NAUKI O FINANSACH FINANCIAL SCIENCES 1(6) • 2011
ISSN 2080-5993

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DILEMMAS RELATED TO THE CONCEPT AND VALUATION OF INTANGIBLE ASSETS IN THE ACCOUNTING SYSTEM OF AN ENTERPRISE

Summary: A part of intangible property is presented in an accounting system and its valuation conforms to generally accepted regulations, while a significant part of an enterprise's intangible property does not meet conditions defined by legal regulations and cannot be presented in an accounting system. Commonly accepted valuation methods are also missing for this part of intangible property. In many cases defining value means, in fact, its estimation. Valuation issues are closely related to the concept of intangible property, which, by research environment and actual practitioners, is differently defined. In some cases the terms are used interchangeably, which results in certain ambiguity regarding what is actually valuated (intangible property as intangible assets presented in balance sheet, or intangible property as intellectual capital).

Keywords: accounting system, valuation, intangible property.

1. Introduction

Both tangible and intangible property are present in any economic entity. Their mutual relations result from numerous factors, for example type of performed activities, organization and administration form. Therefore, based on conducted observations and analyses, it may be concluded that tangible property is a dominating one in a traditional enterprise ensuring the continuation of financial and manufacturing processes. However, intangible property dominates in a contemporary and knowledge-based enterprise, which allows for obtaining competitive advantage on the market.

In the second decade of the 21st century a significant increase of intangible property share is forecast and may amount to 80-90% of an enterprise value at minimum share of tangible property in the range from 20% down to 10%. For this reason, the problems of intangible property (classification, valuation, presentation form) have become of major importance not only to managers of enterprises, but also to the financial and accounting environment.

The objective of the present article is to point to the issues of intangible property concept and its valuation in the context of accounting system which functions in an enterprise. Accounting system offers certain solutions which standardize both the term of intangible property and the process of intangible assets valuation in an enterprise, but they do not refer to all components of intangible property. This problem constitutes a significant challenge for contemporary accounting, which has reached a breakthrough point as far as the occurring changes are concerned.

"Current century presents yet another period in the history of accounting development when the scale of transformations, both in the domain of financial and managerial accounting will become, by far, more extensive than changes which occurred in the previous century" [Walińska 2009, p. 9]. The changes in progress in the domain of accounting may be defined as epoch-making, since they refer to fundamental issues such as property components valuation (from historical cost to goodwill), an enterprise valuation, the form and content of financial statement, the standardization of accounting principles and searching for new instruments in strategic managerial accounting, which could facilitate the valuation of intangible assets.

2. Valuation in accounting system of an enterprise

Contemporary accounting (i.e. integrated financial accounting and managerial accounting) is understood as an information system about property, capital and the financial result of an enterprise. Within the framework of a contemporary accounting system the following procedures are possible: classification, valuation, presentation (in the records and financial reporting), analysis, fixed assets planning and audit, as well as planning and audit of other financial items which constitute the object of interest for accounting.

While discussing valuation in accounting, attention has to be paid to the scope of financial accounting subject matter which is defined in balance law [see *Ustawa*… 1994] and covers mainly: the description of accepted accounting regulations, keeping accounts, stock taking, assets and liabilities valuation and the presentation of financial result, financial statement preparation, collecting and keeping booking records and other documentation, audit and announcement of financial statements [Hońko 2005, p. 27].

The basic task of accounting is "(...) to measure economic reality of enterprises" [Hejnar and Kulis 2005, p. 103]. The analysis of an enterprise property and its changes influenced by the occurring economic processes is supported by the process of valuation defined precisely in balance law and International Accounting Standards. Legal regulations define, among others, the moment of valuation initiating and finalizing, valuation object and price categories ascribed to particular property components.

The functioning of an accounting system in an enterprise is possible owing to distinguishing its property and capital, as well as associating their particular elements with certain valuation properties. Therefore, valuation according to historical and actual prices is the domain of financial accounting, while managerial accounting allows for assigning value not only in monetary dimension, but also regarding quantity and quality. Values defined by managerial accounting are mainly of planning nature.

To sum up, it has to be strongly emphasized that the core nature of accounting system manifests itself mainly in the valuation and presentation of particular property components. The issues most important for contemporary accounting system are those referring to the concept, valuation and presentation of intangible assets.

Changes occurring in accounting are possible owing to its certain attributes, the significance of which has been growing in recent years. The superior properties of contemporary accounting are such as its universal nature, flexibility and creativity. It is owing to these attributes that one may observe how traditional accounting (initially understood only as bookkeeping records) has been evolving towards prospective solutions combined with an enterprise managing process. Therefore, an accounting system may undertake new challenges (for example goodwill application in valuation, or transformation of financial statement).

