ACTA UNIVERSITATIS LODZIENSIS
FOLIA OECONOMICA 173, 2004

*Lina Vaškelienė*, Vytautas Boguslauskas***

# THE NEED OF CHANGES IN TRADITIONAL ACCOUNTING SYSTEMS NECESSITATED BY MODERN INTELLECTUAL CAPITAL CONCEPTION

**Abstract.** While economists, business people and policy analysts continue to debate the question of what is "new" about the so-called "New Economy", globalization, urgency of innovation and intensive use of information technology, one important feature of modern corporation in the early twenty-first century seems clear: intangible factors are playing an increasingly dominant role in business wealth creation. The drivers of tomorrow's wealth are brands, networks, knowledge, innovation, relationships, competencies, corporate culture and leadership, and these are the new critical assets – the weightless keys to business future wealth. But despite the growing awareness of the importance of intangible assets, they remain almost universally ignored in traditional accounting and reporting procedures. The authors in this article analyze the main problems concerning difficulties to reflect intangibles in traditional accounting statements and project the tendencies of reporting intangible-related information in future accountability.

## 1. Introduction

We have already moved into a completely new era, where the dependency on tangible production factors such as commodities, materials, machinery, and financial factors are decreasing in the process of determination of business value. Added value and competitiveness are increasingly being attributed to intangible factors such as knowledge, relationships, innovation, quality and customers. In the conditions of market competition corporate intellectual capital is becoming increasingly hough. Because of the imperfection

* Kaunas University of Technology, Economics and Management Faculty, Accounting Department, Lina.Vaskeliene@evf.ktu.lt

** Kaunas University of Technology, Economics and Management Faculty, Accounting Department, Vytautas.Boguslauskas@evf.ktu.lt

of traditional financial accountability and legal regulation intangibles remain outside the corporate accounting reports, therefore businesses which manage intellectual capital well have a much greater value than appears from their balance sheets. Organizations are creating value in totally new ways, using assets and combinations of assets heretofore unrecognized under traditional accounting systems and certainly unmeasured. But, after all, businesses are all of their assets – tangible and intangible, measured and unmeasured. In most cases, the balance sheet only reflects the sum of physical and financial assets, which are inherently different from intangible ones. The assets hidden below the surface of financial statements drive stock prices. Decision-makers (managers, investors) try to fill this shortcoming of the accounting system for external corporate report and obtain the required information from other sources (through meetings or conference calls or from research reports issued by analysts). The debate about the measurement and reporting of intellectual capital is one of the most important challenges facing corporate managers and their shareholders, investors and capital market regulators, accounting standard setters and policymakers. Why is it that, despite the importance of intangibles, they remain almost universally ignored in accounting statements and are poorly measured? Although the intangibles have occupied an ever growing niche in management literature, both popular and academic, in recent years, analysis of the reasons for these shortcomings and search for solution are still topical issues, particularly in USA (Brooking 1996, Sullivan 2000, Lev 2001, Davis and Harrison 2001), Netherlands (Andriessen and Tissen 2000), Scandinavia (Sveiby 1997, Edvinsson and Malone 1997) etc. These accounting-related problems are also an essential issue in the research concerning measurement of intellectual capital performed by authors of this article.

## 2. Research objectives

The objective of this research was to analyze accounting-related aspects and directions of increasingly important valuation of an organization's intellectual capital and to answer the following questions:

- What are the reasons for intangibles left outside the traditional accounting reports?
- What are the main problems concerning difficulties to reflect an organization's intellectual capital in traditional accounting statements?
- What are the tendencies of intellectual capital measurement and demand of changes in traditional accounting system?
- What role do accounting standards play in measurement process of intellectual capital?

### 3. Research methods

The problem has been solved in the context of New Economy, applying logical comparative and scientific analysis by means of generalizing and systematizing statistical information, the theoretical methods for intellectual capital valuation and the rules of traditional financial accountability.

