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Impact of supply chain finance on firm performance in Vietnamese enterprises

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C H R O N I C L E

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A B S T R A C T

The aim of this study is to experimentally examine the relationship between supply chain finance (SCF) and the financial performance of Vietnamese listed non-financial enterprises. A conceptual framework was developed and tested using secondary data collected from 659 companies listed on the Vietnam Stock Exchange in 2022. The path method is used using Stata 18 software. The results highlight that SCF has a positive impact on the financial performance of listed non-financial enterprises in Vietnam. These findings will help businesses better understand how SCF implementations benefit their financial performance in a global environment, especially in emerging markets.

1. Introduction

The international framework of economies, rules, and financial institutions, as well as the ways in which these entities interact with one another, is referred to as global finance. It discusses a wide range of themes, including financial regulation, currency rates, investment, trade, and other significant topics that are associated with international financial management. Since economies and markets all over the globe are more intimately integrated than they have ever been before, global finance is becoming an increasingly significant discipline in today's interconnected world. Financial markets all over the globe have grown increasingly integrated because of the development of technology and the expansion of globalization. This has made it simpler for firms to engage in international commerce and investment. Because of crises such as the global financial crisis of 2008 and the COVID-19 pandemic, a number of the underlying flaws that are present in the global financial system have been brought to light. It is essential to study in the field of finance because the world needs global leaders who are aware of the complexities and vulnerabilities of global finance and who are prepared to handle them. To address significant difficulties in economic governance, competitiveness in the private sector, and workforce preparedness for the digital economy, the United States Agency for International Development (USAID) collaborates with Vietnam. Additionally, USAID is aiding Vietnam in its efforts to develop a digital economy, which is anticipated to reach a value of $39 billion by the year 2025 and serve as a significant development engine. For over twenty years, with the assistance of USAID, Vietnam's Provincial Competitiveness Index (PCI), which is recognized globally, has been a driving force behind reforms at both the national and provincial levels, with the goal of considerably enhancing the environment that is conducive to the growth of enterprises.

The United States Agency for International Development (USAID) continues to promote economic development by reducing barriers encountered by small and medium-sized firms (SMEs), which are the backbone of Vietnam's economy.

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This aid is built on more than two decades of existing assistance to boost trade. The expansion of access to financial resources, the improvement of company performance, and the collaboration with the Vietnamese government to reduce bureaucracy via the implementation of better rules and regulations are all included in this. US Agency for International Development (USAID) focuses on small and medium-sized firms (SMEs) that are owned or managed by women, as well as vulnerable populations and small and medium-sized businesses that are involved in activities that assist the country adapt to the effects of climate change. Businesses that are not involved in the financial sector are seen as essential to the advancement of the economy in both developed and emerging nations. By contributing around forty percent to the gross domestic product and by supplying more than eighty percent of employment for workers in non-agricultural fields, listed businesses play a significant part in the expansion of the nation's economy. Based on their financial records, companies are now confronted with challenges that prevent them from getting financial help from banks. These challenges include the absence of financial statements and the absence of collateral (Song & Wang, 2013; Song et al., 2018). It is common practice in supply chain financing for a core corporation to distribute its financial resources across its supply chain partners, which may include small and medium-sized enterprises. To improve their working capital, small and medium-sized enterprises (SMEs) are likely to become partners in the supply chain of information and financial resources. According to Wuttke et al. (2013), improved coordination also helps businesses optimize their inventories and improve their operating efficiency. According to Klapper (2006), SCF is also accountable for lowering the likelihood of a company going bankrupt and for minimizing uncertainty at the supply chain level. It is for this reason that supply chain finance (SCF) is thought to stabilize the whole supply chain (Han et al., 2019). Strategic supply chain management (SCF) can enhance the financial performance of key supply chain partners and may assist a firm in gaining greater market share (Wetzel & Hofmann, 2019). This is accomplished via collaboration and the management of supply chain risk.

Even though SCF is a significant alternative source of operational financing, particularly for firms that are going through tough financial times, the consequences that it has for core company operations have not been well investigated in the Vietnamese context, particularly among listed enterprises in Vietnam.

2. Literature review

2.1. Supply chain finance

The acronym “SCF” stands for “supply chain financing”, which refers to a collection of technologically-oriented solutions that are intended to improve the efficiency of a firm and lower the financing costs for buyers and sellers who are participating in a transaction that is linked to commerce. The functionality of SCF is achieved by the automation of transactions and the supervision of the whole process of invoice approval and payment handling. In this approach, the buyer is required to provide their consent to the financing of the supplier's invoice by banks or other third parties, who are frequently referred to as "factors." There are many different components that make up a complete supply chain. All those departments work together in order to ensure that the product is delivered to the final consumer from the provider of the raw ingredients. Specifically, the supply chain is comprised of five fundamental components: the suppliers of raw materials, the manufacturers, the distributors, the retailers, and the consumers.

