The Dilemmas over Credit Policy Management in a Company

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Abstract

Purpose of the article The paper identifies the core dilemmas over the establishment of the credit policy in a company. It considers the general scope and basic stages of credit policy management and analyses each stage of credit policy in terms of decisive aspects. The main areas of concerns are discussed within the settlement of credit policy and its implementation with regard to the model of optimal credit policy.

Scientific aim The paper aims at constructing a unified model of issues rising dilemmas while setting and implementing the credit policy management. It also aims at identifying core decisive problems in each of these fields and at providing a structured questions framework.

Methodology/methods The paper is based on conceptual analysis and deduction of the literature and general review of issues related to credit policy management. It containts autors' own view on the problems included in each stage of credit policy management.

Findings Credit policy management is a subject for numerous dilemmas. The main areas of concerns are related to: the decision about the goal of credit policy managemet with regard to its restrictiveness, the settlement of credit policy with regard to elements of credit policy, and finally the implementation with regard to the risk of bad debts occurrence.

Conclusions (limits, implications etc) The establishment of credit policy in a company requires to balance contrary interests and thus involves wide variety of issues to be considered. The presented model of decisive problems might be applied in each company regardless to their size.

Keywords: Credit policy, trade credit, account receivable, account receivable management, optomal credit policy, cost of credit policy

JEL Classification: G32

Introduction

Credit policy is a subject for numerous dilemmas. The aim of the paper is to identify such dilemmas based on the sequence of activities that should be conducted while defining credit policy of a company. In order to achieve this, a universal model of credit policy management was constructed with the implication of the possible areas of concern. Following, each area of concern was examined and supported with analytical parameters, if applicable. Also, in each of identified areas of concern the core dilemmas were identified. In order to highlight the leading problems, a set of question was provided in each case.

The presented model was developed with an application of conceptual analysis of the leading corporate finance literature in the field of recommended activities within credit policy management. The structure of the paper discusses firstly a scope of credit policy management, followed by the problem of setting the credit policy, implementing it in a company and assessing the results. The paper ends with some concluding notions.

1 A scope of credit policy management

The extension of trade credit is a common practice in most industries. Trade credit is a part of a joint commodity and financial transactions in which a company sells goods or services and simultaneously extends the credit for the purchase to the customer (Lee and Stowe, 1993, p. 285; Arnold, 2005, p. 382). However, trade credit is perceived as essentially unproductive asset because it ties up financial resources and is exposed to the risk of default (particularly, when the credit period taken by customers is lengthy). It is often underlined that offering trade credit is a subject for various benefits and costs. These costs are primarily related to the company's exposure to risk of customers' default in payment. A source of costs is also the interest foregone between the time of the sale ant the time of payment by the customer, in other words – costs of cash tied in receivables (Pike and Neale, 2003, p. 467; Damodaran, 2001, p. 410).

The consequences of trade credit are visible in numerous areas of corporate finance as they influence liquidity, profitability and the level of funds needed. Therefore, an effective management of accounts receivable, mirrored in corporate credit policy management, represents an essential element of financial management practice. Whenever the credit sale is made, inventories are reduced by the cost of goods sold, and accounts receivable are increased by the sales price. The difference is profit which is then added to retained earnings (Brigham, 1992, p. 795). However, the accounts receivable represent the currently unpaid element of credit sales.

Numerous reasons for offering trade credit exist. One of the core reasons is associated with investment and marketing issues. Trade credit forms a part of sales package. Most companies would loss a significant portion of their customers' base to their competitors if they demand cash on delivery. As a consequence, the company is exposed to the credit risk, in particular the risk of bad debts or past-due accounts. However, a proper trade credit decisions should always consider a trade-off between the credit risk and the reward from the profit margin.

Another reason may spring from the industry and competitive pressures. The company has to offer credit terms which are at least as generous as the competitor's terms. Also, companies may offer trade credit if they gain a competitive advantage in financing. Some companies have an access to cheaper funds and this may give them an opportunity to expand trade credit offerings.

