



ASSESSMENT OF THE CAPITAL ASSETS OF COMPANIES. A CASE OF «KOKAND MECHANICAL PLANT» JSC

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Article history:	Abstract:
Received: 14 th January 2024 Accepted: 10 th March 2024	The technical and theoretical components of determining a joint stock company's capital value through the discounted cash flow approach are discussed in this article. Also, the capital value of JSC «Kokand Mechanical plant» was evaluated using the discounted cash flows method. It also notes current issues and suggests solutions for them when utilizing the discounted cash flow approach to determine the joint stock company's capital worth.
Keywords: Cost Of Equity, Discount Cash Flow, Terminal Value, Risk Free Rate, Beta, Debt, Weight Average Cost Of Capital.	

INTRODUCTION

These days, the standard procedures and methods for valuation are widely employed in industrialized countries to ascertain the capital value of enterprises. Additionally, the valuation standards' guiding principles are applied in determining the capital value and worth of an enterprise's property owned by various entities. According to the international standard, enterprises' capital valuation was assessed in industrialized nations using three distinct approaches: the income, comparative, and cost methodologies.

Unfortunately, though, one of the most urgent problems we face today is how to improve our nation's valuing system. Even so, the implementation of a single valuation standard based on best international practices and valuation activities, approaches, and methodologies still do not improve and do not adhere to the principles of international valuation standards. Furthermore, the fact that our nation's capital value calculations frequently employ the net asset and liquidity value approach only serves to highlight the flaws in the valuation procedure.

Hence, the need of a single national standard meets the universal valuation standard in esteeming companies' capital esteem. In our nation, capital is esteemed at an nonsensically expanded cost [1]. Other than, the need of advancement in valuation exercises in our nation and the need of approaches and strategies of valuation to worldwide benchmarks restrain the utilize of capitalization, reduced cash streams, capital markets and multiplier coefficients in surveying the esteem of company capital. Therefore, under the state program on implementing the strategy of actions in five priority areas of development of the Republic of Uzbekistan [2]. Therefore, we dedicate this article to using

capitalization and discounted cash flows based on the income approach in determining the capital value of companies in our country.

LITERATURE REVIEW

Within the 1930s, Graham and Dodd's book Securities Investigation centered on resource valuation strategies. In their supposition, the company' venture value's assurance emphasizes that the appraisal of the company's capital esteem will be exceptionally near. In later a long time, changes in money related markets have required utilizing the showcase esteem of securities in resource valuation. With this in intellect, they appeared an assessment of a company's offers through its substantial assets' advertise value»[3]. John Berr Williams depicted utilizing the markdown cash stream strategy in esteeming a company's capital in his book Venture Hypothesis and illustrated the hypothesis of marked down cash streams in esteeming capital. Concurring to the analyst, three models play an basic part within the reduced cash streams hypothesis. In specific, the company's capital esteem appraisal includes the utilize of profit rebate models, free cash stream markdown models, and leftover salary models. In spite of the fact that the calculation of these models is distinctive, in hypothesis, deciding the esteem of the anticipated cash streams from the company's capital will be the same»[4].

In Miller's and Modiglian's research, the discount dividend model's theory was improved by them. According to the authors, investors consider two types of cash flows when buying a company's securities. The first is the number of dividends payable by the company in the period in which it owns the shares. The second is the market value of those shares in the period in which the company held investors' shares until the dividend



was declared. According to the authors, the company's securities' market value is determined by the expected dividend for the period. That held by the holders of those securities»[5].

Myron J. Gordon contributed to the development of the discount dividend model. He developed an authorship model during his research, and according to this model, the value of shares is determined based on ever-increasing dividends. According to Gordon's theory, if a company's dividend policy pays dividends to regular shareholders when it is stable, using the Gordon model allows the company to calculate the number of dividends for the coming year [6].

Stephen Penman's research focuses on the discount dividend model, where the future market value of a stock is not determined based on dividends. He noted that today there are difficulties in applying this model, as the large number of securities traded and the high volatility of their market value do not allow the use of this model [7].

