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A study of the business case for supply chain finance

A report produced for ACCA by the Aite Group.

Aite

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ACCA (the Association of Chartered Certified Accountants) is the global body for professional accountants. We aim to offer business-relevant, first-choice qualifications to people of application, ability and ambition around the world who seek a rewarding career in accountancy, finance and management.

Founded in 1904, ACCA has consistently held unique core values: opportunity, diversity, innovation, integrity and accountability. We believe that accountants bring value to economies in all stages of development. We aim to develop capacity in the profession and encourage the adoption of consistent global standards. Our values are aligned to the needs of employers in all sectors and we ensure that, through our qualifications, we prepare accountants for business. We work to open up the profession to people of all backgrounds and remove artificial barriers to entry, ensuring that our qualifications and their delivery meet the diverse needs of trainee professionals and their employers.

We support our 162,000 members and 428,000 students in 170 countries, helping them to develop successful careers in accounting and business, with the skills needed by employers. We work through a network of over 89 offices and centres and more than 8,500 Approved Employers worldwide, who provide high standards of employee learning and development.

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Aite Group is an independent research and advisory firm focused on business, technology, and regulatory issues and their impact on the financial services industry. With expertise in banking, payments, securities and investments, and insurance, Aite Group's analysts deliver comprehensive, actionable advice to key market participants in financial services. Headquartered in Boston with a presence in Chicago, New York, San Francisco, London, and Milan, Aite Group works with its clients as a partner, adviser, and catalyst, challenging their basic assumptions and ensuring they remain at the forefront of industry trends.

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This report is aimed at CFOs and FDs considering the business case for supply chain finance. It provides a checklist of costs, risks and complications to be considered, and a breakdown of how the benefits from such facilities are distributed.

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Contents

Glossary of terms	4
Foreword	5
1. Introduction	6
2. Methodology	7
3. A checklist for SCF	8
4. The market for reverse factoring in numbers	14
5. Impact points	16
Appendix	17
References	18

Glossary of terms

Term	Definition
AP : Accounts Payable	AP is money owed by a business to its suppliers and shown on its balance sheet as a liability.
AR : Accounts Receivable	AR is money owed by suppliers to a business and shown on its balance sheet as an asset.
COGS: Cost Of Goods Sold	COGS represent the direct costs attributable to the production of the goods sold by a company. This amount includes the cost of the materials used in creating the good along with the direct labour costs used to produce the good. It excludes indirect expenses such as distribution costs and sales force costs.
DPO : Days Payable Outstanding	DPO= (Accounts payable/COGS) x 365
DSO : Days Sales Outstanding	DPO= (Accounts Receivables/Net sales) x 365
Full-time equivalents	The number of employees equivalent to one full-time employee. 1FTE = one employee working full time
KYC: Know Your Customer	Refers to relevant information obtained from a bank's clients for the purpose of doing business with them. The objective of KYC guidelines is to prevent banks from being used, intentionally or unintentionally, by criminal elements for money laundering activities. Related procedures also enable banks to know or understand their customers, and their financial dealings better. This helps them to manage their risks prudently.
Receivable Finance	Receivable Finance allows suppliers to finance their receivables relating to one or many buyers and to receive early payment, usually at a discount on the value.
Recourse (with/without)	'With recourse' is a legal agreement that provides protection to lenders, as they are assured of having some sort of repayment – either cash or liquid assets – in the event that the borrower is unable to satisfy the debt obligation. In a 'Without recourse' agreement, If the borrower defaults, the issuer can seize the collateral (usually property), but cannot seek out the borrower for any further compensation, even if the collateral does not cover the full value of the defaulted amount.
SCF: Supply Chain Finance	The use of financial instruments, practices and technologies to optimise the management of the working capital and liquidity tied up in supply chain processes for collaborating business partners. SCF is largely 'event-driven'. Each intervention (finance, risk mitigation or payment) in the financial supply chain is driven by an event in the physical supply chain. The development of advanced technologies to track and control events in the physical supply chain creates opportunities to automate the initiation of SCF interventions.
Spread	An amount that each bank decides to add to the base rate as its revenue. The bank buys the money at a price (exchange interbank rate) and resells it to its customers recharged with a profit margin (spread).
WACC: Weighted Average Cost of Capital	As a company's assets are financed by either debt or equity, WACC is the average of the costs of these sources of financing, each of which is weighted by its respective use in the given situation. By taking a weighted average, we can see how much interest the company has to pay for every dollar it finances.
Working Capital	The amount of day-by-day operating liquidity available to a business. In mathematical terms, working capital is calculated as WC=(AR)+(Inventory) – (AP) + (Cash)

Foreword

I come from a background in small business and understand how important good cash flow is to allowing businesses to thrive. Constraints on cash flow can limit investment and growth and in the worse cases result in insolvency.

A strong cash flow is also essential for enabling UK businesses to continue to raise finance, with 48% of declined finance applications over £25,000 in 2012/13 being rejected on 'affordability' grounds.

Supply chain finance offers a solution to this problem. Around 80% of business to business transactions are undertaken on credit terms of some form, and trade credit constitutes about 37% of total business assets. Although, as this report states, supply chain finance only represents 4% of the total global receivables financing market, increasing use of receivables as assets to secure finance presents a strong alternative to more traditional forms of finance.

