Competitiveness as the Factor of Settlements Terms Forming at the Market of Chocolate Producers

Elena A. Kandrashina, Anna S. Zotova, Ekaterina S. Smolina, Vladimir E. Dorozhkin, and Sergey A. Dneprov

Samara State University of Economics, Samara, RUSSIA; Russian State Vocational Pedagogical University, Ekaterinburg, RUSSIA

ABSTRACT

The relevance of the investigated problem is caused by increasing levels of competition in the industry markets of chocolate producers in Russia and the need to maintain the profitability of the companies' activities in the unstable macroeconomic conditions. The aim of the article is to assess the impact of competitive forces on settlements terms between the participants of supply chain, taking into account relative financial and industrial competitiveness of suppliers and buyers. The leading method of this problem is the research analysis of the market situation in the industry based on the model of five forces of competition by M. Porter (2004), as well as assessment of individual indicators of financial condition of chocolate products manufacturing companies using the analysis of some indicators. The article defines the conditions of optimization of financing sources for current payments based on relative financial and industrial competitiveness of suppliers and buyers. Article Submissions are of practical value to chocolate producers operating in Russian and international markets.

Introduction

Terms of payment are traditionally the subject of financial management. In Russian practice of financial management two basic approaches has developed on the issue:

- Consideration of a commercial loan as a financial decision relating to the definition of the credit limit, which may be available to the counterparty subject
according to the transaction terms (amount, frequency of purchases, the duration of the delay of payment) and its ability to pay;

- Consideration of a commercial loan as an investment decision related to the assessment of the impact of credit available on the volume of sales.

These approaches are reflected in literature, which was widely recognized in the scientific and practical circles (Brealey & Myers, 2003; Khasaev & Mikheev, 2003), as well as in the literature, which deals in financial management as a field of applied use of corporate finance (Tobias & Shin, 2010; Doff & Rene, 2008; Sandström, 2006; Limitovskiy, Lobanova & Minasyan, 2014; Ashmarina et al., 2016).

The potential of getting profit at particular industry market is determined by prevailing in this market the intensity of competition and area competitiveness of the enterprise - its relative ability to withstand competitive forces (Porter, 2004; Barbier, 1987; Dyllick & Hockerts, 2002; Ashmarina, Zotova & Smolina, 2016).

Of course, the potential for profits is influenced by the financial costs that are directly dependent on the settlement system (Groppelli, Angelico, Nikbakht, 2000) and the characteristics of goods moving chain on industry markets, creating value chain, which lies in the basis of supply chain management (Oliver & Webber, 1982; Ashmarina & Khasaev, 2015).

Thus, the sectoral competitiveness of individual companies depends not only on its own market position, but determined by the interaction of all participants in creating customer value of the product.

**Methods**

During the study, such theoretical methods as analysis, synthesis, generalization; diagnostic methods (coefficient analysis of liquidity and turnover of stocks) were used; the authors also used empirical analysis (the study of the performance of the chocolate producers); methods of tabular reporting and graphical display of results.

As a basis of reasoning the structure and interaction of industrial markets proposed by M. Porter (2004) have been used, and his concept of customer value creation chain - built in the process of collection of basic and supporting activities of the company, which can act as sources of competitiveness (Porter, 2004).

Testing the hypothesis was made using the financial statements of such enterprises as "Nestle Russia", LLC "Mars", LLC "Sladkodorov", LLC "Mondeliz Russia", "Ferrero", LLC "Rot Front".

**Results and Discussions**

Consideration of issues related to the analysis of the competitive position of enterprises in the industrial markets is based on the concept of the impact of competition intensity on the potential for getting profit. The main attention is paid to aspects relating to the pricing of products and used for its creation resources. At the same time the costs associated with the financing of enterprises activities have a significant impact on the enterprises potential for getting profit. The nature and magnitude of these costs in different companies
can vary significantly due to differences in the conditions of settlements with various counterparties.

