

# Merging Supply Chains, Emerging Supply Chain Financing Needs

This white paper focuses on converging, interrelated trends—the impact of globalizing supply chains, the migration towards open account, and the shifting dynamics of working capital needs within supply chains—as the basis of the emerging model of events-driven supply chain management. It does so primarily through the lens of members of the Global Trade & Supply Chain (GT&SC) Exchange, a client community sponsored by Bank of America, by synthesizing their views and approaches.

The goal of the white paper is threefold:

- To facilitate qualitative benchmarking among Exchange members
- To provide Bank of America with additional insight into clients' needs and views
- To provide clients with Bank of America's point of view.

Based on the interview testimony of GT&SC Exchange members, this document identifies patterns, highlights noteworthy findings, and draws conclusions for group consideration and discussion. Companies contributing to this paper include 12 major retailers.

## Converging trends and the emerging events-driven supply chain financing model

### Collaborative networks: The evolution towards supply chain financing

Today's globalized commercial activity is characterized by elongated and more complex supply chains, which can involve a multi-directional flow of raw materials and parts for assembly into finished goods. Within established supply chains, there is an evolution towards a collaborative, network-oriented perspective of, and approach to, supply chain optimization—one which recognizes the interconnectivity between members of an ecosystem.

Within this context, banks are developing *supply chain financing* solutions that—through a collaborative approach—aim to enhance the supply chain's overall competitiveness. Such solutions consider the working capital needs across the cash conversion cycles of buyer and seller and how best to arrange financing for the lowest cost to the overall supply chain. The objective is to remove working capital inefficiencies from the supply chain while satisfying the collective working capital needs of buyers and sellers—instead of taking actions that address the needs of one with possible detriment to the other.

### The premise of banks as full-fledged members

In parallel, the term "financial supply chain" has entered the parlance of supply chain management. The term underscores a growing awareness of the interconnectivity between the physical, financial and informational flows.

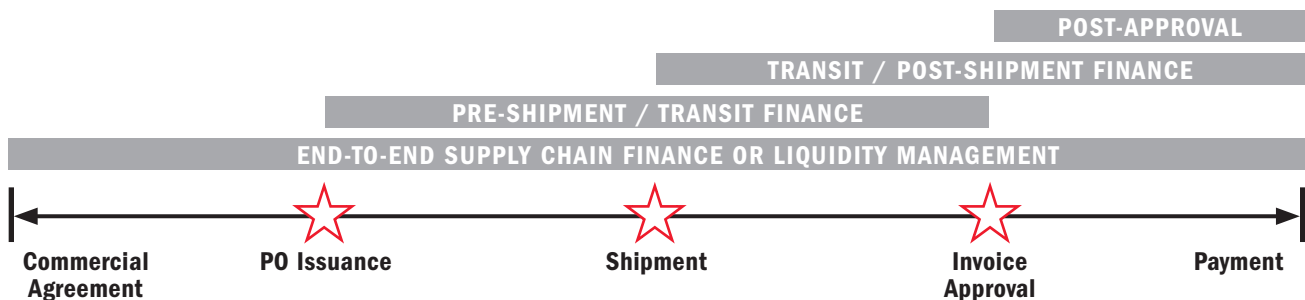
Further, it reasserts the value of banks within the supply chain and even suggests that with true integration, the view of a "financial" and "physical" supply chain evolves to that of one supply chain—encompassing the physical, informational and financial flows—with banks as equal members.

## The events-driven model: Just-in-time financing

Conceivably, with banks fully integrated into the supply chain they can more closely match the timing between the demand for, and the supply of, capital. Just as a lean, just-in-time approach to inventory drives efficiency in the physical supply chain, the ability to deliver financial solutions, informational flows and risk mitigation just in time—where they are needed, when they are needed—lowers cost (tied to P&L), enhances working capital efficiency (tied to balance sheet), and drives cash flow optimization.

This is the basis of the concept of events-driven supply chain financing, or the ability to trigger transactional financing on demand at different junctures in the flow of goods and related information. An events-driven approach requires integration between a supply chain's physical and financial flows.

CONCEPT DIAGRAM: EVENTS-DRIVEN SUPPLY CHAIN FINANCING MODEL



## The spectrum of end-to-end financing alternatives

Pre-shipment financing typically encompasses raw materials financing and/or production (i.e., works-in-progress) financing. Post-shipment financing options include receivables financing and early payment discount programs for sellers, and payables-extension financing for buyers.<sup>1</sup>

In-transit financing includes vendor-managed inventory programs. Sources of financing can include buyers, banks (including multiple financial institutions bidding to finance transactions through an automated platform), third-parties (e.g., factors or financing parties), and sellers.<sup>2</sup>

## Impediments to collaborative financing: The hold-up problem

The economic principle of the *hold-up problem* states that two parties that could work most efficiently by cooperating fail to do so out of concern that cooperation would mean giving the other party more bargaining power, which would reduce profit margin. This principle can be applied to buyer and seller in the case of traditional procurement negotiations and contract practices, which could impede efforts to move to a supply chain financing model.

