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Business Innovation Observatory

Innovative Business Models

Supply chain finance

Case study 24

Enterprise and Industry

Innovative Business Models

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1. Executive summary

Supply Chain Finance constitutes an arrangement between a buyer, a supplier, and a financial intermediary where the credit standing of the buyer is leveraged to improve the working capital position of a supplier. Typically, such arrangements involve a large, financially strong company that is supplied by several SMEs and innovative start-ups, and a financial intermediary – often a bank.

SMEs and start-ups send their invoices to the buyer, which authorizes the financial intermediary to pay the invoice on behalf of the buyer, often within fifteen days. The financial intermediary credits the buyer for the invoice amount, and the buyer reimburses the bank after an agreed period that often exceeds sixty days. In this manner, Supply Chain Finance allows buyers in a supply chain to postpone the payment of invoices, while suppliers see their invoices paid rather swiftly.

This is a solution to the widespread problem that many SMEs and innovative start-ups face when dealing with large buyers, as these large companies often pay their invoices only after a significant amount of time. This introduces a major liquidity risk to SMEs and start-ups that often feel financially squeezed by this practice. Swift payment of invoices improves the operational liquidity of suppliers, which increases their economic potential and can benefit their economic performance, and can positively influence the overall economy.

Similarly, late payment of invoices by the buyers improves the buyers' liquidity, which improves their working-capital ratio. In general, buyers engage in Supply Chain Finance for one of three reasons:

1. To improve their working-capital position by extending their Days Payable Outstanding (DPO);
2. To mitigate risks in their supply chain in relation to strategic suppliers;
3. As a tool in discount negotiations with suppliers.

Offering a low-risk profit to financial intermediaries, already several billions of Euros are channelled from buyers to suppliers via Supply Chain Finance arrangements each year. As it is applicable to any sector that involves large companies being supplied by smaller ones, the market potential for Supply Chain Finance is considered to be quite large. A growth-rate of up to 40% per annum is predicted for the coming years, stabilizing to 10% growth in 2020.

Supply Chain Finance is driven by financial pressure on both buyers and suppliers. Because of this, and because it is unusual to be presented with mutually beneficial innovations in buyer-supplier financial arrangements, the buildup of trust and understanding between both parties is essential for a successful implementation of Supply Chain Finance in any supply chain. Also, tools such as e-invoicing need to be integrated in the financial processes of both parties, and especially on the side of the buyer, specific legal and accounting issues need to be resolved.

Typically, banks are selected as financial intermediaries for Supply Chain finance arrangements for their financial capacity, especially those that have operational experience in managing these arrangements. However, as the volumes channelled through Supply Chain Finance arrangements grow, banks can request the involvement of additional investors to finance the arrangement. Moreover, as these volumes increase, adding complexity to the financial structure of the arrangement and entrenching it deeper in the supply chain, a potential risk emerges concerning the feasibility of ending the arrangement when so desired.

European governments can play a role in the positive uptake of Supply Chain Finance in several ways. The use of e-invoicing could be encouraged throughout the economy, for instance by increasing the use of e-invoicing in public procurement. EU directives related to payment terms could be reviewed to see if unintended legal complications for implementation of Supply Chain Finance can be resolved. The significance of potential risks associated with Supply Chain Finance could be investigated in a government-commissioned study.

At a macro level, Supply Chain Finance is at least partially a response to challenges faced by SMEs and innovative start-ups concerning access to finance. Improving their overall access to finance de-prioritizes Supply Chain Finance as a tool to free up working capital.

2. Supply Chain Finance

Supply Chain Finance refers to the practice of freeing up financial breathing room by using the credit standing of a buyer to improve the working-capital position of a supplier. It is most commonly implemented in supply chains that feature a large, financially strong company that buys from several small, financially less strong suppliers, such as SMEs and innovative start-ups.

As both buyers and suppliers have a financial benefit to gain from freeing up working capital, organisations on different ends of a supply chain have a diverging interest when it comes to the timing of financial transactions. Buyers prefer to pay their invoices as late as possible, maintaining liquidity as long as they can. Suppliers on the other hand prefer to have their invoices paid as quickly as possible, in order to minimise liquidity and solvency risks.

In supply chain relationships wherein the buyer is more dominant by far, SMEs and start-ups that supply the buyer are often paid late on their invoices. In Italy, it is not uncommon for suppliers to receive payments on their invoice after more than 120 days. This introduces a major liquidity risk to SMEs and start-ups that often feel the financial squeeze of dealing with large, powerful buyers. Some succeed in managing this risk, while others choose not to deal with buyers far larger than themselves. In some cases, SMEs and start-ups cannot survive the wait and need to file for bankruptcy, terminating the company.