By optimizing the processes of production and distribution, supply chains reduce the amount of time and money that they need from all the players. In addition to this, it makes manufacturing more flexible and allows for a quicker responsiveness to market conditions. If the supply chain is functioning well, then consumers will be able to get products that are of high quality and competitively priced in a timely manner.

The management of risk and the enhancement of income are two more reasons why supply networks are essential. Assisting businesses in making educated choices about their manufacturing, importing, exporting, and distribution activities may be accomplished via the analysis of changes in supply chain operations.

There is a considerable relationship between the overall success of a business and the effectiveness of its supply chain in its entirety. The effectiveness of your company's supply chain is a significant component that plays a role in deciding how successfully and efficiently your business operates in terms of providing products or services to clients.
When it comes to evaluating the effectiveness of their supply chains, businesses often choose to focus on three common metrics: cost, speed, and quality. With the use of these indicators, the organization is able to identify areas in which it needs to improve productivity and optimize its process.

In the first place, the term “cost” refers to the expenses that are incurred by a company throughout the process of procurement. These expenses include the cost of labor, transportation, and the cost of maintaining inventory inside the company. Businesses can lower their total expenses by effectively controlling their inventory levels via the use of demand planning and forecasting technologies. Second, speed refers to the amount of time that is required to finish an order with all its components completely. Implementing effective logistics management solutions, such as just-in-time delivery systems or lean manufacturing, may help businesses reduce their operating expenses and improve customer satisfaction. These solutions can also help businesses reduce the amount of time it takes to deliver products to customers. What we mean when we talk about quality is that we meet the expectations of our customers for a high-quality product or service that has fewer defects or faults. Because of this precaution, the reputation of the brand is protected, and consumers are certain that they will be able to purchase items that are free of defects at prices that are affordable.

2.2. Financial performance

The term "financial performance" refers to a subjective measurement of how well a firm can produce income and utilize assets that are derived from its core business technique. Additionally, it evaluates the entire financial health of a firm over a certain period from a managerial perspective. Comparing comparable businesses operating within the same industry, industry, or aggregate sector is accomplished by analysts and investors via the use of financial performance. Commercial creditors, bondholders, investors, workers, and management are all examples of stakeholders that a firm includes in its group of stakeholders. The monitoring of a company's financial performance is something that each organization is interested in doing. The degree to which a corporation makes income and manages the assets, obligations, and financial interests of its stakeholders and shareholders is what is referred to as the firm's financial performance. It is possible to assess financial success in a variety of ways; nevertheless, it is important to take all of these measurements together. The usage of line items is possible, and some examples of these are total unit sales, cash flow from operations, operational income, and revenue from operations. In addition, the analyst or investor could investigate the financial accounts in further depth, looking for rates of profit growth or a decrease in debt.

Every publicly traded company is required by the Securities and Exchange Commission (SEC) to submit and publish this annual document, which is an essential component of the corporate financial performance statement, and which places a significant emphasis on the contributions of research analysts. In order to offer stakeholders data and information that is accurate and trustworthy, as well as an overview of the financial health of a firm, its objective is to fulfill. A snapshot of an organization's financial situation in relation to a certain date is what the balance sheet is. The report provides an assessment of the company's ability to effectively manage its assets and liabilities. The revenue statement is a summary of the actions that were carried out over the whole year. The income statement and the balance sheet are both included inside the statement of cash flows, which is a mixture of the two. Because it reconciles the differences between cash flow and net income, the statement of cash flows is considered by some analysts to be the most essential of all the financial statements.

Several other specialized financial performance indicators are more exclusive to certain sectors of the economy. As an example, businesses that see fluctuations in their sales of products and services based on the time of year might use seasonality as a measurement tool to determine the extent to which a certain period or season influences outcomes and metrics. Investors may use a company's financial performance to get insight into the company's overall health. Providing insight into the future, it is an assessment of the company's economic health and the job that its management is doing. It also provides information on whether or not the company's operations and profitability are on track for growth, as well as the prognosis for the company's stock.

Identifying, tracking, and projecting strong economics may be accomplished via the use of quantitative metrics known as key performance indicators (KPIs) or financial indicators. It is possible to evaluate a company's financial performance using a variety of approaches, such as the study of financial performance and the use of financial performance indicators. In conclusion, the evaluation of a company's financial performance encompasses the evaluation of the company's profitability and its overall financial health.

