

## THEORETICAL FOUNDATIONS OF ENTERPRISE VALUE MANAGEMENT

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**Purpose:** The article aims to analyse the theoretical foundations of value management in both large enterprises and small and medium-sized businesses.

**Design/methodology/approach:** The achievement of the objective involved the critical review of both national and international literature as the primary research method.

**Originality/value:** Financial management, in theory and practice of a developed market economy is characterized by high dynamics, high level of evolution of the subject, scope and determinants of decisions made. At the same time, the basic goal of all enterprises is effective financial management as a determinant of the success or failure of an economic unit. When analyzing the financial management process, first of all, it is necessary to define the main goals, functions and management instruments, and then compare the company's goals with the goals of financial management.

In the literature on the subject and in practice, you can meet many goals of the company's activity, i.e. maximizing profit, maximizing sales, achieving a satisfactory level of profit, survival of the company, but all these categories are directly or indirectly related to the profitability. However, the qualification of profit maximization as the superior goal of the enterprise raises a lot of controversy. On the other hand, profit maximization should not be treated as the goal of the company's activity, as it focuses on current effects, ignoring such an important issue as the structure of revenues over time. This gap is filled by maximizing the value of the owners' wealth.

Undoubtedly, the main goal of the company is to maximize the financial benefits of the owners. Therefore, the question arises if this issue can be treated as the primary goal in the group of small and medium-sized enterprises.

Each unit that conducts business activity must have at its disposal adequate capital which is the basis for the initiation and development of the company's activity. This capital can be obtained in many ways, but a significant part has to be contributed by co-owners. Of course, there are many groups of co-owners ranging from shareholders to sole proprietorship. Each shareholder expects to achieve specific benefits. Thus, he wants to be entitled to a share in the company's profits. The investment will be made in such a unit that will allow to obtain the greatest benefits, and therefore obtain the highest rate of return.

**Keywords:** value of enterprise, shareholder value, EBITDA, Invest capital.

## 1. Introduction

A comprehensive enterprise value management system integrates all key areas of economic entity management. These areas relate to valuation, capital budgeting, periodic performance measurement, remuneration based motivation, and internal and external communication, with the fundamental link between these areas being the concept of enterprise value and the common denominator tool being the periodic performance measure, the primary task of which is to promote decisions aimed at maximising shareholder value. However, the scope to which an enterprise value management system is used is often insignificant and tends to be limited to when an enterprise's financial performance is calculated with the help of a given measure and then valued in the market. At the turn of the twenty-first century management by value was the prevailing concept in corporate finance. Such management focused on maximizing a company's value and, as a consequence, its value for stakeholders including, in particular, business owners. The overriding aim of business - generating the highest possible profits i.e. maximizing the financial result - was replaced by maximizing of a company's value. The reason behind that change of perspective was the fact that healthy financial performance was not necessarily translated into maximized shareholder value, therefore a better measure of a company's performance was sought after. The accounting model based on historical cost was not sufficient to meet that objective. What was needed was the type of valuation which could reflect the present value of an entity's assets. The search led to the development of a fair value concept, which was to become the best measure of value. Fair value has been used in the Polish balance-sheet law since 2002. However, it continues to be controversial. The critics of that approach claim that fair value based valuation provides another argument for the uselessness of valuation in volatile market conditions, instead of showing a clear view of business reality.

Modern enterprise value management methods aim to respond effectively to dynamically changing markets, generate competitive advantage and, as a result, increase the chances of success. Value enterprise management methods include:

1. Benchmarking this method involves comparing an enterprise's own solutions with those of other entities. The information obtained is used to improve the functioning of the enterprise, increase revenue and improve customer service.
2. Controlling – this model involves the determination of the measures and criteria by which individual processes are evaluated.
3. ERP – Enterprise Resource Planning – specialist and complex software, the purpose of which is to support business processes conducted within a particular enterprise.
4. Process management – this method aims to respond to dynamic changes both inside and outside an organization.
5. CRM Customer Relationship Management – a model based on building relationships with customers.

6. Competence-based management – a method involving the use of employee knowledge and experience.
7. Outsourcing – delegating tasks to external entities.
8. Lean Management – a management method involving the optimisation of processes by reducing the time spent on non-value-added tasks.

Value remains of interest to many sciences, primarily economics, but also psychology, sociology, philosophy, and ethics. The concept of value in economics has evolved with the development of the economy. In antiquity, Socrates equated value with the good – “the true good is virtue”. In the Middle Ages, St Thomas Aquinas engaged in considerations on fair exchange, which should be based on an exchange of equal value, “value is clearly linked to labour, its quantitative and qualitative expression” (Hostyński, 2006). In the 17th century, William Petty attempted to define the essence of value – “the father of wealth is labour and its mother is land”. In the 18th century, Adam Smith distinguished between value in use and value in exchange. “The articulation of value has the double significance of the good’s utility or the ratio at which a good exchanges for another” (Landreth, Colander, 1998). In the 19th century, Karl Marx further developed the definition of value in use and value in exchange of a good and introduced the concept of social labour – abstract labour as a source of value in exchange (Stankiewicz, 2000). Michael Porter's defined value as “the amount that buyers are willing to pay for a product offered to them by a company”. This approach, however, was applicable in a competitive environment where there is no dominance of a particular supplier or significant shortages in the market (Porter, 1985).

In the 20th century, research on value creation focused on three areas (Maćkowiak, 2013):

1. value for managers,
2. value for owners,
3. value for stakeholders.

Research on value was conducted within two strands:

1. customer value,
2. shareholder value.

The concept of customer value was formulated in 1964 by Peter Drucker in his work “The Practice of Management”. Shareholder value, on the other hand, originated in the 1950s and developed through the application of the CAMP model linking return on investment to the level of risk. Alfred Rappaport, pointing out that “profit is an opinion, cash is a fact”, was the first to criticise accounting profit as a measure of an enterprise’s performance and its value (Rappaport, 1999).

The late 20th century brought significant changes in management styles, objectives and priorities of business. As a result, enterprise value maximisation, understood as increasing the value of invested capital, became a priority. Contemporary enterprise theory posits that the primary goal of all decisions taken in an enterprise is to maximise its market value (Fisher, 1995).

