

Research on the Evaluation of Retail Working Capital Management Based on Financial Sharing Mode under the Background of Informatization

Take Yonghui supermarket as an example

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Abstract—With the development of informatization, a series of problems, such as the mismatch between traditional financial management ability and business scale, slow turnover of working capital, restrict the development of enterprises. Financial Sharing Mode integrates information technology to promote financial and business cooperation, which is a new direction of enterprise financial management. Taking the Financial Sharing Center of Yonghui supermarket as an example to study the corresponding working capital situation during its construction stage of the Financial Sharing Center, this paper finds that the financial sharing mode can improve the working capital management ability of retail enterprises, and puts forward some suggestions on the problems that may exist in the construction process of Financial Sharing of retail enterprises, so as to provide reference for the promotion and application of Financial Sharing Service Center of retail enterprises in China.

Keywords- Informatization; Financial sharing mode; retail enterprises; Working capital management

1 INTRODUCTION

As a new financial management mode, financial sharing solves the problems of low efficiency of financial process and redundancy of organizational structure of large enterprise groups and

multinational companies through process standardization and resource integration, promotes the upgrading of financial management ability and financial transformation of enterprises [1]. Financial sharing ultimately promotes the overall value of enterprises. Working capital management is the core content of enterprise financial management, which has a great impact on enterprise profitability. Since ZTE established the first financial sharing service center in China in 2005, many well-known enterprises at home and abroad have established financial sharing service centers in China. In recent years, the number of financial sharing service centers has grown explosively due to the introduction of relevant policy support and the promotion of information technology such as big data, cloud computing and Internet of things. Large enterprise groups constantly adjust business processes, plan to introduce automation and intelligent tools to update information systems. Enterprises establish financial shared service center to realize integration and digital operation. However, compared with the mature development mode of foreign retail industry, the retail enterprises using the financial sharing mode account for a relatively low proportion in the industry distribution of China's financial sharing mode, which is still in the development period.

2 OVERVIEW OF FINANCIAL SHARING MODE

2.1 Definition of concept

The concept of financial sharing was first put forward by Robert Gunn et al. (1993), who pointed out that shared service is a new management mode to integrate the financial departments of enterprises which are more dispersed and enhance their competitiveness [2]. Scholars at home and abroad generally believe that the Financial Sharing Service Center is a new organization management mode. Relying on information technology, it extracts the accounting with miscellaneous information and low added value from the scattered business departments. On the basis of standardizing and simplifying the internal process of the enterprise, it integrates the financial operation and reengineers the management process to meet the requirements of cost reduction and efficiency increase the purpose of improving the overall financial management level of the group.

2.2 Compared with the traditional model

Under the traditional financial management mode, group enterprises are affected by the disadvantages of scattered resources and non-standard management process, which can not control the financial information of subordinate companies in time. The current management structure increases the difficulty and cost of management. Different enterprises have different financial management methods, internal management systems and business processes, so the information can not be fully shared in the group.

In the financial sharing mode, the group headquarters uses modern information technology to change the traditional financial management mode, puts the scattered business in a unified management environment, and better supports the development of other business of the enterprise. The financial sharing model standardizes the business process, standardizes the requirements of enterprise financial accounting, and maintains the consistency of accounting

caliber, which is conducive to enhancing the reliability and comparability of financial accounting results, and can better provide decision support and business management services for enterprises; The use of highly information and network means to change the traditional way of data decentralized processing, achieve financial and business data integration and analysis, reduce duplication of work, improve business processing efficiency and management level, but also improve the quality of financial information.

3 FINANCIAL SHARING MODE AND WORKING CAPITAL MANAGEMENT UNDER THE BACKGROUND OF INFORMATIZATION

Retail enterprises have a wide range of business, scattered stores, a large number of suppliers and other industry characteristics, resulting in greater pressure on working capital management. The construction of financial sharing mode depends on the establishment of information system. The financial sharing center relies on ERP digital platform, subdivides and standardizes business workflow, and combines various management systems and technologies to deepen the degree of informatization, which helps enterprises improve the efficiency of working capital management.