2.3. Relationship between supply chain finance and finance performance

Vietnam is a growing nation that is making strides toward technical advancement and industrialization to be ready for competition in the global market. Supply chain management is not only an essential part of the transformation that is Industry 4.0, but it is also a method of boosting productivity. Vietnam is working to improve the quality of its products and services while simultaneously increasing its manufacturing capacity, which is making it more competitive. The economy of Vietnam, which is a dynamic and developing open economy in Southeast Asia, must improve its competitiveness and take into account the most recent changes in the global economy. The Vietnamese economy, on the other hand, does not yet have a complete knowledge of the significance of supply chain management in terms of production and delivery to end users. As a result, Vietnamese supply chain management firms do not place sufficient focus on this topic. This is reflected in the following factors: human resources in this industry are always in a shortage of supply; even within companies, there is still no department dedicated to handling supply chain management (SCM); There are still quite a few supply chain management businesses; And no other university or educational institution offers comprehensive and formal training in supply chain management. Furthermore, the process of the examination and evaluation of the financial statements of an organization is referred to as financial analysis. These statements are a collection of facts and statistics that are organized in accordance with generally recognized accounting principles. To put it another way, the objective is to make use of numerical data in order to provide a description of the business and to get an understanding of its operations, financial performance, and general financial management practices. Within the context of the contemporary global economy, the purpose of collaboration between businesses is to improve their respective financial standings. The link between supply chain finance and strong financial performance is one of these interactions that may be regarded as a significant aspect in the operation of a firm. Most businesses choose to assess their level of success by using a set of top-level financial indicators, which may include operating or net income, return on investment, and profits per share. These measurements are often given on a quarterly or yearly basis. Since they demonstrate how the actions made by a firm impact the economy, financial performance assessment studies are quite valuable. They serve as the "language of the economy" for both internal and external stakeholders to utilize when evaluating the success of a firm.

The administrators of the supply chain use the organizational capacity of the firm and make final choices that have an impact on the financial outcomes of the business. To do this, they need to correctly relate the outcomes of its supply chain decisions to the organization's financial goals and the indicators that are pertinent to those goals. When it comes to overcoming these challenges, there are five key areas that policies need to focus on. These include building capacity through the delivery of necessary public services, ensuring market incentives for private investment and innovation, perfecting the agricultural innovation system, encouraging productivity and sustainability of agri-food sector specific incentives, and ensuring economic stability and trust in institutions.

About the connection between the supply chain and strong financial performance, the advantage of this connection is that it allows for cost savings to be achieved at every stage of the process, beginning with the location of raw materials and ending with the transportation of finished goods to customers. It is possible to achieve these cost savings through effective management of the supply chain. Improving logistics, reducing waste, and streamlining procedures are all ways in which businesses may enhance their financial performance. This can be accomplished by lowering production costs and increasing profit margins. Additionally, efficient management of the supply chain can lower the amount of surplus inventory that firms have while simultaneously ensuring that there is sufficient inventory to satisfy the demand of customers. Businesses can optimize their working capital and retain a sustainable stream of revenue when they strike this equilibrium. This balance is achieved by decreasing the risk connected with inventory and lowering the transportation expenses associated with surplus inventory. When it comes to the alignment of strategic goals and plans, an integrated supply chain is directly connected to the overall objectives and strategies of a firm. For enterprises to guarantee effective resource allocation and a considerable return on investment, it is necessary to relate the activities of the supply chain to the objectives of the corporation, which may include growth, profitability, and sustainability. One of the advantages of this strategic alignment is that it will lead to enhanced organizational performance as well as long-term financial success.

There are a variety of negative effects on the financial performance of the firm, as shown by an analysis of the financial performance of family companies in comparison to the financial performance of non-family enterprises operating in the nautical travel industry. The negative and severe effect that liquidity, leverage, and investments in physical assets have on the financial performance of these organizations is one of the aspects that are being discussed here. These findings imply that the variables have the potential to impede the profitability and general financial health of businesses that are functioning within this industry. In addition, the greater size and older age of family businesses both have a negative influence on their financial success, which suggests that these traits might provide difficulties for these businesses in terms of their financial outcomes.

As an additional point of interest, a regression analysis was conducted across Nuts II areas on the mainland and company types. The results revealed that the northern region, which has a greater number of family businesses, had better performance. This indicates that the existence of firms that are not family-owned might have a negative impact on the financial success of locations, showing the possible effect that the composition of companies can have on the overall performance of the sector. When it comes to establishing measures to offset these negative consequences and enhance the financial performance of family and non-family businesses that operate in the marine tourism industry, these results serve as a helpful guide for managers. In the present research, the objective is to investigate the impact that supply chain financing (SCF) has on the robust financial performance (FFP) of the agriculture industry in Vietnam. The primary source of funding continues to be this.