There is a level of distrust—some sellers are leery of buyer-backed financing support. Lower borrowing costs will not be a bargaining chip past the first year of a program, say buyers, as vendors give other reasons for increasing cost (e.g., fuel). Further, buyers say that lower financing costs won't reflect in unit cost, or, even if there is a cost impact, it is not measurable as a separate component of savings. Finally, buyers believe that to some extent banks want to be selective of the vendors they finance.

<sup>1</sup>"Supply Chain Finance Benchmark Report," Aberdeen Group, page 4.

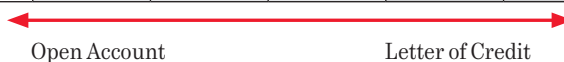
<sup>2</sup>Ibid, page 3

## I. Globalizing supply chains: Dynamics driving working capital needs

### Migration from LC to open account

**TABLE 1: PERCENTAGE IMPORTS BY VOLUME ON OPEN ACCOUNT TERMS**

Company A	Company B	Company C	Company D	Company E	Company F	Company G	Company H	Company I	Company J	Company K
100	100 (near)	100 (near)	71	60	50	45	40	39 (58% PLLC)	37	<1



#### Summary of findings

- GT&SC Exchange members are shifting to open account. There is a general intent to move towards open account, but philosophies and approaches vary to a large degree.
  - Open account terms enable Company C to recoup debit balances (i.e., chargebacks).
  - Company I offers payment options—bank LC, PLLC, and open account (wire or check), using cost to incentivize vendor behavior (e.g., charges fees for bank letters of credit checks).
  - Company E and Company F let vendors choose letter of credit (LC) or open account terms, the underlying assumption being that vendors know their financing needs best. Both actively work to convert vendors from LCs—through education on the cost benefits of open account—and expect the competitive bidding process to yield the lowest product cost.
- The extent of vendor reliance on LCs for pre-export financing—and the impact of shifting to open account—is not well understood. While suppliers welcome a reduction in LC fees, anecdotal evidence suggests that LC elimination is impeding access to liquidity or increasing borrowing rates for some.
  - Demand for LCs remains strong among Asia-based vendors, given the region’s immature and fragmented banking systems and the need to deal with commercial banks at the local branch level. Anecdotal evidence suggests that some Asian exporters may need LCs even if they indicate that they don’t. Despite good buyer-seller relations, some exporters “may hold their cards close to their chests.”
  - In conjunction with migrating vendors to open account, Company D is seeing an increase in receivables factoring. Many of its vendors continue to rely on LCs to finance their production.

## II. Extending payment terms

#### Summary of findings

Those GT&SC members who have moved most aggressively to open account—migrating 80% or more of their vendors—either have extended their payment terms or intend to do so.

#### Noteworthy highlights

- A number of GT&SC members note that the combination of open account migration, extended terms, and the depreciating dollar is a severe setback for vendors. Fuel prices are creating cost pressure too.
- Company L has shifted 90% of its vendors to open account in conjunction with extending its payment terms from 15 to 30 days. The company has longstanding supplier relationships. Company L leveraged TradeCard® to facilitate the migration, which took place 18 months ago.

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-Company K asserts that under an open account scenario, if buyers use DDP Incoterms, extend their payment terms and provide supplier financing, the savings are measurable. Although its suppliers still use LCs, Company K has automatically extended its payment dates by three to five weeks by changing Incoterms from FOB to DDP. The practice also lowers first cost by removing the vendor's mark-up. The company is willing to forego visibility into inventory in transit, since it works with reputable vendors, has done the necessary due diligence, and audits customs compliance by checking vendor drawing documents prior to customs submission.

### III. Events-driven supply chain financing: Summary of findings

Interview testimony focuses on pre-shipment and post-shipment financing (i.e., with PO issuance and buyer approval of invoices as respective triggers). In-transit financing did not surface as a major interview focus.

#### Conclusions

- Despite a continued shift to open account, GT&SC Exchange members are still in the early stages of evaluating, adopting and implementing supply chain finance solutions.
- Pre-export financing under open account is a key area for vendors, which needs not be inadequately addressed now. Bank focus is more heavily skewed to post-shipment financing—and, particularly, early discounting programs, which some believe do not help those vendors with the greatest need.
- Interests vary in establishing post-shipment early discount programs for suppliers. For some GT&SC members, neither the value proposition of the approach nor the value of using a third-party technology platform is strong. How to recoup supply chain savings remains a key question for some.