The traditional model of "accounting", which so beautifully described the operations of companies for a half millennium, is now failing to keep up with the revolution taking place in business. Can a 500-year-old double-entry system of accounting keep step with the New Economy? The double-entry accounting system reflects the value created or destroyed by transactions. Equity grows or declines when there is a transaction to support that movement. If a company's inventory falls by $ 100, for example, and receivables go up $ 150 because goods have been sold, equity increases by $ 50. In the industrial and agricultural economies, this double-entry accounting system suited because most of the value of business enterprises was created by transactions – the legal transfer of property rights. But in the New Economy, value can be created or destroyed without any transactions with third parties, for example, the clinical approval of a new drug (intangibles). In the current economy, much of the value creation or destruction precedes, sometimes by years, the occurrence of transactions. The successful development of a drug creates considerable value, but actual transactions (sales) may take years to materialize. This is the major reason for the growing disconnect between market values and financial information. The second problem is that equity of most significant businesses is now traded continuously on major stock exchanges. Companies rely less on debt financing and the equity held by long-term family members or local stockholders. A company's value is determined daily as millions of shareholders buy and sell its stock. They generate a value for equity that can be much different from what is shown in the accountability. As a result, management can see the value of the company as determined by third-party investors entering into real transactions every day.

In the New Economy the imperfection of traditional financial accountability became obvious. Many public accounting organizations and institutes prove the existence of such imperfection. A survey by the Institute of Management Accounting found that 64% of corporate controllers in the United States said their companies were actively experimenting with the new ways of measuring performance. When nearly two-thirds of the companies in the world's largest economy have accepted the need for change, we almost have a financial accountability revolution. The American Institute of Certified Public Accountants in 1991 formed a Special Committee on Financial Reporting to address a growing concern about the relevance

of financial reporting and disclosure to the modern economy. Three years later the committee issued its report and found a number of substantial areas for improvement, that could be realized with 1) the provision of information about corporate plans, opportunities, risks, and uncertainties, 2) better alignment of external reporting systems with internal management control and information systems, and, 3) enhanced discussion of the non-financial performance factors that create longer-term value[1].

If assets in financial literature[2] are claims to the future benefits, then intangible assets are a claim to future benefits that does not have a physical or financial embodiment. **Intangibles** in the accounting literature, **knowledge assets** by economists, and **intellectual capital** in the management literature (Intellectual Capital conception) essentially refer to the same thing – a non-physical claim to future benefits. When this claim is legally protected (in the case of patents or copyrights), the assets become **intellectual property**[3]. Among the supporters of Intellectual Capital conception (started by Thomas A. Stewart in 1990) there is a variety of perceptions of Intellectual Capital and there is no single definition of this phenomenon. But for the clarity of this research let us define Intellectual Capital as a combination of human capital (knowledge, experience, creativity, competence and loyalty of employees)[4], structural capital (strategic processes, usage of information technology, administrative system, innovation and organizational culture) and relationship capital (relationships with customers, suppliers, networking, acquisitions, brands, trademarks, also company's reputation and image) of organization that create a potential for future benefits generation. Due to the main research problem of Intellectual Capital conception's influence on the development of the accounting system and the fact that intellectual capital in the accounting literature is commonly named intangibles, later in this article will dominate the term **intangibles**.

Let us look at the problem by examining what determines the imperfection of reflecting intangibles in today's financial accountability.

Today in Lithuania, as almost worldwide, in traditional balance sheet stands practically only one kind of intangibles – goodwill (extremely rarely R&D or software). Under generally accepted accounting principles (GAAP), the goodwill that a business enterprise develops is extremely rarely recorded

---

[1] S. Marvinac and T. Boyle, *Sell-Side Analysis, Non-Financial Performance Evaluation and the Accuracy of Short-Term Earnings Forecasts*, an Ernst & Young Boston Center for Information Technology and Strategy working paper, September 1996.

[2] See Merriam Webster's International Dictionary.

[3] See B. Lev (2001).

[4] Human capital cannot be owned by the company, or anyone, or anything except the person who possesses it. It is not included in the balance sheet as intangible assets or recorded as liabilities.

on the financial statements of the business. Most commonly, purchased goodwill is recorded by a corporate acquiror after a business is acquired. To the accountant, intangible value in the nature of the goodwill represents the total value of the business enterprise less the fair market value of the business's tangible assets. So, by the accountant's definition, goodwill generally includes all of the intangible value of a business enterprise. But in reality, after the acquisition, this intangible is often amortized in a short period of time, when its value often has become double or more of what it was. So, does this balance statement line represent all the intangibles that belong to enterprise? Definitely not. But to show the real value of your company's goodwill (intangibles) is essential in many aspects as we will discuss later.

