



## Supply chain finance: From myth to reality

Trade finance is a cost-intensive and highly specialized business dominated by a small number of global banks. Given the scale and size traditionally required to compete in this highly specialized market, most banks have ignored trade finance in favor of more profitable businesses such as cash management and lending. But globalization and the new credit environment have changed the rules of the game. Long regarded by corporates as more myth than reality, supply chain finance (SCF) today offers banks a practical way to meet buyers' and suppliers' liquidity needs within a tighter regulatory framework. This article examines the evolution of supply chain finance and discusses the strategic options available to banks seeking to play a role in this new model of trade and cash management services.

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### **Challenges facing traditional trade finance services**

Trade finance revenues amount to barely four to five percent of corporate banking revenues. As small and medium size enterprises (SMEs) have become increasingly active in international trade, the average value of transactions has decreased, but the documentary burden has stayed the same. Putting additional pressure on margins, more profitable large corporate customers have been shifting from letters of credit (L/Cs) and letters of guarantee (L/Gs) to open accounts, assuming the counterparty risk of their strategic trading partners. Despite a surge in L/Cs following the crisis, the trend toward open account trade continues, particularly among OECD countries. According to SWIFT, open accounts now make up

more than 85 percent of cross-border trade transaction volume. Furthermore, Basel II guidelines do not recognize the short-term self-liquidating nature of traditional trade finance instruments, resulting in disproportionately high capital costs.

### **Trade finance is vital to economic prosperity**

While banks struggle to protect trade finance margins, trade services play a vital role in economic growth. The inability to finance trade contributed significantly to the unprecedented 25 percent drop in international trade in 2009, as demonstrated by the \$250 billion G20 support package of April 2009. Today, access to liquidity is still restricted. As a global head of trade finance observed recently, "Despite some corporates

now having full access to liquidity, others are still in a difficult situation because of banks' continuing credit policy restrictions." Going forward, the implementation of Basel III and post-crisis regulatory reforms will raise the capital costs of asset-based strategies for banks, and consequently, the cost of trade finance will remain a top strategic concern for businesses of all sizes. Several SME owners have told us they now personally look at trade finance issues and carefully consider the quality of trade services when choosing a bank partner. Large corporates, meanwhile, have come to view the financial health of their strategic partners as a primary operational risk but at the same time want to improve liquidity by delaying payment to these same suppliers as long as reasonably possible.

In light of these new economic realities, supply chain finance may enable banks both to increase the value of their trade (and treasury) services and improve corporate liquidity. SCF, however, poses significant competitive threats as well as potentially huge opportunities for banks, large and small. The ongoing transition to-

ward open source networks makes it possible to procure almost any good or service, including financial services, from anywhere in the world, and banks need to set a clear strategy to secure and optimize the value of their trade and treasury services on the basis of a more complex and integrated delivery platform.

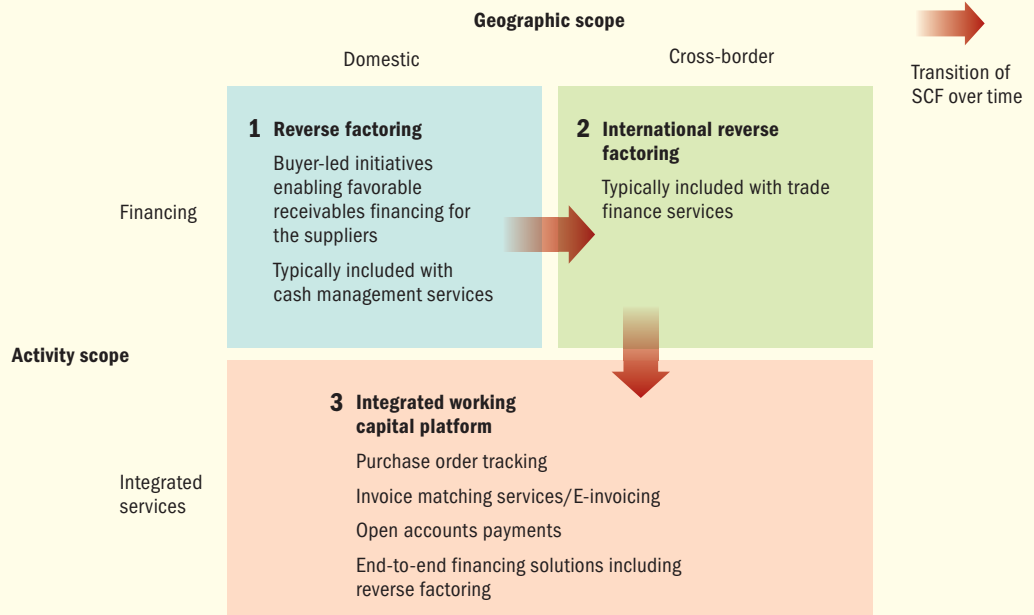
**The evolution of supply chain finance**

