Case-study
on
Valuation of Companies and Managing Companies' Value

Short Version

(compiled by Prof. Sergey Valdaytsev)

Majority shareholders at a sitting of the Board of Directors of an aluminium plant are heatedly discussing the draft of the strategic plan for the corporation whose only tangible asset is this plant.

For all of the majority shareholders the maximization of market value of the company (and their shares) is the first priority.

Up to now the company produces and sells rolled aluminium. Production equipment is in a working state. There is no recognized need to modernize it in future. The company has stable consumers from Russia (70 % of sales) and Ukraine (30 % of sales). The average yearly revenue from sales (after account of the value added and after transport taxes) for the four previous years was equal to Rbl. 30 Bln. (in present prices). The correspondent variable costs in present prices constituted Rbl. 17 Bln., the fixed costs – Rbl. 8 Bln. The average annual net profit was Rbl. 3,3 Bln., the relevant EBITDA constituted Rbl. 4,7 Bln. The earlier taken loans are paid back.

With account of these generally positive financial results, a part of majority shareholders insists on continuing the established business.

Another part of them is not satisfied with comparatively low operating margin in the company and clearly cyclical dynamics of market prices for rolled aluminium. They suggest to vertically integrate upstream, i.e. to produce instead of rolled aluminium wheels and wheels components for cars, commercial vehicles and trucks, using slabs from strengthened aluminium as an own semi-product.

In order to accomplish this, the company will have to:

- introduce technologies of smelting strengthened aluminium alloys (adding to regularly purchased inputs correspondent components),
- order, acquire and install a new specialized stamping equipment,
- make free the premises presently occupied by smelting equipment,
- retrain the local personnel.

The main argument of those who propose to produce and sell wheels and wheels components is the fact that there is a quickly growing local and domestic market for car and commercial vehicles components. They say that:

- there is as yet a "free niche" on this market in Russia and one has to quickly occupy it,

- since it is a quickly growing market, both return on investments and operating margin here are considerably higher then in the saturated aluminium production industry,
- the company's logistics for selling the product they propose will be much better, because the company's plant is situated only 100 kilometres from St.Petersburg (also on the way to Moscow and Central regions of Russia) and only in this city 5 plants of industrial assembling of cars are operating and expanding their capacities, 2 more plants for assembling trucks and commercial vehicles are planned to be soon constructed,
- there is a real option to expand the project they suggest – by means of widening later the product range for the same clients.

If the latter is accomplished, 7 % of the yearly average growth rate of sales and operating cash flows due to this expansion can be planned for the indefinitely long future. But this will cost about 0,6 Bln. Rbls of average yearly additional investments in diversifying the product line.

Those, who oppose the proposal to change the company's product, remind about the needed considerable investments and the time period while equipment will be substituted. During this time one will have to stop operations, i.e. production and sales (and least no newly produced rolled aluminium could be sold). While the sources for fixed costs will go on to exist.

One of the independent members of the Board of Directors has also pointed out that if one wants to decrease contract risks of massive sales to big corporate clients (to ensure the constant orders for newly introduced products) and become comparable to similar public companies in the industry, the company will have to spend in the 2-d year additionally approximately Rbl. 0,3 Bln. for development and introduction of at least a MRP system in management (to provide quality management). This will cause also regular additional yearly investments in size of Rbl. 0,1 Bln. to maintain and modernize the system.

As regards financing the needed investments, all participants of the sitting are aware that the company can afford this financing – partly using self-finance and partly taking a bank loan. The security for this loan will be the company's real estate, resting equipment, and the "treasury" stock of the company (its market value is 0,26 Bln. Rbls). If necessary, the majority shareholder, who is the most eager enthusiast of the innovation, is ready to pledge for the lacking size of the needed loan a corresponding portion of his share of stock.

The bank loan can be obtained as a credit line for 3 years, with one year's preference period and sequent yearly annuity payback payments for the first trench (only annuity yearly payments for other trenches). The credit rate will be 10 %.

The supplies of the most modern new equipment should be paid in advance.

The other information concerning the discussed innovation and available at present is contained in the presented tables.