Agreeing to a think about by Grullon and Michael, within the 1980s, huge companies started to repurchase their offers in expansive amounts. As a result, the transformation of stores in companies into investors' reserves did not permit the profit model's application. After that, most analysts started to utilize the free markdown cash stream demonstrate. However, due to changes within the conjuncture of budgetary markets, the company started to utilize relative valuation strategy in surveying the esteem of capital. In turn, the esteem of the capital was decided utilizing multiplier coefficients [8].

In scientific research, Stowe et al. have argued that it is appropriate to use three relative valuation methods in estimating a company's capital value. In particular, the method of estimating relative income: P / E (Price-earnings ratio) and PEG (price/earnings to growth ratio) coefficients, the method of estimating relative cash flows: P/EBIT, P/EBITDA, P/CFO, EV/EBITDA coefficients. Relative asset valuation method: P/B or B/M ratios [9].

According to Barker's research, professional investors and financial managers have noted the P / E multiplier ratios widespread use in practice [10]. Besides, a study by renowned economists Demirakos, Strong, and Wokera concluded that 89% of companies perform capital valuations using the relative income valuation method [11].

In our view, when buying offers of companies that are not frequently exchanged within the stock advertise, speculators pay consideration to the number of profits

anticipated from the offers of these companies. Be that as it may, when buying offers of companies in which securities are in steady circulation, speculators buy the company taking into consideration the company's multiplier proportions, decided by monetary supervisors. It can be seen that the capital value of undertakings is straightforwardly related to the strategy of evaluating relative wage.

RESEARCH METHOD

The study uses the method of assessing the capital value of companies. The method of determining the value of capital through free cash flows is used. Also, in determining the company's free cash flows, capital expenditures, depreciation costs, and working capital changes are taken into account. The valuation of a company's capital is decided utilizing esteeming monetary resources at a markdown rate. The taking after indicators were calculated and analyzed within the evaluation of the company's capital value:

$$\text{The capital value of the company} = \sum_{t=1}^{t=n} \frac{\text{Free cash flows from capital}_t}{(1 + K_e)^t}$$

Where,

Free cash flow from capital – expected crop cash flow from capital in period t ;

K_e – capital value

Expected free cash flow from capital = Net profit + depreciation-change in working capital- cost of capital + interest expense (tax rate 1).

The research object was the joint stock companies of the developed countries of the world, based on the data of which, using the methods of grouping, comparative analysis, the capital value of the joint stock company and the weighted average value of capital were determined.

ANALYSIS AND RESULTS

These days, there are more than 600 joint-stock companies in Uzbekistan. The shares of Kokand Mechanical Plant JSC were sold in the form of SPO. Our study used the discounted cash flow method to estimate the value of a corporation's capital. Revenues from the sale of products of Kokand Mechanical Plant are shown in the following figure (Figure 1).