Let us consider how the company’s competitive position in the supply chain in its industry market affects the payment terms with suppliers and customers, and how the company, relying on its competitiveness, can optimize its payment system, minimizing the costs associated with the financing of the current activities and increasing thus, the potential for getting profit.

The potential for getting profit at a particular industry market is determined by the intensity of competition prevailing in this market and sectoral competitiveness of the enterprise - its relative ability to withstand competitive forces.

Value chain of specific enterprise is linked to the value chain of suppliers and buyers - the idea lies in the foundation of supply chain management. Initially, supply chain management was aimed at harmonization of suppliers and customers in order to optimize inventories, now it is considered as a tool for matching supply and demand at all stages of the product and bring it to the customer.

The competition arising directly in the supply chain, determines the company's ability to make a profit from operating activities: high pressure from suppliers forces the company to agree to the rising prices of used resources, and the high pressure from the customers makes the company reduce prices of manufactured products. Intense competition in the industry market between manufacturers of similar products, and the availability of goods - substitutes are the factors that increase the ability of suppliers and customers to provide competitive pressure on industry participants in the market. The weaker all of these competition forces are expressed, the greater the potential for getting profit in this industry market, and, accordingly, its investment attractiveness becomes higher. As a consequence, the likelihood of potential competitors is increasing - their occurrence in the industry market ultimately leads to an increase in the competition intensity and reduce the potential for getting profit by all participants.

The comfort of the environment serves as an integral feature of the current impact of competitive forces on the company:

- A comfortable environment allows the company to make a profit in excess of normal, due to the fact that the company, with a strong and stable market position exerts competitive pressure, the opposite effect of a force of competition;
- In a neutral environment, the company does not feel the impact of competition force, profitability can be described as normal;
- Aggressive environment means that the impact of competitive forces reduces the effectiveness of enterprise functioning and creates economic preconditions for the capital transference to other markets if there are no significant barriers to going out of business;
- The cases where the impact of competitive forces makes the companies operation inefficient and creates economic prerequisites for its elimination, even if it is impossible to withdraw investment capital, comfort level is described as catastrophic.

Payment terms can serve as an important indicator of comfort environment.
The authors studied how settlements between suppliers and buyers are formed under the competitive forces of supply chain. The most simple and neutral in terms of impact on the financial results of both parties is the immediate payment for goods (works, services).

Competitive pressure from one of the participants can appear through the demand from the other party to offer the most profitable product, part of which are, inter alia, the terms of payment for goods (works, services rendered).

Most of today's markets are characterized by the situation where manufacturers - suppliers compete with each other for the limited purchasing power of consumers - buyers. The need to provide purchasers with deferred payment is determined by the marketing aspects - payment terms are part of the product offering in its broad sense and, therefore, determine its competitiveness. But from the financial point of view, it is not profitable for the supplier to lend to its customers. Accounts receivable which emerge in such situation increase the need for financial resources and cause additional financial costs for capital maintenance. Customers taking advantage of their market power, in fact shift their financial costs for maintenance of invested capital amount to suppliers, as the invested capital is replaced by commercial credit in case of the deferred payment.

However, commercial credit facilities, i.e. the provision of financial resources for the implementation of payments for goods, works and services are not limited to delay in payment, provided by the supplier to its customers. The Civil Code of the Russian Federation (Article 823) called typical cases of commercial loans in its legal meaning: advance, advance payment, deferred or installment payment for goods (works, services). That is, commercial lending can be considered as every time mismatch of counter obligations under the concluded contract.

If the postponement or installment payment arises in situations where buyers have the ability to exercise competitive pressure on their suppliers, the advances and prepayments occur in situations where the suppliers on the basis of their market power can have a competitive pressure on buyers.

As it was mentioned above, the company acting as a creditor in case of commercial loan is forced to do it as a rule. Commercial lending terms are determined by relative competitiveness of the industry suppliers and buyers.

