

ING Guide to Financial Supply Chain Optimisation

Creating Opportunities for Competitive Advantage

Section One: Introducing the Financial Supply Chain



Foreword

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Welcome to this new series of features from ING on Financial Supply Chain Management and how treasurers can optimise the process to create competitive advantage and add value to the company. During this period of economic instability and depressed growth, which could extend for months or years, every company needs to make the most of its resources and adopt creative solutions to weather the crisis and position itself for short term survival and long term success. Over the next three editions of TMI, we look at financial supply chain management from end to end. What is it? What are the components which make it up? Where are opportunities to address inefficiencies and create value typically found? What solutions can be implemented to take advantage of these opportunities?

Since the discipline of Treasury, as we understand it today, originated in the 1970s, treasurers have typically managed

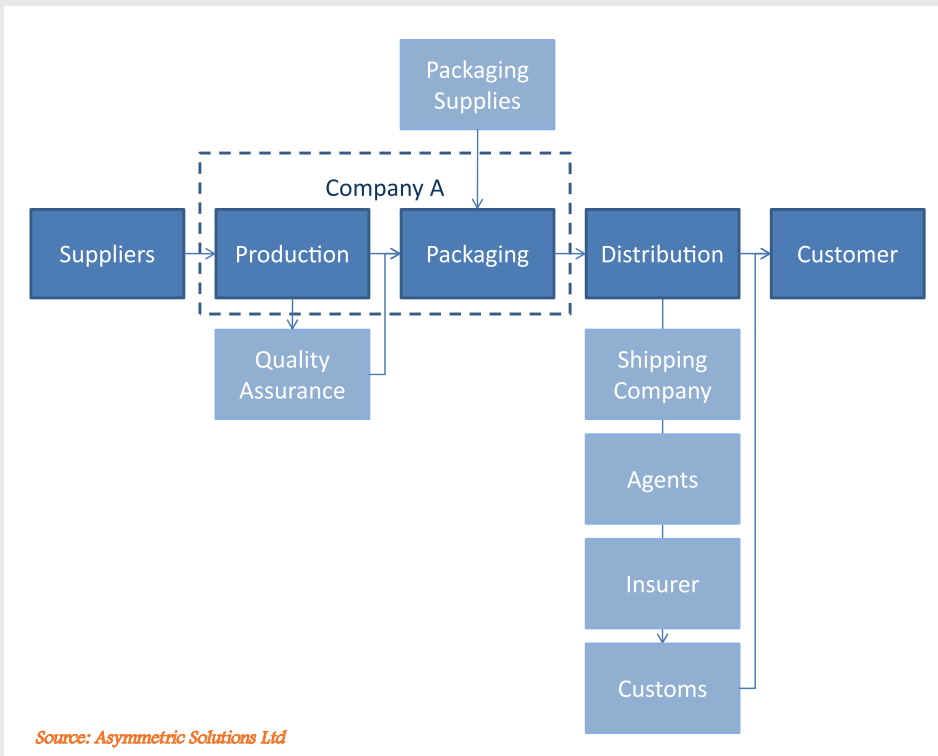
the company's financial assets at a macro level, focusing on overall liquidity and risk. Cash pooling, cash positioning and forecasting typically take place at a group or at least business unit level. While these activities continue to create substantial benefits for their firm, treasurers can further enhance the value they deliver by influencing the elements which contribute to working capital, and increasing the efficiency of the financial supply chain. In this way, treasurers can optimise liquidity, preserve margins and minimize the amount of working capital, which the company requires, whilst contributing to a better experience for customers and suppliers.

A question, which our clients

frequently ask, is how to justify investment in the financial supply chain. For too long, it has been considered that the financial supply chain facilitates the physical supply chain i.e. the process of payments and collections supports the exchange of goods and services. In fact, the opposite is true. Companies' overriding responsibility is to deliver stable returns to its stakeholders, and the goods and services, which it provides, are the mechanisms to do this, not the other way round. Consequently, investment in the financial supply chain is key to a well-managed business with consistent returns and a competitive margin, and equally important as the investment in production processes.

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Fig 1: Example Physical Supply Chain



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To enable companies to leverage opportunities for improvement in the financial supply chain, ING has invested heavily in developing its international scope and solutions to become a leading bank in many of the disciplines which comprise effective financial supply chain management, from trade services and trade finance, through to cash and liquidity management. In this series, we look at each step in the financial supply chain, from explaining the basics to addressing the complexities of global supply chains.

This innovative ING Guide will be presented in three parts. In this first part, ING introduces the financial supply chain and outlines the order-to-cash and purchase-to-pay processes. In the second part, which will appear in the next edition of TMI, we look at supply chain financing alternatives and how these can be used to unlock working capital. In the final part, we look at financial supply chain optimisation from a strategic perspective, including some of the industry initiatives of which corporate treasurers

can take advantage to maximise liquidity and reduce costs.