On the other hand, has there ever been a positive association between the financing of the supply chain and the success of the company's finances? When it comes to this association, is there a threshold that is really optimal? It is necessary to fill a significant research void that has now been identified. The purpose of this essay is to take into consideration our point of view, despite the fact that there is several research and studies relating to this subject.

Raghavan and Mishra (2011) highlighted that synergies via SCF solutions make it possible for buyers and suppliers to have a positive and long-term connection with one another. This results in increased profitability for the core firm, as well as improved working capital for the company's customers and suppliers. Wetzel and Hofmann (2019) conducted research on businesses that had great performance and used working capital management strategies that were focused on self-sufficient financing. The results of previous research indicate that SCF improves the performance of small and medium-sized enterprises (SMEs) and greatly lowers the supply chain risks that SMEs face (Ali et al., 2020; Liu et al., 2021). According to Asif and Nisar (2022), the activity of trade credit, which is part of SCF, can improve the performance of the firm. According to the findings of several studies, the financial effect on the supply chain is contingent upon the strength and location of the core firm within the structure of the supply chain. Resource dependence theory (RDT) is a theoretical framework that offers assistance for explaining interactions between businesses, such as the link that exists between customers and suppliers. It is abundantly obvious that no business can exist without the assistance of third parties; to acquire resources, it is necessary for the business to engage with third parties to function smoothly and to survive (Liu et al., 2018). According to RDT, for a business to be able to sustain long-term connections with all interested parties, such as customers and suppliers, the firm must first create long-term partnerships to obtain resources that are essential to the company's success and survival. Cahyono et al. (2023) and Jahanbakhsh Javid and Amini (2023) found that supply chain finance (SCF) facilitates the reduction of operational risks and uncertainty in the supply chain, as well as the optimization of a company's financial performance. To this investigation, the first hypothesis that has been proposed is to investigate whether the provision of SCFs to suppliers and customers leads to an improvement in the performance of the organization.

H_1: *Supply chain finance has a positive impact on the financial performance of non-financial enterprises listed on the Vietnam stock exchange.*

3. Method

The sample of this study was non-financial companies publicly listed on the Vietnam Stock Exchange (HNX, HOSE and UPCOM). There are 659 non-financial companies listed on the stock exchange.
All 03 exchanges have 988 businesses; however, some companies have been excluded from a sample due to lack of public data. The research model is as follows:

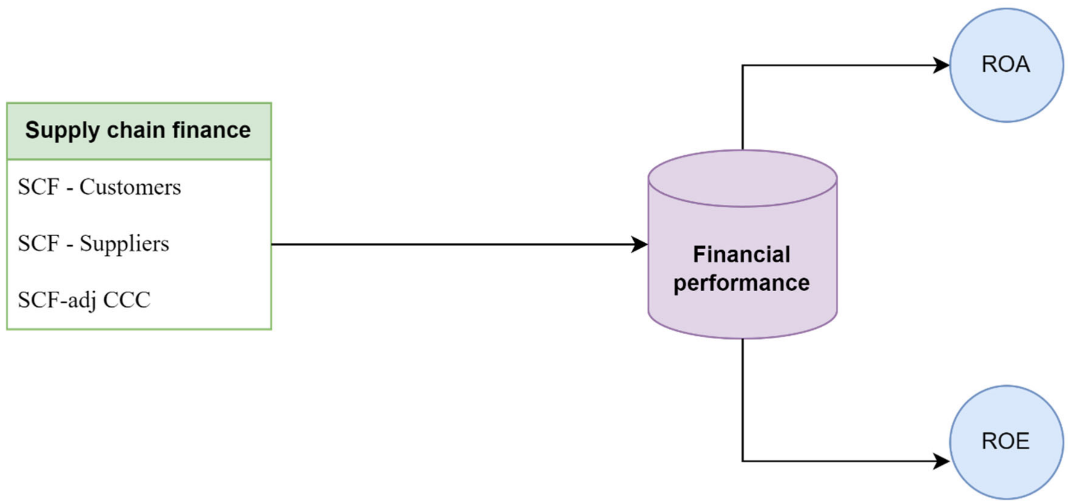

Fig. 1. Research Model

Source: By Authors

Measure variables

Dependent variable.

The financial performance of the company is the dependent variable that is being used in this investigation. This performance is being evaluated using the assistance of conventional performance measures, specifically return on assets (ROA) and return on equity (ROE). According to Liu et al. (2021), the rationale for selecting these measures is that they are the ones that have been used the most often in previous research. The return on assets (ROA) is calculated by dividing the net income by the total assets, while the return on equity (ROE) is determined by dividing the net income by the total equity of shareholders.

Independent variable.

