11th Meeting of the Advisory Expert Group on National Accounts, 5-7 December 2017, New York, USA

Agenda item: 3.5

Globalization

Introduction

Economic globalization has created new opportunities for businesses to organize their production chains more efficiently by establishing economic activities worldwide. This has increased the complexity of compiling economic statistics as it is more difficult to allocate production activities on country-by-country basis. This has a direct impact on the measurement of key economic indicators, including GDP. As a consequence, a debate is ongoing on the adequacy of GDP as an indicator for measuring domestic activities, more specifically on how to define "economic ownership". During this session, the discussion will focus on the way forward. What can and should be done, given the present international standards: definition of alternative indicators, additional breakdowns of multinational activities, additional tools for analyzing international trade and capital flows, etc. Should we also start research and discussion on possible changes that go beyond the current international standards?

Documentation

A paper on Fintechs and the Financial Side of Global Value Chains—The Statistical Implications.

Main issues to be discussed

The AEG is requested to take note of the ongoing work and provide feedback on:

- New forms of trade financing have emerged and new players entered the market (e.g., FinTech companies performing banking activities);
- currently, there is no single comprehensive source for measuring the magnitude, composition, and dynamics of the trade finance market, nor the role that newly developed financial institutions play;
- the views of the members were sought on necessity to (i) give further consideration to trade finance in GVC and (ii) develop (by IMF) proposals for collecting GVC-related information.

Fintechs and the Financial Side of Global Value Chains— Statistical Implications¹

Paper prepared by Cornelia Hammer (IMF)

Summary:

Structural changes to the trade finance market occurred during the last decade:

Fintechs—Financial technology companies— have been established and become successful in segments traditionally occupied by banks; and alternative trade finance solutions, such as *supply-chain financing (SCF)*, have emerged.

Trade finance contributes significantly to the growth and changing pattern of

international trade. Trade in intermediate goods has grown rapidly. It has a high level of reliance on new instruments of trade finance. Periods of stress and disruptions of trade finance during the Global Financial Crisis posed systemic risks to world trade leading the March 2009 G-20 summit to commit \$250 billion to support trade finance and to call for better data: "…*the lack of a comprehensive international dataset for trade finance during the crisis has been a significant and avoidable hurdle for policy-makers to make informed, timely decisions. […] It is recommended that multilateral agencies coordinate and establish a comprehensive and regular collection of trade credit in a systematic fashion."ⁱ*

Estimates on global trade finance are scarce and very divergent. Estimates by the WTO (for 2009) suggest that the global trade finance market (including credit insurance) is about 80 percent of global merchandise trade. For 2015, this would roughly be \$17 trillion in trade finance flows, with an estimated outstanding stock amount of \$6 trillion (assuming an average duration till maturity of 4 months). The estimated outstanding stock of other investment trade credits, based on BOPSY for 2015, is about \$1.14 trillion.

To ensure that macroeconomic statistics mirror global realities and maintain policy relevance, a stepping-up of trade finance statistics is needed. Current statistical frameworks do not adequately capture the trade finance market. Trade finance instruments currently included in macroeconomic statistics are spread over different functional categories, are combined with other instruments, and often only proxied or imputed in data compilation. No separate breakdown is available on third party supply chain financing, and

¹ Prepared by Cornelia L. Hammer, Real Sector Division, with gratefully acknowledged comments from José Maria Cartas, Rob Dippelsman, Claudia Dziobek, Gabriel Quirós, Carlos Sánchez-Muñoz, and Louis Venter. The IMF is currently drafting a chapter on the financial side of global value chains for the Handbook on Accounting for Global Value Chains by the UN Expert Group on International Trade and Economic Globalization Statistics (EG-ITEGS). Consultations will include BOPCOM (during the October 2017 Meeting), the Advisory Expert Group on National Accounts (during the December 2017 meeting), and others.

current data do not capture the great variety of traditional and new SCF instruments. A standalone, exclusive (satellite) trade finance dataset to support informed and timely policy decisions may be needed to respond to the call by policy makers, and existing statistical frameworks beyond the international accounts will need to be updated to reflect (new) types of trade finance instruments and providers.