The 2007-2009 economic crisis triggered further evolution in the concept of value and initiated a process of moving away from maximising value for shareholders to increasing value for stakeholders. However, it is important to note that if stakeholder value is maximised, shareholder value also increases in most cases.

The analysis of how enterprises approach the issues of value should take into account the problem of value creation itself. Value creation can be achieved through (Dyduch, 2022):

1. developing the creative strategy that embraces innovation,
2. focusing on strategic leadership,
3. communicating challenging strategic issues throughout the organisation,
4. creating highly diverse teams,
5. providing organisational members with access to creative methods and experiences,
6. designing and building systems that nurture innovation,
7. investing in ideas that do not at first seem to be a strategic fit by spanning boundaries and breaking down barriers for innovation.

Literature studies and the enquiries into the nature of enterprise value management reveal that this issue tends to be researched in the context of large enterprises that have the adequate facilities and organisational units able to implement a system aimed at increasing value. Literature does not address the problem of value management in the group of micro, small and medium-sized enterprises. In this group, two basic issues should be noted: the objective of conducting economic activity and the scale and structure of the organisational framework.

## **2. Value measurement in accounting theory**

Accounting is frequently equated with valuation and measurement, as evidenced by its definition as the skill of measuring, describing and interpreting activity, or as the theory and system of measuring economic value increased in the process of management, or, finally, economic measurement and the system of this measurement in economic entities. The prime goal of accounting is to assess economic and financial performance. Accounting is also seen as a retrospective and prospective information and control system (Zieniuk, 2018; Meigs, Meigs, 1986; Dobija, 1997; Burzym, 1993; Micherda, 2006; Brzezina, 1998). Thus, on the one hand, the primary function of modern accounting is to address the information needs of financial statement recipients, while performance measurement remains of lesser importance. On the other hand, however, it is emphasised that measurement is the essence of accounting, whereas the recipients' perception of information comes secondary (Micherda, 2001; Zieniuk, 2018). In accounting terms, the analysis of enterprise value should be started with the four approaches to its definition:

- book value,
- replacement value,
- liquidation value,
- enterprise multiple derivative.

The financial statement, or more precisely the balance sheet, presents the measurement of assets and liabilities. The analysis of an enterprise's equity allows for the determination of the net asset value. Net assets are defined as total assets less debt capital. The valuation of the balance sheet items is carried out pursuant to the regulations stipulated in the Accounting Act. The legal norms make valuation comparable between companies. Naturally, the book value often differs from the market value of an enterprise. The major factors responsible for this are inflation, the physical and moral wear-and-tear of tangible and intangible assets, organisational capital, and exchange rate differences. This discrepancy means that the book value stemming from the balance sheet valuation of assets and liabilities should not be used to assess enterprise value.

Replacement value is the value of the investment that would have to be made in order to recreate an enterprise, the so-called replacement value. Assuming that an investor willing to pay a certain price for an enterprise expects the investment to be economically profitable. The use of replacement value, i.e. what an investor would have to pay to recreate the enterprise, seems abstract. As a result, similarly to book value, it does not meet the expectations.

Liquidation value corresponds to the revenue generated by the liquidation of an enterprise. For an investor, such value would be important in the case of the liquidation of an enterprise, whereas it is not useful for the valuation of the business.

Value as an enterprise multiple derivative involves the assessment of the value of an enterprise using a multiple of the profits it generates. The weakness of this method arises when the enterprise does not generate a profit and suffers a financial loss.

The valuation methods in accounting discussed above are related to the foundation of accounting, which is the true and fair view concept, identifying the need to reflect reality faithfully and truthfully through a fair and clear presentation of an enterprise's capital and financial position and its performance in the financial statements. However, globalisation, the rate of economic growth in the world, and socio-economic changes have caused that the objective of conducting economic activity has become enterprise value creation rather than profit generation. This is closely linked to the fact that the stakeholders of the financial statements are oriented towards managing this value. Accordingly, it has become particularly important to provide information about the enterprise to predict and describe its future (Mazur, 2018). Unfortunately, this function is not performed by the information included in the accounting and financial statements as stipulated in the Accounting Act or international accounting standards. It is therefore necessary to transform the financial statements in such a way that information that allows value management can be obtained.

### 3. Value measurement in accounting theory

Enterprise value management is defined in a variety of ways, but they all refer to the pursuit of the highest value for the enterprise. The concept is seen as a management philosophy that pertains to how an enterprise operates with the goal of maximising value for the owners and their invested capital. The main assumption of enterprise value management is therefore to make various types of strategic or investment decisions that will facilitate enterprise value maximisation. Enterprise value management is also recognised as an element in the overall management of an enterprise that allows for linking its strategy to its financial performance (Waśniewski, 2011). Enterprise value creation involves the conduct of regular analysis in order to identify value-creating activities. It is also necessary to determine the checkpoints that support strategic thinking. Four elements should be noted here (Dyduch, 2022):

1. what level of value will be created,
2. how value will be created,
3. how value will be presented,
4. how value will be preserved.

**Table 1.**

*Definitions of value management in national and international literature*

Authors	Definition
A. Black, P. Wright, J.E. Bachmann	Value management is a system that aims at maximising shareholder value by streamlining the resources, strategies, processes and performance evaluation criteria of an enterprise. "Management by value as an integrative process designed to improve strategic and operational decision-making by focusing on the key drivers of an enterprise's value".
R. Borowiecki, A. Jaki, J. Kaczmarek	Enterprise value management is the process that affects an enterprise's all relevant executive subsystems and involves initiating changes towards more efficient use of resources. The process is oriented towards maximising the enterprise's goal.
T. Copeland, T. Koller, J. Murrin	Management by value as an integrative process designed to improve strategic and operational decision-making by focusing on the key drivers of an enterprise's value.
A. Cwynar, W. Cwynar	An enterprise value management system is the system in which all decisions made by managers are subordinated to the objective of maximising the value of invested capital.
T. Dudycz	Value management focused on creating maximum benefits for owners is called enterprise value management. Value management is a management philosophy that applies analytical tools and processes to focus the individual objects of an organisation around the creation of value for owners.
W.M. Grudzewski, J. Hejduk	A set of activities oriented towards a favourable change in the factors that increase an enterprise's assets and develop restructuring programmes to stimulate the efficiency of resource consumption and meet customer expectations, thus reaching a high market position by achieving a competitive advantage.
J. Kaczmarek	Enterprise value is equated with an enterprise's ability to increase the capital invested in it.
J.A. Knight	Value management is a concept that combines an enterprise's strategy with its finances in order to maximise the enterprise's value.
M. Krajewski	Enterprise value should be considered from a financial and non-financial perspective. Financial and non-financial values are not separate values, but complement each other.

