Environmental Information in Financial Statements - "New" Comprehensive Income?

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Abstract

The view at an enterprise is changing in connection with the adoption of the concept of sustainable development. An enterprise begins to be perceived as a unity of economic, social, and environmental dimensions. An empirical study which was accomplished within this research confirmed positively that insufficient concretion of information between economic, environmental and social dimensions of business weakens the potential and reliability of presented information. On the other hand the consistent use of multi-dimensional concept demands the interconnection of information on all three dimensions in an annual report. The aim of this paper is to examine whether it is possible to provide complex, multidimensional information about an enterprise and, at the same time, respect the IFRS.

Key words: accounting, environmental, sustainable development

1 INTRODUCTION: SUSTAINABLE DEVELOPMENT – CHANGE IN MOTIVATION OF THE SOCIETY

1.1 Fundaments of sustainable development

Human society adjusted the environment to their needs almost in all periods of the evolution. This process caused repeated and often irreversible damages of the environment and affected the balance in the nature. It is possible to say that people started to consider the serious consequences of such behavior only during the twentieth century. Very slow reassessment of profit-oriented and consumer way of life was taking place. The process resulted in the formulation of the sustainable development thesis that was explicitly defined by the Brundtland Commission *as the development that meets the needs of the present without compromising the ability of future generations to meet their own needs* presented on the 42 session of the United Nations.[1] The growth of interest in social and environmental issues is connected with the development of "Corporate Social Responsibility" conception.

Sustainable development requires that economic development does not cause social and environmental devastation. The pillars of sustainable development are the following: the environment and environmental resources protection, the maintenance of employment and the respect to people´s social needs.

1 Brundtland, G. (ed.) Our Common Future: Report of the World Commission on Environment and Development, 1987, Oxford, UK: Oxford University Press

The strategy of sustainable development is a challenge not only for governments, governmental departments, agencies and private sector (from small enterprises to big corporotions) but, in the first place, for all people.[2]

1.2 Motivation of enterprises to respect sustainable development

Corporate managers are motivated to run business in compliance with the sustainable development of an enterprise and in compliance with the sustainable development of the whole society by the following:

- **moral/ethical motivation** connected with advanced social and environmental feelings of corporate managers and owners;
- **economic motivation:**
    - a) improved performance of an enterprise;
    - b) creation of internal goodwill;
    - c) grants and tax relief accessibility, etc.
- **compliance with laws and regulations** related to environmental and social dimensions of an enterprise.

While moral/ethical motivation of corporate managers and owners can be influenced only indirectly and is dependent on a particular person, economic factors of motivation can be identified generally.

General economic motivation of managers and owners lies in the fact that their enterprise's profit is increased due to the respect to environmental and social factors in business.

Monitoring and accepting environmental and social aspects of business can lead to the **increase of enterprise's net income.** For example, preventive environmental expenses can often preempt environmental damages whose impact can be manifold heavier; considerable savings can be reached also by waste management and things like that. Introductions of Environmental Management Systems (EMS) and Environmental Management Accounting (EMA) have a crucial role in this area.

Responsible approach to the environment and to the social impacts of a business leads to the creation of internal goodwill which, in reverse, improves the economic position of enterprises (e.g. position on a market).

Access to grants and tax reliefs can be a strong motivation to develop environmental and social activities.

Only when the results of environmental and social activities are monitored and published, business managers are motivated to achieve sustainable development. An issue is whether the public is interested in such information.

2 This strategy is based on a belief that people are able to change their behavior if they understand that it brings benefit. Tools how to achieve sustainable development are as follows:
- the motivation of changes in individuals´ attitudes through education, the development of social and environmental thinking;
- the search for instruments enforcing the respect to social and environmental factors - by means of direct restrictions or duties, and by means of indirect economic motivation.

Therefore, we will identify the most important groups which are interested in the disclosure of such information.

Identifying stakeholders

There are many different groups in a society which are monitoring a behavior of an enterprise in social and environmental areas, for example: shareholders, employees, customers and consumers, public authorities, government and governmental bodies, media, trade creditors and suppliers, neighbours and local communities, industry and trade associations, environmental organizations, non-participatory owners and lenders, other pressure groups[3].

Anyone from the above mentioned stakeholders can develop a pressure on a business to be managed in accordance with sustainable development and to provide social and environmental information to public. Stakeholders can use different instruments to enforce their demands based on economic pressure (if an enterprise fulfills expectations of stakeholders and informs about its environmental and social activities, it will bring a positive economic influence on it at the same time, e.g. an increase of sales). Furthermore, government and governmental bodies can demand some information by enacting the respective law; trade associations can condition the membership of an entity by fulfilling their demands, etc.

The key factors making enterprises monitor and publish social and environmental information are the following:

- compliance with legal regulations of individual countries, or international standards;
- competitiveness in branch;
- demand of customers;
- terms of credits, investments and grants.

2 NEW DIMENSIONS OF AN ENTERPRISE IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

The view on an enterprise is changing in context with the adoption of sustainable development conception. An enterprise is interpreted as a unit of economic, social and environmental dimensions[4] , and only the reproduction of these three dimensions allows its sustainable development. The social and environmental dimensions of business are closely related to the economic dimension. But it is not possible to say that all the results of environmental and social influences of an enterprise are included (directly or indirectly) into the reported performance and its financial position (ergo in traditionally perceived economic dimension).

