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Supply Chain Finance Analysis

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ABSTRACT
Supply Chain Finance as an emergent and currently, one of the most viable and plausible financing procedural instruments is not a new conceptual framework. It has been widely noted and acclaimed as an essential aspect of supply chain management and trade finance. The global economic crises have necessitated the urgent consideration and eventual adoption of Supply Chain Finance (SCF). SCF is noted for its capability to collaborate and coordinate trade partners and procedures in order to increase 
Trade transparency, the shift from paper-laden business documentation to comprehensive sophisticated automation process of concise detailed information exchange and the ultimate dematerialization of the entire supply chain process. The processes involved in a thoroughly comprehensive SCF scheme also reduces trading costs and risks shouldered by all the parties involved in the process. This study attempts to delineate and define the not so obvious but diverse trading efficiencies, value enhancement enjoyed by the users of SCF and the enormous improvement in working capital accessibility and maximization afforded by SCF in the entire supply chain process. It also seeks to highlight some of the major challenges of the SCF system thereby prescribing and providing working innovative but compelling solutions to streamline and ensure the viability and the instrumentation of SCF mechanisms and their capabilities of eradicating trade finance problems faced by various trade partners and companies. This is, by far, a brilliant innovative method of leveraging working capital accessibility and the substantial enhancement of credit ratings and values of the various companies using the SCF system to optimize trade efficiency, predictability and ultimately profitability.

INTRODUCTION
It has been recognized that trade credit granted by trade partners (suppliers) is a very essential catalyst and source of trade finance. Existing findings indicate that about 80% of business transactions carried out in UK thrive on trade credit (Summers, Wilson, 2002). Even buyers with strong credit ratings prefer trade credit to bank loans as this improves their net working capital (Petersen, Rajan, 1997). Supply Chain Finance (SCF) as a major systemic shift emergent but viable trade finance instrument and leverage now available and accessible to companies working with and in the banking industry is geared towards the diversification of funding source endowed with the potency and
possibilities as a credible means and measure to eliminate financial and credit constraints faced by all the parties involved in an entire supply chain process thereby substantially enhancing the financial and operational efficiency of the entire supply chain. Today, trade credit, ie, the credit that a seller grants to its buyer for the purchase of goods and services is common in both developed economies and the not so developed financial markets. (Steele, 2006). Existing evidence shows that trade credit is a more effective screening device than bank credit since it helps to measure the credit worthiness of all the parties at the receiving end of the trade continuum. The information advantage theory asserts that the manufacturer must gather useful information about a potential buyer in the course of business in order to ascertain their credit ratings and worthiness. However, financial institutions must also equally reduce substantial barriers to hands-on operational and financial information which is made possible via a sophisticated but highly predictable automated system giving prompt and reliable feedback on trade transactions in a Supply Chain Finance systemic approach of operations and financing. (Ferris, 1981) also asserts that trade credit may control the transaction costs between trading partners thereby enhancing trade efficiency and effectiveness. Compared to traditional supply chain management, SCF is less expensive and does not involve resource. Due to this leverage window of opportunity and possibilities, today's buyers mostly prefer to use SCF to effectively and conveniently extend their payment terms and Thu access and obtain trade credit and improve their working capital. (Rafik, Jamal, 2005) since SCF provides with the wide range of maneuverability needed and necessary to access funds. With SCF, a supplier delivers to a buyer and provides trade credit by allowing payment due at a mutually agreed date. This ensures maximal trade satisfaction between/among the various trade parties in an entire supply chain process in a highly efficient Supply Chain Finance scheme thereby sustaining trade continuity and profitability in the long run.

LITERATURE REVIEW

For well over a decade now, competition in almost all industries has skyrocketed and become virtually global in the wake of globalization and cyberspace play-off technologies. Therefore, to remain vibrant and relevant as well as benefit from the ensued advantages and opportunities currently available, many companies have been somewhat coerced to assume the role as searchers and leaders of innovative solutions which are more efficiency driven as well as the need to subsequently streamline and strengthen their organizational systems by ensuring that their operational and financial activities are highly cost effective and underfunded by efficiency.