As an independent variable, supply chain financing (SCF) is being used in the present research undertaking. For the purpose of calculating SCF, three distinct measurements are used. With the assistance of turnover of accounts receivable, an estimate is made of a measure that is used in the process of calculating the financial status of a business on the customer side (SCF-Customer), which is the client to whom a firm sells its completed products. The supplier side of a business's finances, which is where the firm gets its raw materials, is another statistic that is used to assess the company's finances. It is possible to compute supplier-side finance, also known as SCF-Supplier, with the assistance of revenue payable. According to Gelsomino et al. (2016), there are two forms of supply chain finance (SCF) that can aid supply chain participants in acquiring financial possibilities. These are accounts receivable and accounts payable.

The third metric is known as net financing for both parties, which includes both consumers and suppliers. This metric is calculated by subtracting the number of days played from the number of days receivable when calculating net financing. Furthermore, scaled decimal rank transformations are used in the calculation of SCF (Liu et al., 2021; Patatoukas, 2012). This is a result of earlier research conducted.

The following equations are used in order to arrive at an estimate of the SCF.

$$\begin{aligned}
\text{SCF} - \text{Customers} &= \text{Rank}(\text{Accounts receivable turnover}) \\
&= Rank\left(\frac{Sales_t}{Accounts\ receivable_{t-1} + Accounts\ receivable_t)/2}\right) \\
\text{SCF} - \text{Suppliers} &= \text{Rank}(\text{Accounts payable turnover}) \\
&= Rank\left(\frac{Cost\ of\ Goods\ Sold_t}{Accounts\ payable_{t-1} + Accounts\ payable_t)/2}\right) \\
\text{SCF} - \text{adj CCC} &= \text{Rank}(\text{adj} - \text{CCC}) \\
&= Rank(Accounts\ receivable\ in\ days_t - Accounts\ payable\ in\ days_t)
\end{aligned}$$

Here Salest denotes a company's sales in year t, Accounts Receivable (t-1) and Accounts Receivable t represent the company's receivables for year (t-1) and t, respectively. Cost of Goods Soldt is the cost of goods sold of the business in year t, accounts payable t-1 and accounts payable t represent the payables of the business in year t – 1 and t, respectively.

4. Results

The term "supply chain finance" (SCF) refers to the formation of partnerships between buyers and sellers to enhance overall profitability. These partnerships include the exchange of financial resources between the two parties. When it comes to aiding for weak supply chain partners, a firm has the ability to combine several SCF solutions, such as prepayment or early payment to suppliers, and credit sales to both consumers and suppliers. Studies conducted in the past have shown that solutions for SCF, such as trade credit, provide a condition in which all parties involved in SCF are able to benefit. Descriptive statistics of variables show that the general characteristics of the dataset are summarized in Table 1 as follows:

Table 1
The summary of some statistical observations

Variable	Obs	Mean	Std. dev.	Min	Max
STT	659	330	190.3812	1	659
ROE	659	9.679681	24.64238	-117.72	424.11
ROA	659	4.781381	11.66208	-177.84	60.31
SCF_Customer	659	20.44137	64.67249	-3.4	987.28
SCF_Supplier	659	20.46159	40.33492	-6.97	536.86
T_Customer	659	138.8858	487.1244	-107.26	8931.31
T_Supplier	659	180.6846	1777.756	-52.38	41332.4

Source: Compiled from Stata 18 software

Return on assets (ROA) has an average value of 4.78%, which means that the average returns a company earns from its total assets is 4.78%. The reported standard deviation of ROA is 11.66. Return on equity (ROE) has an average value of 0.1097 with a standard deviation of 0.246. The average value of ROE indicates that, on average, companies are earning a 9.68% return on equity. All three proxies of supply chain finance (SCF) range from a minimum value of 0.1 to a maximum of 1.

Table 2
The results of the correlation matrix

	STT	ROE	ROA	SCF_Cu~r	SCF_Su~r	T_Cust~r	T_Supp~r
STT	1						
ROE	0.0284	1					
ROA	0.0008	0.2979	1				
SCF_Customer	-0.0077	0.0857	0.1221	1			
SCF_Supplier	-0.02	0.033	0.1213	0.2295	1		
T_Customer	0.0085	-0.0141	-0.3021	-0.0786	-0.0969	1	
T_Supplier	0.0341	-0.0304	-0.2707	-0.0264	-0.0465	0.271	1

Source: Compiled from Stata 18 software

The degree of coincidental relationship that exists between two variables in a data collection is characterized by the correlation matrix. In the same way as described above, the correlation matrix of linked variables is produced using the Stata 18 program. Return on assets (ROA), return on equity (ROE), SCF-Customer, and SCF-adj CCC all have a negative and substantial association with ROA and ROE, as can be shown in the correlation table by looking at the relationship between these variables. During the multivariate regression testing that was performed to assess the study hypothesis, all of the variables were fulfilled.

