



*Research Article*

# Financial Statements as the Basis for the Systematics of Risks in the Accounting Area

**Ewa W. BABUSKA**

Cracow University of Economics, Cracow, Poland  
babuskae@uek.krakow.pl

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## Abstract

The aim of the article is to present financial statements as a source and basis for identifying and systematizing risks in the area of accounting. These risks reflect the threats and opportunities for enterprises' operations and are included in the data disclosed in the financial statements. Many different risks can be recognized and identified in the financial statements by their users, but users should be able to properly read, understand and interpret the information contained in the financial statements in terms of possible risks. The analysis of financial statements as a research method is indicated and applied in the article to identify risks. The analysis covers significant components and items enclosed in the basic financial statements and leads to the detection and description of potential risks contained in these reporting data. The originality of the article is based on the use of financial statements and their analysis to systematize identifiable business risks in the field of accounting and thus emphasize informative function, which is fulfilled by financial statements in economic practice.

**Keywords:** accounting, financial statements, analysis of financial statements, risk identification, systematics of risks.

**JEL classification:** G32, M41

## Introduction

The financial statements as the final accounting product are the important source of information about the enterprises. The information from the financial statements makes it possible to determine the actual property and financial situation of enterprises and to assess the implementation of their tasks and plans.

They also support decision-making processes, create the basis for planning, control and analysis of activities, and in general are of great importance to a wide range of their users. Therefore, the financial statements are expected and analyzed by all stakeholders, both external and internal. Financial statements are accessible to many recipients thanks to the obligation to publish them. Due to the

informative role of financial statements, especially for managers and investors, it is required to prepare them correctly and provide financial information with appropriate qualitative characteristics that determine its usefulness. The International Financial Reporting Standards (IFRS, Conceptual Framework 2016, par. CJ1-CJ39) identify two fundamental characteristics of useful financial information: usefulness and true & fair presentation, and four further characteristics: comparability, verifiability, timeliness and understandability, which enrich the fundamental characteristics. Financial statements and their analysis allow for the identification of risks associated with business activity. The world-famous COSO-ERM model, also known as COSO II, is used for risk management in enterprises. It is the leading model on which business risk management is based. It includes eight components: internal environment, goal setting, event identification, risk assessment, risk response, control activities, information and communication, monitoring. As can be seen, two components, risk assessment and risk response, are closely related to risk management (Enterprise Risk Management – Integrated Framework, Summary, 2004). The ERM approach relies on the relationship of enterprise risk management with the assumed business strategy and goal setting, as well as involvement in the areas of internal control, accountability and decision-making processes. There are many studies in the literature on the effects of implementing this model in practice and its impact on the firm's value. See among others a 2010 article by Arena, Arnaboldi, and Azzone that explored the organizational dynamics of ERM through the longitudinal method of multiple case studies, or a 2011 article by Hoyt and Liebenberg that estimated the impact of ERM on Tobin's Q, a standard proxy for firm's value, and thus found a positive relationship between the company's value and the use of ERM.

This article deals with the risks that can be identified in the financial statements by their users who need however some

knowledge of them in order to be able to do so well. The financial statements analyzed in this article in terms of identification of risks include: balance sheet, profit and loss account, cash flow statement and statement of changes in equity. The article systematizes, describes and interprets the identifiable risks incorporated in the above-mentioned statements. The originality of the article is based on the use of financial statements and their analysis to present the systematics of business risks that can be recognized and identified in them. This is an expression of the accounting information function implemented by using the financial statements. The issue of risk has been repeatedly described in the literature depending on the scientific discipline (management science, economics, finance, accounting) and business practice (company management, financial and internal audit) and the type of entities exposed to risk, e.g. banks, insurance companies, business entities, government and local government units, non-profit organizations and others), also the type of reports prepared (financial statements, non-financial i.e. CRS or integrated reports), and finally the world area on which the institutions operate (Europe, America, Asia, Australia, Africa). According to the different bases for sharing, the risks were classified differently. For example, in non-financial reports, risks are divided into: strategic risk, project risk, operational risk and legal risk. Many authors have addressed the issue of disclosure of risk information in the financial statements. The Cabedo and Tirado study from 2003, which developed a typology of risks, is noteworthy. It identifies all risks faced by companies and proposes a quantitative model for each of them. Both non-financial risks (such as business risk and strategic risk) and financial risks (such as market risk, credit risk, operational risk and liquidity risk) are listed. However, among the financial risks, there are few others that can be detected on the basis of the data presented in the companies' financial statements.

