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Article

Research on BG Group's Working Capital Management under Financial Sharing Mode

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Abstract: In recent years, with the rapid development of the domestic market, many companies have achieved tremendous growth. However, the continuous growth of the group company has also led to many challenges in its branch structure, such as decreased efficiency in financial management and increased costs. These challenges have become obstacles to the further development of group companies, and many group companies have begun to take corresponding measures to address these challenges. Among them, the emergence of the financial sharing center brings a glimmer of hope for the group company to cope with these challenges. It can not only quickly integrate the company's financial resources, but also effectively control operational risks, reduce operating expenses, and enhance the company's strength. BG Group, as a model in the domestic steel industry, has made significant progress since launching its financial sharing model. Its successful cases can not only provide reference for similar companies, but also provide important guidance for future investment and financing. Through horizontal and vertical analysis of BG Group's financial data over the years, identify its shortcomings in working capital management and propose corresponding optimization suggestions to improve the efficiency of the group's working capital management.

Keywords: financial sharing center; group company; BG Group; steel industry; working capital management; efficiency

1. Research Background

Working capital management is an important pillar of corporate finance [1], but also the core of the daily work of enterprises. The main idea of working capital management is the ability to meet short-term debt and operating expense [1]. Through the good working capital management, can make the enterprise internal environment efficient, stable, orderly, thus ensuring the smooth development of daily operations. Working capital management is also important in optimizing corporate profitability [1]. Compared with Western developed countries, working capital management in China is relatively weak, and the influence of cultural embeddedness and informal institutions on economic activities is more widespread and profound in China than in the west [2]. As an important part of our country's economy, the steel industry has accounted for more than 10% of our country's GDP for a long time, its working capital needs are higher than those of the general industry [3]. At the same time, the steel industry is a typical resource-consuming industry. Producing products requires a large amount of mineral resources, such as coal and iron ore, but due to the uneven distribution and

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limited resources of these mineral resources, its procurement of raw materials, production and sales of products across a longer distance, which the management of steel enterprises put forward higher requirements, need to better achieve the rapid transmission of information and the establishment of a more scientific and effective management system. Therefore, it is more difficult for the steel enterprises to manage working capital, and it is more important for improving enterprise benefit [3]. BG Group, as a "leader" in China's steel industry, is the largest and most modern steel joint venture in China. With its comprehensive advantages in integrity, talent, innovation, management, and technology, it has established its position as a world-class steel joint venture in the international steel market. BG Group is still able to achieve high economic benefits even with the increasing pressure on business, the covid-19 pandemic, and the increasing emphasis on environmental protection, the effective management and control of working capital can be said to be an important reason for the development of the group.

With the continuous advancement and deepening of economic globalization, enterprises have made some achievements in management, and achieved better market competition performance. As the scale grows, more and more enterprises start to set up branches. However, the establishment of the branch causes the development of the enterprise to be hindered by the low efficiency of financial management and the high cost of financial management. In this context, some enterprises began to try to set up financial sharing center. Through the financial sharing center model, it can effectively coordinate the financial resources of the group, standardize the financial management process, reduce operating costs, and improve the ability and quality of financial personnel, make it play a more important role. According to China's Ministry of Finance, large companies and enterprise groups with a large number of subsidiaries need to explore and use information technology to improve the efficiency of accounting operations, and gradually establish financial sharing service centers. This provision supports and encourages the implementation of a financial sharing model by large and medium-sized enterprises in China [4]. In 2005, ZTE established China's first financial sharing service center in Shenzhen [4,5]. Subsequently, the financial sharing service soon expanded among the domestic large and medium-sized enterprises. In 2009, BG Group Shared Service Centre was officially launched, dedicated to providing all the group's subsidiaries with comprehensive financial services. By looking at BG Group's implementation of financial sharing, we can further explore the evolution of its financial sharing model history, better insight into its working capital changes. Although some literatures have recorded the working capital management of some listed companies, the working capital management of the steel industry group companies has not been fully explored, there are few researches on working capital management under financial sharing mode. Therefore, in this study, we will take BG Group as an example to investigate the working capital management under the financial sharing model by comparing the changes of working capital management performance in recent years, this paper raises the question that this research wants to solve: How does the implementation of financial sharing affect the working capital management of the company? What is the mechanism of action? The research results will provide reference for other similar enterprises to improve working capital management performance through financial sharing.

The research is divided into six main parts: research background, literature review, BG Group's motivation and mode of financial sharing, BG Group's working capital management analysis under the financial sharing model, BG Group's working capital management under the financial sharing model and optimization measures, conclusion. First of all, literature review mainly reviews and summarizes the problems of working capital management; How the financial sharing model helps enterprises better manage working capital. Second, it introduces BG Group's motivation of implementing financial sharing and the organizational structure of its financial sharing center. Third, it analyzes BG Group's working capital management from the perspective of factors and capital structure. Fourth, find out the shortage of working capital management under BG Group's financial sharing mode and put forward some measures to optimize it. Finally, it is the conclusion of the thesis to summarize the changes brought by BG Group's working capital management.

Our research will contribute to existing scientific research in two ways. First, we summarize the extensive theoretical and empirical results, which represent the status and problems of working capital management in domestic and foreign companies up to now. Second, we put forward how to use the financial sharing model to optimize the management of working capital, which will provide reference for other companies in the same industry.

2. Literature Review

Working capital management, also called short-term financial management, refers to the management method that enterprises implement under the guidance of working capital policy. Scientific financial control measures and rational distribution of current assets and liabilities can not only greatly improve the financial situation of enterprises, but also achieve the continuous growth of financial income. Financial sharing is a way of financial management, which can be centralized management of finance, accounting, capital and so on. This way can make the process of financial accounting and financial settlement scale, so as to improve the efficiency of financial management and reduce the cost of enterprises. Therefore, the management transformation under the financial sharing mode is regarded as the "industrialization revolution" of the financial industry. Under financial sharing model, different departments or organizations can share financial data, processes, technology and human resources to achieve more efficient financial management and service delivery. The implementation of this model usually involves the establishment of a unified financial platform, the development of standardized processes and norms, the integration of information systems and technologies, and the training and development of human capabilities [6]. There are abundant literatures on working capital management both at home and abroad, but the research on financial sharing is much more enthusiastic at home than abroad. From the 1950s to the 1980s, scholars began to find ways to optimize working capital management. From the 1990s to the early 21st century, the research on working capital management began to converge globally. By 1993, China began to implement the internationally recognized accounting system and introduced the concept of working capital from abroad, and in the 1990s domestic scholars began to study the management of working capital [7].

