Supplier Firm and Customer Firm Relationship on the Performance of Working Capital Management

Asif Iqbal[1], Maqsood Hayat[2]

Abstract:

Purpose: *This paper examines how supplier-firm relationship and firm-customer relationship affect the performances of the firm's working capital management of purchasing channels and marketing channels respectively.*

Design/Methodology/ Approach: *The article selects data of listed companies in manufacturing industry from 2016 to 2017 as a sample, and empirically analyzes the mechanism of supply chain management of manufacturing enterprises that affects the performance of operational working capital management.*

Findings: *Our results reveals that working capital turnover in purchasing channels is adversely related to the timeliness of payments (receivables), which shows that overdue loan (undue credit) decreases the efficiency of working capital management in purchasing channels. Our results also describe that the association between working capital conversion cycle in purchasing channels and the supplier concentration is "U-shaped", which demonstrate that both centralize and diversification of suppliers have their drawbacks and an appropriate number of suppliers need to be taken into considerations. Beside this, we find in this study that the relationship between working capital conversion cycle in marketing channels and customer focus is negative and U-shaped, which shows that different degrees of customer focus need to be treated differently. In addition, we find out that both the purchasing channels and working capital turnover periods of marketing channels are negatively correlated with the degree of leverage and the relationship between banks and enterprises.*

Practical Implications: *We introduce the performance of working capital management based on "channel management" and study the influence of customer relationship and supplier relationship on the "purchasing channels" of the enterprise and the working capital management performance of the "marketing channel" respectively to improve the working capital management performance through the supply chain management.*

Originality/Value: *Therefore, firms should make full use of leverage and maintain fair and good relationship with banks.*

Keywords: *Supplier relationship, customer relationship, working capital management.*

JEL Code: *E22, M16, F21, F32.*
Paper Type: *Research study.*

---

[1] *Alhamd Islamic University Islamabad,* *asifiqbal05@hotmail.com*
[2] *Yunnan University of Finance and Economics, Kunming, China*

1. Introduction

The buyer-seller relationship is a competing and cooperative one that integrates the flow of information of logistics and capital of an enterprise in a systematic way, both within and outside the enterprise, in order to achieve the enterprise added value through the creation and realization of the entire supply chain value. In this context we can say that the competition in 21st century has been transformed into the competition among the supply chains where the enterprises are located. According to Ellarm and Liu (2002) and Hofmann and Locker (2009), supply chain management has a substantial influence on a firm's financial performance. Managing the supply chains is the core business of retailers because retailers experience value addition in moving product from manufacturers or suppliers to the point of consumption (Singh *et al.,* 2018). Supply chain management is the management of materials and information flow in a firm to provide the highest degree of customer satisfaction at the lowest possible cost (Palmer, 2012).

Supply chain management and working capital management are the two important aspects of an enterprise. Characteristically supply chain management has focused on the physical flow of goods and services while working capital management represents the management of financial flows. Working capital measures a company's efficiency and represents the liquid assets that are available with a firm (Le Hoang-Lan *et al.,* 2018).

No one can deny the importance and influence of working capital management and supply chain management on a firm's profitability. An efficient management of working capital and supply chain management determines the survival and development of enterprise which enables a firm to spare more capital for strategic objectives, minimize the financial costs and improve the firm's profitability. The change in competitive environment will have an inevitable and profound impact on the management of supply chain and working capital of enterprises. Therefore the study of supply chain management that affects the performance of working capital management is of great importance.

Supplier relationship management and customer relationship management are the vital components of supply chain management. Maintaining an appropriate level of inventory is a key issue to firms operational performance (Shin, Seungjae *et al.,* 2015). Through strategic partnership with small number of suppliers who are willing to share information and responsibilities, enterprises can minimize inventory management cost, avail different discounts, reduce raw materials supply cost, improve raw material quality and reduce lead time and logistics costs (Chen and Paulraj, 2004). However too many supplier means that the manufacturer firms are highly dependent on suppliers and the supply chain profits will split between the two sides. This high degree of dependency may lead suppliers to use high raw material prices, lower quality and harsh supply conditions to the manufacturer, effecting to reduce the manufacturer procurement channel of working capital management

performance. Similarly, high degree of customer focus and attention will facilitate both the parties in formation of a close strategic partnership and integration of sales channels (Magretta, 1998), that will enhance the manufacturer's marketing channel of working capital management performance.

