

## **PERFORMANCE PREDICTION.**

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**Abstract:** This paper aims to present an aspect of managerial activity: anticipating the results related to performance. Issues related to anticipation horizon, the analysis of the company and the sector to which it belongs are being pursued. In building scenario performance, past performance of the enterprise sector and economic trends are taken into consideration.

In any management activity, there are three important steps:

- forecast phase, which is focused on anticipating the ways, means, solutions, etc., which will be applied in future. Forecast management is characterized by setting objectives, while strategic and tactical decisions are prioritized;
- execution or operational phase consists in the achievement of the company's objectives;
- final phase, measuring and interpreting the results of the activity that is exercise-control function evaluation.

Performance must have the capacity to be measurable. In general, performance measurement is seen as a further evaluation of results. Performance means creating value, that is added value, translated by getting a positive value after the remuneration of all factors, including equity.

Given that the business runs in cycles, based on forecast results from an earlier phase, new predictions can be made.

Before developing any prediction, it is necessary a deeper understanding of the current situation of the enterprise. If it is a foreign subsidiary, there is no conversion of the accounts of subsidiaries in a certain currency, because there are differences in inflation, so the accounting method for closing rates will be used.

What indicators can be taken into consideration when talking about performance of an enterprise? It usually appeals to stock and financial indicators. They are not really so infallible, especially financial ones, may indicate an error when manipulated. A steady increase in performance, for example, can be done on behalf of constant price increases of products that will encourage other players to enter the market with similar products. Competition will not only uncover the source of performance, but also to its collapse. Therefore, it matters how to get performance, because it is not just the achievement of financial targets of the moment. True performance is obtained only when it keeps long-term, strategic goals.

The accounting result is also affected by methods of evaluation, the intention of the company, etc. A new accounting concept comes to bring light in measuring performance, that is the overall outcome which expands the temporal sphere of the performance event.

Performance prediction or in other words, the future of an enterprise is based primarily on its previous evolution and its future possibilities.

A first step in building such a process will be to set two objectives:

- the future interval to which prediction refers to;
- detail degree of the forecast.

Certainly, a short term anticipation will have a greater accuracy and a higher degree of detail.

Such predictions are not a simple exercise, they have a well defined purpose, to show if the already built strategy of the enterprise which aims to obtain future performance, can be successful and especially to what extent this is possible.

Several steps must be followed:

- a) the strategy is set out , emphasizing the competitive advantages and disadvantages of the enterprise;
- b) anticipated economic realities are translated into financial terms (balance sheet, available cash flow etc)
- c) several scenarios are built based on data from the first stage;
- d) global predictions are checked (return on invested capital, sales, profits) in line with the developed strategies;

The period to which the forecast refers to should be established so that at its end to reach an equilibrium in which the company to achieve a rate of return for any new capital invested during the duration of the final value. The terminal value in a forecast of 1 - n years, means the value of cash flow that occurs since n+1 moment, so outside the normal range forecasting. In determining the formula, it is assumed that the cash flow N that occurs in n+1 moment will be constant each year. The terminal value is calculated in this case as a division between the cash flow value at n+1 moment and the capital cost.

Then, also for a correct prediction, the enterprise in the state of balance, must obtain a constant yield for the invested base capital, to have a constant growth rate and to reinvest a constant part of the exploitation benefits.

Regarding the growth rate of the company, it is best to assume that it will be in line with the economic growth rate for the forecast to be realistic.

Regarding the forecast period, a period of 10-15 years is chosen, divided into two periods, the first of which includes detailed forecasts based on balances, accounts, complete results and a forecast period that is formulated on the basis of important variables such as : rotation of capitals, turnover, margins, etc..

In developing the strategy, the approach must have a fundamental economic character, which will give directions to the financial forecasts.

Strategic vision will use the known data. First of all, it is about the brand of the products. Transnational companies would benefit from this, which extend their marketing products in several countries. The products can withstand some minor modifications to suit market conditions or consumer desires. These firms imposed on the market because of special competence or specific technologies. The strategy is focused on export license concession, acquisition of production facilities. A lot of the benefits are directed to advertise and develop their own image.