What is the Financial Supply Chain?

Physical Supply Chain

Financial supply chain management is an expression which has become de rigeur but the concept is by no means new. The financial supply chain is a parallel, but opposite process to the physical supply chain, which is the supply and demand of goods and services. Company A which supplies goods will collect money in return, Company B which requires the goods will pay money in return.

Every company's supply chain is different, from the rudimentary to the highly complex, not least according to industry, business model, diversification, degree of centralisation, sourcing and consumer markets. Over the past 50 years, international trade has doubled every five years - an increase of 1,000% over this period. Furthermore, the physical supply chain has become substantially more

complex in terms of the volumes involved and the number of participants to a transaction. The increase in volumes is not only due to the overall growth in trade but the average size of transactions has reduced to around 42% of transaction value in relative terms since the 1970's. More transactions, more customers, more suppliers and more participants in the chain.

Information Supply Chain

To respond to these changes and maintain a competitive position, companies have made substantial progress in automating the physical supply chain, with highly sophisticated sourcing, production and distribution. 'Just in time' (JIT) production, originally a Japanese phenomenon, is common in many firms as a way of reducing cash tied up in surplus stock. Companies in all industries, both goods and services, invest a great deal of time and resource in forecasting demand to ensure appropriate levels of supply. To facilitate this process, a parallel strand to the physical supply chain has developed -

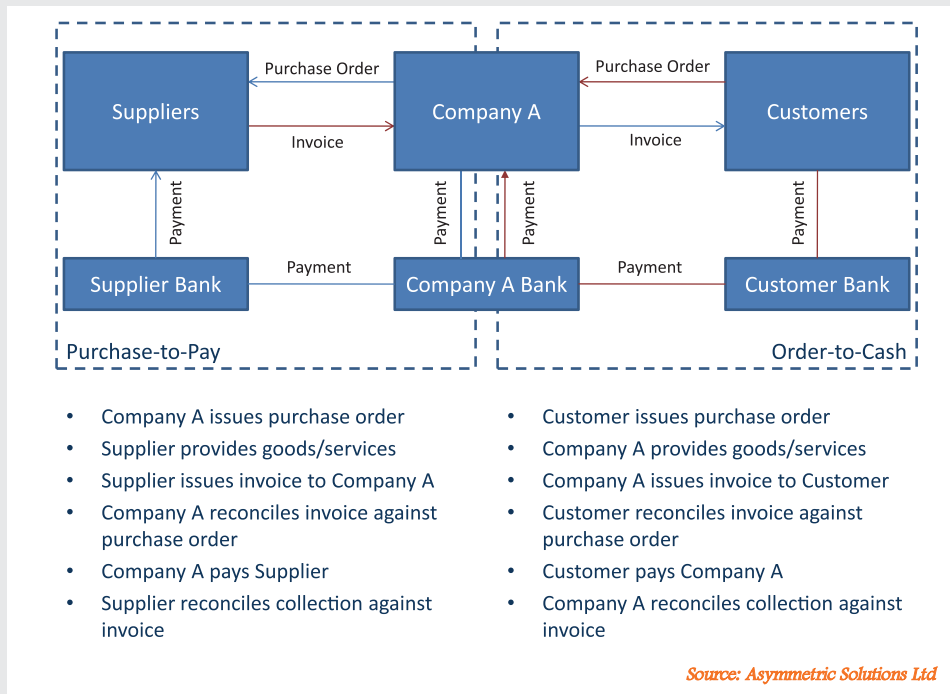
the information supply chain - to ensure effective communication between each stage of production and distribution, particularly through the use of enterprise resource planning (ERP) tools.

Financial Supply Chain

People often associate the physical supply chain with a “one way” flow of goods and services i.e. those that the company produces. In reality, this only tells half the story, as companies will be sourcing goods and services as well as producing them. This is a crucial distinction when it comes to understanding the financial supply chain and its relationship between working capital and liquidity management. In many respects, it is useful to think of the financial supply chain as being a parallel, but reverse process to the physical supply chain. As goods and services pass through the chain from production to customer, cash flows from customer to the company. Similarly, as a company imports or demands goods and services, cash passes from the company to its suppliers.

The process illustrated in fig 2, although a simplified version, is replicated on the left of the diagram for every order from every supplier (purchase-to-pay) and similarly for every order given to every customer on the right (order-of-cash). We will come back to each of these two sets of processes, and the relationship between them, which creates the company’s working capital requirement. It will already be obvious, however, of the need to ensure efficiency in the financial

Fig 2: Sample Financial Supply Chain



supply chain, not least to ensure that various elements of the process, such as purchase order, invoice and payment can be integrated and reconciled easily. Furthermore, given the multiple exchanges of information between supplier and Company A, and Company A and customer, the more effective this communication process, and the more consistent the information used by each party, the better the process will be. This becomes even more significant when there are queries or late payments. In many ways, developments in the financial supply chain have lagged behind those of the physical supply chain. As we will see later in this series, while companies have

made significant progress in automating events in the financial supply chain within their own organization, there is still a great deal of potential to connect the parties in the chain, including the banks, more closely.