Supply Chain Finance allows both ends of the bargaining table to have their cake and eat it too. By introducing an intermediary financial organisation, both buyers and suppliers can free up working capital and maintain a higher degree of liquidity. Supply Chain Finance offers buyers the opportunity to sit on their invoices for relatively long stretches of time, while the speed with which suppliers get paid on their invoices increases dramatically.

Supply Chain Finance is in effect a financial arrangement between a buyer, a supplier and a financial intermediary (often a bank). Figure 1 on page 4 depicts the process in chronological order.

In the arrangement, the bank pays the invoice to the supplier, and credits the buyer for the same amount. Based on the credit standing of the buyer, the bank charges an interest rate on the invoice value owed by the buyer, which makes this an interesting arrangement for the bank.

The buyer benefits in two ways. The buyer can invest the still liquid sums (equal to the invoice value) and generate a return on investment that is higher than the interest paid on the sum owed to the bank. Also, the buyer can negotiate a discount on the invoice with the supplier in exchange for fast payment by the bank.

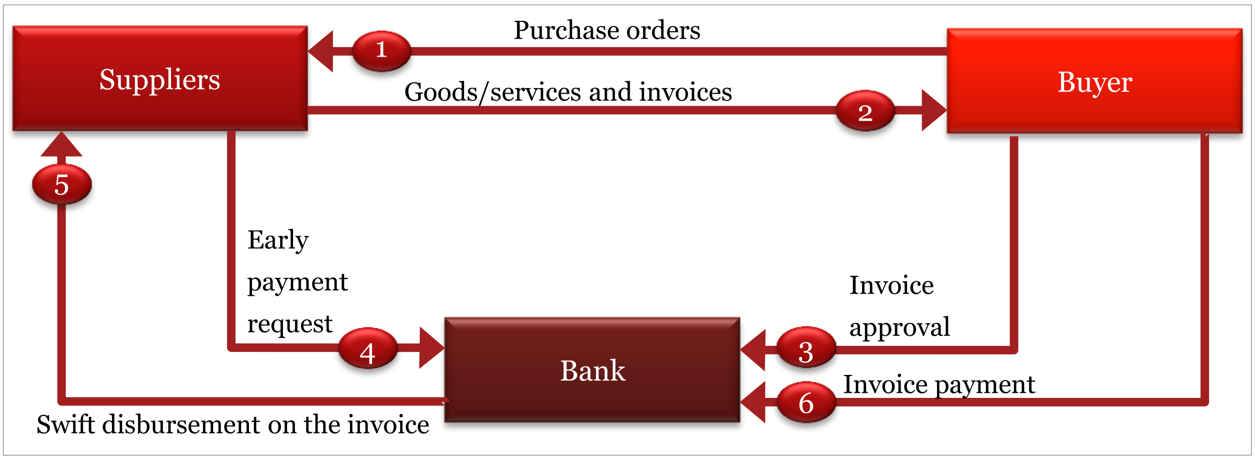
The often cash-strapped supplier benefits, as liquidity and solvency risks are mitigated by a more swift payment, and a discount can be negotiated that is more attractive than a line of credit for the outstanding invoice amount.

In essence, the financial intermediary provides the supplier with liquidity, based on the credit standing of the buyer. This credit standing, together with the approved invoice that is treated as collateral, allows the bank to credit the buyer with limited risk, making the financing of this credit attractive to the buyer and effectively to the supplier as well.

When it comes to implementing Supply Chain Finance, several variations on the theme exist, each with their own rationale. Powerful buyers can choose to forego a negotiated discount, as their main concern is to stabilise a supply chain heavily populated by start-ups and micro firms by simply keeping their feeble suppliers as liquid as possible. In other circumstances, buyers in need of liquidity can choose to pass the discount on to the financial intermediary in exchange for reduced interest charges, freeing up capital to invest.

This trend is partly driven by technological innovations in finance, such as electronic invoicing and standardised business reporting systems, which allow for more rapid processing of invoices and other financial documents and can help reduce the time SMEs and start-ups spend in wait of their money.

Figure 1: Steps in a Supply Chain Finance process



3. Socio-Economic Relevance

Since the credit crunch and the following economic downturn, companies have become increasingly concerned with their working capital management. As acquiring credit has become increasingly hard, freeing up working capital has become an important method for finance managers to maintain acceptable levels of operating liquidity.

Especially SMEs have more and more difficulty in gaining access to finance. Often seen as a credit-default risk, banks are hesitant to offer loans to SMEs, and charge them higher premiums than before the credit crunch. Financial regulations, such as the Basel Accords, have spurred this development.