Traditional financial statements (balance sheet and income statement) unwittingly pit human values against economic value. The income statement categorizes as "expenses" many of the most significant sources of value – people, for example – and overlooks much of the value derived from customer relationships and information (except for that arising from transactions during the period under review). Expenditures on intangibles (employee training, information technology, brand creation) are generally aggregated with other expenses in financial reports. Here we clash with the contraposition expensing versus capitalization. There are some exceptions with R&D and software in several countries, but in reality this requirement to capitalize for example software development costs is ignored by many software companies, including the industry leaders, Microsoft and Oracle[5]. These and other firms routinely expense all software development costs instead of capitalization (considered as assets) and amortization according to the expected useful life of intangibles. In general, no information is provided in financial reports on firms' expenditures regarding employee training, brand enhancement, information technology investment, or other intangibles. Thus companies provide the general public with detailed information on investment in tangible and financial assets but no information on intangible investment. This results in an almost complete lack of transparency concerning intangibles. With few exceptions this situation prevails worldwide. This nondisclosure of most expenditures for intangibles is a major impediment to the advancement of knowledge about intangibles in particular and corporate performance in general.

Why, despite the importance of intangibles in today's reporting, they remain almost universally ignored in accounting statements. The analysis of difficulties to reflect intangibles in traditional accounting statements

[5] For a comprehensive annual survey of the accounting practices of software companies, see Deloitte & Touche 1998.

disclosed that the process of such reflecting is complicated by the nature and characteristics of intangibles. Let us analyze them in turn.

- **Absence of demarcation lines.** Transparent demarcation lines between various kinds of intangible assets, and between intangibles and other forms of capital are often blurry. Intangibles are frequently embedded in physical assets (for example the technology and knowledge) and in labor (the tacit knowledge of employees), leading to considerable interaction between tangible and intangible assets in the creation of value. These interactions pose serious challenges to the measurement and valuation of intangibles. When such interactions are intense, the valuation and reporting of intangibles on a stand-alone basis becomes impossible.
- **Nonscarcity** of intangibles. Physical, human and financial assets are scare assets in the sense that alternative uses compete for the services of these assets. Such scarcity leads to positive opportunity costs for rival assets. In contrast, intangible assets are, generally, nonscare; they can be deployed at the same time in multiple uses. Accordingly, many intangible inputs have zero or negligible opportunity costs beyond the original investment (for example, airplanes can be used during a given time period on one route only, but a reservation system can serve at the same time a potentially unlimited number of customers). Therefore intangibles are generally characterized by large fixed (sunk) cost and negligible marginal (incremental) cost. For example, the development of a drug or a software program generally requires heavy initial investment, while the cost of producing the pills or software diskettes is negligible. If intangibles are such potent value creators, what limits the expansion of these assets? The scalability of these assets is limited only by the size of the market. If we want to measure and report intangibles, we should know the limits of the usefulness of intangibles. Identifying unused physical capacity (half-empty airplanes) and managing it (changing price policy) are straightforward tasks, whereas measuring usefulness of intangibles and managing it (optimizing network effects) is a great challenge[6].
- **Partial excludability** of intangibles. The benefits of tangible and financial assets can be effectively secured by their owners. In the case of intangible investments, nonowners rarely are precluded from enjoying some of the benefits of the investments. For example, when a company invests in training its employees other companies will benefit from such investments when the trained employees switch employers. The investing company cannot effectively exclude others from the benefits of such training. Even in the case of patented inventions, for which property rights are legally well defined, there are substantial benefits to illegal nonowners. The

[6] More about nonrivalry see Lev (2001).

protection of company's intellectual property may require the significant financial expenditure – that is why sometimes this is too much for them. Since a business enterprise does not exercise strict legal control over most intangibles – such as human capital, nonpatented know-how and customer acquisition cots – accounting regulators are reluctant to qualify such intangibles as assets. This leads to the immediate expensing of corporate investment in most intangibles. Such partial excludability gives absence of control in the strict legal sense over most intangibles. These in turn create unique and significant challenges in managing and reporting on intangibles.