I therefore welcome this publication by the Aite Group and ACCA, on a subject that requires greater attention and debate. There is a vibrant and innovative alternative finance market being created and we need to ensure that businesses are aware of all options when applying for finance.

The UK Government has taken a number of significant steps to increase the supply of capital through non-bank lending channels and, in the longer term, to help to diversify the sources of finance available to businesses, including:

- investing through British Business Bank programmes in non-traditional lending channels that lend directly to small businesses, including mezzanine finance funds, supply chain finance schemes and peer-to-peer lenders;
- increasing funding for a range of British Business Bank venture capital programme, including the Business Angel CoFund, which co-invests alongside business angel groups in high growth potential early stage SMEs; and
- committing to the future of the Seed Enterprise Investment Scheme and Enterprise Investment Scheme to increase investment in new and growing businesses.

While there will likely be great debate on the content of this report and the place for Supply Chain Finance, I welcome any efforts to make businesses more aware of their finance options and to make the UK the best place in Europe to start, finance and grow a business.

Matthew Hancock MP,
Minister of State for Skills and Enterprise

1. Introduction

In November 2011, the UK government announced the creation of an industry taskforce to examine the potential for creating better access to alternative credit channels for SMEs and mid-market companies. The taskforce, chaired by Tim Breedon, published its report (Independent Taskforce on Non-Bank Lending 2012) the following March, naming the UK professional accountancy bodies, including ACCA, as the British government's natural partners in accelerating the adoption of supply chain finance.

In February 2014, ACCA's Global Forum for SMEs cited supply chain finance as one of the most promising tools for financing small businesses around the world, and noted the potential for further innovation in the sector, which currently makes up only 4% of the global receivables financing market (ACCA 2014).

This report, prepared by Aite Group, was commissioned as part of ACCA's commitment to the promotion of supply chain finance at the global level. It is aimed primarily at senior finance professionals and is meant to function as a learning resource and a reference text.

A BRIEF INTRODUCTION TO SUPPLY CHAIN FINANCE

Globalisation has created internationally dispersed supply chains as production has been relocated to emerging markets, logistics have become more cost effective and global communications easier and pervasive. Large buying organisations are much more sensitive to the inherent risks within, and the resilience of, their supply chains, as critical product components are frequently dependent on third-party suppliers. For chief executive officers focusing on profitable growth, working capital control has become a key metric. Working capital represents the amount of day-by-day operating liquidity available to a business.

Supply chain finance can be defined (EBA 2013) as the use of financial instruments, practices and technologies for optimising the management of the working capital and liquidity tied up in supply chain processes for collaborating business partners. The development of advanced technologies to track and control events in the physical supply chain creates opportunities to automate the initiation of SCF interventions.

This report addresses the following research questions.

- How can the costs and benefits from supply chain finance best be quantified for buyers and suppliers?
- What is the total 'pot' of value to be divided between these three groups?
- How are the financial gains from supply chain finance typically split between buyer, suppliers, financial institutions and service providers?

The findings of the research project provide:

- a simple conceptual framework and a checklist for chief financial officers (CFOs) or finance directors (FDs) trying to make or assess the business case for supply chain finance
- two alternative estimates of the business potential of SCF, extrapolated from the available empirical data
- a reasonable, 'broad-stroke' estimate of the benefits shared among SCF partners, the typical shares of benefits accruing to each party, and a probable range of variation.

2. Methodology

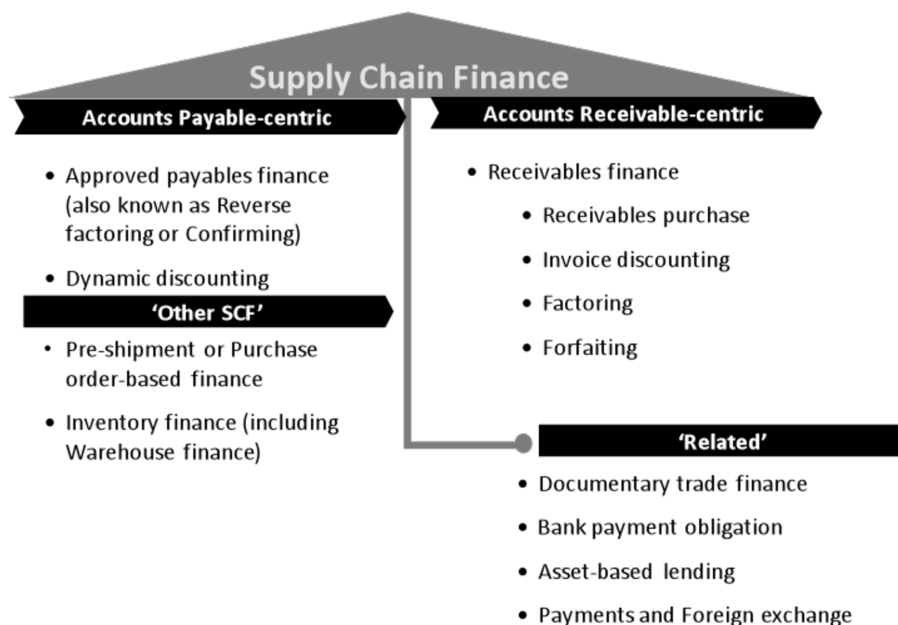
To conduct this project, Aite Group leveraged its extensive knowledge base, existing publications (EBA 2013; Aite Group 2010a, 2013), a proprietary contact database, and publicly available information. Aite Group analysts sourced primary information from selected senior employees in banks providing SCF services, senior employees at SCF software vendors, and corporate treasurers with experience of SCF (See Appendix). Feedback was collected using a questionnaire attached to an introductory email.