Conducting International Trade

The use of cash to pay for these goods and services i.e. payment and collection, was probably first introduced in China in around 2700 BC. The bank notes with which we are familiar originated in the Bank of England in the late seventeenth century, and cheques were also first issued by the Bank at around the same time, becoming a popular method of facilitating trade by the late eighteenth century.

However, the use of cash or cash equivalent instruments alone was not sufficient for many exporters and importers. In particular, difficulties arose when there was a difference in the credit standing of the seller and purchaser, especially when conducting



“Trade finance is an area in which companies can deliver significant working capital improvements by reducing the time from order to payment. Firstly, ensuring the accuracy of trade documentation is critical. Working with a strong trade finance bank which has a deep knowledge of the regulations, conventions and tariffs in the countries in which you operate is also an essential way of ensuring that the order-to-cash process is as efficient and timely as possible.”

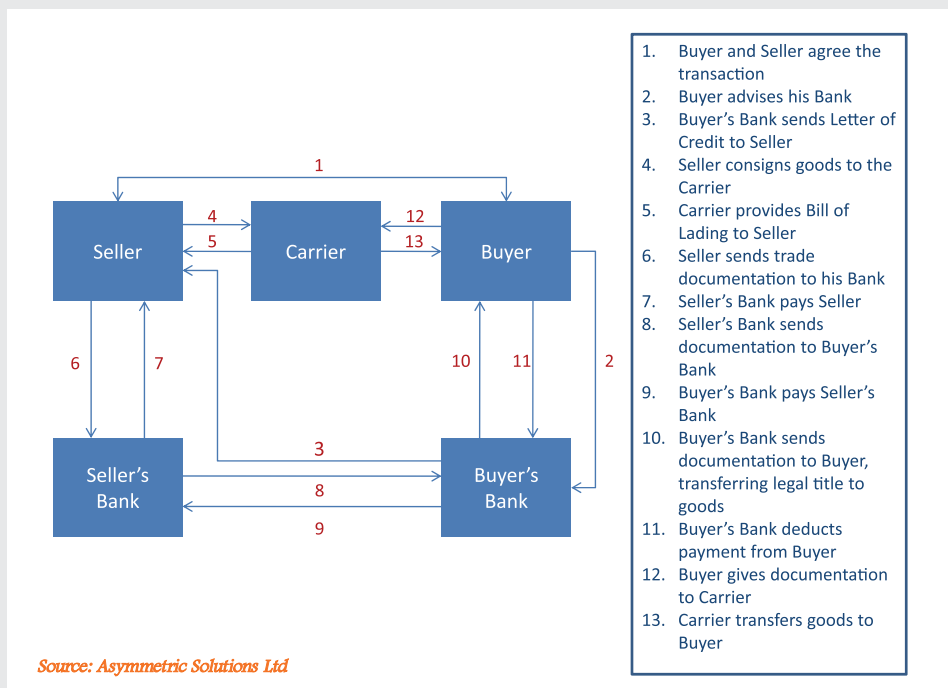
Luc Hopmans, Senior Consultant Trade Finance Services, ING

trade cross-border. A stronger seller would be concerned that a weaker purchaser, particularly overseas, could default on payment. To reduce this risk, the seller might demand upfront payment. On the other hand, the purchaser would be concerned about advance payment without the opportunity to assess the goods first. This has had a variety of consequences, not least a wide spectrum of different payment terms which a company may require, or be obliged to adhere to, creating difficulties in the payments process when large volumes of payments are involved.

Another result is that banks developed an intermediary role to help exporters and importers manage their respective risks. The trade instruments with which we are familiar today, such as letters of credit and other documentary credits, were first commonly used in the late nineteenth century. A letter of credit, or LC, is a guarantee issued by the buyer's bank to the seller which guarantees payment on presentation of the correct trade documentation (fig 3). The bank mitigates its own risk by taking ownership of the goods until it has received payment by the buyer, but as banks cannot physically take delivery of goods, the trade documentation which relates to legal title to the goods is used instead.