Cont. table 1.

M. Michalski	Value management is a variant of strategic management, with the primary objective of maximising value for the owners
W. Pluta	Value management involves using the concept of the market value of an enterprise in analysing, evaluating, undertaking and then controlling strategic and operational processes. It is an approach in which management objectives and processes, as well as the relevant calculation methods, are subjected to enterprise value maximisation.
A. Rappaport	The need to develop a concept orienting an enterprise's management system towards maximising its market value arose when the separation of ownership from management and the dispersion of ownership created the need to implement instruments shifting enterprise management systems towards increasing shareholder value and, as a result, achieving the enterprise's primary objective.
P. Szczepankowski	"the concept of managing an enterprise by focusing management activities and processes on maximising its value from the point of view of the interests of the owners and the capital they invested. It assumes the control of an enterprise's operational and investment activity in order to achieve the primary objective of its existence - to increase value".
W. Skoczylas	Value management is a management system based on maximising the market value of an enterprise by seeking to ensure above-average efficiency that guarantees an operating profit above the cost of capital.
P. Waśniewski	It can be defined as a management philosophy that refers to the operation of an enterprise, which aims to maximise its value because of the interests of the owners and their capital.
W. Wielgórka	Enterprise value management should be understood as a management system consisting of adequate tools and actions leading to an increase in the value of the enterprise.
W. Wielicki, R. Braun	Enterprise value management is based on the premise that an organisation's most important objective is value maximization.

Source: own elaboration based on: Borowiecki, Jaki, Kaczmarek, 1999; Black, Wright, Bachmann, 2000; Copeland, Koller, Murrin, 1997; Cwynar, Cwynar, 2002; Dudycz, 2005; Grudzewski, Hejduk, 2008; Knight, 1998; Michalski, 2001; Pluta, 2009; Wielgórka, 2012; Skoczylas, 1998; Maćkowiak, 2009; Maćkowiak, 2013; Wielicki, Braun, 2009; Waśniewski, 2011; Kaczmarek, 2014; Szczepankowski, 2012.

The analysis of the definitions of enterprise value management clearly shows that all proposals equate value management with maximising an enterprise's value. At the same time, the authors identified value drivers. These drivers are presented in Table 2.

**Table 2.***Enterprise value drivers*

<b>Author</b>	<b>Drivers</b>
A. Rappaport	- operating cash flows, - discount rates, - debt
D. Walters	- customer loyalty management, - inclusion of suppliers and customers in the value creation process, - financial leverage, - operational leverage, - strategic and operational cash flows, - capacity management.
J. Copacino	- cash, - invested capital, - cost of capital.
A. Black, P. Wright, J.E. Bachman	- strategic factors – risk, profitability, growth, - financial factors – operating cash flows, discount rates, debt, - operational factors – overheads, production, productivity.

Cont. table 2.

A. Damodaron	- free cash flows for an enterprise, corresponding to the after-tax cash flow the enterprise would obtain if it was not in debt, - expected growth in operating profit, - asset life, which allows for the determination of the time when cash flows can be realistically forecasted.
T. Copeland, T. Koller, J. Murrin	Factors contributing to an enterprise's value are individual in nature.

Source: own elaboration based on: Maćkowiak, 2009.

The analysis of the above definitions reveals the most important characteristics of enterprise value management (Maćkowiak, 2019):

1. it is a management philosophy that uses analytical tools and processes to steer the organisation towards the main objective of creating value for the owners,
2. it is a term that describes an enterprise management philosophy based on the principle of economic value creation,
3. enterprise value management is based on achieving a rate of return exceeding the cost of capital,
4. it is a concept focused on enterprise value maximisation,
5. the primary goal of an enterprise is to maximise shareholder value so, accordingly, the structure of an enterprise serves this goal,
6. it is a structure for measuring and managing an enterprise in order to create long-term value for the owners,
7. a concept based on value creation rather than accounting profit.

#### 4. Value measurement in accounting theory

The implementation of an enterprise value management system aims to supply compatible tools, the application of which is intended to cause, as a result of investment decisions made by managers in accordance with the NPV maximisation principle, the economic value of an enterprise to increase systematically above the level of its equity capital, thus testifying to the above-normal return on assets (Cwynar, Dzurak, 2010).

Enterprise value management is a modern management system incorporating tools and procedures for making strategic and operational decisions aimed at increasing the long-term value of an enterprise and increasing the wealth of its owners.

The essence of this system amounts to (Jaki, 2014; Starovic, Cooper, Davis, 2004; Szablewski, Pniewski, Bartoszewicz, 2008):

1. identifying the long-term enterprise value maximisation and the increase in the wealth of shareholders and owners as the primary goal of the enterprise,

2. evaluating capital expenditure from the point of view of the expected rate of return and the weighted average cost of capital. Enterprise value is created when the rate of return on invested capital exceeds its weighted average cost,
3. recognising the importance and change sensitivity of the various determinants of value: sales growth rate, operating profit margin, cash tax rate, investment in working capital and fixed assets, weighted average cost of capital,
4. applying the measures of shareholder value creation in order to motivate managers and inform on enterprise performance.

Shareholder theory, shareholder value maximisation has been the dominant principle of corporate governance over the past decade or so. However, the world financial crisis triggered the debate as to whether it is still ethical to pursue shareholder value maximisation. The growing changes in the business environment of an economic entity make it necessary for enterprises to develop competitive value management models focused not only on economic benefits, but also on meeting the sustainable expectations of society and all stakeholders (Barrena, López, 2015).