An often encountered tool to free up working capital concerns the timing with which invoices are being paid. Generally speaking, the working-capital position of a company can improve when it pays its payable invoices late, and when it collects payment on its receivable invoices as swiftly as possible.

Because of this, many payments in commercial transactions between businesses or between businesses and public authorities are made much later than agreed.[1] This is costly for businesses, and dangerous for companies that do not have large financial reserves, such as a lot of SMEs, or that are in an unstable financial situation, such as many start-ups. Under the wrong circumstances, what starts out as a minor liquidity squeeze might cascade into the termination of the company.

The EU directive on combatting late payment in commercial transactions is adopted and implemented with an aim to remedy this situation,[2] setting payment terms at thirty or in some cases at sixty days. Although this is a favourable outcome for creditors, buyers my find it such a strain on their working-capital strategy that try to find other ways to delay payment of invoices.

Supply Chain Finance can align the interests of buyers and suppliers and allow both sides of the spectrum to free up working capital by allowing buyers to defer payment, while ensuring suppliers they do not have to wait for an expected inflow of cash.

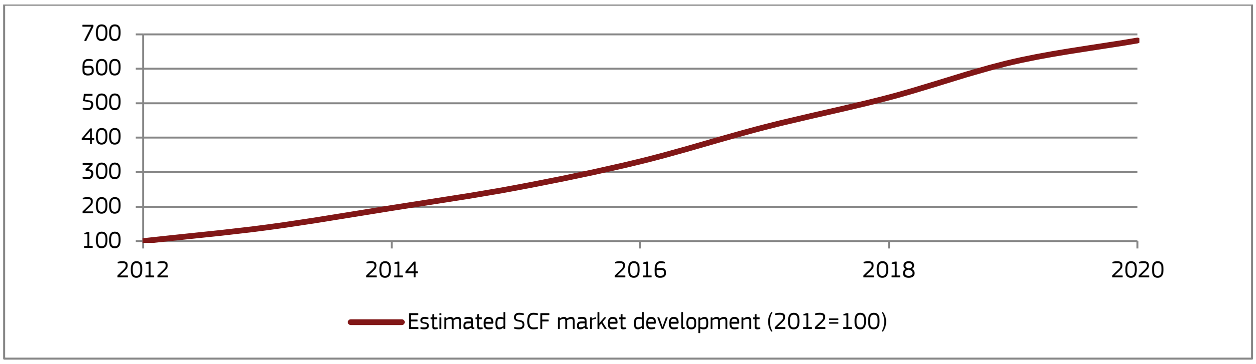
Improving the operational liquidity of companies increases their economic potential, which can benefit their economic performance and can positively influence the overall economy. Also, it can prevent SMEs and start-ups from financial distress, and can increase their odds of survival. Moreover, an already healthy start-up that has greater operational liquidity can grow and expand with more ease. A quantitative study by Cetinay et al in 2011 suggests that Supply Chain Finance can generate a 2-5% value increase within supply chains.[3]

3.1. The market potential of the trend

The market potential for Supply Chain Finance can be considered as quite large. It is applicable to any sector that allows the configuration of a supply chain that consists of a small number of large buyers and a large number of smaller suppliers. The sectors in which Supply Chain Finance can be observed the strongest are retail, manufacturing, consumer products, automotive, agriculture, chemicals, and pharmaceuticals[4] [5].

Currently, already several billions of Euros are transferred between buyers and suppliers through Supply Chain Finance arrangements.[6] Growth rates of Supply Chain Finance are estimated at 30-40% per year, and the market is predicted to continue to grow by 20-30% annually by 2015, and by 10% in 2020[7]. The British government has initiated a Supply Chain Finance program led by the Prime Minister which is predicted to grow the UK SCF market by 10 percent alone[8].

Figure 2: Estimated Supply Chain Finance market development (2012=100



The market as a whole might profit from supplier finance since it transfers risks to those who are willing to take it and it helps SMEs and start-ups, the backbone and the future of economic growth and labour-market development, to get financing they need in difficult times present.

Table 1: Overview of the company cases referred to in this case study

As the information underpinning this report is considered sensitive and restricted by the companies and financial institutions involved, they can only be described on an anonymous basis.