The universal nature of accounting manifests itself in the possibility of its application regardless of the specific nature (form, object) of the conducted economic activity. Additionally, such universality guarantees an option for implementing both actual values (e.g. production cost) and forecasted ones (e.g. goodwill) for presenting the given entity's activities by means of numbers. On the other hand, the attribute of flexibility offers an opportunity to adjust accounting system to the needs of a particular economic unit and opens possibilities of reacting to changes occurring in it.

Creativity in accounting means the possibility to choose measurement methods, by an economic entity within the framework of conducted accounting policy, as well as preparing additional information for the needs of internal and external users [see Paczuła 2005, pp. 132-133]. Creative accounting[1] should be associated with positive and creative activities which support company management in presenting current financial situation within the framework of an accounting system which would persist in line with an entity's specific nature and legal regulations in force in relation to accounting procedures.

For several dozens of years critical opinions have been expressed about an accounting system and especially about the prepared financial statements, or performed valuation. Most frequently the information presented in financial statements is disclosed in a correct way, i.e. in line with accounting rules and balance law. Despite that, however, the information coming from financial statements has little in common with reality, for example property components valuation is performed according to historical costs instead of actual value.

The criticism of financial reporting is mainly focused on its two aspects [see Walińska 2007, p. 334]: on the measured object (e.g. some components are not subject to valuation) and measurement methods (e.g. incorrect valuation categories are applied based on historical values).

[1] The term of creative accounting has become very popular in recent years; however, it is used in an incorrect context, mainly by the media, which identify creative accounting with aggressive accounting, accounting fraud, or falsified financial statements presentations.

According to balance law, the following price categories are applied to property components' valuation: purchase cost, acquisition price, production cost, net selling price, average exchange rate, the required payment amount, permanent impairment and goodwill.

The possibility of applying goodwill in valuation[2] constitutes a step forward towards current, actual values. However, defining goodwill results in numerous problems for those who have decided to implement this valuation option [see Mazur 2010, p. 12-16]. The biggest difficulty refers to forecasting future economic advantages in which a certain property component should result. Goodwill is not defined as the result of actual sales/purchase transaction of a given component. It refers only to an estimated price which would have been applied in a hypothetical transaction taking current market situation into consideration.

The condition indispensable for value estimation is market presence of an identical property component. When this condition is met, goodwill is represented by actual market value. In the situation when defining current market value is not possible the latest transaction price should be applied, or the price of similar components. If defining the price is not possible in the aforementioned way then value estimation is performed by means of income or cost methods [Kamela-Sowińska 2007, p. 152].

Goodwill applied for valuation most frequently refers to the following components: intangible property, foxed assets, investment property, investments in intangible assets, financial assets and liabilities.

3. The concept and classification of intangible property from the perspective of an accounting system

The concept of intangible property[3] was precisely defined in balance law[4] and International Accounting Standards. According to these regulations, intangible property is identified with an economic entity assets. However, these regulations refer only to a certain part of intangible assets.

Intangible property represents an extensive and diversified set of an enterprise's property components. The major part of intangible property does not meet the requirements imposed by accounting, and therefore, it cannot be disclosed within its framework. This situation poses a serious problem (and a challenge) for accounting system, since the undisclosed part of intangible property is very important because it

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[2] The amended Polish Accounting Act [see *Ustawa*… 2000] which entered into force in two stages (1 January 2001 and 1 January 2002) introduced the possibility of goodwill application.

[3] In the article it is assumed that intangible property represents an overall set of all components which do not take any physical form and result in some profit for an economic entity. It is divided into two basic parts and the division criterion is related to intangible property presentation in accounting system. The part undisclosed in accounting system constitutes an interpretation problem of deciding whether these are assets or liabilities.

[4] The Accounting Act uses the term "intangible assets".

influences an enterprise value and its market position. This part of intangible property is interpreted as a given hidden enterprise assets or/and liabilities.

Additionally, there are also interpretations which refer to intangible property as components which have the broadest meaning and define all, regardless of their type and origin, without any physical presentation, sources of economic profits possible to obtain by an enterprise[5].

In the process of analyzing the existing disorder related to certain diversity in defining this part of intangible property – not presented in accounting system, it may be concluded that the terms of intangible property and intangible assets are commonly used by an accounting system, intellectual property is applied in law, intellectual capital is used in management, while intellectual assets are most frequently referred to in economics. The interpretation of these terms is often different. Therefore, a thorough understanding of a given concept is frequently missing. Besides, some terms are used as substitutes on many occasions (e.g. intangible assets and intellectual capital), which results in numerous interpretational misunderstandings.

