Scientific and Social Research
2022, Volume 4, Issue 3

Commercial Credit and Corporate Performance: Business Credit or Business Trust

Yan Li, Xiaolin OuYang*

Lingnan Normal University, Zhanjiang 524048, Guangdong Province, China

***Corresponding author:** Xiaolin OuYang, gaap008@126.com

Abstract: With the development of capital market, commercial credit has gradually become an important part of market credit. Throughout the long-term development of the manufacturing industry, commercial credit has been one of the indispensable soft powers in the process of enterprise development. Therefore, enterprises should fully recognize and use commercial credit as a new means to improve enterprise performance. This paper selects the financial data of China's listed manufacturing enterprises from 2010 to 2019, divides commercial credit into business credit and business trust, as well as studies the relationship between commercial credit and corporate performance. The empirical results show that the business credit of manufacturing enterprises has significant positive correlation with corporate performance, but there is no significant positive correlation between business trust and corporate performance. This paper also provides effective suggestions for manufacturing enterprises to enhance commercial credit.

Keywords: Commercial credit; Business credit; Business trust; Business performance

Online publication: March 11, 2022

1. Introduction

Commercial credit is the interenterprise credit formed on the basis of commodity transaction in capital market. It is an important part of market credit and one of the important financing channels for enterprises. At the end of 2019, the Central Economic Work Conference proposed the increase of medium- and long-term financing for the manufacturing sector, which is of great significance to stabilizing current growth, expectations, and investments. In 2016, the commercial credit of listed companies on the main board accounted for only 12.41% of the total assets, far lower than 17.8% of developed countries, such as the United States and Germany in 1991 [1]. With the continuous development of China's enterprise credit investigation and the continuous improvement of the credit system as well as financial system, commercial credit has been further developed. Throughout the long-term development of the manufacturing industry, commercial credit has been one of the indispensable soft powers in the process of enterprise development. Therefore, enterprises should fully recognize and use commercial credit as a new means to improve enterprise performance. This paper takes the manufacturing enterprises listed in Shanghai and Shenzhen A-share markets as research samples and discusses the relationship between commercial credit in manufacturing and corporate performance by analyzing the data from 2010 to 2019, hoping to provide effective suggestions for manufacturing enterprises to improve commercial credit.

2. Literature review

At present, the academic circle has not reached a consensus on the study of the relationship between

commercial credit and corporate performance. Some scholars believe that there is a relationship of mutual promotion between business credit and enterprise performance. Schwartz and Ferris pointed out that buyers can use commercial credit to reduce corporate cash reserves, reduce transaction activity expenditures, and strengthen the management of cash as well as inventory so as to improve profits [2,3]. In turn, the improvement of profits will improve the insufficient funds of enterprises, reduce the pressure of financing constraints, promote the investment of enterprises, improve the performance of enterprises, and ultimately promote the growth of enterprises. From the perspective of financing substitution of commercial credit, it is believed that commercial credit financing channels can improve corporate performance to a certain extent [4]. Although commercial credit cannot completely replace the traditional financing methods of banks, it can serve as an important supplement to financing channels of enterprises. Lu Zhengfei and Yang Deming quantified commercial credit at different stages and proposed excessive commercial credit; they believe that excessive credit loans by enterprises are closely related to corporate performance [5]. Through empirical research, it is found that excess commercial credit is conducive to the improvement of the overall management level of enterprises. Yan Yanyang and Jiang Hengbo believe that with the continuous improvement of the credit system, the development of commercial credit has a significant positive impact on the improvement of enterprise performance [6].

Some scholars believe that the business credit obtained by enterprises will have a negative impact on enterprise performance. Cull conducted an empirical study on industrial enterprises in China and found that the effect of commercial credit on enterprise performance in China is limited [7]. He believes that previous empirical studies more or less overestimated the effect of commercial credit on enterprise performance. Wang Luping and Mao Weiping proposed that the excessive use of commercial credit will reduce corporate governance efficiency [8]. Compared with banks and other monetary institutions, it is difficult for commercial credit providers to supervise the receivers, and commercial credit will have a negative impact on corporate performance. Molina and Preve studied the impact of commercial credit on corporate performance from the perspective of financial crisis and found that excessive use of commercial credit is not conducive to improving corporate performance [9]. Tang Yang, Song Ping, and Tang Guoping took listed manufacturing enterprises from 2007 to 2012 as research samples and divided the life cycle of enterprises into growth stage, mature stage, and decline stage; the results showed that in the whole life cycle of manufacturing enterprises, commercial credit has significant negative correlation with enterprise performance [10].

