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Original Article

Impact of information technology and economics on value creation indicators

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Abstract In terms of the temporal dimension, the concept of value has emerged with trade being used in all areas of activity. Over time, economists have tried to define it in different ways, but all these have started from a subjective appreciation of the size of a good or business. Research on the economic value of a good or business has been and is still very numerous, the ultimate goal being to estimate the value of an individual asset and then expand it to the level of assets that can be exchanged.

The continued development of the global economy has led to the development of value-based management, and the research of value creation has become increasingly precious. Shareholders are the main beneficiaries of actions taken by management teams to increase the value of a business.

To implement a value-based management program that generates future benefits, there is a need for more than mere analysis and interpretation of value-based performance indicators. Users of this managerial approach assert that there is also a need for essential changes in the company culture.

Keywords: information technology, economics, value creation, indicators

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Introduction

While companies have widely evolved, the competitive economic environment has become increasingly complex and companies' business has diversified, requiring new, more powerful management tools and techniques to enable management teams to identify firms and overcome obstacles More and more expensive.

Until now, traditional management, based on the analysis and interpretation of accounting data, has not been able to evaluate and express the true performance of companies in as clear and real as possible. Most of the time, accounting data has proven to be subject to subjectivity and lack of transparency (1).

In terms of the temporal dimension, the concept of value has emerged with trade being used in all areas of activity. Over time, economists have tried to define it in different ways, but all these have started from a subjective appreciation of the size of a good or business. Research on the economic value of a good or business has been and is still very numerous, the ultimate goal being to estimate the value of an individual asset and then expand it to the level of assets that can be exchanged. The continued development of the global economy has led to the development of value-based management, and the research of value creation has become increasingly precious. Shareholders are the main beneficiaries of actions taken by management teams to increase the value of a business (2, 3).

Discussion

In terms of Interval Valuation Standards, the value results from the interaction of four identifiable factors at the level of a good. These are: utility, rarity, desire and purchasing power. The link and action of these factors is the demand and supply for a good. Due to the action of external factors such as market prices, the economic environment and internal factors such as internal management of the enterprise, synergies and efficiency, the value of a good changes over the course of its existence (4).

The literature offers several definitions of value, some of which are formulated in nuance to meet specific needs. Below are some of the definitions of the value:

- Economic Value - is the ability of an asset to generate net cash flows for its owner. The value of an asset is the amount of cash that a seller agrees to receive in order to sell the asset at present, in exchange for future cash flows. Based on the elements of this definition, the economic value is forward-looking.
- Market value - represents an asset or business that is formed in the minds of market participants and results from market trading as a result of negotiation between parties involved in a transaction. The

market value is closely related to the economic value because it is based on the expectations of the parties in relation to future cash flows arising from the use of assets.

- Book value - is the amount of money that is recorded in the Company's financial statements and that has changed over time due to the action of generally accepted accounting principles. Book value is a past historical value that resulted from a market value that existed at a given time and that has been adjusted over time.
- Value for shareholders - is the value that is created when the present and future earnings generated by an investment are higher than the cost of the enterprise's capital. As a form of manifestation, this can be found in the form of an increase in profitability, and can be quantified by the correlation between earnings from dividends and gains / losses resulting from changes in the share price.

Prior to the eighth decade of last century, the main goal of management teams was to obtain profit and less the efficiency and operational management of companies. For these reasons, the assets required to support the operations were less important, considering that when the profit is high enough, the profitability will be self-sufficient, and the need to finance the assets will be easily acquired. Therefore, the efficiency of the use of assets and capital employed by investors has not reached a satisfactory level (5, 6).

In the 1990s, managers' mentality changed and began reporting relative to the investment base and operating profits in the form of a percentage return on assets. At the same time, new economic indicators have emerged, and the managers' attention has been focused on managing the shortcomings generated by the accounting approach and at the same time providing more useful information to managers (7- 10).

