Assessment of Rating Levels based on Indicators of Attractiveness of Investments Made in the Country, Region, Industry and Enterprises

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Abstract--- In this paper have been investigated assessment of rating levels based on indicators of attractiveness of investments made in the country, region, industry and enterprises.

Keywords--- Attractiveness of Investments, business, Assessment, Rating, Integral Level, Value, IRR, NPV,Finance, Rank.

I. Introduction

Hazards and risks associated with conducting business and investment activities in the country are an important component of the investment environment. International practice shows that the level of risk of doing business in the country for foreign investors is often characterized by its international rating.[1]

Today, there are 3 international rating agencies, they are Standard and Poors, Moody's Investor Services and Fitch Ratings. [2] A number of rating tools are used by these companies in order to determine the level of risk related to the activities of countries and their economic entities. Among them, the most common and demanded rating tool is the credit rating of issuers and financial institutions.[3]

II. Methodology

The practical importance of the credit rating is that its level has a significant impact on the ability of the country and its economic entities to attract funds in the international capital markets and on the interest rate of such funds.[5]

In practice, the rating level of the country is divided into investment and speculative levels. According to the methodology of the rating agency "Fitch Ratings", if the rating level of the country is BBB and higher, such a rating is recognized as a high level of investment. Countries with an investment grade rating and their financial institutions and enterprises will be able to place securities (bonds and shares) in international financial markets at relatively low interest rates, that is, attract funds.[4]

It can also be seen from Table 1 that the country's sovereign rating has a significant impact on attracting funds from international capital markets and the price of such funds. On average, the spread on securities of countries with an investment rating, i.e., holders of a sovereign rating of BBB and higher, placed on the international financial markets, is 60-80 basis points. The meaning of this is that the capital raising rates of these developing countries are 0.6-0.8 percent higher than bonds of developed countries. [6]

China, Malaysia and Poland are among such countries. The spread on bonds of countries with a sovereign rating of BB and lower (Philippines, Brazil, Ukraine, and Turkey) in international capital markets is on average 200 to 300 points, which means that their capital raising costs are at least 2-3 percent higher than those of developed countries.

Table 1: The Sovereign Rating Level of Some Countries andtheir Costs of Raising Capital in International Markets

Countries	Rating level on long-term liabilities	JP Morgan Chase EMBI Global Yield Spread
China	A+	68
Poland	A-	62
Malaysia	A-	64
Thailand	BBB+	72

Hungary	BBB+	74
Russia	BBB+	89
Mexico	BBB+	112
Philippines	BB	302
Brazil	BB+	308
Ukraine	BBB-	212
Turkey	BBB-	223

Thus, the higher the sovereign rating level, the lower interest rates the country and its economic entities will be able to attract funds from the international financial markets.[7]

In our opinion, it is necessary to start organizational work on obtaining an international sovereign rating in Uzbekistan. Stable economic growth, low inflation rate, stability of the exchange rate, low level of external debt, as well as the growth of gold and currency reserves open the possibility of obtaining a high international rating for our republic. [8]

Obtaining an international rating provides an opportunity not only to finance centralized projects, but also to attract long-term funds at a relatively low price for financing promising projects in priority areas by the corporate sector, that is, large corporations and companies. In the initial stages, attracting long-term funds from international markets can be done by placing bonds in foreign markets by large financial institutions and corporations operating in the national economy. [9]

After 1-2 years after the implementation of these works, the next step is the initial public offering of shares by national companies on international stock markets, including Moscow (Moscow Interbank Currency Exchange), Frankfurt (Dutch Burse) or Singapore (Singapore Stock Exchange).) should be provided. In the process of issuing and servicing bonds at the first stage, national companies develop the skills to learn and meet the requirements of international stock markets. It is known that attracting funds through the stock markets requires the fulfillment of many requirements for the issuers, that is, the management and shareholders of the securities trading company. The following formula can be used to determine the investment attractiveness of an area:

$$M_i = \frac{\sum_{s=1}^{c} k_s \dfrac{p_{si}}{p_s}}{\sum_{s=1}^{c} k_s} \quad (1)$$