At the same time, risk reporting practices are a subject of great interest from the

accounting literature. The problem of the quality of risk reporting was raised by Ryan (2012), who indicated four ways to improve it: 1) complete disclosure of comprehensive income, 2) checking and disclosure of changes in accrual estimates and their impact on accounting data, 3) structured forms of risk disclosure, 4) detailed model disclosures for model-driven risks. According to the author, the indicated methods of improving the quality of risk reporting should be included in the financial reporting policy of firms. The issue of improving the quality and value of risk reporting was also reflected in the ACCA report from 2014. The report reviews the existing risk reporting practices, limitations in their improvement, the requirements of the recipients of the reports and the objections of the persons preparing them. Many studies have focused on the determinants of risk disclosure and some of them have looked at the impact of enterprise characteristics on risk disclosure. Khlif and Hussainey (2014, 181-211) found that company size, leverage ratio, profitability and risk factor are positively related to risk reporting. In 2016, Allini, Manes Rossi and Hussainey examined the impact of board composition (in terms of female participation and age of board members), as well as company size and online visibility on risk disclosure in the annual reports of Italian listed state-owned enterprises. Their findings on this theme, despite taking into account only the Italian realities, can be spread and used more widely in the world. Anagnostopoulou and Tsekrekos (2017), when examining the relationship between accounting quality and the behavior of the term structure of implied options' volatility around earnings announcements, used the quality of quarterly accounting information as a proxy for enterprise information risk. They considered that the quality of the accounting reflects and represents the company's information risk. The purpose of the 2017 research by Yang, Yu, Liu, and Wu was to assess corporate risk using free text disclosures from annual reports and to investigate the relationship between identified risks and audit fees. It turned out that the audit fees are positively related to the financial, strategic and operational risk

specific to the company. This confirms the informative role of textual disclosures about corporate risk made on the basis of annual reports as well as a modern approach to text mining. In a 2017 article, Aven noted, referring to the concept of resilience and its relationship to risk, that the effectiveness of resilience management, while not dependent on risk considerations and assessments, can benefit from them as long as it goes beyond traditional quantitative assessments and embraces a broader qualitative approach or semi-quantitative. It can be improved by taking into account the risks. Huang and Mazouz (2018) referred to the liquidity risk to which investors are exposed and to the liquidity premium and stated that the excess cash can be positively perceived by investors because it improves the continuity of trading in shares and reduces the liquidity risk and also the cost of equity. Risk information disclosure was taken up in 2019 by Tahat, Dunne, Fifield and Power. They have made a critical review of the literature on risk reporting and noted significant omissions on some points on the subject. They indicated the directions of further research in the field of risk reporting. In turn, Demina and Dombrovskaya (2020) referred to the preparation of risk-based financial reports. The model for detecting the risk of fraud in financial statements was developed in 2020 by Özewin. It is an alternative to mixed models and has a high level of significance and is explanatory. It uses Benford Analysis to classify risk and control groups and may be useful for different groups of users.

The above references are just a few examples of documents related to risk disclosure in accounting discipline and financial reporting. The selected articles for the most part concern the European area. However, it should be pointed out that the financial statements themselves have been subject to severe criticism for many years, in which they are accused of many weaknesses (e.g., Lev and Feng Gu, 2016). Nevertheless, all stakeholders still use financial statements on a regular basis, as they are still an irreplaceable source of a wide variety of relevant data about the

enterprise. The remainder of this article will deal with the risks that can be identified in the financial statements.

### **Risks identifiable based on the financial statements**

There are many different business risks that can be identified from the financial statements. The following describes the risks identifiable in the balance sheet, income statement, cash flow statement and statement of changes in equity. These risks can be detected by stakeholders themselves based on the figures and verbal descriptions disclosed in the companies' published financial statements using appropriate analytical indicators with predictive power, the so-called predictors. It is necessary to distinguish between risk detection and risk disclosure. The first action may be done by stakeholders who have an interest in the enterprise whereas the latter is done by the enterprise itself to present its situation in a reliable manner (Babuska, 2020, 133-154). The risks recognizable in the financial statement will be characterized and interpreted in the order of their possible occurrence in the aforementioned financial statements, taking into account theoretical studies by several authors and the Polish Accounting Act (AA).