#### Pre-shipment financing

- Financing trigger. Purchase Order (PO) issuance by buyer to seller. Finance provider assumes risk of seller and typically covers the purchase of raw materials and/or the cost of manufacturing.

#### Summary of findings

- Some GT&SC Exchange members say that pre-shipment financing is an area within the events-driven model that needs to significantly advance in order to address supplier needs for working capital in an open account environment. Anecdotal evidence of need includes vendor requests for SBLCs.

#### Noteworthy highlights

- Company K sees a strong need among its supplier base, which it has been unable to wean from LCs. In Bangladesh the company's suppliers pay as much as 19 percent interest on working capital loans, even with LCs as collateral. Company K asks whether Bank of America can leverage its stake in China Construction Bank to enable a greater assumption of risk.
- A standardized, event-triggered pre-shipment program would allow Company F to work with some of its smaller vendors in more robust and efficient ways. Company F has developed creative solutions to help some of its new smaller vendors, but such efforts entail significant work. For vendors that are too small, and where there is too much risk, solutions would need to enable banks to assume more risk.

#### *Example: Hypothetical Factory Financing Program*

A few companies (not members of GT&SC Exchange) are enabling pre-export financing for suppliers on open account terms. Factory financing programs enable select suppliers to obtain pre-export financing by borrowing against a company's POs. Typically these programs are available to a subset of Asia-based vendors with longstanding relationships with the buyer.

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## How it works

The localized financing, which typically covers the cost of manufacturing, leverages an importer's banking relationships to enable loans to vendors that either would not be able to borrow directly or would borrow at a higher cost and with more documentation requirements. Borrowing typically does not carry a guarantee (i.e., buyers have no risk exposure). A buyer's banking partners serve as lenders.

Participating suppliers and banks link directly to a buyer's purchasing system for access to outstanding POs and related data (e.g., PO reductions). The banks evaluate the factories based on their performance track record. Loan advances are negotiated directly between the vendors and banks and utilize a standing financing line. Post-shipment export proceeds also can be advanced at a discount. The buyer may work with its banks to market the program to sellers. Such programs can be coupled with extended payment terms.

## Post-shipment financing

★ **Financing trigger.** Invoice approval by buyer. Financing provider assumes buyer risk. Typically, buyer has received goods at its warehouse or distribution center.

## Summary of findings

- GT&SC Exchange members interested in collaborative financing structures for imports are primarily focusing on offering early payment discounting programs. However, there is a broad spectrum of views on the value proposition for buyers in general and on the use of third-party technology platforms.
- GT&SC Exchange members do not necessarily believe in linking early payment discounting programs with initiatives to extend payment terms. For some the primary goal would be to facilitate migration to open account. Programs may or may not be coupled with a technology platform to provide suppliers with additional process flow efficiencies.
- Company E is in the early stage of deploying a program with a limited number of vendors to gauge the level of interest. Company B is developing a business case for a self-funded program. Company H is close to deciding whether to do post-shipment financing.
- Some question how to recoup savings to the supply chain and therefore to measure the economic benefit of an early discounting program.
- For imports, no one is paying their invoices early for a discount due to the complexity of recouping customs overpayments.

### *Example: Company E's Limited Program for Early Payment Discounting*

Company E is implementing an early payment discounting program for select domestic and international vendors. Top suppliers with short payment terms or that have expressed a need for financing are eligible. The main objective is to help suppliers reduce their costs. Company E also intends to use the program as a gateway to lowering LC usage. The program has not been coupled with an extension of terms and there is no plan to do so. There was no formal business case for establishing the program.

Lower financing costs, combined with reduced LC fees, are expected to yield lower unit prices or at least a negotiation bargaining chip. Without visibility into a factory's cost structure, though, it isn't possible to measure the hard dollar benefit or to correlate the program with a pricing benefit beyond its first year. Concurrent to the program, Company E is pursuing ways to make LC processes more efficient.

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### *Example: One Company's Process for Building a Business Case*

Company B evaluated two options: 1) taking discounts for early payment of invoices (i.e., reducing cost of goods sold), and 2) offering a bank-financed early discount program to its suppliers, coupled with extended payment terms (increasing days payable outstanding (DPO)). It found the latter approach to be more economically advantageous; carrying a potentially large working capital benefit. A supplier early discount program with extended terms is also easier for its accounts payable group to implement. The other approach would require the selection of which invoices to pay early, for example.

