

# Supply Chain Finance: Addition by Subtraction

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An increasing focus on cash flow, combined with turbulence in the credit markets, is driving corporates to further increase trade credit by extending payment terms. How can firms significantly reduce days sales outstanding (DSO) and accounts receivable (A/R) without affecting sales and customer relationships?

Trade credit, the extension of credit from supplier to buyer throughout the supply chain, is a large and growing asset on corporate balance sheets, representing 2.5 times the combined value of all new public debt and primary equity issued per year.<sup>1</sup> Trade credit exceeds the primary money supply (M1) by a factor of 1.5 on average and accounts for 13% of the total liabilities of U.S. manufacturing firms.<sup>2</sup> According to the Federal Reserve, non-farm, non-financial corporate trade credit amounted to US\$2.2 trillion in 2008. An increasing focus on cash flow, 'asset light' business models and investor demand for improvements in return on invested capital (ROIC) combined with recent shocks to the credit markets are driving firms to further increase trade credit by extending payment terms. Given the size of these liabilities and the proportion of a firm's capital that is involved, managing trade credit (in the form of A/R) should be a focus for any organisation.

Although initially it may seem that trade credit and payment terms are determined primarily by the relative power in the buyer/supplier relationship, most research on trade credit concludes that its main role is as a marketing tool used to win business and manage customer relationships. If it were simply about supplier leverage, General Electric wouldn't have DSO of 67 and Emerson Electric would not have DSO of 72. Whether viewed as 'an integral part of the firm's pricing policy'<sup>3</sup> or as a 'selling expense like advertising',<sup>4</sup> the provision of trade credit is essential to maintaining a firm's customers and revenue growth.

In this context, it is not surprising that most techniques used to manage A/R focus on ensuring that customers pay on the agreed payment term rather than actually reducing payment terms. Techniques such as improving invoice processing, developing new collections channels or outsourcing them entirely, centralising receivables processing, etc, can yield valuable reductions in DSO however they are not designed to reduce payment terms below current contracted levels and they provide 'evolutionary' improvement rather than sustainable 'revolutionary' change. In today's economic environment, simply maintaining DSO at current levels is a victory. According to the Credit Research Foundation, 94% of firms say customers are leaning on them to extend payment terms and increase A/R balances.

## Uncertainty Breeds Inefficiency

The challenge of reducing DSO even further than current payment terms permit seems quite large. How can firms significantly reduce DSO and A/R below current payment terms without impacting sales and customer relationships? One need only look at another component of trade working capital - inventory - to see how this might be accomplished.

In any process, uncertainty creates inefficiency as it is hedged with excess. In physical flows within the supply chain, uncertainty is hedged with excess inventory. Suppliers, not wanting to let any order go unfulfilled, maintain excess inventory as a result of demand uncertainties. Buyers face a similar situation with uncertain supply, causing them to maintain excess inventory to ensure their ability to meet production schedules.

Fortunately, over the past 25 years, organisations have used information technology to reduce uncertainty in physical flows and thereby dramatically reduced the amount of inventory on their balance sheets. Buyers now provide information in the form of demand forecasts to suppliers through EDI and web-based technologies. Further, suppliers are able to leverage this information by passing it on to third-party service providers to reduce the cost of services such as logistics. According to the Federal Reserve Bank of Dallas, 'producers have streamlined their supply chain operations to hold less inventory relative to sales... In essence, new technologies have allowed firms to replace inventory with information and then use that information more productively'.<sup>5</sup> While information technology has been used to dramatically improve inventory management, it has not been leveraged with the same kind of effect to manage trade A/R.

*Table 1: Transaction Processing Time - 1960s vs Today*

	1960s	Today
Order	4-7	Today
Deliver	14-21	Next Day
Invoice	4-7	Same Day
Payment	45-60 days	45-60 days

*Table 2: Supply Chain Solutions to Uncertainty - 1960s vs Today*

	1960's Solutions	Today's Solutions - IT and Process Change
Uncertain Supply	Hedge with excess Inventory	Just in Time Inventory
Uncertain Demand	Hedge with excess Capacity	Lean Environment
Uncertain Logistics	Hedge with excess Time	Next Day Delivery
Uncertain Payment	Hedge with excess Cash	Hedge with excess Cash

Herein lies the opportunity to dramatically reduce A/R balances and DSO.