The conducted professional literature survey results in an observation that the most often discussed notion is intellectual capital, which is explained by the fact that intangible assets have not yet been sufficiently identified. Additionally, the following opinions are expressed about mutual relations between intellectual capital and intangible property (intangible assets)[6]:

- intellectual capital is part of intangible property,
- intangible property is part of intellectual capital,
- intangible property and intellectual capital constitute separate categories,
- intangible property and intellectual capital refer to the same categories.

In order to understand the interpretation of intangible property (intangible assets) and intellectual capital better, it may be assumed that intangible property, not presented in an accounting system, is analyzed in three perspectives:

- capital perspective defined as intellectual capital,
- property perspective interpreted as intangible property (intangible assets),
- property-capital perspective which allows for following the balance method (referring to balancing intangible assets and intellectual capital).

Figure 1 presents mutual relations between concepts used in the article. In particular, attention should be paid to the part of intangible property undisclosed in an accounting system since the presentation form is of great importance (capital, property, capital-property).

The part of intangible property undisclosed in accounting system may be interpreted as intangible assets and/or intellectual capital.

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[5] Intangible property understood in this way may be interpreted both as assets and liabilities of an enterprise.

[6] It refers to the part of intangible assets not presented by accounting system.

<table>
<tr><td colspan="3">INTANGIBLE PROPERTY</td></tr>
<tr><td>Presented as assets in accounting</td><td colspan="2">Not presented in accounting</td></tr>
<tr><td>Intangible property
(Intangible and legal property)</td><td>Intangible assets</td><td>Intellectual capital</td></tr>
</table>

Figure 1. Mutual relations between concepts used in the article

Source: Author's compilation.

Intangible property in an accounting system should be analyzed from the perspective of the balance method which is regarded as a fundamental research method. Mutual interdependencies between assets and capital may be explained by means of an analogy between energy and matter. Nita [2009, p. 29] makes an observation that "(...) just like energy needs a material carrier also in case of accounting assets embody capital", since "(...) capital constitutes certain homogenous energy included in heterogeneous assets". Therefore, if intellectual capital does exist also intangible property must occur (intangible assets) and vice versa.

Table 1 presents the synthetic division of intangible property from the perspective of an accounting system, which distinguishes basic differences in the approach to intangible property both disclosed and undisclosed in this system. Among these differences the following may be indicated: characteristic properties, classification, valuation, presentation form and the manner of interpretation.

Table 1. Synthetic division of intangible property from the perspective of accounting system

<table>
<tr><td colspan="2">Intangible property in an enterprise</td></tr>
<tr><td>Presented in accounting system</td><td>Not presented in accounting system</td></tr>
<tr><td>Properties and classification in line with balance law and International Accounting Standards</td><td>Properties and classification prepared by practical and theoretical circles, mainly specialists in finance and management.
Lack of common and uniform standpoint in this matter</td></tr>
<tr><td>Valuation according to categories defined in accounting policy of an enterprise based on balance law and International Accounting Standards</td><td>Valuation according to many methods prepared by practical and theoretical circles, mainly specialists in finance and management.
Lack of common and uniform standpoint in this matter</td></tr>
<tr><td>Presentation in accounting records and in the obligatory form of financial statement</td><td>Presentation in the so-called implicit, informal reporting. Most frequently it is a report about human capital. Reports referring to intellectual capital take the form of a supplement to an annual report of an enterprise</td></tr>
<tr><td>Represent assets of an enterprise</td><td>Depending on interpretation they refer to assets and/or liabilities of an enterprise</td></tr>
</table>

Source: Author's compilation.

It is worth considering different approaches to intangible property valuation (for example defined by balance law and prepared by practical and theoretical circles) both disclosed and undisclosed by an accounting system.

Enterprises do not prepare separate statements referring to intangible assets. They only include, in an annual report (as its part), information about: clients, employees, trademarks, suppliers, innovations, research and development activities, quality, applied technologies, internal organization of processes, co-operation with partners, established alliances, formal capital relations (take-overs, mergers), influence on natural environment [Marcimkowska 2006, p. 227]. Most frequently prepared statements referring to intangible assets are reports about intellectual capital.

Table 2 presents the characteristics of intangible property and its classification from the perspective of balance law and International Accounting Standard 38 Intangible assets. Comparing these two regulations with regard to intangible property is of crucial importance, because some economic entities, since Polish accession to the European Union structures, have been obliged to prepare financial statements according to International Accounting Standards[7].