Given the variety of financial instruments that fall under the term SCF (see Figure 2.1: Varieties of SCF), the research focused on the most popular and most widely used: reverse factoring.

Reverse factoring (also called approved payables finance) allows a supplier to receive a discounted payment of an invoice due to be paid by a buyer (ie an account payable). The buyer approves the invoice for payment and finance is raised separately against the payable by the supplier from a bank or other finance provider, who relies on the creditworthiness of the buyer. The buyer pays at the normal (or another, mutually agreed) invoice due date, whereas the supplier receives a discounted payment through the financing facility. The funding provider relies on the creditworthiness of the buyer and the attraction to the supplier is based on an 'arbitrage' between the higher credit rating of the buyer and the typically higher cost of financing for the supplier, as well as the attraction of the availability of the finance. Because it is the ordering party – usually a large company with a high-quality credit rating – that starts the process, it is that party's liability that is engaged and therefore the interest applied for the deduction is less than the one the supplier would have obtained on its own account. Figure A1 in the Appendix provides a more detailed representation of the process flows of this SCF instrument.

Owing to the nature of SCF and the financial institutions involved in such services, the study had a global perspective. Nonetheless, the study focused on the European market by default when specific findings were impossible to obtain without a geographic specification. To encourage participation, prospective participants were given an overview of ACCA's identity and background as well as ACCA's interest in the subject matter.

Figure 2.1: Varieties of SCF



Source: EBA (2013)

3. A checklist for SCF

When a company that has entered an SCF agreement later experiences poor results it is very likely that the main reasons for failure are a lack of proper planning and the limited visibility of all the elements necessary to build a conceptual framework for assessing the case (Aite 2010b). Below are shown the elements of a 'total cost of ownership' checklist for planning a successful business case for SCF. For each, more detailed information is provided in the next chapters.

- Fee structure: access to finance comes with a service cost. It is important to understand its components.

- Transfer of title: funds are disbursed against a title that ensures that funds will be repaid. It is advisable to know the legal aspects tied to this transfer before entering any SCF agreement.

- Limits and thresholds: not all transactions can be financed. Banks impose limits and constraints that must be known to plan any SCF programme properly.

- Payments: while the transfers of SCF funds follow normal payment channels, there may be some limitations on the currencies available, electronic systems to use, and the need to open dedicated bank accounts.

- Dates: the time-based nature of SCF schemes allows suppliers to be paid in advance while buyers extend their payables for working capital optimisation. Any SCF arrangement starts with an approved invoice and the flow of correlated actions must be properly scheduled.

- Risk: SCF schemes are all based on transferring risk from one party – the supplier – to another – the buyer, who is expected to be presumably 'safer' for the party supplying the intermediate finance. Before signing any SCF contract, therefore, players must know their liabilities.

- Benefits: all parties in an SCF programme have the objective of obtaining positive returns. To set proper expectations it is important to consider tangible benefits (ie quantifiable in monetary terms) from intangible ones (ie hard to quantify), and to identify the beneficiaries.

- Costs: too often academic papers and industry journals dedicate attention to the (undoubted) benefits of SCF, while the corresponding costs are seldom discussed, let alone quantified. One of the most significant contributions of this research report is that it presents a list of one-off and recurring cost elements that can justly constitute a 'Total Cost of Ownership' model for SCF.

- Legal assistance: elements related to taxes and jurisdictions must be included to complete the framework for SCF business case.

Table 3.1: Spread values for funding fees

Source of funds	Spread Value	Notes
Bank directly through its own platform	Minimum of 20 bps; average 100–200 bps	Peaks of 500 bps in Africa
Bank through service provider	Average 40–70 bps	Peaks of 250 up to 450 (Asia)

Source: author's calculations based on expert interviews

The chapters that follow provide further details of the elements of the SCF 'checklist'.

'Success of global SCF rollouts requires standardised business processes and technologies among company subsidiaries as well as with banking partners'.
EXPERT INTERVIEWEE, HEINEKEN

3.1 FEE STRUCTURE

The structure of a funding fee is typically composed of two elements:

- interest rate
- spread (see Glossary).

The interest rate usually depends on the country where the SCF arrangement is structured and can be either:

- Libor
- Euribor
- Federal Discount Rate
- Other country-specific rate.

For reverse factoring (ie SCF) programmes, the discount is usually at 30 or 60 days. The value of the spread is the main point of negotiation on which finance providers compete and depends on commercial decisions, customer relationship strategies, and opportunities for cross-selling. Aite Group's research has identified some average values, depending on whether funds are sourced directly from a bank or through a service provider[1] of the SCF electronic platform, and the region where the SCF programme is arranged Table 3.1[1]).