- **Riskiness** of intangibles. Assuredly, all investments and assets are risky in an uncertain business environment. But it is widely recognized that innovation is highly risky relative to other corporate activities, such as production, marketing or finance. The earnings volatility (a measure of risk) associated with R&D is, on average, three times larger than the earning volatility associated with physical investment[7]. During the innovation process, which starts with discovery and ends with the commercialization of physical products or services, the level of risk concerning future profits is continuously decreasing. This clarifies the reason for the inherently high risk of intangible investments. R&D, employee training, acquired technologies, reached alliances and other intangibles are most intensive at the early, high-risk stages of innovation process. Much of the investments at latter, lower risk stages of this process are in physical assets, such as machine tools and distribution channels. Risk, of course, plays a major role in the accounting treatment of intangibles. The widely held belief that the prospects of most intangible investments are highly uncertain underlies the decision of accounting authorities to immediately expense such investment[8].
- **Nontradability** of intangibles. This characteristic of intangibles is often invoked to disqualify intangibles from being recognized as assets in corporate financial reports. The measurement and valuation of intangibles is restricted by the scarcity of comparables, namely prices of assets in similar transactions. The absence of such comparables disqualifies intangible investments from consideration as assets in both corporate and national accounts. Liquidity and restricted risk-sharing opportunities (like the securitization of the firm's R&D operations) increases the risk of intangible investments and restricts their growth. According to some economists, the absence of organized markets in intangibles is a consequence of the inability to undersign contracts, because there are difficulties in specifying

[7] For the study, see Kothari, Laguesse and Leone (1998).

[8] More about riskiness of intangibles, see Lev (2001).

in advance the actions of the parties to the contract and how these outcomes will be shared. Markets cannot function without clearly defined property rights of parties to a trade. Questions concerning ownership of the human capital resulting from firms' investment in training complicate the trade in intangibles. So, contracting difficulties, negligible marginal costs, and fuzzy property rights – do not preclude the existence of markets in intangibles. According to Baruch Lev, Internet-based markets in intangibles may provide the missing transparency, along with liquidity and risk sharing[9]. Not surprisingly the assets traded in these exchanges are mostly patents – again, the intangibles with the most clearly defined property rights. Such exchanges, however, are in their infancy, and the volume of trade is still very low. It is too early to predict whether and when these exchanges will develop into versatile markets in intangibles.

These characteristics of intangibles presented above are important in analyzing measurement and reporting intangibles. To qualify as an assets for financial reporting it has to be shown that the company exercises a considerable degree of control over the assets, the risk concerning commercial success has been considerably reduced and market mechanisms are available to trade the assets or its consequent cash flows.

So, practically all intangible investments are expensed as incurred in financial reports[10]. What if the accounting system fails to reflect important attributes of intangibles? The difference between the accounting treatment of tangible and intangible assets, it is generally argued, has dire consequences for managers, investors and policy-makers relying on financial information (such as corporate financial reports and prospectuses). Are there really serious social and private harms caused by the scarcity of information on intangible investments?

First of all, there are abnormal gains to informed investors. Informed persons (such as managers having information about the success of a drug under development in human clinical tests) gainfully trade to exploit their private information. Also active information search by investors (financial analysts, for example) does not eliminate the edge of insiders. Ways often are found to motivate insiders to disclose in a timely manner at least some of their private information. According to David Aboody gains to insiders in companies with R&D activities are, on average, three to four times larger than insider gains in companies without R&D[11]. Insider gains erode

[9] Recent web-based exchanges in intellectual property provide valuation and insurance services that are not common in financial or physical-assets markets.

[10] Sometimes there are exeptions: intangibles, such as movie rights, commissions paid for life insurance and mortgages, or software can be capitalized.

[11] David Aboody examined all trades by corporate officers in the stocks of their companies over the 1958–1998.

investors' confidence in the integrity of capital markets, leading to thin trades and a decrease in the social benefits from large, transparent capital markets. This determines a situation when the social consequences of substantial gains to informed investors are the corresponding losses to other investors. The prospects of gains from inside information may also distort the incentives of some managers, leading to decisions and actions that are not in the best interest of shareholders and society.

Secondly, such tangibles-intangibles accounting asymmetry certainly results in confusion in the market. Lawrence Glosten and Paul Milgrom established that information asymmetry is the major determinant of securities' bid-ask spread[12]. Bid-ask spreads widen when the market maker faces better informed investors, as a self protected mechanism against excessive losses to these investors. There can be occasions on which the market shuts down and stays closed until the insiders go away or their information is at least partly disseminated to market participants from other information sources[13]. Such information asymmetry leads to decreases in volume of the trade and in the social gains from trade.

The third problem – increasing cost of capital. Yakov Amihud and Haim Mendelson established the important linkages between information asymmetry and firm's cost of capital[14]. Serious information deficiencies lead to excessive cost of capital, low employee compensation and in extreme case takeover of the entire enterprise, triggered by low market values. This is very important for intangible-intensive enterprises, given the deficient public information about these assets, and are mostly serious for small, early-stage enterprises.