However, as we know that the client/customer is the end user for buying and purchasing the product of a company customers who spends large amounts of money to buy the products are considered more dominant in negotiations and bargaining due to more and higher purchase volume. When customers have the bargaining power, they can apply pressure on a company. When such a superior customer threats the manufacturer, it will affect a decline in the marketing channel of working capital management performance. Such customers can affect the competitive environment and directly influence profitability for the company.

Very few and limited systematic study is available on "How the supplier relationship and customer relationship affect the performance of the enterprise's working capital management", "how to effectively speed up the capital turnover and increase the competitiveness of enterprises through the management of supplier relationship and customer relationship management". In this article we studied the ways and mechanism of the impact of customer relationship and supplier relationship on the performance of the operating cash management of enterprises. In this research article, for the first time, we introduce the performance of working capital management based on "channel management" and studies the influence of customer relationship and supplier relationship on the "purchasing channels" of the enterprise and the working capital management performance of the "marketing channel" respectively to improve the working capital management performance through the supply chain management.

2. Literature Review

2.1 Impact of Suppliers' Relationship Management on the Performance of Procurement Channels of Working Capital Management

In the early 1980s, Japanese industry stepped up its research and development and several companies became famous for their inventions and creativity, moving from dependency on exports to reliance on internal demand. This rapid growth in high technology industries such as automobiles, electronics, home appliances and other high quality products with low prices motivate the researchers and academicians to examine the mysteries of the success of Japanese firms. Research suggests that firm-supplier relationship is no longer a pure buyer-seller relationship, but rather a competitive and cooperative one (Kawasaki and McMillan, 1987). Reducing the number raw material suppliers and service providers, will not only decrease the management costs but the firm will have more energy to improve the relationship with selected suppliers. Further, this decrease in the cost of raw materials will improve the quality of raw materials and shorten supply time.

Although there are many benefits to establish a strategic partnership with a small number of suppliers, however too few suppliers or too many suppliers often means that manufacturers are highly dependent on suppliers and the supply chain profits will split between the two sides. Such a high degree of dependency on suppliers will reduce the bargaining power of manufacturer. In order to avail more profits, supplier may apply pressure on the manufacturer by providing the high prices raw materials, lower quality and harsh supply conditions which will prolong the working capital turnover period of the manufacturer procurement channels. Purchasing a minimal amount of the total purchase from multiple suppliers will reduce the dependency on a single supplier. It will increase the bargaining power of the manufacturer and will reduce the transfer cost. Such conditions compel the suppliers to compete each other by providing high quality, low cost raw materials, better credit policies and favorable supplier approach to manufacturer that will reduce the working capital turnover procurement channel. The above discussion demonstrates that there should be an optimal number of suppliers, enabling manufacturers to better supply chain integration and supplier dependency. In general, high number of suppliers, the lower will be the focus of supply and vice versa. Based on the above analysis we proposed the following hypothesis.

H1: Enterprise procurement channel of working capital time period is positively related to suppliers and "U"-shaped.

Traditionally it is believed that firms with longer payment period for purchases are more profitable (funds to be invested somewhere else). However, in the era of supply chain competition, enterprises and suppliers compete with each other and excessive outstanding can cause dissatisfaction among suppliers and even push the suppliers to competitors. It is very vital for the enterprise to have an optimal number of suppliers as well as to establish and maintain a long term relationship with suppliers. In addition to deliver goods on time and in good quality and quantity, mutual understanding of product design, material selection, technology programs and other aspects of the common interest need to comply with the contract manufacturing enterprises (timely and full payment of purchases). In other words, the more payment the more favorable conditions to establish and maintain a good strategic partnership with suppliers, which in turn helps to improve the performance of the working capital management of its procurement channels.

H2 : Manufacturer procurement channel time of working capital is negatively related to payment period.

2.2 Impact of Customer Relationship on the Performance of Marketing Channel of Working Capital Management

As the "seller's market" shifts to the "buyer's market" and the rapid response system continues to evolve, customer relations are increasingly valued by theorists and practitioners. Greater customer focus facilitates the formation of close strategic

partnerships and consolidation of sales channels (Magretta, 1998), which in turn enhances the management performance of the manufacturer's marketing channel of working capital. However, the client is responsible for understanding and purchasing the products as the ultimate consumer and larger customers are more dominant in the negotiations due to the larger purchase volume. The bargaining powres of such dominant customers with the manufacturer will affect a decline in the marketing channel of working capital management performance. On the contrary, as the number of customer increase, the margin of maximum wholesale price of the products will decrease and the minimum wholesale price will increase. The margin for wholesale price that customer can avail will be smaller and the bargaining power of the enterprise will be enhanced (Guo *et al.,* 2008) which will improve the performance of marketing channel of working capital management. Neither too many nor too few customers, but there should be an optimal number of customers so that manufacturers can have a balance between the supply chain integration and customer dependencey. This will reduce working capital turnover period of marketing channels, and improve the performance of marketing channel of working capital management.