Corporates may be excused for once dismissing SCF as little more than myth, and bankers freely admit that each institution has its own definition of SCF. However, the various SCF programs available today reflect one of three models, which have developed since the concept of SCF first appeared in supply chain literature in the early 1990s (Exhibit 1).

Introduced in the 1990s, the first model of SCF combined domestic trade finance with supply chain management through an innovative invoice financing arrangement known as "reverse factoring," a three-way agreement by which the bank (or "factor") purchases the receivables of the supplier with legal recourse to the buyer. In this earliest

Exhibit 1  
**Supply chain finance has expanded over time into a broader set of integrated services**

**Supply chain finance business models**



Source: McKinsey analysis

model, reverse factoring was purely a domestic service offered within select industries, especially the automotive sector. A large, investment-grade company could extend its days payables outstanding while allowing its suppliers (typically smaller, less creditworthy companies) to reduce their days sales outstanding at a favorable rate. Thus, reverse factoring is a form of credit arbitrage: by relying on the stronger credit rating of the buyer, SME suppliers get liquidity at better terms.

The second model of SCF emerged as many large companies began sourcing their raw materials from SMEs around the world. The key enabler here was the development of technology platforms with two innovative features. First, these platforms connected all counterparties around the world, and second, they made it possible for multiple credit providers to connect and compete on financing, with the expectation that lower cost receivables financing would attract more suppliers. A buyer (e.g., a large supermarket chain, acting as a hub) would require its top 200 to 400 suppliers to connect to a platform (typically supported by the buyer's bank) in order to receive faster payment at a favorable discount.

Despite these innovations, participation in SCF has never fulfilled expectations, due to a number of inhibiting factors. First, legal and accounting standards in many countries do not recognize e-invoices and other electronic documents as legally binding. Second, the low cost of capital in the mid-2000s virtually eliminated the marginal advantage of credit arbitrage between large corporate buyers and SME suppliers. Third, linking suppliers with banks' proprietary platforms proved to be cumbersome and expensive. While the second model of SCF reached a modest level of success in previous years, the failure to achieve critical mass has prompted many companies to abandon SCF programs. More recently, however, technological improvements and the economic environment have rekindled interest among suppliers, suggesting that the second model has the potential to gain traction going forward.

The third and most promising model is still emerging and represents the holy grail of SCF. Ultimately, the third model will integrate the pieces of the financial supply chain from end to end, fully automating the buyers' procure-to-pay and suppliers' order-to-cash cycles. This new level of integration will support event-triggered financial services along the physical supply chain (e.g., purchase order tracking, invoice matching services, e-invoicing, open account payments, import/export financing, reverse factoring) and afford full transparency into each transaction. This transparency will allow liquidity providers (whether banks or non-bank finance companies) to apply dynamic pricing in purchasing outstanding invoices (e.g., the closer the goods to destination, the lower the pricing). The integration of procurement, invoicing and financing within a single platform represents the full convergence of cash management and trade finance.