Some scholars believe that there is an inverted U-shaped relationship between business credit and enterprise performance. Zhang Liang and Ma Yongqiang analyzed the economic data of China's listed companies from 1991 to 2014 and found that the impact of commercial credit on corporate performance depends on a boundary point of the use of commercial credit; that is, the use of commercial credit has both advantages and disadvantages on corporate performance, with an inverted U-shaped relationship [11].

At present, most studies on the relationship between commercial credit and enterprise performance have found a positive relationship between commercial credit and enterprise performance, but some studies proposed that commercial credit cannot promote enterprise performance, or even reduce enterprise performance. In addition, previous research did not analyze commercial credit from the supply side (business credit) or the demand side (business trust), and most of the research samples are industry-wide sample data, so there is a lack of research on the commercial credit of manufacturing enterprises. Based on the 10-year data of China's listed manufacturing companies from 2010 to 2019, this paper divides commercial credit into business credit and business trust as well as studies the correlation between commercial credit and enterprise performance from the perspective of supply and demand.

3. Study samples and data sources

This paper takes the financial data of A-share manufacturing enterprises from 2010 to 2019 as the research sample and filters the data according to the following principles: exclude samples without data of ten consecutive complete accounting years, listed companies by ST, and samples with abnormal data. Through screening, 442 qualified manufacturing enterprises were finally determined as the research subjects, with a total of 4,420 sample data. All sample data were derived from WIND database. EXCEL and SPSS 26.0 were used for data calculation and collation.

4. Analysis of the current situation of commercial credit and corporate performance

Since the reform and opening-up, China's manufacturing industry has developed continuously and has earn the title of the largest manufacturing country. In the past decade, the structure and scale of the manufacturing industry have been constantly adjusted and upgraded. Since 2010, the scale of China's manufacturing industry has surpassed that of the United States, becoming the first in the world. Its export scale is also continuously increasing. China's export of manufactured goods has ranked first in the world since 2008 and accounted for 18% in 2016. In addition, the international competitiveness of China's manufacturing industry is also increasing. In the 2016 Global Manufacturing Competitiveness Index report released in 2016, China's manufacturing competitiveness surpassed that of the United States and ranked first. However, during the decade, opportunities and challenges coexist. In 2018, trade frictions and other reasons impacted China's export, but expanding domestic demand became the impetus for the development of its manufacturing industry. In recent years, with the industrialization of artificial intelligence, China's manufacturing industry is also on the road of intelligent transformation.

4.1. Analysis of commercial credit status

From the perspective of supply side and demand side, commercial credit can be divided into business credit and business trust. Business credit refers to the ratio of the sum of accounts receivable, notes receivable, and prepayments to total assets, while business trust refers to the ratio of the sum of accounts payable, notes payable, and prepayments to total assets. **Table 1** shows the names and descriptions of specific commercial credit indicators.

Table 1. Commercial credit indicators

Indicator	Description
Business credit	(Accounts receivable + Notes receivable + Prepayments) / Total assets
Ratio of business credit to commercial credit	(Accounts receivable + Notes receivable + Prepayments) / Commercial credit indicators
Business trust	(Accounts payable + Notes payable + Prepaid) / Total assets
Ratio of business trust to commercial credit	(Accounts payable + Notes payable + Prepaid) / Commercial credit indicator

Figure 1 and **Figure 2** show that the ratio of business credit and the ratio of business trust remain at a relatively stable level over the past 10 years. From 2012 to 2016, it experienced a small rise and then a decline, and then a rise again in 2017, followed by a significant decline in 2019. These changes are closely related to the changes in the domestic economic and market environment. During the 12th Five-Year Plan period, the service industry has become the largest industry in China. In 2015, the State Council issued a ten-year program as a strategy to transform China as a leading manufacturing power – Made in China 2025. During the 13th Five-Year Plan period, China has been actively expanding its opening-up and upgrading. The business trust of manufacturing enterprises is generally lower than that of business credit, indicating

that enterprises are adopting the loose commercial credit policy.