Here:

M_i - The integrated level of investment attractiveness of the i-region, which is compared with the average level of Uzbekistan, is taken as 1.0;

i = 1…n - regions;

s = 1...c - the private indicators being compared;

c - the number of pointers being compared;

k_s – s-weight factor of the indicator (weight score);

p_{si} - s-the numerical value of the indicator in the i-region;

s - s-numerical significance of the indicator on average for Uzbekistan;

$\dfrac{p_{si}}{p_s}$ - s-the normative numerical significance of the indicator in the i-region.

Table 2 below presents the composition of the main indicators of the assessment of the integral level of investment attractiveness of the regions of the Republic of Uzbekistan. To determine the integral level of investment attractiveness of the regions of the Republic of Uzbekistan, we use the composition of important investment

indicators. The data of the State Statistics Committee of the Republic of Uzbekistan and their results can be used to measure these indicators.

Table 2: The Composition of the Main Indicators of the Assessment of the Integral Level of Investment Attractiveness of the Regions of the Republic of Uzbekistan

№	Indicator name	Measurement volume
A. Indicators of investment attractiveness of the region		
1. Regional production and financial indicators		
1	Industrial production volume	Volume of industrial output per capita of the territory
2	Rate of volume change	Annual rate of change
3	The level of development of entrepreneurship	Employment in small enterprises in the total number of activepopulation
4	Share of harmful enterprises in small business	Relative weight of harmful enterprises and organizations in relation to their total number
5	The total amount of internal investment resources of the enterprise	Actual depreciation deductions and profit amount
6	Volume of retail turnover	Volume of retail turnover per capita
7	Export to far and near abroad	Exports from the region per capita
2. Indicators of social potential of the area		
8	Provision of housing for the population	The total number of living spaces per capita
9	Providing the population with cars	The number of private cars per 1000 inhabitants
10	Providing the population with telephone devices	Personal telephone sets (numbers) for 1000 families
11	The territory is provided with highways	The total length of highways per area and per capita is determined by E. Engel's formula:
12	Volume of paid services to the population	Ke=D/√TN where: D is the length of the highway network in km; T - territory area in hundreds of square kilometers;
13	Living standards of the population of the region	N - the population of the area in tens of thousands of people.
3. Ҳудуд ресурс хом ашё салоҳияти кўрсаткичлари		
14	The volume of hydrocarbon (oil and gas) reserves	The volume of natural resource reserves due to the profitability of location processing
15	The volume of mineral and raw material resource reserves	The volume of mineral, raw material resource reserves due to the profitability of location processing
16	Geographical location of the territory to access domestic and foreign markets	Scoring on the scale:
Total area investment potential level		
B. Indicators of socio-political and environmental security of the territory		
17	Proportion of poor population	Share of the population with income below the subsistence minimum
18	Crime rate	Complex indicator:
19	Unemployment rate	1) registered crimes per 100,000 inhabitants;
20	Level of environmental pollution and environmental discomfort	2) serious crimes registered per 100,000 inhabitants.
21	The attitude of the population to the formation of market relations	Ratio of the total unemployed to the number of economically active population, in %
22	The level of conflict that occurs in labor relations	Complex indicator:
Socio-political and environmental security for the investor is the level of the total territory		
Total area investment attractiveness integral level	*An integral coefficient summarizing the data of the total private indicators*

Assessment of Enterprise Investment Attractiveness Rating

In assessing the investment attractiveness of the enterprise, the intended size of the investment is important. For capital investments, there is an internal rate of return (IRR) as well as a net present value (NPV). Therefore, when considering the investment attractiveness of an enterprise, the path followed by the investor occupies a central place.

If the issue under consideration is to place investments in a fixed amount to evaluate the attractiveness of various enterprises, then the net present value (NPV) will be the main indicator.

If we are talking about diversified investments with a limit on the amount of financing, then the internal rate of return (IRR) is preferable.[9]

If the net present value (NPV) for the entire depreciation period is higher than 0, the investment attractiveness of the enterprise is absolutely positive. The concept of "relative investment attractiveness" always implies a basis of comparison.