### **Win-Win-Win: Better liquidity, more efficient capital allocation**

SCF is a rare example of a tripartite value proposition for banks, buyers and suppliers (Exhibit 2). First, it helps banks optimize use of capital by reducing the consumption of risk-weighted assets, as counterparty risk shifts to larger buyers with a better risk profile (important in light of Basel III). Second, the credit differential among investment grade buyers and their SME suppliers is wide enough in the current funding market to make the credit arbitrage of reverse factoring an attractive way to improve liquidity for both buyers and suppliers. For example, SCF programs allow buyers to extend payment terms from 60 to 120 days while providing suppliers access to better financing rates (e.g., 120 days at 100 bps instead of 60 days at 500 bps). According to industry sources, SCF could unlock \$100 billion to \$500 billion of liquidity by accelerating the cash conversion cycle for suppliers and extending days payables outstanding for buyers. Third, the more efficient, automated credit mechanism of SCF strengthens each link of the supply chain, thus decreasing

Exhibit 2

## SCF programs provide significant benefits to all parties involved

Benefits to buyer	Benefits to supplier	Benefits to bank
Provides basis to negotiate improved commercial terms with suppliers (i.e., lengthening payment terms)	Provides accelerated payment option	Increases profitability thanks to lower capital requirement (especially in light of Basel III)
Improves vendor relationships by providing access to new and cheaper sources of funding	Provides alternate source of liquidity (e.g., off-balance sheet financing such as securitization)	Increases top line by supporting clients' entire supply chain from end-to-end
Reduces payment processing costs	Provides potentially better financing cost (depending on credit quality and industry)	Builds stronger, more collaborative relationships with clients
Enables better cash flow management	Provides visibility and facilitates reconciliation of payments with invoices (faster dispute management)	Increases reach and profile of trade and treasury organization
	Offers more predictable cash flows	Efficiency gains among clients create growth potential, leading to expanded need for banking services

Source: McKinsey analysis

buyers' operations risk. Finally, elimination of paper processing can reduce processing times of 30 to 60 days to approximately 10 days, enabling suppliers to offer better discounts for early payment.

### From myth to reality

As of today, no bank has achieved such a fully integrated supply chain solution. Most are still busy migrating their traditional domestic platforms to cross-border standards. Some of the established leaders in trade finance offer fragmented solutions but not globally. In addition, a high hurdle separates mythic vision from today's reality: There is no common standard to enable the exchange of data among different technology platforms. SWIFT's Trade Services Utility initiative and its Bank Payment Obligations aim to generate this link between purchase orders and financial instruments but has yet to win full buy-in from the industry.<sup>1</sup>

Meanwhile, non-bank players are leveraging recent technology innovations to position themselves as key participants in integrated financial supply chain services, including the credit link. Ariba, for example, connects buyers with suppliers; Prime Revenue, Orbian and Demica offer online access to finance providers; and UPS Capital offers

finance and receivables management services in conjunction with its cargo service. These services have already contributed to the increasing globalization of supply chains. Seeking to reduce costs and improve operating efficiency, many companies have outsourced management of their supply chains to logistics experts. Similarly, SCF will allow corporates to unlock trapped liquidities through automated financing at lower rates.

Any bank that chooses to ignore the ongoing evolution of SCF runs a risk of disintermediation. By allowing bank and non-bank competitors to take their pick of preferred services, from procurement to financing, SCF could actually weaken the relationship between banks and their corporate clients. Indeed, in the best-case scenario, we expect that as this market grows, big global banks will likely experience a loss of market share even as their trade services revenues grow.

### Launching a successful SCF program

In choosing a delivery platform for SCF, banks need to think carefully about where they want to play in the trade and treasury services value chain. Some banks may seek to consolidate a leadership position with a comprehensive proprietary platform. Most

<sup>1</sup> For more on the remaining obstacles to financial supply chain integration, see "Who will drive B2B electrification, banks or technology providers?," *McKinsey on Payments*, June 2010.

## Trade finance glossary

Trade finance incorporates highly specialized instruments to mitigate risk between trading partners. Traditional trade instruments such as letters of credit are document-heavy and require extensive manual processing, and cost-to-income ratios of 50 percent are typical in the trade finance business. Consequently, a small number of large banks (varying in scope from local to global) dominate trade services, leveraging scale to establish centralized processing operations. The following glossary of trade finance terms provides an overview of traditional transactional and newer working capital solutions.