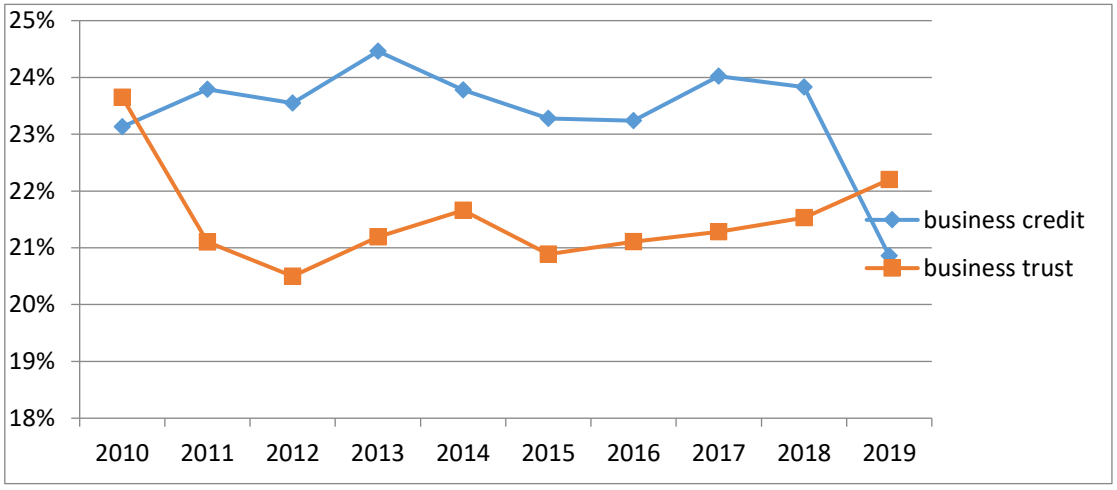

Figure 1. Trend chart of manufacturing enterprise business credit and business trust

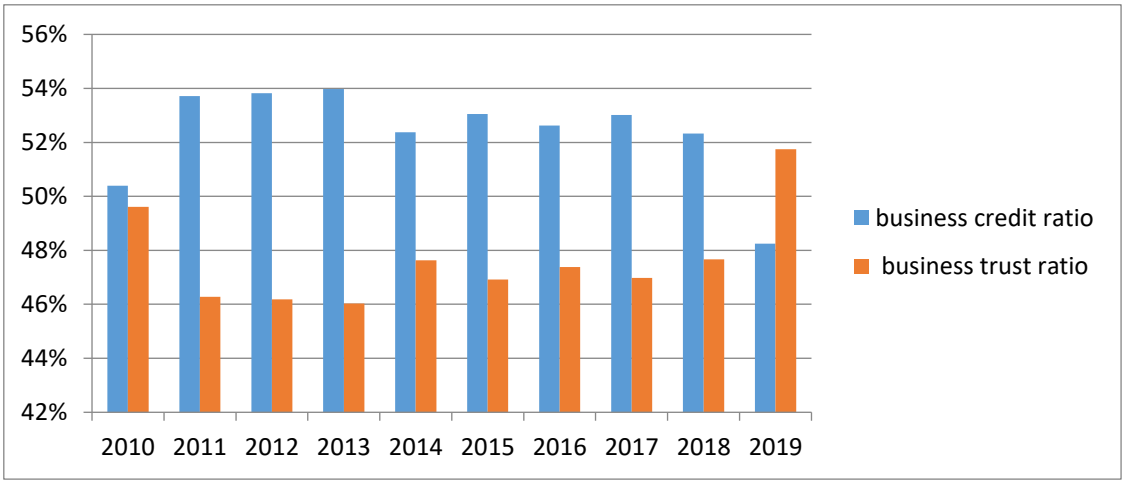

Figure 2. Manufacturing enterprise business credit ratio and business trust ratio

In 2019, for the first time in a decade, the business credit share fell below the business trust share. In that year, the decline of China's economic operation was caused by the continuous decline of economic prosperity and the weakening of economic benefits, which were closely related to the global economic slowdown and the upgrading of Sino-US trade. As an important share of the national economy, the manufacturing industry was greatly affected.

The trend of business credit and business trust of manufacturing enterprises in the past 10 years has been discussed. Following that, manufacturing enterprises can be divided into labor-intensive enterprises (textiles, toys, porcelain, etc.) and technology-intensive enterprises (electronic communication equipment, software, etc.), and the commercial credit status of different types of manufacturing enterprises under the background of the transformation and upgrading strategy of manufacturing enterprises since the 18th National Congress of the Communist Party of China will be discussed and analyzed.