In the early days, the efficiency study of working capital management was only based on a single factor index, such as accounts receivable, inventory, accounts payable and so on. However, these single factor indicators can only explain several major internal factors, such as current liabilities, current assets and so on. Therefore, some scholars began to call that the management of working capital should be a comprehensive management of these factors, and should consider the relationship between current assets and current liabilities, the relationship between the preparation of current assets and corresponding capital should be explored from the overall perspective, how to make a reasonable working capital allocation through this relationship. Some scholars especially point out that the working capital management of cross-regional sales companies is not only related to current liabilities and current assets, but also based on process, from source management of suppliers to production management of intermediate links, then to the improvement of working capital management performance, this is the whole process of working capital management. To assess the management capability of working capital, Gitman first proposed the indicator of cash flow period, which refers to the number of days from the initial purchase of production materials' cash information to the final sale of products. However, it did not take into account the impact of current liabilities on working capital. In response to this deficiency, Richard & Laughlin proposed that the efficiency of working capital management can be reflected through the cash cycle. The cash cycle is expressed as the value of accounts receivable turnover plus inventory turnover, minus accounts payable turnover. This may include the impact of current liabilities on working capital, in order to comprehensively reflect the overall status of the company's working capital management. Some domestic scholars refer to this cash cycle as the "working capital turnover period" [7].

According to Wang [8], there are many problems in the management of working capital, such as insufficient working capital, unreasonable capital structure and lack of high-quality financial personnel, enterprises should fundamentally attach importance to and improve the working capital management system, improve the level of knowledge of financial personnel. In view of the importance of working capital for enterprises and the harm brought to enterprises by improper management of working capital, Chen [9] pointed out that in today's rapidly developing market environment, whether the working capital management of an enterprise is proper and efficient has a great influence on the later development prospect of the enterprise. The integrity of the capital chain is the foundation of the survival of the enterprise, and the damage of the problem of the capital chain to the enterprise will be disastrous, the centralized management and allocation control of the funds of each business unit can reduce the occurrence of financial risks and enhance the capital management ability of enterprises. Yang [10]'s research reveals that there is a positive correlation between the level of working capital management and the profitability of enterprises, that is, when the growth rate of working capital is relatively high, more economic value is created for enterprises. Many scholars hold the same supportive attitude to the necessity of the financial sharing center model for the working capital management of enterprises. Fan [11] believes that as one of the important products in the era of information-based management, the financial sharing center must take information technology as its carrier and play the role of integrating a large amount of data into a unified planning, ensure the utilization and dissemination of information resources, and achieve rational transportation and content sharing among various departments. Therefore, enterprises can make full use of the advantages of financial sharing center to achieve effective management of working capital.

Prša [12] sees the impact of working capital management on corporate wealth, arguing that increased working capital investment can reduce business risk, but has an adverse impact on profitability, and vice versa. Prasad et al. [13] to use the working capital efficiency multiplier as a measure of direct profitability in working capital management. Working capital efficiency multipliers represent financial performance variables such as return on assets, investment capital, return on equity, total operating income, and net operating income. The lower working capital efficiency multiplier indicates the higher working capital efficiency. Naumoski [14] analyzed the impact of effective working capital management on corporate profitability using a sample of 720 companies from Balkans. He defines dependent variables as operating margins, including inventory turnover, days due, days due and cash conversion cycles, as the most comprehensive indicators of working capital management. The results show that the days of accounts payable and the cash conversion cycle have a statistically significant negative impact on the profitability of the company. On the other hand, the number of days due and unpaid has a statistically significant positive impact on profitability. The results also show that south-eastern European companies can improve their operating profitability by reducing the days of accounts receivable outstanding and the cash conversion cycle, as well as by delaying the days of accounts payable in good business relationships. Working capital management is one of the key areas of financial management, according to Vukovi'c & Jakši'c [15]. Vukovi'c & Jakši'c [15] used multiple regression analysis to determine the impact of such variables as current ratios, current liabilitiestotal assets and total liabilitiestotal capital on the return on assets of the Republic of Serbia food industry in 2014. The results show that most of the analysis variables have a significant impact on profitability.

At present, domestic scholars agree that through business process reengineering, the financial sharing model can help enterprises operate more efficiently, better coordinate the group's financial resources, standardize financial management processes, and reduce operating costs, and it can improve the ability and quality of financial personnel, realize the transformation of financial function as well as the transformation of strategy, and finally enhance the core competitiveness of enterprises [4]. Through the understanding and comparison of domestic and foreign materials, the author finds that the discussion of working capital management under the financial sharing model are quite similar, and the discussion methods and concrete contents are also similar, compared with foreign countries, the domestic discussion is more extensive and in-depth, and the discussion of different types of problems is more specific.

3. The Motivation and Model of Financial Sharing in BG Group

Motivation 1: driving change and strengthening financial management. BG Group's financial information quality is poor due to poor communication and Information asymmetry between its subsidiaries, which makes it difficult to make accurate decisions. It needs to find new financial management models to develop in the long run. Therefore, the financial sharing service comes into being. BG's scale is huge, the subsidiary company member is numerous, the personnel distribution is complex. Financial staff workload and simplification, resulting in lower efficiency. In addition, the lack of a unified financial accounting system between the subsidiaries, increasing the difficulty of financial management. If the company's different business processing standards communication is not timely, especially between the upper and lower levels of effective communication, easy to lead to a rapid response to the latest changes in the market, affect the efficiency and effectiveness of business processing.

Motivation 2: improve the efficiency of financial resources allocation. Through the financial sharing model, the enterprise can optimize the allocation of resources, divide the responsibilities of employees, according to different functional departments and different advantages of employees to play, and improve the efficiency of the use of enterprise resources. The former financial management model has a negative impact on the resource utilization efficiency of each subsidiary.