### ***Risks identifiable based on balance sheet data***

The most important risks that can be identified on the basis of the balance sheet result from its structure, in particular from the structure of total assets and liabilities, the structure of fixed and current assets and the structure of liabilities. Moreover, from the balance sheet, it is also possible to identify operational risk, liquidity risk, including the risk of working capital management, as well as the risk of lowering the profitability of assets, sales and equity (Bareja and Giedroyc, 2008, 449-457). Risks resulting from bad trends in the structure of assets and liabilities and the balance sheet sum can be read using structure ratios and growth ratios. The assets' structure depends on the type of

business. A large share of fixed assets may pose a risk, as fixed assets restrict cash flows and freeze capital for a long time, due to technical progress and high fixed costs (Waśniewski and Skoczylas, 2002, 348). Various authors have developed relevant ratios for this purpose, e.g.: assets tangibility (fixed assets to current assets) and assets productivity (tangible assets to financial assets). A higher rate of growth of current assets should be ensured as less risky. Changes in the value and dynamics of assets express the absolute differences and growth rates of total assets as well as fixed and current assets (with a fixed and variable base). A distorted relationship between equity and liabilities is an unsuitable trend. A correct structure and growth rate of equity ensures stability and liquidity. Change trends in equity structure show the financial risks' size related to debt capital and the capability to continue operating. The respective values of equity capital and debt capital should correspond to the value of financed asset groups, i.e., equity should correspond to fixed assets and debt should correspond to current assets. Changes in equity and debt over time are demonstrated by growth rates of total capital as well as by respective growth rates of equity and debt. An industry-correct structure of assets and liabilities means correct trends and lower risks. Balance sheet amount changes reflect an increase or a decrease in assets which is a symptom of development and low risk, or stagnation and high risk, respectively. There is also the risk resulting from the structure of fixed and current assets and from its changes as of a particular date. Fixed assets are typically long-term and low-liquidity. Their prolonged use creates the risk of investment choices, high expenditures and financing sources. New fixed assets make it possible to manufacture high-quality products, but economically and physically depreciated assets generate risks. Such risks are reflected by the fixed assets to total assets ratio. Risks are also generated by the ongoing depreciation of fixed assets. An appropriate structure of fixed assets may reduce business risks. Skillful fixed asset risk management has an effect on operating risks. In their turn, current assets

are short-term and fast movable. Their higher share in total assets improves liquidity; they can be quickly and easily sold or used for an alternative purpose (Gabrusewicz, 2014, 74-76). Current assets create various levels of risk. Both excessively high and too low inventories are risk factors. Outstanding receivables also generate risks. Too much cash means lack of investments and over-liquidity, cash shortages – imprudence and loss of liquidity. A sudden change in long-term trends in the current assets structure also involves risks (Bareja and Giedroyć, 2008, 449-450).

The next are the risks resulting from changes in the structure of equity and liabilities and from their changes as of a given date. Equity secures financial independence. The greater the value of equity, the easier the access to long-term debt. The aggregated value of long-term debt capital and equity capital corresponds to fixed capital which reduces debt risk (Sierpińska and Jachna, 2004, 75-76). The greatest risk is related to revaluation reserve and financial result. Changes in this reserve involve revaluation of fixed assets and long-term investments (e.g., the risk arises if their value does not grow as a result of unfavourable market price trends, mostly those of financial instrument). Losses, low profits and low profit-to-equity ratios reflect high business risks. In its turn, the structure of debt is formed by liabilities and provisions for liabilities. The proportion of debt to total capital is related to the scale of debt and debt limit, and the types of debt capital have an effect on risks affecting the capacity to pay. In accordance with article 35d of the AA, provisions are created for certain or highly probable future liabilities, also related to restructuring. These include liabilities of uncertain amounts or maturity dates that can be estimated and match the definition of a liability. The need to make provisions follows from the prudent valuation. The financial result includes provisions for risks known to the entity, threatening losses and consequences of other adverse events (art. 7 par. 1 point 5 of the AA). Provisions safeguard the entity against known or expected risks of various costs,

losses and liabilities that may occur in the future. Excessively high provisions may create a risk of reduced economic gains, whereas insufficient (or missing) provisions create a risk of imprudent valuation.