Regardless to the reason for offering trade credit, the company should apply wise and mature credit policy management. A model of issues that require a closer consideration is presented on Figure 1:

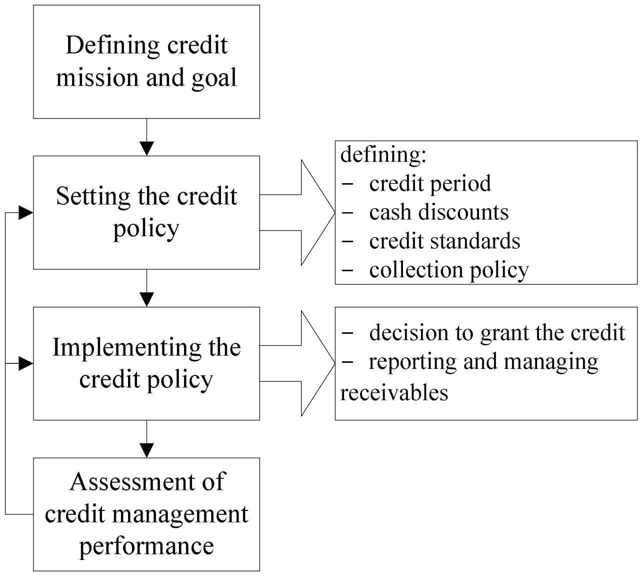

Figure 1 A model of credit policy management Source: Own work

The credit policy management should always begin with a definition of credit missions and goals. The company must decide what the purposes of credit policy are and thus construct the frame for further decisions. In particular, it needs to consider whether the credit policy will be lenient or restrictive. Too restrictive credit policy will reduce sales and profits, while an overly permissive policy, which does not distinguish the level of risk, will result in excessive uncollectible accounts (Bierman and Hausman, 1970, p.B519).

In the next stage the company sets the credit policy, considering an implementation of numerous elements. The following stage is related to the credit policy implementation. Here the com-pany must consider a frame for decision making whether to grant the credit, and if yes – managing properly the receivables in order to avoid bad debts. Finally, the whole credit management policy requires to be constantly assessed in order to improve the prior decisions.

A presented above model of credit policy management requires closer consideration in the field of setting the credit policy and its implementation. In these fields it is a subject for numerous dilemmas. Indirectly it lays a foundation for con-sidering the main problem related to establishing the optimal level of credit sales.

2 Setting the credit policy

While setting the credit policy, the company must consider numerous issues related to the key elements of credit policy. The aim of this stage is to produce a clear system of credit terms related to the risk-class of a particular customer. This is further developed in the stage of credit policy implementation. However, clearly defined rules should be developed within the settlement of credit policy.

The core elements of credit policy are: the credit period, discounts for early payments, credit standards and collection policy, as presented above on Figure 1.

The credit period is the length of time the customers are given to pay for their purchases. Among the main factors influencing the period of credit granted to customers the company must recognise (Brigham, 1992, p. 798):

(1) the usual terms of trade for the industry,
(2) the importance of trade credit as a marketing tool, as the more vital the perception of credit as a marketing tool, the longer the likely period of credit offered,
(3) the individual credit ratings of customers (with regard to good-quality customers or high-risk customers).

Cash discounts are related to financial inducements for customers to pay accounts quickly. Offering discounts may be costly for companies. However, some established customers may pay more promptly to take an advantage from the discounts. Also, new customers may be attracted, as the discounts act as reduction in price. These problems should be taken into account while setting the cash discounts (Brigham, 1992, p. 803; Pike and Neale, 2003, p. 473; Watson and Head, 2001, p.271).