This is the average investment attractiveness of the network; comparing the network with other enterprises; there may be a comparison with some normative (given by the customer) indicators.[10]

Therefore, when assessing the investment attractiveness of an enterprise, it is necessary to clearly specialize the following cases:

1. What is the assessment base?
   - Other enterprises (limited list).
   - Target indicators of investment payback provided by potential investors (payback period, normal rate of profit, net present value, internal rate of return).
   - Average industry return on invested capital.
   - 0 (in this case, the absolute investment attractiveness of the enterprise is evaluated).
2. Is the assessment of the investment attractiveness of the enterprise for a specific investment project being carried out or is this period not determined?
3. Is the enterprise's investment attractiveness assessment for a specified amount of investment carried out, or is this period not determined?
4. Is the investment attractiveness of the enterprise being assessed for credit or institutional financing?
5. Are investors restricted by the following? - investment recovery periods.
   - Minimum return on invested capital.
   - Liquidity of capital investments.
   - Limited amount of funding.
6. Qualitative description of financing (ITTMI supporting investments, innovations, modernization).
7. What is the additional security (guarantee, minimum account balance, letter of credit, etc.)?

If there are no clear explanations, the investment attractiveness of the enterprise will lose its meaning.

Assessment methodology (methodology) and assessment algorithm.

It is advisable to evaluate the investment attractiveness of the enterprise in two stages.

III. Discussion of Results

The first stage is the analysis of constraints.

The second stage is the rating assessment of the investment attractiveness of the enterprise.

In the analysis of constraints, the financial ability and investment attractiveness of some joint ventures and joint-stock companies operating in the light industry of Uzbekistan were analyzed, and the results are presented in Table 3.

Table 3: Indicators of Assessmentof Financial Ability and Investment Attractiveness of Textile Industry Enterprises of Uzbekistan

Enterprises	Net present value (SJQ-NPV)	Internal rate of return (RIM-IRR), %
"BETLIS TEXTILE" LLC	91240,2	20
"Bukhorotex" JSC	-127853,9	15
"Karakoltex" JV	-5903593	Negative
"Babur" JSC	-884977,1	Negative
"Namangantex" JSC	-754589,7	5.81
"Chinoz Tokmachi" JV	-1845743,5	Negative
"Fargonatex" JSC	-1783616,2	Negative
"Kabul-Fergana" JV	-4101795,6	2.84
"Istiqbol" JSC	-34168,2	Negative
"SAMO" LLC	39399,8	18
"Yulduz" JSC	-642340,8	Negative
"ELEGANT GARMENT TEXTILE" LLC	301344,0	57,9 *

Nine out of 12 enterprises under analysis have a negative indicator. This indicates that enterprises are operating inefficiently in terms of profit.

In particular, all enterprises with old equipment and three enterprises with modern equipment ended the year with a loss because they received very expensive equipment.

Six out of 12 enterprises had a negative internal rate of profitability and did not exceed the specified discount rate.

Therefore, it is necessary to implement strict management measures to improve the conditions of investment in light industrial enterprises and the operation of enterprises.[11]

The methodology (methodology) for rating the investment attractiveness of the enterprise shows the level of investment attractiveness of the enterprise*.

As can be seen from Table 4, the ratio of factors in credit financing and institutional financing in the first case was 4 to 4, andInternal rate of return (RIM-IRR), %

20
15
Negative
Negative
5.81
Negative
Negative
2.84
Negative
18
Negativein the second case 6 to 2, respectively.