Analyzing the enterprise, the basic problem that could be answered is whether the enterprise can get a higher return in the future, compared to other firms in the same sector.

Affirmative response is directly dependent on competitive advantage, without which the return is limited to the cost of capital. Competitive advantage has as an accounting expression the positive interval between ROIC (return on invested capital) and WACC (weighted average cost of capital). The firms that make products that cannot be imitated will have competitive advantages, which have lower costs or better productivity than the other competitive firms.

Structural analysis of a sector may be based on Porter's <sup>1</sup>example. Four factors that influence the potential return of a sector: replacement products, ability to negotiate with clients and entry or exit barriers from the sector.

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<sup>1</sup> M. Porter, *Competitive Strategy : Techniques for Analysing Industries and Competitors*, New York, Free Press, 1980;

Replacement products may relate for example to transport: road or rail. The choice will be based on price, length of distance, approach. The customer can use one of these two ways, by putting them in competition.

Barriers to entry into a sector refers to the need for competence or assets which can be obtained only by some of the enterprises. It is hard to get out a strong capitalization sector in which a company covers its marginal cost, while having a low return on capital.

The ability to negotiate with suppliers will reflect in sales volume and capturing a larger part of the market. But all these attempts don't always succeed, especially if the manufacturing costs of products are not as small to compensate price declines.

Bargaining power to customers will also influence a sector's turnover. For example, an intermediary may be removed from the market due to which a gain can be achieved.

Porter's analysis model is static, without regard to external influences coming from the macro-economy, new technologies, regulations, customer preferences, etc.

Analysis of customers will implement the strategy with data on potential market, on customer preferences (it has to be argued why customers would prefer a company to the detriment of competitors), the possibility of a competitor to differentiate, to measure the likely return of each type of customer. In this respect, it can be useful to analyze customer segments. For example, one customer segment is very interested in post-sale service (for a client who has a big company and provides maintenance services, this facility doesn't have the same importance). In this chapter of the strategy, analysts are responsible not only for the segmental division, but also to discover the opportunities that are required for each segment. The customers are analyzed from the manufacturer's point of view, who will take into account in terms of transportation costs (if the product's value is low, it will not be profitable to be transported over long distances).

Also in preparing a strategic vision, it will be taken into consideration how competition proceeds to obtain a similar product. Here the entire business chain is analyzed, from product characteristics (quality, features, production time, special technology) raw material supply (cost, cycle time) marketing (price, promotion, packaging, brand) and sales (costs, channels distribution, transport). From this analysis conclusive results must occur which will show the advantages of the competitive firm (cost, cheap labor, savings, better quality product). A good analysis will detect and analyze the key processes.

"Another strategic sector analysis model can be approached, that of Kevin Coyne and Subramanian"<sup>2</sup>, which includes elements of Porter's structural analysis.

This model illustrates two components: the structure of the sector with the actors' behavior and the basis of competition. Privileged relations and co-dependent systems are added to Porter's. Thus, in the sectors based on privileged relations, companies afford special treatment to each other due to common financial interests, friendship, political or ethnic ties.

Co-dependent systems refers to sectors in which alliances, networks, and to economic issues is kicking competition.

In a traditional model, the structural advantages are sources of great return. Coyne and Subramanian add two other sources: execution on the ground, on one hand and understanding the present and anticipating future on the other hand. Some companies can overcome their competition simply by better execution of current tasks on the ground, which may be more important than any structural advantage. Others can create value, because they understand better the present reality and anticipate its evolution. According to the theory cited above, bringing together the three aspects of sector structure

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<sup>2</sup> K. Coyne, S. Subramanian, *Bringing Discipline to Strategy*, McKinsey Quartely, no 4, 1996, p.14-25;

(codependence of systems, privileged relations, normal conditions) with the three sources of benefits (understanding and anticipation, execution on the ground, the structural advantage) a complete picture of how a company can create value can be obtained.