In particular, the discount policy and credit period policy correspond directly with the main goal of credit policy. If the company aims at extending the trade credit, the credit policy may be relaxed due to lower discounts and longer credit periods. However, it may result in higher bad debts losses. In such circumstances, the cost of discounts is lowered, and the customers will be interested in taking the trade credit rather than paying cash, as the cost of trade credit decreases (and may be even comparable to the cost of short-term bank loans). And quite the opposite, higher discounts and shorter credit periods within restrictive credit policy may discourage customers from taking credit (they will prefer to pay in cash as the cost of trade credit rises). These findings spring from the basic formula that can be applied for computing the cost of trade credit (C) (Pike and Neale, 2003, p. 473):

$$C = \frac{d}{100-d} \times \frac{365}{f-p} \tag{1}$$

where: d – discount rate, f – final payment date, p – discount period.

Credit standards refer to the minimum financial strength of acceptable credit customers and the amount of credit available to different customers. Also, such standards refer to the strength and creditworthiness a customer must exhibit in order to being qualified for credit. The company's credit standards would be applied to determine which customers qualified for the regular credit terms. Credit terms are here associated with setting the credit period and granting discounts. Also, the company needs to specify the trade credit limits. These limits may apply either a maximum amount of receivables balance admitted to a particular customer, or a maximum order account. Trade credit limits may be assigned to all or only selected buyers. An advantage of trade credit limits is the simplicity. That is probably why these are the most common tool in credit policy management (Scherr, 1996, p. 71).

Major facts that require a closer consideration when setting credit standards are related to the probability that the customer will pay with delay or even fail to pay. Therefore, a careful assessment of customer's credit quality is required (Brigham, 1992, p. 799). With the assessment of customer's creditworthiness, the company may establish appropriate credit rules, concerning (a) the maximum period of granting the credit, (b) the trade credit limits, and (c) the payment terms, including any discounts for early payment and interest charges on overdue accounts.

Collection policy refers to the procedures the company follows to collect accounts, in particular these past-due (Brigham, 1992, p. 801-802). A good credit collection policy clearly defines the procedures and ensures that the customers know the rules. It is more likely that the customer will pay in full and on time if prepared to cut off supplies or take action to recover overdue debts (Pike and Neale, 2003, p. 474). The procedures usually define the actions against customers whose payments are overdue. The examples are (Ross, Westerfield and Jaffe, 2005, p. 791; Baker and Powell, 2005, p. 180):

- a delinquency letter informing of the past-due account,
- a telephone call to the customer
- employment of professional collection agency,
- legal action against the customer, which is the ultimate step.

The above mentioned elements form a base for the next stage in credit policy manage-ment – the credit policy implementation. However, here the company has to decide about numerous issues, as presented on Figure 2:

Figure 2 Core dilemmas over setting the credit policy Source: Own work

The main effort is put on constructing proper frames of credit policy, regarding credit period, discounts, credit standards and collection policy. The credit period and discounts influence the trade credit costs and its extent. Credit standards require a careful analysis related to proper credit limits establishment, whereas collection policy demands decisions within collecting cash promptly, without delay. These issues are particularly problematic in smaller companies, which of-ten lack of sources and qualified staff to consider in advance the pros and cons of the decision taken.

3 Implementing the credit policy

Implementation of the credit policy means that the predefined rules come into life. Here, the two dominant issues require consideration – a decision to grant the credit and then the receivables management aspects.

A decision to grant the credit is based on the results of creditworthiness assessment. The creditworthiness assessment (also referred to as credit evaluation) should take into consideration numerous pieces of information helpful in assessing the probability of customer's default. The company should review the prior experience with the particular customer. However, it may refer to periods when the customer was not experiencing financial difficulties. Therefore, the assessment procedure should include an analysis of the customer's current financial statements and credit reports, including e.g. bank references, trade references or credit bureau reports (Pike and Neale, 2003, p. 472).

For the assessment purposes, a company may obtain the required credit information from various sources. The internal sources of information include a credit application, usually followed by references, as well as the applicant's previous credit history. Also, the information from sales representatives may be useful. While assessing the creditworthiness of the market partner, external sources of information are also useful. In particular, a useful external source of information is company's financial statement. Also, the information provided by credit rating agencies may support the assessment of creditworthiness (Baker and Powell, 2005, p. 177).