Operating risks are related to the management of operating assets and liabilities (amount and structure of inventories, system of monitoring and effecting payables and receivables, securing payments, credit policy and cash levels). An analysis of assets from the viewpoint of operating risks should involve the fixed to current assets ratio. Fixed assets increase overheads and operating risks. A like effect is caused by a growth trend in investment assets that are contingent on speculative deposits of spare cash in relation to operating assets. Such a trend may indicate that the company is active in a high-risk area, with real-time reduction of its core business (Bareja and Giedroyć, 2008, 451-452). Operating risks are also generated by the level, structure and management of inventories. A high level of inventories involves added cost, while low inventories cause bottlenecks in production and/or sales, and increase the cost of supplies. As a rule, inventories should be reduced and their structure should be optimized depending on inventory groups and business types. Management of inventory is illustrated by turnover ratios, expressed in the number of cycles and cycle length measured in days (Gabrusewicz, 2014, 95-111). The value of inventories disclosed in the balance sheet may include the risk of changes in prices on commodity markets, especially in material-intensive production (Waśniewski and Skoczylas, 2002, 348). Operating risks also affect trade accounts with suppliers and customers in the balance sheet. Accounts receivable are seen as positive, as long as debtors pay them on time and in full. Delays in payment mean greater risk. Regularly incoming receivables create liquidity and are necessary for on-time payment of accounts payable. In addition, they improve the structure of assets. Foreign exchange risks may occur if purchase and sale transactions are made in foreign currencies, and accounts payable

and receivable in the balance sheet are expressed in the national currency. This transactional risk (of revaluation of trade accounts due to exchange rate fluctuations) is illustrated by the scale of payable / receivable currency differences and by the possibility to adjust sale prices accordingly. Conversion and long-term foreign exchange risks also exist. Businesses are also exposed to interest rate change risks, as long as they possess variable-interest debt capital (Waśniewski and Skoczylas, 2002, 349-350). Interest rate risks cannot be fully determined on the basis of the balance sheet, because fixed-interest loans cannot be differentiated from variable-interest loans. Susceptibility to exchange rate changes is observed with regard to long and short-term loans, financial leasing and debt securities (Bareja and Giedroyc, 2008, 456-457).

On the basis of balance sheet information, stakeholders can also identify:

- liquidity risk and the related working capital risk
- risk of lower return on assets, sales and equity

Determining financial liquidity is a priority in risk assessment and may exhaust management issues. High liquidity compensates for cash flow waves caused by endo- and exogenous factors, reducing the entity's profitability (Waśniewski and Skoczylas, 2002, 349). Liquidity expresses the ability to pay current liabilities on time (Sierpińska and Jachna, 2004, 145). The risk of liquidity loss follows from the ratio of current assets to current liabilities. It is defined by the degree of assets liquidity and capital maturity. Timely debt repayment depends on the availability of liquid assets and the capability of obtaining third-party financing. Theorists propose static and dynamic analysis of liquidity loss. The static analysis uses current, quick and cash liquidity that reflects the ability to repay current liabilities from current assets, current assets excluding inventories and cash. In the dynamic analysis, ratios are based on the balance sheet and the cash flow statement and these are primarily indicators of cash efficiency and cash

sufficiency (Bareja and Giedroyc, 2008, 452; Gabrusewicz, 2014, 329-340). It should be added here that excess cash in companies does not have to be perceived negatively by investors, as proved Huang and Mazouz (2018, 275-291). They assessed the costs and benefits of the excess cash and found that it improves the continuity of trading in shares and reduces the liquidity risk and the cost of equity. The working capital finances the current assets not covered by current liabilities (Sierpińska and Jachna, 2004, 77). Working capital management risk depends on the size and structure of assets and liabilities. It is the difference between current assets and current liabilities, or between fixed capital and non-current assets. The sum of this capital is important in the assessment of liquidity, thanks to the limitation of the risk of its loss. The liquidity provided by working capital results in the short and long term. Its value expresses financial security (Gabrusewicz, 2014, 164). Return on assets means their profit generating potential. As a ratio, ROA shows the amount of net profit per one unit of assets employed, as well as the efficiency of their management. The greater the ROA, the better the financial condition. The lower the ROA, the worse the condition and the greater the risk of decreased return on assets. The ROA formula is modified by using various forms of profit (gross, gross incl. interest) and assets groups (fixed, current, net). Different ratios may show diverse levels and trend directions; by elaborating on the general formula, they can also extend the scope of the examined business, thus disclosing detailed risks. High return on sales is accompanied by low assets turnover, which has an effect on the choice of risk mitigation strategies. Theorists suggest two strategies: 1) high prices and high profits accompanied by adequately low assets turnover, 2) low prices and low profits accompanied by relatively high sales. The choice of the strategy reflects the type of and conditions affecting the company's business (Gabrusewicz, 2014, 311-316). ROE means return on equity. A higher ROE shows a more favourable financial condition and greater development potential. ROE measures the efficiency of invested equity. It