Motivation 3: strengthen the control of enterprise financial risk. BG Group's various subsidiaries, there is a lack of effective communication and organizational fragmentation problems, in strict control of risk is facing great difficulties. By means of financial sharing, a perfect risk early-warning mechanism can be set up to take effective measures to ensure the real-time exchange of financial data between each subsidiary and headquarters.

BG Group is very strict in financial sharing management, currently has a total of 8 series and 46 functions. These functions are divided into 242 sub-processes, each sub-process corresponding to a post type, covering the accounting can share the main process. Such settings greatly reduce the likelihood of errors, and also better accountability, forcing employees to minimize errors. At the same time, job refinement can also make financial personnel for accounting accurate grasp, will work detailed, so that the task is better, make accounting more clear and transparent, so that the decision-making will be more accurate and effective. BG financial sharing center consists of eight different organizational structures, they are: from purchase to payment, from product sales to payments, from fees to taxes, from scanning to special services, from general ledger to statements, from systems to operations. After the initial application of the financial sharing center, the original 100 finance only need a few dozen people to complete, for the general financial staff requirements have also been reduced, the cost of human resources has been greatly reduced. After the establishment of some time, BG group combined with the characteristics of the company, the Financial Sharing Center model has been adjusted appropriately. After fully considering the separation of physical document flow and information flow, a unified scanning center is set up in the tax documents group, this allows accounting information to be obtained and accounting files to be generated, and the most important original documents to be kept in the original branch or subsidiary for archiving and future reference as required by law.

4. Analysis of Working Capital Management under the Financial Sharing Model of BG Group

4.1. Analysis of Working Capital Management Based on Factor Perspective

4.1.1. Analysis of Account Receivable Turnover Period

With the development of the industry, the amount of the receivables generated by credit sales is also increasing, which requires enterprises to take effective measures to recover these receivables as quickly as possible, so as to turn them into real wealth. In the same industry, the accounts receivable turnover of shorter days of business is usually more competitive. Based on BG Group's 2009–2021 financial statements data, we can get Table 1, Figure 1:

Table 1. 2009–2021 accounts receivable turnover period data.

Year	Account Receivable Turnover Period (days)	Industry Average (days)
2009	13.15	6.25
2010	10.95	6.48
2011	11.09	8.24
2012	14.63	11.52
2013	18.81	12.63
2014	20.48	14.29
2015	21.11	19.95
2016	18.01	15.62

Table 1. Cont.

Year	Account Receivable Turnover Period (days)	Industry Average (days)
2017	17.15	11.05
2018	14.74	9.60
2019	14.68	11.55
2020	13.24	11.54
2021	10.91	8.09

Data source: Oriental Fortune Website.

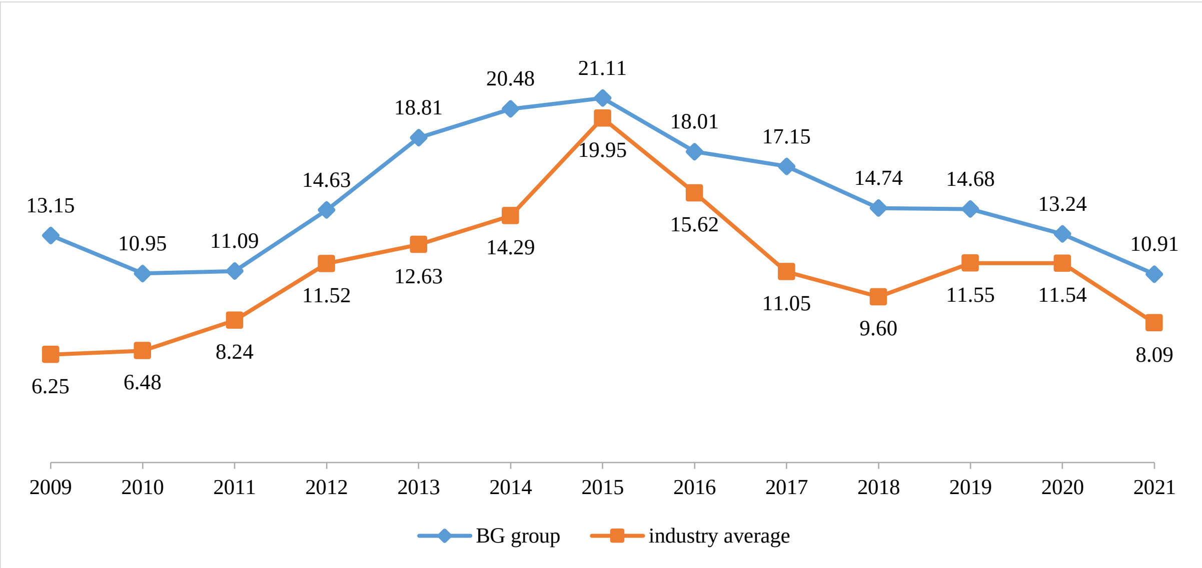

Figure 1. 2009–2021 accounts receivable turnover period data.

On the basis of the data in Table 1 and Figure 1, we can see that despite the large cyclical changes in accounts receivable, in particular some fluctuations in 2009–2010 and a sustained rise in 2010–2013, as the model of financial sharing becomes more and more mature, the cyclical changes of accounts receivable become more smooth. In horizontal comparison, BG Group and industry trends tend to be the same, but BG Group accounts receivable turnover is generally higher than the industry average, indicating that the efficiency of accounts receivable turnover is lower than the industry level, corporate credit policies are less stable and bad-debt risk is higher than the industry average, limiting BG's efficiency in managing its money.

4.1.2. Analysis of Accounts Payable Turnover Period

By calculating the turnover of accounts payable, we can estimate the conditions under which the enterprise can support its normal economic situation, so as to avoid excessive financing of banks. Based on BG Group's 2009-2021 financial statements data, we can get Table 2, Figure 2:

Table 2. 2009–2021 accounts payable turnover period data.