I. THE TRADE-FINANCING MARKET AND RELEVANCE FOR (IMF) SURVEILLANCE

1. The reduction of world trade in the 2008-2009 financial crisis was associated with breakdowns in traditional trade finance and disruptions in global supply chains' finance. The crisis led to adverse feedback loops between the financial system and the real economy. Global Value Chains (GVCs) have become dominant features of world trade. They are complex, interconnected, multi-layered networks of suppliers, buyers, service providers, and customers. GVCs have changed the dynamics of financial stability and thus call for special recognition in surveillance. Macroeconomic effects could include bankruptcies, layoffs, and contraction of trade.

2. **Financial disruptions at the level of a supplier can have ripple effects throughout the entire value chain.** Upstream companies are vulnerable to the risks and resilience of small and medium-sized companies (SMEs) in their supply chains, as critical product components are often sourced from SMEs abroad. Constraints on cash flow affect investment and growth. Financial shocks may affect trade financing for SMEs, especially in emerging markets.

3. For surveillance, better data are needed to track and examine the evolution of the trade finance market, and evaluate ongoing market dynamics.ⁱⁱ Stability analysis will extend to the new market entrants, the use of securitization markets to raise trade finance capital, and increased competition in the supply chain market. For example, Fintechs could qualify as (money-creating) depository corporations,ⁱⁱⁱ funding themselves with short-term loans and providing loans to goods suppliers. Further insight into third-party financing would be useful to monitor the role and impact of new players, and the extent to which these companies themselves could become the origins for disruptions in the supply chain market. There are no readily available data covering the trade finance exposures of banks or other financial intermediates.

II. THE CHANGING TRADE FINANCE ENVIRONMENT

Fintechs – new players in the trade finance market

4. **Fintechs are non-bank institutions that use advanced technologies to perform traditional banking activities.**^{iv} Increased regulations for banks have made it less attractive for them to do business in certain jurisdictions with stricter compliance rules regarding transparency, consumer protection, and capital requirements.^v Providing financial support to SMEs, especially in developing countries, requires specialized risk-assessment and evaluation models that banks are not necessarily willing or able to adopt.

5. **New partnerships between Fintechs and banks have been established**. The International Chamber of Commerce (ICC) noted in its Global Survey on Trade Finance 2017^{vi} report, that Fintechs count major financial institutions among their shareholders.

Fintechs use big data and cloud-based technology to offer new and established services in trade finance, marketplace lenders, micro-lending, and "robo-investment platforms." ^{vii} Most of these startups have not yet been subject to the same regulatory scrutiny and constraints as conventional banks. Regulators are in early stages to catch up with these developments. Blockchain is another emerging game changer. ^{viii} In a nutshell, Blockchain is a digital ledger of trade related financial transactions traceable in real time which is shared among participants with access rights. While traditional trade finance requires each participant to maintain their own administration and databases, Blockchain integrates the information in one digital document. Payments can be monitored by both parties, and the bank can see both the original contract as well as the order placed between companies and can verify both authenticity and state of fulfilment at any given time.

Traditional trade finance instruments and open account trading

6. **Open account trading has become the prevalent form of trade finance** replacing traditional trade finance such as Letters of Credits and other short-term pre-shipment trade loans typically covered by banks (Chart 1). Open account trading is also referred to as 'trade credits/advances' in SNA terminology. Although there is no comprehensive source for measuring the size and composition of the trade finance market, the few estimates that exist^{ix} evaluate the size of bank-guaranteed trade finance to account for 10 to 30 percent, while the remainder (70 to 90 percent) is organized by inter-firm trade credits through open account trading. In open account trading, the buyer is directly responsible for meeting the payment obligation in relation to the underlying transaction.

7. In open account trading, suppliers ship goods and documents directly to the buyer before payment is due, making open account trading the buyers' most attractive option. Buyers typically may take 30, 60, or up to 90 days to settle the invoice. At the same time, it is the least secure option for suppliers who bear the non-payment risk and potentially

a shortage in working capital. While this form of financing was once only practiced among companies with long-term and well-established commercial relationships, and for trade in or with low-risk markets, increasing competition, combined with at times rationed supply of bank-intermediated trade finance, have made companies of all sizes pursue open account trading as alternatives to traditional instruments.