'The average figure of applied spread to the Reverse Factoring schemes we see is around 65 bps'.
EXPERT INTERVIEWEE, PREMIUM TECHNOLOGY

'The platform software licence fees are generally embedded in a bank's risk margin'.
EXPERT INTERVIEWEE, BARCLAYS

'We see average bps figure of applied spread to Reverse Factoring schemes up to 200'.
EXPERT INTERVIEWEE, GTNEXUS

1. An electronic invoicing service provider (or third-party business-to-business (B2B) platform) provides services to the buyer and suppliers using an electronic platform (ie a portal). Approved invoices are displayed in the e-invoicing portal and appropriate messages are generated between the parties involved. The portal presents an aggregated demand for financing to potential funding providers.

3.2. TRANSFER OF TITLE

There are various aspects to consider when signing an SCF scheme contract (Tables 3.2 and 3.3)

Once the supplier has selected the invoices to be discounted, it is advisable for both buyer and supplier to verify whether the bank/fund provider is obliged to purchase (ie finance) all payables, or whether the collection of payables is still the supplier's own responsibility.

The bank/finance provider needs to be notified whether the payables it is required to finance represent the net value of the invoice after any discounts, rebates, offset or adjustments.

The bank/finance provider also nominates the party who notifies it about that information, and this party can be:

- the buyer
- the supplier, or
- both

It is usual practice that the bank/fund provider will also establish how that information is notified (eg via formal letter or email).

Table 3.2: Various legal aspects to consider in an SCF contract…

Legal Item	Options
Type of legal instrument for collateral	Purchase of receivables: the finance provider legally owns the receivables and collects directly the payments due to the borrower. Assignment of receivables: the borrower retains ownership of the accounts, continues to collect the accounts receivable, and passes the payments on to the finance provider. Since the borrower retains ownership, it also retains the risk that some accounts receivable will not be repaid. Pledge of receivables: the borrowing company completes a borrowing base certificate following the completion of each reporting period, and forwards the signed certificate to the finance provider. The borrowing base certificate itemises the amount of accounts receivable outstanding at the end of the reporting period into the age brackets specified by the finance provider, calculates the maximum amount of borrowing allowable on the basis of the amount of accounts receivable, and states the amount actually borrowed. The finance provider uses this certificate to monitor the amount of collateral available, and whether it needs to adjust the amount of debt available to the company. Under a pledging agreement, the borrowing company retains title to and is responsible for collecting accounts receivable. Other type of security interest
Underlying instrument used for the financing	Open account receivable Bill of exchange Promissory note

Table 3.3: ...and aspects that go beyond legal considerations

Item	Options
Supplier has to sign a notification of assignment of receivables to the bank/fund provider?	Yes/ No
Supplier has to provide bank/fund provider with any data pertaining to the buyer's payment track record?	Yes/ No
Payables must be transferred to the bank/fund provider individually or by batch?	Individually/ By batch
In case of batch transfer, how is the discount rate calculated?	To be determined

3.3 LIMITS AND THRESHOLDS

Only eligible payables can be financed. The following is a series of decision constraints – in order of use frequency – normally adopted by the bank/fund provider.

- Payables must be free from any liens or security interests, and must not have been previously pledged, sold, assigned or transferred, and must be readily available to be assigned.
- There must be no commercial dispute between buyer and supplier related to that payable.
- The minimal value of the amount payable that is to be financed for the entire SCF contract must be established between parties
- The minimum period that must elapse before the amount payable is financed must be agreed (eg 'payable not sooner than 'n' days from date of issue').
- A facility limit may be imposed by the bank/fund provider.
- There may be a maximum number of payables that can be submitted in one month.
- There may be a minimum/maximum allowed discount to the supplier.
- There may be a minimum discount period (eg shall not be less than 'n' calendar days).

3.4 PAYMENTS

A number of conditions must be verified to ensure swift payment of the facilities.

The bank/fund provider must confirm whether the facility it provides is committed (ie clearly defined terms and conditions are set forth by the finance provider and imposed upon the borrower) or uncommitted (ie the lender agrees to make funding available to the borrower, but is under no obligation to provide a specific amount of money).

The supplier must verify whether the transaction must be notified to the buyer.

The supplier must verify whether the SCF scheme allows the finance provider to change:

- the supplier discount limit and/or
- the payment date of the discounted payable

Buyer and supplier must verify whether there is a web-based tool that they must use to load the invoices for discounting.

Buyer and supplier must verify how many currencies are available for funding.

Depending on the chosen legal instrument for collateral (see Table 4.1: Various legal aspects to consider in an SCF contract…Table 4.1) the supplier may have to act as collection agent for the bank/finance provider.

If so, is there an allowance to the supplier for such a service?

Is any such eventual allowance part of the discount rate applied by the bank or accounted separately?

Does the collection agent have to open a separate bank account?

With what frequency does the collection agent transfer receipts to the bank/fund provider?

The supplier must verify whether it has to open a special bank account to receive financing by the bank/fund provider.

3.5 DATES

The process flows illustrated in Figure A1 in the Appendix are sequential and the completion of each one triggers the next, determining the overall time it takes for suppliers to access finance. Parties involved in the SCF scheme must be well aware of the following milestones:

- date of original invoice due (ie maturity date), including:
  - any grace period conceded by the supplier
  - whether a consolidated maturity date (eg Friday of the week for all payables that fall within that week) is conceded by the supplier
- date of invoice approval by buyer
- date of request for discount by supplier
- date of decision to approve/refuse discount by bank/finance provider
- date of response to supplier regarding approved/refused discount by bank/finance provider
- date of payment (of discounted amount payable) to supplier by bank/finance provider
- date of payment of fees by supplier to bank/ finance provider
- date of refunding by buyer to bank/ finance provider; at this time it is advisable also to verify whether there is a limit of days from this refunding date after which the buyer becomes delinquent.