Concluding the presented analysis of balance law and IAS 38, regarding characteristics and classification of intangible assets, it has been observed that there are similarities in defining the core concept of intangible assets. Namely, they represent a nonmonetary component of assets, without any physical form and meet the following conditions: they are controlled by an entity, they are used during performed business activities, and in the future an entity will obtain certain profits resulting from them.

Among the listed intangible assets, goodwill deserves special attention since it is a specific component of an enterprise property. In general, goodwill may be divided into two parts: the part presented (purchased) in an enterprise financial reporting and the one not presented. The disclosed part may be of a positive or negative nature[8].

[7] The Accounting Act amendment [see *Ustawa*… 2004], which has been in force since 1 January 2005 obliged banks and other issuers of securities admitted for public turnover to prepare financial statements in line with International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS). This entry resulted in the division of economic entities preparing financial statements into three groups [Gierusz et al. 2007, p. 24]. The first group includes economic entities obliged to prepare financial statements according to IFRS. They apply The Accounting Act regulations only in the cases not provided for in IFRS (e.g. rules for bookkeeping, stock taking). The second group comprises entities for which it is optional to prepare financial statements in line with IFRS. These units have to meet the same obligations as entities obliged to prepare financial statements following IFRS. The third group of economic entities prepares financial statements in line with The Accounting Act. IFRS are applied by them only in the cases not regulated by The Act and National Accounting Standards. In 2008 the pool of entities obliged to prepare financial statements was extended to include the subsidiaries of foreign companies [see *Ustawa*… 2008].

[8] Negative goodwill constitutes the difference between higher goodwill value of an entity's property components (or its organized part) less the accepted commitments and the lower price of an overall unit takeover. Negative goodwill is represented by gradually obtained income, i.e. accruals settlement (liabilities).

Table 2. Characteristics and classification of intangible assets in line with balance law and IAS 38

Distinguished criterion	The Accounting Act	IAS 38
Name of the component	Intangible assets	Intangible assets
Characteristics	Used in production, delivering goods or providing services by an entity; controlled by an entity; facilitate obtaining profits by an entity in the future	**Possibility of a given component identification.** Identification occurs when: 1. it is possible to distinguish a component (e.g. separate from an economic entity and sell, or offer for a third party to be used at a certain fee); 2. it results from contractual titles, or other legal titles (regardless of the fact whether they are transferable, possible to separate from an economic entity, or other titles and liabilities); **Controlling a component** occurs, among others, if: 1. obtaining economic profit is highly possible; 2. the entity controls economic profits resulting from knowledge about the market and technical knowledge, if such knowledge is legally protected in the form of copyrights; 3. having employed qualified staff an entity may identify this part of their qualifications which results from completed trainings and will provide prospective economic profits **Prospective inflow of economic profits to an entity** obtained owing to a component of intangible assets. Proceeds may cover revenues from selling products and services, cost savings or other profits resulting from the component usage
Scope of the subject matter	It is an open list due to using the term "in particular": – property copyrights, related rights, licences; – franchising; – invention rights, patents, trademarks, – registered and decorative designs; – know-how; – purchased goodwill; – costs of finished development works	The standard distinguishes exemplary groups of intangible assets, but does not list their full catalogue Intangible assets group is a set of assets characterized by a similar profile and usage in an entity's activities The examples of separate groups are as follows: – trademarks (of products); – titles of magazines and publications; – software; – licences and franchising; – copyrights, patents and other industrial copyrights, operator's rights and related to services provision; – recipes, formulas, models, designs, prototypes; – intangible assets in progress

Source: Author's compilation based on [*Ustawa*… 1994; *Międzynarodowe Standardy*… 2007].

Table 3. Examples and characteristics of intangible assets undisclosed in an accounting system

<table>
<tr><th>Intangible assets undisclosed
in accounting system – examples</th><th>Problematic issues preventing the disclosure
of intangible assets in accounting system</th></tr>
<tr><td>Company image
Reputation
Brand
Organizational cohesion
Flexibility
Staff skills
Staff loyalty
Capital related to clients
Intellectual capital
Structural capital
Contacts with institutions
Market alliances
Cooperation traditions
Opinion of the environment
Confidential recipes
Data bases
Analytical methods
Research works
Market service systems
Logistics etc.</td><td>Classification

Valuation

Presentation</td></tr>
<tr><td colspan="2">Characteristics</td></tr>
<tr><td colspan="2">• based on knowledge,
• absence of physical presentation,
• not fully identifiable,
• unique for every enterprise,
• composed of diversified categories of different nature (e.g. company reputation, staff skills),
• not valuated and disclosed within the framework of accounting system (except these defined by balance law),
• most of them are dividable and may be used at the same time in different places,
• capable of creating cause-effect relations between particular intangible and tangible categories,
• ensure obtaining competitive advantage by an enterprise at the market (e.g. winning credible and solvent clients and business partners,
• source of prospective advantages,
• represent a growing gap between an enterprise market value and its balance value</td></tr>
</table>

Source: Author's compilation.