The next stage aims to transform performance scenario into financial projections. It should start with a full prediction of results and the balance from which free cash flow could be inferred, (without which it is difficult to develop new products, to make acquisitions, to pay dividends, etc.) and the return of invested capital. The balance is important, which presents the clear and synthetic image of the patrimony, financial position and results. We underline the importance of balance, that enables the identification of financial implications of the forecast, indicates the amount of capital which will rise and which will be the volume of available funds for the company.

For non-financial companies (whose source of income are the proceeds from the sales of goods and non-financial services), the method for the anticipation of the results and balance is based on the analysis of demand, which will take into account the sales forecast, out of which most of the other variables are derived (expenditures, working capital).

For this type of prediction several stages must be followed:

- a) predict turnover according to sales increase and price variations;
- b) operating items will be provided (which are divided into fixed and variable costs), established in connection with the turnover or sales volume;
- c) non-operation costs will be provided (loss of equity-related claims), expenses on financial investment disposal, expenditures concerning exchange rate differences, interest expenditure, discounts granted, investments in non-consolidated subsidiaries, etc.)
- d) development of own funds will be provided, whose volume must be equal to that of the previous financial year, plus net income and stock issuance, without dividends and share repurchases;
- e) the liquidity and debt accounts will be used to balance cash flow and balance;
- f) the entire tree of return of capital invested (ROIC) will be calculated and the ratio between the values that best define this company;

In developing forecasts on balance, there are two ways of approach:

- a direct way- through stock method, which provides stock variations depending on the year of turnover growth;
- an indirect way- through flows method from the different activities. Through cash flow analysis information about changes in financial position and performance of the company is provided. It provides information to assess the ability of the company to generate cash, and about the need of the company to use cash flows, about the timing and reliability of their generation.

It is preferable to use stock method for its more stable character, by reporting balance accounts on turnover, while the second method is a ratio between the variations of the two elements.

In what concerns the forecasts related to the company's land, buildings and equipment, investment spending is forecasted as a percentage of turnover. This will lead to increases or decreases in the rotation of capital (the ratio between building, land, equipment net worth and turnover). It is noted, however, that the ratio is stable over long periods.

Also, in order to achieve a high degree forecast accuracy, inflation will be taken into consideration. Projections and the cost of capital must be reported at the same rate of inflation. This means that the inflation rate of the forecast should result from an implicit inflation rate built into the cost of capital. The overall inflation rate can be obtained from the

treasury rate structure, depending on their maturity. The nominal interest rate of these securities is the investor's demand for a real rate at which a bonus is related to the expected inflation. Inflation expected is thus equal to nominal interest rate minus an estimate of the real interest rate.

There are economic analysts who make general forecasts, but they can not be used in enterprise scenarios, because they do not refer to long periods. Therefore, an enterprise must develop its own performance scenarios. In no event only one scenario will be built, however plausible it may seem. After building the scenario, the overall weighted average of each of these scenarios will be calculated, according to the probability of each of them. In all the calculations, turnover increase by a certain percentage will not be varied mechanically, but various incidents that might occur will be taken into consideration, influencing in a way, the return and performance of the enterprise.

For scenarios to be verified in practice at a larger extent, the following statements based on reality will be considered:

a) enterprises rarely exceed the direct competition performance over a long period (10-15 years). The company under the scenario will only get better results compared to some companies in the sector. Ingenuity is to predict which one will be;

b) Some companies may exceed the average growth of the sector in terms of return on invested capitals;

c) return on invested capital and average growth of the sector depend on the economy in general, it is important if the enterprise is now part of a stable or dynamic sector. If it gets subsidies from the state, it must be anticipated what happens if the subsidies cease.

Company evaluation and scenario check will end by calculating the final value.

Conclusions:

- result anticipation is a complex process that must go through several stages, without neglecting any of them;
- anticipation is time-varying with different degrees of probability;
- enterprise-analysis will be done according to fixed strategy and economic context;
- analysis will consider the specific sector, customers and competition;
- a correct prediction should be verified in practice.

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