The borrowers can be motivated at least consider the possibility of substitution of commercial loans by other sources of funding - for example, short-term bank credit, but it is necessary that commercial credit had the value, which means the costs arising from the borrower in connection with the use of such source of funding for their business turnover.

A price difference can serve as these costs - the price of goods (works, services) in case of earlier payment compared with deferred payment or advance payment as compared to the immediate settlement, should be lower.

Regardless of whether you use the price discount or not, the buyer payments to the supplier are understood as operating costs that affect taxable profit. Accordingly, the existence of such price discount forms the value of commercial credit as a source of financial resources.

The cost of commercial credit defined in this way is hidden in the total amount of the operational obligations arising. However, her selection with the
help of analytical procedures allows you to compare the cost of using this source of funding to other, for example, to the cost of a bank loan.

So, if the cost of commercial credit provided by the supplier to the buyer is higher than the interest on a bank loan, taking into account tax effects, the buyer is expedient to abandon the deferred payment, provided by the supplier (i.e., the use of commercial loans), to take a short-term loan from the bank and pay for the purchased goods immediately take advantage of discounts for prompt payment provider. Similarly, the price discount can motivate a buyer to make an advance payment and the advance payment, thus providing a commercial loan provider.

However, it is also necessary to take into account the fact that the settlement participants can not only have different sectoral competitiveness, but also different financial competitiveness.

Financial competitiveness reflects the relative ability of companies to form the capital invested in a competitive environment in the financial market and determined by collective assessment of risk level associated with the financing of the business by investors and lenders. Increased risk leads to increased demands of investors and lenders to the profitability of financial instruments purchased by them, which in turn leads to the increase in the invested capital value for funded enterprises.

Those participants in the supply chain whose financial competitiveness is higher have relatively smaller financial costs associated with the maintenance of the invested capital. Accordingly, the price discount, provided by the supplier to transfer payment to an earlier date (to pay an advance in comparison with the immediate settlement, or to carry out an immediate payment, compared with deferred payment) can motivate customers only in case that the buyer’s financial costs of invested capital maintenance will be lower than that of the supplier, that means, if buyer’s financial competitiveness will be higher than supplier’s one.

Taking into account the fact that the provision of price discounts is the prerogative of the supplier, we should distinguish two situations.

If the customers have a greater market power, they have the opportunity to replace their invested capital into operating liabilities - accounts payable in the form of deferred payment provided by the supplier. In this case, the price discount is an instrument aimed to prevent, if possible, shifting of buyer’s financial costs to the supplier, i.e., biasing them up the supply chain.

If greater market power is occupied by the suppliers, they can demand an advance payment or prepayment and replace invested capital into actually free operating liabilities - free, due to the fact that they have no motivation even to consider the question of price discounts. However, these discounts make sense for enterprises, acting as their customers: being forced to replenish their sources of funding for advance payment and pre-payment, they may try to transfer arising financial costs down the supply chain, even if they do not possess any relevant market power, but rely on the financial competitiveness of their customers. Reasonable price discount can also motivate their buyers to prepayment.
Justification of specific sizes of price discount in this case is an important tool for optimal distribution of the added value created between supply chain members. The basis of this justification is the following rule:

Return on invested capital of supplier, released from the business turnover > Price Discount > Return on invested capital of the buyer, further involved in the business turnover

Speaking about the impact of the settlement system on the enterprises need for invested capital, and as a consequence, the financial costs associated with its maintenance, such factors as reduction in the duration of the accounts receivable turnover and increase in difference between the periods of turnover of receivables and payables should also be noted. These factors allow releasing money from economic circulation without the risk of business activity decline.

This relationship is easily traced by comparing the absolute liquidity ratios and accounts receivable turnover and inventory turnover for the chocolate industry companies operating in Russia (Table 1, Table 2).

**Table 1.** Absolute liquidity ratios and inventory turnover (measured in days) for the chocolate industry companies operating in Russia.