In the wake of such need and developments, SCF suffices as a viable paradigm which is quite plausible to meet all the major trade requirements helping to bring to fore trade standardization and satisfaction among the various respective trade partners. Now, the emphasis is to harness SCF solutions by making money out of it. Essentially, new innovative attempts are positioned to trigger and sustain major trade improvisations making both financial and operational flows in the entire supply chain faster, more reliable, more predictable and more cost efficient. (Herring, 2011).

Cost and financial optimization have hastened the urgency on every facet of business to generate and sustain competitive edge and advantages. Since global competition is keener than ever before with the virtual removal of all trace barriers, companies are to outperform their peers an innovation in working capital optimization solutions are now vital within a company's entire supply chain.
The existing literature indicates that, somewhat, traditional trade finance solutions are expensive and mostly just one party in the entire supply chain continuum is to benefit at the detriment and disadvantage of other partners involved in the entire supply chain. The approach of SCF has become more popular and plausible in part due to the opportunity it makes available to exchange goods and services as they move from their original manufacturer to their final consumptive destination along a very comprehensive and highly transparent and predictable SCF scheme.

Working capital is demonstrably seen as one of the most important indicators of the efficiency in a supply chain (Farris, Hutchison, 2003). To optimize working capital, the cash-to-cash cycle advanced by (Richards, Laughlin, 1980) is good and credible index. However, it is quite evident that many companies need significant amounts of working capital in order for them to streamline their productive endeavors as well as deal effectively with the unstable and to notable extent, the unpredictable financial inflows and outflows through their productive oriented interactions with other key players in the supply chain finance process and this requires a higher working capital than necessary (Hofmann, Kotzab, 2010).

In an attempt to improve working capital traditionally, several single company-oriented methods have been rolled out with the cardinal objective of ensuing and ensuring an optimum level of working capital (Farris, Hutchison, 2003). The traditional solutions provided and prescribed for improving working capital have been inadequate since it is almost invariably always one-sided in their rewarding of advantages so much so that the buyer's attempt to defer or postpone payment or the seller's decision to increase the rate of cash collection is, to that effect, somewhat inhibited leading to unnecessary distortions in the buyer-seller interactions thereby creating a lopsided discord between the interested parties as they work against each other's interests in the supply chain continuum. Therefore, there is the need to understand the working intricacies of the bigger supply chain picture as well as effectively coordinate with the supply chain partners in tandem with their respective interests to yield the maximum trade benefits and returns for all the parties involved in such undertakings. The maximum solution to lessen and ultimately to eliminate every capital accessing bottlenecks and exposure between buyers and sellers in the supply chain is to ensure that there is proper coordination and cooperation between the parties involved.

According to the existing relevant literature, when the burden of the supply chain is unduly shifted and skewed to one party in the process, it can inordinately lead to unnecessary risks to the supply chain such as the possibility of losing customers, ruining business relationships and continuity. SCF provides a great unsurpassed opportunity for both buyers and sellers to collaborate and create benefits for each side of the transaction as well as improve working capital (PricewaterhouseCoopers, 2009).

As the term 'supply chain' involves a network of partners that supplies raw materials, assembles, manufactures products and eventually distributes them via a single or multiple distribution channels to the end customer/user. It is evidently obvious that along this supply chain, there are three essential but instrumental parallel flows intrinsic to the supply chain: goods and services, information and finance (Lambert and Pohlen, 2001).

The flow of goods and services deals with services or products that move via the supply chain network between the suppliers and buyers. Information flows involve the availability of vital information
encompassing products and services delivery as well as payment flows within the chain of supply. Until recently, information and financial flows and data were treated differently. However, with the innovative changes in and the subsequent sophisticated but comprehensive automation of the SCF, brilliant payment solutions are now available which provide detailed transaction information specifying the date and time of receipt of transaction payments effected, quantity of goods received and the like. This gives prompt feedback on business transactions making the entire process susceptible to effective and efficient exchange of vital business transaction information aiding quick and informed decision making in the entire supply chain process.