Only the positive part represents intangible assets which are presented as balance assets[9].

[9] Acquisition of an enterprise, or its organized part is a positive transaction since it confirms the good financial situation of an acquiring company. Purchased goodwill measures this part which, according to balance law, cannot be presented as assets, i.e. the set of properties characterizing an enterprise and resulting in its economic profits. Balance law does not define particular factors influencing the purchased goodwill, but the acquisition transaction allows for these assets presentation and valuation which are capable of "bringing economic profit under effective management of the Board and/or in exceptionally favourable market conditions" [Karmańska 2009, p. 3].

The undisclosed part of goodwill represents an internal goodwill created by an enterprise[10]. Its presentation is not possible according to accounting principles since the transaction with another entity is missing. If such a transaction does not occur, the value is not defined and therefore it is not possible to present it in financial statement.

Table 3 illustrates examples of intangible assets undisclosed in an accounting system and their characteristics. Among problematic areas related to such intangible assets, the following may be distinguished: classification, valuation and presentation form.

At present, there is no single, generally accepted, definition and classification of intangible assets agreed by the environment of practitioners and theorists representing different research areas (such as e.g. economics, management, finance, accounting). There is also no clear agreement regarding valuation and presentation method of intangible assets. Therefore, intangible property constitutes a problematic issue in every enterprise.

Intangible assets, which persist undisclosed in accounting system, may result in increased productivity by cutting different costs, pushing up sales due to better quality of products/services, providing an enterprise with an opportunity to choose different strategies and ways of functioning.

The structure of intangible assets is extensively diversified (e.g. copyrights, relations with customers, skills and loyalty of staff); however, particular components are related and supplementary for one other. For example, a brand influences relations with clients and company reputation.

4. Valuation of intangible assets in line with balance law and International Accounting Standard 38

Initial valuation of intangible assets presented in an accounting system in line with balance law and IAS 38 is similar. The historical cost is determined at the level of acquisition price, or production cost. IAS 38 offers the possibility to choose the model for intangible assets valuation later – the choice is between cost model and revaluation model. The cost model is based on valuation resulting from acquisition price, or production cost. Revaluation model, on the other hand, offers the possibility of revaluating value to goodwill value, for which The Accounting Act does not allow. Table 4 presents intangible assets valuation in line with balance law and IAS 38.

Goodwill for revaluation purposes should be determined based on active market which, according to IAS/IFRS, is understood as the market where goods subject to turnover are homogenous and at any time it is possible to find clients willing to buy or sell, while prices are disclosed for public information [Kabalski 2009, p. 55]. In

[10] Internal goodwill consists of direct factors (e.g. staff skills, relations with clients, market position) and indirect factors (e.g. economic system, market demand and supply, access to resources, location), which influence both the strength and potential of an enterprise.

Table 4. Intangible assets valuation in line with balance law and IAS 38

Intangible assets valuation in line with balance law	Intangible assets valuation in line with IAS 38
Historical cost results from acquisition price or production cost Historical cost of intangible assets cannot be revaluated to goodwill	While valuating intangible assets an entity, after initial presentation in acquisition price, or production costs, chooses between cost model and revaluation model. 1. Cost model refers intangible assets valuation to acquisition price, or production cost; 2. Revaluation model allows for the application of goodwill in valuation process
Balance value represents historical cost less amortization charges, or depreciation, as well as write-downs resulting from permanent impairment	Balance valuation of intangible assets occurs in: 1. Acquisition price, or production cost less depreciation and the total amount of revaluation deductions resulting from impairment; 2. Revaluated value referring to goodwill at revaluation date, less later depreciation and the total amount of revaluation deductions resulting from impairment
Production cost of developmental work finished with positive result covers: – costs referring directly to a given developmental work; – justified part of indirect costs related to performing developmental work	The cost of producing intangible assets component by an entity itself covers all outlays which may be directly associated with intangible assets creation, production and adjustment for usage
Exit value of intangible assets is represented by net selling price	Exit value of intangible assets characterized by a determined usage period equals zero, unless: – the third party committed itself to purchase this component at the stage when its usage period has been completed, or – an active market for a given component exists
Improvement process does not apply Improvement of intangible assets results in creating new titles	

Source: Author's compilation based on [*Ustawa*… 1994; *Międzynarodowe Standardy*… 2007].

the case of intangible assets the problem of practical nature occurs; namely, the market for intangible assets almost does not exist. However, if an entity owns intangible assets, for which active market does exist, it should be expected that in such a situation no additional costs, resulting from valuation, occur since the current market price of a given component will be publicly available.