Table 4: Financing of Credit Activities and Institutional Financing (Size of Indicators in Rating Assessment)*

Indicators	Credit activity financing	Institutional funding
1. Efficiency of economic activity		
Product profitability	1,5	2,3
Profit on the balance sheet to gross assets of 1 soum	1	1,5
Profit on the balance sheet to private funds	0,7	1
Depreciation percentage of fixed assets	0,5	0,7
Profit on the balance sheet to the volume of current assets	0,3	0,5
The sum of the total volumes by efficiency	4	6
2. Financial status		
Current liquidity ratio	0,8	0,4
Required liquidity ratio	0,8	0,4
Absolute liquidity ratio	1,5	0,8
Share of net working capital in current assets	0,5	0,2
Share of private funds in liabilities	0,4	0,2
Sum of total volumes by financial position	4	2
Total	8	8

*Note: *To use this indicator, it is necessary to have accurate information about the alternative cost of capital. We used the refinancing rate of the Central Bank of the Republic of Uzbekistan equal to 14% per year as an alternative cost of capital.*

The indicator of long-term financial stability (the share of private assets in the property) in Table 5 has a larger volume in long-term loans compared to "short" loans (0.4 and 0.1). At the same time, indicators of current solvency (liquidity, share of net working capital in current assets) are somewhat higher in short credit terms.

Table 5: Financing of Credit Activity

Indicators	Coverage period 8 years	Coverage period 2 years
1. Efficiency of economic activity		
Product profitability	1,5	1,5
Profit on the balance sheet to gross assets of 1 soum	1	1
Profit on the balance sheet to private funds	0,7	0,7
Depreciation percentage of fixed assets	0,5	0,5
Profit on the balance sheet to the volume of current assets	0,3	0,3
The sum of the total volumes by efficiency	4	4
2. Financial status		
Current liquidity ratio	0,8	0,8
Required liquidity ratio	0,8	0,9
Absolute liquidity ratio	1,5	1,6
Share of net working capital in current assets	0,5	0,6
Share of private funds in liabilities	0,4	0,1
Sum of total volumes by financial position	4	4
Total	**8**	**8**

In Table 3, in the assessment of the financial capacity and investment attractiveness of some enterprises of the light industry of Uzbekistan, 1 2 "ELEGANT GARMENT TEXTILE" LLC (Tashkent region) and "BETLIS

TEXTILE" LLC (Tashkent city) have relatively positive results 1.6,7,8, In the 9th tables, we present the developed algorithm of rating assessment on the example of them.

Initial parameters.
Grades:
"good" - 2 points;
"satisfactory" - 1 point;
"allowable value" - 0;
"unsatisfied" - 1 point;
"very unsatisfactory" - 2 points.
Volumes.
1. Efficiency of economic activity:
Product profitability - 1.5;
Profit on the balance sheet in relation to gross assets of 1 soum - 1;
1 soum profit on the balance sheet compared to private means – 0.7;
Percentage of depreciation of fixed assets - 0.5;
Profit on the balance sheet against 1 soum of current assets – 0.3.
Total (sum of volumes) - 4.
2. Financial situation:
The current liquidity ratio is 0.8;
Required liquidity ratio - 0.8;
Absolute liquidity ratio – 1.5;
Financial flexibility: share of net working capital in current assets - 0.5;
Total solvency: the share of private funds in the company's liabilities is 0.4. Total (sum of volumes) - 4.
Dynamics correction:
"very positive" - plus 20%;
"positive" - plus 10%;
"stable" - 0;
"negative" - minus 10%;
"very negative" - minus 20%.

Table 6: Score Evaluation of Parameters

Indicators/ Evaluation	Good	Satisfactory	Allowable value	Satisfied You	Very unsatisfied
Product profitability	>20 %	5-20 %	0-5 %	-20 %-0	<-20 %
Profit on the balance sheet against the foreign exchange balance	>15%	5-15%	0-5 %	-10 %-0	<-10 %
Profit on the balance sheet against private equity	>45 %	15-45 %	0-15 %	-30 %-0	<-30 %
Depreciation percentage of fixed assets	<20 %	20-30 %	30-45 %	45-60 %	>60 %
Profit on the balance sheet in relation to the volume of current assets	>30 %	10-30 %	0-10 %	-20 %-0	<-20 %
Current liquidity	>1,3 %	1,15-1,3	1-1,15	0,9-1	<0,9
Required liquidity	>1 %	0,8-1	0,7-0,8	0,5-0,7	<0,5
Absolute liquidity	>0,3 %	0,2-0,3	0,15-0,2	0,1-0,15	<0,1
Share of net working capital in current assets	>22 %	12-22 %	0-12 %	-11 %-0	<-11 %
Share of private equity in property	>50 %	20-50 %	10-20 %	3-10 %	<3 %