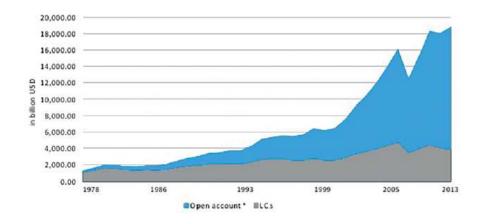


Chart 1: Development of letters of credit compared to open account trading 1978 - 2013 (Source Unicredit Group 2015)

New Supply Chain Financing (SCF) Solutions

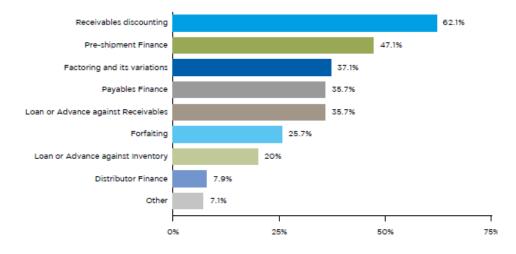
8. **SCF solutions bring the financial intermediary back into the equation.** SCF providers provide an integrated technology platform – an SCF portal- that makes it possible to *extend payment terms to buyers while accelerating payment to suppliers*. Visibility of underlying trade flows by the supply chain provider is a necessary component of such financing arrangements which can be enabled by the platform. Sophisticated programs are connected with multi-funding sources to deal with multiple currencies and jurisdictions as well as to work with non-investment-grade or unrated companies. Globally operating banks see SCF as an important new area of their activity and focal point of current competition.

9. Typically, SCF covers a set of instruments through which the largest company inside a supply chain uses its superior financial credit rating to help its lower-rated suppliers obtain more favorable access to financing. Suppliers of all sizes upload their invoice directly to the portal or send their invoice using specific accounting software. The buyer approves the invoice for early payment by the SCF provider and the full invoice amount less a financing fee is transferred to the supplier's bank account. At maturity of the invoice period (with or without extension), the buyer will pay his due amount directly to the finance provider (if the supplier has sold his invoice) or to the supplier's bank account (if the supplier has not sold the invoice). Overall, however, buyers only *arrange* the financing that allows suppliers to get early payment (see Annex and Chart 2).

Fintrading is not considered a financial transaction because the Fintrader acquires the

goods and not the claim. The Fintrader takes ownership and pre-finances the goods on behalf of the buyer for a defined financing period. For the buyer, the benefits are reduced inventory and improved working capital, while the supplier gets paid immediately. Finetrading is a trade finance tool typically provided by intermediaries other than banks.

Chart 2: Most used techniques in supply chain finance



(ICC Global Survey on Trade Finance and Supply Chain Finance 2017:^x)

Secondary markets

10. Securities backed by trade receivables came almost to a stand-still during the crisis but have become popular again in recent years. *Trade receivables securitizations* (TRS) allow banks or non-banks to raise capital by selling a selection of receivables (non-tradable financial assets) to a legally separate special purpose vehicle ('SPV'); based on the acquired receivables, the SPV can issue collateralized notes or commercial paper with the issuance proceeds flowing back to the original selling company.

11. Because SPVs are separate entities, securitization can lead to a rating higher than the company's own credit rating, thereby providing access to greater liquidity at a lower cost of funds. At the same time, securitizations under current accounting regulations allow securitized assets to remain off balance sheet for entities managing an SPV, thus, the usage of regulatory capital for banks is reduced when compared to traditional balance sheet lending. Securitization is a way to reach a broader investor base, such as hedge funds, insurance companies, and pension funds. Banks also distribute trade finance to non-bank investors through direct sales of syndicated trade loans.

12. **Fintechs access the securitization markets to finance SMEs**. Participating SMEs can utilize the technology platform provided by Fintechs to sell their trade receivables held against their customers. As intermediaries, Fintechs select and structure eligible receivables, and match them with investors. Securitization could enhance financial sector stability by enabling risk-transfer from banks to a wider pool of investors beyond the banking sector. At the same time, it can hide the underlying risk, as was the case with the mortgage-backed securities in the global crisis, if they are outside the radar of surveillance.