There is a growing awareness in society that the goal of an enterprise should not be limited to just one group – the owners. Stakeholder value theory is, in a sense, the opposite of shareholder value theory. Stakeholder value theory assumes that an enterprise's goal is to benefit all groups in its environment. Proponents of this theory indicate that taking all these groups into account will be the best way to maximise enterprise value (Howell, Nwanji, 2004; Freeman, 1984; Malik, 2012; Donaldson, Preston, 1995; Rzepka, 2018).

By citing arguments in favour of adopting shareholder value maximisation as the primary goal, it is also implied that considering the perspective of stakeholders has no valid justification. The main issue is the divergence of competing expectations expressed by different stakeholder groups. Thus, consumers expect low prices and high product quality, employees high wages and stable employment, suppliers low risk and fast payment. The general public will be interested, for example, in environmental protection. Analysing such expectations, it is difficult to determine how to satisfy all these needs and at the same time increase enterprise value. Rather, it is necessary to select and identify the entities directly related to the enterprise and increase enterprise value through the prism of these entities. They may include customers, employees, suppliers, creditors.

Whether an enterprise adopts shareholder or stakeholder value maximisation, the overriding goal is always to survive and grow.

The analysis of the cited definitions of enterprise value management, value drivers, and doubts reveals three points to be noted:

1. cash flow,
2. time,
3. the concept of shareholders and stakeholders.

When an enterprise's value is based on its long-term cash flows, it is possible to assess its competitive capacity, which is the foundation for its survival and growth. Using the notion of shareholder value maximisation, many authors argue that it is cash flows as opposed to changes in share price that determine this value (Wrońska, 2004). Another issue to be addressed is that of time. Enterprise value maximisation as a primary goal means a long-term perspective should be adopted. If an enterprise adopts a short-term perspective, a risk exists that decisions that are taken will not necessarily translate into value creation. An example of this would be accounting malpractices and their consequences.

The proponents of financial goals believe that the objectives of the owners are divergent from the objectives of other stakeholders, so they disregard the expectations of the other interest groups in value creation. In contrast, researchers who disagree with this position argue that an enterprise, while respecting the objectives of all major stakeholders, fulfils its responsibility to the owners at the same time (Pachciarek, Szarek, 2017).

Stakeholder theory takes a much broader view of an enterprise's business goals and the beneficiary of the value it creates is every stakeholder in the organisation.

The analysis of the areas of activity where drivers of value for stakeholders originate from indicates the following ones (Pawłowska, 2016):

1. changes in the enterprise aimed at applying new technologies or launching a new product,
2. obtaining financial and economic benefits, e.g. stemming from increased profitability or cost reduction,
3. obtaining social benefits, e.g. image, reputation, credibility.

**Table 3.**

*Expectations of all groups with an interest in corporate value*

	<b>Expectations, benefits</b>	<b>Effect on an enterprise</b>
Owners/ Shareholders	Attractive investment, increased enterprise value, dividends, indirect benefits, power and prestige	They do not interfere in the running of an organisation, but derive income from their shares.
Supervisory board	An enterprise's security and growth: ensuring the compliance with legal norms, responsible management, remuneration, prestige	They influence an organisation through their right to vote.
Managers	Personal professional success: high remuneration, profit sharing, appreciation in share price, bonuses and other benefits, professional and social status	
Employees	Quality of life and professional success, high income, stability, employment, opportunity to develop professional qualifications	They are the people responsible for the execution and implementation of the entire project. They form project teams.
Creditors	Attractive investment: return of borrowed capital with interest, security, power	
Customers	Satisfaction of needs, good cooperation: security and stability of supplies, good quality products, professional service, customer service	Their role is to exchange money for an organisation's products or services. The term customer embraces a variety of institutions and organisations, e.g.: individuals, other enterprises, schools, distributors, hospitals.

Cont. table 3.

Suppliers	Survival and development, profitable cooperation, increased value of a supplier's enterprise	They supply an organisation with goods, raw materials, and other services.
Competitors	Competition respecting moral principles and professional ethics, fair play	Competition positively influences the development of an organisation by motivating it to extend its operations and improve performance, seeking to expand into new markets.
Society	Fairness and growth: sustainable job creation, high income, support for education and culture	
Analysts and rating agencies	Information: preparation of an opinion on an enterprise in the investment context, but also to provide information to the general public and specific groups about an enterprise's situation and its sustainability	
Ecologists	Sustainable growth, care for the ecosystem, monitoring an enterprise's direct environmental impact	
State/state authorities	Prosperity, stable financial system, high revenue, sustainable job creation	They control the operations of organisations to protect the public interest and ensure compliance with free market principles.

Source: Maćkowiak, Poniatowska, 2021; Mikołajewicz; Maćkowiak, 2013.

In conclusion, enterprise management should primarily serve the interests of an enterprise itself, rather than any particular stakeholder groups, whether they are owners or other stakeholders. Enterprise value management should focus on increasing the value of an enterprise regardless of what method or metric is used.

## 5. Evolution of enterprise value management metrics

Regardless of an enterprise's organisational and legal form, every owner expects an increase in its value in the long term. As a result, both modern financial theory and business administration studies recognise an enterprise's market value maximisation as the primary goal of its activity (A. Jaki, 2011). Enterprise value maximisation is classified as one of the financial objectives. The benefits of an enterprise's owners are related in the long term to the increased value of the invested capital. The direct reflection of its value is its market value of the enterprise in which it was invested.

Enterprise value management metrics can be classified based on a variety of criteria.

Performance measures used in enterprise value management can be divided into two groups:

1. accounting-based performance measures,
2. value-based measures.

Alternatively:

1. standard enterprise valuation methods, which are used primarily to determine the value of an enterprise for the purpose of transforming the ownership structure. They basically embrace three groups of methods: asset-based, income-based and mixed,
2. non-standard enterprise valuation methods.

Accounting measures are usually different types of profit determined in accordance with accounting principles. The most common accounting measures include: ROI, ROA, ROE, RONA, ROCE, EPS (Maćkowiak, 2022).

