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Evaluating the Rates of Investment Project Effictiveness for Commerrcial Bank

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Abstract: Elaboration of methodological approaches to evaluation of investment projects will allow to make better informed and qualitative decisions. The major task of evaluating investment projects by Commercial Bank is information acquisition for making a decision about expediency of financing this project. The study demonstrates the key approaches to evaluating investment projects by commercial bank, gives the rate evaluations of effectiveness of the project, reveals methodological errors in evaluating the rates for Commercial Bank. It has been used the direct method of budgeting cash resources, the method of discounting cash flows, calculation of the rates of net present value of the project, assessment of payback period. On the results of investigations, it has been determined the structure of cash flows for evaluating the indicators of effectiveness by Commercial Bank. It has been carried out a comparative assessment of the rate of net present value for determination of effectiveness of the project in general and for evaluation by the Commercial Bank. It has been interpreted the internal rate of return of the project by evaluating the project by bank. In the end of the investigation, it has been suggested the methodical recommendations on evaluating the rate of net present value, on selecting a planning horizon and on determining the period of payback.

Key words: Investment project, investment analysis, discount method, net present value, Russia, Commercial Bank, internal rate of return

INTRODUCTION

Possibilities of achieving strong economic growth isassociated with the development of investment activity and transfer to innovation model of economic growth. Current conditions of reproduction, toughening the competition between producers predetermine objectively the necessity to activate innovation-investment activity at the level of individual business entities and elaborate more perfect approaches to managing real investments (Stoyanova, 2013).

An increased number of the investment process, diversification of potential resources of investing, complex character of state-of-the-art technologies and organizational decisions require adequate development of managing investment activity, methodology of its analysis and methods of assessment.

Assessment of effectiveness of the investment project includes several constituents cost-effectiveness and financial competency. The main task of assessing effectiveness of the project is acquisition of information about possible return of the project, valuation of financial competency is meant for characterizing the capability of the company to realize this project.

Revelation of methodological problems and improvement of methodical approaches to assessment of effectiveness of investment projects (by their realization at operating enterprises), aimed at reasoned and qualitative decision-making, play an important role in the process of shaping not only investment strategies of business entities but also forming credit policy of the Commercial Banks.

The problem of effectiveness of real investments has been covered by a variety of scientific researches of home and Foreign researchers who reflect in their researches the accumulated experience of many companies in planning and assessing effectiveness of investment outlay. The theoretical basis for the present paper is the scientific researches of home and Foreign authors such as Stoyanova Kovalyev, Ryabykh, Brigkhem, Gapensky that deal with evaluation of the investment projects. The developed state methods of evaluation of the investment projects "Guidelines for the assessment of investment projects and their selection for financing", adopted by the Ministries of the RF on June 19, 1999 were also used.

MATERIALS AND METHODS

Various aspects of the investment project may have different rate evaluations, therefore, in order to evaluate, it is important to define a standpoint with regard to the project. Unawareness of this feature may lead to wrong interpretation of the rates and making an erroneous decision.

Firstly, by evaluating the rates of investment project, it is essential to determine time period of project

consideration as finite rates of the project represent a derivative of the prospects of project consideration (excepting pay-off period) (Richard, 2011).

The time horizon of evaluating the investment project for its different aspects may differ. In isolated cases, the horizon of considering the project is defined by:

- Requirements for return of investment
- Currency of effect of a credit contract
- Currency of effect of the contract between the parties of the project

By carrying out commercial valuation of effectiveness of the project, certain periods of time have been considered: what collective effect of the life-time project will be (for example, by 12 years) or from the stand point of the investors interested in return of investments within the shortest period (8 years). As a result, we haveat least two horizons of consideration of the project, each of them will have its own efficiency rating (NPV, IRR, PI).

Secondly, evaluation of the rates of project effectiveness is based on the sum of net cash flow from three types of financing activities: operations, finance and investments. Therefore, for essential distinctions between evaluations of general rates of the investment project and the rates for commercial bank to find, two budgets of flow of project funds were drawn up. The first budget includes all cash flows, generated by the project, the cash flows for credit extension, capital repayment and interest amount from the second budget were excluded. The target purpose of this approach for the bank is to allocate those cash flows which are related to the project and to estimate financing requirement of the project (Kovalev, 2013).

The key efficiency rating of the investment project is the rate of Net Present Value (NPV) which reflects a profit, realized from investments with account taken of compensation for temporary non-useof draft on funds, and a risk, due toresult uncertainty (Koltsov and Ryabykh, 2007). The formula evaluating the rate of net present value is the following:

$$NPV = \sum CF_t \times D_t$$

Where:

Cf_t = A net cash flow of the project within the time perriodt

D_t = Discount factor, calculated for the period of time t

The formula to evaluate the discount factor within the period of time equal to one quarter is presented as:

$$D_t = \frac{1}{\left(1+\frac{r}{4}\right)^t}$$

Where:

r = Annual percentage rate, compensating temporal non-use of cash means and risks

t = The period of time equal to a quarter

According to the obtained net present value of the project, one can evaluate how attractive it is or whether it is worth abandoning investments (Stephen, 2012).