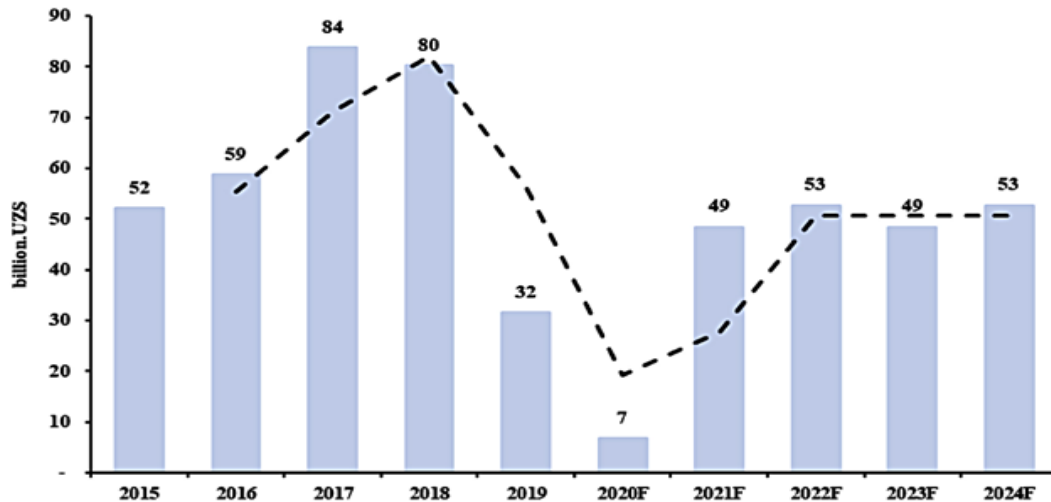


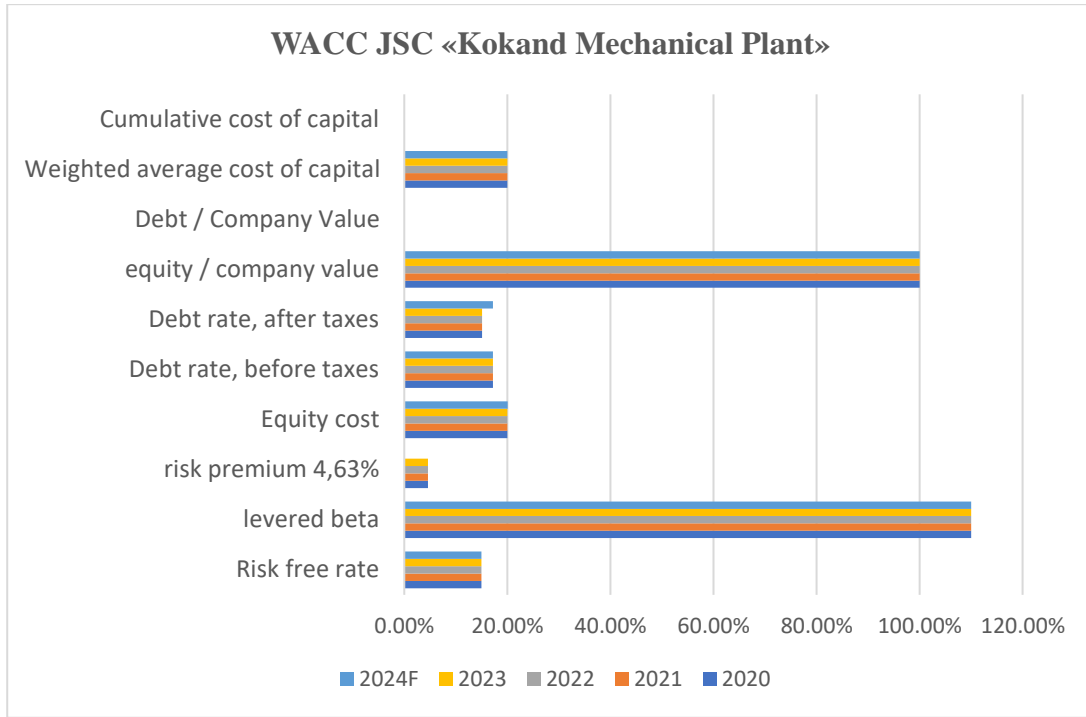
Figure 1. Revenues from the sale of products of JSC «Kokand Mechanical plant».

Figure 1 shows that as a result, the revenue of JSC « Kokand Mechanical Plant » will reach 7 billion UZS by 2020 and 53 billion by 2024. Growth rates will smoothly increase from 6.4% in 2021 to 9.6% in 2022 and 14.1% by 2024. EBIT margin for the last three

fell from 21% to 6%. According to our estimates that based on the company's expected plans to expand production by 2024. It will reach 6 %, which will lead to a reduction in the NOPLAT margin from 30% in 2019 to 7% in 2024. However, NOPLAT margin will grow slowly over the forecast period (table 1).