There are currently two very important notions: the cost of capital, as a way of assessing performance, and the cash flow as a promoter of value. Cash flow analyzes have become increasingly important in recent decades, including the cash flow return on investment (CFROI). Now everything revolves around the fact that any company is an economic set that needs to be analyzed over a reasonable period of time, taking into account performance and value creation indicators that highlight the rights to cash flows that may be generated after adoption Different managerial decisions.

The shareholder value maximization, known as value based management, establishes that management must take into account the interests of shareholders in the business decision-making process, namely maximizing earnings Shareholders by raising stock prices and dividends (11).

Value-based management is a managerial concept where the main purpose of the company is maximizing shareholder wealth. The company's objective, strategy, mechanisms, financial analysis techniques, performance indicators and culture are at the service of maximizing value for shareholders. "

Valuable management aimed at eliminating managerial errors caused by the analysis of accounting data, using managerial techniques, organizational culture notions, and even performance measurement methods. By combining all of the above elements, value management becomes a kind of philosophy adopted and promoted by consulting and financial planning companies.

However, management objectives are in some situations different from those of shareholders, managers as well as other people with their own interests. This is a very important issue for multinationals where shareholders have imperfect control over management and therefore may sometimes not engage in transactions that are in the interest of shareholders (12-14).

Due to the fact that traditional measurement tools for management performance are based on accounting data, they do not take into account elements such as risk, inflation, opportunity cost. Stern-Stewart & Co's specialists have called the migration from revenue-based management to value-based management (the switch from "managing for earnings" to "managing for value").

It is well known that classical indicators only provide information about the historical performance of the enterprise in the form of the results of using the invested capital without considering its cost. Therefore, it is possible to identify enough companies that have significant performance but are not capable of creating value, even destroying the existing ones (15).

Analysis of value creation can be done from the perspective of shareholders, creditors, employees, suppliers, and other partners of the company.

Specialist literature provides analysts with a rich tool for measuring shareholder value but often relies on either the comparison of the company's market value with its accounting value or the quantification of residual income (16).

Various theories have been developed over time about how to implement the value-based approach. Among those who have developed such ideas identify financial consulting or consultancy companies such as: Stern Stewart & Co., Marakon Associates, McKinsey & Co., PriceWaterhouseCoopers, L.E.K. Consulting and Holt Value Associates:

- Stern Stewart & Co - the company was set up in 1982 and focused on the development of a management building around the concept of added value (EVA);
- Marakon Associates - established in Stanford, the company is based on Gordon's model.
- McKinsey & Co - provides both its clients with advice on strategy setting and financial advice;
- PriceWaterhouseCoopers - active in the planning and implementation of managerial programs, as management based on value;

- L.E.K. Consulting - established in 1983, provides its clients with advice on strategic management. Among those who collaborated with L.E.K. Alfred Rappaport also counted on the implementation of the concept of maximizing shareholder value as an objective of the company's business;
- Holt Value Associates, based in Chicago, has developed together with Boston Consulting Group the liquidity return on investment (CFROI). Their analysis focuses more on the evaluation methods of listed companies.

Indicators that help create value for shareholders can be grouped into three categories.

- Profit indicators - which refer to the traditional ways in which the profit is valued under its various forms or the profit on the invested capital is reported. It is considered that the indicators in this category are, in terms of importance, inferior to those based on cash or value flows, taking into account internal planning and performance analyzes and evaluations. This category includes: EPS - earnings per share, return on investment (ROI), return on equity (ROE);
- Cash flow indicators - emerged in response to new performance and value measurement requests, wishing to eliminate accounting allocations and non-monetary adjustments. The ultimate goal is to identify to a reasonable extent the cash generated by operations and, on the other hand, the cash invested to support operations. This includes: Free Cash Flow (FCF), Return on Investment (CFROI), Total Return on Shareholders (TSR);
- Value indicators - if at first they were in the form of profits multiples, they have now come to the level of complex judgments about the current value of cash flows. In determining the multiples of profit, it starts from the total profit after tax or the EPS, which is then adjusted with a rational factor. Similarly, multiples of cash flow are a transposition of multiple profits, using this time the total profit after tax plus amortization and provisions multiplied by a rational factor. Included in this category are: EVA, Value Added Value (MVA), Shareholder Value (SHV), Shareholder Value Added Value (SVA) .

