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ASSOCHAM INDIA

Role of Trade Finance for Inclusive Growth

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Content

Foreword by ASSOCHAM

DS Rawat
Secretary General, ASSOCHAM

Trade Finance, from a Trade & Commerce perspective has assumed a great significance for India especially with falling exports to grow in the changed Trade regime, as there appears to be more bilateralism than multilateralism in evidence. It is therefore necessary to expand our focus on external engagement of Trade with our neighbours too, especially with Nepal and Bangladesh, both long been one of the best destinations of goods and services. Of late, it is under increasing pressure and competition from China.

Given the importance of Trade Finance for trade and economic growth, ASSOCHAM is organizing National Conference on Role of Trade Finance for Inclusive Growth, to tackle the issues and promote the role of Trade Finance.

Keeping this in context, ASSOCHAM - Deloitte has brought out the knowledge paper focusing on Trends in Trade Finance & Challenges.

We hope that this study would help the regulators, market participants, government departments, and other research scholars.

Foreword by Deloitte

Kalpesh. J. Mehta

Today, with major Global economies pushing back Global trade, their protectionist attitude is allowing major players in Asia to set themselves up as the new champions of Globalization, and capture the next wave of growth. Global and Indian initiatives to drive trade must now be taken advantage of by India, to fully benefit from this opportunity. At the same time, our financial system's ability to finance this trade is equally critical.

The Trade Finance process we have in place has tremendous scope to be fine-tuned and to build in efficiencies. Right from funding excess working capital due to lack of end-to-end visibility on the Trade Finance lifecycle, the regulatory compliances such as Know Your Customer (KYC) and Anti Money Laundering (AML) programs, there is an immediate need for some actions. Bank's challenges aside, buyers and sellers face their own set of challenges due to lack of adequate visibility on the counterparty. Small and Medium Enterprises (SMEs) / Micro-Small and Medium Enterprises (MSMEs), typically go unfinanced and get caught in a self-deprecating spiral where they rarely get financed by Banks, due to their own inability to prove creditworthiness. Their own preferences, emerging from proximity of the lender, are often tipped in favor of smaller, more expensive lenders. Worse still, they end up self-financing, which limits their ability to grow altogether.

Implementing digital technologies such as Blockchain in Trade Finance can resolve the inefficiencies in our current Trade Finance system, and make the process efficient at the Bank's, buyer's, seller's, as well as the SME's/MSME's end. In example, Banks will avoid duplicate financing, buyers and sellers will avoid fraudulent trade, and SMEs/MSMEs can gain access to cheaper capital and these inclusive businesses can be made to scale. The Proof of Concept (PoC) stage of testing this Distributed Ledger Technology (DLT) in India has demonstrated the application of this DLT in Trade Finance. Challenges in its implementation are bound to be seen. There are also cyber, regulatory and infrastructural implications that need to be further deciphered.

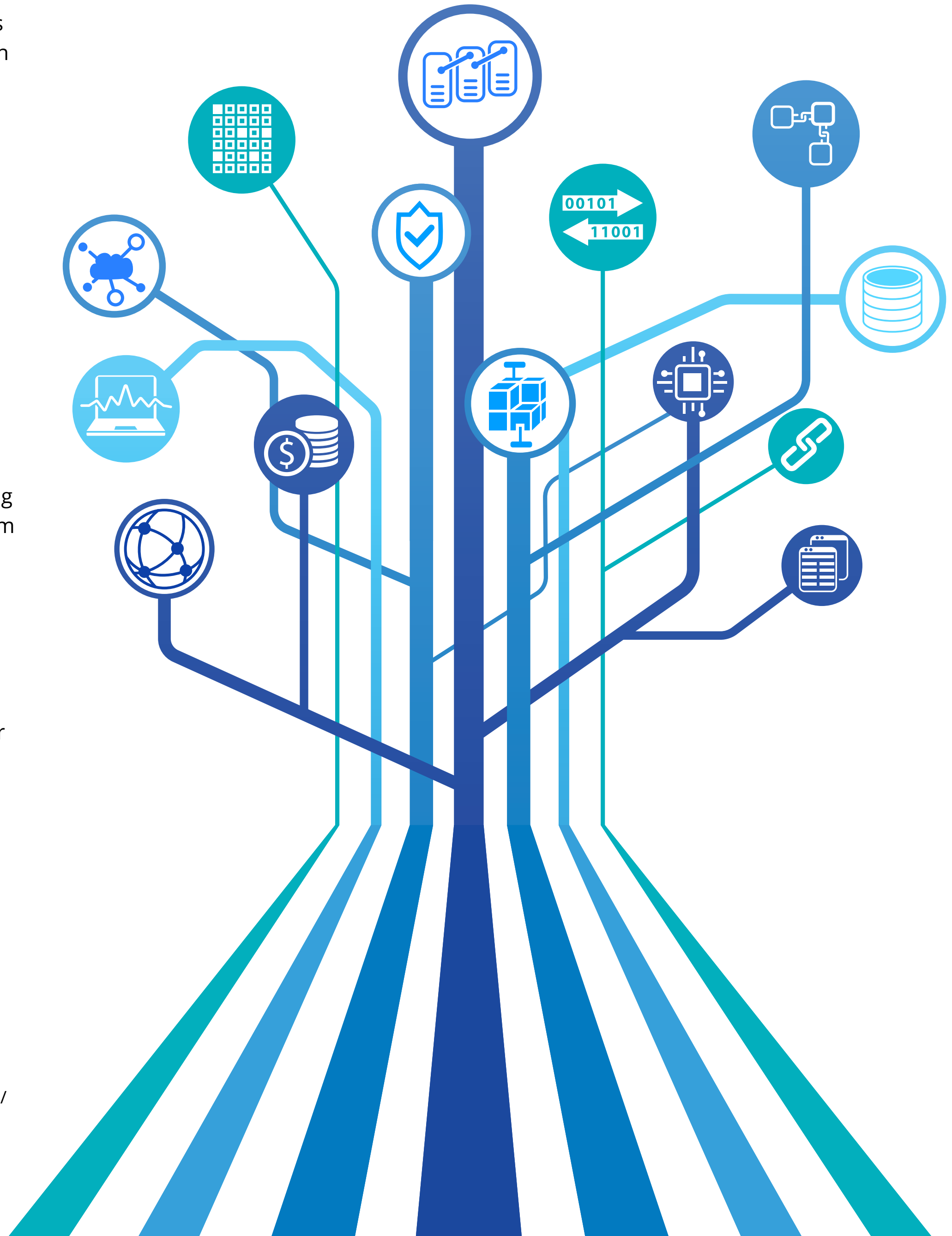
Yet, strides in Trade Finance are inevitable. The vast Trade Finance opportunity that the SMEs provide, can be explored despite the current limitations. With new models of credit and funding guarantees backing the trade, the current Trade Finance process can be changed significantly. Alternate financing options such as collateral free finance and transaction financing, crowdsourcing, invoice financing for short term finance, being examples. On the whole, macroeconomic indicators are positive and the Indian Trade Finance market seems lucrative, if technology is applied, data is cleaned up and Government actions are supportive.

The Trade Finance opportunity has been re-imagined. What the Government, banks, policy makers, regulators, buyers and sellers, need to do now is, develop strategic priorities initiatives to collectively pursue this opportunity.

Introduction to Trade Finance and background setting

Evolution of Trade Finance: From Maritime Trade to Block-chain

Trade Finance, a commercial activity, has been closely linked to the story of human trade evolution. It has for centuries influenced economic conditions, public policy, living standards, and degree of financial inclusion. The role of Trade Finance in trade is very important for us to understand, as the latter rarely takes place safely and securely without the former. Trade Finance, where financial institutions provide credit facilities such as short-term finance to guarantee exchange of goods (domestic and international), involves multiple parties on both sides of the transaction; and Payments generally through letters of credit (LC), or guarantees. Trade financing could also use medium-term or long-term loans. It has evolved over the years and as of 2017, according to the World Trade Organization (WTO), facilitated around 80%[1] of world trade. Innovation over the years has helped bring efficiency and wider coverage to Trade Finance, and as both buyers and sellers, push for greater efficiencies, the focus on innovation is likely to further increase in 2018.



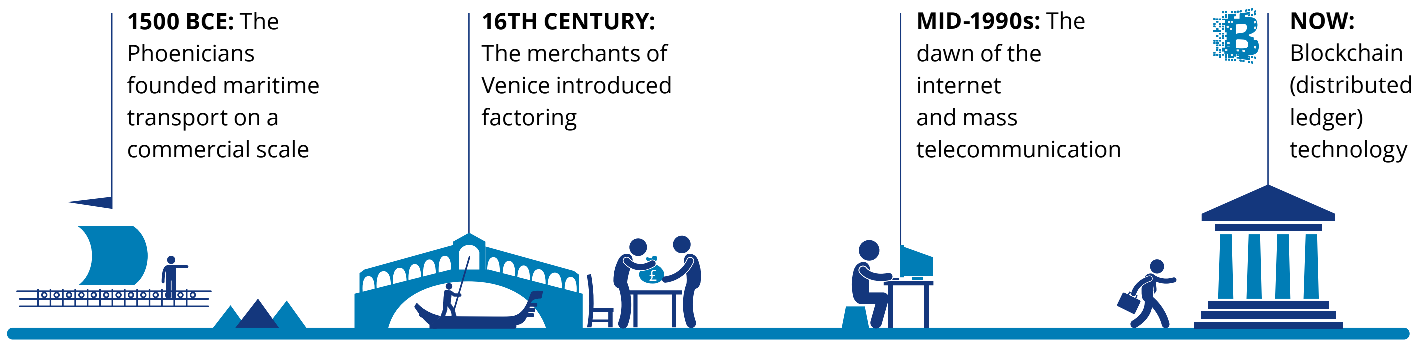
[1]World Trade Organisation: https://www.wto.org/english/thewto_e/coher_e/tr_finance_e.htm

The financial sector has seen many innovations through the years. In the 1970's, a global financial-messaging network, the Society for Worldwide Interbank Financial Telecommunication (SWIFT), started out using the telex, and was considered revolutionary. It created the first global financial messaging service that used a common language for international financial communication. In the 1980's, dematerialization of stocks and bonds was introduced, allowing paperless transactions of securities. In the 1990's, central counter party clearinghouses helped reduce risks such as counterparty, settlement, and default risk for traders, and in the first decade of the twenty-first century, it was the application of trading systems and algorithmic trading, bringing efficiencies such as speed.