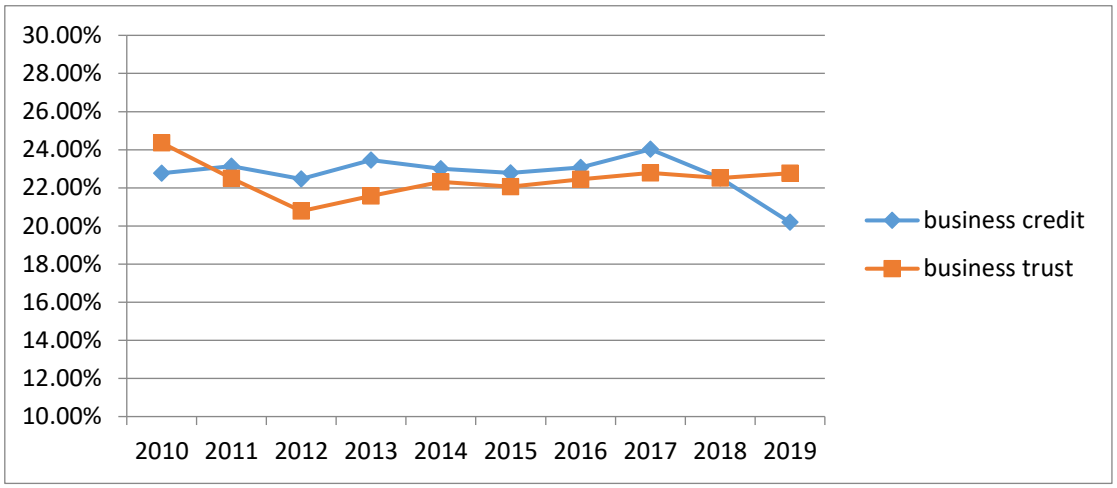

Figure 3. Labor-intensive manufacturing commercial credit trends

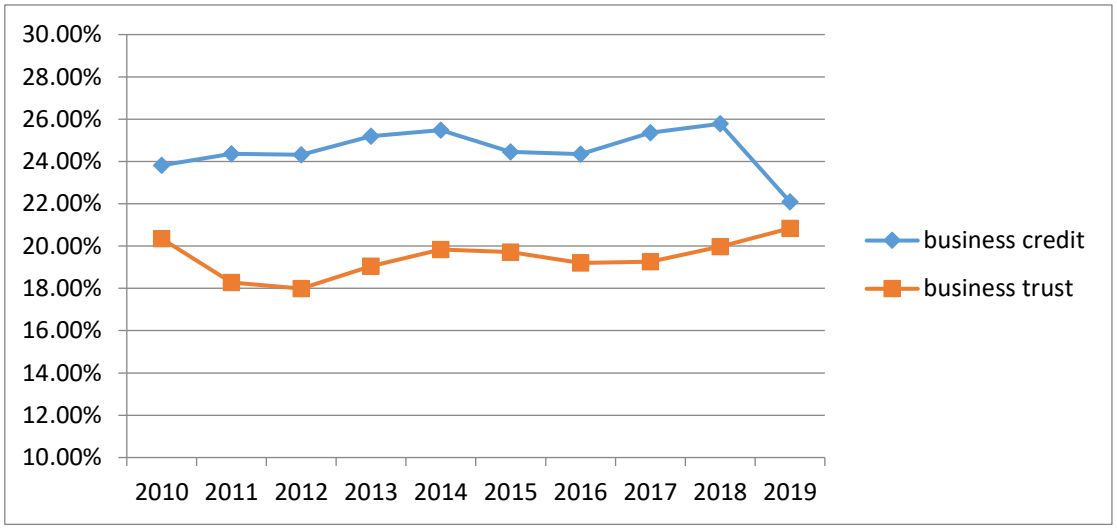

Figure 4. Technology-intensive manufacturing commercial credit trends

Figure 3 and **Figure 4** show that the business trust and business credit of labor-intensive enterprises are relatively average; that is, the difference between the two is small, and the business trust value is larger than the business credit value of enterprises. However, by observing the business credit data of technology-intensive enterprises, it can be appreciated that there is a large gap between the values of business trust and business credit. In sharp contrast with labor-intensive enterprises, the business credit value of technology-intensive enterprises is greater than their business trust value. The average level of business credit of technology-intensive enterprises (24.52%) is higher than that of labor-intensive enterprises (20.39%); labor-intensive enterprises tend to obtain more business trust. From the different operation characteristics of the two types of manufacturing enterprises, labor-intensive enterprises are mostly traditional processing enterprises, whose production activities involve the purchase of a large number of raw materials and other activities. Enterprises often need to delay payment to maintain the normal operation of funds, so there is more business trust. Compared with labor-intensive enterprises, technology-intensive enterprises are less dependent on capital, so they provide more business credit. External enterprises use deferred payment to purchase the technological equipment needed for enterprise production, so technology-intensive enterprises have more deferred payment and more business credit.

4.2. Enterprise performance analysis

In order to reflect the level of enterprise performance, three economic indicators have been selected to measure enterprise performance: return on equity, return on total assets, and net profit rate on sales.

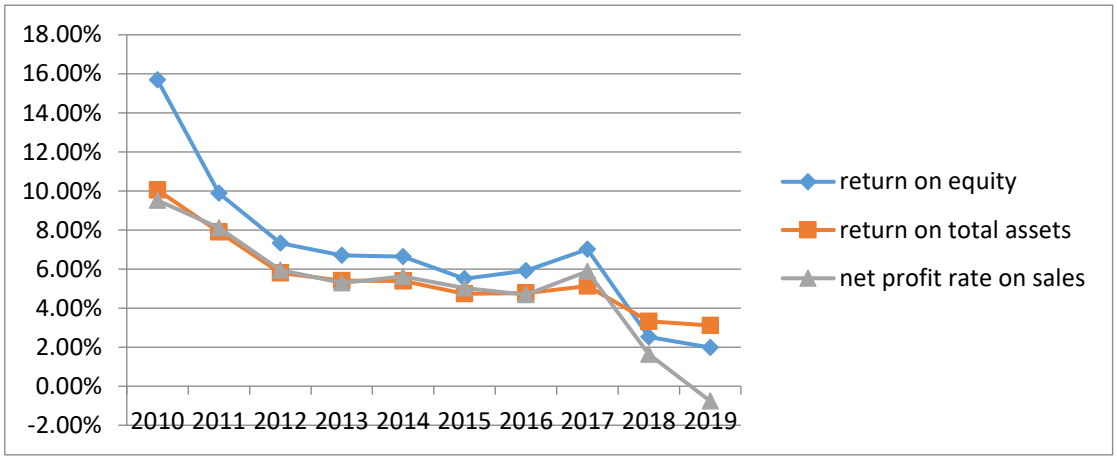

Figure 5. Trend chart of performance indicators