Company	Location	Background of implementation	Success signals
Global Multimedia Company X	Global	Supply Chain Finance was implemented within a pool of 10,000 suppliers to increase the company's valuation by freeing up cash.	The company increased its free cash flow by 25%, by increasing its payment terms from sixty to 365 days, while suppliers have their invoices paid within fifteen days, see their credit risks mitigated, save money on insurance of these risks, free up working capital, and can better forecast their cash inflow.
Technology Company Y	NL	Supply Chain Finance was implemented within a supply chain that suffered significant continuity risk, as the suppliers include financially instable technology start-ups, while Company Y requires at least sixty days to pay any invoice.	Through Supply Chain Finance, suppliers can get their invoices paid within fifteen days. The annual cost of €300,000 are borne by the buyer and considered an investment that de-risks the supply chain.
Global Technology Company Z	Global	Supply Chain Finance was implemented to free up working capital, as more than € 15 billion is spent on procurement of products and services annually.	180 suppliers around the globe are now paid on their invoice within fifteen days, while Company Z can wait up to 105 days before transferring money to the bank. Annually, €1.5 billion worth of procurement is now done through this arrangement.
Five large banks	EU, Asia	Banks have feared the risk of losing not only large corporates over Supply Chain Finance arrangements, but the suppliers in their value chain as well.	The banks report a growth of 30-40% of working capital solutions in their portfolio.

3.2. The role of Supply Chain Finance in supply chains

The examples of Supply Chain Finance arrangements described in this case are similar in structure, but differ in rationale. Large buyers can venture into Supply Chain Finance in order to extend payment terms, negotiate price discounts, support suppliers in need of capital (often suppliers that are of strategic importance to the buyer), tie suppliers more tightly to the buyer, or combination of the above.[9]

The buyer in a Supply Chain Finance arrangement is typically a large, stable and credit worthy entity that deals with a large number of smaller suppliers. Generally, three lines of reasoning can be observed that together or in isolation lead a buyer to initiate a Supply Chain Finance arrangement. Suppliers in general do not instigate such an arrangement.

The first line of reasoning is one of working-capital improvement by extending a buyer’s Days Payable Outstanding (DPO). Extending DPO by a buyer is an easy and straightforward benefit for the buyer, as for each day the buyer does not pay an invoice, he earns interest on the retained sum in capital. Supply Chain Finance in this case functions as a way to extend DPO without violating the EU directive on combatting late payment in commercial transactions, and without overly distressing suppliers.

In the second line of reasoning, Supply Chain Finance arrangements serve to negotiate a price discount from suppliers. In some cases, this discount can be as high as to have the buyer fully benefit from any cost savings generated by the arrangement. In such a scenario, the supplier agrees to the arrangement for fear of losing future business. Leveraging the credit standing of the buyer, the Supply Chain Finance arrangement allows the supplier to access capital at a significant lower cost, decreasing risks on supplier default and subsequent disruption of the supply chain.

The third line of reasoning focusses on decreasing risk in the supply chain and tying strategically important suppliers to the buyer. Supply Chain Finance arrangements then are geared to help suppliers have their invoices paid in as little time as possible, without any negotiated discounts or extended payment terms from the side of the buyer. In this scenario the buyer bears most of the costs associated with the management of the arrangement. However, the risks that through Supply Chain Finance are mitigated for buyers and sellers do not disappear. In essence, they are transferred to the financial intermediary, often a bank.

Banks in Supply Chain Finance arrangements are mostly interested in generating a low-risk profit. As financial regulations stipulate that the amount of equity that a bank needs to hold will be based on its risk-weighted liabilities, a strong incentive emerges for banks to also have liabilities on their balance sheets that carry relatively low risk. As Supply Chain Finance arrangements constitute opening up a line of credit to a financially strong and stable company, banks are generally interested in facilitating such schemes.

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Problem 1 - Multimedia Company X: Multimedia Company X deals with more than 10,000 suppliers and is looking to increase its valuation by improving its free cash flow (FCF). According to accounting standards, cutting Capital Expenditures (CapEx) has a direct impact on its FCF. For this reason, Company X wants to extend payment terms on CapEx-related invoices.

Innovative solution 1 – From its pool of more than 10,000 suppliers, Company X selects specific CapEx suppliers that can greatly benefit from swift payment of their invoices. Given the fact that Company X typically requires 30-60 days to pay an invoice, suppliers that can benefit from having their invoices paid in less than thirty days would fit the profile.

The Supply Chain Finance arrangement is set up to ensure that these suppliers have their invoices paid within fifteen days. Also, the arrangement allows Company X to pay the invoice amount to the bank after as much as 365 days. Because Company X operates in fourteen different countries, Company X selects an internationally operating bank as a financial intermediary, to help in the on-boarding process of suppliers, including operational support on efficient processing of invoices.

As a result, Company X manages to increase its FCF by 25% and uses the invoice sums owed to the bank to generate a return on investment of 20%. At the same time, suppliers are paid within fifteen days and see their credit risks mitigated, save money on insurance of these risks, free up working capital, and can better forecast their cash inflow.