Instruments such as receivable discounting, pre-shipment finance and factoring have in the past played a crucial role in the growth of international trade. Today, we are again at the cusp of enormous change with the advent of digital disruption by use of Blockchain, Artificial intelligence (AI), Machine Learning and Robotic process automation. Banks are automating financial and transactional information exchange through pilot projects in smart contracts. Distributed ledger technologies (DLT) will allow stakeholders to digitally share accurate and reliable trade information, while smart contracts supported by DLT, will allow automated execution of payments on meeting pre-defined conditions in the contract. This also means that reconciliation will no longer be a worry for banks as the ledger is shared and updated in real time. Blockchain's application for identity management and know your customer looks quite promising. Innovation in AI is also moving very fast. It too has enormous application to solve real problems. It could be used to detect transactions quality, or opportunity to market cross channels, to ensure banks are utilizing their resources optimally.

Trade Finance – The Context

Trade finance relates to the process of financing activities related to commerce and international trade. Companies involved with trade finance include importers and exporters, banks and financiers, insurers and export credit agencies, and other service providers



Source: Deloitte Analysis

Role of Trade Finance for Inclusive Growth

Global Trade Finance market review

Size and growth trends

The weak global economy over the last few years has been an outcome of political uncertainty in larger economies, Brexit, sluggish growth in international trade, besides other contributing factors. However, things seem to be improving. The year 2017 has seen global trade expansion as a consequence of acceleration in global trade growth in the first six months of the year. The forecast in the growth of world trade volume as of 21st September, 2017 was raised by the World Trade Organization to 3.6%[2], from the previous 2.4%[3], as of 12th April 2017. The new estimate was an improvement from the lacklustre 1.3%[4] growth in 2016. This strong resurgence is attributed to the revival of trade flows from Asia, especially intra-regional trade that picked up due to recovery in demand from North America, from the earlier 2016 figures. However, as predicted in September 2017, this high level of growth in trade volumes is expected to slow down slightly to around 3.2%[5] in 2018, owing to tightening monetary policy in developed economies (US), phasing out of quantitative easing in Europe, and the slowing down of easy credit, and fiscal expansion in China.

Global Trade Finance's long term growth looks encouraging though, with an expected CAGR of 3.77%[6] (from 2016-2020). Global revenue from Trade Finance is expected to increase at 4.7% annually, from USD 36 billion[7] in 2016, to USD 44 billion in 2020[8]. However, bankers around the world are getting worried about the ability of the financial system to deliver the financing needed to help restore international trade as a driver of economic growth. Currently, the system suffers from high cost and complexity of compliance. A shortage of Trade Finance is being caused due to strict compliance with regards to know your customer (KYC) and anti-money laundering (AML) rules, to name a few.

Continuing shift in regional trade activity and implication on Trade Finance

On a global scale we are also witnessing a shift in the geo-political center away from the United States of America, as China, Japan step up. In 2017 we saw a backlash in trade on a global scale as Governments around the world implemented protectionist economic policies and tore down trade agreements. The recent pulling away from the Trans Pacific Partnership (TPP) and threats of leaving the North American Free Trade Agreement (NAFTA), are clear signs that the USA is changing tracks and has moved away from its position as global head of liberal trade policy and has adopted an "America First" approach. Its focus has shifted from multilateral to bilateral trade deals. This has set up other major players as the champions of globalization to capture the next wave of growth. The European Union (EU) is also seeing growing uncertainty. With Britain's referendum to leave the EU, it has brought about the question of EU's stability.

China on the other hand has made trade growth a priority, and it is an area where the world is investing heavily. The Belt and Road is key to China's growth, as well as a possible solution to the current uncertain and sluggish global trade environment. The rise in the count of Renminbi backed transactions is a trend that is expected to gain traction in the coming years. In 2015, the Renminbi bypassed the Euro and the Pound to become the second most used currency in trade transactions. This development can be attributed directly to the effort of the Government of China to promote its currency by setting up global clearing centers for conversion and settlements in Renminbi.

Trade Facilities and an overview of trade facilitation measures

World Trade Facilities Agreement (TFA) – was signed to address red tape in trade. The agreement expedites the movement of goods, by making the trading process simple and modern. It also sets out effective co-operation measures between authorities on trade facilitation, including customs. The agreement became effective in February 2017. Till December 2017, 121[9] WTO members have ratified the agreement. According to the WTO, the TFA's full application is expected to cut member's costs of trade by an average of 14.3%[10]. The TFA is also likely to reduce the time needed to export goods by over 2 days, and import various goods by over 1.5 days. This will represent a reduction in time of 47%[11] and 91%[12] respectively over the current average. Moreover, with the full implementation of the agreement, the number of new products exported by developing countries is expected to increase by as much as 20%[13], and the least developed economies are likely to see an increase of over 35%[14]. This would boost global trade by up to USD 1 trillion annually, the biggest impact being felt on poorer countries. Trade Facilitation Agreement Facility (TFAF), effective November 2014, is the TFA facility which ensures assistance to lesser developed countries to benefit from the TFA.

Indian Trade Finance market review

Indian trade comprises domestic (intra-regional) and cross border trade.

Size and growth trends in domestic demand

India's slow growth in trade has been a case of concern. Many, are attributing this short term down turn as a negative fallout from the reforms - Demonetization and Goods and Service Tax (GST). India's trade deficit hit a 35 month high, at USD 14 billion[15] as exports declined, for the first time in 14 months by 1.12%[16] in October 2017, to USD 23.1 billion.[17] Exporters faced a liquidity crunch after paying GST for four months in a row without any refund.

Implications of Government initiatives on Trade

India currently ranks 100 in ease of doing business. Government initiatives have played a big role in improving the ease of doing business ranking from the 2016 rank of 130[18]. Yet, a lot of work is still to be done. Given that, India significantly lags on key metrics such as: turn-around time and operating costs, reliance on physical documentation, requirement of liaison with multiple stakeholders on disparate systems and lack of transparency, increase the cost of compliance. These limitations, limit trading volumes, which in turn limit the speed and efficiency of Trade Finance.

[2]World Trade Organisation: https://www.wto.org/english/news_e/pres17_e/pr800_e.htm
[3]World Trade Organisation: https://www.wto.org/english/news_e/pres17_e/pr800_e.htm
[4]World Trade Organisation: https://www.wto.org/english/news_e/pres17_e/pr800_e.htm
[5]World Trade Organisation: https://www.wto.org/english/news_e/pres17_e/pr800_e.htm
[6]Business wire, 10th October 2016: https://www.businesswire.com/news/home/20161010005465/en/Global-Trade-Finance-Market-Growth-CAGR-3.77
[7] ICC Global Survey on Trade FinanceTrade Finance 2017, ©International Chamber of Commerce (ICC), Pg 56, https://iccwbo.org/publication/2017-rethinking-trade-finance/
[8] ICC Global Survey on Trade FinanceTrade Finance 2017, ©International Chamber of Commerce (ICC), Pg 56, https://iccwbo.org/publication/2017-rethinking-trade-finance/

[9]Ratification list, World Trade Organisation: http://www.tfafacility.org/ratifications
[10]WTO's Trade Facilitation Agreement enters into force, World Trade Organisation, 22nd February 2017: https://www.wto.org/english/news_e/news17_e/fac_31jan17_e.htm
[11]WTO's Trade Facilitation Agreement enters into force, World Trade Organisation, 22nd February 2017: https://www.wto.org/english/news_e/news17_e/fac_31jan17_e.htm
[12]WTO's Trade Facilitation Agreement enters into force, World Trade Organisation, 22nd February 2017: https://www.wto.org/english/news_e/news17_e/fac_31jan17_e.htm
[13]WTO's Trade Facilitation Agreement enters into force, World Trade Organisation, 22nd February 2017: https://www.wto.org/english/news_e/news17_e/fac_31jan17_e.htm
[14]WTO's Trade Facilitation Agreement enters into force, World Trade Organisation, 22nd February 2017: https://www.wto.org/english/news_e/news17_e/fac_31jan17_e.htm
[15]India's Foreign Trade, Press Information Bureau, October 2017: http://pib.nic.in/newsite/PrintRelease.aspx?relid=173499
[16]India's Foreign Trade, Press Information Bureau, October2017: http://pib.nic.in/newsite/PrintRelease.aspx?relid=173499
[17]India's Foreign Trade, Press Information Bureau, October2017: http://pib.nic.in/newsite/PrintRelease.aspx?relid=173499
[18]World Bank, Ease of business rankings: http://www.doingbusiness.org/rankings

The Government has been driving initiatives to stimulate trade:

- Foreign Trade Policy (FTP) is expected to be crucial to the growth of the economy. This policy provides a strong foundation and a viable policy environment to conduct international trade. Launched in April 2015, the FTP 2015-2020 has helped improve the measures used for trade facilitation. It provides a structure for boosting goods and services trade, while at the same time also generating employment. While consolidating existing export incentive schemes, the policy has introduced two more schemes:
  - 'Merchandise Exports from India Scheme' (MEIS). This scheme facilitates the export of stated goods to stated markets, and
  - 'Services Exports from India Scheme' (SEIS). This scheme serves the purpose of increasing exports of declared services. It benefits all service providers (providing services from India), regardless of the provider's profile.

  Some other features of the policy include coupling procedures and incentives with other Government initiatives such as "Make in India", "Digital India" and "Skills India".
- Make in India – The campaign aims to challenge the way the Indian economy currently functions. The scheme was put in place to help turn India into a global manufacturing destination, and increase manufacturing's share in Gross Domestic Product (GDP) to 25%[20] by 2025, from 16% in 2017[21].
- The state of Infrastructure has drastically improved post 2014 when the Government increased public spending and sped up the approval process in order to attract private funds and resources. Fueled by various reforms, infrastructure growth can in-fact be expected across sectors. "BharatMala", the road ministry's plan to build 5,000 KM of roads costing INR 12,000 crore in 2 years from Gujarat to Mizoram, and covering 10 border hugging states, is likely to facilitate trade with neighbors in the region. The growth in trade volumes will further increase the need for infrastructure financing. Improvement in infrastructure is expected to help attract FDI as well. The Trade Infrastructure for Exports Sector (TIES) is a scheme being designed to support infrastructure projects linked to exports.
- RBI's Trade Receivables Discounting System (TReDS) is an interesting example of how digitization is helping Micro Small and Medium Enterprises" before (MSME) get access to easy capital, by auctioning their receivables. TReDS is an electronic platform that allows businesses to auction trade receivables such as bills of exchange and invoices, and the platform serves as a transparent and quick medium for the small scale players to avail funds at cheaper rates, through banking and factoring companies. The system is expected to be a game-changer. The benefits expected include quick turnarounds, owing to digitized information. The full benefits of the system cannot yet be fully estimated though, given the mindset change the system requires among the MSME segment that is currently paper driven, as well as the quality of data that is fed into the system.