Some of the indicators are considered more useful than others, but their primary purpose is to help management teams make decisions to increase the value of companies and guide all employees to value creation. It was found that indicators based on economic value are more used, in this respect McKinsey consultancy firm claims that they are better because, on the one hand, they are easier to identify factors that influence the value of the company and on the other Cash flows are thought to affect the price of a company's stock (17-19).

Rapapport believes that only through Discounted Cash Flow (DCF) can a pertinent image of company performance and shareholder value outline. Although the indicators used to measure performance in value-based management are very valuable, we must bear in mind that the ultimate goal is not just calculating and interpreting them.

There are also certain ways of constraining managers such as: the existence of special internal control departments and operational and financial audit in some groups reporting directly to shareholders, the attitude of shareholders who can themselves check some aspects, employees and The trade unions in which they are constituted, the strong growth in competition in this field requires performance, the danger of takeovers involving management change (20).

Performance in a business from the point of view of shareholders, investors on the capital market, is represented by everything that makes the value of the business grow, quantifiable if this business would be sold (its value in the market), to which All earnings from distributions received by shareholders are added (21).

The different currents of opinion that confirm or criticize the much higher importance given to the shareholders of the company compared to the other partners-creditors, employees, the state, the public, etc. Are based on the following ideas:

- management is chosen by shareholders as business owners to represent their interests, therefore the fundamental objective of management is to maximize the value of the shares;
- management receives shareholder mandate to ensure long-term business continuity and not to maximize short-term value.

Increasing the value of a business is determined by the following:

- Higher values of the financial performance indicators and the best realization of the income and expense budgets that have been set for the company's strategies;
- best relationship with customers by offering products / services tailored to their requirements;
- optimal organization, control and audit of internal processes within the company (innovative processes, production / service provision, marketing and sales, distribution);
- the fundamental relationship of the R & D function in order to create new products / services that are more competitive in terms of quality in line with market requirements.

We realize, as a result of the above, that traditional financial performance indicators are not sufficient to assess the performance generated by shareholders, investors at the level of a business, created/ destroyed by the company for its shareholders (22-24).

One reason would be that traditional financial indicators are not able to assess the value created / destroyed by the company for its shareholders.

In the case of tobacco companies, in most cases, they have a significant market value, considerably superior to their net assets, being performing through the relationships they have built and maintaining with customers through the quality and efficiency of the services provided by Integrated production and logistics (25, 26).

The concept of value-based management, a pervasive concept over the past two decades both in management practice and in economic research, establishes a link between the two strands of opinion with the company's key objective of creating value for future capital providers.

As a result of the above, value management is used without any difficulty at the level of the tobacco companies in the following cases:

- evaluation of the main transactions undertaken by the company: acquisitions of assets / companies, mergers-absorption or meetings, divisions, divisions, sales of assets, etc .;
- analysis of the performance objectives of the treasury generating units within the company: subsidiaries, branches, work points;
- the comparative appreciation of the values resulting from the investment projects (eg opting out between the possibility of buying a target company, investing in a logistics space as needed or renting the space);
- estimating possible future strategies and different integration programs and stronger market demands;
- The management communication with the capital suppliers, usually with the shareholders who are not dissipated in the tobacco industry companies, are quite few in number compared to other areas of activity. As the value of the company comes from its ability to generate liquidity, communication in terms of value is the most appropriate.

The creation or destruction of value for shareholders in the tobacco industry therefore entails increasing the value of shares and distributing dividends (27, 28).