It can be seen from **Figure 5** that the trends of the three indicators were similar over the decade. From 2010 to 2011, there was a large downward trend, and from 2011 to 2017, it remained in a relatively stable state, and increased slightly in 2017. It fell again from 2017 to 2019. Since WTO accession, China's manufacturing industry has been developing rapidly; after the financial crisis in 2008, it came to a plateau in terms of profitability. Affected by the economic cycle, demographic dividend fade, manufacturing industry transformation, and various factors, the manufacturing business performance is no longer developing rapidly in 2011 as a watershed can be seen where the growth trend is slowing down and maintaining at a medium speed. In 2017, the performance of enterprises in the global economic recovery picked up again, while the three indicators showed a downward trend due to international economic and trade frictions between 2018 and 2019.

5. Empirical analysis

5.1. Research hypothesis

This study divides commercial credit into business credit of the supply side and business trust of the demand side as well as subdivides the relationship between commercial credit and enterprise performance according to the supply and demand characteristics of commercial credit.

It is generally believed that by using commercial credit, credit granting parties can strengthen inventory management, thus improving corporate profits, relieving financing pressure, and promoting enterprises to invest as well as improve corporate performance. The more commercial credit the trustor obtains, the more interest-free loans the trustor receives, thus improving the enterprise's capital turnover, operation capacity, corporate performance. Based on this, two hypotheses are proposed.

Hypothesis 1: There is a positive relationship between business credit and business performance of manufacturing enterprises.

Hypothesis 2: There is a positive relationship between business trust and business performance of manufacturing enterprises.

5.2. Variable selection and model construction

5.2.1. Explained variable

The index of return on equity (ROE) comprehensively reflects the company's profitability, operating

capacity, and debt paying capacity. This study chose ROE as the explained variable to reflect the company's operating performance.