Problem 2 - Technology Company Y: Company Y is a technology company with a supply base that consists mainly of local SMEs and start-ups. For reasons of scarcity, Company Y cannot scrutinise all suppliers for financial solvency before deciding to business with them. The sometimes precarious financial situation of these SMEs and start-ups introduces a continuity risk to Company Y, especially since Company Y requires at least sixty days to pay an invoice, which at times is more than some of its suppliers can handle. In order to mitigate the continuity risks in its supply chain, Company Y wants these suppliers to have their invoices paid sooner than Company Y currently manages.

Innovative solution 2 – Instead of redesigning its purchase-to-pay process, Company Y chooses to set up a Supply Chain Finance arrangement. Company Y does not negotiate a discount with its suppliers, nor does it negotiate longer payment terms. The Supply Chain Finance arrangement serves to make sure it will take far less than sixty days to pay an invoice, without any negative consequences for Company Y. Thirty key suppliers are included in the arrangement. Company Y modifies its processes to handle electronic invoicing and catalogue buying. Company Y selects a bank as a financial intermediary. The costs of the program, approximately EUR 300,000, are fully borne by Company Y which considers it a strategic investment that de-risks the supply chain.

As a result, suppliers can get their invoices paid within fifteen days.

Problem 3 - Global Technology Company Z: Company Z is a globally operating technology company that spends more than €15 billion on procurement of products and services annually. Considering this significant sum, Company Z is determined to free up its working capital. Suppliers however will not tolerate being paid later than sixty days, and highly prefer to be paid sooner.

Innovative solution 3 – Company Z sets up a Supply Chain Finance arrangement and carefully selects which suppliers it should include, based on the suppliers credit risk, its dependence on Company Z, and its importance to Company Z. Only suppliers that supply more than EUR 2 million worth of products or services are included in the arrangement.

Leveraging the credit standing of Company Z, suppliers included in the Supply Chain Finance arrangement are required to offer an annual discount of LIBOR + 0.85%, which results in an annual discount of roughly 1%. In comparison, they would normally pay up to 8% annual interest on short term capital.

As a result, 180 suppliers around the globe are paid on their invoice within fifteen days, while Company Z can wait up to 105 days before transferring money to the bank. Yearly, € 1.5 billion worth of procurement is now done through the Supply Chain Finance arrangement, roughly 10% of total annual procurement.

Problem 4 - The Bank’s perspective: Banks report a growth of 40% of working capital solutions in their portfolio, which they attribute to market developments instigated by large international banks that offer Supply Chain Finance solutions to large corporates. Domestic banks fear that not providing similar solutions risks not only losing large corporate customers to foreign banks, but also the suppliers related to these corporate supply chains.

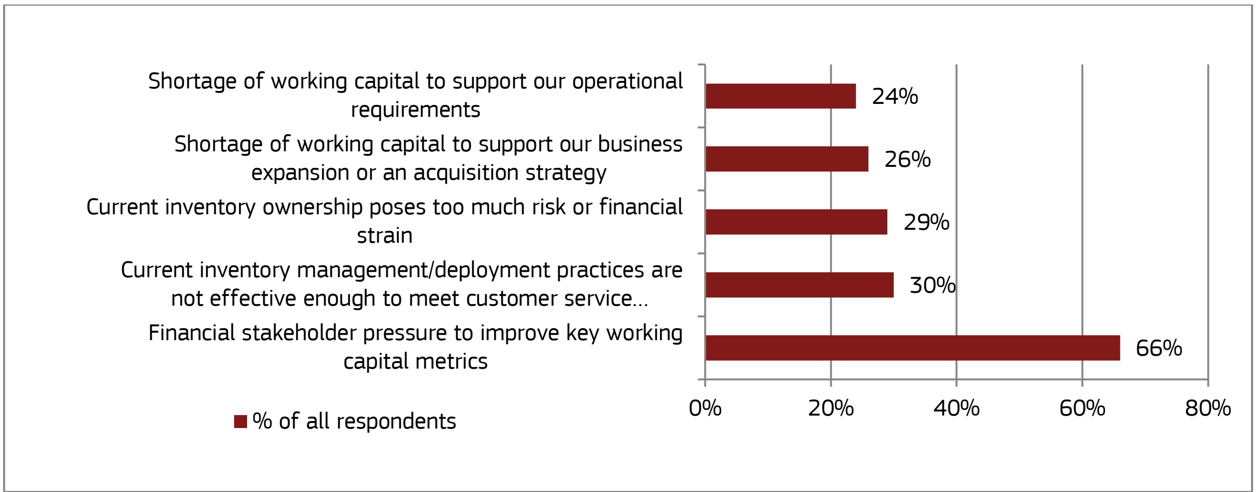
Innovative solution 4 - Banks base their margin mostly on either LIBOR or Euribor. As a rule of thumb for the margin is a buyers' 5-year Credit Default Swap (CDS) price plus 25 basis points. This results in most programs giving the bank a margin of in between 90 and 170 basis points above LIBOR.