H3: Manufacturer marketing channel of working capital time period is positively related with customer focus and "U"–shaped.

Customer preference information is considered as a key element for future market demand. In order to obtain more accurate information on the potential and direction of future market demand, in addition to make full use of modern information technology, enterprises should also enhance their mutual cooperation with downstream distributors and retailers and establish good customer relationships so as to realize the win-win situation of creating value for customers and creating value for themselves (Fynes *et al.,* 2005). Manufacturing companies and downstream customers to establish a good partnership can get many benefits such as access to downstream market demand information, maintain customer loyalty, accelerate the recovery of goods (Magretta, 1998). Therefore, a good customer relationship is conducive to reduce business marketing channel of working capital turnover. As the trust is mutual, the establishment and maintenance of the long-term cooperation and relationship with the customer needs to comply the contract and payment of goods in time, in addition to provide satisfactory products or services in time. In supply chain competition, we expect the more timely payment and the better strategic cooperation between enterprises and customers, the more effective balance between the accounts receivable and the inventory, will improve the performance of marketing channel of working capital management. Based on this assumption our next hypothesis is:

H4: Manufacturer's marketing channel of working capital turnover period is negatively related to the collection period.

Chiou *et al.* (2006) argue that the degree of commercial prosperity will affect the working capital management of enterprises. During the economic recession,

enterprises generally reduce credit sales or increase the collection of accounts receivable, and delay payment of the purchases as much as possible to deal with external funds. In terms of working capital management performance, due to the impact of the financial crisis, 14 of 21 industries in China's listed companies experienced significantly lower working capital management performance in 2008 than in 2007 and in two or three industries a simultaneous decilne were found in the performance of working capital management management (Wang Zhuquan *et al.,* 2009). According to the survey results of 2010, the performance of working capital management of listed companies in China has been raised over 2009, and the performance of working capital management in export-oriented industries is gradually increased (Wang Zhuluan et al., 2011). This shows that the macroeconomic environment does affect the performance of corporate working capital management.

3. Data Collection and Variables

3.1 Sample Selection and Sources

Since China started to implement the new Accounting Standard for Business Enterprises in 2007, it has changed both in the setting of accounting subjects and in the way of handling business and presenting information. In the year of implementation, this fluctuation was especially obvious. Considering the changes of the "Accounting Standards for Business Enterprises", the change of the consensus index and the impact of the macroeconomic environment, this paper sets the time frame of the research sample as 2016-2017. In addition, working capital management in different industries is somewhat different (Hawawini *et al.,* 1986).

Considering the above factors, this article selects the data of listed companies in manufacturing industry from 2016 to 2017 as a sample, and empirically analyzes the mechanism of supply chain management of manufacturing enterprises that affects the performance of operational working capital management. We have collected the procurement and marketing channels working capital turnover period from the China Enterprise Working Capital Management Research Center State-owned company's working capital management database. Account payables, account receivables procurement ratios, sales ratios of top five customers of enterprises are extracted from the consolidated financial reports disclosed by the enterprise.

3.2 Variables and Models

The indicators for evaluating the performance of working capital management mainly include the requirements for working capital (Chiou *et al.,* 2006), such as net profit and working capital requirements, financial ratios (Gupta, 1969; Lamberson, 1995), current ratio and quick ratio, (Deloof, 2003; Gill *et al.,* 2010), cash turnover, inventory turnover, accounts receivable turnover and accounts payable turnover period. From the existing literature on the measurement of working capital

management performance indicators, the literature based on turnover indicators are mostly followed by indicators of working capital requirements, with the current ratio, quick ratio and other indicators. This paper intends to use the turnover indicator to measure the working capital's turnover performance. Since the turnover indicator of each factor breaks down the relationship between each item of working capital and the channel or supply chain, and the factors considered are not comprehensive and complete, this article verifies the supplier relationship and customer relationship on the performance of the procurement channel and the working capital management of the marketing channel. Therefore, this paper takes the working capital turnover period based on the channel as the dependent variable, including the turnover period of the working capital of the procurement channel and the working capital turnover period of the marketing channel (Wang Zhuquan *et al.,* 2009; Wang Zhuquan *et al.,* 2011).