With the in-depth application of intelligent technology, the Financial Sharing Center has developed from the traditional accounting business to the data and supervision center. The financial sharing center integrates the financial data and business information of each branch and subsidiary of the group through the information platform, quantifies the information, effectively promotes the integration of financial business, improves the efficiency of financial information processing, better realizes the centralized management of working capital, and reduces the risk of working capital management [4]. The information platform can provide the functions of financial statistics, analysis and prediction and data reporting, and excavate the value of data information. The enterprise management can use the data simulation technology to develop efficient working capital management plan, and effectively reduce the risk of management decision-making.

With the deep application of cloud computing, OCR recognition, machine learning and other technologies, the functions of Financial Sharing Center are gradually diversified. The development of informatization simplifies business operation, helps to improve business processing capacity and speed, eliminates duplicate business processing posts, and greatly reduces the number of front-line business processing personnel. In the current context of rising labor costs, the scale effect brought by business concentration can effectively reduce the operating costs of enterprise groups and highlight the competitive advantage of enterprise working capital management [3].

4 RESEARCH ON THE APPLICATION OF FINANCIAL SHARING MODE IN YONGHUI SUPERMARKET

4.1 Overview of Yonghui supermarket Financial Sharing Center

Yonghui supermarket, founded in 2001 and headquartered in Fuzhou City, Fujian Province, is a large enterprise group based on retail industry, modern logistics, modern agriculture and food industry, and industrial development. It is one of the first circulation enterprises in China to introduce fresh agricultural products into modern supermarkets. Yonghui supermarket has developed over 1000 chain supermarkets in China, covering 29 provinces and 572 cities, with an operating area of more than 7.5 million square meters. It is one of the few supermarket enterprises in the industry that are still expanding and can make profits in most areas. In this case study, according to Peng Xinmin et al. (2011) division of the establishment period of Financial Sharing Center [5], according to the development stages of Yonghui supermarket Financial Sharing Center Construction: Regional Sharing, national sharing and blockchain sharing, Yonghui supermarket Financial Sharing construction is divided into initial stage (2010-2012), development stage (2012-2015) and mature stage (2016-2019).

4.2 Analysis method

This paper analyzes the working capital of Yonghui supermarket with reference to Wang Zhuquan et al. (2012) working capital management performance evaluation method based on channel management [6]. Purchasing channel and marketing channel are the main research objects, and production channel is the auxiliary research object. The calculation formula is as follows:

1) Working capital turnover period of purchasing channel = working capital of purchasing channel ÷ (2 operating costs ÷ 360) = (raw materials + inventory + prepayment - notes payable - accounts payable) ÷ (2 operating costs ÷ 360)

2) Turnover period of marketing channel working capital = marketing channel working capital ÷ (2 operating costs ÷ 360) = (goods in stock + notes receivable + accounts receivable - taxes payable - accounts receivable in advance) ÷ (2 operating costs ÷ 360)

3) Working capital turnover period of production channel = working capital of production channel ÷ (2 operating costs ÷ 360) = (low value consumables + other receivables - other receivables - employee compensation payable) ÷ (2 operating costs ÷ 360)

4) Working capital turnover period of business activities = total working capital of business activities ÷ (2 operating income ÷ 360) = (purchasing channel working capital + marketing channel working capital + production channel working capital) ÷ (2 operating income ÷ 360)

4.3 Evaluation of working capital management in the initial stage

This paper sorts out the data of Yonghui supermarket Financial Sharing Center in the initial stage (2010-2012), calculates the working capital turnover period of three channels, and obtains

the working capital turnover period of business activities by synthesizing the data of each channel. The results include Table 1 and Figure 1 as follows:

TABLE 1. TURNOVER PERIOD OF BUSINESS ACTIVITIES OF YONGHUI SUPERMARKET FROM 2010 TO 2012

	2010	2011	2012
Working capital turnover period of purchasing channel	21.67	22.39	5.06
Working capital turnover period of marketing channel	39.37	46.73	37.94
Working capital turnover period of production channel	-0.06	10.08	7.04
Working capital turnover period of business activities	49.32	63.95	40.26