III. STATISTICAL IMPLICATIONS

13. Currently, there is no comprehensive global dataset covering trade finance statistics and the G-20 called for a comprehensive collection of trade credit data. Statistics currently only separately distinguish trade credits as part of other investment. This instrument is narrowly^{xi} defined as *credit extended directly by the suppliers of goods and services to their customers (BPM6 5.70)*. Therefore, trade credits do not include financial intermediation (other than the settlement through the banking system). This definition does not cover trade financing provided by third parties/financial intermediaries, such as direct working capital financing by suppliers, and new SCF techniques with financial intermediaries added back to the equation.

The traditional letters of credit category is not considered a financial instrument until documents are received and funds are transferred by banks; at that point this category is included under deposit-taking corporation loans not differentiated as trade finance.

14. A comprehensive collection should be based on the umbrella term 'trade finance' and take into account:

- a. traditional bank-guaranteed instruments (letter of credits and other documentary collection instruments), which are off-balance sheet
- b. other bilateral working capital financing between suppliers and financial intermediaries (such as export-related working capital lending, pre-export finance, supplier credits, receivables discounting, or forfaiting);
- c. conventional open account trade financing, i.e., directly extended trade finance loans by the supplier to the buyer (currently trade credits in other investment);
- d. newer open account SCF instruments that include the financing of a supplier by a bank or a nonbank financial intermediary (based on standardized definitions drafted by the GSCFF)
- e. information about export credit insurance provided by public export credit agencies or private insurance firms to bridge the gap or cover the risk

15. A stand-alone comprehensive (satellite) trade finance dataset to support informed and timely decisions can be considered to respond to the call by policy makers. This dataset will also facilitate tracking the dynamics of the trade finance market. The statistical frameworks (*BPM6*, 2008 SNA, MFSM) would need to be updated to reflect trade financing instruments and SCF providers.

16. A comprehensive dataset on trade financing could also shed light on the different regional patterns, because the nature of trade finance varies widely from country to country and region to region due to distance from trading partners, product types, and the efficiency of local market practices.

Multisource statistics and big data to compile information on trade finance

17. **Growing digitization of commerce and finance processes is creating potential for accessing timely, precise, and relevant data right at the source of trade financing**. SWIFT, bank data bases, and digital Fintech's technology platforms are enabling these developments. On the SWIFT platform, financial institutions send structured electronic messages to one another to perform common business processes, such as making payments or confirming trades. The SWIFT "MT" standard, for instance, is used for international payments, cash management, trade finance, and treasury business.^{xii} To keep up with latest developments, in 2013 the ICC and SWIFT rolled out new industry-owned technology standards to digitize correspondent banking practices for supply chain finance (albeit, according to the WTO, not widely used yet).

18. The complementary use of big data accessing these digital data sources may facilitate a sound, efficient, and timely data collection, close existing data gaps, broaden the range of traditional macroeconomic statistics, and respond to research needs. Trade finance statistics as a separate data set could be compiled on a national and international level with instrument detail and eventually on a from-whom-to-whom basis. To this end, the statistical community on an international, regional, or national level could form Public-Private Partnerships.

Annex: New supply chain finance (SCF) instruments– based on suggested terminology and grouping by the Global Supply Chain Finance Forum

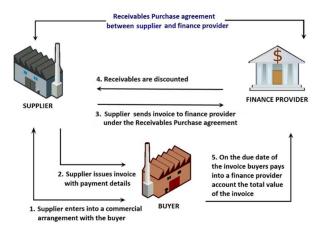
SCF Definition established by the GSCF Forum

"Supply Chain Finance is defined as the use of financing and risk mitigation practices and techniques to optimize the management of the working capital and liquidity invested in supply chain processes and transactions.

SCF is typically applied to open account trade and is triggered by supply chain events. Visibility of underlying trade flows by the finance provider(s) is a necessary component of such financing arrangements which can be enabled by a technology platform. [...] [The buyers and sellers] often have objectives to improve supply chain stability, liquidity, financial performance, risk management, and balance sheet efficiency. SCF is not a static concept but is an evolving set of practices."