The independent variables in this article include supplier focus, payment period, customer focus and collection period. From domestic and foreign literatures, it is generally considered that the influencing factors of working capital management mainly include the macroeconomic environment (Chiou, 2006), return on assets (Deloof, 2003; Lazaridis and Tryfonidis, 2006), debt-to-asset ratio (Chiou, 2006), sales growth, operating cash flow, firm size, firm performance, Tobin's Q, industry characteristics (Deloof, 2003; Chiou, 2006) and corporate governance. Since the sample data selected in this paper is from a single industry and the macroeconomic environment is relatively stable during this period, we do not consider the impact of industry and macroeconomic environment. In general, the higher the return on assets, the better corporate performance, the corresponding Tobin's Q value is greater, so this article choose return on assets as a control variable. In addition, due to the continuous development of supply chain finance, the good relationship between enterprises and banks can objectively promote their better use of receivables, inventories etc. Inventory control and other financial instruments, reduce the occupancy level of accounts receivable and inventory and enhance the performance of operational working capital management. It is difficult to distinguish it from the working capital management performance of supply chain management.

Therefore, we consider relationship between enterprises as a control variable. In summary, the control variables selected in this paper include return on assets, debt-to-asset ratio, sales revenue growth, operating cash flow, firm size, bank-enterprise relationship and year.

In order to study the mechanism of the influence of supplier relationship and customer relationship on the purchasing channels and the working capital management performance of marketing channels, this paper constructs a model (Equation 1) for testing. The meanings and calculation methods of each variable in the model are shown in Table 1.

$$\begin{aligned} PURcycle(MARcycle) = {} & \alpha0 + \alpha1\,PAYtime(REC time) + \alpha2 PURrate(SALrate) \\ & + \alpha3 PURrate2(SALrate2) + CONTROLS + Year + \varepsilon \end{aligned} \tag{1}$$

Table 1. *Variable definitions*

Variable Name	Variable calculation	Variabe Sign
Procurement channels working capital turnover	(Raw material Inventory + Prepayments - Accounts Payable –Notes Payable) ×360/Revenue	PURcycle
Marketing channels Working capital	(inventory of goods, finished products, etc. + accounts receivable - receipts in advance + notes receivable - tax payable	Marcycle
Collection time period	Within one year accounts receivable / total accounts receivable	RECtime
Supplier paymet period	Within one year accounts payable / total accounts payable	PAYtime
Supplier aggregation degree	The top five suppliers purchase / purchase of the year	PURrate
Sales revenue sGrowth rate	(Current operating income - last operating income) /previous operating income	Growth
Customer gathering degree	Sales of the top five customers / total sales of the year	Salerate
Operating cash flow	Current net cash flow × 2 / (total assets at the beginning of the year + total assets at the end of the year)	OCF_TA
Return on assets	Net profit × 2 / (total assets at the beginning of the year+ total assets at the end of the year)	ROAETS
Assets and liabilities	(Beginning of the year debt + year-end debt) / (total assets at the beginning of the year + total assets at the end of the year)	*LEV*
Enterprise size	The natural logarithm of the average balance of total assets Dummy variables , time to establish business as a business and banking relationships. Enterprise	*SIZE*
Bank-enterprise relations	The founding date of the annual report disclosed in the first registration time shall prevail , undisclosed to Sina Finance Net disclosure of the first registration time shall prevail. Then calculate all sample companies and banks to establish customs The median time-based, the variable 1 is taken above the median, otherwise set to 0	*Bktime*
Year	Dummy variable, taking 0 2016 2017 1 to take	*Year*

Source: *Own.*

4. Results

In this artcle we have excluded companies with missing data and data anomalies, and then we perform the 1% quantile Winsorize function in all variables. The descriptive statistics of various channels in the sample enterprises are shown in Table 2.