The 21st century is the time of significant changes in the priorities of doing business. Enterprise value maximisation, defined as increasing the capital invested by the owners, has come to the fore. The idea of value measurement stems from the conviction that information presented in accounting books and financial statements is an insufficient basis for decision-making. The shortcomings of profit as the primary performance measure are becoming increasingly evident. It was observed that, for many enterprises, accounting profit did not necessarily imply a growth in the value of the enterprise. This happens when the profit generated falls short of investors' expectations or the rate of return they require. Profit is an accounting entry that, through the use of creative accounting, may not adequately reflect economic reality.

Accounting measures are based on the data presented in the profit and loss account prepared in accordance with the provisions of the Accounting Act. As they are based on accounting data, they share all the shortcomings that are associated with accounting profit.

The most important shortcomings of accounting measures include (Dudycz, 2002; Sierpińska, 1999; Rappaport, 1999; Rutkowski, 1999; Maćkowiak, 2013):

- the level of profit is strongly influenced by accounting policy, i.e. the legal framework of accounting regulations in force in a given country (e.g. different inventory valuation methods, different depreciation methods),
- the amount of cash is not equivalent to the profit generated,
- ignoring investment issues,
- the financial result does not take into account the change in the value of money in time, which means that the change in the value of accounting measures does not reflect the change in an enterprise's value,
- not all items disclosed under assets have an impact on the profit made by an enterprise (e.g. investments under way),
- some liabilities depend on effective management (e.g. trade payables, the volume of which depends on trade credit, which is in turn related to the position and credibility of the enterprise, i.e. on the quality of management),
- the net financial result reflects the result of all events that took place in an enterprise, including those that are incidental and one-off (other operating income, other operating expenses, financial income and expenses).

This caused a need to replace profit with another measure to estimate an enterprise's value. As a result, the concept of economic profit was developed. In literature, economic profit is used as the main tool of the enterprise value management system.

In its basic form, economic profit is accounting profit; its construction is based on data obtained from the balance sheet, income statement and notes. Economic profit draws on Alfred Marshall's concept of residual profit. The main difference between profit in the income statement and economic profit is the inclusion of the opportunity cost of equity capital. "The fundamental difference between accounting profit and economic profit relates to the statement that an enterprise is not truly profitable until its revenues are sufficient to cover its production and it also ensures owners a normal rate of return on invested capital" (Cwynar, Dżubak, 2010). Accordingly, economic profit takes into account the cost of the entire capital invested in an enterprise's assets.

The universal formula for economic profit is as follows:

$$\text{Economic profit} = \text{return on capital} - \text{cost of capital}$$

Non-standard methods used to measure enterprise value include enterprise value metrics. These metrics can be divided into two groups according to the figures that form the basis of control:

- metrics based on net operating profit, e.g. economic profit, economic value added, market value added,
- metrics based on cash flows.

The most popular metric based on economic profit is EVA, which has been in use since 1991, when Bennett Steward published "The Quest for Value". Enterprise value management was long identified with creating economic added value (Maćkowiak, 2022).

The basic formula for economic value added is as follows:

$$\text{EVA} = \text{net operating profit after tax (NOPAT)} - \text{weighted average cost of capital (WACC)} \times \text{invested capital (IC)}.$$

In consequence, value creation is based on three components:

- NOPAT,
- cost of capital,
- capital employed.

Simultaneously, the creators of EVA proposed adjustments to profit and capital employed. In total, more than 160 adjustments were proposed and their application depends on the decisions made in an enterprise.

As F. Weissenrieder points out, economic value added was indeed developed for value management, but less as a metric and more as an incentive (Weissenrieder, 1998; Dudycz, 2001). In the early years of the introduction of economic value added, it seemed that it was the best measure of enterprise value management. First all, economic added value, based on economic profit, eliminates the majority of the shortcomings of accounting profit. However, some critical opinions argued that it does not eliminate the shortcomings of accounting metrics

because it is still based on accounting data, despite its different construction. As a result, a problem arises what metrics could be used to measure enterprise value management if not economic added value.

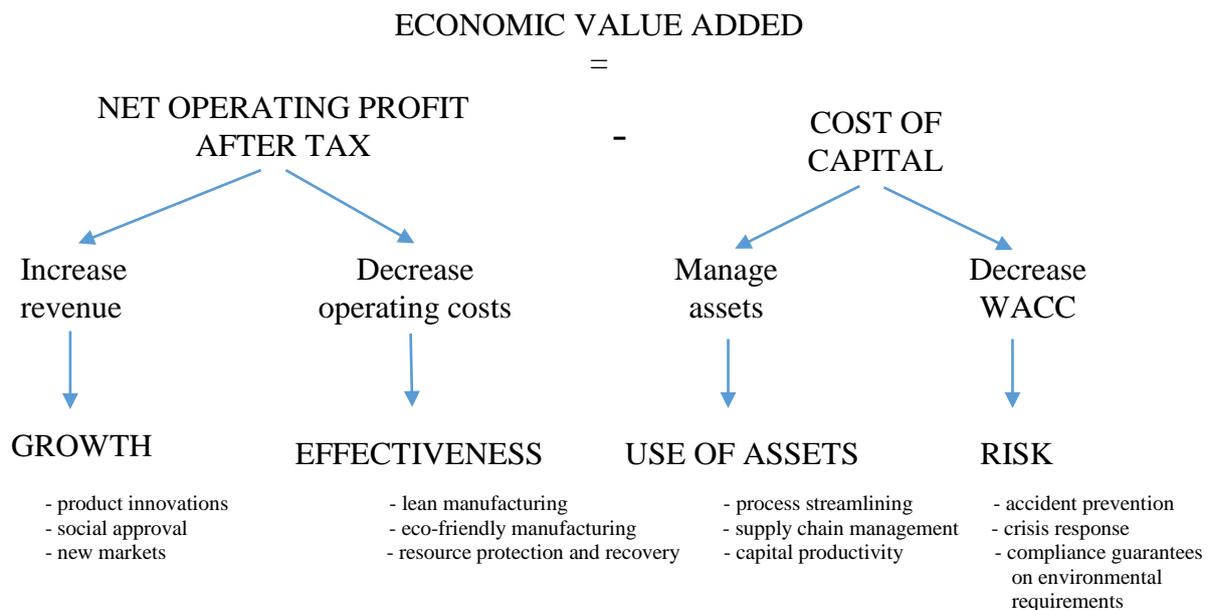
The analysis of the advantages and disadvantages of economic value added, a number of issues should be raised, as presented in the table below.