There is no strict minimum set for the total sum of procurement to flow through a Supply Chain Finance arrangement, but banks prefer larger sums with less frequent invoices, mainly due to documentation costs. Suppliers are usually paid one or two days after requesting payment at the bank.

3.3. Advantage of freeing up working capital for large buyers

A poor working capital ratio is a sign of a buyer’s financial inefficiency. The more working capital a company manages to free up, the more financial room it allows itself to manoeuvre. Working capital is essential for supporting operational activities and for expansion strategies or specific acquisitions. Also, working capital tied up in inventory management or invoicing processes can introduce additional financial strain to a company. Finally, more and more financial stakeholders (e.g. shareholders) consider working capital ratios one of the core metrics through which to gauge the performance of a company as well as the quality of its management. Figure 3 (Aberdeen Group, 2007) shows the reasons companies have for optimizing their working-capital position.

Figure 3: Reasons for the Increased Focus on Working Capital Optimization[10]



3.4. Advantage of early payment for suppliers

An SME or start-up supplier that needs to wait a large number of days before receiving payment on an invoice effectively has the invoice sum unavailable to its financial operations until the invoice is settled. This has a negative effect on the working-capital ratio of the supplier (see above), and imposes financial risk on the supplier.

As SME and start-up suppliers in general are smaller in financial terms compared to their buyers, outstanding invoices have an inversely corresponding larger effect on their working-capital ratios. Similarly, the effect on their liquidity is far higher compared to larger organisations, making them more vulnerable to liquidity risks that stem from late payments. Also, because of their relatively small size, the risk of non-payment of an invoice for them is heavily tied to solvency risks. As the stretch of time they have to wait for payment prolongs, so does their solvency risks.

Ultimately, SMEs and start-ups that face significant solvency risks repeatedly or over long stretches of time can face severe repercussions from their financiers, for instance through increased interest rates, fines, or – in the worst case – divestments.

4. Drivers and obstacles

Supply Chain Finance arrangements have specific drivers and face several obstacles. The arrangements are heavily driven by financial pressure on both buyers and suppliers. In setting up such arrangements, it is important to build trust and understanding between buyers and suppliers, as novel financial arrangements that hold the promise of being mutually beneficial are generally not accepted at face value.

Specific technological drivers need to be in place, such as E-invoicing and standardized business reporting systems, for the arrangement to deliver on its promise. Especially on the buyer's side divisions such as legal, finance and accounting need to be brought on board with the process, as implementing a Supply Chain Finance arrangement can introduce legal and accounting issues that need be resolved.

The pivotal role played by the financial intermediary means that care must be taken to include a financial institution that can manage the Supply Chain Finance arrangement both in terms of operational experience and in terms of financial capacity. Moreover, increasing volumes channelled through these arrangements beg the question if there is a threshold above which these arrangements become unpractical.

4.1. Financial pressure drives Supply Chain Finance

One of the biggest drivers of Supply Chain Finance comes from the fact that both buyers and suppliers experience increasing financial pressure and difficulty in accessing finance. In order to free up as much working capital as possible, without introducing negative effects to the supply chain, and with an aim to mitigate solvency risks amongst strategic suppliers, both buyers and suppliers are increasingly willing to move beyond traditional financing methods and engage in novel financing methods such as Supply Chain Finance.

4.2. Trust and understanding between suppliers and buyers

An important success factor for a Supply Chain Finance arrangement to work is to understand the position of suppliers and to gain their trust. As it is almost in all cases the buyer that together with a financial intermediary sets up the Supply Chain Finance arrangement, suppliers that are approached to participate in the arrangement fear to be taken for a ride. In the world of finance, and especially in buyer-supplier relationships, introduction of new financial arrangements do not usually lead to mutual benefit. The win-win-win aspect of Supply Chain Finance does not always appear immediately apparent to approached suppliers.

In order to convince suppliers of the advantages of Supply Chain Finance arrangements, buyers and banks need to understand each specific supplier and develop a creative, tailor-made approach. Buyers and banks need to align their communication methods, and have a clear sense of their role in the approach. Most commonly, the role of the bank is provide technical information, explaining how the arrangement works, while the buyer explains the rationale for the new arrangement and assures the supplier that there is no “catch” to it.