Table 2. *Distriptive statistics*

	Descriptive									
	Procurement channels					Marketing channels				
Variable	Obser vation	Minimum	Maximu m	Mean	Standard deviation	Observa tion	Minimum	Maximu m	Mean	Standard deviation
PURcycl e/MARcy cle	504	-164.299	73.1066	-36.9915	46.7546	603	-26.886	309.2035	126.986	71.9407
PAYtime /RECtim e	504	0.5614	1	0.9294	0.0783	603	0.4187	0.9996	0.8368	0.1308
PURrate /SALrate	504	0.0686	0.8683	0.3168	0.1657	603	0.0435	0.6948	0.2935	0.1639
ROAETS	504	-0.0271	0.2012	0.0651	0.042	603	-0.0305	0.2108	0.0651	0.0414
LEV	504	0.0561	0.8471	0.3955	0.1919	603	0.0576	0.8569	0.3979	0.1889
GROWTH	504	-0.2858	1.4521	0.2588	0.2808	603	-0.2701	1.4521	0.2595	0.2678
OCF_TA	504	-0.2025	0.2524	0.0171	0.0752	603	-0.2025	0.2524	0.0189	0.0751
SIZE	504	19.6036	25.1342	21.3904	1.13168	603	19.6036	25.1454	21.489	1.1691
Bktime	504	0	1	0.4306	0.4957	603	0	1	0.4279	0.4952

Source: *Own.*

Table 3 describe the correlation coefficient of the study. The results describe that both PURcycle and PAYtime were significant and negatively correlated, indicating that more timely the payment, the lower the working capital turnover period of the purchasing channel, which is consistent with the hypothesis 2. Similarly the results in Table 3 describe that MARcycle and RECtime are significantly negatively correlated, indicating that the more timely the payment, the lower the working capital turnover period of the marketing channel which is consistent with hypothesis 4. At the same time, the correlation between other variables is also very reasonable.

Table 3. *Pearson Correlation Analysis*

	MARcycle	PAYtime	PURrate	RECtime	SALrate	GROWTH	ROAETS	LEV	OCF_TA	SIZE	BKtime
PURcycle	-0.058	-.206[a]	.156[a]	-0.01	-.081[c]	0.017	.216[a]	-.523[a]	-0.006	-.354[a]	-.133[a]
MARcycle		-.141[a]	-0.051	-.173[a]	.159[a]	-.185[a]	-.254[a]	-.151[a]	-.285[a]	-.178[a]	-0.047
PAYtime			0	.164[a]	-0.074	.153[a]	.153[a]	.080[c]	0.063	0.018	-0.057
PURrate				.256[a]	.274[a]	0.072	0.004	-.157[a]	-.126[a]	-.267[a]	-.090[c]
RECtime					.225[a]	.206[a]	.208[a]	-0.045	0.075	-0.057	-0.06
SALrate						-.083[c]	-.097[b]	-0.046	-0.041	-.208[a]	-0.073
GROWTH							.250[a]	0.056	.095[c]	0.071	0.006
ROAETS								-.395[a]	.389[a]	-0.059	-.134[a]
LEV									-0.064	.615[a]	.157[a]
OCF_TA										0.028	0.007
SIZE											.137[a]
Significant at (a,b,c). 1% 、5%, 10%											

Source: *Own.*

4.1 Regression Analysis

Table 4 shows positive "U" shapped relationship bewteen PURcycle and supplier relationship, supporting hypothesis 1. This shows that when the supplier number is large, due to higher management costs, a single supply of smaller supplier quotas make it difficult for manufacturing enterprises to supply chain integration, can not get the high scale of advantage, which will help to improve the performance of working capital management of procurement channels. When the number of suppliers is small, between a competing economic interests of the companies, manufacturers tend to easily over-dependence on suppliers, The reduction of the price ability is also not conducive to the improvement of the performance of the working capital management of procurement channels. As a result, suppliers are unitary and numerous.

Companies should choose the appropriate number of suppliers in the supply chain integration and supplier reliability between the effective balance to enhance the purchasing channel of working capital management performance. This conclusion is in line with the conclusion of Tang Yuejun (2009), and provides further empirical support for the longstanding dispute over the number of suppliers and the diversification of suppliers.

Timeliness of payment is negatively correlated with PURcycle at 1% significance level, which supports hypothesis 2, that is, the lower the proportion of default payment, the better the working capital turnover performance of manufacturer's purchasing channel indicates that the supplier's fund is excessively occupied under the competition of supply chain. In addition, the PURcycle is negatively correlated with the bank-enterprise relationship at the 10% significance level, indicating that better bank-enterprise relationship can help improve the performance of the corporate purchasing channel working capital management.