[20]Make In India: The vision, New Processes, Sectors, Infrastructure and Mindset: http://www.makeinindia.com/article/-/v/make-in-india-reason-vision-for-the-initiative

[21]Make In India: The vision, New Processes, Sectors, Infrastructure and Mindset: http://www.makeinindia.com/article/-/v/make-in-india-reason-vision-for-the-initiative

- Export Data Processing and Monitoring System (EDPMS) – A comprehensive IT system launched by the Reserve Bank of India (RBI) for the monitoring of export of goods and software and help banks report returns through a single platform, for better monitoring and integrating returns.
- Import Data Processing and Monitoring System (IDPMS) – The Reserve Bank of India came out with a format to be followed by banks for Bill of Entry[22] reporting under IDPMS. This move is aimed to boost ease of doing business, as well as facilitate efficient data processing for payment of import transactions.
- The scheme "Assistance to States for Development Export Infrastructure and Allied Activities (ASIDE)", was put in place to create export infrastructure through the most efficient utilization of resources. This would help meet the laid down growth in exports via a coordinated effort of the State and Central Governments. The Government spent INR 2,500[23] crore in the 10th Five year plan (2002-2007) and INR 3,048[24] crore in the eleventh five year plan (2007-2012) under the scheme.
- Government of India e market place (GeM) scheme allows sellers to participate in e-bidding and reverse auctions by Government agencies. This helps in providing more transparency, bilateral commitments and smooth delivery. Banks can support these transactions on behalf of sellers through performance guarantees.
- The interest equalization scheme for exporters has been approved for 5 years as against one year tenor which was provided in all earlier schemes. This provides more clarity with respect to banks extending financing and will help exporters execute long tenor contracts.

Growth trends in nature of financing

Status of supply chain finance (SCF) in India

Alternate financing options, such as SCF and factoring have potential to bridge the Trade Finance gap, in the absence of Trade Finance. As World trade volumes increase, SCF is likely to become integral to facilitating trade. Industries such as Consumer and Retail are increasingly utilizing SCF to manage their working capital requirements. An evolving trend is the nature of trade financing shifting to "Unsecured trade", with the underlying security being the trade itself.

[22]IDPMS, Reserve Bank of India, 2016: https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=10824&Mode=0

[23]Towards sustainable and lasting growth, Government of India, 2016-17: http://commerce.gov.in/writereaddata/uploadedfile/MOC_636281140249481285_annual_report_16_17_eng.pdf

[24]Towards sustainable and lasting growth, Government of India, 2016-17: http://commerce.gov.in/writereaddata/uploadedfile/MOC_636281140249481285_annual_report_16_17_eng.pdf

Role of Trade Finance for Inclusive Growth

Trends in Trade Finance & Challenges

Existing Business Models
To remain competitive in today's changing environment, both clients and financial institutions have to streamline their trade activities. Firms are looking to reduce costs and improve efficiencies across the board.

As per JP Morgan estimates, today, with trade activities requiring an average of 36[25] original documents, 240[26] copies, and the involvement of 27[27] entities, the Fortune 500 companies spend over USD 81[28] billion annually on unnecessary working capital, and supply chain costs. As per the ICC 2017 survey the major challenges facing businesses today are cost control, limited technical competency, limitations of current technology, poor productivity management, and limited training and development. The ICC Survey is the Trade Finance industry's comprehensive study, with 255 participating Banks from across 98 countries. It's objective was to collect insights on specifics of Trade Finance and supply chain finance (SCF) business. As per the survey, a major driver of cost and the biggest roadblock in global trade is regulation and compliance. More specifically, financial institutions identified the Basel III norms, anti-financial crimes regulations, and stringent AML and KYC requirements as major impediments when providing Trade Finance. As per the survey, anti-financial crimes and Base III regulations (80% & 71%[29]), are reasons reported by financial institutions for limiting their ability to reduce the Trade Finance gap. Low country ratings is another reason that is likely to have a negative impact. Another driver of cost is the labour intensive, physical handling and checking of documents. This is more so the case with LCs, Guarantees/standby Letter of credit that are paper heavy, very fragmented, and labour intensive.

While the problems seem daunting and have plagued the Trade Finance markets for long, banks are looking at applying technology to help with the situation. They expect technology to help increase efficiency and reduce compliance costs linked to due diligence and regulations.

Digital implementation is also not without its own unique set of challenges. A key to drive efficiency in the future would be the broad application of automation and AI. Automation has faced a few challenges that have kept it from being broadly implemented in the past. Firstly, variation in technology adaptation crimped coordinated digital solutions. As a result, even today most Trade Finance transactions remain paper based. Secondly, the constant change and development of regulatory requirements and compliance behaviours required by automated systems has also been an inhibiting factor in technology's wide spread application.

Challenges in the Trade Finance Lifecycle

Challenges	Description	Operational Impact
Paper heavy processes	• Flow of physical paper documents like Purchase Orders, Invoices, Bill of Lading (BOL) etc. across borders throughout the transaction cycle	• Increase in transaction turnaround time • Handling & storage costs • Risk of losing or tampering important documents
Labour intensive	• Authenticity of paper documents like BOL, signatures, address is verified manually • Manual handoffs across fragmented operational processes and IT systems	• Manual checking is subjective & error prone • Lack of standardization across geographies makes it difficult to scale operations • Staff development is critical which may take as many as 6 months to 7 years • High staff turnover and relative inexperience increases operational risks and leads to client dissatisfaction
Legacy IT systems	• Fragmented and outdated legacy systems are integrated in an ad-hoc manner with manual processes by staff	• Manual handoffs increase complexity in tracking and limit efficiency improvement by automation • Low paced adoption of operationally efficient technological innovations like Bank Payment Obligation (BPOs)

[25]Key factors driving global trade in 2017, JP Morgan, 2017: https://www.jpmorgan.com/country/US/EN/2017-trade-outlook-key-factors
[26]Key factors driving global trade in 2017, JP Morgan, 2017: https://www.jpmorgan.com/country/US/EN/2017-trade-outlook-key-factors
[27]Key factors driving global trade in 2017, JP Morgan, 2017: https://www.jpmorgan.com/country/US/EN/2017-trade-outlook-key-factors
[28]Key factors driving global trade in 2017, JP Morgan, 2017: https://www.jpmorgan.com/country/US/EN/2017-trade-outlook-key-factors
[29]ICC Global Survey on Trade Finance 2017, ©International Chamber of Commerce (ICC), PG 105, https://iccwbo.org/publication/2017-rethinking-trade-finance/

[29]ICC Global Survey on Trade Finance 2017, ©International Chamber of Commerce (ICC), PG 105, https://iccwbo.org/publication/2017-rethinking-trade-finance/

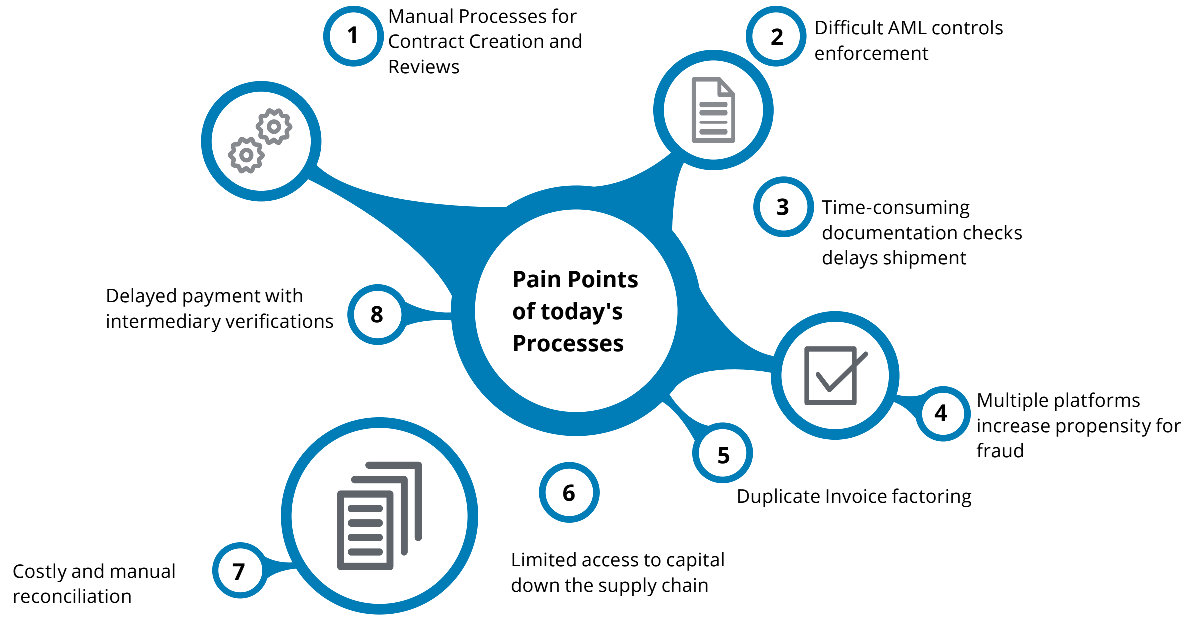
Challenges	Description	Operational Impact
Stringent regulatory & financial crime compliance	• Basel III, Dodd Frank, Foreign Account Tax Compliance Act (FATCA) and AML require banks to invest heavily in systems and procedures to deter, detect and protect from money laundering. This is one of the significant cost drivers in the industry.	• Enhanced due diligence, KYC compliance, Sanctions screening has introduced costly manual checks • Reliance on 3rd party providers like World Check, Sea Searcher, Blacklist check, Defaulters list check increases manual handoffs and turnaround time • Nonstandard reporting processes and formats for ad-hoc transaction reporting to regulators
Funding unknown	• The absence of guaranteed payment due to little or no clarity on the counterparty and absence of payment default rules	• Delayed or no payment

Source: Deloitte Analysis

Trade Finance - Current Pain Points

Today's processes for Trade Finance relies heavily on opaque documentation and manual processes

The industry has a high cost structure and target for fraudulent activities



Source: Deloitte Analysis

Challenges faced by banks

The ICC survey saw almost all respondents (i.e. Banks) worried about tight regulations, strict KYC, and AML requirements. Banks are also facing excess liquidity due to the lack of bankable deals, which is giving rise to fierce competition and unsustainable low prices. They are looking for consistency, which will foster predictability and lead to effective planning.