<table>
<thead>
<tr>
<th>Enterprise</th>
<th>Absolute liquidity ratios</th>
<th>Inventory turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014</td>
<td>2015</td>
</tr>
<tr>
<td>Nestle Russia</td>
<td>0,07</td>
<td>0,01</td>
</tr>
<tr>
<td>Mars</td>
<td>0,04</td>
<td>0,1</td>
</tr>
<tr>
<td>Ferrero</td>
<td>0,05</td>
<td>0,08</td>
</tr>
<tr>
<td>Sladkodarov</td>
<td>0,19</td>
<td>0,36</td>
</tr>
<tr>
<td>Monedeliz</td>
<td>0,09</td>
<td>0,13</td>
</tr>
<tr>
<td>Rot Front</td>
<td>0,31</td>
<td>0,36</td>
</tr>
</tbody>
</table>

**Table 2.** Accounts receivable turnover and accounts payable turnover for LLC Nestle Russia.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator of accounts receivable turnover</td>
<td>4,04</td>
<td>1,15</td>
<td>1,23</td>
</tr>
<tr>
<td>Indicator of accounts payable turnover</td>
<td>5,19</td>
<td>1,64</td>
<td>1,58</td>
</tr>
<tr>
<td>Accounts receivable turnover (in days)</td>
<td>24,7</td>
<td>49,46</td>
<td>45,82</td>
</tr>
<tr>
<td>Accounts payable turnover (in days)</td>
<td>19,3</td>
<td>34,03</td>
<td>36,55</td>
</tr>
<tr>
<td>Inventory turnover, (in days)</td>
<td>28</td>
<td>28</td>
<td>25</td>
</tr>
</tbody>
</table>

The presented data show that the absolute liquidity ratio in all cases is inversely proportional to the accounts receivable turnover in days. This means that the increase of balance sheet liquidity causes slowing of current assets turnover, which leads to decrease in business activity. The level of both receivables and payables in production companies is very high. It would be logical to assume that the company must always have on the current account 20-25% of the total short-term debt, but this requirement creates increased financial burden on the company. If the company is able to achieve speeding of accounts receivable turnover over payables, it will allow reducing financial costs and increasing the competitiveness of industry. Unfortunately often this is not possible for chocolate industry companies, as the large buyers market, accounting for the largest volume of sales, is quite limited and customers can set...
their terms. On the other hand, suppliers of cocoa beans - they are representatives of several African countries, which are not so heavily dependent on the procurement of a single enterprise. Therefore, it appears that the organizations involved in the production and marketing of chocolate products, are heavily dependent both on the supplier and customer and that together with high level of competition prevailing in this industry market leads to a decrease in average values of profitability indicators.

Analysis of receivables of LLC Nestle Russia shows that accounts receivable turnover decreased, thereby increasing the time of one revolution of 24 days in 2013 to 45 days in 2015.

The increase in collection terms of accounts receivable is not a positive factor. When cash gaps, which are formed by the fact that the time of receipt of receivables from debtors is not the same point of debt payment to the creditor, the company has to borrow money to pay off debts for raw materials and other payments.

Analysis of accounts payable LLC Nestle Russia shows that the number of payables revolutions also declined, with the increase in the number of days from the date of shipment of raw materials from the vendor until the transfer of funds on its current account.

Slower turnover of accounts payable is a positive factor, certifying that the company will not have so often divert funds from the market to pay the debt.

The comparison of the turnover of accounts receivable and accounts payable clearly shows that payments to creditors are more frequent than the company receives cash from customers for products shipped. However, this gap increased from 5.4 days in 2013 to 13.43 days - in 2014 and 9.27 days in 2015.