**Table 4.**

*Advantages and disadvantages of economic value added*

Advantages of economic value added	Disadvantages of economic value added
The inclusion of the total cost of capital, both own and third-party	Short-term metric
Internal metric	A large number of adjustments
Information on whether value for owners increases or decreases	Problems with determining the cost of equity capital
Fostering the decentralisation of management	Conflict between EVA and enterprise value
Possibility of conducting comparison between enterprises irrespective of their capital structure	Problems with assessing the Beta coefficient
Application as an early warning signal	
Compliance with the NPV method	

Source: own elaboration based on: Kubacka, 2018; Nowicki.



**Figure 1.** Deaggregation of EVA.

Source: Kochalski, 2016.

However, literature offers many examples of the conflict between economic value added and enterprise value (Jaki, 2012):

1. EVA depends on invested capital so the board may seek to reduce the value of this capital by, for example, carrying out a restructuring that does not increase operating cash flow and its costs reduce the value of capital employed, or replacing conventional purchases with operating leases,

2. the board may manipulate future growth by increasing the current EVA at the expense of reducing its future investment,
3. the possibility of influencing the cost of capital, which is risk-related; the primary measure of an enterprise's risk is the beta coefficient, determined based on historical data,
4. the possibility of choosing from 160 adjustments to achieve the desired level of EVA,
5. it is not confirmed that EVA correlates better with enterprise value or encourages shareholder value creation,
6. the low correlation of EVA with an enterprise's market value; this is a consequence of the calculation of EVA, which is based on nominal rather than market data.

The critical observations presented above that concern the application of economic added value to enterprise value management lead to the conclusion that this metric should not be used for enterprise value appraisal in isolation. It definitely can and should be used as one of the components in enterprise value management. Cash flow based measures of value creation are primarily: shareholder value added, cash flow based return on investment, and cash value added.

Shareholder value added represents the present value of future cash flow balances discounted at the weighted average cost of capital.

Shareholder value maximisation can be adopted as an enterprise's financial goal. The calculation of total enterprise value in the SVA model consists of three components (Daszyńska-Żygadło, 2015):

- the current value of operating cash flow in a given period - its final value depends, to a large extent, on the volume of sales revenue, although it is also affected by factors such as the operating profit margin, the value of capital expenditure in excess of depreciation, and the cash tax rate;
- the residual value - also referred to here as the baseline or base value. It is calculated using an appropriate residual value model (e.g. a perpetual annuity model) for the period beyond the forecast horizon. In practice, this means estimating the residual value for each year of the forecast, with the assumption that cash flows, which do not include new investments, do not change;
- the current market value of securities held for sale and other investments - those that do not have a major impact on an enterprise's operations and can be easily monetised.

Return on investment expressed in cash flows is a relative measure of the financial gains earned from an investment and it is interpreted as the discount rate at which the sum of the discounted gross cash flow balances over the life of the project equals the investment expenditure incurred during the initial period.

Cash value added, on the other hand, shows the excess cash flow generated by the investment on the cash outlay incurred for the investment.

Market value added informs on the excess market value of the enterprise on the value of the capital invested in a given period.

The analysis of the examples of the most popular enterprise value management metrics discussed above reveals their complex structure as well as their advantages and disadvantages. Each economic entity should implement an enterprise value management system adequate to its own needs and capabilities, identifying the areas and procedures in a precise manner.

## 6. Conclusion

The implementation of an enterprise value management system can encounter a number of obstacles. First of all, an enterprise should consider the purpose of implementing such a system. It is necessary to define what it means to increase value for owners. Another problem involves choosing an adequate measure, because no metric demonstrating the short-term effects of value creation can be regarded as the only objective reflection of the enterprise value creation process, as this value is primarily linked to investors' expectations concerning the future rate of return (Daszyńska-Żygadło, 2015).

The considerations concerning the implementation of enterprise value management should recognise a special group of enterprises – small and medium-sized entities. These are the entities that do not often have their own accounting or financial analysis departments. In such entities, it is difficult to implement an enterprise value management system in the form that is proposed by consulting firms. However, small and medium-sized entities may also be interested in value management, but from a slightly different perspective.

The analysis of the advantages and disadvantages of enterprise value management metrics helps identify key factors that will allow value management to be monitored without being excessively complicated.

Accordingly, in a simplified form, value management can be comprised in these three elements (Kumor, Maćkowiak, 2018):

- EBITDA,
- invested capital,
- cash flows.

Based on these three elements, a scorecard of basic financial metrics can be built.

The proposed solution has some limitations that need to be considered. First, an enterprise has to keep full accounting in compliance with the Accounting Act. Second, it cannot prepare simplified financial statements as the data presented in such a manner will be insufficient. Third, it has to keep cost records by nature. Finally, risk-related issues and the time value of money will not be considered.

Various factors that support the application of VBM to SMEs can be identified. These include (Britzemaier, Kraus, Hanerle, Mayer, 2013):

- VBM helps to ensure the going concern and competitiveness of an enterprise in a constantly changing environment by the consideration of risk-adjusted profitability and increasing awareness of strategic issues.
- VBM supports the fulfilment of the stricter rating requirements of Basel II through reconciliation of rating criteria and the aims of VBM.
- Owing to the special significance of meta-economical, non-financial goals in SMEs, the orientation on VBM ensures the rationality of the management. Independently from that, value orientation explicitly implies ecological, ethical and social goals and prevents these issues from being neglected.

Reasons for the lack of application are manifold. Hirsch et al. states that the lack of application of VBM (in family businesses) is supported by scientific practice. The majority of publications on VBM implicitly refer to large traded companies. A more practical and empirically proven barrier for the avoidance of VBM is that SMEs are confronted with limited financial and personnel resources as well as a lack of knowledge about VBM. SMEs link the implementation of VBM to the extension of their IT systems and the hiring of additional staff, both of which may result in higher costs (Britzemaier, Kraus, Hanerle, Mayer, 2013).

By introducing the enterprise value management system, one obtains information on the management of working capital, capital employed, operating profit and free cash flow.