is important for owners who consider alternative forms of using equity (Bareja and Giedroyć, 2008, 454). Return on equity allows investors to set the rate of return on investment in the company's stock (shares). A higher ROE ensures higher dividends, growing stock prices and lower investment risks. Assets are also financed using debt capital. To increase sales and profits, debt may sometimes be more efficient than equity. The financial leverage effect (growing rate of return on equity) will be observed if the loan interest rate is lower than return on total capital, as long as its structure has been optimized (Sierpińska and Jachna, 2004, 203-206).

***Risk identifiable based on profit and loss account data***

Examples of business risks that can be identified based on the profit and loss account statement data are characterized below in accordance with the study by Wachowicz and Klimczak, 2008, 460–470. The risk of results variability in examined periods manifests itself in the volatility of results and periodical fluctuations of revenues and costs. Risk mitigation involves separation of revenues / costs with a high likelihood of repeatability from those that are more incidental and relate to such events as sale of assets, fines, penalties, compensation for damages, donations or force majeure. When analyzing this risk, it is basic to differentiate between costs that are controlled by the company in a long term from those that cannot be controlled by it. Uncontrollable costs follow from applicable laws and public liabilities. The risk of not achieving the assumed results is associated with the deemed costs and revenues which should be excluded from their real counterparts resulting from business relationships. Presumptive items are the result of accounting operations (their effects are evened out in the future) arising from: impairment losses on assets and their reversal, creation and release of prepayments and provisions. They are included in other operating and financial activities as an expression of the risk of failure to achieve the assumed results. The risk of measuring results arises from

management's estimates of the value of revenues and costs. Such estimates can be biased and therefore risk measuring performance. The risks described above relate to the risk of the financial result. and the following risks are reflected in revenues and costs of profit and loss account statement.

Risks on business activity as a whole and affecting the company's results are linked, inter alia, with:

- 1) the concept of managing the company and its development (including: research and development, new projects, technologies and products) – management of the company and its development cannot be spontaneous, but should rather follow a project reflecting the company's needs and its specific nature. The risk of a mistaken management idea has a bearing on the company's operations and manifests itself in increasing costs and decreasing revenues. The risk of research and development, implementation of new projects, technologies and products is high, and setbacks in this regard involve an unwarranted increase in overheads; 2) the concept of human resources management cost – cost of labour in Polish companies is very high (amounts actually received by employees are increased by over 40% in taxes and obligatory social security paid by the employer). The risk of human resources management manifests itself in growing cost of employment; 3) balance sheet and tax policy – the balance sheet policy is part of the economic policy in company management and differs from the accounting policy. The results of changes in estimated values that accompany changes in accounting rules are shown in the profit and loss account. The change in accounting principles makes the risk of its reorganization costs real (they will

be charged to operating activities). The company's tax policy allows it to optimize the amount of taxes paid by choosing a more profitable form of taxation. Such decision is risky and must be preceded by a tax simulation.