In evaluating customer's creditworthiness different techniques can be applied. A well established practice allows distinguishing qualitative, quantitative or mixed methods, as depicted on Figure 3:

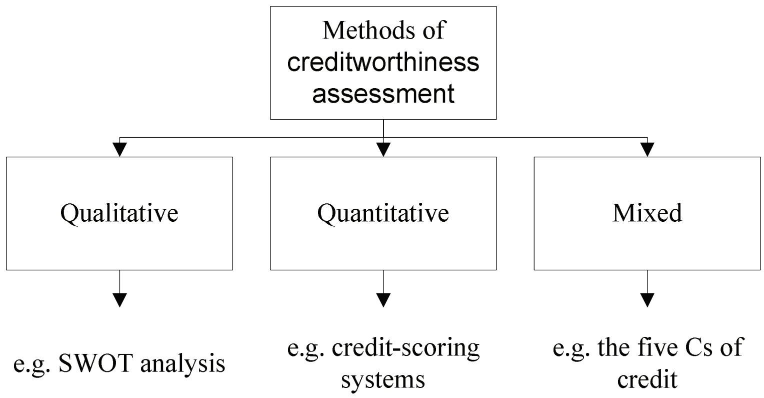

Figure 3 Methods of creditworthiness analysis Source: Own work

An example of qualitative method is SWOT analysis. Here, the company may consider various pieces of information acquired during the analysis of previous history of the market partner. The following strengths, weaknesses, opportunities and threats should always be identified and assessed from the company's perspective – its risk involved in crediting a specified customer. A dis-tinctive feature of qualitative methods is that each factor taken into consideration is subjectively judged by the decision makers.

Quantitative methods are based on financial data, therefore the main source of information are financial statements (Ross et al., 2005, p. 788-789; Baker and Powell, 2005, p. 178). A popular quantitative method of creditworthiness analysis is credit-scoring system (model) that aims at determining the probability of default. Credit scoring models allow assigning a numerical rating for a customer based on the information collected. The numerical credit scores are usually based on financial analysis ratios with weights applied to each factor. Therefore, the decision whether to grant or refuse the credit is based on the customer's numerical credit score.

A popular example of the credit-scoring model is the Multiple Discriminal Analysis (here-after: MDA). MDA takes into consideration variables associated with financial strength and the ability to pay off the debt. The factor weights are assigned with the use of statistical techniques. A customer quality is expressed in a single numerical value (Altman, 1968, p. 591-592; Ohlson, 1980, p. 111).

Credit-scoring methods are admitted due to clear results of analysis. They give a numerical score for which a company may make a quick accept/reject decision. However, two fundamental problems with these methods exist. First of all, it is needed to decide which ratios are informative. Secondly, the company must decide how to apply wages for each ratio to identify distressed compa-nies (Wang, 2004, p. 20). In practice, the company may be forced to redefine the model, especially if the level of bad debts increases.

An example of mixed method is the set of traditional and subjective guidelines referred to us as "the five C's of credit". The customer is ana-lysed with respect to five factors (Brigham, 1992, p. 800-801; Pike and Neale, 2003, p. 473):

1. Character – refers to the judgement of the customer's willingness to meet credit obliga-tions (credit reports provide background information on customer's past performances, the fundamental question asked is: will the customer make serious effort to repay the debt within the required period?),
2. Capacity – a subjective judgement of customer's ability to pay, based mainly on the customer's operating cash flows analysis, past records and business methods and may be supplemented by physical observation of their plants or stores (the fundamental question asked is: does the customer have the capacity to repay debt within the required period?),
3. Capital – is related to the customer's finan-cial reserves assessment; the customer's general financial condition is analysed, with regard to financial analysis, in particular, debt/asset ratio, the current ratio, the times-interest-earned ratio (the fundamental question asked is: what is the financial situation of the customer concerning profitability and liquidity?),

4. Collateral – a pledged asset in the case of default is considered (the fundamental question asked is: should some form of security be required in return for extending credit facilities?),
5. Conditions – refers to assessment of both general economic trends and conditions in certain geographic regions or sectors of economy that might affect a customer's ability to meet its obligations; the normal credit terms in the industry should also be analysed.