For small enterprises listed on the New Connect financial market, and therefore using the capital market, the value management system may be the basis for further analysis.

Due to the fact that there will be other shareholders next to the owner, it will be reasonable to supplement the system with measures such as (Maćkowiak, 2017):

- economic added value,
- added value for shareholders,
- market added value.

A multi-dimensional value management system in a small and medium-sized enterprise is a tool that takes into account the specificity of the largest group of economic entities, i.e. small and medium-sized enterprises. By analyzing the objectives of activities, both financial and non-financial, a set of measures was selected that will allow the implementation of enterprise value management in this group of entities.

Traditional financial analysis is based primarily on accounting profit. However, not always increasing profit means multiplying value for owners. At the same time the enterprise may generate profit, but may have a problem with financial liquidity. This means that the profit made does not have to fully cover the cost of capital, and the wealth of shareholders is multiplied when there is a surplus of profit over the cost of capital. It should also be noted that cash flow, i.e. cash, better illustrates whether an individual multiplies the wealth of the owners. (Maćkowiak, 2022)

## References

1. Barrena, M., López, F., Romero, F. (2015). Corporate social responsibility: Evolution through institutional and stakeholder perspectives. *European Journal of Management and Business Economics*, 25(1).
2. Black, A., Wright, P., Bachmann, J.E. (2000). *W poszukiwaniu wartości dla akcjonariuszy. Kształtowanie wyników działalności spółek*. Warszawa: Dom Wydawniczy ABC.
3. Borowiecki, R., Jaki, A., Kaczmarek, J. (1999). *Metody i procedury wyceny przedsiębiorstw i ich majątku*. Kraków: Wydawnictwo Profesjonalnej Szkoły Biznesu.
4. Britzemaier, B., Kraus, P., Hanerle, M., Mayer, B. (2013). Cost of capital In SMEs: Theoretical considerations and practical implications of a case study. *EuroMed Journal of Business*, nr 8.
5. Brzezina, W. (1998). *Ogólna teoria rachunkowości*. Częstochowa: Politechnika Częstochowska.
6. Burzym, E. (1993). Przesłanki i perspektywy standaryzacji i międzynarodowej harmonizacji rachunkowości. *Zeszyty Teoretyczne Rachunkowości, Stowarzyszenie Księgowych w Polsce, t. 23*. Warszawa.
7. Copeland, T., Koller, T., Murrin, J. (1997). *Wycena: mierzenie i kształtowanie wartości firmy*. Warszawa: WIG-Press.
8. Cwynar, A., Dzurak, P. (2010). *System VBM i zysk ekonomiczny. Projektowanie, wdrażanie, stosowanie*. Warszawa: Price Waterhouse Coopers, Poltext.
9. Cwynar, A., Cwynar, W. (2002). *Zarządzanie wartością spółki kapitałowej*. Warszawa: Fundacja Rozwoju Rachunkowości w Polsce.
10. Daszyńska-Żygadło, K. (2015). *Wycena przedsiębiorstwa*. Warszawa: PWN.
11. Davis, M. (2004). *Maximising Shareholder Value. Achieving clarity in decision-making*. London: CIMA.
12. Dobija, M. (1997). *Rachunkowość zarządcza i controlling*. Warszawa: PWN.
13. Donaldson, T., Preston, L.E. (1995). The stakeholder theory of the corporation: Concepts, evidence and implications. *Academy of Management Review*, 20(1).
14. Dudycz, T. (2002). *Finansowe narzędzia zarządzania wartością przedsiębiorstwa*. Wrocław: Wydawnictwo Akademii Ekonomicznej im Oskara Langego we Wrocławiu.
15. Dudycz, T. (2005). *Zarządzanie wartością przedsiębiorstwa*. Warszawa: PWE.
16. Dyduch, W. (2022). Strategic Processes and Mechanisms of Value Creation and Value Capture: Some Insights from Business Organisations in Poland. In: A. Zubac, D. Tucker, O. Zwikael, K. Hughes, S. Kirkpatrick (eds.), *Effective Implementation of Transformation Strategies. How to Navigate the Strategy and Change Interface Successfully*.
17. Fisher, A.B. (1995). Creating Stockholder Wealth. *Fortune*, V. 132, no. 12.

18. Grudzewski, W.M., Hejduk, J. (2008). Zarządzanie wartością firmy. In: T. Krupa, M. Siudak (eds.), *Nowe trendy i rozwiązania w organizacji produkcji i zarządzaniu przedsiębiorstwem*. Warszawa: Wydawnictwo Instytutu Organizacji Systemów Produkcyjnych Politechniki Warszawskiej.
19. Hostyński, L. (2006). *Wartość w świecie konsumpcji*. Lublin: Wydawnictwo Uniwersytetu Marii Curie- Skłodowskiej.
20. Howell, K.E., Nwanji, T.I. (2004). The stakeholder theory in the modern global business environment. *International Journal of Applied Institutional Governance*, 1(1).
21. Jaki, A. (2011). Imperatyw kreowania wartości a teorie przedsiębiorstwa. *Kwartalnik Nauk o Przedsiębiorstwie*, 2.
22. Jaki, A. (2012). *Mechanizmy procesu zarządzania wartością przedsiębiorstwa*. Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie.
23. Kaczmarek, J. (2014). Kreowanie wartości dla akcjonariuszy w spółkach giełdowych sektora nieruchomości. *Świat Nieruchomości [World of Real Estate Journal]*, no. 88, swiatnieruchomosci.krakow.pl
24. Knight, J.A. (1998). *Value Based Management*. New York: McGraw-Hill.
25. Kochalski, C. (2016). *Zielony controlling i finanse. Podstawy teoretyczne*. Warszawa: CH Back.
26. Kubacka, M. (2018). Problematyka wykorzystania EVA jako miernika wartości przedsiębiorstwa. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, nr 513. Wrocław.
27. Kumor, I., Maćkowiak, E. (2018). *A multidimensional approach to value management in a small and medium-sized enterprise*. 36th International Scientific Conference on Economic and Social Development – "Building Resilient Society". Rozana Veselica, Gordana Dukic, Khalid Hammes (eds.). Zagreb.
28. Landreth, H., Colander, D.C. (1998). *Historia myśli ekonomicznej*. Warszawa: PWN.
29. Maćkowiak, E. (2019). *Wielowymiarowe podejście do zarządzania wartością w małych i średnich przedsiębiorstwach*. Warszawa: CeDeWu.
30. Maćkowiak, E. (2022). *Barriers to business value management in small and medium entities*. 40th International Business Information Management Association, Spain.
31. Maćkowiak, E., Poniatońska, L. (2021). *Determinanty użyteczności raportów finansowych w kontekście grup użytkowników informacji finansowych*. Warszawa: CeDeWu.
32. Maćkowiak, E. (2009). *Ekonomiczna wartość dodana*. Warszawa: PWE.
33. Maćkowiak, E. (2013). *Model przekształcenia sprawozdania finansowego na potrzeby zarządzania wartością przedsiębiorstwa*. Katowice: Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach.
34. Maćkowiak, E. (2013). Potrzeby informacyjne akcjonariuszy i interesariuszy a raportowanie wartości. In: B. Micherda, M. Andrzejewski (eds.), *Sprawozdawczość i rewizja finansowa. Problemy kwantyfikacji wartości*. Kraków: Wyd. UE w Krakowie.