4.3. E-invoicing and standardized business reporting

Supply Chain Finance arrangements have a hard time delivering on their promises without the technological underpinning of electronic invoicing and standardized business reporting systems. Relatively small Supply Chain Finance arrangements can be easily managed by banks and finance departments. However, the number of invoices to be processed through Supply Chain Finance can grow rather quickly. This is partly due to the large sums of procurement by buyers channelled through Supply Chain Finance arrangements, and partly due to the small size of typical suppliers in such arrangements. SMEs and start-ups in general send high quantities of smaller invoices compared to large corporations.

The speed and accuracy with which invoices are processed is especially important within Supply Chain Finance arrangements, as one of its main aims (freeing up working capital) partly depends on payment processes that take as little time as possible, while at the same time involving a third party in what previously was a two-party process, namely the financial intermediary. Another important element of the process is the ability of the buyer to forecast the size and timing of its procurement activities and related accounts payable, and to communicate this information to the financial intermediary.

As speed and accuracy are such important aspects of a Supply Chain Finance arrangement, in some arrangements buyers or banks offer extensive help to suppliers to improve invoice quality, or even introduce self-billing to the invoicing process.

4.4. Business divisions aligned

Accurately forecasting the size and timing of procurement activities and related invoices to be received also requires significant effort on the side of the buyer. As a rule, all divisions involved in the Supply Chain Finance arrangement need to be made aware of the benefits of the arrangement, of its key drivers, and of the role of their division in making the arrangement a success. Typically the procurement, treasury, finance, accounting, legal and IT divisions of a buyer need to be involved in reshaping and disseminating the internal processes to fit the Supply Chain Finance arrangement, in order to generate their support for the arrangement, and to ensure no organisational specificities hamper the execution of the arrangement as foreseen.

4.5. Legal and accounting issues

Organisations implementing a Supply Chain Finance arrangement face several legal and accounting complexities. These have to do with the invoice price changing during the approval process, and the payment terms for the buyer extending beyond what is allowed following the EU directive on combatting late payment in commercial transactions.

Supply Chain Finance arrangements can include value changes on invoices that become effective halfway during the invoice process, for instance because of discount charges kicking in or transferring from supplier to buyer. Due to accounting rules, this creates work that needs to be performed by external accountants, which causes delays in the process and generates additional costs. Also, supplier contracts may disallow invoice-changes during the invoice process. In such cases new or additional agreements need to be drafted up and signed by the buyer and the supplier in order to allow changes to invoices while still protecting the supplier against unreasonable delays, amendments or disapprovals.

Extended payment terms can bring up accounting issues, as it may result in an increase of short-term debt on a buyer’s balance sheet, in effect worsening the working capital position of the buyer. Careful calibration is required of the precise extension of payment terms in relation to the accounting rules applicable.

Extended payment terms can also seemingly violate the EU directive on combatting late payment in commercial transactions. The directive limits payment terms at thirty or in some cases at sixty days, while buyers in Supply Chain Finance arrangements aim for a much higher number of DPO. The argument put forward by buyers is that, although formally speaking the payment terms exceed the limits put forward by the directive, in effect suppliers get their invoices paid even sooner than the directive aims for. They reason that as the directive is intended to mitigate liquidity risk among suppliers stemming from long periods of waiting for their cash inflow, Supply Chain Finance arrangements in its consequences aligns with the EU directive.

4.6. Selecting the right financial intermediary

The financial intermediary plays a crucial role in Supply Chain Finance arrangements. Selecting the right financial intermediary is therefore very important for the implementation. Buyers involved in Supply Chain Finance in general prefer banks to play the role of financial intermediaries, as they are a familiar type of organisation for suppliers to work with.

Banks most suited for the role of financial intermediary are banks that have sufficient experience in managing Supply Chain Finance arrangements. The experience a bank has with Supply Chain Finance even counts for more than the experience that the buyer has with the bank.

4.7. Too Big To End?

As individual Supply Chain Finance arrangements grow, the question rises as to whether there is a maximum size for individual arrangements before they become too large to manage. At a certain stage, financial intermediaries might consider the risks too high.

The Multimedia Company X in this case study has expressed the wish to its financial intermediary to increase the volume of funds transferred through Supply Chain Finance to more than €1 billion for a period of three years. As Multimedia Company X is heavily leveraged with over €30 billion in debt, the financial intermediary regards a Supply Chain Finance exposure of more than €1 billion to Multimedia Company X too big of a risk. As a result, the Supply Chain Finance arrangement of Multimedia Company X needs be backed by a second layer of investment coming from third-party capital providers.

The reason for Multimedia Company X to set up a Supply Chain Finance arrangement is to boost its free cash flow, which thanks to the arrangement has increased by 25%. However, the company forecasts this increase to drop to 5% within three years. When the free cash flow benefit approaches zero or becomes negative, the original rationale for engaging in Supply Chain Finance no longer applies. However, with over €1 billion of invoice value flowing through the arrangement, involving hundreds of equipment suppliers in more than ten countries, and two layers of financing brought in by several capital providers, the yet unanswered question is if it is practically feasible to part from it.