Risks connected with the company's operations are related to the management of operating assets and liabilities as well as the organization of operations. Risk factors may be linked to how operations are organized, how technological processes are implemented, how product quality is monitored, or how complaints and product returns are handled. The consequences will be included in operating results shown in the profit and loss account. These results will also include the risk effects of the company's strategy, marketing policy and the method of creating and maintaining production capacity, as well as the risk effects of organizing the logistics of supply and sales systems. Lack of a strategy or ignoring and failing to implement its assumptions in the current activity and the lack of strategic control may result in ad hoc actions, devoid of a long-term scale, chaotic, increasing overhead costs in the entity's operating activities. The risk of marketing policy may relate to solutions used in the advertising and promotion of products, discounts, rebates, customer segment selection, assortment structure, etc. The costs or benefits of the marketing policy fall within the scope of basic operating activities. The risk of creating and maintaining tangible economic potential is determined by the production capacity plan. These capacities should not be too high or too low. Excess production capacity carries the risk of not using it fully in business activities, and their shortage prevents the realization of achievable revenues. Material resources should be kept in good technical condition, with technical control eliminating disturbances, failures of machines and devices leading to downtime, as well as product deficiencies and defects. This risk affects the costs and revenues of operating activities. The risk of organizing the logistics of supply and sales systems is related to the implementation of

supply and sales processes with the use of logistics solutions that require appropriate organization. It consists in providing adequate resources, including means of transport, warehouse network, IT system for supply management. In addition, the selection of supply sources and the development of distribution channels are also important. The effects of this risk may reduce the entity's operating result.

Risks related to financial and investment activity are connected with: 1) the company's financial assets management strategy, which may involve risks related to: inappropriate investment strategy, financial assets structure or value change, portfolio design (diversification), collaterals policy, interest and foreign exchange rate fluctuations. In the profit and loss account, the results of these types of risk are charged to financial costs and revenues; 2) the policy of securing equity and debt capital which should assume that the choice of financing sources depends on how realistic it is to obtain capital from a given source and on the cost and structure of capital. The risk of procuring capital and shaping its structure has a bearing on financial costs and revenues and may be related to: inappropriate equity capital ownership structure, defective debt capital structure and overall capital structure, choice of external sources of capital injections, issue of securities with the choice of the issuing entity, preparation of the prospectus, fixing nominal and issue prices, emission and redemption of debt securities; 3) the practice of investment project efficiency assessment, which requires an analysis of incurred cost and gains that can be achieved through the investment. The risk of investment project assessment is not directly reflected in the profit and loss account. After selecting the project, its implementation begins and at that time the actual costs and revenues are generated and presented later in the income statement. Actual economic results of the project may differ from forecasts. Projects are assessed on the basis of informed forecasts of investment outlays, future revenues and macroeconomic parameters related to foreign exchange rates, inflation, interest rate, taxes. Risk



results are visible when actual effects are compared against forecasts.

### ***Risk identifiable based on cash flow statement data***

Business risks, identifiable in the cash flow statement, are related to three types of activity: operating, investment and financial. These risks will be presented on the basis of Karmańska, 2008, 472-474 and Nowak, 2017, 145-155. The risks associated with the cash flows are important because of their relate to the liquidity and solvency that determine the possibility of going concern. According to the types of business activities disclosed in the cash flow statement, the following risks are distinguished:

1. Operational activity risk that may be caused by negative cash flow from operating activities, which may also indicate a risk of default and insolvency. Operating activities are the core activities of an entity and other activities that are not included in investing or financing activities. The operating cash flows and their structure recognized in cash, i.e., using the direct method, are easier to interpret and contain more information about the likely risks than those generated using the indirect method. This method requires the analysis of cash accounts and the determination of the amount of receipts and expenses for each title. It is possible to determine whether the structure of operating receipts and expenses is typical or untypical for a given industry. The assessment of operating cash flows in terms of risks must take into account the scope of business and the current stage in the market lifecycle.

2. Investment activity risks, that including chiefly those related to the company's investment policy.

Investment activity is understood as purchase or disposal of fixed assets and short-term financial assets, together with all pecuniary interests and costs. By analyzing investment activity cash flows, it is possible to define the company's

investment policy risk. The risk of a change in the company's economic preferences may be shown by financial investments accompanied by incurring new debt and by weakening operating activities. If this option is not available, risks can be assessed based on investment revenues and expenditures grouped by investment instruments. Knowing the external motives for investing in various instruments helps investors to assess a company's investment strategy. The risk of default and insolvency may be shown by negative cash flows from investments. In such a situation, positive cash flows from operations are insufficient to cover investment expenses, and cash shortages are covered from external sources. This is typical for market newcomers, but may also be observed in firms facing similar payment difficulties as a result of management mistakes, eventually leading to reorganization or bankruptcy. To assess whether the risk results from increased investments or inappropriate management, it is also necessary to analyze other activities in the cash flow statement. All circumstances affect the assessment of the investment risk faced by the company.