### **Eliminate A/R with Supply Chain Finance**

In order to bring revolutionary change to A/R management, organisations must leverage information technology to reduce the uncertainty associated with future payments and to replace working capital (in the form of trade A/R) with information. As with physical flows in the supply chain, the solution will require electronic connectivity between buyers and suppliers to reduce the uncertainty of future flows, in this case future cash flows.

Such a solution exists today in the form of supply chain finance (SCF). Through SCF, buyers provide suppliers with approved payables information, indicating the exact date and sum of future cash flows associated with their trade receivables. This reduces supplier cash flow uncertainty and therefore reduces the amount of cash a supplier must maintain to hedge that uncertainty. While extremely valuable, this simply reduces DSO down to the contracted payment term, which can still be 60 days or more. In order to make dramatic improvements in managing trade A/R, we must reduce them further, even to the point of accelerating them in advance of the contracted payment date. To do this we must give organisations the ability to leverage sum certain, date certain trade A/R and remove them from the balance sheet.

An SCF solution accomplishes this through two automated services. The first, an automated payables presentment and settlement service, allows buyers to send approved payables data to suppliers electronically and further allows the buyer to settle those payables electronically at maturity date. The supplier completes the settlement process through an SCF technology platform by sending payment instructions to the buyer's disbursement account indicating the bank account the supplier has chosen for receipt of funds due. This service allows suppliers to view which payments have been approved by the buyer and how much they have been approved for, generally 30 to 90 days in advance of their current capability. The supplier's date-certain receivables data can be downloaded to the supplier's information systems for reconciliation and easy transfer to other systems. This enables a more efficient settlement process, reducing paper-based payments and reconciliation costs for both buyer and supplier. The data also provides greater visibility for the supplier into their future cash flows, reducing the working capital required to hedge payment uncertainty. Just as in supply chain physical flows, technology is allowing suppliers to replace a safety stock of an asset (inventory or cash) with information.

Traditionally suppliers have provided their receivables data, in the form of purchase orders, invoices, etc, which they have received from a buyer, to banks in order to finance working capital needs. This process is inefficient, since the information is often paper-based, outdated and requires manual verification by the bank to the buyer (if verification is provided at all). A second service offered through SCF seeks to address these

inefficiencies. After the supplier has viewed its approved receivables on the SCF platform, they may present these receivables electronically to a bank and offer them for sale. The bank then chooses to buy the receivable in a 'true sale' transaction. The bank is able to offer financing rates based on the buyer's credit risk profile due to the robust and timely receivables data provided by the supplier, as well as the removal of supplier credit risk through the true sale legal structure. Payment risk and supplier credit risk have been removed for the receivables sale transaction. Through SCF, suppliers not only reduce uncertainty and the working capital associated with it, but they also have the opportunity to virtually eliminate A/R from the balance sheet. While many gravitate to the potential to reduce financing costs, SCF can significantly reduce all costs associated with managing trade A/R, including collections, cash application, foreign exchange (FX) risk, customer credit risk, etc.

## **Conclusion**

So, how do suppliers take advantage of the SCF opportunity? Currently, SCF is hardly widespread, even among large corporates. At PrimeRevenue, we estimate current take-up of SCF at about 10% of the Global 2000 (excluding financial services firms), though a survey conducted by the analyst firm Aberdeen indicates 58% of survey respondents are either investigating SCF or planning to implement it. Suppliers will have to take the reins and lobby their customers to implement SCF for them. With physical flows, early adopters of technology such as Wal-Mart sought some benefit from suppliers in return for the investments they made to reduce physical flow uncertainty. With financial flows and receivables management, suppliers will have to do the same in order to push adoption of SCF among buyers. This inducement may come in the form of pricing, payment terms or other components of the commercial relationship. Payment terms could be used more aggressively as an offensive weapon to win more business while simultaneously reducing DSO. The benefits of doing so would come not only from the potential to increase sales but also from the quantifiable benefits of removing A/R from the balance sheet, eliminating payment uncertainty and the associated drag on working capital as well as reducing collection and other receivables management costs.

## **References**

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- <sup>3</sup> Schwartz, R. A. (1974), 'An Economic Model of Trade Credit', Journal of Financial and Quantitative Analysis, Volume 9, September Issue, pp 643-657.
- <sup>4</sup> Nadiri, M. I. (1969), 'The Determinants of Trade Credit in the US Total Manufacturing Sector', Econometrica, Volume 37, Number 3, pp 408-423.
- <sup>5</sup> Federal Reserve Bank of Dallas, 2005 'Supply Chain Management: The Science of Better, Faster, Cheaper'.