Rationality analysis with several variables

For the purpose of putting all of the assumptions of the present investigation to the test, a straightforward linear regression analysis was carried out between a dependent variable (business performance), independent variables (supply chain finance), and a moderator, in addition to providing many control factors.

Table 3
The summary of ANOVA and regression analysis

Source	SS	df	MS Number of obs	=	659
	F(5, 653)	=	14.4		
Model	39683.25	5	7936.65086 Prob > F	=	0
Residual	359885.3	653	551.126027 R-squared	=	0.0993
	Adj R-squared	=	0.0924		
Total	399568.6	658	607.247036 Root MSE	=	23.476

ROE	Coefficient	Std. err.	t P>t	Beta
ROA	0.689007	0.084817	8.12 0.000	0.326075
SCF_Customer	0.021062	0.014618	1.44 0.150	0.055275
SCF_Supplier	-0.006076	0.023458	-0.26 0.796	-0.009946
T_Customer	0.003922	0.002019	1.94 0.053	0.07752
T_Supplier	0.000525	0.000547	0.96 0.337	0.037904
_cons	5.439503	1.172832	4.64 0.000	.

Source: Compiled from Stata 18 software

The results of the first model test affect SCF's financial performance through ROA variables, the results show that only the SCF factor in T_customer aspect has a positive impact on the financial performance of listed non-financial enterprises in Vietnam, with an impact factor of 0.04 at a significance level of 10% (P_value = 0.053). The author goes on to examine the influence of SCF on financial performance through the ROA aspect, the results are as follows:

Table 4
The summary of ANOVA and regression analysis

Source	SS	df	MS Number of obs	=	659
	F(5, 653)	=	37.37		
Model	19911.52	5	3982.30342 Prob > F	=	0
Residual	69579.18	653	106.553106 R-squared	=	0.2225
	Adj R-squared	=	0.2165		
Total	89490.7	658	136.004096 Root MSE	=	10.322

ROA	Coefficient	Std. err.	t P>t	Beta
ROE	0.133211	0.016398	8.12 0.000	0.281479
SCF_Customer	0.010656	0.006424	1.66 0.098	0.059092
SCF_Supplier	0.019275	0.010287	1.87 0.061	0.066666
T_Customer	-0.005612	0.000863	-6.50 0.000	-0.234431
T_Supplier	-0.001273	0.000235	-5.41 0.000	-0.193991
_cons	3.889148	0.501537	7.75 0.000	.

Source: Compiled from Stata 18 software

According to the findings of the study, the following outcomes are produced by evaluating financial performance in terms of ROA:

All components of SCF have a favorable influence on the financial performance (ROA) of firms that are listed on the Vietnam Stock Exchange, and this benefit is significant at a level that is less than 10% from the baseline. Because of this conclusion, firms are able to encourage SCF activities, which are beneficial to the improvement of the business's financial performance.

5. Conclusions

Supply chain finance, also known as SCF, is a relatively new idea that core firms are using in order to provide assistance to their partners who are experiencing financial difficulties. Additionally, SCF may serve as a source of competitive advantage for core organizations. SCF is a source of operational funding; nevertheless, the impact of SCF on the performance of core firms in Pakistan has not yet been evaluated. This is particularly true for enterprises that find themselves functioning in an environment that is inherently competitive. The purpose of this research is to investigate whether or not SCF affects the performance of a firm and whether or not the level of rivalry within the industry has an effect on the link between SCF and company performance. The purpose of this research was to investigate two developed econometric models by using a simple linear regression model. There are three main proxies that are used to assess the success of a company. These proxies are return on assets (ROA), return on equity (ROE), and Q. The financing of the supply chain is an independent variable that is computed using three different supply chain finance related activities. The Herfindahl-Hirschman Index (HHI) is used to determine that the level of rivalry within an industry is moderate. Table 2 provides the proxy measures that you may use to evaluate these variables. Table 5, A1–A5 contains the estimated findings of the hypotheses, which are shown in the table. A positive and statistically significant association exists between ROA and each of the three SCF proxies, as can be shown in the previous sentence. A supply chain finance concept is a