Year	Accounts Payables Turnover Period (days)	Industry Average (days)
2009	52.26	56.73
2010	36.93	48.82
2011	34.18	47.34
2012	40.55	66.03
2013	38.12	58.35
2014	41.63	67.96

Table 2. Cont.

Year	Accounts Payables Turnover Period (days)	Industry Average (days)
2015	50.93	58.55
2016	41.53	53.26
2017	48.43	57.45
2018	40.23	57.45
2019	40.87	52.06
2020	45.85	56.31
2021	45.29	50.13

Data source: Oriental Fortune Website.

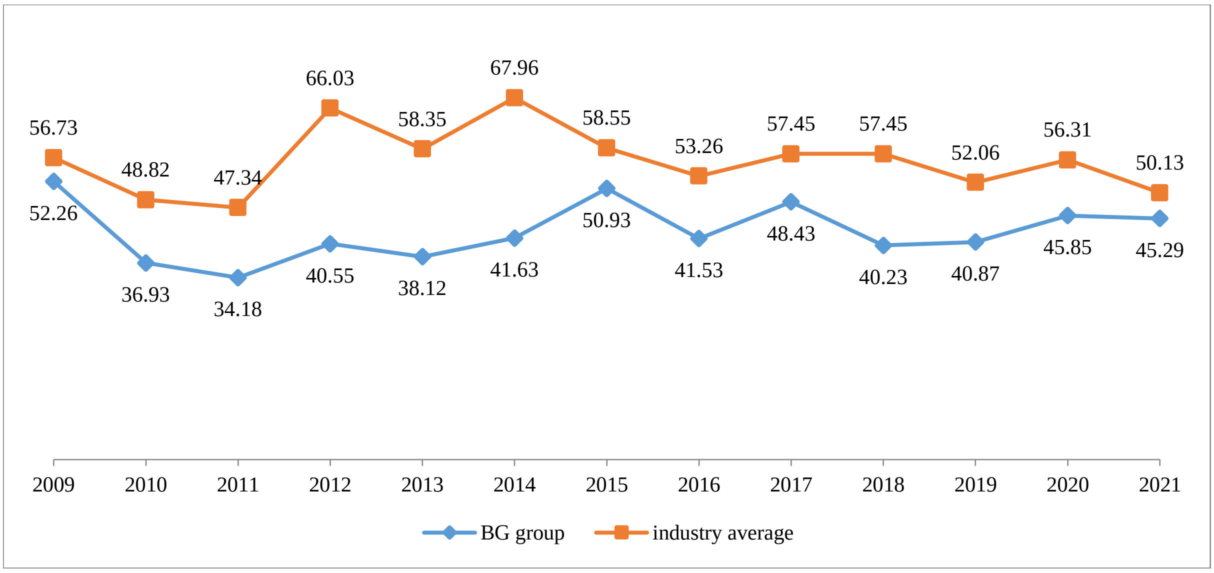

Figure 2. 2009–2021 accounts payable turnover period data.

Based on the data in Table 2 and Figure 2, we can see that the BG group accounts payable turnover period was stable during the implementation of the financial sharing model, this shows that the group has found a stable development strategy for its own. By way of horizontal comparison, BG Group's accounts payable have been less liquid than other enterprises, which indicates that BG Group has been able to utilize the resources needed for its internal economic activities, investment of energy and investment costs are much higher than other enterprises, working capital management efficiency is low.

4.1.3. Analysis of Inventory Turnover Period

Inventory turnover period refers to the total amount of time an item spends in circulation in financial records. In general, the length of this indicator is proportional to the velocity of circulation. If the circulation of goods faster, it is more circulation. The shorter the time that the inventory occupies the fund, the higher the efficiency of inventory management. Based on BG Group's 2009−2021 financial statements data, we can get Table 3, Figure 3:

Table 3. 2009–2021 inventory turnover period data.

Year	Inventory Turnover Period (days)	Industry Average (days)
2009	87.24	66.76
2010	69.26	63.66
2011	66.86	65.86
2012	67.43	79.02

Table 3. Cont.

Year	Inventory Turnover Period (days)	Industry Average (days)
2013	62.85	85.90
2014	61.70	101.94
2015	60.70	108.10
2016	60.30	96.85
2017	64.54	72.34
2018	56.24	62.10
2019	56.71	71.83
2020	57.01	71.30
2021	50.69	52.70

Data source: Oriental Fortune Website.

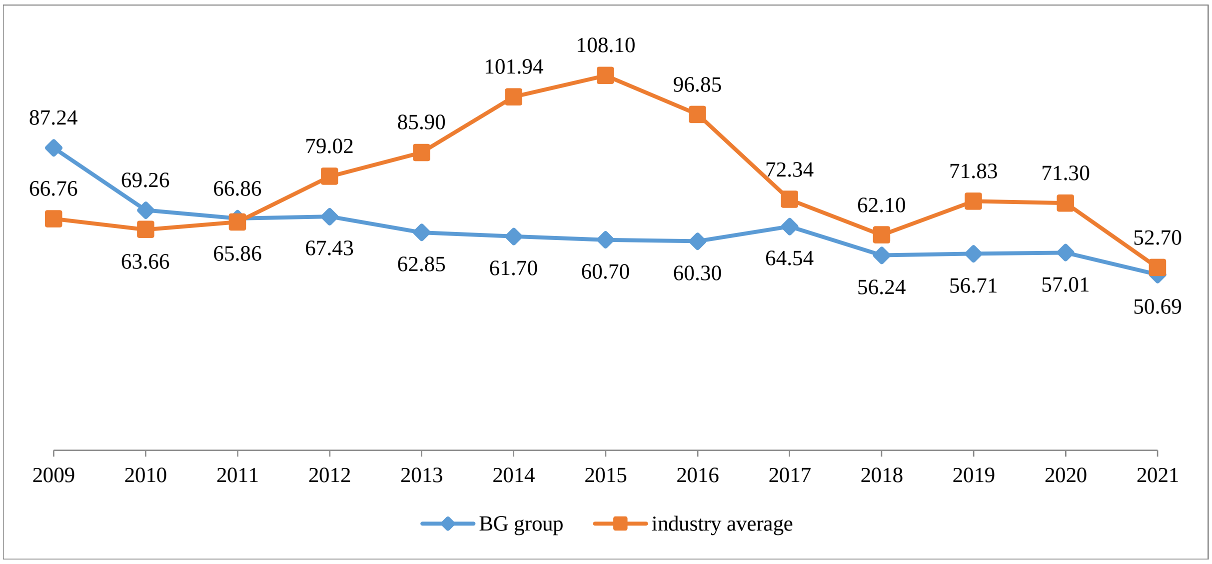

Figure 3. 2009–2021 inventory turnover period data.