Table 4. *Regression Analysis*

variable	Purchasing channel		Marketing Channels	
	Regression Coefficient	T Value	Regression Coefficient	T Value
Intercept Term	168.383	3.299[a]	276.667	4.447[a]
PAYtime	-113.812	-4.822[a]		
PURrate	-56.874	-1.307		
PURrate2	103.493	1.987[b]		
RECtime			-84.861	-3.874[a]
SALrate			253.926	3.532[a]
SALrate2			-291.253	-2.956[a]
GROWTH	6.813	1.004	-29.346	-2.781[a]
OCF_TA	-4.312	-0.165	-161.712	-4.044[a]
ROAETS	95.447	1.771[c]	-300.255	-3.609[a]
LEV	-88.286	-6.436[a]	-52.711	-2.602[a]

SIZE	-3.225	-1.497	-2.933	-0.971
BKtime	-6.602	-1.778[c]	-10.368	-1.908[c]
Year	Yes			Yes
Adjusted R2	0.268			0.209
F Value	19.451[a]			16.866[a]
Sample Size	504			603

Source: *Own study.*

4.2 Marketing Channel Regression Analysis

As can be seen from Table 4, the square root of customer concentration is negatively correlated with MARcycle at 1% significance level, that is, the inverted square U-shaped relationship is opposite to hypothesis 3. This may be because the existing market is mostly the buyer's market. In order to improve the performance of the marketing channel's working capital management, the enterprise should have certain advantages of the marketing channel. When the customer concentration is low, companies in the marketing channels have strong bargaining power, one can request a higher price or more stringent credit policies, or even spot cash. When customers are more concentrated customers are becoming more and more important to manufacturers, and manufacturers are trying to maintain a good partnership with them. The close strategic partnership enables both parties to effectively share market demand information and integrate sales channels (Iyer and Villas-Boas, 2003). Timeliness of collection is negatively correlated with MARcycle at 1% significance level, supporting hypothesis 4, that is, the lower the proportion of payment arrears, the lower the working capital turnover period of marketing channels. In addition, MARcycle is negatively correlated with the bank-enterprise relationship at 10% significance level, that is, the better bank-enterprise relationship can help to improve the performance of corporate marketing channel of working capital management.

Taking into account the characteristics of cross-section regression, this paper tests the regression model for multiple collinearity, the maximum value of VIF of each variable does not exceed 2.34, and there is no multicollinearity that affects the regression results among the variables. At the same time, all models passed the tests of residuals.

In order to test the reliability of the above results, this paper makes the following robustness test. First, the level of corporate governance of an enterprise tends to have an impact on the performance of working capital management (Xin Yu and Xu Liping, 2006). The paper adds the shareholding ratio of the largest shareholder that reflects the level of corporate governance in the model and repeats the above research process. Second, compared with private enterprises, state-owned enterprises tend to shoulder more policy burdens and therefore enjoy more favorable policies such as cheaper loan funds (Fang Junxiong, 2007), lighter tax burden, government procurement support, etc., this article by adding the proportion of state-owned shares in the model, repeat the above research process. Judging from the regression results,

the goodness of fit and the significant test results of the models are consistent with the previous ones, and the regression results of the dependent variables in the model are also consistent with the previous ones.

5. Conclusion and Suggestions

The paper selects the data of listed companies in machinery and equipment manufacturing industry from 2016 to 2017, and conducts an empirical test on the mechanism of supplier relationship and customer relationship affecting the operating fund management performance. The results show that: (1) the working capital turnover period and payment; (2) the working capital turnover period of the procurement channel is positively "U"-shaped whith the supplier concentration degree and the suppliers are monopolized and diversified; (3) the working capital turnover period of the marketing channel is negatively related to the timeliness of payment, and the excessive credit sales are not conducive to the improvement of the performance of the working capital management of the marketing channel; (4) the working capital turnover period and the customer concentration of the marketing channel are inverted "U"-shaped relationship, enterprises should take different measures depending on the level of customer concentration. In addition, the research in this paper also finds that both the purchasing channels and working capital turnover periods of marketing channels are negatively correlated with the degree of leverage and the relationship between banks and enterprises. Therefore, enterprises should make full use of leverage and maintain the relationship with banks.