Data source: Yonghui supermarket 2010-2012 annual report data collation

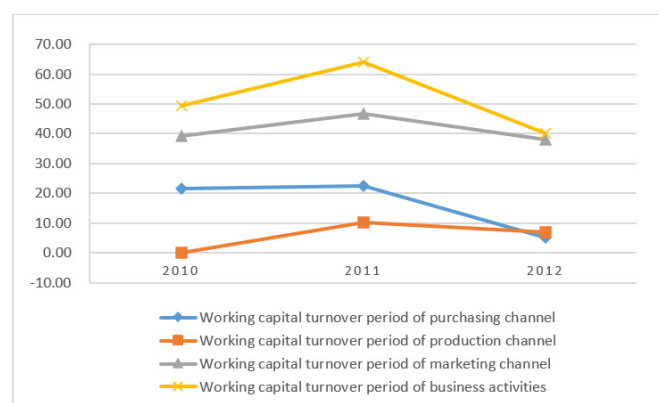


Figure 1 working capital turnover period of Yonghui supermarket from 2010 to 2012

Combined with the chart, in the early stage of the construction of Yonghui supermarket Financial Sharing Center, 2011 was taken as the time node, and all index data showed an upward trend from 2010 to 2011, and all index data decreased after 2011. It shows that the construction of Financial Sharing Center of Yonghui supermarket has begun to take effect and plays an important role in optimizing working capital management. Commodity purchasing of retail enterprises belongs to their main business activities, and purchasing channel is the focus of working capital management. Under the purchasing channel, the working capital turnover period of Yonghui supermarket decreased from 21.67 days to 5.06 days. The turnover period of marketing channel working capital decreased from 46.73 days to 37.94 days, but in all indicators, Yonghui supermarket has a longer turnover period of marketing channel working capital. Due to less production business and less working capital turnover days of production channels in retail industry, the phenomenon of negative turnover period appeared in 2010,

reflecting the characteristics of short capital occupation cycle. After comprehensive calculation, the working capital turnover days of business activities decreased by 23.69 days, and the efficiency of enterprise management has been greatly improved.

Yonghui supermarket mainly focused on this business process when building the Financial Sharing Center. Although the Financial Sharing Center of Yonghui supermarket was in the period of rapid expansion when it was founded, there was a balance between the inventory and daily operating capital occupation and the supplier's accounts payable after the implementation of financial sharing, which showed that the enterprise improved the management and control ability of working capital through business process specification and financial sharing.

4.4 Evaluation of working capital management in development period

This paper sorts out the data of Yonghui supermarket Financial Sharing Center during its development period (2013-2015), and calculates the working capital turnover period of operating activities and the working capital turnover period of various channels. The results includes Table 2 and Figure 2 as follows:

TABLE 2. TURNOVER PERIOD OF BUSINESS ACTIVITIES OF YONGHUI SUPERMARKET FROM 2013 TO 2015

	2013	2014	2015
Working capital turnover period of purchasing channel	3.24	-2.03	0.01
Working capital turnover period of marketing channel	32.32	29.69	29.92
Working capital turnover period of production channel	0.22	-3.26	-4.70
Working capital turnover period of business activities	28.91	19.60	20.23

Data source: Yonghui supermarket 2013-2015 annual report data collation

Combined with the chart, it can be concluded that in the development period, the working capital turnover period of each channel of Yonghui supermarket has been shortened continuously, and the working capital management efficiency has been improved.