Accounts Receivable Centric SCF Category

Accounts or trade receivables refer to the outstanding invoices that a supplier has vis-à-vis the buyer of its goods and services. Receivables are recorded separately on the balance sheet as short-term claims. Using the Receivables Purchase program, *the supplier sells all or parts of these outstanding claims to a financial intermediary or SCF service provider which takes full legal and economic ownership* (and not just a security interest in the collateral); in return, it provides the supplier with working capital in form of advance payments less the financial service charge (called discount), reducing the days sales outstanding (DSO) and providing



much needed liquidity the company can work with.

The following three different techniques on the market are *seller (supplier)-led* programs.

(1) Receivables Discounting allows suppliers with outstanding short-term invoices mostly vis-à-vis *multiple buyers* to sell their receivables to a financial provider at a discount. This instrument is

Source: Based on Global SCF Forum

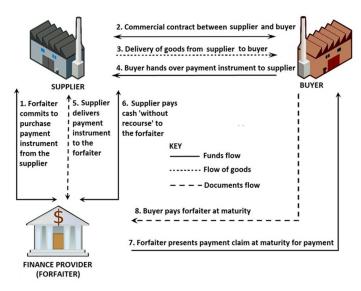
usually reserved to "investment-grade" suppliers that have

a minimum credit rating. Because of this, the finance provider can offer this program on a full or partly "without recourse"^{xiii} basis; i.e., the supplier can remove the accounts receivables completely or partly from its balance sheet, and the finance provider bears the risk in case the buyers fail to perform their payments. A trade credit insurance can limit the risk exposure of the finance provider. This financing transaction between the supplier and a finance provider can be made with or without the knowledge of the buyers; and depending on the situation in some cases, the buyers may be asked to validate their accounts payables.

At maturity, the buyers pay the amounts of the invoices into the bank account (i) of the supplier, with limited access rights of the supplier; (ii) of the finance provider (the finance provider does not have to be a bank); or (iii) of the supplier without restriction. The latter one adding an additional element of risk for the finance provider.

The buyer benefits from extended credit terms in a stable supply chain environment. The supplier profits from increased short-term liquidity. And the finance provider provides services in a relatively stable non-speculative financial environment.

(2) Forfaiting is an export oriented form of supply chain finance where a forfaiter (finance provider) purchases from the supplier, without recourse, future payment obligations and trades these as *negotiable debt instruments* in the form of bills of exchange, promissory notes, or L/Cs on the *secondary forfaiting market*. These payment instruments are legally independent from the underlying trade and require a guarantee by a third party (normally the buyer's bank).



Source: Based on Global SCF Forum

In the secondary market, forfaiters deal with financial investors. In the primary market, the supplier approaches the forfaiter before signing the contract with the buyer. The buyer obtains a guarantee from his bank, and provides the documents that the supplier requires to complete the forfaiting. After receiving *100 percent cash payment* against delivery of the payment (debt) obligation, the supplier has no further interest into the transaction, because the forfaiter must collect the future payments *plus forfaiting costs* (included in the invoice price) via the guarantor from the buyer. Forfaiting involves mostly medium to long term maturities, and is most commonly used in large, international sales of capital goods.

Forfaiting helps suppliers in trading with buyers of countries with high levels of risks, and obtaining a *competitive advantage by being able to extend credit terms* to their customers. While the without-recourse-sale eliminates all risks for the supplier, the forfaiter charges for his credit risks as well as for covering the political, commercial, and transfer risk related to the importing country, which is also linked to the length of the loan, the currency of transaction, and the repayment structure. The costs are overall higher than commercial bank

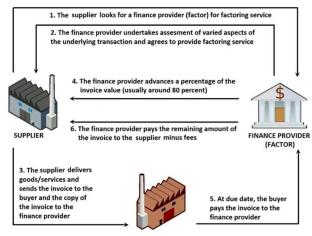
financing, but more cost effective than traditional trade finance tools. Forfaiting is only used in international trade financing.