The market value of equity capital depends on the estimated cash flow for the owners and the discount rate (the cost of capital). By detailing, the main creators of value are:

- Factors related to the operational flows where we have the growth rate, the related growth rate for the main indicators such as: turnover, staff costs, taxes and fees, amortization, other expenses for the company's needs, profit tax rate;
- Factors related to investment flows: investments related to intangible and tangible assets, investments related to working capital;

- Factors related to the financing flows: the structure of the equity and the borrower, as well as the cost of the capital.

Analysis based on value creation indicators is becoming increasingly used when the prosperity of the company depends on the management's ability to relate to value in ensuring proper relationships with financiers and business partners:

- shareholders are interested in raising the price of shares and dividends received;
- the creditors are interested in the financial security of the company that will allow them to recover the advanced amounts;
- customers are pursuing the best value for money;
- employees want competitive salaries;
- The state wants to achieve all budget policies through the level of taxation.

It is well-known that as long as the return of the invested capital at a certain rate of profitability that exceeds its cost is created value at the level of the companies. As managers ignore this, less pleasant situations arise, such as:

- Natural mechanisms for regulating the destruction of assets (such as in the case of hostile takeovers, the sale of holdings held by majority shareholders or even the liquidation of the enterprise) are activated in the developed markets;
- in emerging markets, the regulation of the situation is usually quite delayed, most often by the state's involvement through various administrative measures (rescheduling / restructuring of debts to the capital providers) in order to solve the situation . There are situations in which liquidation may occur in the end, which generates losses for all investors in the company. In these markets, without the existence of effective mechanisms for regulating value losses, there is the economic decline and the increase of unemployment.

At the company level, value creation must be perceived as an action to advance a current flow of liquidity, which will in the future provide a reverse and higher value flow. Under these circumstances, the expectations of investors are based on the fact that the value of the assets in which the initial flow of liquidity materialized will be higher than the amount of the initial invested capital (29).

The top companies in this field are also extremely well anchored in the innovative process of developing shipping and logistics services in line with market requirements, which propels them and helps them to remain at the forefront of this field.

Over the past three decades, "a new reality is challenging capital providers, corporate management and financial analysts: the need to manage the value and primary direction of enterprise strategy toward creating value for shareholders." Therefore, management decisions will be targeted, analyzed, and appreciated through the value created / destroyed for shareholders. Adding value to shareholder investments is a completely different concept of value added in the economic and financial analysis. Value Added (Value Added) is a measure of the value created / destroyed for shareholders and can use the following formula in a simple way:

$$\text{Creare de valoare} = \text{Vânzari} - \text{Achizitii} - \text{Costul muncii} - \text{Costul capitalului}$$

If the remuneration of the invested capital is lower than its cost, the shareholders act promptly in order to regulate the situation of destruction, by affecting their interests. Depending on the situation in which the company is located, we will witness: change of management, sale of held holdings, hostile takeovers by other companies or even liquidation of the respective business (30).

Starting from the concept of value creation, it is possible to analyze and categorize a company by using a comparison between the return on capital invested and the cost of capital.

In order to fully understand and quantify the impact of value creation, investing in a company must be assimilated to a stream of liquidity advanced by shareholders (originally invested capital plus the reinvested earnings by them) from which they expect Generates, as a result of the production or service processes, another reverse and considerably higher flow (31).

$$AV = VPA - CTA = VPA - (CIA + PRA)$$

AV – added value/ destroyed for shareholders;

VPA - the market value of the company at the time of analysis;

CTA - the present value of all shareholders' equity;

CIA - the present value of the capital invested by the shareholders;

The company's market value can be expressed by means of future cash flows available to shareholders:

$$VPA = \sum_{i=1}^{n} \frac{FV_i}{\left(1 + c_{Kp}\right)^i}$$

where:

FVi - the value of future flows in year "i" , CKp - the cost of equity

The current value of all shareholders' equity may be highlighted based on the following relationship:

$$CTA = \sum_{i=1}^{n} VCTI_i \times \left(1 + c_{Kp}\right)^i$$

where: VCTIi - the total value of equity invested in year "i"