Undervaluation of intangibles is another problem necessitated by tangibles-intangibles asymmetry of information. Undervaluation of securities, particularly of early-stages intangible-intensive enterprises, (as information deficiencies) implies an excessively high cost of capital. Baruch Lev in his research found that companies with a high growth rate of R&D expenditures – but relatively low growth rate of earnings, typical of young, intangibles-intensive enterprises – are systematically undervalued by investors[15]. Given the low reported profitability of these companies, investors apparently heavily discount the prospects of their R&D, hence the undervaluation. When the R&D ultimately bears fruit, investors correct the undervaluation.

Asymmetry of tangibles-intangibles information also leads to manipulation through intangibles. Since intangible investments are immediately expensed

[12] Namely, the price differential that traders or market makers quote for buying or selling a security.

[13] Glosten and Milgrom (1985).

[14] Amihud and Mendelson (1986).

[15] Lev (2001).

in financial reports, changes in these expenditures affect the bottom line – earnings. The temptation to change the level of investment in intangibles in order to manage reported earnings to meet and exceed analysts' expectations is therefore large. In contrast, if intangibles were capitalized, changes in periodic intangibles expenditure would have a protracted effect on earnings, reducing the potency of intangibles as earnings management tools.


Fig. 1. Association between Annual Earnings and Stock Returns in 5000 U.S. Firms, 1980–1996

In the year of initial public offering, firms tend to have decreased R&D levels and, consequently, higher reported earnings, apparently in an attempt to improve investors' perceptions about the company's prospects.

And finally, reported earnings in the traditional accounting statements are playing the decreasing role in the total information affecting investors' decisions. Figure 1 portrays the pattern of the association between corporate earnings (of approximately 5000 U.S. enterprises) and stock price changes (returns) over the period 1980–1996. This figure characterizes the research by Lev and Zarowin made in 1999. We think that this reduction is quite sharp because of the increasingly large spread of knowledge-intensive businesses in U.S.A. According the researcher Dainius Ulys of Kaunas University of Technology, the relationship between financial variables and stock prices in Lithuania is still intense[16]. But this may be determined by the fact that we do not have many real intangibles-intensive companies here in Lithuania and the stock exchange functions quite passively in comparison with other European stock exchanges. Various researchers document a decreasing pattern of association between stock prices and returns and key financial variables, such as earnings, cash flow, and book (equity) values. In the current economic environment, characterized by rapid change and high uncertainty, a failure in the major information

[16] For more about the relationship between financial variables and stock prices in Lithuania see Ulys, Boguslauskas.

system – corporate financial reports – over the period 1980–2000 is particularly damaging. This happens because of the fast increase in the proportion and importance of knowledge-based, intangibles-intensive companies in capital markets, and the deficiency of information concerning the assets and activities of these companies.

Who should take care and worry about the reporting on intangibles and disclose all necessary information. There are several groups having primary interest in intangibles:

**Corporate managers and their shareholders.** As we mentioned earlier, lack of information about intangibles leads to excessive cost of capital. The excessive cost of capital, in turn, hinders investments and growth. Managers and investors should, therefore, be interested in mechanisms aimed at alleviating the excess cost of capital.

**Investors and capital markets regulators.** Large and persistent asymmetry of information between corporate insiders and outsiders leads to undesirable consequences, such as systematic losses to the less informed parties and thin volume of trade. Investors and policymakers should, therefore, be interested in systematically decreasing the intangibles-related information asymmetry.

**Accounting standard setters, corporate boards.** Empirical evidence indicates that the deficient accounting for intangibles facilitates the release of biased and even fraudulent financial reports. This should obviously be of concern to regulators of financial information and to corporate board members who rely heavily on accounting-based information to monitor managerial activities.

**Policymakers.** The information from corporate financial statements is a major input into the national accounts and policy deliberations. The various intangibles-related deficiencies in financial information adversely affect public policymaking in key areas, such as the assessment of fiscal policy supporting innovation, optimal protection of intellectual property etc.

So, all representatives of these groups should be interested in reduction of tangibles-intangibles asymmetry and actively participate in solving this dilemma. But what must be done for resolution of this problem? Encourage firms to voluntarily disclose more information about intangibles (the majority of commentators in intangibles-related literature point out this remedy)? Or make changes in regulated accounting and reporting systems (this remedy is pointed out by minority of commentators)? A comprehensive plan for improvement in the measurement and disclosure of intangibles and for a change in the current incentives for managers and accountants to elicit such information is missing. In recent years in management literature and scientific activity we can observe three major resolution directions of this problem.