### **Choosing a solution**

The company found Prime Revenue to have the best technology platform, one which is bank-agnostic and therefore more flexible. Terms are negotiated with each vendor, but typically range from 45 to 60 days except for seasonal dating. Lowering the cost of financing and giving suppliers access to same day liquidity should make suppliers indifferent to extended payment terms. Select longstanding vendors without credit issues will be eligible. Prime Revenue will determine borrowing rates on a case-by-case basis, and together with the company, will collaborate on vendor education.

### **Gaining buy-in from internal stakeholders**

Making a business case involves commitment by various internal stakeholders—including merchants, accounts payable, IT, legal, and treasury, and is therefore a complex process. A key selling point for merchants is the lack of impact to gross margins and the ability to use the program as a bargaining chip in price negotiations. Chargebacks are a key concern of the accounts payable group. To address this, the company would hold a reserve of invoices (i.e., not release all available invoices). Prime Revenue's platform also allows for a percentage or dollar value to be approved by invoice.

### **Product innovation ideas**

The ability to attach a syndicate facility to a supply chain financing structure would help this company to bring in new vendors to the platform, since participating banks could provide additional credit support.

Banks need to think about developing a global platform for payables solutions as the retail industry continues to globalize. For example, as Company B expands globally, it will look to pay in local currencies in the country of local incorporation.

### *Example: Company H Links in Open Account Outsourcing*

Company H is close to deciding whether to establish an early payment discounting program. The goal would be to encourage vendor migration to open account, and the company would look to extend payment terms in conjunction with the program.

The logical choice would be a third-party provider to discount documents and extend terms. Company H would not use Prime Revenue's technology platform but rather would rely on its own global tracking system.

## **IV. Bank of America point of view**

This section aims to address questions raised by GT&SC Exchange members during the interview process related to the value proposition of buyer-backed early payment discounting and use of a third-party technology platform. The aim is to spur additional dialog. We first provide a brief vision statement for end-to-end payables solutions as context for our viewpoint.

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## Vision for end-to-end payables—A singular solution

Today clients want a single global payments platform from which to initiate the spectrum of domestic and cross-border payments. The platform enables paper-to-electronic migration by including check payments (printing and distribution outsourced to the bank), ACH, purchasing card (e.g., ghost cards) transactions, wires and drafts. Future open account payments can include a financing component such as payables discounting as well as integrating traditional forms of financing such as LCs.

Clients also want solutions that apply automation to the broader order-to-pay process. Accounts payable outsourcing for domestic and cross-border transactions addresses key pain points such as invoice receipt, document matching and workflow management.

Finally, clients are asking for a range of tools and bank-led programs that facilitate payment optimization. This includes, for example, programs to increase vendor enrollment for card and ACH payments as well as in-early payment discounting programs. It also could include intelligent payment routing, whereby the bank accepts a client's payables file and chooses the lowest cost payment channel based on the nature of the payment, its value and level of urgency.

## Invoice-triggered early payment discounting

Early payment discounting improves DPO for buyers while enabling sellers to obtain better rates for working capital financing. A buyer can extend payment terms without negatively impacting its sellers, since sellers can borrow at lower rates based on a buyer's credit rating. The solution works well in emerging markets like Asia and Latin America, where many suppliers have very limited access to capital.

The bank intermediates between importer and exporter for a fee, but the seller's overall cost of capital is still less than it would pay to its local bank.

## Coupled with payables outsourcing

Bank of America can provide accounts payable (including open account) outsourcing—receiving and processing a buyer's POs and its sellers' invoices, converting paper invoices from multiple formats to a single digitized data stream, and then matching commercial documents (i.e., POs, invoices, and transport documents) to enable payment. Coupling payables outsourcing with the ability to pay early for a discount—and enabling some of your sellers to trigger early payment—provides processing efficiencies in addition to working capital and supply chain benefits.

## Stand-alone solution using technology platform

Our partnership with Prime Revenue provides suppliers with a high degree of visibility into the status of invoices and payments, thereby reducing vendor inquiries. Bank of America receives your file of invoices for payment on future dates, which we upload to the portal for supplier review and selection. If you have a large supplier base, many of which will participate in your early payment discounting program, you may have the scale to make this level of automation beneficial to you and your suppliers (i.e., the efficiency savings outweigh the additional cost).

## Without technology platform

Bank of America can provide payables discounting without the technology platform. This is a manual process whereby the bank accepts drafts from your suppliers at a discount. If your spend analysis indicates a small number of participating suppliers, this approach may be more cost effective.

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## V. Group snapshot: Purchasing in USD versus foreign currency

### Summary of findings

- Sourcing is still almost exclusively in U.S. dollars. Some do limited purchasing in euros and pounds sterling
- There are some requests from vendors for payment in other currencies. It is unknown to what extent suppliers are building in their own hedges.