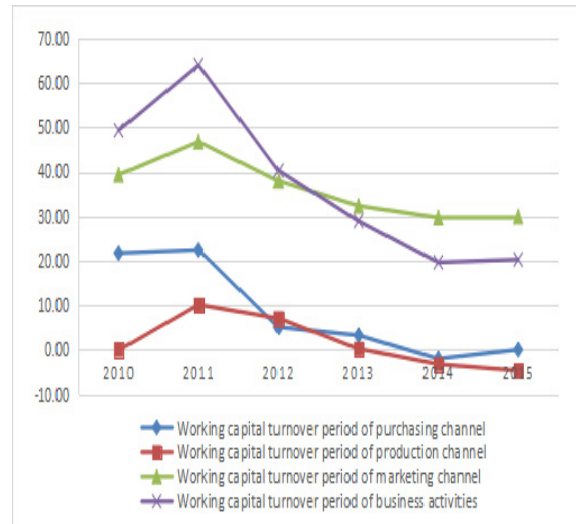


Figure 2 working capital turnover period of Yonghui supermarket from 2010 to 2015

The turnover period of working capital of purchasing channels showed a downward trend, from 21.67 days in 2010 to 0.01 days in 2015. In the development period, the Financial Sharing Center of Yonghui supermarket has developed from the centralized management of funds to the centralized management of business processes. The growth rate of inventory is less than that of accounts payable, and the application ability of accounts payable to suppliers is strengthened. In 2014, the growth rate of accounts payable was as high as 21.21%, and the turnover period of working capital of purchasing channels decreased to -2.03, which indicates that enterprises rely on the financial sharing mode to stabilize working capital management and optimize capital allocation efficiency in business expansion. The turnover period of marketing channel working capital and production channel working capital have kept a gentle downward trend since the implementation of the construction of Financial Sharing Center in 2011. Purchasing channel and production channel indicators have been kept at a low level. After comprehensive calculation, it is concluded that the working capital turnover period of business activities first decreases and then develops horizontally, the process standardization reduces the operation cost, and the operation effect of Yonghui supermarket Financial Sharing Center is obvious.

At this stage, Yonghui Supermarket launched the electronic seal and invoice management system, introduced the image and document management system, centralized control of receivables and payables and expense reimbursement, and realized the paperless sharing of payments and electronic documents across the country. Financial Sharing Center makes Yonghui supermarket financial work scale processing, workflow more standardized and rigorous.

4.5 Evaluation of working capital management in mature period

This paper sorts out the data of Yonghui supermarket Financial Sharing Center in the mature period (2016-2019), calculates the working capital turnover period of each channel, and

comprehensively calculates the working capital turnover period of business activities. The results include Table 3 and Figure 3 as follows:

TABLE 3. TURNOVER PERIOD OF BUSINESS ACTIVITIES OF YONGHUI SUPERMARKET FROM 2016 TO 2019

	2016	2017	2018	2019
Working capital turnover period of purchasing channel	2.08	-1.70	2.46	8.61
Working capital turnover period of marketing channel	36.09	32.44	48.21	51.70
Working capital turnover period of production channel	-3.76	-11.86	-18.87	-16.12
Working capital turnover period of business activities	27.46	14.95	24.76	34.66

Data source: Yonghui supermarket 2016-2019 annual report data collation

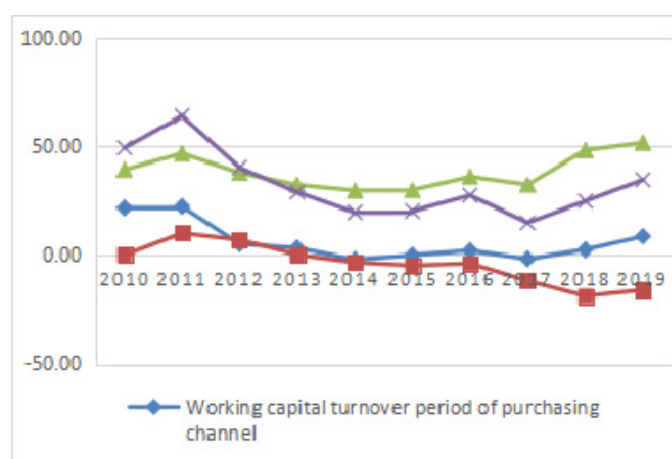


Figure 3 working capital turnover period of Yonghui supermarket from 2010 to 2019