(3) Factoring targets the domestic as well as the international market, whereby the latter often includes two "factors", one in each country. The suppliers, often SMEs, receive *around* 80 percent of the invoice value from the factor as advance payment, and a remaining, but discounted, value when payment is due by the buyer. The fees and discounts are borne by the supplier in return for the factor's services of advancing funds and managing the collecting of the receivables from the buyer. Because factoring is available with and without recourse, depending on the circumstances in the market, the factoring institution may add a credit insurance. Factoring provides suppliers with working capital, albeit discounted, allowing them to continue trading, while the factor receives margins from rendering the service.

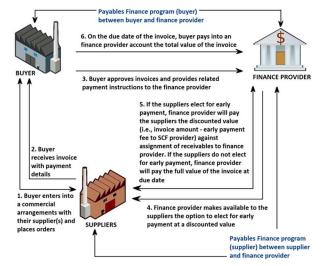
Asset-based financing linked to the physical supply chain is not a new concept. There are a variety of traditional techniques for accessing finance both pre- and postshipment. However, traditional factoring is often not fit for purpose for small businesses, as it typically entails long-term, complex contracts with fixed volumes.^{xiv} The innovations with SCF are the automated business processes and e-invoicing tools that are based on a central technology platform simultaneously accessed by buyers, sellers, and SCF providers.^{xv}

(4) Reverse Factoring, also known as Approved Payables Finance^{xvi}, is a *buyer-led* and arranged financing program for *designated suppliers* in the supply chain. The buyer's creditworthiness allows the supplier to receive an early discounted payment for the accounts receivables, typically without recourse. The buyer will pay the due amount directly to the finance provider. Buyers can be large, but also medium-sized and at times even near non-investment grade

(given, an established buyer-finance provider relationship exists); however,



Source: Based on Global SCF Forum



Source: Based on Global SCF Forum

buyers only arrange the financing, but they are not part of the financing transaction. As with previous cases, the assets are changing ownership from the suppliers to the financial intermediary. The early financing is for 100 percent of the receivables less a discount, which is lower than with conventional trade financing. As before, the buyer receives an extended term for payment in a secured supply chain environment.

(4a) As a variation to (4), buyers use *their own funds* in **Dynamic Discounting** to decide how and when to pay their suppliers in exchange for a discount on the purchased goods; the earlier the payment, the larger the discount. The buyers can use their own access liquidity to generate additional income, while the supplier can optimize the days outstanding and the working capital.

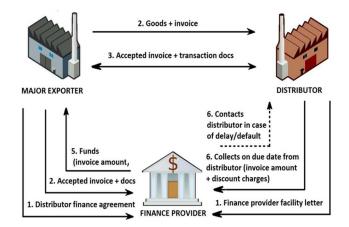
Dynamic discounting is a typical example where Fintech companies^{xvii} have been entering the market as providers of web-based platforms that allow both parties to upload, view, and approve invoices for early payment. For the buyers, there is no additional costs; the suppliers are charged a fee once they request early payment of the approved invoices.

Overall, in this category of Accounts Receivable Financing the financial claims move from the suppliers' books to the SCF providers (the service provider or directly to the finance provider); hence, *no new financial debt is created in the books of the suppliers for receiving early payment, in return for new liquidity*. On the creditor side, SCF programs^{xviii} can be self-funded by the buyers, or composed of a mixed program where financing is shared by the buyers, capital markets, and financial institutions.

Loan/Advance based SCF category

The second SCF category is based on loans and advances, where financing is usually provided in return for rights to a collateral, and the loan is recorded as a liability in the beneficiaries' balance sheet.

(5) The new edge to an existing instrument called **Distributor Financing** (or Channel Financing) is that large MNCs (as suppliers) are using this instrument increasingly for expanding into emerging markets. The MNCs support the financing of a geographically-important (network of) established distributors against their retail inventory, and the distributors repay their debt once the inventory is sold. Although the finance provider (e.g., local banks) is providing the



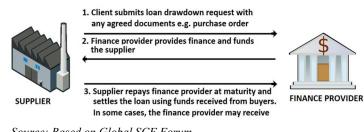
Source: Based on Global SCF Forum

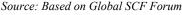
funds and taking over the risks, often MNCs subsidize the financing by absorbing part of the interest margins or other forms of risk-sharing arrangements, and through reputational support. MNCs directly benefit from their suppliers' sales of goods to these distributors (buyers), and indirectly, because a sound supply chain allows end-customers to profit from products that can be delivered without delay. Distributor Financing has limited impact on MNCs balance sheets compared to foreign direct investment. *Therefore, Distributor Financing is often seen as alternative to foreign direct investment and preferred to establishing inventory-carrying subsidiaries abroad*. xixxx Through the engagement of the MNCs, distributors profit from better loan prices and bridging liquidity gaps. The collateral for the finance providers is usually an assignment of rights over the inventory.