Table 7: Evaluation of the Efficiency of Economic Activity

Enterprise	Product profitability	1 soum in relation to gross assets profit on the balance sheet	1 soum profit on the balance sheet compared to private funds	Асосий воситалар емирилиши улуши	Circulating tools Profit on the balance sheet against 1 soum
«ELEGANT GARMENT TEXTILE» МЧЖ-ХК	1,39/+2 (+)	0,73/+2 (-)	0,2/+2 (-)	35,8/+1 (+)	0,1/+1 (+.)
«BETLIS TEKSTIL» МЧЖ	0,71/+2 (+)	0,017/+2 (+)	0,051/+1 (+)	47/0 (-)	0,05/+1 (-)

Table 8: Assessment of Financial Performance

Enterprise	Current liquid licity coefficient	Necessary liquid licity coefficient	Absolute liquid licity coefficient	Financial flexibility: share of SAK in current assets	Financial flexibility: share of SAK in current assets
«ELEGANT GARMENT TEXTILE» МЧЖ-ХК	0,484/-2 (+)	0,358/-2 (+)	0,257/+2 (+)	Сал. САК/-2	0,06/-2 (+)
«BETLIS TEKSTIL» МЧЖ	0,803/-1 (-)	0,429/-1 (-)	0,115/+1	Сал. САК/-2	0,553/-1 (+)

Table 9: Ranking

Enterprise	Operational efficiency	Financial situation	General summary
«ELEGANT GARMENT TEXTILE» МЧЖ-ХК	+7,2/+7,24	-2/-0,96	+6,28/1
«BETLIS TEKSTIL» МЧЖ	+5/+5,27	-1,5/-1,58	+3,69/2

Compiling the rating is the end of the absolute and relative assessment of the investment attractiveness of enterprises. In a practical key, it means that within the limits and conditions imposed on the return of the instruments, the investor can make numerical justifications for different choices of comparative profit when investing financial resources.[12]

According to the classification of these proposed methods, the value-added measurer for efficiency evaluation is used in the case based on the principle that takes into account the factors of the duration of the invested capital, the price, which takes into account the risk and adapts to the change of internal parameters, and is based on various principles of the formation of results and costs.

IV. Conclusions

In this way, in our opinion, the method of evaluating the efficiency of the enterprise's investment resources management, based on the value approach, helps to use the following advantages:

1. To ensure the most accurate strategic analysis and choose a step-by-step, sequential development strategy to maximize the evaluation of indicators with the help of setting a common goal and forming conditions at all levels of the management of separate departments as well as the entire enterprise. This, in turn, aligns the interests of owners and managers, and facilitates communication with investors and analysts.

2. To increase the quality and effectiveness of management decisions, ensure flexibility and systematization due to clear priorities in management and rational matching of long and short-term goals.

3. Organization of planning processes due to rational allocation of investment resources. It helps to effectively manage very complex and uncertain objects, control the investment attractiveness of the enterprise within

the life cycle of its product.

At the same time, we emphasize the shortcoming of the methodology:

1. Inability to accurately assess negative factors, which leads to a decrease in management efficiency (for example, excessive diversification of activities or wastage of resources).
2. Not using the terms (NOPAT or EBIT (IT), FCF, OCF, FCFE) in the report.

If we see the improvement of the methods of calculating the investment attractiveness of enterprises in the textile industry network. Calculation of investment attractiveness coefficient. The coefficient of investment attractiveness of the enterprise indicates the ratio of the real (internal) value of the enterprise to its current market (statutory) value. Market value refers to the total value of all shares of the company at the possible current purchase price. The charter value means the size of the charter capital shown in the company's balance sheet.

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