3. Financial activity risks, which result *inter alia* from mistakes in the management of business financing sources. Financial activity involves procurement or loss of financing sources, accompanied by changes in the amounts of and relationships between equity capital and debt capital, as well as the related pecuniary gains and expenses. The risk groups discussed above are inter-related. For instance, the risk of default may be caused by inappropriate management of business activity financing sources. Such risk can be detected by analyzing cash flows. Negative net flows from financial activity accompanied by positive flows from operations and investments may suggest restructuring and fixed assets sell-out accompanied by difficulties in debt repayment, caused by low operating revenues. Mistakes in the management of business financing sources and the related risks are hinted by: taking a loan accompanied by bond redemption, similar timing of bond issue on the one hand and loan or financial leasing repayment on the other.

### ***Risk identifiable based on statement of changes in equity data***

The statement of changes in equity contains data that supplements the balance sheet. It informs on the structure and extent of changes in equity. The balance sheet and the statement of changes in equity present seven items in the equity structure: I Primary capital (fund), II. Supplementary capital (fund), III. Revaluation capital (fund), IV. Other reserve capitals (funds), V Profit (loss) from previous years, VI. Net profit (loss), VII. Write-offs from net profit during the financial year (negative value). Their changes can be observed by analyzing the following aspects: opening balance, increase / decrease by titles, closing balance (Annex 1 to the AA). In this way, each component can be tracked in terms of risks. If the reasons for increasing or decreasing equity and its components are known, equity can be properly managed. Some of the risks that can be identified from this statement are presented below.

Risks caused by the structure of equity are related *inter alia* to such categories as revaluation reserve (capital) and net profit or loss. Revaluation reserve is often adjusted downwards in the face of unfavourable changes in market prices and fair value valuation. Low net profits or losses indicate a high level of risk. Reduced net profit to equity ratios indicate lower return on equity and higher risk, although this also depends on income taxes paid (Bareja and Giedroyć, 2008, 451) An increase of this ratio does not necessarily denote greater operating efficiency and lower risk (Nowak, 2017, 165-174).

The risk of return on equity can be inferred by assessing the efficiency of contributed (invested) capital measured with the financial result to capital ratio (i.e., profit per unit of capital employed). Such ratios come in a variety of configurations, depending on the type of profit used in the nominator (gross, net operational profit) and the type of capital used in the denominator (own equity, invested

capital). What matters from the risk perspective is the return on equity capital, as owners expect high returns on capital employed by the company (Wędzki, 2015, 462-466). A decrease in the profitability of equity means a decrease in its ability to multiply capital and a shrinking development potential of the entity. This statement makes it possible to track changes in return on equity and its components throughout the reporting period. A detailed analysis reveals information on the causes of the changes.

A realistic risk of bankruptcy is a high risk threatening to business continuity. It puts the company in the spotlight of investors, for whom the identification of this risk should be a priority. A negative value of equity indicates this risk, as it shows that balance-sheet losses have accumulated and owners have failed to intervene. The statement of changes in equity contains information on the coverage of losses and division of profits. An analysis of previous years' statements makes it possible to evaluate the owners' risk response, i.e., whether they took attempts at improving the situation or have done nothing to minimize risk (Karmańska, 2008, 474; Nowak, 2017, 286-290, Wędzki, 2010, 162-183).

The risk of a conservative attitude of the owners (low risk appetite) should be expected if shares are not contributed to the company over lengthy periods, if new stock is not issued, if dividends are paid, or when losses are not covered (or are covered in fractional amounts). In a young company, such an attitude may be attributed to lack of faith in success due to the lack of vision and action strategy, or to the shortage of funds necessary to finance further operations. A strategic investors could then introduce changes in such a company in line with their own vision and plans; alternatively, they could provide capital in return for a high profit share. This risk is easier to diagnose and respond to it if changes in equity are monitored, and it is the statement of changes in equity that explains the causes of equity increases and decreases across all equity components (Karmańska, 2008, 474-475).