According to Ma et al.'s research from 2020, a core firm is essential to the development of long-term relationships with its supply chain partners since it aids its customers and suppliers in payment arrangements. Emtehani et al. (2023) found that supply chain management (SCF) assists businesses in reducing inefficiencies at the supply chain level. For a core firm, increasing its performance may be accomplished by providing financial assistance to both its customers and its suppliers. Aiding suppliers allows a firm to get high-quality raw materials in a timely manner, which in turn helps the company function more efficiently. As an additional benefit, it assists a corporation in lowering its operational risk and uncertainty. Moreover, SCF improves the flow of information across participants in the supply chain by minimizing the disparities in information that exist between them (Pellegrino et al., 2019; Jia et al., 2020). Because they are dependent on one another for their operations, the findings of this research demonstrate that resource reliance among partners in the supply chain facilitates collaborative work (Liu et al., 2022). In addition, the findings of this research suggest that a core firm has more bargaining power on behalf of its supply chain partners, allowing it to experience high levels of company performance. To put it another way, the dependency of the core firm's suppliers and customers on the core business results in an improvement in the core performance of the company. Additionally, a core company's dependency on resources enables it to acquire supplies at a quicker rate than alternative businesses.

During the course of this research, the link between supply chain financing (SCF) and business performance was explored, and the regulatory function that industry competition plays in the relationship between SCF and company performance was established. A total of 122 businesses from ten different non-financial industries that are listed on the Pakistan Stock Exchange are included in the sample size. To test the hypothesis, an ordinary least squares regression, often known as an OLS, is carried out. The results of this research demonstrate that supply chain financing, such as trade credit, contributes to an improvement in the operating performance of businesses. A positive regulation of the link between SCF and firm performance is provided by the competition within the industry. Consequently, both hypotheses were validated because of the data. Therefore, the projected findings demonstrate the impact that certain elements have on the performance of the organizational unit.

As a result of the fact that supply chain finance (SCF) enables supply chain partners to ensure high-quality and timely delivery of raw materials, effectively manage inventory, and reduce the company's operational risk, statistical results indicate that businesses that provide financial support to their upstream suppliers and downstream customers have positive company performance. Nevertheless, businesses can achieve great performance because they share their financial resources with their clients in order to guarantee sales despite the intense rivalry that exists within the market. Companies provide a variety of services, such as credit sales, to increase the amount of sales they make to clients without experiencing any financial troubles because of the competition in their market. Improved sales agreements to customers not only help businesses keep their clients, but they also help minimize uncertainty and inefficiencies at the supply chain level, as well as develop long-term relationships and trust with those customers, which eventually leads to improved performance. Regardless of these factors, the data also indicate that the size of the firm and the growth of its sales have a favorable impact, however leverage is indicated to have a negative impact on the performance of the organization. When it comes to the performance of the firm, the age of the company does not have any impact. All of the research questions are answered by the results of the study, and the study was successful in accomplishing all of its goals. Taking everything into consideration, the present study offers several important findings, as well as some contributions and implications.

The following are some of the contributions that this research brings to the documentation of supply chain finance (SCF) in a variety of different ways. In the first place, our research makes a substantial contribution to the existing body of knowledge by developing a reliable measurement for SCF. According to previous research (Wuttke et al., 2013; Abbasi et al., 2018; Gelsomino et al., 2016), supply chain finance (SCF) is correlated with accounts payable and accounts receivable. This idea extends the concept of Liu et al. (2021) and Patatoukas (2012), who developed authorization measures for estimating supply chain finance. These measures include decile rating conversion of the size of revenue payable and adjusted cash conversion cycle (see Table 2 for authorization measures). These measures were developed as authorization measures for estimating supply chain finance, which refers to the extent to which a core company provides support to its supply chain partners.

In the second place, this research makes a substantial contribution to the growing body of literature on SCF by conducting an experimental investigation into the connection between SCF and the performance of companies. This research, which is based on data from 122 different firms, offers fresh insights into the beneficial link that exists between supply chain finance (SCF) and core company performance. The provision of financial assistance to supply chain partners, the enhancement of performance, and the improvement of cooperation among supply chain partners are all essential components of SCF's prosperous existence. There has been prior research performed on SCFs, and those studies have shown that organizations that have SCFs experience favorable company performance (Wetzel & Hofmann, 2019; Han et al., 2017; Ali et al., 2020). The findings of this study are compatible with those observations.

The third contribution that we have made is to construct a competitive industry moderating role between SCF and firm performance. This will contribute to the expansion of the literature on the combination of SCF and its relationship to industry competitiveness. Using SCF, a firm is able to enhance its overall performance, which is a significant result given the increased level of competition in the sector. Earlier research has shown that trade credit financing, which is a kind of SCF, is an effective instrument for competitive advantage (Lee et al., 2011, 2018; Peura et al., 2017). This conclusion is corroborated by these investigations as well.

References

Abbasi, W. A., Wang, Z., & Alsakarneh, A. (2018). Overcoming SMEs financing and supply chain obstacles by introducing supply chain finance. *HOLISTICA–Journal of Business and Public Administration*, *9*(1), 7-22.

