RELIABILITY OF ECONOMIC INTELLIGENCE AND STABILITY OF FINANCIAL MARKETS

ANNA STASZEL

MSc, Anna Staszel, Department of Accountancy, Cracow University of Economics, +48-692-687-500, staszela@uek.krakow.pl

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Abstract

Investors make their decisions on the basis of economic intelligence which is mostly derived from the accounting system and required to be reliable and capable of giving a true and fair picture of economic reality. Reliable economic intelligence enables investors to make well-informed decisions and results in the proper allocation of capital. By contrast, distorted financial statements, leading investors to make erroneous decisions could, in the event that truthful information is disclosed, destabilize financial markets and lead to a decline in investor confidence in the markets, which translates into stagnation. The paper aims to highlight the importance of the quality of financial statements, which provide information determining investor behaviour and to present the destabilizing impact of economic intelligence on financial markets whenever such information turns out to be unreliable

Key words: *reliability of financial statements, measurement in accounting, value, fraudelent financial statements, financial stability*

1. Introduction: Measurement of the Economic Size and the Flexibility of Accounting Systems

Value is a basic economic category. Following in Adam Smith's[1] footsteps, value can be viewed as the utility of a given good or ability to exchange it for another good, or – in line with Marx's[2] theory – the value of a given good depends on the amount of work put in to obtain it, or, indeed in line with Bohm-Bawerk's[3] perception it is the price that the buyer is able to offer for a given good. Although there exist various definitions of value, it is taken for granted that value will be determined by the way in which we measure it. And to go even further, the measurement of value in the case of companies, indeed markets, is carried out by means of accounting information systems. Valuations performed within accounting aim to present a true and fair view of an entity's economic reality. The measurement of various economic phenomena, including of both the entity's resources and the effects of its activities, is an attribute of this valuation.

Accounting can thus be dubbed a quantitative description of reality[4], an art of measurement, although it should be emphasised that this measurement is performed by means of not just one, but rather by means of numerous methods. Accounting does not constitute a code of ultimate do's and don'ts: it gives accountants some leeway – leeway, which is aimed at ensuring the most accurate measurement and subsequently disclosure in the financial statement of an image of the

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[1] SMITH, A. 1977. An Inquiry into the Nature and Causes of the Wealth of Nations. Chicago: University of Chicago Press, 1977. 1152 s. ISBN: 978-0226763743

[2] MARX, K, 2008. Value, Price and Profit. Maryland: Wildside press, 2008. 64 s. ISBN: 978-1434463111

[3] BILO, S. [online] 2005. Imputation and Value in the works of Menger, Böhm -Bawerk and Wieser, [cit. 2015-10-08] online available: <http://nb.vse.cz/kfil/elogos/miscellany/bilo105.pdf, 2005>

[4] MATTESSICH, R. 1994. Accounting as a cultural force: past, present and future. In *The European Accounting Review*, 1994, 3:2. ISSN 0963-8180, p. 19.

entity which is as representative of economic reality as possible. Accounting standards, which could be referred to as "general guidelines" do not contain a list of codified straightforward rules and regulations for one simple reason: such detailed regulation would apply to merely one type of transactions, and introducing it would presuppose the need of a separate regulation for each and every other transaction, which is impracticable, especially at a time when ever newer and more complex financial instruments, transactions and contracts are spawned into life.

Given that accounting faces the need to quantify economic reality so that it gives as true and fair a view of this reality as possible, for it to be able to realistically live up to this challenge in the face of the increasing complexity of economic events, it is not possible to lay down rigid rules – indeed only flexibility promises to give a chance for a reliable reflection of reality. On the other hand, this very flexibility causes that such accounting measurement can never be considered fully objective: its accuracy generally depends on both the efforts and will of the accountant. The accounting measurement process is marked by subjectivity and, because of its very nature, must be subject to individual judgments which, properly used, are beneficial to users of financial reporting, as they contribute to the most faithful quantification and presentation of economic events in accordance with their economic content. Yet, this very degree of accounting freedom can be used for the wrong purpose: to manipulate and falsify economic information, which is then used, e.g. by investors to make investment decisions.