The risk of expansive dividend policy results from the company's preference for payment of excessive dividends, using not only previous years' profits, but also advances towards profits expected in the current year. A radical dividend policy may be due to owners' pressure (as owners may be impatient having waited for return on invested funds), even in the face of unfavourable forecasts of future results. General (rather than detailed) interpretations may suggest that the company's financial condition is sound, while in fact it is poor. The aim may be to attract new capital by publishing information on allegedly appropriate management. This risk can be detected from the analysis of changes in the previous years' results and the write-offs of the current year's result made during several consecutive reporting periods (Karmańska, 2008, 475). However, it is believed that cash flow rather than profits, are the primary determinants of the amounts of dividends disbursed, as dividends are then less risky (Brigham, E. and Houston, J. 2015, 593-594). The information contained in the above-described basic financial statements, i.e., the balance sheet, profit and loss account, cash flow statement and statement of changes in equity, shows changes in various financial data during the reporting period. Most of these data are related to the execution risk, therefore their value is used to estimate the size of the risk, using volatility measures or more advanced methods such as safety measures and concepts of value at risk (Nowak, 2013, 497-505).

Stakeholders may identify other business risks based on the additional information, which include:

1. Introduction to the report
2. Additional information and explanations (notes).

The introduction to the report may inform about the risk denoting threat to continuation of activity in the declaration of the management. In turn, the notes to the financial statements include *inter alia*:

- 1) description of uncertainties as to going concern,
- 2) description of undertaken or planned actions to eliminate uncertainties;
- 3) market risk (including risk: price, currency, interest rate changes) and other operational risks.

The detailed scope of information that should be presented in the Additional Information, including the Introduction and Additional Information and Explanations, is presented in Annex 1 to the AA. It contains a lot of the requested information. There is a constant tendency to widen the scope of information in the accounting notes prepared by enterprises. The obligation to disclose detailed information and its effective use by management contribute to the mitigation or prevention of risk. Some risks are disclosed by the firms themselves, particularly in the notes and in the entity's report on the activities. Stakeholders can also discover many risks for themselves using the predictor indicators. As the selected risks described above show, each of the financial statements enables the detection and identification of many types of business risk. However, the financial statements do not allow to detect by stakeholders many significant risks and risk factors related to, *inter alia*, the business environment, the operations of the enterprise and its capital group as well as the capital market and secondary trading in shares (Karmańska, 2008, 475-476). Financial statements also do not disclose and do not allow to detect many risks associated with the management and measurement of intangible assets, i.e., intellectual capital or corporate social responsibility activities. These sample risks require separate reporting. Reports that currently take into account environmental and social requirements are CRS (Corporate Social Responsibility) reports and integrated reports.

## Conclusions

The article presents financial statements as a source of identification of business risks and the basis for their systematization in the area of accounting. The identifiable business risks in individual financial

statements reflect the threats and opportunities for businesses. Risks are included in the data disclosed in such financial statements as the balance sheet, profit and loss account, cash flow statement, statement of changes in equity and additional information (introduction and explanations). These types of risk can be identified, that is, recognized and detected by the users of the statements. However, users should have some knowledge of the content of the statements and how to prepare them, as well as the ability to correctly read, interpret and assess the risks presented (hidden) in the reporting data. In detecting these risks, it is helpful to analyze financial statements, thanks to the use of appropriate types, tools and techniques, in particular appropriately selected analytical financial indicators that have predictive power. Thanks to this risk analysis, the risks have been characterized in detail and systematized according to the criterion of their traceability in the components and items of financial statements. The article highlights the role of financial statements in both disclosing and detecting business risks. Identifying and assessing business risks based on financial statements contributes to the improvement of the risk management process throughout the enterprise. Other external stakeholders, in particular investors, are also free to detect and evaluate risks in the reporting data themselves as the financial statements are published and therefore generally available to the public. On the other hand, risks related to social and environmental issues that cannot be detected in the financial statements should be disclosed and described in corporate social responsibility reports and integrated reports. The CRS reporting system developed gradually, starting from the 1970s, and integrated reporting were implemented for the first time in the 21st century. These issues, however, go beyond the scope of this article, but may be taken up in the course of further research. The article indicates that financial statements, despite their imperfections and constant criticism, remain an irreplaceable source of information about the enterprise, which is used by all stakeholders, and also play an

important role in identifying and systematizing risk in the area of accounting.

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