Ali, Z., Gongbing, B., Mehreen, A., & Ghani, U. (2020). Predicting firm performance through supply chain finance: a moderated and mediated model link. *International Journal of Logistics Research and Applications*, *23*(2), 121-138.

Asif, R., & Nisar, S. (2023). Does trade credit spur performance of the firm: a case study of non-financial firms in Pakistan. *Journal of Islamic Accounting and Business Research*, *14*(5), 718-739.

Cahyono, Y., Purwoko, D., Koho, I., Setiani, A., Supendi, S., Setyoko, P., ... & Wijoyo, H. (2023). The role of supply chain management practices on competitive advantage and performance of halal agroindustry SMEs. *Uncertain Supply Chain Management*, *11*(1), 153-160.

Emtehani, F., Nahavandi, N., & Rafiei, F. M. (2023). Trade credit financing for supply chain coordination under financial challenges: a multi-leader–follower game approach. *Financial Innovation*, *9*(1), 6.

Gelsomino, L. M., Mangiaracina, R., Perego, A., & Tumino, A. (2016). Supply chain finance: a literature review. *International Journal of Physical Distribution & Logistics Management*, *46*(4).

Han, K., Mittal, V., & Zhang, Y. (2017). Relative strategic emphasis and firm-idiosyncratic risk: The moderating role of relative performance and demand instability. *Journal of Marketing*, *81*(4), 25-44.

Jahanbakhsh Javid, N., & Amini, M. (2023). Evaluating the effect of supply chain management practice on implementation of halal agroindustry and competitive advantage for small and medium enterprises. *International Journal of Computer Science and Information Technology*, *15*(2023), 8997-9008.

Jia, F., Blome, C., Sun, H., Yang, Y., & Zhi, B. (2020). Towards an integrated conceptual framework of supply chain finance: An information processing perspective. *International Journal of Production Economics*, *219*, 18-30.

Klapper, L. (2006). The role of factoring for financing small and medium enterprises. *Journal of banking & Finance*, *30*(11), 3111-3130.

Lee, C. H., & Rhee, B. D. (2011). Trade credit for supply chain coordination. *European journal of operational research*, *214*(1), 136-146.

Lee, H. H., Zhou, J., & Wang, J. (2018). Trade credit financing under competition and its impact on firm performance in supply chains. *Manufacturing & Service Operations Management*, *20*(1), 36-52.

Liu, L., Qu, W., & Haman, J. (2018). Product market competition, state-ownership, corporate governance and firm performance. *Asian Review of Accounting*, *26*(1), 62-83.

Liu, F., Fang, M., Park, K., & Chen, X. (2021). Supply chain finance, performance and risk: how do SMEs adjust their buyer-supplier relationship for competitiveness?. *Journal of Competitiveness*.

Liu, B., Ju, T., & Chan, H. K. (2022). The diverse impact of heterogeneous customer characteristics on supply chain finance: Empirical evidence from Chinese factoring. *International Journal of Production Economics*, *243*, 108321.

Ma, H. L., Wang, Z. X., & Chan, F. T. (2020). How important are supply chain collaborative factors in supply chain finance? A view of financial service providers in China. *International Journal of Production Economics*, *219*, 341-346.

Patatoukas, P. N. (2012). Customer-base concentration: Implications for firm performance and capital markets: 2011 American accounting association competitive manuscript award winner. *The accounting review*, *87*(2), 363-392.

Pellegrino, R., Costantino, N., & Tauro, D. (2019). Supply Chain Finance: A supply chain-oriented perspective to mitigate commodity risk and pricing volatility. *Journal of Purchasing and Supply Management*, *25*(2), 118-133.

Peura, H., Yang, S. A., & Lai, G. (2017). Trade credit in competition: A horizontal benefit. *Manufacturing & Service Operations Management*, *19*(2), 263-289.

Raghavan, N. S., & Mishra, V. K. (2011). Short-term financing in a cash-constrained supply chain. *International Journal of Production Economics*, *134*(2), 407-412.

Song, H., & Wang, L. (2013). The impact of private and family firms' relational strength on financing performance in clusters. *Asia Pacific Journal of Management*, *30*, 735-748.

Song, H., Yu, K., & Lu, Q. (2018). Financial service providers and banks' role in helping SMEs to access finance. *International Journal of Physical Distribution & Logistics Management*, *48*(1), 69-92.

Wetzel, P., & Hofmann, E. (2019). Supply chain finance, financial constraints and corporate performance: An explorative network analysis and future research agenda. *International Journal of Production Economics*, *216*, 364-383.

Wuttke, D. A., Blome, C., & Henke, M. (2013). Focusing the financial flow of supply chains: An empirical investigation of financial supply chain management. *International journal of production economics*, *145*(2), 773-789.