3.6 RISKS

The interest rate applied by the finance provider to the borrower takes into account not just the time value of money, but also the risk or uncertainty of future cash flows; the greater the uncertainty of future cash flows, the higher the discount rate. The bank needs to minimise its exposure to risk and there are various options possible:

- risk is wholly on the supplier with no recourse (see definition in Glossary)
- risk is wholly on the supplier with possible form of recourse
- risk is wholly on the buyer without recourse to the supplier
- risk is shared in some agreed proportion between the parties.

While in the reverse factoring SCF scheme the general rule is that the funding provider relies on the creditworthiness (ie risk) of the buyer, suppliers must be aware that there are nonetheless some conditions that allow the bank recourse to the supplier:

- existence of fraud in relation to a payable or a commercial dispute between the supplier and the buyer
- payables that are not eligible
- supplier omits to pay any duties or taxes due
- supplier breaches any of its obligations as collection agent
- loss in the purchased payables as a result of the application of credit notes or marketing rebates.

Although this is not frequent, some reverse factoring contracts stipulate that, in case of recourse to the supplier, the supplier may have to repurchase such receivables immediately.

3.7 BENEFITS

The reverse factoring SCF scheme is promoted as a 'win-win' for both buyers and suppliers. Benefits are grouped in two categories:

- tangible benefits (Table 3.4), and
- intangible benefits (Table 3.5).

'A buyer usually subscribes to Supply Chain Finance as an extension of the Procure-to-Pay solution'.
EXPERT INTERVIEWEE, GTNEXUS

Table 3.4: Each party enjoys tangible benefits with reverse factoring

Party	Tangible benefits	Comments
Supplier	Reduced days sales outstanding (DSO)1	
	Reduce commitment fees	
	Reduced cost of equivalent financing line	
	Reduced probability-weighted average marginal cost of arranging emergency liquidity	An average of 20 bps is likely.
Buyer	Extended days payable outstanding (DPO)2	
	Rebates (i.e., kickbacks) from fund provider.	

Table 3.5: Each party enjoys intangible benefits with reverse factoring

Party	Intangible benefits	Comments
Supplier	Standardised payment terms	
	Improved cash forecasting	Reduced cycle time to develop a short-term cash flow forecast: between 1 and 4 FTEs.3 Between 1 and 2% in overnight FX or spot borrowing savings on total annual spend but virtue of better cash flow forecast.
	Reduced AR4 carrying costs (eg reduce disputes for payments not in time), improved reconciliation processes	Reduced cycle time from the time a discrepancy is discovered until the discrepancy is resolved: between 0.5 and 1 FTEs.
	Cash flow predictability and certainty	Reduced marginal cost of arranging a larger facility than otherwise needed: between 50 and 500 bps.
	Reduced currency risk (ie less hedging required)	
Buyer	Reduced AP10 carrying costs (eg disputes), improved reconciliation processes (ie FTE reduction % of AP department)	
	Freed up credit lines	
	Avoid the opportunity cost of forgone investment	5bps on average.
	Managing electronic invoices (ie % reduced staff hours for manual handling)	
	Reduced risk of non supply (ie reduced safety stocks; reduced lot order size of supplies)	
	Reduced risk of non-innovation by supplier (ie reduced time-to-market responsiveness)	
	Reduced Currency risk (i.e., less hedging required)	

3.8 COSTS

Cost factors are necessary for building a reliable business case for SCF. The cost elements for reverse factoring programmes (Table 3.6) can be categorised as follows:

- monetised costs: these are normally embedded in the fee structure
- employee time (ie FTEs): employee time spent in activities dedicated to the SCF programme
- one-off costs: single costs typically charged during the start-up of the SCF programme
- recurring costs: costs that repeat, normally annually.

'IT maintenance costs from an SCF software provider are roughly around 20% of the license fee'.
EXPERT INTERVIEWEE, PREMIUM TECHNOLOGY

'Some of the costs associated with the implementation and management of an SCF programme are not always easy to quantify in a large organisation'.
EXPERT INTERVIEW, VOLVO

'If corporate IT is not involved in the earlier stages of an SCF project and before contract signature, the implementation costs can be significantly higher, in dollar terms, but also in regards to time'.
EXPERT INTERVIEWEE, PA CONSULTING