### Documentary collections (D/C)

The supplier entrusts collection of payment to the remitting (supplier's) bank, which sends documents and instructions for payment to the collecting (buyer's) bank. The buyer pays the face amount either upon acceptance of documentation or at a specified future date to the collecting bank, which transfers funds to the remitting bank.

### Letter of credit (L/C)

The buyer's (issuing) bank makes payment to the supplier's bank, with the supplier presenting documents confirming the shipment of goods within a given time frame. L/Cs reduce the risk of non-delivery for the buyer and guarantee payment to the supplier upon shipment.

### Letter of guarantee (L/G)

Promise by the bank on behalf of a buyer to compensate a supplier for any detriment suffered on the basis of the non-fulfillment of obligations. L/Gs protect the buyer against the commercial risks of non-fulfillment of the supplier's obligations and reduce non-payment risk for the supplier.

### Open account

A standard arrangement with no third-party or guarantees involved. The seller presents an invoice to the buyer for goods delivered. Suppliers are increasingly obtaining credit insurance to mitigate the non-payment risk.

### Factoring

The supplier sells its short-term accounts receivables to the factor (a bank or specialized trade finance company) for cash at a discount on the face value. Factoring allows the supplier to offer open account terms and reduce days sale outstanding.

### Forfaiting

The supplier sells a large, medium-term receivable at a discount to the forfaiter "without recourse." The supplier ships goods to the buyer and delivers documents to the forfaiter, who assumes the risk of non-payment and handles collection. In distinction from factoring, forfaiting contracts are made on a transaction basis with suppliers (usually exporters) that sell capital goods, commodities or large projects with medium-term credit needs ranging from 180 days up to 7 years.

### Export financing

In pre-shipment export finance the bank provides a loan to the supplier (exporter) to finance the processing of goods to be delivered to the buyer (importer) on the basis of a confirmed purchase order and/or L/C. In post-shipment export finance the bank provides a loan to the supplier against their export receivables for the period between shipment of goods and receipt of payment from the buyer.

### Credit insurance (CI)

CI protects an exporter of products or services against the risk of non-payment. CI generally covers commercial risks such as buyer insolvency, bankruptcy or protracted defaults, and certain political risks, as well as currency inconvertibility, expropriation, and changes in import or export regulations.

### Supply chain finance (SCF)

SCF programs generally refer to bank-sponsored buyer-centric initiatives using open accounts and providing liquidity to suppliers through reverse factoring.

### Trade-receivables-backed financing

The supplier transfers accounts receivable assets, usually on a revolving basis, to a special purpose vehicle, which issues notes sold to investors through secondary distribution. This form of structured finance can be beneficial to non-investment-grade medium-size suppliers, as the securitized assets are rated according to the creditworthiness of the buyers, providing the supplier with liquidity at a lower cost of funds.

### Commodity inventory financing

A form of structured finance in which the pledge of a commodity is used to improve credit terms. Funding techniques include pre-export finance and inventory finance, and the lender is reimbursed through the sale of the assets.

banks, however, will either partner with another bank or third-party or pursue a combination of in-house development and external partnership in order to focus on the pieces best suited to their clients' needs. The choice depends in part on the financial institution's size, footprint, IT capabilities and appetite for investment but also on its growth strategy (e.g., targeting new outlets for lending or enhancing existing cash management offerings with trade services) (Exhibit 3).

Any bank, regardless of size and ambition, must recognize current market expectations for openness. An open network (in which various credit and technology providers serve the network of buyers and suppliers) has the highest likelihood of attracting critical mass. Participating companies want to access trade finance from various providers, not only the bank that serves as their primary treasury services gateway. Consequently, we expect hybrid solutions to become the most popular.