RESULTS AND DISCUSSION

As a result of evaluation of the net present value of the unconditioned project (for the perriod of effect of the credit contract) according to general approachand for commercial bank, we have obtained two widely different values (Fig. 1).

If to consider a standard error when by evaluating the rates of effectiveness of the project, account is taken of all cash flows, then the diagram of net present value will have the following form.

As follows from the diagram, we see that depending on inclusions of certain cash flows, the sums of net present value of the project are widely different. Therefore, situation 1, by discounting all the cash flows of the project by the bank, will not reflect internal requirement of the project for financing, misrepresent its

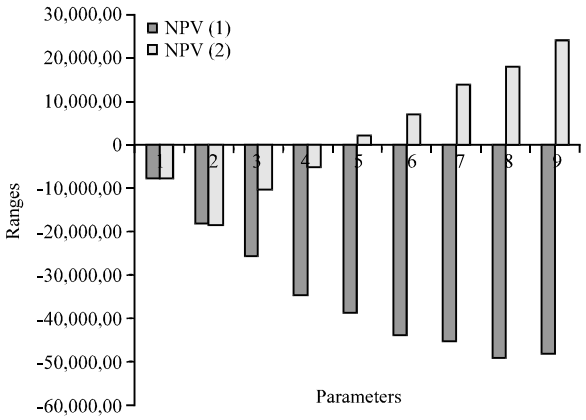

Fig. 1: The diagram of net present value of the project according to general approach and for commercial bank

effectiveness (ascash flows fromfinancial activities create extra load on the project) and accordingly, not allow the bank tomake impartial decision about purposefulness of crediting (Peter *et al*., 2008).

One more important result obtained on the basis of the analysis of selection of time horizon is its influence on payback period of the project. Using two budgets of flow of funds in evaluation, it has been determined the rates of payback of investments during the whole life-time of the project and for the credit contract period. We see in the diagram that a Net Present Value (NPV 2) for the period of the credit contract is negative. And if to approach the problem of assessment of payback of the project within the entire life cycle, then it is likely, on the one hand, to turn out to be financially consistent. On the other hand, one can lose sight of the moment when the project within the period of debt servicing may meet certain problems associated with financial responsibility. Accordingly, one is to make a decision of either prolongation of term of the credit contract or refusing to finance this project.

And the final result of investigation that follows from after having selected e horizon of planning the project and defining a structure ofcash flows is a role definition of internal rate of return by evaluating the project for Commercial Bank. In fact, the internal rate of return is an amount of maximum interest rate which can be stated on crediting of this project. This meansthat for a given cost of borrowed resources in the selected time period, the project can serve debt and also remain effective (Brigham and Ehrhardt, 2009).

Summary: Featuresin the evaluation of investment projects of commercial bankare observed in determining the structure of fundsin the selection of planning horizon of the project and the interpretation of the internalrate of return of the project.

To determine the needs of the projectin its financing, it is necessary to select only those cash flows that are associated with the project, that is, not take the cash flows of credit, payment of the principal debt and interest payments into account.

The time horizon for consideration of the project should correspond to the length of time during which it will be considered important for the parties. The project is of interest for the creditor onlyduring the term of the credit contract.

CONCLUSION

Thus, we have identified three key points in assessing the performance of the investment project by Commercial Bank. This is the choice of time horizon of project planning, definition of the structure of the project cash flows for evaluation of the rates as well as the interpretation of the indicator of internal rate of return.

According to the results of analysis, one can observe how much the final figures can differ with mistaken approach to evaluating the rates of effectiveness and profitability of the project. Application of these recommendations will enable the credit in stitutionto obtain reliablee stimates of net present value to calculate the payback period and to determine the maximum interest rate for the financingof this project.

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REFERENCES

Brigham, U. and M. Ehrhardt, 2009. Financial management. 10th Edn. SPb, pp: 960.

Kovalev, V.V., 2013. Financial Management: Theory and Practice. TC Welby, Publishing House of the Prospectus, pp: 1024.

Koltsov, I. and D. Ryabykh, 2007. Practice of Financial Diagnosis and evaluation of projectsm. M.: Publishing House Williams, pp: 413.

Peter, V., B. Livshits and S. Smolyak, 2008. Evaluating the effectiveness of investment projects. Theory and practice. Publishing House Business, Academy of National Economy, pp: 1104.

Richard, B., 2011. Stuart Meyer Principles of Corporate Finance. Trans. from English. N. Baryshnikova (Eds.), M.: UAB "Olympus-Business", pp: 1008.

Stoyanova, E.S., 2013. Financial Management: Theory and Practice: A Textbook. E.S. Stoyanova (Eds.), 5th Edn., Rev. Dop, Publishing House of the "Perspective" pp: 656.

Stephen, B., 2012. Handbook of Financial Director; Trans. from English. 8th Edn. Alpina Publisher, Moscow, pp: 608.