5.2.2. Explanatory variables

Commercial credit includes business credit (BC) and business trust (BT). Business credit refers to the commercial credit granted by enterprises, which is measured by the ratio of accounts receivable, notes receivable, and prepayments to the total assets of enterprises. On the other hand, business trust refers to the commercial credit obtained by an enterprise and is measured by the ratio of the sum of accounts payable, notes payable, and accounts received in advance to total assets.

5.2.3. Control variables

This paper mainly studies the correlation between commercial credit and enterprise performance. Since there are many factors affecting enterprise performance, in order to study the relationship between commercial credit and enterprise performance more accurately, this paper designs the use of control variables from multiple perspectives to be more explanatory.

(1) Enterprise size. When the enterprise scale is large, it means that the enterprise has certain prestige and other enterprises are willing to choose such enterprise as a partner. This means that enterprise scale can promote business transaction activities, and thus play a role in enterprise performance. At the same time, the larger the enterprise scale, the better the reduction of transaction costs and the improvement of enterprise performance.

(2) Growth. If an enterprise maintains a high level of growth, it will send a good signal to the market, which is conducive to commodity sales and capital acquisition, thus promoting enterprise performance. This indicator reflects the likelihood that companies will make more profits in the future.

(3) Liquidity. The liquidity of a company's assets plays a vital role in the normal operation of the company. The larger the proportion of the current assets in the total assets of the company, the stronger the liquidity of the assets, the more conducive it is to the company's capital turnover, and the better the improvement of the business performance of the company.

(4) Debt level. As an important means of enterprise financing, bank loan is closely related to enterprise business activities. The availability and timeliness of enterprise financing have a profound impact on enterprise business performance.

Table 2. Definitions and descriptions of variables

Types	Variable	Symbol	Description
Explained variable	Return on equity	ROE	After-tax profit / net assets
Explanatory variables	Business credit	BC	(Accounts receivable + Notes receivable + Prepayments) / Total assets
	Business trust	BT	(Accounts payable + Notes payable + Prepaid) / Total assets
Control variables	Enterprise scale	Size	LN (size)
	Growth	Growth	Main business income growth rate
	Liquidity	Liquidity	Current assets / total assets
	Debt level	Lev	Total liabilities / total assets

5.2.4. Model building

In this paper, return on equity is taken as the explained variable, business credit and business trust as the explanatory variables, and enterprise size, growth, liquidity, and debt level as the control variables. The following model is constructed:

$$ROE = \beta_0 + \beta_1 BC + \beta_2 Size + \beta_3 Growth + \beta_4 Liquidity + \beta_5 Lev + \varepsilon$$
$$ROE = \beta_0 + \beta_1 BT + \beta_2 Size + \beta_3 Growth + \beta_4 Liquidity + \beta_5 Lev + \varepsilon$$

5.3. Empirical results and analysis

5.3.1. Descriptive analysis

It can be seen from **Table 3** that the standard deviation of return on equity (ROE) is 0.184963, indicating that there is a small difference in the operating performance between manufacturing enterprises. The standard deviations of business credit (BC) and business trust (BT) are also small, indicating that the commercial credit of some enterprises with better business performance has not been effectively utilized.

The standard deviation of the enterprise size (Size) is 1.222626, indicating that there is a great difference in the size of listed manufacturing companies, but the difference between the maximum value and the minimum value is not very significant. The standard deviation of Growth is small, indicating that there is a small difference in the growth rate of the main business income of listed manufacturing enterprises; however, the minimum value is negative, indicating that the main business of some enterprises has begun to decline. There is a large gap between the maximum and minimum value of Liquidity, indicating that there is a large gap in the short-term solvency of manufacturing enterprises. The maximum value, minimum value, standard deviation, and mean value of Lev are 1.0564, 0.0278, 0.183714, and 0.47228, respectively. This shows that enterprises face different risks due to different debt levels.