Over the last year, the trade finance ecosystem has continued to grow and adapt to new technologies and regulatory conditions. But even as financial institutes increasingly implement digital solutions, the Trade Finance gap persists.

- Visibility and cash position - When working on international multi banking deals across multiple banking products and portals, getting a real time view of a credit position in Trade Finance is almost impossible. By the time the figure is calculated, the number is out of date with the new advice and amendments made to the existing LCs. This inefficiency implies companies fund excess working capital, as they do not have an accurate view of the financial supply chain.
- Standardization - LC applications come in a variety of formats, using different terminologies, and requiring information to be completed. This causes inconsistencies, delays, and errors.
- Compliance and regulation – The cost and complexity of compliance has reduced the risk appetite of many banks. These banks balance the costs and benefits when they select preferred markets for participation. According to a 2016 Thomson Reuters survey on KYC procedures and their escalating costs and complexity, financial institutes today spend upwards of USD 60[30] million, on this activity. Facing heightened competition and price sensitivities, many organizations are very concerned about this. As a result, banks prefer to conduct KYC and AML checks on larger clients which have higher revenue earning opportunities for the bank. Therefore there is a bias to only investigate high revenue and margin markets/clients. This to an extent helps explain the reason behind why SMEs and emerging economies suffer from a large Trade Finance gap and are the victims of a bank's de-risking activities. LCs are credit instruments and therefore are highly sensitive to security concerns. As labour intensive processes such as compliance and regulation checks increase, banks are seeing their costs sky rocket, and are therefore getting more selective with the markets, customers and the geographies they operate in.

Challenges faced by buyers and sellers

In the traditional Trade Finance process, facilitated by LCs, the buyer approaches the financial institution (FI) for a credit facility and the seller for a financial guarantee. In the process multiple pain points exist ranging from a plethora of paper work (financial agreements requiring manual reviews), to insecurity and delays. Until recently (prior GST), the buyer and seller also faced a lot of ambiguity when dealing with an Indian counterparty, owing to complexity in taxes.

[30]ICC Global Survey on Trade Finance 2017, ©International Chamber of Commerce (ICC), PG 31, https://iccwbo.org/publication/2017-rethinking-trade-finance/

Buyer Side

- No clear understanding on the counterparty
- Shipment delays – Many touchpoints, increased & time consuming paperwork
- Possibility of fraud due to multiple touchpoints
- Possibility of damaged goods on receipt and inspection

Seller Side

- No clear understanding on the counterparty's credibility
- Increased paperwork
- No assurance of payment at the time of shipment
- Possibility of delayed payment/no payment
- Delay in receiving acknowledgement of receipt of goods

Source: Deloitte Analysis

Challenges in MSME lending
One of the most important issues being faced today inhibiting the growth of the global economy and world trade is the inability of banks and financial institutes to provide credit and finance to the sectors that need it the most – the Small and Medium Enterprises (SMEs). Majority of the companies in the world are SMEs, with most of them located in developing nations. This matter is of grave concern given SMEs are often driving economic development, including trade and employment. This segment is contributing 4 out of the 5 new jobs created and is a significant contributor to GDP in emerging economies, and hence we ought to give attention to the SME's trade financing needs. Currently, according to ADB's 2017 study, the Trade Finance gap is USD 1.5[31] trillion, with as much as 50%[32] of SME Trade Finance proposals to banks and financial institutions being rejected. According to the same ADB study[33], one of the main impacts of the Trade Finance gap is forgone trade, with respondents saying around 60%[34] of the transactions that needed Trade Finance, failed to be executed when they did not receive the required capital. The survey also threw light on the job impact with 87%[35] respondents stating that additional finance would allow them to expand business and increase employment.

Recent research shows that SMEs face hurdles such as credit worthiness, in both developed and developing countries, but the challenges continue to be the greatest in the lower income countries. This tends to be the case as emerging economies have relatively smaller banking sectors which tend to be more selective and advanced. At the same time, there is a lack of appetite of larger global players to do business in these countries. SME's are also plagued by the lack of technical knowledge and skills to handle financial transactions. The disproportioned impact on SME sectors comes from the fact that for large banks, SMEs are not their preferred borrowers (due to the high transactional and information costs of dealing with smaller companies). SMEs lack the wherewithal or infrastructure to set up digitized systems, hence there are issues with book keeping, which further aggravates the problem. Failure on part of SMEs to provide basic details that need to be provided for extension of credit, makes it close to impossible for banks to do AML and KYC. As a consequence, SMEs are compelled to borrow from local banks/NBFCs, or money lenders at higher rates. Another contributing factor is that SMEs tend to be cluster focused and close proximity is a key concern when selecting their source of finance. With low penetration of commercial banks in developing nations, they are often forced to borrow from money lenders and alternative sources close to them. In many instances, they finance their own businesses, severely hampering their ability to grow.

[31]ADB Briefs: https://www.adb.org/sites/default/files/publication/359631/adb-briefs-83.pdf
[32]Trade Finance and SMEs, WTO, https://www.wto.org/english/res_e/booksp_e/tradefinsme_e.pdf
[33]ADB Briefs: https://www.adb.org/sites/default/files/publication/359631/adb-briefs-83.pdf
[34]ADB Briefs: https://www.adb.org/sites/default/files/publication/359631/adb-briefs-83.pdf
[35]ADB Briefs: https://www.adb.org/sites/default/files/publication/359631/adb-briefs-83.pdf

Current regulatory framework governing Trade Finance in India and challenges
The Trade Finance market space has evolved over time, with the technological enhancements, switches in corporate behaviour, regulatory reforms and increasing market competition.

Import and export trade is regulated by the Directorate General of Foreign Trade (DGFT) under the Ministry of Commerce & Industry, Department of Commerce, and Government of India. Additionally Banks are required to comply with the Foreign Exchange Management (Current Account Transactions) Rules, 2000 framed by the Government of India and the directions issued by the Reserve Bank of India.

Directorate General of Foreign Trade (DGFT)
The regulatory entity has drafted the India New Foreign Trade Policy (Exim Policy), 2015- 2020 along with the India New Foreign Trade Procedure 2015-2020 [36]

The regulators key functions include the following:

- Introduction of various schemes and guidelines in coordination with the departments of Ministry of Commerce and Industry, Government of India and with state governments.
- Providing of Exporter Importer Code Number to Indian Exporter and Importers.
- Regulates Transit of Goods from India or to countries adjacent to India in accordance with the bilateral treaties between India and other countries and promotes trade.

Reserve Bank of India (RBI)
RBI releases master circulars and directions on the import and export of goods and services, from time to time.

The directions state the general guidelines for the import of goods and services through remittance of import payments, import of foreign exchange, advance remittances, import licenses, third party payment for import transactions, receipt from import bills/ documents by the Importer directly from overseas suppliers, evidence of imports, issuance of bank guarantee, import of gold and other precious metals, import factoring and merchanting trade[37].

On the export side, the regulations cover aspects such as diamond dollar accounts, exemptions, exchange earners foreign currency accounts, foreign currency account, advance payments against

[36] Directorate General of Foreign Trade: http://dgft.gov.in/
[37] Master Circular on Export of goods and services: https://rbi.org.in/scripts/BS_ViewMasCirculardetails.aspx?id=989

exports, , Export Declaration Form (EDF) approval for export of goods for re-imports, consignment exports, invoicing of software exports, counter trade agreements, export of goods, forfaiting, project exports and service exports, EFD/ Software Export Declaration (SOFTEX) procedure, export claims, extension of time, write, etc[38].

Foreign Exchange Management Act

The Foreign Exchange Management Act (1999) is an Act of the Parliament of India. The act provides guidelines for the free flow of foreign exchange in India[39]. The framework is consistent with the World Trade Organization framework. The rules and regulations under FEMA include:

- Foreign Exchange Management (Current Account Transactions) Rule, 2000
- Foreign Exchange Management (Permissible Capital Account Transactions) Regulations, 2000
- Foreign Exchange Management (Transfer or Issue of any Foreign Security) regulations, 2004
- Foreign Exchange Management (Establishment in India of branch or office or other place of business) regulations, 2000
- Foreign Exchange Management (Realization, repatriation and surrender of Foreign Exchange)regulations, 2000
- Foreign Exchange Management (Possession and Retention of Foreign Currency) Regulations, 2000
- Foreign Exchange Management (Export of Goods and Services) regulations, 2000: The guidelines cover the declaration of exports, exemptions, evidence in support of declaration, manner of payment of export value of goods, period of realization, submission of export documents, payment for the export, delay in receipt of payments, advance payment against exports and project finance, etc.

EXIM Bank

Export Import Bank of India established under the Export Import Bank of India Act, 1981[40]. The financial institution offers financial products such as buyers' credit, project finance and lines of credit. Export advisory services are also offered by EXIM Bank.

Challenges in Trade Finance in India

According to the latest statistics released by the Government of India, trade deficit in October 2017 widened sharply to USD14 billion from USD 9 billion in September 2017 and USD 11.13 billion in October 2016, because of weaker exports and simultaneous increase in oil and gold imports.

The Mid-Term Review of the Foreign Trade Policy 2015-20, was released on December 5th, 2017 to tackle the issue of refunds to exporters with the setting in of the GST regime, which restricted the liquidity of the exporter, thereby requiring exporters to limit acceptance of orders.