Combined with the chart, it can be concluded that in the mature period, the working capital turnover period of procurement, marketing and production channels shows different degrees of first decrease and then increase. The working capital turnover period of procurement channels has been floating around 0 before 2018, and it will increase significantly in 2019, reaching 8.61 days. The turnover days of marketing channel working capital increased by 15.61 days. Although the working capital turnover period of production channels has increased, the value is always negative. The establishment of Financial Sharing Center reduces the burden of human cost of enterprise financial system and optimizes the organizational structure. Therefore, the turnover period of operating activities working capital calculated by comprehensive calculation also presents the same change trend, and the turnover period in 2019 increases by 7.2 days compared with that in 2016.

In the mature stage of Financial Sharing Center, after a period of stability, the impact of Financial Sharing Center on working capital management in this stage is different from the first two stages. The negative effects brought by the expansion of business scale make the efficiency of working capital management decline, and the supporting effect of Financial Sharing Mode on enterprise financial management gradually weakens. In the gradual development of the Financial Sharing Center, we need to transform and improve the function of the Financial Sharing Center, optimize and improve the positioning of the sharing center, and become the efficiency engine within the group.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Research conclusion

5.1.1 Financial Sharing Mode to improve the efficiency of working capital management of retail enterprises

The financial sharing mode plays a positive role in improving the working capital management efficiency of retail enterprises. Due to the characteristics of retail enterprises such as wide business scope and large number of stores, the traditional management mode of enterprise financial unit is scattered, which makes the working capital management more difficult. As a new development of enterprise centralized management mode in the financial system, financial sharing standardizes, reorganizes and upgrades the original business process, innovates and uses all kinds of big data technology, analyzes, screens and transforms the business process, realizes the cross organization integration from the service end to the client end, and optimizes and forms a set of information system operation process, so as to realize the flexible flow of working capital in each business module and improve the operation ability of the enterprise.

5.1.2 Different stages of financial sharing have different effects on the efficiency of working capital management

In the initial stage of the Financial Sharing Center, retail enterprises implement centralized capital management, cooperate with the support of information system to collect the capital units scattered in various stores, comprehensively integrate the enterprise's inventory capital, improve the efficiency of enterprise's working capital, and enable the headquarters to grasp the financial situation of stores in various regions more effectively.

In the development period, business process reengineering and financial integration become the focus of Enterprise Financial Sharing Center construction. With the help of data center, enterprises upgrade SAP system and service system for suppliers, introduce electronic signature and invoice management system, realize nationwide paperless reconciliation, and improve the settlement efficiency of accounts payable with suppliers. Retail enterprises audit expense reimbursement in a large scale through Financial Sharing Center, supervise the status and progress of the whole process from collection to entry, realize centralized check of financial information generated by business and data integrity of financial system, fully integrate the existing business of enterprises, and deepen the degree of financial integration.

When entering a mature stage, the effect of the original financial sharing operation on the efficiency of working capital management is weaker than that in the development period. With the improvement of the system and process, the role of the Financial Sharing Center is limited at the present stage, so it needs to be optimized and improved to undertake the financial functions that are not shared centrally.

5.2 Recommendations

5.2.1 Establish an interconnected system based on operation management

In order to maximize the value of enterprises, we should take customers as the center, bring suppliers and channels into the interconnected development system based on operation management, and integrate customer demand, market information, working capital and other factors into the centralized circulation of Financial Sharing Center. In this way, enterprises can integrate sales resources and sales platform based on customers'; demand for products and services, improve the bargaining power of inventory, and occupy cooperative funds for suppliers, which greatly increases the flow speed of working capital and fully realizes the creation of value.

5.2.2 The application scope of Financial Sharing Center needs to be expanded

With the mature development of big data environment and the promotion and upgrading of information system technology, business behavior with Internet as the media gradually occupies a dominant position. In the future, the business scope of Financial Sharing Center and its impact on the core competitiveness of enterprises will continue to expand, and gradually expand to the vast majority of the process of enterprise value chain, so as to achieve a full range of business sharing services from a single financial business, and output high-quality services for enterprise organization and operation.

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