2. Subjectivism of measurement in accounting and investor decisions

As already indicated, accounting measurement is never objective. Yet, investors are mostly oblivious of the fact that there is no unambiguous form of measurement in accounting and that measurement will often depend on accountants' subjective choices, thereby being prone to manipulation. This ignorance leads to the emergence of systemic risk and the consequential implications of the use of information derived from the accounting system, which results in erroneous economic decision-making.

The information produced by the accounting system plays a key role in managing financial risk[5]. Investors admittedly regularly track information affecting the share prices of companies, however it is the publication of financial statements that is a crucial. Investors await the statements most eagerly at times of economic slowdown, hoping to see data that heralds the beginning of recovery. So it was e.g. in July 2009 when a positive trend on the stock markets[6] manifested itself only in the wake of the presentation of financial reports.

The accuracy of investment decisions depends on the quality of the information investors can access. However, investors on the stock market are not interested in the accounting measurement process itself – they expect only that the State will reduce the risk of distortion of information in the reports[7].

3. The credibility of accounting measurement and financial markets, financial stability and macroeconomics

The existence of the information necessary for the functioning of financial markets can be taken for granted, but it is worth considering where the information originated, who can influence it and whether it is possible to manipulate it.

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[5] KUTERA, M., SURDYKOWSKA, S.T. 2009. Kryzysy gospodarcze a wiarygodność sprawozdań finansowych, Warszawa: Difin, 2009. 259 s. ISBN: 978-83-7641-165-1, p. 31

[6] KUTERA, M., SURDYKOWSKA, S.T. 2009. Kryzysy gospodarcze a wiarygodność sprawozdań finansowych, Warszawa: Difin, 2009. 259 s. ISBN: 978-83-7641-165-1, p. 107

[7] MARUSZEWSKA, E.W. 2014. Etyka we współczesnej rachunkowości a wiarygodność informacji w niej tworzonej, Katowice: Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach, 2014. 177 s. ISBN: 978-83-7875-173-1.

Economic information is a collection of some already processed data relating to economic phenomena occurring in the company (e.g. purchase of assets) and in its environment e.g. change in the market price of the assets owned by the company). In particular, it concerns the assets of the company and changes in these assets as well as in the results of its operations (reflected as a profit or loss).

Globalisation has made financial markets, even the ones located in the most distant corners of the world, strongly intertwined, so that for example changes in currency exchange rates or equity prices in one market could destabilise the financial system on the other side of the world.

Perfection of the markets in practice turns out to be fiction[8]. One is tempted to say that current prices do not reflect the balance between supply and demand, but it is the very economic intelligence about prices that largely creates demand and supply. Now, economic intelligence is a basic commodity that is necessary to carry out transactions in the financial market. And it is accounting that is a major provider of economic intelligence or financial information[9].

As indicated by the International Accounting Standards Board (IASB)[10] its work on the Conceptual Framework and International Financial Reporting Standards (IFRS) brings in transparency and accountability thereby contributing to the efficiency of financial markets around the world: "The IASB's work serves the public interest by fostering trust, growth and long-term financial stability in the global economy."

Economic information provided by accounting is very important for a number of reasons:

- it allows investors to make well-informed business decisions,
- it reduces the information gap between providers of capital and people entrusted with the capital,
- it contributes to economic efficiency, helping investors to identify opportunities and threats, thereby contributing to better allocation of resources.

As demonstrated by numerous authors[11] the liquidity and stability of financial markets depends on the quality of financial statements, and securities prices are highly sensitive to the information on financial results as supplied by accounting systems. Therefore, economic intelligence provided by accounting constitutes an important determinant of investor decision-making. Incorrect or ambiguous information provided by the accounting system may in turn lead to inefficient allocation of resources[12].