The process from stage 1 to stage 13 can frequently take many weeks, hindering companies' efforts to restrict

Fig 3: Letter of Credit Process



the amount of stock tied up and delaying payment. This is often due to inaccuracies in the trade documentation which then needs to be corrected and resubmitted - frequently more than once - prolonging an already lengthy process. Consequently, increasing the efficiency of trade processes as far as possible is an important priority for companies' finance departments to avoid interrupting the physical supply chain and ensuring earlier payment. This applies too to the buyers who use letters of credit. While it may appear that buyers would prefer to

pay later, the delay in gaining legal title to the goods can impact substantially on the firm's business and the payment timing becomes unpredictable, requiring large amounts of working capital to be held pending payment.

Trade & Cash

Over recent years, there has been a substantial growth in 'open account' i.e. transactions paid directly rather than using trade instruments such as letters of credit. However, although open account now represents the majority of transactions, the growth of international trade over the past half-decade which we referred to earlier means that trade services are still increasing. Furthermore, although transactions conducted under open account are increasing, the risks of unequal trading partners, particularly internationally, still remain. During the current economic recession, companies are more focused on customer payment risk and therefore letters of credit are likely to be more important than during more favourable economic conditions.

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The letter of credit process is a form of financing for sellers, the beginnings of an important trend in the services which banks are increasingly offering, namely using different elements of the financial supply chain, such as receivables, invoices or even purchase orders as collateral for financing. In credit-strapped times, this type of financing is becoming increasingly important to treasurers, as we will discuss further in the next edition of TMI. These innovations include mechanisms such as supplier financing which uses a customer's higher credit rating as a means of securing financing for lower-rated suppliers.

Working Capital Management vs Working Capital Optimization

Fundamental to treasurers' role is maintaining liquidity to ensure that the company has sufficient levels of working capital to finance its regular activities. Working capital is the amount of cash which a company requires to fund the difference (both in amounts and timing) between payment and collection.

There are a range of risks and scope for delay in both the order-to-cash and purchase-to-pay processes. The effect of this is to postpone collection of cash and make both payment and collection timing unpredictable. This means that even if the payment and collection amounts each month are similar, the company needs to maintain a "float" or working capital amount to finance cash flow volatility and timing mismatches. A frequent metric used for calculating working capital requirements is 'cash days'. This is calculated by adding the number of days sales outstanding (DSO) to the number of days inventory outstanding (DIO) and subtracting days payables outstanding (DPO).

i.e. $(DSO + DIO) - DPO = \text{Cash Days}$

"The relationship between trade and cash is important for treasurers and there is a significant risk that companies' ability to forecast cash flow and manage working capital effectively will be hindered if these are treated independently. Trade finance has typically fallen outside most treasurers' remit, except to take into account of the resulting financial flows into the cash position or cash flow forecast. The transaction size involved is often huge, so every day's payment delay can have a substantial impact on liquidity and the amount of working capital which needs to be held. Consequently, there is a huge incentive for treasurers of exporters or importers to become more involved in this area. As well as taking responsibility for liquidity management, treasurers maintain banking relationships on behalf of the company. By representing both the cash and trade finance needs of the company, which are intimately connected in the drive towards improved working capital as we shall see, treasurers can leverage these relationships and structure solutions based on the overall needs of the company."

To help companies use the financial supply chain, including both trade and cash, more strategically to manage working capital and liquidity, banks such as ING are taking an increasingly integrated approach to providing advisory services and solutions in financial supply chain management, including both trade and cash elements.

**Robert Dekker, Global Head of Sales Corporate & Institutional Clients,
Payments and Cash Management, ING**

For example, if DSO = 45 days, DIO is 25 days and DPO is 20 days, the total number of cash days is 50 days (45 + 25 - 20 days). Therefore, if Company A's sales are €1bn a year, daily sales average €4m. The cash required to run the business is the daily sales figure multiplied by the number of cash days = €200m. For Company A, the working capital requirement represents 20% of annual revenue which cannot be used for strategic investment or other business purposes which could otherwise contribute to its competitive position. Consequently, in this example, for every day's reduction in the number of cash days, the working capital requirement can be reduced by €4m, an immediate contribution to the bottom line. Working capital levels differ between industries but there are few companies which have delivered the maximum possible efficiency in this area.

Many treasurers have already achieved significant treasury centralisation, and automation and efficiency in

treasury operations, the skills which are also required to develop efficiency in the business functions which contribute to the number of cash days, particularly order-to-cash and purchase-to-pay. Focusing on one of these areas alone will deliver some benefit but less than a cohesive working capital optimisation initiative with a closer connection established between the two sets of processes, with the results apparent in treasury through greater liquidity and lower working capital requirements.

In some cases, treasurers are taking an advisory role in these areas; in others, payment and/or collection factories are falling under treasurers' remit. In this way, treasurers have a greater ability not only to manage liquidity and ensure that the required level of working capital is available, but to minimize the actual amount of working capital which is necessary. This has a direct value to the business and therefore is an important way in which treasurers can elevate their influence and profile within the company. ■