However despite the modifications to the policy, the following are some of the challenges that need to be considered:

- The five-year FTP laid out an ambitious annual target of USD 900 billion of exports by 2020, despite the fact that exports have been sluggish over the last couple of years.
- Focus on farm exports is currently limited, given the restrictions on agricultural trade. The increasing international prices and loss of competitiveness due to currency movements add to the declining farm export earnings.
- High transaction costs and high logistic costs further add to the challenges faced by the Trade Finance sector.
- One of the major challenges faced is the submission of fake and fraudulent underlying documents submitted by the exporter/ importer for availing of funded or non-funded facilities. Several fraudulent cases due to fake submission of documents has been recovered in the last couple of years.

[38] Master Circular on Import of goods and services: https://www.rbi.org.in/scripts/BS_ViewMasCirculardetails.aspx?id=9889
[39] Foreign Exchange Management Act: https://www.rbi.org.in/scripts/fema.aspx
[40] Exim Bank of India: https://www.eximbankindia.in/

Recent events on frauds identified in Trade Finance, factoring, etc.

- An exporter was recently arrested for misuse of currency declaration forms, by forging the same to claim remittances for exported goods. The exporter deposited large amounts in foreign currency, and claimed excise duty benefits from the government by showing fake Currency Declaration forms (CDFs), wherein they sold goods to fictitious individuals or companies. The fake CDFs allow the exporters black money to be converted to white and avail government benefits[41].
- CBI recently registered nine cases of bank frauds worth over INR 51 billion, wherein standby letters of credit were opened by the Indian banks for the import of gold by the alleged diamond firms from UAE based distributors. On investigation it was noted that the promoter of the Indian companies, held a majority stake in the UAE based companies and cheated their bank by diverting bank funds[42].
- A case of hacking was discovered in early, 2017, wherein hackers infiltrated the systems of three government-owned banks, to create fake trade documents, to raise finance abroad or facilitate dealings in banned items. The banks in question discovered that their SWIFT system was compromised to create fake documents[43].
- CBI investigations led to the arrest of 2 individuals for an alleged fraud of INR 246.4 million[44]. It was alleged that the company through its director had obtained limits for Open Cash Credit/ Overdraft against Book Debts (OCC/ODBD) of INR 100 million and Inland Letter of Credit/Foreign Letter of Credit (ILC/FLC) of INR 100 million from a Bank. The limits were secured by hypothecation of stocks and book debts of the company and fraudulently collaterally secured by the equitable mortgage of two properties which were not in possession of the accused at the time of sanction of the loan[45].
- Another fraud was uncovered wherein the promoters of a certain company availed LC facilities and various credit facilities fraudulently by submitting false documents and inflated stocks and receivables statements to a public sector bank to get more drawing power from their cash credit account[46].
- The grand jury of USA has indicted promoters of an Indian listed company for alleged financial irregularities. The promoters were accused of floating several sham companies to create fake invoices in its favour and encash these using factoring service provided by a US based service provider[47].

Regulatory initiatives undertaken to promote and ensure compliance over Trade Finance in India and globally

Regulatory initiatives in India

- Reserve Bank of India has recently come out with the Import Data Processing and Monitoring System (IDPMS), which requires Banks to generate or submit the data under IDPMS as per specified message format and technical specification. The said application is expected to boost ease of doing business and facilitate efficient data processing for payment of import transactions[48].
- Several leading national and private Banks are adopting Blockchain technology for facilitating faster Trade Finance transaction processing. To align with these digitalization initiatives, the Reserve Bank of India's arm The Institute for Development and Research in Banking Technology (IDRBT), is in the process of developing a model platform for Blockchain technology, the decentralised database that keeps records of digital transactions, by connecting customers and suppliers on the same platform[49].
- RBI launched the Trade Receivables Discounting System (TReDS) which aimed at improving the flow of funds to the MSMEs by reducing the receivables realisation cycles. TReDS will allow SMEs to post their receivables on the system and get them financed[50].
- Government of India released the Foreign Trade Policy mid-term review in December 2017, some key highlights of the policy, benefiting exporters are as follows:
  – New incentives valued at INR 80 billion with focus on micro and small enterprises, labour intensive sectors
  – Self-certification scheme for duty-free imports

[41] Midyear foreign trade review: http://www.financialexpress.com/opinion/foreign-trade-policy-more-than-sops-promote-exports-as-growth-engine/974733/
[42] Mid-year foreign trade review: http://www.firstpost.com/business/foreign-trade-policy-mid-term-review-exporters-heave-a-sigh-of-relief-now-for-quicker-gst-refunds-4243759.html
[43] Fraud using the standby letter of credit: http://www.hindustantimes.com/india-news/cbi-steps-up-vigil-against-bank-fraud/story-7zyAtzJSNsvwHOvNEP3KHJ.html
[44] CBI arrests two in fraud case worth INR 0.24 billion: https://www.outlookindia.com/newsscroll/cbi-arrests-two-in-fraud-case-worth-rs-24-crore/1048422
[45] Indian banks are waking up to a new kind of cyber-attack: https://economictimes.indiatimes.com/industry/banking/finance/banking/indian-banks-are-waking-up-to-a-new-kind-of-cyber-attack/articleshow/56575808.cms
[46] Bank fraud case: ED attaches assets of INR 3.25 Cr of M/s GS Oils Ltd: https://www.outlookindia.com/newsscroll/bank-fraud-case-ed-attaches-assets-of-rs-325-cr-of-ms-gs-oils-ltd/1157474
[47] US jury indicts Indian promoters: http://www.business-standard.com/article/companies/us-jury-indicts-indian-promoters-117122300239_1.html
[48] RBI unveils format for reporting under IDPMS: http://www.business-standard.com/article/pti-stories/rbi-unveils-format-for-reporting-under-idpms-116100601239_1.html
[49] RBI arm to launch model platform for block chain technology soon: http://www.thehindubusinessline.com/money-and-banking/rbi-arm-to-launch-model-platform-for-blockchain-technology-soon/article9840772.ece
[50] More MSMEs register with M1 Xchange for online trade receivables discounting: http://www.thehindubusinessline.com/economy/more-msmes-register-

- 2% increase in incentive rates of the Merchandise Exports from India Scheme and Services Export from India Scheme.
- A new trade data analytics division under the Directorate General of Foreign Trade will analyse real time data to help fine tune policy.

- Exporters have expressed their concerns over the recently implemented GST regime, as the refunds were stuck with tax authorities, creating funding and liquidity crunch. The Government of India plan to roll out an e-wallet plan for exporters wherein exporters can claim their refunds faster, by filing of correct GST returns[51].
- ECGC Limited, a premier Export Credit Agency (ECA) of Government of India provides credit insurance to exporters against non-payment risks by the overseas buyers due to Commercial and Political reasons. ECGC recently took a step by reducing the premium rate by an average 17 % for its whole turnover policy covers. ECGC has also taken steps to make Export Factoring Scheme, cheaper for MSMEs[52].
- The directorate general of foreign trade (DGFT) has set up an online facility "Contact@DGFT", which is a one stop platform that allows importers and exporters to resolve all foreign trade related concerns/ issues[53].

Select global Regulatory initiatives

- The governments of Hong Kong and Singapore are currently developing a prototype leveraging Blockchain technology to strengthen trade ties between the two countries. Integration between two digital platforms between two trading nations is the deemed output of this collaboration[54].
- The Hong Kong Monetary Authority (HKMA) has spearheaded a project designed to demonstrate the feasibility of using the distributed ledger technology through Blockchain to reduce the risk of fraudulent activity, while increasing business transparency, operational efficiency and productivity in Trade Finance[55].
- The World Trade Organization and the World Economic Forum have joined with the Electronic World Trade Platform (eWTP) to launch a new initiative that aims to put e-commerce practice and policy front and centre among governments, businesses and other stakeholders on a global level. The platform allows micro, small and medium-sized enterprises to participate in cross-border trade. Countries such as Malaysia and China have embraced the platform to facilitate global trade.
- The International Trade Centre, initiated the "She Trades" wherein online application aims to connect women-owned companies around the world to facilitate trade. Several countries are a part of this initiative[56].

[51] Exporters heave a sigh of relief; now for quicker GST refunds: http://www.firstpost.com/business/foreign-trade-policy-mid-term-review-exporters-heave-a-sigh-of-relief-now-for-quicker-gst-refunds-4243759.html
[52] Reduction in insurance cost for exporters: https://www.indiainfoline.com/article/news-top-story/reduction-in-insurance-cost-for-exporters-117053101145_1.html
[53] Government offers online tool to resolve foreign trade issues: https://economictimes.indiatimes.com/news/economy/policy/government-offers-online-tool-to-resolve-foreign-trade-issues/articleshow/60422566.cms
[54] NTT DATA+MUFG block chain PoC may be more than it seems: https://www.enterprisetimes.co.uk/2017/12/08/ntt-data-mufg-blockchain-poc-may-seems/
[55] Hong Kong's monetary authority unveils Trade Finance platform based on block chain technology: http://www.scmp.com/tech/innovation/article/2083536/hong-kongs-monetary-authority-unveils-trade-finance-platform-based
[56] She Trades initiative aims to connect women-owned companies globally: https://america.cgtn.com/2017/12/26/she-trades-initiative-aims-to-connect-women-owned-companies-globally

- The Department for International Trade (DIT), in UK was created in 2016, which is intended to provide a hub for all the government's information and services related to trade and investment[57].
- The Department of Finance (DOF), Philippines has implemented a TradeNet platform wherein traders can initially use the system to apply for import and export permits for rice, sugar, used motor vehicles, chemicals (toluene), frozen meat medicines (for humans, animals or fish) and cured tobacco. The platform is connected online to 16 government agencies[58].

Tax issues through the Trade Finance cycle

There are no significant tax issues in Trade Finance when the transaction between a customer and a bank, are within a country. The challenge typically arises in international trade in the context of withholding tax.

The Gujarat High Court in a landmark judgment in the case of Vijay Ship Breaking in 2003 has held that usance interest does not form part of the purchase price, and is in the nature of interest for income-tax purposes. It was accordingly concluded that withholding tax applies on such usance interest.

A related issue is the rate of withholding tax. The Indian tax law provides a concessional withholding tax of 5% (plus surcharge and cess) on interest payments by Indian companies on foreign currency borrowings, as approved by the Central Government, and subject to various conditions. Some of the conditions in the general approval provided by the Central Government for this purpose include borrowing under a loan agreement, compliance with specific provisions of the foreign exchange regulations, obtaining a loan registration number (LRN) from the Reserve Bank of India, etc. It may generally not be possible to satisfy these conditions, and accordingly the 5% withholding tax rate is typically not available for Trade Finance.
The withholding tax issue gets compounded as generally overseas parties insist on grossing-up of the withholding tax, leading to increased cost for, say, an Indian importer. Interestingly, depending on facts, if the transactions of an Indian company are with an overseas branch of an Indian bank, the Indian withholding tax issue could be mitigated.