Table 3. Descriptive statistics of the variables

Variable	N	Minimum value	Maximum value	Mean value	Standard deviation
ROE	4420	-5.0833	1.5996	0.06828	0.184963
BC	4420	0.0092	0.6572	0.23393	0.114149
BT	4420	0.0131	0.7234	0.21511	0.114872
Size	4420	18.6832	27.4677	22.37098	1.222626
Growth	4420	-0.8718	11.2848	0.14957	0.377749
Liquidity	4420	0.0895	0.9850	0.60738	0.155121
Lev	4420	0.0278	1.0564	0.47228	0.183714

5.3.2. Correlation analysis

Pearson correlation analysis was carried out for the seven variables in the model. **Table 4** shows that the correlation coefficients between variables are small and less than 0.8, indicating that there is no multicollinearity among variables. The explained variables (ROE) are positively correlated with BC, BT, Growth, and Liquidity at 1% confidence level. The explained variable (ROE) is negatively correlated with the enterprise size (Size) at the confidence level of 5%. The explained variable (ROE) is also negatively correlated with the level of liability (Lev) at the 1% confidence level. Each variable has a certain correlation with the explained variable, reflecting the rationality of the selection of variables in this paper.

Table 4. Pearson correlation of the variables of listed manufacturing enterprises

	ROE	CS	CD	Size	Growth	Liquidity	Lev
ROE	1						
BC	0.088**	1					
BT	0.105**	0.420**	1				
Size	-0.038*	-0.183**	0.184**	1			
Growth	0.369**	0.090**	0.042**	-0.078**	1		
Liquidity	0.173**	0.579**	0.325**	-0.210**	0.085**	1	
Lev	-0.085**	0.080**	0.518**	0.483**	-0.015	-0.105**	1

Note: ** and * indicate significant at 1% and 5% significance levels

5.3.3. Regression analysis

Correlation analysis only assists in the preliminarily test of the influence of the above factors on the performance of manufacturing enterprises. In order to control the interaction between variables more comprehensively and investigate the relationship between commercial credit and the performance of manufacturing enterprises, multiple linear regression analysis is required. The regression results are shown in **Table 5**.

Table 5. Results of multiple linear regression analysis

	F (1)			F (2)		
Variable	**β**	**t**	**Sig.**	**β**	**t**	**Sig.**
BC	0.052	2.765	0.351			
BT				0.141	7.286	0.000
Size	0.073	4.317	0.000	0.063	3.772	0.000
Growth	0.198	13.662	0.000	0.198	13.711	0.000
Liquidity	0.062	3.359	0.001	0.034	1.992	0.046
Lev	-0.185	-10.817	0.000	-0.252	-12.795	0.000
F	70.162		0.000	79.955		0.000
R^2		0.074			0.083	
Adjusted R^2		0.073			0.082	

Table 7 shows that the R2 values of the two models are 0.074 and 0.083, respectively, and the adjusted R2 values are 0.073 and 0.082, respectively. Although the overall goodness of fit of the model is not high, it is still acceptable, mainly because the factors affecting enterprise performance are large, which will not have a great influence on the accuracy of the empirical results. The F values of the two models are above 70, and both models passed the significance test.

F (1) verifies the relationship between business credit and enterprise performance. There is a positive correlation between business credit and enterprise performance, but it fails to pass the significance test; thus, the first hypothesis is not valid. Through the use of commercial credit, the business credit party can improve the inventory turnover rate, increase the operating income, and then promote the investment of enterprises to improve corporate performance. On the other hand, the more the enterprises' business credit, the more receivables the enterprises have, which is not conducive to the capital withdrawal of enterprises. F (2) verifies the relationship between business trust and enterprise performance. There is a significant positive correlation between business trust and enterprise performance, indicating that business trust is

conducive to the improvement of enterprise performance, thereby validating the second hypothesis. The more the business trust a company obtains, the better it will improve its performance. The more business trust an enterprise is granted, the greater the proportion of its accounts payable to the total assets, which is conducive to the return of its own funds and the maintenance of a stable capital chain.

There is a significant positive correlation between enterprise size, growth, and liquidity and enterprise performance; that is, manufacturing enterprises with large scale, good growth, and strong liquidity have better performance. There is a significant negative correlation between corporate debt level and corporate performance; that is, the higher the debt ratio of an enterprise, the lower its performance.

5.3.4. Robustness test

The return on total assets (ROA) index is used to replace the return on equity (ROE) index to test the robustness of the model and whether significant changes and symbol changes occur in the regression results after changing the variables.