We note that the notion of value creation is more widespread at the level of multinationals than in other companies, and is most commonly applied to companies active in the tobacco industry. As a result of the research undertaken at INSEAD (France's most important international business school in Fontainebleau), five key determinants of company-created value were identified:

- an explicit promise of the management team for creating value, which becomes evident when the company channelises its activity in the interest of its shareholders;
- preparing and perfecting as many managers and employees as possible to maximize shareholder wealth;
- Designing opinions that share a common brand at the company level, supported by a policy of adequate reward for the management team or Chira of the entire staff in accordance with the economic profit generated in the company;
- developing and supporting value-creating sectors for shareholders by choosing and implementing the highest performing investment projects;.
- calling for a general restructuring.
  and economic environment has facilitated the development of economies of scale.

From a historical point of view, at the end of the 20th century, the first forms of value-based management implementation are found at the level of companies. The trigger element is considered the moment when the world economy experienced a period of strong development, and the political and economic environment has facilitated the development of economies of scale (32).

This start-up period of the new managerial philosophy has been characterized by the strong interest of firms in achieving high efficiency and productivity in their work. Over the years, the new approach has proven its full qualities and has begun to be assimilated by more and more companies, especially transnational ones.

The theoretical and practical basics of value management were put by Nobel laureates for economics, Franco Modigliani and Merton Miller in their 1961 article. Later on, these ideas were extended by various theorists and practitioners (among whom Alfred Rappaport and Joel Stern), who extended the ideas of Modigliani-Miller. This approach has created a new challenge for company or group management, namely to manage their value and to focus primarily on company or group strategy to create value (27).

The primary message of shareholder management is the management's obligation (commitment) to base all investment, operational, and financing decisions on an economic logic, managing all the resources entrusted to it to obtain returns superior. The challenge for this XXI century is to survive in the competitive environment through better global resource management, where fundamental economic principles gain ground in the face of ideologies. "

A value creation organization can be defined as the enterprise in which management has reached the level of integration of interests and actions of stakeholders, ie shareholders, managers, employees, customers, suppliers, creditors and the community. Such a company achieves, as far as possible, a time-optimization of performance based on a viable business model, strategies linked to a sustainable competitive advantage supported by a balanced and adapted capital structure. This should lead to positive cash flows as well as to expectations of future cash flows that are higher than the cost of capital (14).

However, the management's objectives are in some situations different from those of the shareholders, the managers aiming to achieve their own interests. This problem becomes stringent for multinationals where shareholders have imperfect control over shareholders and therefore may sometimes not engage in transactions that are in the interest of shareholders. The problem is amplified in the case of large corporations that show a dispersion of power, thus becoming a topic of topicality in scientific debates. Furthermore, some key management constraints can be identified:

- the position of the shareholders;
- securing performance as a result of competition;
- the danger of taking over;
- labor force and trade union organizations.

If a company in any field of activity, and implicitly any management, does not best meet all these expectations, then they will lose support from both financiers and business partners. Summarizing, the well-being of a company depends to a large extent on its ability to generate as much liquidity as possible from its work and to attract less expensive sources of funding. I therefore believe that value-based management offers the best alternative for both the tobacco industry due to its particularities and all other areas of activity (6).

Conclusions

At present, there are opinions that support the importance of the earnings per-action indicator as compared to value creation indicators, considering that it is included in the financial reports as a tool for highlighting the company's performance. However, literature offers at least five reasons to look at this indicator with some retention:

- does not consider the possibility of using alternative accounting methods;
- does not include risk;
- does not take into account the necessary investments;
- does not relate to the company's dividend policy;
- does not take into account the present value of future flows.

To implement a value-based management program that generates future benefits, there is a need for more than mere analysis and interpretation of value-based performance indicators. Users of this managerial approach assert that there is also a need for essential changes in the company culture.

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