From the data in Table 3 and Figure 3, we can see that BG Group's inventory turnover period was above the industry average in 2009 and 2010 during the initial period of the FSC system coming online, but with the stabilization of the financial system, group inventory turnover period continues to decline and is below the industry average. This shows that BG Group, with the support of the financial sharing center Big Data Technology, has developed an inventory control plan that matches the overall plan of the group and ensures the effective use of inventory, this reduces liquidity risk and prevents the risk of reputational damage due to sharp fluctuations in customer demand.

4.1.4. Analysis of Working Capital Turnover Period

The liquidity of capital is an important index to measure the financial management ability of an enterprise. By calculating the liquidity of inventory and accounts receivable, we can get Table 4, Figure 4:

Table 4. 2009–2021 working capital turnover period data.

Year	Working Capital Turnover Period (days)	Industry Average (days)
2009	48.13	16.28
2010	43.28	21.32

Table 4. Cont.

Year	Working Capital Turnover Period (days)	Industry Average (days)
2011	43.77	26.76
2012	41.51	24.51
2013	43.54	8.30
2014	40.55	−12.29
2015	30.88	−67.42
2016	36.78	−79.49
2017	33.26	−24.39
2018	30.75	−5.77
2019	30.52	−8.60
2020	24.40	−4.17
2021	16.31	−0.81

Data source: Oriental Fortune Website.

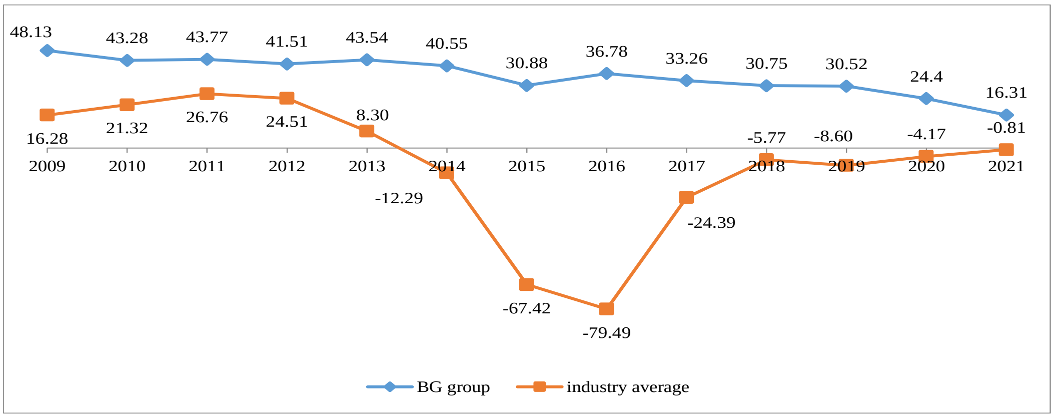

Figure 4. 2009–2021 working capital turnover period data.

Based on the data in Table 4 and Figure 4, we can see that BG Group's working capital turnover period shows a downward trend, which indicates that BG Group has been implementing the financial sharing model, there has been a marked improvement in the efficiency of capital management. Compared with the industry average level, BG Group's working capital turnover period has been improved, but its capital management level still lags behind the industry. Therefore, BG Group in the process of promoting financial sharing, must be constantly improved to achieve better results.

4.2. Analysis of Working Capital Management Based on Capital Structure

The establishment of financial sharing center can better optimize the company's capital structure, and can significantly improve the company's economic performance. Table 5 shows BG Group's financial structure from 2009 to 2021:

Table 5. financial structure Unit ($100 million).

Year	Current Assets	Current Liabilities	Total Assets	Net Working Capital	Current Assets Ratio	Current Liabilities Ratio
2009	527	707	2011	−180	26.21%	35.16%

Table 5. Cont.

Year	Current Assets	Current Liabilities	Total Assets	Net Working Capital	Current Assets Ratio	Current Liabilities Ratio
2010	689	732	2161	−43	31.88%	33.87%
2011	792	988	2311	−196	34.27%	42.75%
2012	697	844	2209	−147	31.55%	38.21%
2013	781	946	2267	−165	34.45%	41.73%
2014	744	983	2287	−239	32.53%	42.98%
2015	699	919	2341	−220	29.86%	39.26%
2016	1386	1703	3591	−317	38.60%	47.42%
2017	1333	1632	3502	−299	38.06%	46.60%
2018	1207	1337	3359	−130	34.89%	39.80%
2019	1375	1381	3459	−6	39.75%	39.92%
2020	1476	1295	3578	181	41.25%	36.19%
2021	1494	1374	3804	120	39.27%	36.12%

Data source: Oriental Fortune Website.

4.2.1. Analysis of Internal Structure of Current Assets

Current assets refer to the assets that an enterprise can cash out or use in one business cycle of one year or more. The speed of cash out of current assets is one of the main indexes to measure the operating effect of an enterprise's working capital. Current assets include accounts receivable, prepaid accounts, inventory and monetary funds. Based on BG Group's 2009–2021 financial statements data, we can get Table 6, Figure 5:

Table 6. internal structure of current assets.

Year	Accounts Receivable	Advance Payment	Inventory	Monetary Funds
2009	10.56%	7.78%	55.98%	10.72%
2010	9.77%	7.93%	55.15%	13.43%
2011	8.82%	6.69%	47.22%	14.90%
2012	12.27%	5.34%	41.46%	25.74%
2013	14.47%	3.92%	39.82%	19.62%
2014	13.44%	3.93%	36.02%	24.46%
2015	13.10%	5.95%	33.62%	18.31%
2016	11.18%	8.08%	35.79%	6.96%
2017	9.08%	6.02%	29.63%	13.43%
2018	10.69%	5.26%	34.47%	14.17%
2019	7.94%	3.64%	29.31%	11.49%
2020	6.66%	3.44%	26.77%	11.86%
2021	8.17%	3.89%	33.13%	13.39%

Data source: Oriental Fortune Website.