The main reason for cash shortages – the period of accounts receivable turnover is too long. The main buyers of LLC Nestle Russia are two types of customers: large chain customers and distributors. The first group includes the retail chain "Magnit", "Auchan", «X5 Retail Groupe», «Kopeechka” and others. Distributors - are intermediaries involved in the sale of products in the network and non-network retail stores. Currently, sales of production networks is 60%, while the share of distributors in revenue - 40%. There is a tendency to reduce the number of distributors; network partners are increasingly seeking direct purchases of goods from the manufacturer. The largest distributors of "Nestle Russia" include: LLC "Line 7", JSC “Hebe”, "Abner", LLC "Voronezh Freight", LLC “Neo-Trade”, LLC "Michelle" and others. The company "Nestle Russia" acts of prepaid and postpaid policy with respect to its customers. The company must transfer money for shipped products within 27-30 days after receipt of bills and invoices when it comes to large network partners and distributors.

If the client does not pay accounts for shipped products in due time, it is moved to the credit unit of accounting department and production shipment is suspended. Network partners are generally given the greater delay of payment - 60 days. The market of network customers is the market of buyers oligopoly and the manufacturer has to put up with customer conditions, while there are plenty of distributors and sales terms are dictated by the manufacturer.

Thus, the solvency of chocolate products manufacturers in Russia has a lot of pressure from the solvency of their major buyers - network clients.
Terms of settlement designed to stop cash shortages and the situation of insolvency, are traditionally the subject of financial management. Based on generally accepted and formed idea of business loan cost, modern financial management is considering such loan in two basic aspects:

- As financial decision related to the definition of the credit limit, which may be available to the counterparty under transaction terms (amount, frequency of purchases, the duration of the delay of payment) and its ability to pay;

- As investment decision related to the assessment of the impact of available credit on the volume of sales and business activity of the company as a whole.

This approach is somewhat limited according to the authors’ opinion. Besides the financial aspects the fact that the system of payments between counterparties is shaped by competitive forces should be taken into account.

Production company gets commercial credit in the form of advance payment or pre-payment from the buyer or in the form of deferred payment from a supplier and creates a new source of financing in the form of accounts receivable and, thereby, reduces the need in invested capital. On the contrary, providing commercial loans to counterparties generates accounts receivable and increases funding needs. Accordingly, the terms of settlement are not only the result of competition in the industry markets, but also an important contributing factor to equalize the intensity of competition in the supply chain.

Conclusion

Each company operates in various industrial markets, being both the supplier for different consumer groups and buyer of variety of resources. Each market develops special competitive situation which may change over time, and quite significantly. If the enterprise is forced to lend to buyers providing them with a deferred payment, and suppliers by making an advance payment, it actually incurs costs of their business financing and loses profits as a result. Thus, the impact of competitive forces creates economic preconditions of leaving the market for such enterprises. If the industry market is an important element of the supply chain, the mass exodus of businesses leads to a radical change in the competitive situation, when the remaining members have the opportunity to exert competitive pressure on their contractors, including payment terms, transferring to them their financial costs as much as possible, and reducing the pressure of the costs on profits. Comfortable environment of functioning and potential profits become much higher, which creates prerequisites for the new round of increased competition.

Implications and Recommendations

The research results may be useful as the foundation for the professionals in financial sphere and financial management for the purpose of more complex and meaningful assessment of the enterprise efficiency.

Study is also recommended to scientists and higher vocational teachers, who work on solving the problem of the future financial profile specialists’ professional competence creation for Russian labor market.

Acknowledgement
The authors are thankful to the enterprise authorities for their assistance during the research work and to Azihanova V. for her assistance in gathering relevant information and data.

Disclosure statement
No potential conflict of interest was reported by the authors.

Notes on contributors

Elena A. Kandrashina is Professor of Samara State Economic University, Samara, Russia.

Anna S. Zotova is Associate Professor of Samara State Economic University, Samara, Russia.

Ekaterina S. Smolina is Associate Professor of Samara State Economic University, Samara, Russia.

Vladimir E. Dorozhkin is postgraduate of Pedagogical Sciences of Russian State Vocational Pedagogical University, Ekaterinburg, Russia.

Sergey A. Dneprov is Doctor of Pedagogical Sciences of Russian State Vocational Pedagogical University, Ekaterinburg, Russia.

References