Once the decision to grant the credit is made, the receivables are created. Therefore, the company should properly manage they level.

A proper management of the amount of receivables is based on the awareness and under-standing of debt collection cycle. This cycle starts with the customer order and ends with the cash received. Therefore, any speeding up of the order and shortening of receivables collection will reduce the required working capital (Pike and Neale, 2004, p. 474). Consequently, a company should apply techniques that allow monitoring the level of receivables.

A good indicator applicable for measuring the average amount of time required to collect an account receivable is average collection period (hereafter: ACP), known also as day's sales outstanding (DSO) or days in receivables. ACP is computed as follows (Smart, Megginson and Git-man, 2004, p. 809; Leach and Melicher, 2009, p.163; Brigham and Davies, 2010, p.745; Shapiro, Balbirer, 2000, p.40):

$$ACP = \frac{S}{365} \qquad (2)$$

where: S – annual sales.

The company should not neglect the unexpected increase in ACP as it may be caused by increase of bad debts. In such case, it is recommended to enlarge the analysis with constant monitoring of the bad debts loss ratio (hereafter: BDL). It represents the proportion of the total receivables that are not paid and is computed as fol-lows (Baker and Powell, 2005, p. 179; Smart et al., 2004, p. 807):

$$BDL = \frac{E_{BD}}{S_C} \qquad (3)$$

where: EBD – bad debts expenses; SC – credit sales.

An increase in bad debt loss ratio increases the cots of extending credit.

Also, a useful tool of managing the level of receivables is aging schedule which tabulates receivables by age of account (Ross et al., 2005, p. 790; Smart et al., 2004, p. 810). Aging schedules aim at finding out quickly the number of past-due receivables and prevent them from turning into bad debt expenses (Baker and Powell, 2005, p. 178; Shapiro and Balbirer, 2000, p. 41). The analysis should be extended with regard to particular customers as the record of payment experience should be kept for each customer separately (Ross et al., 2005, p. 789). The company should identify delinquent accounts as soon as possible and take a proper course of action (predefined within its credit policy) to prevent bad debts losses. Of course, some delinquencies may appear for cus-tomers who usually pay on time if they overcome temporary financial difficulties. However, if the delay in payment is observed with new customers or customers with bad debt experiences, the company should react immediately.

The implementation of credit policy is a subject for numerous dilemmas and the core of them are presented on Figure 4:

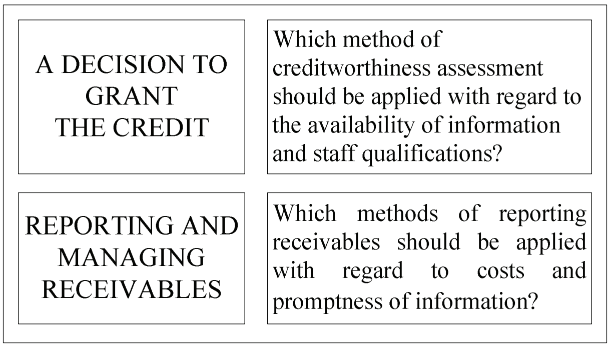

Figure 4 Core dilemmas over implementation of credit policy Source: Own work

The company has to put an effort for assessing the creditworthiness of customers. The main concern is related to the choice of method that allows the company to assess the quality of customers in the best way. The company abilities, concerning available sources of information and staff qualifications, should be carefully judged. Monitoring receivables raises further dilemmas. The company must construct an effective system of monitoring the amount of receivables in order to react promptly for any delinquencies.