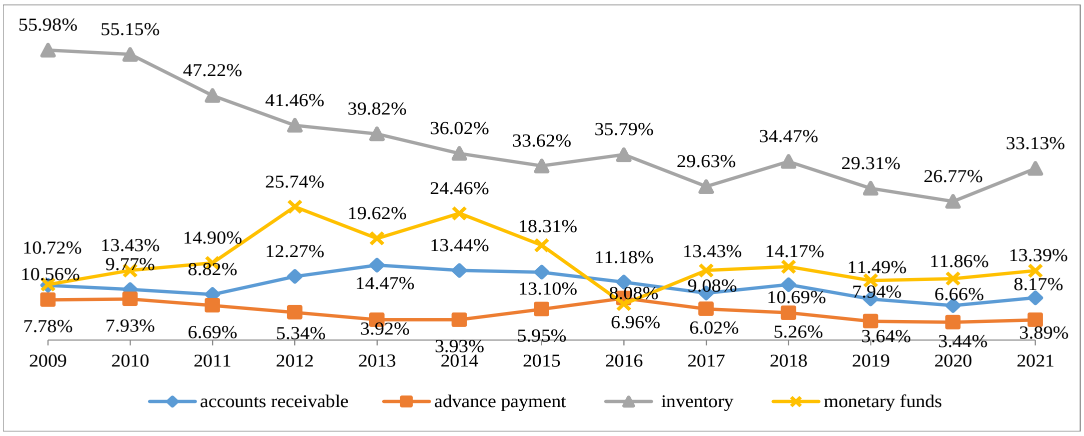

Figure 5. diagram of the internal structure of current assets.

Based on the data in Table 6 and Figure 5, we can see that the ratio of accounts receivable to advances has remained relatively balanced, while the ratio of inventories has decreased from 60.54 per cent in 2009 to 33.13 per cent in 2021, this shows that the shortage of inventory is being effectively eased. According to the statistics in Table 6, BG Group's liquid assets structure has started to become more reasonable. In the process of financial sharing project, the group's team and employees can make better use of these technologies, so that the economic vitality and social impact of the enterprise more concentrated. In addition, BG Group's internal structure of funds has also been appropriately improved, the proportion of current assets is increasing, the enterprise's economic situation has been in a relatively stable state.

4.2.2. Analysis of Internal Structure of Current Liabilities

Current liabilities are an important financial resource that reflects a company's total debt over a period of time. Different current liabilities can help us better understand the company's sources of funds, and predict the efficiency of the company's use of funds. According to their own business strategy, enterprises should formulate a scientific debt management program in line with the actual situation. Based on BG Group's 2009–2021 financial statements data, we can get Table 7, Figure 6:

Table 7. internal structure of current liabilities.

Year	Accounts Payable	Advance Payment	Short-Term Borrowing
2009	26.31%	15.56%	34.37%
2010	26.23%	16.12%	32.24%
2011	19.53%	10.93%	39.37%
2012	22.16%	13.27%	37.44%
2013	19.23%	12.68%	36.47%
2014	20.24%	11.70%	32.04%
2015	23.29%	13.60%	29.49%
2016	20.55%	16.03%	30.59%
2017	17.89%	13.54%	36.95%
2018	21.91%	17.05%	28.80%
2019	21.30%	14.92%	9.49%
2020	26.71%	--	9.65%
2021	34.57%	--	7.93%

Data source: Oriental Fortune Website.

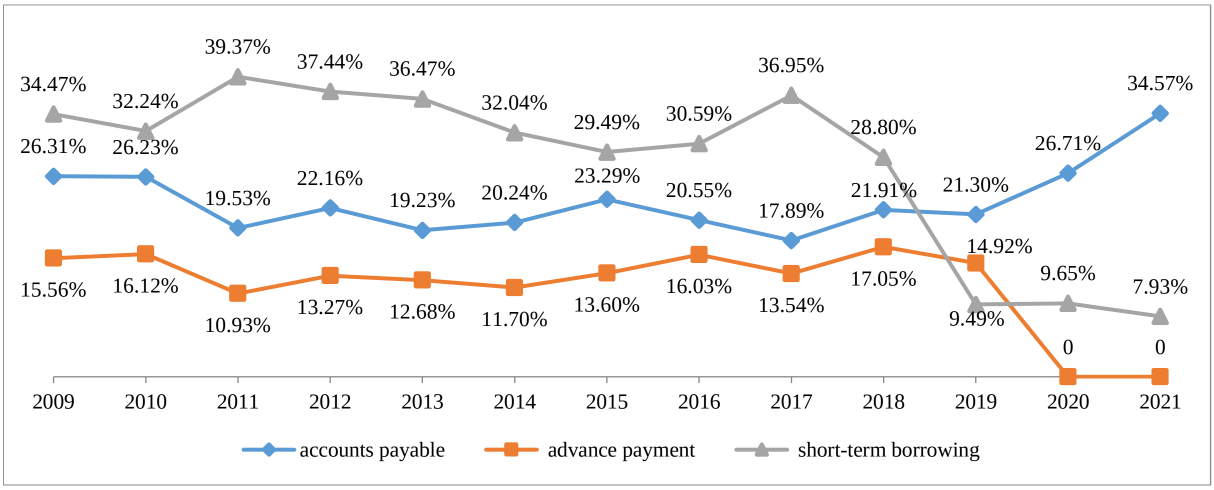

Figure 6. diagram of internal structure change of current liabilities.

Based on the data in Table 7 and Figure 6, we can see that the increase in advance collection indicates that BG Group's actual control and management capability is increasing during the process of trade agreement. This shows that BG Group has been successful in using its business reputation to trade more effectively and has reduced the financial burden arising from the use of commercial bills of exchange, BG group not only received more funds, but also more interest-free loans, greatly improved the efficiency of the company's capital operations.