The remuneration earned by non-residents like fees, guarantee charges, etc. (i.e. non-interest income) creates further complications, as withholding tax is based on characterization of such remuneration for tax purposes. For example, in a recent case the Delhi Tribunal has held that guarantee fee charged by a UK company to an Indian company, in relation to guarantee provided to various bankers for extending loan facilities to such company was taxable as 'other income'. It would accordingly be necessary to take into account judicial precedents surrounding taxability of various types of income connected with trade financing activities.

Similar issues may arise in the reverse situation as well, say, where an Indian bank provides Trade Finance to overseas companies. There could be withholding tax and other issues in the jurisdiction where the overseas company is based.

To sum up, the tax impact in case of Trade Finance needs to be factored in, to determine the overall cost of Trade Finance.

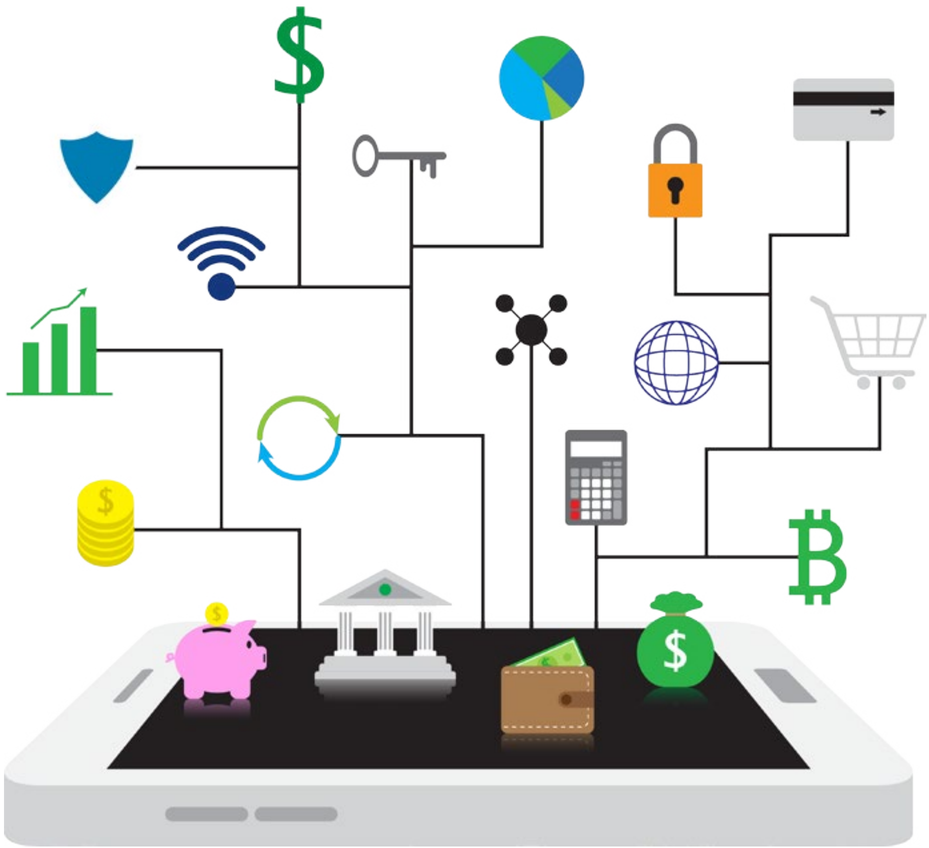
[57] Department for International Trade working on '20 transformation projects': https://www.publictechnology.net/articles/news/department-international-trade-working-%E2%80%9820-transformation-projects%E2%80%99
[58] Department of Finance, Philippines: http://pia.gov.ph/news/articles/1003634
[59] CIT v. Vijay Ship Breaking Corporation [2003] 261 ITR 113 (Guj)
[60] Section 194LC of the Income-tax Act, 1961

Fintech & Easing Trade Finance Norms

Today the financial world is at the cusp of great change. Technologies such as Blockchain, Artificial Intelligence (AI), Internet of things (IoT) and Machine Learning hold promises in solving banking problems, and have applications in Trade Finance.

Digitalization
Trade Finance processes involve hefty amounts of physical paper based documentation. This makes the majority of Trade Finance costs, document related. For banks to survive in today's challenging and uncertain environment, their Trade Finance offerings must be adaptive, agile, low cost and also must add value to their customers. One of the ways for banks to compete is through digitalization. New technological innovations such as the E bill of lading, bank payment obligation and blockchain technology are bringing about a digital revolution in the Trade Finance business.

- With the advent of digitally documented trade, we are likely to see costs reducing, and greater agility in this process. Digitizing this will cut costs for Trade Finance significantly as also improve capital for trade, as a funder's confidence in a transaction increases.



  - Intelligent Optical character recognition (OCR) - Banks already use OCR while dealing with documents in their backend processes. But the untapped potential lies in the machine learning capabilities i.e. intelligent OCR. With this capability, the machine learns to recognize documents and automatically transfer paper based and handwritten documents into the back end processor.
  - Bank payment obligation (BPO) - Uses a system of electronic matching to facilitate payments between the buyer's and the seller's banks. This form of financing is quicker and cheaper than LCs
  - E-Bill of Lading - Would facilitate the instant transferring of shipping documents between parties. This instant transfer shortens the payment cycle and therefore improves the working capital position of exporters. Digitalized documents are easier to trace, cheaper to process and more secure.
- Digital innovation in customer interface of the banks can help create deeper and more valuable relationships with their customers.

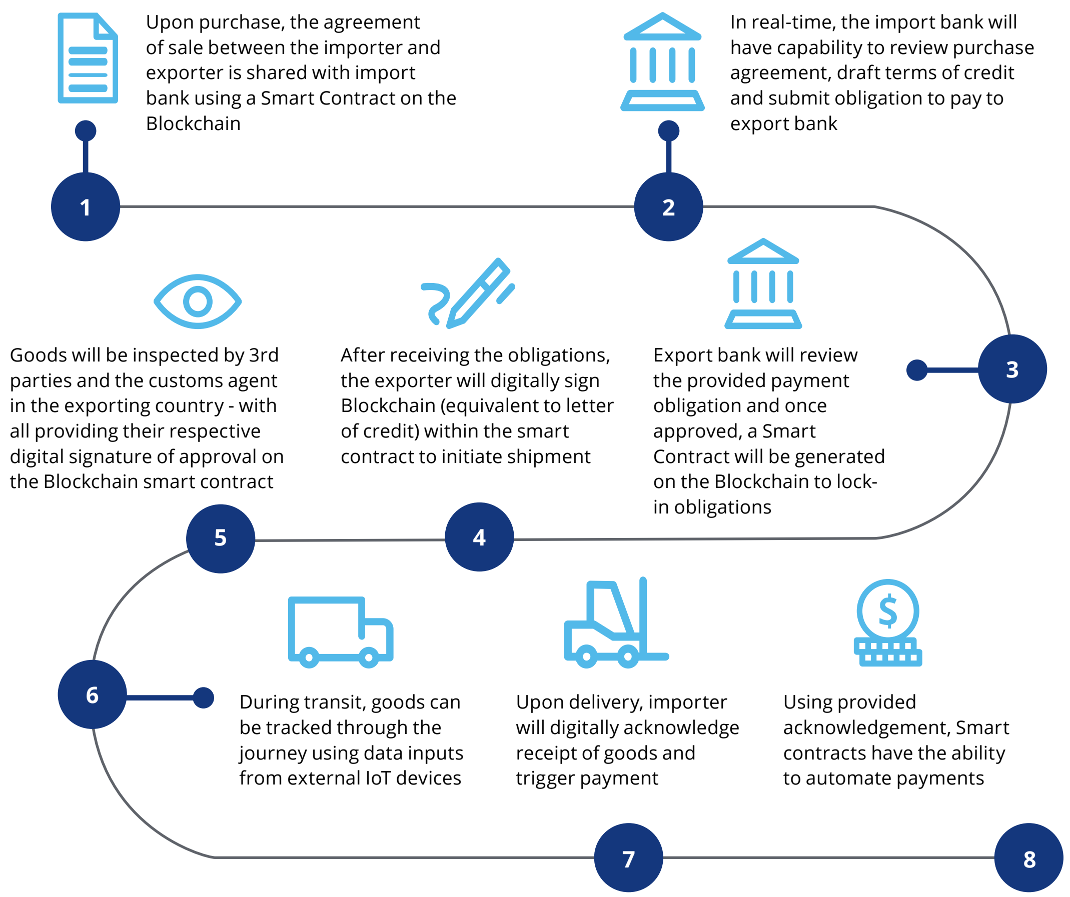
Trade Finance in the World of Blockchain
Current Process in Trade finance

Blockchain Process

The current process of trade finance relies on paper based components such as bills of lading. This manual process implies it can take a few weeks before the funds relating to a transaction are paid.

The Blockchain would make use of smart contracts to improve letters of credit process and digitise the bills of lading. The smart contract would be created & deployed on the blockchain by the issuing bank which will encrypt the letter of credit with rules. Once the carrier and bank have both sent confirmation messaged to the contract, payment transfer will be triggered between bank accounts. This platform would be transparent, allowing all parties to track the stage of the process, which would reduce operational risk.