While choosing between the cost model and revaluation one for intangible assets balance valuation, economic entities have to be aware that the revaluation model is a more difficult and more expensive one in its application. Additionally, the revaluation process makes accounting in an enterprise more complicated due to [Kabalski 2009, p. 56]:

- discrepancies occur between balance value and tax value,
- after performing revaluation depreciation write-downs have to be adjusted to the other usage periods,
- economic entity is obliged (in line with IAS 38) to present both balance value determined according to cost model and balance value defined according to revaluation model.

The application of cost model in valuation does not have to mean unreal value if an economic entity is consistent in calculating amortization allowance in the form of depreciation write-downs and impairment write-downs.

5. Valuation of intangible assets undisclosed in an accounting system

Managerial accounting[11] and especially strategic managerial accounting investigates new solutions facilitating, among others, identification, measurement and presentation of this part of enterprise intangible assets which persist undisclosed by financial accounting. Such activities are possible within the framework of managerial accounting since, contrary to financial accounting regulated by the legislation in force, it follows the internal needs of an enterprise and decisions made by individuals responsible for solving specific financial problems.

Additionally, managerial accounting does co-operate with other economic domains (e.g. management, marketing, financial analysis) adapting their tools to its needs. Such interdisciplinary nature of managerial accounting is a valuable attribute in the situation when other domains also search for solutions in this matter (e.g. intangible assets valuation).

Among many instruments characteristic for strategic managerial accounting, which in an indirect and/or direct way facilitate both classification and measurement of an enterprise intangible assets components, the following may be listed: sustainable scoreboard (financial perspective, client's perspective, internal processes perspective, innovation and learning perspective), product life cycle cost account, quality cost account, target cost account, clients' profitability account, competition costs analysis, *Benchmarking, Kaizen*, enterprise evaluation potential – BCG method, multidimensional budgeting.

The choice of tools applied within the framework of strategic managerial accounting depends on the needs and expectations of an enterprise (Management

[11] Managerial accounting represents a type of accounting focused on operational and strategic activities. Operational managerial accounting is mainly focused on costs, income, profits, production volume etc. Therefore, it may be concluded that operational managerial accounting indirectly influences an enterprise intangible assets. Strategic managerial accounting concentrates its activities on company goodwill, its favourable position on the market, reputation, quality, employees and clients, internal processes, flexibility and innovation processes. Therefore, it may be stated that it is directly involved in the research process regarding intangible assets. Strategic managerial accounting attempts to clarify (analyze) an enterprise relations with its environment, as well as the behaviour of competition.

Board). Finance management and strategic analysis methods are especially helpful in the process of intangible assets identification and management.

Transformations related to possibilities of intangible assets valuation may be also observed within the framework of financial accounting. An example of such changes may be grouping and calculating booked costs related to an enterprise clients (e.g. winning a client or keeping a client) which facilitate defining the final value of customer relations as one of the most important intangible assets items characteristic for a contemporary enterprise. Owing to such activities, it is possible to specify the profitability of particular clients.

The analysis of an enterprise costs shows client's costs as the component of an enterprise's basic activity costs (costs referring to type and/or costs referring to place of their origin)[12], the other operational costs and financial costs. Identifying and distinguishing client's costs from the costs presented in a comparative and calculative profit and loss account constitutes one of the tasks for financial accounting which allows for defining intangible assets value (from costs perspective), i.e. relations with clients.

In financial accounting and reporting (i.e. in the system of financial accounting) the category of client's costs has not been distinguished. According to Nowak [2009, p. 332] "(...) costs resulting from relations with clients are dispersed in accounting records and in profit and loss account, besides they are present in the budgets of different cost centres".

Table 5 presents the selected instruments of an accounting system facilitating both measurement and management of client's costs.

Many methods allowing for intangible assets measurement function in practice, however, differences occurring between them make the selection of one and only method, appropriate for a given enterprise, quite difficult [see Kicińska 2006b, pp. 197-218]. Particular attention should be paid to different financial and non-financial measures which enrich and extend the knowledge regarding intangible assets and their components, in particular human capital[13].