5. Shortcomings and Optimization Measures of Working Capital Management under Financial Sharing Model of BG Group

5.1. Slow Turnover of Accounts Receivable

When analyzing the working capital management of BG Group, it was found that the company has a large amount of accounts receivable, which limits the efficiency of working capital management. As the scale of a company's accounts receivable expands, the risk of bad debts also increases. We can predict that due to this reason, although BG Group will adjust its credit policies and expand its market share, they will still not be able to bring significant returns. The use of financial sharing to handle accounts receivable cannot fully and effectively solve the problem, for example, the company's business transaction center is not established according to the prescribed standards, and the collection and payment of accounts receivable are not well supervised [16,17].

5.2. Significant Increase in Risks Brought about by Centralized Fund Processing

BG Group has established a financial shared center to centrally manage the funds of all its subsidiaries, thereby reducing the risk of centralized fund processing. However, there are also some potential issues. First, excessive concentration of funds may result in companies being unable to utilize them effectively, increasing the cost of capital for their subsidiaries; Second, due to insufficient allocation of funds to subsidiaries, there may be a shortage of funds. When the funds of multiple subsidiaries are closely linked, there will be a problem of risk transfer. If the funds of one subsidiary are used improperly, it will lead to financing difficulties for other subsidiaries, thereby affecting the overall efficiency of capital flow. If a company fails to handle financial risks in a timely manner, this dispersed risk will quickly transform into a risk for the entire group, greatly hindering the overall development of the company [18,19].

6. Optimization Measures for Working Capital Management under BG Group's Financial Sharing Model

6.1. Develop A Comprehensive Accounts Receivable Management System

BG Group should strengthen the management of accounts receivable, conduct detailed evaluations of customer information and reputation, and remind customers to prevent bad debts from having an adverse impact on the company's cash flow. For customers with a high reputation, it is important to maintain and consolidate cooperation with them in order to achieve a win-win situation. At the same time, for credit sales business, dedicated personnel should be arranged to keep good records and increase monitoring of accounts receivable to reduce bad debt losses. For loyal customers who have long-term cooperation, it is best to adopt a more flexible credit policy to make them feel the integrity of the company, maintain a good relationship with the company, and have long-term business dealings [20].

6.2. Improve Risk Control System and Reduce Concentration Risk

BG Group must strengthen its internal controls, establish a sound financial risk management system, and regularly hold relevant training activities to improve employees' financial literacy. At the same time, establish a strict supervisory body to regularly review financial statements, promptly detect financial anomalies, take effective measures in a timely manner, and effectively mitigate financial risks. To effectively reduce the financial pressure on enterprises, effective measures should be taken, such as adjusting the structure of liabilities reasonably, expanding financing channels, reducing financial pressure, and providing support for the sustained growth of enterprises [21,22].

In short, BG Group lacks reference experience in building a financial shared service center, and the construction of the shared center itself is a very complex process that will not go smoothly. In this process, continuous adjustments and improvements are needed to identify various problems in the implementation process. First, the company should establish a rigorous fund sharing procedure and provide training to all employees to ensure compliance with the procedure and standardize operations. Second, continuously revise the existing accounting treatment process that is not in line with the company's development status to adapt it to the company's development status. Finally, establish a risk prevention and warning system, and immediately handle situations that do not comply with business processes to reduce the likelihood of risk occurrence [23].

7. Conclusions, Limitations, and Implications for the Industry

The financial sharing model adopted by BG Group from 2009 to 2021 has achieved significant improvements in working capital management. The author will continue to pay attention to BG Group's significant practices in this field and make it a key research area for the future. BG Group's accounts receivable turnover period is significantly higher than the industry average, which has brought huge profits to the company. However, due to the instability of corporate credit policies, the company's bad debt risk is relatively high. In contrast, BG Group's accounts payable turnover period has remained relatively stable, close to the industry average, and has remained at a low level throughout the year. With the development of the industry, the inventory turnover period is also constantly changing, and after adopting the financial sharing model, this change is more obvious, and the inventory turnover period has been effectively maintained. The turnover period of working capital has always been higher than that of the same industry, but after the implementation of the shared center, the enterprise's working capital has been significantly improved. By establishing a financial sharing model, BG Group not only effectively solves the problem of inventory backlog, but also provides an effective strategic guidance for the development of the enterprise, making the internal capital structure of the group more scientific and reasonable.

This study adopts a case study approach to analyze the problems in working capital management under BG Group's financial sharing model, and proposes optimization measures based on this analysis. Although this case-based research method has the advantages of gaining a deeper understanding of the research object, providing real cases, and discovering specific problems, it also has some significant limitations: First, there is a lack of universal applicability. The results of case studies are often limited by specific contexts and conditions, making it difficult to directly generalize to other environments. Second, there is a high demand for case quality. The success of a case largely depends on the quality of the chosen case. High quality cases require representativeness, typicality, and completeness, but they are often difficult to obtain and limited in quantity. Third, there is a strong subjectivity. The results of case analysis are influenced by the subjective judgment and cognitive experience of researchers, which may lead to diversity and inconsistency in the analysis results.

Although there are limitations mentioned above, the conclusions of this study can still provide reference and guidance for companies in the industry to use financial sharing models to manage operating funds.

First, in order to improve the efficiency of enterprise fund management, it is possible to strengthen inventory supervision, control inventory quantities reasonably, and enhance the turnover efficiency of inventory in procurement, production, and marketing processes [24]. The big data function of financial sharing can help enterprises better achieve the above goals. For example, by utilizing financial sharing, it is possible to more accurately grasp the preferences and demand of the target group, summarize the production and sales situation of each round of the enterprise, take customers as the starting point, scientifically and reasonably complete the procurement of raw materials, and thus perfectly link market demand with the quantity of finished products. By utilizing financial sharing, it is possible to view the production cycle, type, and quantity of products in real time, and keep track of the dynamic changes in finished products at any time, thereby reducing waste caused by product backlog. By utilizing financial sharing, it can also enhance the timeliness of information transmission among various departments, encourage them to work together, communicate information between the finance and marketing departments, adjust production plans in a timely manner according to changes in market demand, and improve inventory turnover efficiency [25].