Future State Vision



Source: Deloitte Analysis

Benefits of blockchain

- Paperless process
  - The main cost associated with trade finance lies in document handling. With digitalization, this cost is expected to come down drastically (e.g. lower cost of storage), making it possible for banks to bring down the cost, as well as processing time of trade finance substantially.
  - Digitizing the process will also allow better record keeping as paperwork is less likely to be misplaced.
- Cost reduction
  - Blockchain technology has the potential to achieve efficiencies in transactional lifecycle of trade finance products. This is expected to help banks in reducing turnaround time as well as operational costs (reduced compliance costs, elimination of paper, improving TAT).
- Document verification and authentication
  - Distributed ledger allows for real time confirmation, authentication, and monitoring across multiple participants like banks, shippers, insurers, regulators and importer/ exporters.
  - Operational risk will be lowered, from standardized, objective and rule based automation.
  - Manual handling and duplication of verification processes across importer and exporters banks, will also be avoided.
- Transfer of Ownership of assets
  - Transfer of ownership and liability of shipping, insurance and correspondent bank documents in tandem and real time movement and position of goods
  - This will allow for reduction in litigation cost, efficient sanction compliance by easily identifying the origin and destination of goods.
  - Liquidity forecasting of importers and exporters will also be possible.
- Digital Identities
  - There is a digital identity generated from the importer, exporter, shipper etc. This will increase creditworthiness of the participants of the trade, reducing counterparty risk.
  - We can expect to see lower KYC and client onboarding costs as, over a period of time, there will be plenty of past data available on the various parties involved.
  - Financing will also become cheaper owing to availability of information.
- Smart contracts with digital signatures
  - Smart contracts (automated contracts with digital signatures) will trigger periodic payments to shippers and insurance companies in real time as the prerequisites of the contract are fulfilled. The Digital signature provides legal enforceability for real time information flow between banks.
  - This provides a seamless automated integration between systems unlike current fragmented systems, and reduces manual intervention in release of payments.
  - The smart contract will automatically trigger red flags to meet various compliance requirements such as financial crime, AML, etc.
- Monitoring Transactions and Regulatory reporting
  - Blockchain creates an immutable record of transactions. This helps local regulators track transactions and receive reports on AML and Anti-terrorist financing purposes.
  - This automatic process reduces the cost of regulatory adherence and reporting. An audit trail of transactions is established which allows the source and end use of the funds to be tracked. This helps in AML compliance.

Implementation challenges
Blockchain must address certain challenges before a widespread adoption.

- Onboarding users - Onboarding stakeholders and users is going to be challenging as regulators and shipping companies are not tech savvy and thus will resist investing upfront in the technology.
- Regulatory acceptance - changes from blockchain will invite stringent regulatory scrutiny as security loopholes in blockchain are still to be explored. New regulation on digital identities, cross currency, cross border transfer of value over a distributed ledger still need to be formulated.
- Changing role of banks - The disintermediation of banks will create resistance and revenue pressures as clients will no longer need intermediaries who charge hefty spreads to access the market.
- Infrastructural issues - Most of the third world countries still suffer from lack of fast and stable internet connections, limiting reach to actual customers.
- Small firms – Small firms/traders may not have the scale of business to benefit from blockchain application.

Mitigating factors

- Banks, startups and regulatory bodies should work together and collaborate in blockchain development to address their problems in the early stages.
- To overcome regulatory concerns, the creation of an independent regulatory body to oversee blockchain activity in accordance to the regulatory guidelines.
- Banks can overcome their disintermediation by exploring alternate sources of revenue in the blockchain environment eg transaction fees on verification of digital transactions by permissioned nodes in the financial ecosystem.
- Trust issues and security concerns can be reduced by using a private ledger or a blockchain tweaked with security layers.

Cyber Impact: Traditional Challenges and Recommendations to stay safe
Key Management
Private keys are a means to authorize activities from an account. In case of being accessed by a hostile party, any wallets or assets secured by these keys will be compromised. The attacks intended to gain unauthorized access to a system with stolen credentials fundamentally follow the same methodology – gather information, plant malware, and steal user's private keys using social engineering.

A distributed ledger uses a set of different private keys to sign and encrypt messages. Therefore, in case of an attack, one can only gain access to the underlying data encrypted with the keys to that particular dataset. A secured signing key will prohibit the attacker from modifying the data or interacting with that smart contract, considering it is well-designed.

It is crucial to protect the private key as actions like private key reproduction and file decryption efforts carried out on a hacker's machine are independent of server-imposed query limits and go unnoticed. The traditional systems gave malicious users the freedom to try to decrypt a given ledger or reproduce a private key from its encrypted data until a server administrator could track attempts of breaking into a customer or user account. With Blockchain, the user remains unaware of such an attack until the hacker has succeeded.

"Blockchain plays little to no role in trade today. There are no commercially viable solutions yet, but yes, we are seeing the technology leave the lab in recent months, and being applied in the real world through a number of small-scale proofs of concepts. Many of these proofs of concepts of blockchain have demonstrated that blockchain technology can transform the old, document intensive processes that currently underpins global trade, removing risks and driving efficiency."

Ketan Gaikwad
Director Trade, Barclays Bank

Cryptography
Most Blockchain applications are dependent on public and private keys that are generated with cryptography to operate. The main problem with this is the stringent policies and procedures to be followed while managing keys, be it technology, people or processes. A user usually uses the Blockchain client software or whatever software is available to produce public and private keys; however, some programs fail to generate keys that are strong. In fact, there have been several attempts to spread random generators that are intentionally weakened and can produce only a limited range of possible values. Keys produced by such programs can be easily attacked.

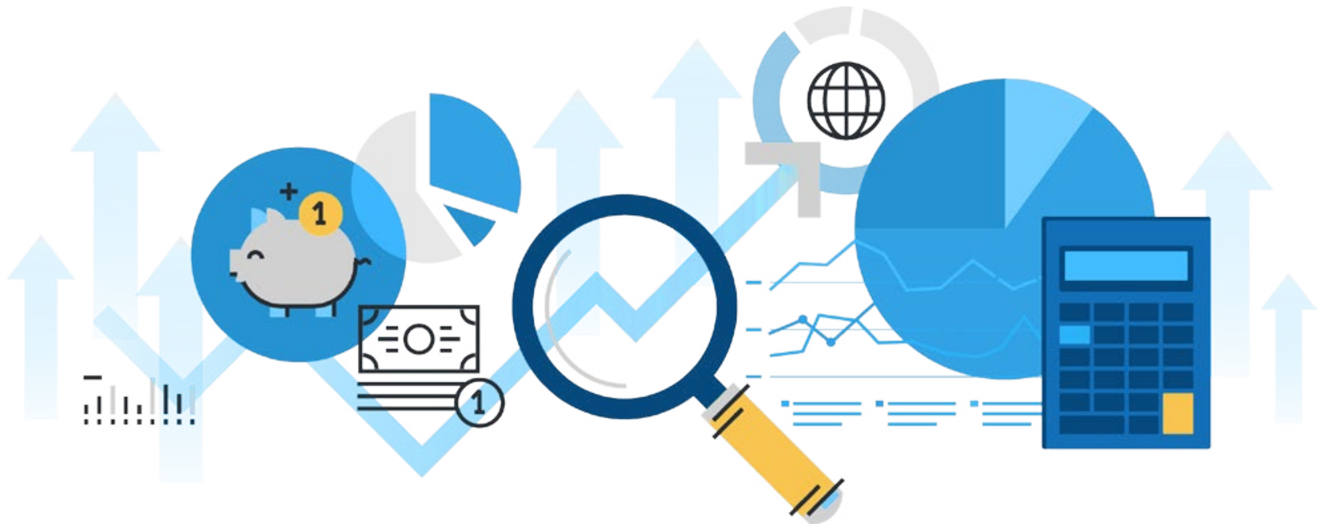
The theory of asymmetric cryptography may also be threatened by quantum computing, even though it does not pose an immediate risk. For a future-proof solution, quantum computing can be used to resolve simplify complicated security algorithms and considerably reduce the time it takes to secure information.

Privacy
Another threat posed by the use of Blockchain technology is privacy. For instance, a permission-less ledger allows all counterparties to download the ledger; whilst offering them access to the entire transaction history including the ones they are not concerned with. It is quite a challenge to implement the 'right to be forgotten', i.e. the need to remove information from a ledger. As many counterparties have access to ledger data, there will not be a definite proof that the data has been deleted. Solutions like Hyperledger offer to overcome this challenge with its range of commercial privacy services.

Revamping the Trade Finance of Domestic Demand

SME Lending to increase SME competitiveness
SMEs play a major role in economic activity in India. However this is a segment that most often gets rejected when applying for trade finance, owing to a high default rate and KYC, AML issues. SME lending is critical, as its absence leads to high opportunity cost of forgone trade. TReDS is one example of best-in-class innovation predominantly to facilitate SME's access to capital. Other methods include:

- Transaction financing over balance sheet financing - This is one way by which SMEs can be extended capital. SME's failure to provide a collateral could still allow them access to capital, if financiers shift focus to the transaction itself, and evaluate if that is worthy of being financed. Hereafter, performance history of SMEs can be beneficial in future financing of these SMEs.
- Crowdsourcing - The next generation of Blockchain startups will create "mesh" industries where smaller companies can compete with entrenched corporations through crowdsourcing and shared services.
- Government's role – The role of the Government in providing SME's access to capital is crucial. A case in point is Barclays' partnership with UK Export Finance (UKEF). In July 2017, Barclays, along with four other UK lenders, signed an agreement with UKEF to further support UK exporters. The agreement includes giving banks delegated authority to directly deploy UKEF's guarantees when a client meets certain criteria. It is benefitting the bank's UK SME clients. A number of companies are using this funding to be more competitive when selling overseas by offering bonds or extended payment terms to their buyers. Others use it to fund their working capital needs to ensure that all orders are fulfilled.
- SME education - Bank's in India need to play a role in educating SMEs on better book-keeping, as also on the importance of digitalization (as digital documents are lesser prone to manipulation, and an accurate record-keeping system, allows the supply-chain to manage funds efficiently). This too will go a long way in increasing SME's access to funds.



"MSMEs are struggling with liquidity, lack of access to factoring and rejections of trade finance transaction requests. Banks and financial institutions can play a vital role by providing them correct mix of cash management, forex, trade and technology solutions."

Shekhar Bhandari
Business Head, Global Transaction Banking and Precious Metals, Kotak Mahindra Bank Ltd.

New revenue opportunities in the infrastructure
New infrastructures built on blockchain technology, have the potential to allow banks to change existing practice of factoring and invoice financing. Documents such as invoices can become tradeable assets that banks can repackage, resell and securitize, enabling the creation of new markets and revenue opportunities. When a seller invoices a buyer, banks can obtain immediate line of sight into payment obligations and provide instantaneous short term financing, resulting in improved economics of capital allocation. In example, the seller can benefit from such capabilities by enabling on demand invoice financing solicitation from multiple banks, regardless of whether they are an existing customer of that bank or not, the seller can receive funds in real time with minimal touch-points and manual paper work.