First of them – to revise the principles of traditional accounting system. Such revision would force enterprises not to expense intangibles immediately, but to capitalize them as assets. But in recent years without long and trusty experimentation it would be too dangerous to start such practice ignoring all the characteristics and nature of intangibles mentioned in the first part of this article. A lot of aspects should be disputed before the changes could be made, or even this way could appear as disastrous.

Secondly, theoretically it could be possible to organize special unique accounting system for intangibles, which should be distributed along with traditional accounting statements or separately. Such new balance sheet on the one side could reflect various intangibles (as brands, organizational assets, patents) and on the other the added market value of a company. Such a way of solving the problem demands creative and innovative thinking, which should pass a long way full of skepticism and criticism before the legitimation.

And the third way of solving this problem, which is not very related with traditional financial accountability – recommending that firms voluntarily disclose more information about intangibles in unique reports without restrictions. Scientists often doubt such report's usefulness truth, because this just would lighten (decrease) the asymmetry of tangibles-intangibles, but not solve the problem. Without strict rules for reporting companies could manipulate information on intangibles by emphasizing their advantages and concealing failings. But we think that this way must be necessarily exploited nowadays, to help accountants eventually implement the first or the second way of solving the problem. Only in long years practice arrive universally acceptable decisions. Investors and managers of knowledge-intensive companies already use various intangibles-related measures and indicators. This is necessary for them not only if they want to examine the real value created by intangibles, but also for decisions making and managing intangibles. Several knowledge-intensive companies, like Scandia (1994), Celemi (1995) or WM-data (1995) even proposed their unique annual report on intangibles. These reports received recognition not only from investors or competitors, but also from financial analysts and experts. This proves that such evolution of reporting on intangibles is on the right course. However, if after ten or fifteen years of unprecedented growth in the value and economic impact of intangibles the main accounting supervisory organizations still conclude that there is "lack of meaningful and useful disclosures about intangibles", one must ask whether this experimentation process is working and how long it might last.

Accountants are often skeptical about creating a system for reporting intangibles. They probably feel more than a little ambivalent. On the one hand, this is an apparent threat to everything they spent years learning

and perfecting. At the same time, it represents an extraordinary new business opportunity that will restore the lost relevancy the entire profession is experiencing. With the rise of intangibles accounting firms, big and small, have a unique opportunity to help their clients establish, run, and validate computer-based intangibles reporting systems. Moreover, the biggest accounting firms will be able to develop proprietary intangible reporting software that simplifies this data gathering task still further.

In this analysis there is one more important aspect – what will motivate managers to publicly disclose the information in a systematic and consistent (not onetime) manner? First of all, it is hard to feel much sympathy for management that sees such problems and is not immediately making efforts to fix them. Secondly in the age of hundreds of vertical trade magazines, newsletters, and the Internet, any company that believes it can keep these secrets for long is kidding itself. According to Leif Edvinsson, the modern, virtual corporation demands openness and the sharing of once proprietary information. In the leading companies, that information is already being shared with frontline employees, suppliers, distributors, retailers and strategic partners. It will also soon be shared with customers to enlist their participation and creativity. That is a huge population of people – and if company believes it can stop there, throwing up an information firewall to keep that knowledge from the rest of the world, it is delusional. Investors are going to request such information, and they will get it somehow. And the last definitive reason why companies will adopt reporting on intangibles and share this inside information with the world – because they recognize that such reporting gives them a competitive advantage when it comes to valuation and advantage in the investment market to their less open competitors.

The final step of the solving of this problem is standardization. Will such organizations as Accounting Council of the EU in Europe, or Financial Accounting Standards Board in US, accept intangibles reporting as an additional, and more immediate measure of value? Both of these organizations recognize the growing importance of intangibles and show that by organizing intangibles-related conferences in Europe and US. The speed of the standardization of reporting on intangibles will be largely paced by how fast the methods for valuation of intangibles are established and worldwide accepted by industry. Establishing the reporting system and putting into place the right technology to process it will not be simple, even with the new applications programs. It will also require a mind-set change among those who administer it. There are many interested parties which would be willing to set and change intangibles accounting standards. The desires of these parties regarding what and how should be disclosed in reports on intangibles are different. Therefore accounting standards must be developed