Table 1
Capital assets calculations of JSC « Kokand Mechanical Plant »

Forecasting period, bln., UZS	2020	2021	2022	2023	2024F	mature
<i>revenue growth rate, %</i>	3,2%	6,4%	9,6%	12,8%	14,1%	5,4%
(+) Revenue	6,8	48,5	52,8	48,5	52,8	55,6
(x) Operating margin	3,7%	7,4%	11,1%	14,8%	16,3%	7%
(=) EBIT	0,25	3,59	5,87	7,19	8,60	3,9
Tax rate	12%	12%	12%	12%	12%	12%
(-) Tax on EBIT	0,0	0,4	0,7	0,9	1,0	0,5
(=) NOPLAT	0,2	3,2	5,2	6,3	7,6	3,4
(-)net reinvestment	-55	9	14	26	26,5	0,5
CapEx	2,1	2,7	3,4	4,2	5,2	0
(+) changes in WC	-52,9	10,5	14,7	26,3	25,9	0
(-) DD&A	4,2	4,0	3,8	4,2	4,6	0
(=) FCF	55	(6)	(9)	(20)	(19)	3
(x) discount factor	0,87x	0,73x	0,60x	0,50x	0,42x	0,50x
PV FCF	48	(4)	(6)	(10)	(8)	1
Terminal value						20
PV Terminal value						8



Implied model variables	2020	2021	2022	2023	2024F	mature
Revenue /capital, x	0,10x	0,49x	0,47x	0,45x	0,44x	
Invested capital, billion UZS	70	100	114	140	167	
Net reinvestment, %	-24600%	292%	278%	416%	351%	15%
ROIC, %	0%	3%	5%	5%	5%	5%
Margin NOPLAT, %	3%	7%	10%	13%	14%	6%

Capital valuation, bln., UZS		
(=) Cost in the forecast period		20
(+) Cost in the mature period		8,305
(=) EV		28
(-) Debt		0,0
(+) Cash		0,6
(=) cost of equity		29
Market capitalization		25

Target share price, UZS		1 296
Market price, UZS		900
Growth potential, %		44%
Multiplier		valuation DCF



P/BV, x		0,9x
P/E, x		-3,8x
BV, 2019		31
Net profit, 2019		-8

Table 1 shows that in 2019, the net loss amounted to 7.56 billion UZS as a result of a sharp decrease in revenue (from 80.37 billion UZS in 2018 to 31.58 billion UZS in 2019), which resulted in low gross profit that did not cover operating expenses (although they decreased in twice). The company's assets decreased by 6.6%, and equity by 27.8%. Forecast of future cash flows in 2024 was drawn up based on its new business plan. Thus, the company plans to get a net profit of 2.5 billion UZS in 2020, and by 2024 bring the net profit to 3.19 billion UZS. However, the company's business plan includes an EBIT margin of 45.5%, which we considered overly optimistic, and made our forecast for an EBIT margin of 20.5% by 2024 (average margin for 2015-2017) and movement margin to average in 2020-2023, which is much more a conservative forecast than the forecast of the company itself. The cost of equity capital is calculated based on the Central Bank of Uzbekistan refinancing rate of 14% per annum plus a risk premium on equity investments of 4.63 with a beta of 1.1x.

The final estimate is 29 billion UZS by DCF. Based on the above assumptions, the cost of JSC «Kokand Mechanical Plant» in the forecast period will amount to 20 billion UZS and 8,3 billion UZS in the terminal period. We get an estimate of the equity capital of JSC «Kokand Mechanical Plant» at 29 billion UZS, which is equivalent to 1296 UZS per 1 common share. The analysis result given this target price, the fundamental upside potential towards the lower end of the range is 44%.

CONCLUSION

Overall, from the analysis we can say that almost the company does not use the method of discounted cash flows in estimating the value of capital.

The main reason for this is the underdevelopment of the stock market in our country. There are the following problems with the use of the discounted cash flow method in assessing the capital value of joint-stock companies:

Firstly, the market capitalization of joint-stock companies in our country is very low. That is because the state's share is high in many joint-stock companies, while private investors' share remains low.

Secondly, due to the country's high risks, the expected return on capital of joint-stock companies is high. That significantly limits the opportunities to attract investment through securities.

Thirdly, the investment attractiveness of stocks of joint-stock companies is almost low. The main reason for this is that the dividend policy is not being appropriately pursued. That is because joint-stock companies pay a dividend payment of 50% of the share's nominal value for the first two years. In subsequent years, they do not pay dividends due to directing the company's net profit to the capitalization of the charter capital.

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