5. Policy recommendations

Supply Chain Finance can benefit the financial situation of both large corporations and SMEs and start-ups, and by doing so provide a boost to the overall economy. However, some of the obstacles faced by companies trying to implement Supply Chain Finance arrangements could be addressed by government policy, while a potential risk introduced by such arrangements could be important for policy makers as well.

5.1. Policy gap analysis

When it comes to the implementation of Supply Chain Finance arrangements, there are some issues to which governments could try to offer support in order to overcome them. Policy gaps could be identified in the areas of standardized business reporting and the implementation of the EU directive on combatting late payment in commercial transactions, as well as the potential risk introduced by Supply Chain Finance arrangements concerning the termination of the arrangement.

Supply Chain Finance arrangements depend on electronic invoicing, as it can help generate the speed and accuracy with which invoices are processed required for the arrangements to provide the expected advantages. Currently, a lot of companies, especially SMEs and start-ups, still resort to manual invoicing. This means that, to participate in a Supply Cain Finance arrangement, these companies would have to make significant changes to their internal processes.

The EU directive on combatting late payment in commercial transactions puts buyers in a Supply Chain Finance arrangement in a difficult legal position. While they try to increase their DPO by paying the financial intermediary as late as possible, they violate the directive when it states that payment terms should be maximized at thirty or in some cases at sixty days. However, Supply Chain Finance arrangements often see suppliers paid on their invoice by the financial intermediary in much less than thirty days, reducing their liquidity risks as a result, which was precisely the intention of the directive.

As buyers try to maximize the advantages of Supply Chain Finance arrangements, the invoice value channelled through the arrangement can grow to the extent that individual financial intermediaries are no longer willing to finance the arrangement by themselves. As a result, the arrangement becomes more entrenched in the supply chain and its financial structure becomes more complex. This can introduce a risk wherein the buyer might want to terminate the arrangement, but cannot do so in any practical matter.

5.2. Policy recommendations

European governments can address these policy gaps by encouraging e-invoicing in public procurement and by reviewing the EU directive on combatting late payment in commercial transactions. Also, a study could be launched to investigate the risks associated with growing volumes channelled through Supply Chain Finance arrangements. From a macro perspective, improving the overall access to finance of SMEs and start-ups could decrease the relative importance of these arrangements and subsequently decrease the potential risks it is associated with.

Similar to how public procurement of innovation can stimulate uptake of innovative products and services, use of e-invoicing in public procurement by organisations in the public sector can encourage proliferation of e-invoicing throughout the economy. As suppliers of public-sector organisations increasingly encounter e-invoicing practices, they grow increasingly more accustomed to and acquire more experience with e-invoicing processes. This increased their propensity to adopt e-invoicing into their own invoicing processes and increases their aptitude for Supply Chain Finance arrangements. In consultation with the European Multi-Stakeholder Forum on e-Invoicing, public-sector organisations throughout Europe could be encouraged to adopt e-invoicing.

The EU directive on combatting late payment in commercial transactions could be reviewed in an attempt to find ways to reduce the legal issues experienced by large buyers that increase their DPO through Supply Chain Finance arrangements while decreasing the time suppliers spend waiting for payment. Potential proposals for amendments could result in an update of the directive that decreases these legal complications for large buyers, increasing the potential for further uptake of this trend and decreasing the burden of legal costs on companies attempting to implement Supply Chain Finance.

A study could be proposed into the potential risk introduced by Supply Chain Finance arrangements that grow to very large volumes. The study could be designed with an aim to uncover the extent to which these risks exist, the degree to which these risks are significant, and if they are widespread. Also, such a study could suggest ways for supervisors and regulators to engage this risk on national and on EU level.

From a macro-economic perspective, Supply Chain Finance is a creative micro-level solution to a larger problem in the European economy. Small business and start-ups still have major difficulties when trying to gain access to finance. This issue is at the top of their list of worries already for several years. As a result, their financial situation makes them vulnerable to liquidity squeezes and short-term solvency risks. An improvement in the overall supply of capital and credit to SMEs and start-ups can remedy this situation to the point where late payment of invoices is less of a concern for SMEs and start-ups.

6. Appendix

6.1. Websites

European Commission	http://ec.europa.eu/enterprise/policies/single-market-goods/fighting-late-payments/

6.2. References

[1] European Commission website on fighting late payments, available at http://ec.europa.eu/enterprise/policies/single-market-goods/fighting-late-payments/

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