The information is reliable if it is prepared honestly, on the basis of comprehensive and error-free real data, which translates into an accurate and fair presentation of the economic substance of any transaction[13]. However, how true and fair the reflection will be depends largely on the person who prepares the books of accounts.

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[8] SOROS, G. 1997. The Capitalist Threat. In *The Atlantic Monthly,* No 279. ISSN 1072-7825, s. 45-58.

[9] MICHERDA, B. 1997. Analityczna funkcja rachunkowości w okresie przejściowym do gospodarki rynkowej. Kraków: Wydawnictwo Naukowe Akademii Ekonomicznej w Krakowie. 171 s. ISBN: 83-87239-67-4, s. 13-14.

[10] *Conceptual Framework for Financial Reporting, Exposure Draft* [online] May 2015, [online] [cit. 2015-10-08] online available: http://www.ifrs.org/Current-Projects/IASB-Projects/Conceptual-Framework/Documents/May%202015/ED_CF_MAY%202015.pdf, (IN 5)

[11] ASCIOGLU, A., HEDGE, S.P., KRISHNAN, G.V., MCDERMOTT J.B. 2012. Earnings Management and Market Liquidity. In *Review of Quantitative Finance and Accounting,* 2012, No. 38. ISSN*: 0924-865X*, s. 257-274, *CLEMENT, M., FRANKEL, R., MILEER, J. 2003. Confirming Management Earnings, Forecasts, Earnings Uncertainity, and Stock Returns. In Journal of Accounitng Research, 2003, No. 43.* ISSN: 1475-679X*, s. 653-679.*

[12] BLECK, A., LIU, X. 2007, Market Transparency and the Accounting Regime. In *Journal of Accounting Research*, 2007, no. 45. ISSN: 1475-679X, s. 229-256.

[13] KOSMALA-MACLULLICH K., The truth and Fair View Construct in the Context of the Polish Transition Economy: Some Local Insights. In *European Accounting Review,* 2003, no 12. ISSN 0963-8180, s. 465-487.

It should also be noted that the data needed to calculate all kinds of macroeconomic indicators describing the economy (e.g. Gross Domestic Product) is provided by accounting, hence the importance of reliability of financial statements becomes even greater. Basic economic categories are calculated on the basis of data drawn from measurements made at the micro level and, importantly enough, in accordance with an accounting system currently in place in the country.

Users of financial information expect individual countries to reduce (through the agency of competent institutions and suitable activities) the room for either deliberate or unintentional distortion of information. Moreover, it should also be in the interest of every country to look after the reliability of data in financial statements, since the higher the quality of economic information, the higher the efficiency of decisions taken on its basis, which translates into subsequent increase in the productivity of the economy when capital goes to those companies that are able to manage it better than others.

The risk that the financial market will be fed inaccurate information arises from the fact that financial statements may be subject to tampering. The effects of provision of such falsified financial information will affect, however, not only the company in question but may affect the entire stock exchange, or even determine macroeconomic data.

4. The impact on the financial markets of manipulation of economic information as illustrated by the accounting scandals in US listed companies at the beginning of the 21st century

Not only does manipulation of financial reporting have negative consequences for the owners of capital, but it can also affect the entire financial market. This was confirmed at the beginning of the 21st century in the United States by a series of accounting scandals, which reverberated across distant markets in Europe or Asia leading to serious declines and the consequential crisis on the financial markets.

The crisis was the result of false economic information reported by companies that had indulged in falsification of financial statements. False information on profits (which were overstated) enticed investors to buy shares, and their prices soared. It was only after the disclosure of accurate information about their financial situation and performance that investors verified their earlier estimates regarding the companies. The implications of such false information presented in the financial statements for three US companies, i.e. Enron, WorldCom and Xerox are presented in Table 1.