in order to define what kind of information has to be disclosed in these statements, and what valuation principles should be used. As a result, if such unified standards were not established, reports on intangibles of companies would not be comparable, and prepared financial information would not be unambiguous and clearly understandable. To avoid such situation standards of intangibles reporting must be developed. International harmonization of accounting principles[17] plays here a significant role. After the standards have been set, a methodology for conducting, validating and certifying corporate intangibles audit must be established. This would be a huge opportunity for the accounting industry. It may happen that the accounting profession will be stymied in its attempt to take on the work of intangibles reporting, and no doubt some other profession (probably the big consulting firms) will step in to take on the job. But that will be a loss to almost everyone else: intangibles reporting will lose precious standardization time because it will lack the imprimatur of certified measurement, companies will continue to be misvalued, and most of all, the accounting profession will have missed the first big opportunity for professional renewal and development into the new century.

## 4. Research findings

In the New Economy the imperfection of traditional financial accountability became obvious. One of the main reasons for such imperfection is the absence of information provided in financial reports on firms' intangibles. Practically all intangible investments are expensed as incurred in financial reports instead of being capitalized (considered as assets) and amortized according to the expected useful life. The analysis of difficulties to reflect intangibles in traditional accounting statements disclosed that this process is complicated by the following characteristics of intangibles:

- the absence or transparent demarcation lines between various kinds of intangible assets, and between intangibles and other forms of capital;
- the nonscarcity of intangibles – the ability to deploy them at the same time in multiple uses;
- the partial excludability of intangibles, which leads to the absence of control in the legal sense over most intangibles;
- the higher riskiness of intangibles in comparison with tangibles;
- the nontradability of intangibles.

[17] Fore more about international harmonisation of accounting principles see K r i s j a n e [Rigas Technikal University] (2001).

There are really serious social and private harms caused by the scarcity of information on intangible investments:

- active information search by investors induces the rise of insiders who erode investors' confidence in the integrity of capital markets, leading to thin trades and a decrease in the social benefits from large, transparent capital markets;
- information deficiencies and undervaluation of intangibles implies an excessively high cost of capital;
- asymmetry of tangibles-intangibles information leads to manipulation through intangibles;
- because of the increasingly big number of intangibles-intensive companies in capital markets, traditional accounting statements are playing the decreasing role in the total information affecting investors' decisions.

In order to change the situation, corporate managers, shareholders, investors, capital markets regulators, accounting standards setters and policymakers must primarily be interested in reduction of tangibles-intangibles asymmetry and disclose all necessary information. We think therefore that there are three major solutions to this problem:

- to revise the principles of traditional accounting system by forcing enterprises to capitalize intangibles as assets;
- to organize a special unique accounting system for intangibles, and thus procuced reports should be distributed along with traditional accounting statements or separately and reflect various intangibles;
- to allow firms to voluntarily disclose more information about intangibles in unique reports without restrictions.

All of these resolutions have merits and demerits and only interest, aspiration and efforts to standardize intangibles of various interested accounting-related groups will determine which of them is the best.

Despite the growing awareness of the importance of intangible assets, they remain almost universally ignored in traditional accounting and reporting procedures. Practically all intangible investments are expensed as incurred in financial reports instead of capitalization and amortized according to the expected useful life. The tangibles-intangibles asymmetry leads to serious social and private harms caused by the scarcity of information on intangible investments. The authors in this article analyze the main problems concerning difficulties to reflect intangibles in traditional accounting statements, suggest ways of solving this problem and project the tendencies of reporting intangibles-related information in future accountability.

## References

Andriessen D., Tissen R. (2000), *Weightless Wealth. Find your Real Value in a Future of Intangible Assets*, Amsterdam, Prentice Hall.

Boulton R. E. S., Libert B. D., Samek S. M. (2000), *Cracking the Value Code. How Successful Businesses are Creating Wealth in the New Economy*, Harper Business.

Davis J. L., Harrison S. S. (2001), *Edison in the Boardroom. How Leading Companies Realize Value From their Intellectual Assets*, John Wiley & Sons, Inc.

Edvinsson L., Malone M. S. (1997), *Intellectual Capital. The Proven Way to Establish Your Company's Real Value by Measuring its Hidden Brainpower*, Great Britain, Biddles Ltd.

Garnett J. (2001), *Work Based Learning and the Intellectual Capital of Universities and Employers*, "The Learning Organization", Vol. 8, Nr 2, 78–82.