4 Optimal credit policy – the core of the assessment of credit policy management performance

Offering trade credit attracts customers, therefore it results in additional cash flows from credit sales. However, the credit policy is a subject of additional costs, related to the increase in accounts receivable. In a model version, optimal credit policy involves the trade-off between the incremental additional cash flows and incremental total costs of receivables (Baker and Powell, 2005, p.180-181). Total costs of receivables include the total costs of carrying receivables and opportunity costs. Total costs of carrying receivables include:

1) the cost of non-payment of some receivables (bad debts),
2) the cost of short-term financing needed to finance receivables that the company grants,
3) the cost of managing credit and credit collections.

These costs increase as the company increases the amount of credit to customers.

The opportunity costs represent the loss of sales by not extending credit. These costs decrease as the amount of receivables increases. In particular, the opportunity costs (OC) may be computed as follows (Brigham, 1992, p. 808):

$$O_C = (S_P / 365) \times \Delta ACP \times CM \times k \qquad (4)$$

where: SP – previous level of sales, ΔACP – change in ACP, CM – contribution margin (computed as 1 less variable costs ratio), k – cost of carrying receivables.

In the model version, the sum of the carrying costs and the opportunity costs of a particular credit policy defines the optimal level of credit sales. The sum of carrying costs and opportunity costs is often referred to as the total credit-cost curve. The optimal amount of trade credit exists for the lowest possible sum of total costs, as pre-sented on Figure 5:

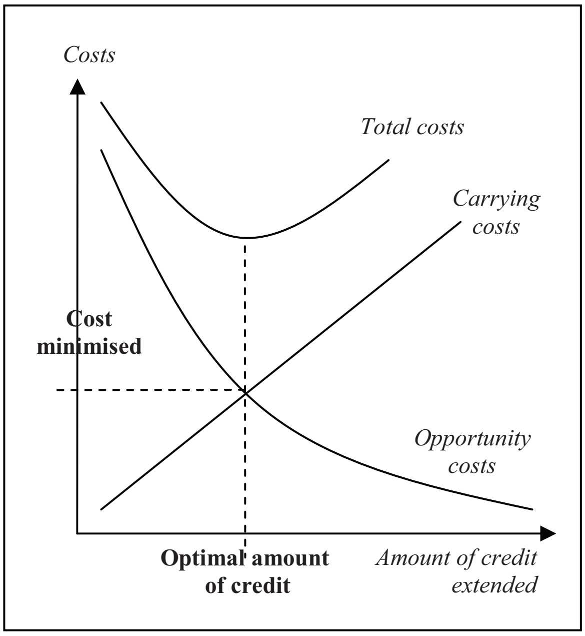

Figure 5 The optimal amount of trade credit

Source: Own work based on: Ross et al., 2005, p. 787; Baker and Powell, 2005, p. 180.

The model presented above on Figure 5 shows, that if the company extends more credit than the minimum, then the net cash flow from additional sales may not cover the costs of receivables, mainly due to increased investment in receivables. This justifies why the main concern while granting the credit is the trade-off between the credit risk and the reward from the profit margin (Pike and Neale, 2003, p. 468).

The model of optimal credit policy is difficult to be applied in practice with accuracy as it requires numerous assumptions. However, the model is useful as it allows the company to define the areas of concerns and the fields of credit policy management that require closer consideration. If the total costs of carrying receivables increase, the company should identify reasons of that rise. If it is caused by the increase of bad debts, then proba-bly the credit standards and collection policy need to be redefined. If it is caused by the increase of cost of additional capital required, the credit pe-riod and cash discounts need reconsideration. Also, if the whole receivables management procedure is a subject of increased costs, the company should search solutions that may increase the effectiveness of the procedure.

Conclusions

Managing receivables require a company to balance competing interests. On one hand, a company would prefer to receive cash payments as it helps to avoid bad debts. On the other hand, company is aware that trade credit is a powerful marketing tool. Therefore, the credit management policy is a subject of numerous dilemmas.

The above conducted analysis proved that there are the three core areas of concern. The first one is the establishment of the goal of credit policy management, with regard to its restrictiveness. These decisions are even more difficult if the com-pany has to define the credit policy in terms of the industry or competitive pressure.