Table 3.6: Reverse factoring cost elements

Cost element	One-off / recurring	Party accountable*	Comments
Monetised: software to access and integrate the SCF platform to the party's back office	One-off	Buyer	If the SCF platform is bank-proprietary the bank tends not to charge the cost. If the SCF platform is provided by a service provider the cost is often embedded in the total cost of implementing the SCF programme (approx. US$2,500 one-time cost).
		Supplier	Banks tend not to charge the cost. Platform providers charge approx. US$200.
Monetised: hardware and equipment needed to use SSL (Secure Socket Layer) technology or equivalent for secure access to the SCF platform	One-off	Buyer/ Supplier	A bank could require such a facility depending on its access system and on the bank's security policy. For a platform provider this cost is part of implementation cost and embedded in the cost for the portal solution.
Monetised: SCF platform (ie, portal) software licence fee	One-off	Buyer	The buyer can purchase the software directly from a SCF platform vendor, or decide to use the bank's, or, finally, to pay a pay-per-use licence to a SCF portal service provider. If the buyer decides to purchase the software, the cost may be around US$600,000. If the SCF platform belongs to the bank, the fee is normally embedded in the risk margin. If the SCF portal is operated through a service provider, the pay-per-use fee is normally tiered: the annual order spend is multiplied by transaction fees, and paid as an annual subscription. The fee can be as low as US$2,000 for an annual spend of US$1,000,000, up to US$600,000 for US$10,000,000 of annual spend.
Monetised: Platform software Implementation and integration fee	One-off	Buyer	Banks tend not to charge this cost. Portal service providers charge this as a professional service fee. It is a one-off cost and usually ranges from US$300,000 up to US$1 million.
Monetised: IT maintenance costs	Recurring	Buyer	Banks do not charge this cost. Portal service providers charge this cost. It is a fraction (usually 18–20%) of the initial licence fee, and is based on volumes transacted. If the software is in pay-per-use mode, the cost is embedded in the subscription fee.
Monetised: Due diligence costs	One-off	Buyer	Costs to bank for assessing buyer's credit worthiness. Between US$300 and US$400 in Europe Whether or not to charge the buyer is the bank's commercial decision
		Supplier	Bank KYC 6 assessment.

Cost element	One-off / recurring	Party accountable*	Comments
Monetised: Training and Education costs	Recurring	Buyer	Banks do not charge this cost. For SCF portal service providers it is normally embedded with the licence fee. It is very important to educate the internal staff (eg procurement, accounts payables) on the changes to the supplier relationship procedures. The amount of the cost depends on the number of subsidiaries to train. The average training time is five days/year. In some cases these costs are quoted as part of a professional services fee.
Monetised: Legal costs	One-off	Buyer	Costs for formalising the SCF agreement. On average US$15,000
FTEs: IT staff for startup	One-off	Buyer	Between 1 and 2
		Supplier	Not very significant. Less than 1
FTEs: On-boarding	Recurring	Bank/ Buyer	Between 1 and 2 A rough figure is 1 FTE for every 100–150 suppliers to on-board
FTEs: Internal operations	Recurring	Bank	Between 0.5 and 2 On average 20% of on-boarded suppliers tend not to use the platform for financing, so there is the need to keep a constant eye on them and follow up
FTEs: Assistance to buyer/supplier/bank/ fund provider	Recurring	SCF platform provider	0.5 on average
FTEs: Staff of procurement department to discuss contractual details as part of supplier relationship management	Recurring	Buyer	Between 1 and 2 for internal coordination
FTEs: Staff of Legal department.	Recurring	Buyer	0.5 FTEs on average to work with bank and suppliers to ensure proper on-boarding procedures. Large corporations have their own contract ready to hand over to banks and this reduces the FTE time.
FTEs: Staff of Legal department	One-off	Supplier	On average 0.1, to max 1 FTE. This cost often represents a potential barrier to enter SCF programs for small companies.
FTEs: SCF Program leader	Recurring	Buyer	Between 0.5 and 3 FTEs. The number depends very much on the size of the company.

* Same pair of trade relationship buyers/suppliers as discussed so far, and not buyers/suppliers of software.

3.9 LEGAL ASSISTANCE

There are various additional cost elements that must be included to prepare a complete view of the SCF business case:

- auditors' fees for accounting treatments
- advisory services to verify the applicable country laws in case of multi-country SCF programmes
- advisory and legal assistance to establish contractually who pays for tax withholdings, VAT, deductions, charges, translations of documents, fees.

Advisory and legal assistance to determine and agree contractually on who will pay, where the bank/fund provider needs more information before executing the financing (eg audit of supplier's credit control and collection procedures – in case supplier is a collection agent).

'Some costs vary with the scope of the SCF programme: for instance the number of buying legal entities activated from the start and the number of invoicing currencies eligible'.
EXPERT INTERVIEWEE, VOLVO

'Education of internal staff (eg, procurement, AP) must be factored in, especially regarding training on changes brought by SCF schemes to internal procedures and how current and new suppliers are on-boarded'.
EXPERT INTERVIEWEE, PA CONSULTING

4. The market for reverse factoring in numbers

4.1 MARKET SIZE

Literature abounds (eg ING Economics Department 2012; Demica 2012) with attempts to quantify how much can be financed through reverse factoring programmes. There is, however, poor information as to how the numbers are calculated. This section suggests a methodology for collecting and analysing data, and proposes a way of quantifying the potential size of the reverse factoring financeable market.

To ensure the utmost impartial and objective results, Aite Group followed two separate calculation methods. Both approaches provided very similar results, which further supports the outcome.

The estimated market size for reverse factoring ranges between US$255 billion and US$280 billion.

Method 1

Estimates were extrapolated from market statistics and from the results of interviews with SCF industry experts.

Aite Group selected the industry sectors most active with SCF programmes (Figure 4.1):

- aerospace
- automotive
- chemicals
- consumer packaged goods
- pharmaceuticals
- retail
- telecommunications.