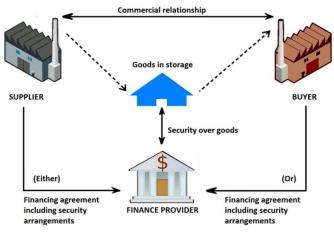
(6) With Loan or Advance against Receivables, the financial intermediary provides

advances or loans to suppliers that are collateralized with future or current receivables, while collateralization may be formalized or accepted informally. The suppliers repay the loans upon maturity and interest on an accrual basis.

(7) Loan or Advance against Inventory is an asset-based financing instrument in form of a credit line for suppliers and buyers along the physical supply chain to raise funds "instead of locking unused value inside a warehouse". The finance providers obtain title over the goods as collateral, and utilize on-site inspections and property insurance for risk







Source: Based on Global SCF Forum

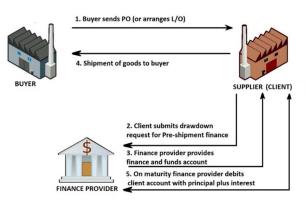
mitigation. Furthermore, finance providers base their lending on the inventory's appraised value, which is usually lower than the market value, and finance about 80 percent of this amount. For finished goods or work-in-progress, finance providers may also require purchase orders (on behalf of the buyers) or purchase contracts (on behalf of an end-customer). The transactions are settled regularly at the time inventory is used for production or sold off to customers. Although inventory financing is more expensive than other SCF instruments, for a certain market, it still provides advantageous terms, such as the ability to accumulate inventory and optimize working capital for lower rates than conventional bank financing.

Financing of "toll manufacturing" (7a) of the inventory is a variation of (7); toll manufacturing is what the SNA calls "manufacturing services on physical inputs owned by others" (as opposed to contract manufacturing, where the manufacturer owns and provides the raw materials).

Inventory repurchase (repo) agreement, or buy-back agreement" **(7b)** is a special case of inventory financing when the buyer/supplier temporarily "sells" its inventory to a financing entity, and "buys' it back after a predetermined time. What seems like a sale and buy-back is in fact not recognized as a true sale by the accounting bodies; therefore, the inventory stays on the balance sheet and the funds received are recorded as liability until the repurchase takes place within the pre-agreed upon period (usually 30, 60 or 90 days).

(8) In Pre-Shipment Financing

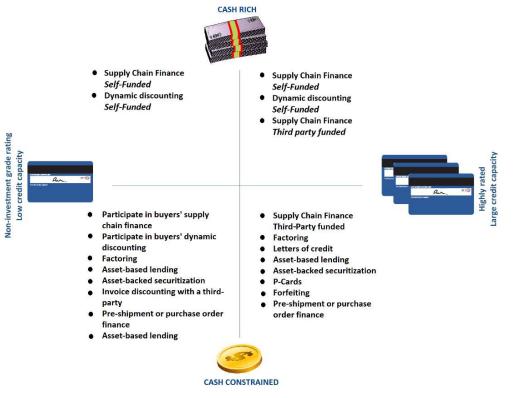
(sometimes called "Packing credit"), a manufacturer receives financial assistance for purchasing raw materials, processing, and packing the finished goods for exporting. Although the financial transaction is between the manufacturer and the finance provider, the creditworthiness and reliability of the buyer play a role in negotiations, and so does the manufacturer's reputation to perform



Source: Based on Global SCF Forum

and deliver. A prerequisite for granting the financing may often be (i) a specific kind of L/C from the buyer and his bank or a confirmed and irrevocable purchase order (PO) for the export of goods; (ii) the documents relating to the raw materials may be pledged to the finance provider as collateral; and (iii) the granting of inspections to the finance provider during the manufacturing cycle.