Table 1. Impact of the revelation of manipulative reporting practices on the financial market as illustrated by three companies listed on the New York Stock Exchange.

Case (company)	False information	Improper investors' response to false information	Consequences
Enron	Reported false information on profit, concealed asset impairment	Information on rising profits contributed to an increase in share price: in 1999 share price jumped 56%, in 2000 it soared 87%.	Following the disclosure on 16 Oct. 2001 in the quarterly report of a $638m loss in Q3, Enron's shares plunged from about $90 to several cents per share. The company went bankrupt on 2 Dec. 2001. Additionally, humiliation of analysts and rating agencies.
World-Com	Understated costs, overstated assets	Withholding information on fall in profit meant share price continued to be high.	In June 2002, following the detection of irregularities by auditors and the public announcement of an overstatement of revenue by $3.8bn, share prices dropped from about $60 to a few cents (followed by suspension of

			trading). Declines in the seemingly distant European exchanges amounted to 4%, the Seoul stock market plunged 7.5%. Declared bankrupt in July 2002.
Xerox	Overstated revenues (for the years 1997-2002) by a total of $1.5 billion.	Company's share price remained high.	Share price plummeted 30% in a single day, company had to pay a $10m fine for improper booking.

Source: Author's own work based on press releases.

Decreased confidence in the financial statements of companies who were diagnosed with fraudulent financial reporting led to a decrease in the share prices of not only the companies involved, but also the indexes of other companies, which caused a global decline in the confidence in economic information disclosed in financial statements. To quote Smaghi[14]: "if the lack of confidence in the market is a permanent feature of financial crises, then a crisis could even result from the loss of confidence in the economic information supplied by the accounting system."

Aware of the fact that the reliability of economic information arising from account books affects the stability of financial markets, in the wake of the bankruptcies of US giants Enron and WorldCom, the US government took unprecedented step, introducing the Sarbanes-Oxley Act (SOX) of 2002.

One could note however that both governments and accounting circles reacted after practically every financial crisis by launching appropriate regulations or standards, responding to the financial crisis by improving the reliability of the data supplied to the financial markets.

Historical assessment reveals that the fuel crisis of 1973 triggered the need for action on the financial markets involving provision of reliable accounting information: It was then that the FASB (Financial Accounting Standards Board) was established. After the next crisis on the US stock market in 1987, in 1988 the IASC (International Accounting Standards Committee) developed the first conceptual assumptions underlying the Preparation and Presentation of Financial Statements, putting credibility at the heart of the definition of basic accounting categories and valuation principles.

In cases of speculative bubbles involving not only US giants, companies' book values were significantly lower than their market values. What's more, despite the fact that companies reported losses, their share prices grew, which implies that investors actually ignored the adverse information, further pushing share prices up. This caused the bubbles to burst and burnt investors, which had its repercussions in the accounting circles. This gave rise to the category of fair value, among other things, just to ensure that financial reporting is based on the most recent data provided by the market and that it responds to changes in the market as soon as possible.

The global financial crisis of 2008 again revived the debate over the reliability of financial statements, and the reactions of the stock exchanges to companies' quarterly reports clearly confirm the high importance attached to in the intelligence provided by financial statements.

[14] SMAGHI, L.B. [online] 2008. Restoring confidence, Speech by Mr Lorenzo Bini Smaghi, Member of the Executive Board of the European Central Bank, on the panel: "Society, State, Market: a European Answer" at the International Forum Economia e Società Aperta "Uscire della crisi", organised by Bocconi University and Corriere della Sera in cooperation with University Carlos III de Madrid, Madrid, 25 November 2008. [cit. 2015-10-08] online available: <http://www.bis.org/review/r081201d.pdf>

Conclusions:

The accounting system is the primary source of information, e.g. for investors and, of course, the satisfaction of stakeholders' information needs can be seen as a contemporary challenge facing not just accounting, but the whole economy operating within a free market economic system. Investors expect information to be reliable and further that based on that information they will be able to evaluate events already on-going in the company, its achievements and failures, and further that they will be able to verify their expectations of the entity as well as to use such information in the process of forecasting events and making decisions. One can only agree with the statement that at the time of information overload, it is the reliability of information that is the primary challenge facing the accounting system, the more so that false, manipulated economic information has an impact not only on the company in question, but can affect the entire global financial market, which was confirmed by the financial scandals of the early twenty-first century in the United States.