**Key factors for successful development of SCF business models**

As a new delivery model for trade and treasury services, SCF requires banks to bring large corporates and SMEs on board through the development of new infrastructure, new value propositions and new sales and marketing strategies. To successfully enter the space of cross-border reverse factoring services (Model 2), banks will need to:

1. *Ensure their footprint covers key trade corridors:* The trend of increased south-south, south-north trade is likely to intensify in the coming years. Banks will need to meet their clients' growing needs in more diverse and exotic locations, whether through partnerships with local institutions or increased physical footprint.
2. *Target relevant industries:* Build participation in segments where the bank has strong relationships, particularly those where demand for innovative solutions is

Exhibit 3 <b>Banks should choose an SCF platform according to capabilities and footprint</b>		Option 1	Option 2	Option 3	Option 4
		<b>DEVELOP proprietary system</b>	<b>OUTSOURCE to another bank</b>	<b>BUY from external vendor</b>	<b>HYBRID PLATFORM</b>
<b>Description</b>		Internal development or software licensing agreement  Integrate cash management and trade finance functionalities (e.g., E-invoicing, Procure-to-Pay)	Bank-branded solution through private label agreement	Open network platform (e.g., Prime Revenue, Orbian, Demica)	Combine proprietary system with open system(s)
<b>Prerequisites</b>		Large volume/scale Global footprint Large, knowledgeable sales team Robust technology resources Ability to distribute risk to create adequate capacity on single risk	Knowledgeable sales team Insourcing bank must meet clients' footprint	Knowledgeable sales team Skilled technology workers	Same as options 1 & 3
<b>Bank advantages</b>		Increase client stickiness Fully leverage own brand equity Full control of legal framework Can insource/white label to other banks	Flexibility/scalability Access to suppliers through global bank Focus resources on core strengths No need to host platform	Increase speed-to-market Attract suppliers with access to multiple banks Technical support and help deploying solutions at suppliers Focus technology resources on core strengths	Capture volume from clients already participating in existing open systems Build volume with new participants on own platform Ability to structure hybrid programs

Source: McKinsey analysis

highest (e.g., industries where payment terms vary widely across the supply chain).

3. *Secure participation of buyers first and then help them onboard suppliers:* SCF is a buyer-led concept. Banks should start by bringing the largest clients on board, who in turn attract suppliers. Multinational buyers have already been targeted by the leading trade finance banks, but in aggregate, mid-size corporations represent the largest potential for growth. Banks should invest significant time in facilitating the roll-out of programs, engaging cross-functional teams and ensuring CFO/CEO sponsorship on the supplier side.

To move to the next level of integrated SCF services (Model 3), banks will also need to ensure the following:

1. *Merge existing domestic cash management platforms with cross-border trade systems:* This will enable banks to track the full supply chain across a single infrastructure and offer transactional and financing services triggered automatically at key moments in the supply chain.
2. *Become 100 percent paperless:* The electrification of all documents is the only way to deliver a truly distinctive value proposition to clients. Corporates should be able to upload electronic invoices, L/Cs and L/Gs directly from their enterprise resource planning systems.
3. *Adopt the right coverage model:* Banks should revamp their marketing and sales model for transaction banking. SCF is a broad proposition with strategic implica-

tions at various levels of the client organization. Benefits will be most readily perceived by the CFO and treasurer, but issues of operational risk and supply chain management will engage the CEO and COO as well. Procurement officers may mistakenly pay more attention to price discounts obtained at the expense of worse payment terms. Banks should prepare sales staff, ideally specialists in financial supply chain management, to educate people throughout the client organization about how SCF impacts their duties and performance.

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The recent financial crisis brought the end of cheap credit and diminished trust among trading partners. On the upside, it has also created new opportunities and accelerated trends that could redraw the industry landscape. Going forward, new regulations will likely require banks to hold more capital against risk-weighted assets and companies expect to use credit arbitrage to manage liquidity costs. The new model for supply chain finance opens the growing trade finance market to a wide array of banks (and non-banks) eager to eat into the market share of the big global players. Banks of various types and sizes can profit from supply chain finance, provided they can craft the right strategy in an increasingly global and electronic market for cash management and liquidity services.

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