35. Maćkowiak, E. (2018). *The effect of fair value and historical cost on financial performance – a comparative outlook, Economic and Social Development (Book of Proceedings)*. 20th International Scientific Conference on Economic and Social Development. L. Yongqiang, A. Hunjet, Ante Roncevic Prague, Czechy.
36. Marks, K. (1956). *Krytyka ekonomii politycznej, Tom I*. Warszawa: Książka i Wiedza.
37. Mazur, A. (2018). Schyłek informacyjnej funkcji bilansu – ujęcie cybernetyczne. *Studia i Prace Kolegium Zarządzania i finansów, vol. 160*. Warszawa: Wydawnictwo SGH.
38. Meigs, W.B., Meigs, R.F. (1986). *Financial Accounting*. New York: McGraw-Hill.
39. Michalski, M. (2001). *Zarządzanie przez wartość*. Warszawa: WIG-Press.
40. Micherda, B. (2001). *Ocena działalności jednostek gospodarczych przesłanką ewolucji rachunkowości i jej regulacji prawnych*. Kraków: Zakamycze.
41. Micherda, B. (2006). *Problemy wiarygodności sprawozdania finansowego*. Warszawa: Difin.
42. Mikołajewicz, G. [www.wbc.poznan.pl/content/161923/S4225GrzegorzMikołajewicz.pdf](http://www.wbc.poznan.pl/content/161923/S4225GrzegorzMikołajewicz.pdf).
43. Nowicki, D. (2017). Dyskusyjne problemy ustalania i wykorzystania ekonomicznej wartości dodanej. *Zeszyty Naukowe Uniwersytetu Szczecińskiego, no. 88, cz. 1, Finanse, Rynki, Ubezpieczenia, no. 4*.
44. Pachciarek, H., Szarek, M. (2017), Kreowanie wartości dodanej dla interesariuszy – studium przypadku firmy handlowo-usługowej. *Zarządzanie i Finanse, Journal of Management and Finance, Vol. 15, no. 2*.
45. Pittman; Malik, F.F. (2012). *The right corporate governance: Effective top management for mastering complexity*. Frankfurt: Campus Verlag,
46. Pluta, W. (2009). *Zarządzanie wartością małych i średnich przedsiębiorstwach*. Warszawa: PWE.
47. Porter, M.E. (1985). *Competitive Advantage, Creating and Sustaining Superior Performance*. New York: The Free Press.
48. Rappaport, A. (1999). *Wartość dla akcjonariuszy – poradnik menedżera i inwestora*. Warszawa: Wig-Press.
49. Rutkowski, A. (1999). Ekonomiczna wartość dodana w ocenie organizacji gospodarczej. *Przegląd Organizacji, nr 1*.
50. Rzepka, A. (2018). Ethical aspects of shareholder value objective. *Zeszyty Naukowe Małopolskiej Wyższej Szkoły Ekonomicznej w Tarnowie, vol. 40, no. 4*.
51. Sierpińska, M. (1999). *Polityka dywidend w spółkach kapitałowych*. Warszawa: PWN.
52. Skoczylas, W. (1998). *Wartość przedsiębiorstwa w systemie jego oceny*. Szczecin: Wydawnictwo Uniwersytetu Szczecińskiego.
53. Stankiewicz, W. (2000). *Historia myśli ekonomicznej*. Warszawa: PWE.
54. Starovic, D., Cooper, S., Davis, M. (2004). *Maximising Shareholder Value. Achieving clarity in decision-making*. London: CIMA, p. 2.

55. Szablewski, A., Pniewski, K., Bartoszewicz, B. (eds.) (2008). *Value Based Management. Koncepcje, narzędzia, przykłady*. Warszawa: Poltext.
56. Szczepankowski, P. (2012). *Wycena i zarządzanie wartością przedsiębiorstwa*. Warszawa: PWN.
57. Waśniewski, P. (2011). Zarządzanie wartością przedsiębiorstwa jako narzędzie sterowania jego działalnością. *Studia i Prace Wydziału Nauk Ekonomicznych i Zarządzania, no. 21*. Szczecin: Wydawnictwo Naukowe Uniwersytetu Szczecińskiego.
58. Wielgórka, W. (2012). Zarządzanie wartością przedsiębiorstwa w globalizacji. *Zeszyty Naukowe Politechniki Częstochowskiej, no. 5*. Częstochowa: Wydawnictwo Politechniki Częstochowskiej.
59. Wielicki, W., Braun, R. (2009). Rola kapitału oraz wartości niematerialnych i prawnych w zarządzaniu przedsiębiorstwem rolnym. *Roczniki Nauk Rolniczych, Seria 6, Ekonomika i Rolnictwo, t. 36, z. 4*. Warszawa: Wydział Nauk Ekonomicznych, Szkoła Główna Gospodarstwa Wiejskiego.
60. Zieniuk, P. (2018). *Wartości szacunkowe w teorii i praktyce spółek giełdowych*. Warszawa: Difin.