Regulatory framework: way forward
The global regulatory framework on trade finance is evolving with an aim to ensure boost in exports, better reporting, and disclosure and governance requirements. Further, the regulators are also placing emphasis on block chain facilities to boost trade finance, implementing of digitalization for trade finance.

In the Indian context, the regulators have in place, a framework on regulating trade finance products. However, the current regulatory framework needs to evolve based on the learnings from the global events, particularly in the areas of conducting risk management and elimination of fraudulent transactions.

Intra State Trade: Impact of GST on Trade Finance

- Introduction of Goods and Services Tax ('GST') in India continues to be one of the most discussed topics in business meets; not only in India, but globally as well. The world is keeping a close eye on the indirect tax reform to explore the opportunities that have emerged in India, owing to the advent of GST. GST has consolidated indirect taxes in India and removed trade barriers caused by the State boundaries from an indirect tax perspective. It has created a level playing field for businesses across the country. It has also attempted to supplement the 'ease of doing business' initiative of the Government.
- GST provides a level playing field to Indian businesses, which shall help them compete at a global level. The virtual desertion of boundaries is likely to not only enhance domestic trade, but also significantly boost trade at a global level.
- The traditional and the most commonly used methods of non-funded trade finance is a bank guarantee or a letter of credit. A cross-border bank guarantee or a letter of credit could be chargeable to GST if either the customer is in India or if the Indian bank has instructed its foreign arm to issue a guarantee or a letter of credit in its jurisdiction, for its Indian customer. The treatment in respect of the same is more or less similar to the erstwhile Service Tax regime. The Indian Banks requesting its foreign arm to issue a guarantee or the letter of credit, has to self-assess GST and suffer an additional disincentive owing to an increase in tax rate, as it reverses half of the input tax credit.

- The money changing service was and continues to be chargeable to indirect taxes. The same is not treated as a transaction in money consequent to the margin earned by the bank by means of differential exchange rate. The currency exchange services provided by the Bank to the businesses has also seen an increase in cost to the recipient. These services provided by the Bank at a global level may not attract GST and could be treated as exports, if requisite conditions are fulfilled.
- The most popular manner of funded trade finance is a working capital loan. Similar to the erstwhile Service Tax regime, extending a loan or an advance is treated as an exempted supply under GST. Consequently, advent of GST does not have any effect on this mode of funded trade finance. While the Banks and NBFCs are exempted from payment of GST on the interest on such loan, the fee based income relating to the same, which is chargeable to GST could witness an increase in the cost. Various provisions of the GST law, such as charging GST on the inter-branch services, liability to pay GST under reverse charge in respect of supplies received from unregistered persons, could increase the working capital requirement. This is in light of the requirement for the tax to be first paid by the supplier (in case of inter-branch services), or by the recipient (in case of reverse charge payments), and subsequent availability of tax credit. This could contribute to increased demand of this product.
- Another way of financing the trade is through assignment of receivables i.e. factoring, which is discussed above. Taxability of a factoring arrangement from an indirect tax perspective is not free from ambiguity. The position taken by the industry is that the factoring arrangement essentially involves an advance by the Bank against the assignment of receivables by the customer. Since, the advance represents realization of the receivables at a discounted value, it may be treated as exempt under GST. However, any charges recovered by the factor for such assignment would be under the purview of GST.

Implications for India

Protectionist measures by countries such as the US, combined with geopolitical reasons, have resulted in world trade contracting in the recent past. Given India has made strides in manufacturing goods that will have paybacks in domestic and international trade, the outlook for India continues to remain positive. These advances in trade will in turn have implications for India in Trade Finance.

Technology is likely to emerge as the key differentiator in the Trade Finance market, both for intra-regional finance, as well as global Trade Finance

Digitalization

With advancement in technologies and as we move towards open-account trade, e-filing of exports and imports, e-delivery being cases in point in the trade finance process, the message that digitalization in trade finance is inevitable and here to stay, is clear. Banks that do not embrace digitalization, are likely to face increased challenges in the trade finance lifecycle. Areas where we have fallen short in the current architecture that need to be harnessed includes:

- To increase transparency in data, service providers need to fine-tune the big data that feeds IT platforms
- There is an immediate need to build technical skillsets
- The Bill of lading/Bill of entry should be converted to digital form
- All regulatory documents (including customs clearance) must be made digital. This will allow delivery of goods till the banking front becomes electronic.
- Implementation of identity solution to address KYC due diligence challenges. The Legal Entity Identifier (LEI) is a global identification system that could address the issue at a global level. This tool would allow banks to verify who's who, who owns whom and who owns what in an efficient way.

Blockchain

Technologies such as Blockchain, AI, IOT are witnessing large number of use cases. They also see deployment in some areas. Blockchain based infrastructure in trade finance will drive efficiencies discussed earlier in the paper. Banks in India should start conducting POCs in this DLT to get a deeper understanding of its implications from the dimension of deployment in trade finance.

The Government and Regulators believe in the potential of the technology and are trying to set up a working group to create the documentation needed for Blockchain and trade.

GST

Integrating documentation to invoicing to tax filing under the GST will have many potential benefits discussed earlier. Fine-tuning GST data that feeds IT platforms will have a significant impact on trade finance.

Government actions

Trade being a global function needs homogeneity of governing regulations. The Government taking on a more pro-active role will need to take action on the following fronts:

- Opening up Tarde Corridors - By opening up larger no. of trade corridors, greater engagement with neighboring countries, especially within our region can be encouraged. This can provide a big impetus to SMEs (as language and cultural barriers are lower when dealing with neighboring countries, which directly impact transaction costs).
- Free Trade Agreements (FTA) - There is an increasing magnitude of trade flows when a FTAs between different countries is in place. For instance, the expected Australia – India FTA will open up more opportunities between Australia and India, and provide a massive boost to world trade volumes.
- Cross border Industry focused marketing, such as the Make in India campaign, will bring a lot of overseas interest and trade/trade finance opportunities to India.
- Limited Protectionism - Anti-dumping duties imposed on Chinese steel manufacturers with the help of Indian lobbying bodies, has made Indian steel competitive globally.
- Indian products (exports) are slightly disadvantaged due to pricing, although quality of products is improving. Government action can make our products more competitive.
- Arbitration laws need to be strengthened in India
- Build Technical Skillsets – A critical requirement for infrastructure financing

Role of Trade Finance for Inclusive Growth

Role of Trade Finance for Inclusive Growth

Glossary

AML	Anti-Money Laundering
AI	Artificial Intelligence
ADB	Asian Development Bank
ASIDE	Assistance to States for Development Export Infrastructure and Allied Activities
BOPs	Bank Payment Obligation
BOL	Bill of Lading
CC	Cash Credit
CBI	Central Bureau of Investigation
CDF	Customer Declaration Form
DIT	Department for International Trade
DOF	Department of Finance
DGFT	Directorate General of Foreign Trade
DLT	Distributed Ledger Technology
eWTP	Electronic World Trade Platform
EU	European Union
ECA	Export Credit Agency
ECGC	Export Credit Guarantee Corporation
EDPMS	Export Data Processing and Monitoring System
EDF	Export Declaration Forms
EXIM	Export Import Bank of India
FATCA	Foreign Account Tax Compliance Act
FLC	Foreign Letter of Credit
FTP	Foreign Trade Policy
GST	Goods and Services Tax
GeM	Government of India e market place
GDP	Gross Domestic Product
HKMA	Hong Kong Monetary Authority
IDPMS	Import Data Processing and Monitoring System
ILC	Inland Letter of Credit
ICC	International Chambers of Commerce
IoT	Internet of Things
KYC	Know Your Customer
LEI	Legal Entity Identifier
LC	Letter of credit
LRN	Loan Registration Number
MEIS	Merchandise Exports from India Scheme
MSME	Micro Small Medium enterprises
NBFC	Non-Banking Financial Company
NAFTA	North American Free Trade Agreement
OCR	Optical Character Recognition
OABD	Overdraft Against Book Debts
RBI	Reserve Bank of India
SEIS	Services Exports from India Scheme
SME	Small and Medium enterprises
SWIFT	Society for Worldwide Interbank Financial Telecommunication
SCF	Supply Chain Finance
IDRBT	The Institute for Development and Research in Banking Technology
TFA	Trade Facilities Agreement
TIES	Trade Infrastructure for Exports Sector
TReDS	Trade Receivables Discounting System
TPP	Trans Pacific Partnership
TAT	Turn Around Time
WTO	World Trade Organization

About ASSOCHAM

Assocham
The Knowledge Architect Of Corporate India
Evolution Of Value Creator

ASSOCHAM initiated its endeavour of value creation for Indian industry in 1920. Having in its fold more than 400 Chambers and Trade Associations, and serving more than 4,50,000 members from all over India. It has witnessed upswings as well as upheavals of Indian Economy, and contributed significantly by playing a catalytic role in shaping up the Trade, Commerce and Industrial environment of the country.

Today, ASSOCHAM has emerged as the fountainhead of Knowledge for Indian industry, which is all set to redefine the dynamics of growth and development in the technology driven cyber age of ‘Knowledge Based Economy’.

ASSOCHAM is seen as a forceful, proactive, forward looking institution equipping itself to meet the aspirations of corporate India in the new world of business. ASSOCHAM is working towards creating a conducive environment of India business to compete globally.

ASSOCHAM derives its strength from its Promoter Chambers and other Industry/ Regional Chambers/Associations spread all over the country.

Vision
Empower Indian enterprise by inculcating knowledge that will be the catalyst of growth in the barrierless technology driven global market and help them upscale, align and emerge as formidable player in respective business segments.

Mission
As a representative organ of Corporate India, ASSOCHAM articulates the genuine, legitimate needs and interests of its members. Its mission is to impact the policy and legislative environment so as to foster balanced economic, industrial and social development. We believe education, IT, BT, Health, Corporate Social responsibility and environment to be the critical success factors.

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ASSOCHAM represents the interests of more than 4,50,000 direct and indirect members across the country. Through its heterogeneous membership, ASSOCHAM combines the entrepreneurial spirit and business acumen of owners with management skills and expertise of professionals to set itself apart as a Chamber with a difference.

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Together, we can make a significant difference to the burden that our nation carries and bring in a bright, new tomorrow for our nation.

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