Table 6. Multivariate linear regression analysis results (robustness test)

	F (1)			F (2)		
Variable	**β**	**t**	**Sig.**	**β**	**t**	**Sig.**
CS	0.043	2.459	0.358			
CD				0.171	7.397	0.000
Size	0.079	3.827	0.000	0.069	2.897	0.000
Growth	0.201	11.462	0.000	0.202	12.671	0.000
Liquidity	0.067	4.101	0.001	0.043	1.858	0.037
Lev	-0.275	-13.718	0.000	-0.364	-15.877	0.000
F	56.427		0.000	65.369		0.000
R^2	0.055			0.067		
Adjusted R^2	0.054			0.066		

Table 6 shows that there is a small change in the regression model results after the replacement of the explained variable. There is a positive correlation between business credit and enterprise performance, and it did not pass the significance test. Hence, hypothesis 1 is not valid. There is a significant positive correlation between business trust and enterprise performance; hence, hypothesis 2 is true.

At the same time, the regression results of the control variables are consistent with the previous regression. Enterprise size, growth, and liquidity are significantly positively correlated with enterprise performance, while enterprise debt level is significantly negatively correlated with enterprise performance, indicating that the model passed the robustness test.

6. Conclusion and recommendations

The manufacturing industry is an important part of the real economy and has influence on the development of national economy. Throughout the long-term development of enterprises, commercial credit has been one of the indispensable soft powers in the process of enterprise development and also one of the key factors to improve the core competitiveness of enterprises. Fully understanding and using commercial credit have become new means to improve enterprise performance.

The empirical results show that there is no significant positive correlation between the business credit and enterprise performance of manufacturing enterprises. This may be related to the enterprise capital operation. Although more business credits awarded can increase the business performance, but to produce

more accounts receivable may lead to the difficulty in recovering the enterprise's cash flow; thus, it is not conducive to the timely recovery of funds. There is a significant positive correlation between business trust and corporate performance of manufacturing enterprises. The more business trust a company obtains, the more it is beneficial to the operation and to improving corporate performance.

Combined with the empirical results obtained, first of all, from the perspective of enterprises themselves, manufacturing enterprises should strive to improve their independent innovation ability. Only through continuous innovation can enterprises further improve their productivity and speed up their capital turnover, gradually weaken the impact of commercial credit on enterprises, and improve their comprehensive performance. Secondly, from the government level, it is necessary to use big data, block chain, and other technologies to constantly speed up the construction of China's enterprise credit system, improve enterprise information, increase credit awareness among enterprises, improve laws and regulations related to commercial credit, as well as strengthen the supervision and evaluation of the enterprise credit industry.

In the past two years, COVID-19 has had a huge impact on the global economy. Under such force majeure factor, it is also worth discussing whether there is any change in the impact of commercial credit on enterprise performance, which is expected to be discussed in future studies.

Disclosure statement

The authors declare no conflict of interest.

References

[1] Rajan RG, Zingales L, 1998, Financial Dependence and Growth. The American Economic Review, 88(1): 559-586.

[2] Schwartz RA, 1974, The Journal of Financial and Quantitative Analysis. Model of Trade Credit, 9(4): 643-657.

[3] Ferris JSA, 1981, Transactions Theory of Trade Credit Use. The Quarterly Journal of Economics, 96(96): 243-270.

[4] Yang X, Blenman LP, 2008, Corporate Inventory Financing: Trade Credit, Bank Loans. Retrieved, 7(30): 2009.

[5] Lu Z, Yang D, 2011, Business Credit: Alternative Financing or Buyer's Market. Management World, 2011(04): 6-14.

[6] Yan Y, Jiang H, 2011, Credit System Change, Commercial Credit and Enterprise Performance. Economic Issues, 2011(11): 58-60, 100.

[7] Cull R, 2009, Formal Finance and Trade Credit during China Transition. Journal of Financial Intermediation, 18(2): 173-192.

[8] Wang L, Mao W, 2009, A Study on the Relationship between Bank Credit and Corporate Investment. Journal of Xi'an Jiaotong University (Social Science Edition), 29(1): 6-11.

[9] Molina CM, Preve A, 2012, An Empirical Analysis of the Effect of Financial Distress on Trade Credit. Financial Management, 41(1): 187-205.

[10] Tang Y, Song P, Tang G, 2014, Corporate Life Cycle, Debt Financing and Firm Performance: Evidence from China's Listed Manufacturing Companies. Collection of Finance and Economics, 2014(11): 49-56.

[11] Zhang L, Ma Y, 2016, Can Business Credit Improve Enterprise Performance?. Investment Research, 2016(2): 59-77.