There is "no one size fits all" SCF. Alternatives depend on individual circumstances



Source: PwC: June 2014; "Managing Risk: Supply Chain Finance"

http://www.g20india.gov.in/pdfs/August2010_G20_Trade_Finance_Experts_group.pdf; G20 Trade Ministers Meeting Statement, 9-10 July, 2016. https://www.wto.org/english/news_e/news16_e/dgra_09jul16_e.pdf

- ⁱⁱ BIS 2014 Committee on the Global Financial System (CGFS) Paper on Trade Finance: Developments and Issues.
- ⁱⁱⁱ For instance, the US Office of the Comptroller of Currency (OCC) announced on December 2, 2016, that it is proceeding with its proposal to allow fintech companies to become charted as special-purpose national banks.
- ^{iv} Businessinsider.com/BI Business Intelligence, December 2016: Global fintech funding continues to grow. Worldwide funding flows reached \$19 billion in total in 2015, and \$15 billion by mid-August 2016. Last year, China overtook the U.S. as the top destination for fintech investment. Singapore has more than 100 fintech startups (Bloomberg, Jan 2017).
- ^v Regulatory requirements include the Anti-Money-Laundering (AML), the know-your-customer (KYC) and know-your-customer's-customer (KYCC) requirements. In the International Chamber of Commerce's (ICC) 2016 trade survey, 90 percent of respondents said the complexity of compliance was the chief barrier to the provision of trade finance. (https://iccwbo.org/publication/icc-global-survey-trade-finance-2016/).

vi https://iccwbo.org/publication/2017-rethinking-trade-finance/

vii The Report "The Future of FinTech: A Paradigm Shift in Small Business Finance", presented at the World Economic Forum 2015, makes a clear case for Fintechs: "Innovation, through what has been called FinTech, is already disrupting the ways financial services are being offered, promising to provide access to underserved markets in new ways."

^{viii} For instance: <u>www.supplychain247.com/article/why_blockchain_is_a_game_changer_for_the_supply_chain</u>. ^{viii} FT June 26, 2017: Seven of Europe's largest banks have hired IBM to shift trade finance to blockchain technology for crossborder small business financing of orders. IBM also partnered with companies in China and India.

^{ix} SWIFT, BIS (2014); International Chamber of Commerce (ICC) (2013)

^x <u>https://iccwbo.org/publication/2017-rethinking-trade-finance/</u>. The annual survey covers banks located in 98 countries.
^{xi} BPM6 5.72 in a footnote states: *Trade-related credit* is identified as a concept in *External Debt Statistics: Guide for Compilers and Users, Chapter 6, Further External Debt Accounting Principles*. It consists of trade credit as well as trade bills and credit provided by third parties to finance trade. It should be compiled as a supplementary item, where significant.
^{xii} All digital SWIFT messages are supposed to satisfy the information needs of "international standards for combating of money laundering and the financing of terrorism and proliferation of weapons." The information is sufficiently detailed and accurate to be used in trade finance statistics.

xiii Without recourse means: without subsequent liability. As a legal term, it signifies that the finance provider (and not the seller) of an asset is assuming the risk of non-payment of the asset.

- ^{xv} In a nutshell, this overall elevated collaboration between the parties to the financial transaction and the visibility of the underlying trade flows is said to be the reason why SCF will increasingly outperform traditional financing. Additionally, what is mainly referred to as SCF on the markets is based on buyer-led financing (financing provided by large buyers to their smaller suppliers) rather than supplier-led financing. Once the supplier is onboard, the buyer approves the invoice, and a cascade of processes takes place on the SCF provider's platform.
- ^{xvi} This SCF program currently has various names on the market; most commonly, "reverse factoring". There may be slight differences in the execution of the programs.
- xvii For instance: https://primerevenue.com/what-is-dynamic-discounting/
- xviii For instance: https://primerevenue.com/what-is-supply-chain-finance/

^{xx} Companies, of course, have plenty of other reasons why they would choose direct investment and the establishing of a longer-term interest in the host economy.

xiv The Future of FinTech: A Paradigm Shift in Small Business Finance; Report presented at World Economic Forum 2015

^{xix} Treasureandrisk.com