A number of top firms were identified for each industry sector, and each one's accounts payables (AP) value extracted from its annual financial filings. The interviews with expert panellists allowed Aite Group to assess the estimated total outstanding payables (ie value of AP currently financed via reverse factoring) per sector. This value was the basis for building a 'conversion factor' for turning the value of AP into financeable payables (ie 'outstanding' payables). This factor was then applied to the AP values of the 'tail' (ie companies other than the 'top') firms in the sector, in order to derive the 'tail outstanding' figure. The total AP outstanding value was then estimated for each sector.

Finally, by adding up the total outstanding values of all sectors, plus an additional value to account for remaining industry sectors, the estimated actual market size of reverse factoring produced the result demonstrated in Table 4.1 rounded to US$255 billion.

Table 4.1: Reverse factoring market size. First estimation method

(values in US$ bn)	Top' sector AP	Sector outstanding	Conversion factor	Total sector AP	Total sector AP 'tail'	Outs%_Sec_ Tail	Tail outstanding	Total sector AP outstanding
Aerospace	157.3	18.5	12%	224.7	67.4	2%	1.59	20.1
Automotive	356.4	7.4	2%	594.0	237.6	0%	0.99	8.4
Chemicals	129.8	25.9	20%	173.1	43.3	4%	1.73	27.7
CPG	168.3	37.0	22%	210.4	42.1	4%	1.85	38.9
Pharma	71.4	3.7	5%	142.7	71.4	1%	0.74	4.4
Retail	173.4	22.2	13%	231.1	57.8	3%	1.48	23.7
Telco	131.9	37.0	28%	164.9	33.0	6%	1.85	38.9
								162.1
Additional value to account for remaining industry sectors								91.8
Total Reverse Factoring market size ($US B)								253.8

Table 4.2: Reverse factoring market size. Second estimation method

	Top' sector DPO (average days)	Exceeded threshold (avg. days)	Values exceeding threshold (US$ bn)
Aerospace	73.1	35.0	15.1
Automotive	92.3	56.3	30.8
Chemicals	72.9	39.4	16.1
CPG	107.8	74.3	44.5
Pharma	219.0	185.6	20.8
Retail	65.1	31.6	22.0
Telco	208.8	175.3	55.4
			204.7
Additional value to account for remaining industry sectors			77.3
Total Reverse Factoring market size ($US B)			282.0

Source: Author's calculations

Method 2
Here Aite Group adopted a more analytical approach. As with the previous method, this calculation started with the same 'top' companies of selected industry sectors. The assumption behind this calculation is that reverse factoring helps companies extend longer payment terms (ie DPO) while allowing their suppliers to benefit from receiving on-time payments of their receivables from finance providers (eg banks). The foundation of the estimate was to quantify the value of the current delays of payments beyond contractually agreed terms, as this is the value that reverse factoring can address and resolve.

Each firm's DPO was calculated (Table 4.2: Reverse factoring market size. Second estimation method) from its financial statements. A calculation was then performed to estimate how much the firm's DPO exceeded the threshold limit accepted by suppliers before the delayed payment becomes a concern.[2] The values of payments exceeding such accepted limits represent the opportunity to use reverse factoring to support financially distressed suppliers.

As in the previous method, an additional value to account for the remaining industry sectors was included to produce the estimate for the size of the reverse factoring market size, rounded to US$280 billion.

Based on the two alternative calculation methods, the business potential of reverse factoring is best estimated as between 20% and 25% of an industry's accounts payable.

'There are at least 1,500–2,000 companies globally utilizing SCF'.
EXPERT INTERVIEWEE, GREENSILL CAPITAL

4.2 SHARE OF BENEFITS

If reverse factoring reduces costs across the supply chain by letting suppliers 'borrow' against their customers' creditworthiness instead of their own, then some of the resulting value must be captured by the suppliers, some by the buyer and some by the financial intermediary and other service providers.

The findings from interviews with panel experts and subsequent verification with market data has produced the results illustrated in Figure 13.1: Share of benefits and typical benefits among reverse factoring players. Consensus figures were derived through interviews with market players and averaging overall data provided independently – and anonymously – by respondents.

'The benefit to the bank is earning the commensurate return on risk weighted assets, between 30–50%'.
EXPERT INTERVIEWEE, GREENSILL CAPITAL

'The bank/finance provider on average gets a share of benefits between 20 and 100 bps, while the platform provider enjoys a range between 10 and 25 bps'.
EXPERT INTERVIEWEE, BARCLAYS

'Typically when buyers launch SCF schemes with a view to extending their payment terms they do not expect to receive a share of the discounting fee'.
EXPERT INTERVIEWEE, CITI

Table 4.3: Allocation of benefits among reverse factoring players

	Share of SCF savings captured		Typical benefits expressed as spread	
	Min	Max	Min	Max
Buyer	35%	50%	50	150
Platform provider	2%	5%	NA	NA
Suppliers	25%	45%	50	150
Bank/fund provider	15%	18%	20	100

Source: Author's calculations based on expert interviews

2. These threshold statistics are available from the 'Atradius Payment Practices Barometer', September 2013 <http://www.atradius.co.uk>, accessed 12 May 2014.

5. Impact points

- Of the numerous varieties of financial instruments that fall under the supply chain finance (SCF) 'umbrella' the most popular and most widely used is reverse factoring.

- When approaching a reverse factoring programme, the important elements of a company's checklist for planning a successful business case are:

  – fee structure
  – transfer of title
  – limits and thresholds
  – payments
  – dates
  – risk
  – benefits
  – costs.