Last but not least in importance is how the financial flows in SCF deal with the multiple invoices and payments between the various market players in an efficient and predictable manner. In an efficient comprehensive SCF system, these three vital trade elements are intertwined and for that matter co-exist where each play vital role by supporting one another for maximum trade benefit to accrue to all parties involved in the process. By far, the existing relevant literature establishes that at the center of the SCF is the management of working capital and financial flows, but equally important is the effective management of the relevant information across the supply chain as well as the documents and data involved that support these flows and payment approval processes (UN, 2015)

The existing SCF solutions considered to be viable tend to present and possess certain essential elements (features) such as the elimination of all paper work leading to the eventual automation of all trade transactions and the transparency and predictability inherent in the thoroughly comprehensive automated process thereby making available a wealth of important information handy enabling both internal and external trade partners to mutually exchange data on various transactions. This outflow and inflow of relevant data pertaining to various transactions. The consistent outflow and inflow of relevant business transaction information leads to risk reduction and prompt awareness of business transactions to the various participants involved in the entire supply chain process.

Financial Supply Chain
ANALYSIS OF SUPPLY CHAIN FINANCE

Definition of SCF

Many have opined that SCF is about managing capital whereas, for others, it is simply the flow of cash between corporations along the supply chain either in the form of a payment between a vendor and a buyer or in the form of finance. The latter can be either from a bank or a financial institution or from a Supply Chain partner willing to lend in the form of an early or extended payment (Erik Hofmann, Oliver Belin, 2001). Others have also put forward that the above definition is too limited in scope since it fails to capture and encompass the exchange of assets as well as liabilities within the entire supply chain. It is well-known and documented in the available literature that SCF is the reverse flow to the flow of goods within the field of supply chain management (Bansod and Borade, 2007).

By extension, SCF includes the flow of information simultaneously along the production and distribution process. Therefore, SCF solutions are noted for certain enhancing features with the advent of new innovative technologies paving the way for the entire supply chain process to be comprehensively automated which enables prompt mutual feedback on business transaction between trade partners thereby helping quick but informed decision making, transparency through the automation of the entire process which facilitates the flow of ongoing business transactional information. This enables the efficient flow and exchange of transaction data in the entire supply chain. With the sheer visibility and accessibility of transaction events in the supply chain process, risk is immensely minimized as all parties involved in the process seeks to mutually satisfy their respective but mutually important interests. There is also a high degree of predictability due to the introduction of new viable innovative technologies that have led to the thorough and insightful automation of the
entire supply chain process. Moreover, there is the complete emphasis on cooperation and collaboration among the various market partners thereby ensuring trust based and mutually informing and rewarding relationships among the various participants in the entire supply chain and its managerial as well as financial process to yield the maximum trade benefits for all the parties involved.

Supply Chain Finance on a diagram

![Supply Chain Finance Diagram](image_url)

**Fig. 3-1.** Supply Chain Finance on a diagram

**CHALLENGES OBSERVED WITHIN SUPPLY CHAIN FINANCE**

As noted earlier, substantial amount of working capital is needed by many companies in order to survive and possibly thrive in the current global market environment. Without that most companies cannot survive and suffice in such an unpredictable environment of financial inflow and outflow in the entire supply chain process.
There are several observed challenges laden within the supply chain process such as slow processing of business transactions since it takes time parties involved to make decisions, unreliable and not so predictable financial flows as well as expensive processes involved in the process. However, when such manifest challenges are mitigated through viable and innovative measures and procedures, SCF serves as a highly advantageous paradigm system to leverage the trade capital of many companies both tactically and strategically. But, in order to alleviate these challenges exhaustively, there must be a diagnosis of their causes to put companies in the position to effectively deal with them.

First, there is an observed significant delay in information accessibility due to lack of informational details attached to financial flows either in the manual or automated systems. This must be properly corrected using innovative measures and methods.

Second, inadequate working capital is also a cause of delays and inefficiencies in most invoice reconciliation. Inadequate informative details are a challenge inherent in the supply chain process since mostly references on details of payments are not sufficient. The existing evidence shows that collection errors take an average of four weeks to rectify when they are identified. Also, most companies devote all their attention to the bigger transactional accounts at the detriment of those deemed to be insignificant and thereby losing substantial amount in the process.

Furthermore, most companies are plagued with inadequate capacity to thoroughly and effectively assess, address and set appropriate parameters to establish the credit limits and worthiness of their customers and most of them end up at the losing end of the chain process.