References

[1] ASCIOGLU, A., HEDGE, S.P., KRISHNAN, G.V., MCDERMOTT J.B. 2012. Earnings Management and Market Liquidity. In Review of Quantitative Finance and Accounting, 2012, No. 38. ISSN: 0924-865X, s. 257-274.

[2] BILO, S. 2005. Imputation and Value in the works of Menger, Böhm-Bawerk and Wieser [online]. [cit. 2015-10-08] online available: <http://nb.vse.cz/kfil/elogos/miscellany/bilo105.pdf, 2005>.

[3] BLECK, A., LIU, X. 2007. Market Transparency and the Accounting Regime. In Journal of Accounting Research, 2007, no. 45. ISSN: 1475-679X, s. 229-256.

[4] CLEMENT, M., FRANKEL, R., MILEER, J. 2003. Confirming Management Earnings, Forecasts, Earnings Uncertainity, and Stock Returns. In Journal of Accounitng Research, 2003, No. 43. ISSN: 1475-679X, s. 653-679.

[5] Conceptual Framework for Financial Reporting, Exposure [online]. May 2015 [cit. 2015-10-08] online available: <http://www.ifrs.org/Current-Projects/IASB-Projects/Conceptual-Framework/Documents/May%202015/ED_CF_MAY%202015.pdf>.

[6] KOSMALA-MACLULLICH K. 2003. The truth and Fair View Construct in the Context of the Polish Transition Economy: Some Local Insights. In European Accounting Review, 2003, no 12. ISSN 0963-8180, s. 465-487.

[7] KUTERA, M., SURDYKOWSKA, S.T. 2009. Kryzysy gospodarcze a wiarygodność sprawozdań finansowych, Warszawa: Difin, 2009. 259 s. ISBN: 978-83-7641-165-1.

[8] MARUSZEWSKA, E.W. 2014. Etyka we współczesnej rachunkowości a wiarygodność informacji w niej tworzonej, Katowice: Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach, 2014. 177 s. ISBN: 978-83-7875-173-1.

[9] MARX, K, 2008. Value, Price and Profit. Maryland: Wildside press, 2008. 64 s. ISBN: 978-1434463111.

[10] MATTESSICH, R. 1994. Accounting as a cultural force: past, present and future. In The European Accounting Review, 1994, 3:2. ISSN 0963-8180.

[11] MICHERDA, B. 1997. Analityczna funkcja rachunkowości w okresie przejściowym do gospodarki rynkowej. Kraków: Wydawnictwo Naukowe Akademii Ekonomicznej w Krakowie. 171 s. ISBN: 83-87239-67-4.

[12] SMAGHI, L.B. 2008. Restoring confidence, Speech by Mr Lorenzo Bini Smaghi, Member of the Executive Board of the European Central Bank, on the panel: “Society,

State, Market: a European Answer" at the International Forum Economia e Società Aperta "Uscire della crisi", organised by Bocconi University and Corriere della Sera in cooperation with University Carlos III de Madrid [online]. Madrid, 25 November 2008. [cit. 2015-10-08] online available: <http://www.bis.org/review/r081201d.pdf>.

[13] SMITH, A. 1977. An Inquiry into the Nature and Causes of the Wealth of Nations. Chicago: University of Chicago Press, 1977. 1152 s. ISBN: 978-0226763743.

[14] SOROS, G. 1997. The Capitalist Threat. In The Atlantic Monthly, No 279. ISSN 1072-7825, s. 45-58.