Table 1

The previously assessed data on the projected investment process and main sources to self-finance it

The total investment needed, Bln. Rbls	16,5[1]
Duration of supplies of the new equipment, years[2]	0,9
Time needed to disassemble the substituted equipment, years	0,5
Time needed for liquidation of the substituted equipment, years	0,12
Time needed to install and adjust the new equipment, years	0,2
Market value of the substituted equipment, Bln. Rbls	10,4
Liquidation value of the substituted equipment, Bln. Rbls	2,8
Portfolio investments and bank deposits of the company, Bln. Rbls	0,3

Table 2

The targeted parameters of the proposed innovation (in case if the above mentioned real option to expand the project will not be realized)

	1st year	2nd year	3rd year and later, in average per year
Revenue from sales (after value added and transport tax), Bln. Rbls	0	14,1	50,0
Variable costs, Bln. Rbls	0	7,2	28,6
Fixed costs, without amortization, but including property and real estate taxes, Bln. Rbls	0	8,6	11,3
Planned operating profit, Bln. Rbls	0	5,3	8,1

Note:

Obligatory payments to the pension fund and to funds of medical and social insurance are here added to wages when variable and fixed costs were calculated. Planned bonuses are also added (think: if it correct?)

The Board of Directors cannot meet any decision. They decide to outsource the decision draft to a consulting firm.

The information about

- prices for rolled aluminium,
- other prices, market capacities, renting and leasing rates, interest rates used to calculate the appropriate discounting rates (capitalization coefficients),

[1] Including Rbl. 0,5 Bln. for installing and adjusting the new equipment

[2] The supply condition – DDP-the plant of the customer

– relevant technologies,
– macroeconomic and financial data and forecasts for Russia, and
– all the rest needed in calculations

should be taken as maximally close to reality from trustworthy Internet sources and other publications.

Act for the consulting firm!

Perhaps, you will be able to find other reasonable solutions of the strategic business-plan. Develop it!

Present the appropriately prepared and presented consulting conclusion!

It should contain:

- a Microsoft Power Point presentation that should take not more than 15 minutes,
- an explanatory note in Microsoft Word (with all formulas used), and
- relevant Excel tables.

The consulting firm is expected to use all modern relevant alternative methods and to present cautious preliminary appraisals. In particular, this means that the consultants for the calculated values would better assess only probable intervals – making and founding adjusted assumptions.

In the final end, however, they should aim at bringing forward a clearly managerial strategic decision backed by assessing the alternative figures (intervals of figures) for the company's fair market value in case if the company undertakes each specific project – or changes nothing in its operations.

Since, according to the Charter of the company's incorporation, strategic projects should be adopted at an extraordinary general meeting of all shareholders, any new project proposed for the firm can be started only by the end of November of the current calendar year.

If the presented data does not contain some needed information, please, assess it, basing on relevant trustworthy published resources, and use it! Apply any expertise only in extreme cases (citing experts!)!

Remember, the most important criterion relevant for the majority shareholders of the considered firm is the maximization of the company's fair market value!

However, they don't plan to divest immediately or in the closest future, i.e. they are also interested in dividends, if it does not damage too much the above mentioned main criterion.

End

Guess, what a really existing Russian company (not traded at stock exchanges) has been minded in this case-study - given that its actual financial figures and results the case's compiler, as a matter of fact, has changed,!

Some practical advices:

1. In order to locate the considered company, recollect, what massively and constantly purchased input has the overwhelming share in variable costs of smelting aluminium!
2. If, using the answer for the previous question and the database Spark, you manage to understand, who or what firm is the dominating shareholder of the considered company, find information on how Russian companies controlled by this shareholder developed!
3. Pay attention at the difference between planned operating cash flow and operating profit (the accounting system in the company is quite neutral)! Explain it for yourself and make the relevant conclusion!
4. Don’t forget about EVA and ROV models, as well as about standard and modified Gordon capitalization models!
5. Be cautious about planning to finance the projected investments from current operating cash flows, since it might destroy plans of specific shareholders to get return on their capital before they divest (corporate conflicts should be avoided)!

Good luck!

Pour les savants et les meilleur etudiants: Vernuenftige Innovationen immer zum Wachstum des Unternehmenswerts positiv eintragen. Niech szanovne panie, panienki i panowie z tego zawsze zdaią sobie spravę! Ar’igato! Спасибо.