**PROSPECTS OF SUPPLY CHAIN FINANCE**

With supply chain finance as a viable working capital optimization paradigm, there is a corresponding need to effectively address and eventually eliminate all the noted and major challenges inherent in the entire model.

First and foremost, the globalization of the chain process has triggered many relevant forces aiding the viability of SCF. The rapid growth of global trade and business transactions through the outsourcing of capital-intensive Labor as well as the production and distribution of goods and services to global partners has accelerated and is predictably going to continue over the long haul. It has been observed that world trade in goods and services grew by 83% from $2,093 billion in 1999 to $3,823 billion in 2008 (OECD, 2009) However, all these opportunities come with the increased complexities, risks and costs associated with a long distance supply chain (Erik Hofmann, Oliver Belin, 2001). To minimize the risks involved, many companies have cut down capital exposure in the supply chain.

Moreover, global competition is getting keener than ever as the various trade boundaries are giving way for the emergence and establishment of a unified global marketplace. Due to this development in competition, there is also little difference among vendors and their products. This has increased demand for new ways of handling business transactions such as extended payment terms for customers and reduction in payment terms to suppliers increasing their market shares (Jones 2008).
In addition, supply chain management with optimal operational efficiency and effectiveness places many companies at advantageous position by managing their supply chain adequately via better collaboration of both internal concerned departmental units and external trading partners (Mentzer, DeWitt, et al, 2001). Many companies have really benefited from the supply chain management but most companies are now turning their attention to the financial supply chain to attain similar benefits (Erik Hofmann, Oliver Belin, 2001). There is a remarkable change in trade paradigms in recent years. Many have drifted and shifted from the traditional documentary letter of credit (L/C) to open account (O/A). According to estimates, the use of a L/C as a payment method in a Supply Chain has drastically declined 20% and as result, it has left a huge margin of about 80% to O/A. Currently, more than 80% of global trade is now in the form of O/A (Erik Hofmann, Oliver Belin, 2001). Many buyers and sellers have thoroughly come to appreciate the utility and benefits of O/A trade as a preferable payment method in their various cross-border supply chain management. O/A is even earmarked to retain its lure as it remains viable to streamline processes by eliminating the multiple parties involved in the flows while reducing the amount of documentation required in global trade transactions (Erik Hofmann, Oliver Belin, 2001). Furthermore, new viable and innovative technologies have made way for the penetration of SCF in the global market. With the complete automation and transparency accorded by new technological devices and systems, SCF is destined to entrench itself in the global market. All business-related information is and can be transmitted electronically, and more so, digital signature and identification has become more and more standardized in global trade and has facilitated SCF (Ali, 2016). Also, with the application of web-based instruments that yield to successful implementation of SCF programs, transparency, speed and predictability are guaranteed in the entire supply chain.

CONCLUSIONS
The SCF approach helps to improve the required working capital in supply chains. Even though there are certain inimical challenges observed within the SCF approach, there are effective solutions to eradicate such challenges as discussed in the preceding writing. Therefore, with the various innovative drivers and enablers of SCF working effectively in the global market, companies must also be circumspect about their risk exposure in the manner they deal with the entire supply chain whether in management or finance.

Research Significance
Supply Chain Finance as an emergent and currently, one of the most viable and plausible financing procedural instruments is not a new conceptual framework. It has been widely noted and acclaimed as an essential aspect of supply chain management and trade finance. The global economic crises have necessitated the urgent consideration and eventual adoption of Supply Chain Finance (SCF). SCF is noted for its capability to collaborate and coordinate trade partners and procedures in order to increase. The study would also inform policy makers and lead to improvement of service on the global Supply Chain Network. This study formulated a wide range of researches brought together to present a newer view on Supply Chain Finance. This study presented, a brilliant innovative method of leveraging working capital accessibility and the substantial enhancement of credit ratings and values.
of the various companies using the SCF system to optimize trade efficiency, predictability and ultimately profitability.

Finally, the study aims at generating interest among researchers and engenders further studies into Supply Chain Finance issues, using similar or other research designs in the study area and eventually contribute to body of knowledge.

**Data Availability**
The data and other research documents (papers) used to support the findings of this study are included and cited in this article.

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