Lev B. (2001), *Intangibles. Management, Measuring and Reporting*, Washington, D.C.Bookings Institution Press.

Mayo A. (2001), *The Human Value of the Enterprise. Valuing People as Assets – Monitoring, Measuring, Managing*, Nicholas Brealey Publishing, London.

Ministry of Economic Affairs (1999), *Intangible Assets. Balancing Accounts with Knowledge*. JB&A Graphic Communication, Hague.

Pratt S. P., Reilly R. F., Schweihs R. P. (1998), *Valuing Small Businesses & Professional Practices*, McGraw-Hill, New York.

Reilly R. F., Schweihs R. P. (1999), *Valuing Intangible Assets*, McGraw-Hill, New York.

Sullivan P. H. (2000), *Value Driven Intellectual Capital. How to Convert Intangible Corporate Assets into Market Value*, John Wiley & Sons, New York.

Sveiby K. E. (1997), *The New Organizational Wealth*, San Francisco, Berrett-Koehler Publishers, Inc.

Tissen R., Andriessen D., Deprez F. L. (2000), *The Knowledge Dividend*, Prentice Hall, New York.

Ulys D., Boguslauskas V., *Concepcions of Corporate Valuation Measures*, "Engineering Economics", Nr 3(18), Kaunas, 9–13.

Vaškelienė L. (2001), *Tendency of Business Valuation in the New Economy*, "Transformations in Eastern and Center Europe" Tiltai Nr 4, University of Klaipėda.

Vaškelienė L., Sakalas A. (2002), *Human Capital Measurement in a Systematic Organization's Measurement Framework*, "Inžinerinė Ekonomika", Nr 2(28).

*Lina Vaškelienė, Vytautas Boguslauskas*

## POTRZEBA ZMIAN W TRADYCYJNYM SYSTEMIE RACHUNKOWOŚCI ZWIĄZANA ZE WSPÓŁCZESNĄ KONCEPCJĄ KAPITAŁU INTELEKTUALNEGO

(Streszczenie)

Podczas gdy ekonomiści, przedsiębiorcy i politolodzy dyskutują nad tym, co jest „nowego" w tzw. Nowej Ekonomii oraz nad zagadnieniami związanymi z globalizacją i potrzebą innowacji oraz szerokiego korzystania z technologii informatycznej, jedna kwestia nie ulega wątpliwości, jeśli chodzi o zmiany w przedsiębiorstwie XXI w.: czynniki niematerialne odgrywają coraz większą rolę w tworzeniu wartości. Czynniki kluczowe w kreowaniu przyszłego

bogactwa to znaki firmowe, systemy połączeń i kooperacji, wiedza, innowacje, relacje, wartości, kultura organizacyjna i przywództwo. Ale chociaż świadomość znaczenia aktywów niematerialnych i prawnych jest coraz większa, tradycyjna rachunkowość i sprawozdawczość niemal całkowicie je ignoruje. Autorzy tego artykułu analizują najważniejsze problemy, wynikające z trudności odzwierciedlenia aktywów niematerialnych w tradycyjnych sprawozdaniach finansowych oraz ukazują kierunki przyszłego rozwoju rachunkowości w tym zakresie.

*Lina Vaškelienė, Vytautas Boguslauskas*

## POREIKIS POKYČIAMS TRADICINĖJE APSKAITOS SISTEMOJE, SĄLYGOTAS MODERNIOS INTELEKTUALAUS KAPITALO KONCEPCIJOS

(Sautranka)

Nepaisant augančio nematerialaus turto svarbos suvokimo, daugelyje šalių jis išlieka ignoruojamas tradicinėje atskaitomybėje ir ataskaitų procedūrose. Praktiškai visos nematerialios investicijos finansinėse ataskaitose yra fiksuojamos kaip išlaidos, bet ne kapitalizuojamos (traktuojamos kaip turtas), ir nuamortizuojamos prognozuojamame naudos laikotarpyje. Materialaus-nematerialaus turto asimetrija stingant informacijos apie investicijas į nematerialų turtą daro socialinę ir ekonominę žalą. Šio straipsnio autoriai analizuoja pagrindines nematerialaus turto atspindėjimo tradicinėse finansinėse ataskaitose sunkumų problemas, pasiūlydami jų sprendimo būdus ir prognozuodami informacijos apie nematerialų turtą fiksavimo ateitį atskaitomybėse.