Different approaches to intangible assets definition and classification are reflected in preparing numerous proposals for their valuation. In some cases, it is not possible to specify which methods and measures applied in valuation refer only to intangible assets and which to intellectual capital. However, the majority of methods refer to intellectual capital measurement. Table 6 presents the comparison of selected intangible assets valuation methods. These methods are also used in accounting for intangible assets valuation.

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[12] It depends on the selected by an enterprise basic activity costs accounting variant within the framework of the accounting policy. Costs generated by clients in a comparative profit and loss account represent costs by type, while costs of clients in a calculative profit and lost account are mainly sales costs, general management costs and basic activity costs.

[13] The examples of financial and non-financial measures of human capital are presented in [Kicińska 2006a, pp. 118-122, 146-147; Marcimkowska 2006, pp. 212-216].

Table 5. Selected instruments of accounting system facilitating measurement and management of client's costs

Selected instruments of accounting system
Variants of basic activity costs booking including the extension of analytical accounts by clients or groups of clients
Activity costs account – focused on clients costs calculation allows for assigning costs incurred as the result of co-operation with clients to particular clients. Clients' costs are divided into direct and indirect costs. Within the framework of activity costs, adequate cost drivers are assigned to particular activities and the demand for due activities is defined for particular clients
Target costs account – focused on accomplishing the attempted margin rate level per client, ensures an opportunity for influencing client's costs in the planning phase
Product life cycle costs account – in every phase of product life cycle costs related to manufactured product and sold to particular clients can be planned and analyzed
Client's profitability analysis – including client's costs
Multidimensional budgeting – covering the following levels: traditional budget, activities budget, products budget, clients budget, strategy budget. Transformation of products budget into clients budget aims at the presentation of planned structure and resources consumption for the benefit of particular clients
Balanced scoreboard of accomplishments – financial perspective, clients perspective, internal processes perspective, knowledge and growth potential perspective
Multidimensional costs and profit and loss account – distinguishing sales regions, distribution channels, clients (individual, collective clients)

Source: Author's compilation.

Classical models for assets valuation are based on the discounted value of future profits for owners the estimation of which is most frequently performed by such measures as: dividends, profits or cash flow and market value of comparable components. Certain limitations characteristic for classical methods (e.g. disregarding some aspects related to flexible activities in the future) result in the need to search for new methods in order to estimate intangible assets and intellectual capital value.

In the process of selecting the method for intangible assets valuation, the following factors have to be considered [see Urbanek 2008, pp. 103-104; Kicińska 2006a, p. 117]: a valuation object (single intangible value, or general intangible value), valuation target (e.g. information for transaction purposes), access to information applied in a given method, manner of collecting information (e.g. based on market data, or analytical data collected in a company), cost of obtaining information (e.g. implementation of new procedures in the process of collecting information and changes in accounting system) and the information recipient.

It has to be emphasized that depending on the valuation goal, a different estimated value of a given intangible asset may be obtained in the same enterprise. Valuation for external needs is usually higher than valuation performed for the internal needs of an enterprise.

Table 6. Presentation of selected methods for intangible assets valuation

Method	Characteristics
Index of market value to accounting value	If the relation of market value to accounting value is higher than 1, then index defines the presence of intellectual capital Most often used in intellectual capital valuation. Advantage – easy to calculate, disadvantage – oversimplification in its assumptions, accounting value depends on accepted accounting standards
q-Tobin index	Defines intellectual capital as the difference between market value and assets replacement value. Index neutralizes the influence of accepted accounting standards. It constitutes a good tool for sector benchmarking
Scandia navigator	Intellectual capital measurement model by means of 164 measures which make up five components: finance, clients, processes, development, people. It allows for an overall view on intellectual capital value. It facilitates company performance monitoring, strategic decisions undertaken by management, reveals neglected intangible potential
Sustainable scoreboard	Represents a logically related system of measures which helps to combine fixed assets and intangible assets. It also allows for effective intellectual capital management at a strategic and operational level
Cost methods	Based on economic cost which is defined as accounting (historical) cost verified by the influence of market conditions. These methods allow for credible estimation of value if all costs related to a given component are included, as well as factors influencing changes (decrease) of a given component. In financial accounting if these methods are applied historical costs constitute basic valuation method
Market methods	Competition and market balance are fundamental in applying these methods. They estimate value based on sales or licensing market transactions comparison. The following conditions have to be met: active market for components similar for the purposes of valuation, transactions made in the past with similar components, access to information about conditions of these transactions. Limitations in their application results from the fact that majority of intangible assets do not constitute market transactions object. Additionally, they are unique and it is difficult to find their equivalents
Income methods	Based on prognosis. The set value equals current value of expected economic profits from applying them. Different measures of economic income (profits) may be applied for valuation: operational profit, pre-tax gross profit, net profit, operational cash flows, free cash flows. The biggest difficulty refers to separating these profits from all obtained which relate to intangible property
Economic value added (EVA)	Based on the assumption that added value occurs when capital return rate exceeds capital cost. High correlation to market value of an enterprise is considered an advantage of this method. It may be regarded as a substitute measure of intellectual capital. Increase of EVA value is responsible for intellectual capital productivity
Cumulated intangible value (CIV method)	Focuses on illustrating real market value of company intangible assets. It is calculated as an excess return on intangible assets and next this value is applied as the basis for determining which part of assets return can be assigned to intangible assets. Increasing tendency for CIV indicator informs about an enterprise capacity to create future intangible assets, while decreasing indicator may reflect low efficiency of intangible assets, or the decision to invest mainly in fixed assets. This method may be used for comparing an enterprise's competitive position in a given sector
Knowledge capital earnings (KCE method)	Valuation of intellectual capital value. Its role is to present company income alongside assets which generate such income. The obtained results may turn out useful in investigating changes regarding the level of intellectual capital formation in the course of time in a given company. This method's disadvantage is the absence of information about individual components of intellectual capital and arbitrary specification of the required knowledge capital return rate