The second area of concern is the settlement of credit policy. The company should define the appropriate length of trade credit, level of cash discounts, credit limits with regard to the credit risk, and finally courses of action against bad debts occurrence. Errors and omissions within these fields may result in higher costs of trade credit.

The implementation of credit policy is also a subject of dilemmas. The company is exposed to the risk of granting credit to the unreliable customers and thus the bad debts losses may occur. Also, the management of receivables raises numerous problems, especially within the field of proper receivables tools analysis.

The above mentioned problems surely are far more complicated for smaller companies. As they often lack proper experience and qualified staff, the serious mistakes within each stage of credit policy implementation are common place. Further inquiries should be conducted in order to find out wheather this is not the reason why smaller companies often do not develop a mature credit policy until they not suffer high bad debt losses. However, this increases the risk of being involved in insolvency trap. In such circumstances it is often impossible to react and the company is seriously endangered with bankruptcy.

References

ALTMAN, E. I. (1968) Financial Ratios, Discriminant Analysis and the Prediction of Corporation Bankruptcy. The Journal of Finance. Vol. 23, No. 4, pp.589-609.
ARNOLD, G. (2005) Handbook of Corporate Finance. A business companion to financial markets, decisions and techniques. Harlow: Pearson Education. 716 pp.
BAKER, H. K., Powell, G. E. (2005) Understanding Fi-nancial Management. A practical Guide. 1st ed. Oxford: Blackwell Publishing. 481 pp.
BIERMAN, Jr. H., HAUSMAN, W. H. (1970) The Credit Granting Decision. Management Science. Vol. 16, No. 8. pp. B519-B532.
BRIGHAM, E. F. (1992) Fundamentals of Financial Management. 6th ed. Forth Worth: The Dyrden Press. 904 pp.
BRIGHAM, E. F. DAVES P. R. (2010) Intermediate Financial Management. 10th ed. Mason: South-Western. 1041 pp.
DAMODARAN, A. (2001) Corporate Finance. Theory and Practice. 1st ed. New York: John Wiley & Sons. 904 pp.
EMERY, D. R. FINNERTY, J. D., STOWE, J. D. (2004) Corporate Financial Management. 2nd ed. Upper Saddle River: Pearson/Prentice Hall. 899 pp.
LEACH, J. Ch., MELICHER R. W. (2009) Enterpreneurial Finance. 4th ed. International Edition: South-Western, 663 pp.
LEE, Y. W., STOWE, J. D. (1993) Product Risk, Asymmet-ric Information, and Trade Credit. Journal of Financial and Quantitative Analysis. Vol. 28, No 2. pp.285-300.
OHLSON, J. A. (1980) Financial Ratios and the Probabilistic Prediction of Bankruptcy. Journal of Accounting Research. Vol. 18, No. 1. pp.109-131.
PIKE, R., NEALE, B. (2003) Corporate Finance and Investment. Decisions and Strategies. 4th ed. London: Prentice Hall. 883 pp.
ROSS, S. A., WESTERFIELD, R. W., JAFFE, J. (2005) Corporate Finance. 7th ed. New York: McGraw-Hill Irwin. 942 pp.
SCHERR, F. C. (1996) Optimal Trade Credit Limits. Financial Management. Vol. 25, No. 1. pp.71-85.
SHAPIRO, A. C., BALBIRER, S. D. (2000) Modern Corporate Finance. A Multidisciplinary Approach to Value Creation. Upper Saddle River: Prentice Hall. p545.
SMART, S. B., MEGGINSON, W. L., GITMAN, L. J. (2004) Corporate Finance. 1st ed. Mason: Thomson South-Western. p905.
WANG, Z. (2004) Financial Ratio Selection for Default-Rating Modeling: A Model-free Approach and its Em-pirical Performance. Journal of Applied Finance. Vol. 14, No. 1. pp.20-34.
WATSON, D., HEAD, A. (2001) Corporate Finance. Princi-ples and Practice. 2nd ed. Harlow: Pearson Education. 444 pp.

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