Competition in the 21st century is competition in the supply chain, and building good supplier relationships and customer relationships is very crucial. In order to improve the performance of the working capital management of procurement channels, enterprises should not adopt the traditional "default policy" and the simple "shop around shopping" strategy. They should choose the appropriate number of suppliers to establish strategic cooperation with them, with the relationship, and relatively timely payment of goods. In order to improve the performance of marketing channel's working capital management, the enterprises should sell credit modestly when the customer concentration is low, enterprises should strengthen customer relationship management, maintain existing customers and actively develop new clients in order to further enhance the bargaining power of their marketing channels. When the customer concentration is high, the enterprise should make full use of the existing close relationship, the sales channel integration or re-engineering, enhance the market share of enterprise products.

References:

Chen, I.J., Paulraj, A. 2004. Towards a theory of supply chain management: the constructs and measurements. Journal of Operations Management, 22, 119-150.

Chiou, J.R., Li, C., Wu, H.W. 2006. The determinants of working capital management. The Journal of American Academy of Business, 10(1), 149-155.

Deloof, M. 200. Does working capital management affect profitability of Belgian firms? Journal of Business Finance & Accounting, 30(3-4), 573-588.

Fynes, B., Voss, C., Búrca, S. 2005. The impact of supply chain relationship quality on quality performance. International Journal of Production Economics, 96, 339-354.

Fang, J. 2007. Ownership, Institutional Environment and Credit Funds Allocation. Economic Research, 12, 82-92.

Gill, A., Biger, N., Mathur, N. 2010. The relationship between working capital managment and proficiency: evidence from the United States. Business and Economics Journal, 10, 1-9.

Gupta, M.C. 1969. The effect of size, growth, and industry on the financial structure of manufacturing companies. Journal of Finance, 24(3), 517-529.

Guohong, L., Houcloud, F., Yang. B. 2008. Suppliers, manufacturers and Retailors: three supply chain cooperation game coordination model. Chinese Management Science, 16(6), 54-60.

Hawa Wini, G., Viallet, C., Vora, A. 1986. Industry influence on corporate working capital decisions. Sloan Management Review, Summer, 15-24.

Iyer, G., Villas-Boas, J.M. 2003. A bargaining theory of distribution channels. Journal of Marketing Research, 40(1), 80-100.

Kawasaki, S., McMillan, J. 1987. The design of contracts: evidence from Japanese subcontracting. Journal of the Japanese and International Economics, 1, 327-349.

Lamberson, M. 1995. Changes in working capital of small firms in relation to changes in economic activity. American Journal of Business, 10(2), 45-50.

Lazaridis, I., Tryfonidis, D. 2006. Relationship between working capital management and proficiency of listed companies in the Athens Stock Exchange. Journal of Financial Management and Analysis, 19(1), 26-35.

Le, H.L., Vu, K.T., et al. 2018. Impact of working capital management on financial performance: The case of Vietnam. International Journal of Applied Economics, Finance and Accounting, 3(1), 15-20.

Liu, L. 2003. Supply chain management ideas and the development of their theories and methods. Journal of Management Science, 4, 81-88.

Magretta, J. 1998. The power of virtual integration: An interview with Dell computer's Michael Dell. Harvard Business Review, 3-4, 71-84.

Palmer, A. 2012. Introduction to Marketing: Theory and Practice, 3rd Ed. Oxford U Press.

Schelling, T.C. 1956. An essay on bargaining. The American Economic Review, 46(3), 281.

Singh, R., Sandhu, H.S., et al. 2018. Supply Chain Management Practices, Competitive Advantage and Organizational Performance: A Confirmatory Factor Model. In Operations and Service Management: Concepts, Methodologies, Tools, and Applications. IGI Global.

Shin, S., Ennis, K.L., Spurlin, W.P. 2015. Effect of inventory management efficiency on profitability: Current evidence from the US manufacturing industry. Journal of Economics and Economic Education Research, 16(1), 98.

Tang, Y.J. 2009. Supplier, dealer bargaining power and company performance. China Industrial Economics, 10, 67-76.

Wang, Z., Liu, W., Wang, R., Zhang, X.I., Yang, L.F. 2009. Chinese Listed Companies Working Capital Management Survey: 2007-2008. Accounting Research, 9, 51-57.

Wang, Z., Sun, Y., et al. 2011. Chinese Listed Companies Working Capital Management Survey: 2010. Meeting Research, 12, 52-62 .

Xin, Yu., Xu, Liping. 2006. Corporate Governance Mechanism and Excess Cash Holdings. Management World, 5, 136-141.