Source: Author's compilation based on: [Urbanek 2008, pp. 101-128; Kicińska 2006a, pp. 138-167; Jarugowa and Fijałkowska 2002, p. 130].

To sum up, it should be emphasized that in the case of intangible assets valuation, we deal with values estimated according to different (selected) methods and values accepted by transacting parties at a competitive market.

In order to specify goodwill (applied in accounting) of intangible assets for example income methods may be applied. While valuating particular intangible assets, the preferred recommendations regarding the choice of a suitable method may be used [see Zarzecki 2010]. For example, while valuating trademarks and brand income method is suggested as the first to apply; however, in the case of valuation procedures worked out by a given company the preferred method to apply is the cost method.

Valuation of intangible assets in an enterprise represents a complex process which in most cases evolves around the selection of proper method and establishing the value of a given component.

6. Final remarks

Both traditional and contemporary enterprises function based on intangible assets which ensure their development and competitive advantage on the market. The awareness of intangible assets presence and its importance in an enterprise has significantly increased in recent time, as well as having influenced the development of intangible assets research and analysis by both practitioners and representatives of academic circles.

Intangible assets constitute a category whose certain aspects have not yet been fully investigated. Its problematic issues refer especially to the classification, interpretation of certain terms, valuation and presentation. Diversity of terminology and offered classifications, as well as the abundance of valuation methods, result in overall chaos in the sphere of concepts covering the domain of intangible property.

The problem of intangible assets has also been included in issues discussed within the framework of an accounting system, constituting a peculiar challenge for contemporary accounting. Particular interest is associated with the part of intangible assets which do not meet legal regulations, and therefore, do not constitute the subject of valuation and presentation in financial accounting.

Dilemmas related to intangible assets valuation focus mainly on defining the valuation object and the selection of adequate valuation method. If an accounting system does aim at the preparation of due valuation methods suitable for intangible property, it should commence from proper classification of particular intangible assets, indicate mutual relations between particular financial items and intangible assets in accounting records, as well as work on extending financial reporting.

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DYLEMATY ZWIĄZANE Z POJĘCIEM I WYCENĄ WARTOŚCI NIEMATERIALNYCH W SYSTEMIE RACHUNKOWOŚCI PRZEDSIĘBIORSTWA

Streszczenie: Część wartości niematerialnych jest ujawniana w systemie rachunkowości i ich wycenę precyzują ogólnie akceptowane uregulowania, natomiast znaczna część wartości niematerialnych przedsiębiorstwa nie spełnia warunków określonych przez regulacje prawne i nie może być ujawniana w systemie rachunkowości. Nie ma też powszechnie akceptowanych metod wyceny dla tej części wartości niematerialnych. W wielu przypadkach ustalanie wartości jest szacowaniem tej wartości. Problematyka wyceny jest bardzo ściśle związana z pojęciem wartości niematerialnych, które przez środowisko naukowe i praktyków są różnorodnie określane. W niektórych przypadkach określenia te są stosowane zamiennie i tak naprawdę do końca nie ma pewności, co podlega wycenie (wartość niematerialna jako aktywa niematerialne, czy wartość niematerialna jako kapitał intelektualny).