Second, utilizing financial sharing platforms to connect with corporate clients can enhance the matching degree between sales channels and business processes [26]. When selecting cooperative enterprise clients, it is necessary to conduct in-depth investigations into the client's background, strengthen credit management, improve and perfect the client's credit file, classify the client based on their financial status and credit level, and formulate credit policies according to the level. Enterprises should adhere to the basic principle of "collecting all receivables", focus on both daily management and key projects, increase collection efforts, focus on breaking through and reducing collection risks, promote repayment from key customers, and ensure profits with cash flow. At the same time, enterprises can use financial sharing platforms to develop supplier evaluation standards, optimize supplier management systems, strictly enforce supplier admission, assessment, and exit mechanisms, increase supplier control, and conduct comprehensive assessments and evaluations of suppliers, striving to establish long-term cooperative relationships with suppliers with high evaluations. Utilize a financial sharing platform to monitor and warn of accounts payable, control the repayment amount and deadline of accounts payable in a timely manner, and avoid excessive use of supplier funds that may cause difficulties in turnover and affect the establishment of a win-win partnership with suppliers [27].

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Conflicts of Interest

The authors report there are no competing interests to declare.

References

1 Mazanec J. The Impact of Working Capital Management on Corporate Performance in Small-Medium Enterprises in the Visegrad Group. *Mathematics* 2022; **10(6)**; 951.

2 Zhao MY, Ming BX, Li YQ, et al. Peer Effects of Working Capital Management: Considering the Moderating Effect of Knowledge Flow. *Frontiers in Psychology* 2022; **13**: 1054349.

3 Wang JX. *Research on the Working Capital Management Performance of a Enterprise under the Financial Sharing Mode*; Guilin University of Technology: Guilin, China, 2024; pp. 1–74.

4 Iqbala A, Wang ZQ. Enterprise Working Capital Management Performance through Channel Management in Financial Shared Center: A Case Study of Haier Group. In Proceedings of the 5th International Conference on Key Engineering Materials and Computer Science, Zhengzhou, China, 20–22 July 2018.

5 Yang P. *Research on the Performance of Working Capital Management of M Enterprises under the Financial Sharing Model*; Hubei University for Nationalities: Enshi, China, 2024; pp. 1–96.

6 Li XH. *Research on the Impact of Financial Sharing Model on Working Capital Management of H Company*; Shanxi University of Finance and Economics: Taiyuan, Chima, 2024; pp. 1–60.

7 Yang Y. The Efficiency of Working Capital Management in the Logistics Industry Using the O2O Model: The Case of SF Group. Master’s Thesis, ISCTE-Instituto Universitario de Lisboa, Lisboa, Portugal, 2018.

8 Wang YQ. Research on the Problems and Countermeasures of Enterprise Working Capital Management. *Chinese Market* 2022; **1**: 75–76.

9 Chen HQ. On Working Capital Management under the Background of Financial Sharing. *National Circulation Economy* 2020; **6**: 99–100.

10 Yang LL. The Impact of Working Capital Management Strategies on Enterprise Profitability. *Public Investment Guide* 2021; **19**: 47–48.

11 Fan XJ. The Important Impact of Financial Shared Services on Enterprise Financial Management. *Finance and Accounting Learning* 2021; **10**: 20–22.

12 Prša D. The Impact of Working Capital Management on the Profitability of Croatian Manufacturing SMEs. *Ekonomski vjesnik/Econviews: Review of Contemporary Business, Entrepreneurship and Economic Issues* 2020; **33(2)**: 371–382.

13 Prasad P, Sivasankaran N, Paul S, et al. Measuring Impact of Working Capital Efficiency on Financial Performance of a Firm: An Alternative Approach. *Journal of Indian Business Research* 2019; **11(1)**: 75–94.

14 Naumoski A. The Impact of Working Capital Management on Profitability of the Listed Companies in Emerging European Countries. In Proceedings of the 13th RSEP International Conference on Business, Economics & Finance, Istanbul, Turkey, 11–13 June 2019; pp. 374–381.

15 Vuković B, Jakšić D. The Effect of Working Capital Management on Profitability: Evidence from Southeast europe. *Економика пољопривреде* 2019; **66(1)**: 159–172.

16 Chen Z, Yang NX. Analysis of Performance Evaluation Methods for Working Capital Management. *China Collective Economy* 2020; **20**: 141–142.

17 Deng ZY. Research on the Impact of Financial Sharing on Enterprise Operating Capital Management. *Financial Audit* 2021; **13**: 166–167.

18 Guo XH. Study on the Effect of Financial Sharing Implementation on Working Capital Management Efficiency of a Company. *Modern Marketing* 2024; **10**: 128–130.

19 He XC. The Application of Financial Sharing Center in Working Capital Management of Group Enterprises. *Chinese and Foreign Corporate Culture* 2024; **6**: 71–73.

20 Shen HF. Research on Fund Control under the Financial Shared Center Model. *China Business Review* 2020; **3**: 187–188.

21 Shen QH. *Analysis of the Impact of Financial Sharing on Enterprise Operating Capital Management: A Case Study of Midea Group's Management Practice*; Jiangxi Normal University: Nanchang, China, 2020; pp. 1–61.

22 Wang JJ. Research on Improvement of Enterprise Working Capital Management. *Quality and Market* 2022; **2**: 142–144.

23 Wang LJ. Case Analysis of Management Accounting Informatization Based on Financial Sharing. *Finance and Accounting Communication* 2020; **19**: 150–154.

24 Xie CL. Analysis of Working Capital Management for Business Processes. *Finance and Accounting Communication* 2018; **26**: 83–87.

25 Zhang WQ. Research on Enterprise Operating Capital Management under Financial Sharing Mode-Taking Y Company as an Example. *Farm Economic Management* 2024; **4**: 56–58.

26 Zhao B. The Impact of Working Capital Management Strategies on Enterprise Profitability. *Finance and Accounting Monthly* 2020; **7**: 19–23.

27 Zhao Z. Research on the Management Strategy of Enterprise Operating Funds. *Modernization of Shopping Malls* 2021; **19**: 60–62.