- The estimated global market size for reverse factoring ranges between US$255 billion and US$280 billion, of which about one-third can be attributed to Europe. An extrapolation for estimating the business potential of reverse factoring is to apply a 20–25% 'conversion factor' to the value of accounts payables.

- Reverse factoring reduces costs across the supply chain by letting suppliers 'borrow' against their customers' creditworthiness instead of their own. On average, 80% of the resulting value is shared between the suppliers and the buyer, with varying degrees of allocation depending on whether the buyer wants to facilitate its key suppliers' financials (ie the largest share goes to supplier)or, instead, take all the benefits by extending payment terms. Typically, the buyer will capture 35% to 50% of all savings, while suppliers will get 25% to 45%. Another 15% goes to the financial intermediary while the remaining 5% is for the service provider.

Appendix

PANEL OF INDUSTRY EXPERTS

- Banks
  - Global US Bank
  - Barclays
  - Citi
  - Global European Bank
- Financial Services Operators (non-banks)
  - Greensill Capital
- Solution providers
  - Misys
  - Premium Technology
  - GTNexus
  - Primerevenue
  - Consulting
  - PA Consulting
- Corporations
  - Heineken
  - Volvo

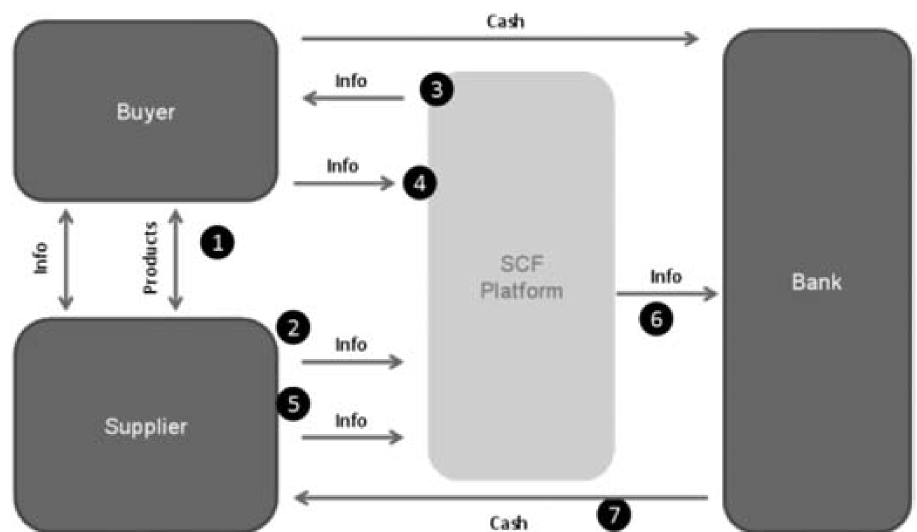
Due to the commercially sensitive nature of their insights, some experts have chosen to remain anonymous.

OPERATIONAL PROCESSES OF REVERSE FACTORING

Reverse factoring is also known as 'approved payables finance'. The basis for the approved payables finance is the underlying transaction between the buyer and the supplier (step 1 in Figure A1). The invoice for the transaction is submitted to the buyer by the supplier (2), enabling the buying party to receive it into its enterprise resource planning (ERP) system (3). Electronic communication between the supplier and buyer is supported by the platform.

As soon as the buyer has approved the invoice/account payable, the approval is communicated via the SCF platform (4), allowing the supplier to see it. It is the up to the supplier either to wait until the payment term expires and the buyer pays the invoice, or to request finance from the bank (5). The bank receives this request via the SCF platform (6) and pays the supplier for the invoices, withholding the agreed discount (7). When the agreed payment term expires, the buyer makes a payment to the bank, after which all obligations have been met.

Figure A1: Process flows of reverse factoring



References

ACCA (2014), *Innovations in Access to Finance for SMEs* <http://www.accaglobal.com/content/dam/acca/global/PDF-technical/small-business/pol-afb-iiatf.pdf>, accessed 12 May 2014.

Aite Group (2010a), 'Supply Chain Finance: A Taxonomy' <http://www.aitegroup.com/report/supply-chain-finance-taxonomy>, accessed 12 May 2014.

Aite Group (2010b), 'Supply Chain Finance Programs: Implementation Guidelines' <http://www.aitegroup.com/report/supply-chain-finance-programs-implementation-guidelines>, accessed 12 May 2014.

Aite Group (2013), 'Supply Chain Finance in Europe' <http://www.aitegroup.com/report/supply-chain-finance-europe>, accessed 12 May 2014.

Demica (2012), 'The Hidden Player' <http://www.demica.com/news-events/215-new-research-the-hidden-player>, accessed 12 May 2014.

EBA (Euro Banking Association) (2013), 'Market Guide On Supply Chain Finance' <https://www.abe-eba.eu/N=EBA-Market-Guide-on-SCF.aspx>, accessed 12 May 2014.

Independent Taskforce on Non-Bank Lending (2012), *Boosting Finance Options for Business* <http://www.bis.gov.uk/assets/biscore/enterprise/docs/b/12-668-boosting-finance-options-for-business.pdf>, accessed 12 May 2014.

ING Economics Department (2012), *Supply Chain Finance* <http://www.nvg.nl/downloads/cms//ING%20Supply%20Chain%20Finance%20-%20June%202012.pdf>, accessed 12 May 2014.

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