Externality is an outside impact of an economic decision, or activity born by somebody else, not its originator. Externalities are gains or losses of other subjects that cannot be adopted by an originator (in case of gains – positive externality) or that cannot be claimed from him (in case of

3 Inspired by: Sustainability: the role of accountants, An initiative from the Institute of Chartered Accountants in England and Wales, 2004, ISBN 1841522945, page 30.

4 E.g. Bent, etc.: The Five Capitals Model, Kovanicová, D.: Sustainability accounting and reporting, paper from conference „Accounting in process of international harmonization"" Horní Bezděkov, 2008, ISBN 9788024513935, or Eklington, J.: Cannibals with Forks: The Triple Bottom Line of 21 st Century Business, New Society Publisher, Gabriela Island, BC.

losses – negative externality). It is clear that the internalization of these losses and gains is in the interest of sustainable development.

A multidimensional view on an enterprise shows us three lines of reporting – traditional economic dimension and besides it a new communication area including also social and environmental aspects of business.

3 RESULTS OF AN EMPIRICAL STUDY

An empirical study about the specific reporting of social and environmental business aspects was conducted as an initial part of this research. The aim of the empirical part of research was to identify the ways which enterprises use in environmental and social information reporting, and to determine whether such information are linked up with financial information (whether a reporting brings comprehensive, multidimensional view on an enterprise). At the same time the reliability and information potential of reported information was assessed.

The empirical study was made in all production enterprises listed on Prague Stock Exchange. The choice was not aimed at the selection of either random sample or characteristic sample of Czech enterprises, but vice versa, it was to choose the enterprises with an assumed high quality and standard of reporting. All assessed enterprises prepared their financial statements in compliance with the International Financial Reporting Standards. A lot of these enterprises use Environmental Management System and are holders of ISO 14001 certification.

Sources of the empirical study:

- information about the issuers of securities on Prague Stock Exchange http://www.bcpp.cz/,
- information presented on official web pages of individual enterprises.

Questions surveyed in the empirical research:

1. Has the information about environmental aspects been reported in the annual report?
2. If the answer to question number 1 is positive – is the information linked with the figures in the financial statements?
3. Has the information about social aspects been reported in the annual report?
4. If the answer to question number 3 is positive – is the information linked with the figures in the financial statements?
5. Has the information about environmental aspects been reported in a separate environmental report?
6. If the answer to question number 5 is positive – is the information linked with the figures in the financial statements?
7. Has the information about social aspects been reported in a separate social report?
8. If the answer to question number 7 is positive – is the information linked with the figures in the financial statements?
9. Has the information about social and environmental aspects been reported in a separate social and environmental report?

10. If the answer to question number 7 is positive – is the information linked with the figures in the financial statements?
11. Is the complex conception of a business concerning environmental area disclosed?
12. Is the complex conception of a business concerning social area disclosed?

Simultaneously it was surveyed whether the enterprises use Environmental Management Systems (EMS) on the basis of ISO14001.

Interpretation of the empirical research results

a) Separate periodical reporting on environmental and social information

One third of the total number of enterprises reported a separate environmental report; the relation to financial statements in annual reports was recognized only by two reports. At the same time, all those enterprises reported the information about environmental aspects in their annual reports, the information was often duplicate.

Separate environmental reports of investigated enterprises had almost no relation to economic dimension of the enterprises. The enterprises reported mostly only on their successes. The information was presented only in a verbal form. Comparable figures (from the previous years) of reported environmental indicators (in measured units) were not reported. And this fact significantly decreases the information potential.

Separate social reports have not been submitted by any enterprise.

b) Reporting of environmental and social aspects in annual reports

Two thirds of the enterprises reported the social and environmental information in their annual reports. The rest of the enterprises did not report such information with annual periodicity; an interesting fact is that two thirds of these enterprises use EMS.

As far as the relations between the social or environmental information and economic (financial) information are concerned, the financial statements of one third of the enterprises show a link to the environmental information, only one sixth to the social information.

However, the frequency of links is higher than in separate environmental reports.

The reported links to economic figures in financial statements are rather sporadic and are not systematically processed.

None of these enterprises comments on the environmental and social information in notes to their financial statements, such information is presented only in the other parts of their annual reports.

Enterprises have a strong tendency to report only positive information (almost as advertisement) and we can justifiably be worried that such information is not complete. Enterprises are not motivated to present comprehensive information, they are motivated to create their positive image. It is not exceptional that an enterprise presenting its favourable and positive approach to sustainable development is known from mass media for its problematic attitude to the environment. We suppose that a closer link of such information to real numbers in their financial statements would bring more truthful and reliable information.

Our empirical research univocally confirms the lack of links between the information on economic, environmental and social dimensions of a business. This lack weakens the potential of the information that is presented separately.

An issue of multidimensional, comprehensive view on an enterprise is widely solved neither in practice nor in the expert literature. It can be stated that most publications concentrate on this issue only from the position of a managers. The absence of the link to financial accounting and reporting is often explained that financial accounting is linked with national or international accounting standards, and these standards do not facilitate separate recognition and reporting on these issues. This idea is true only partially. Financial accounting needs to be viewed as an instrument which is developing in many aspects and which, with the help of information technologies, is capable of flexible adaptation to the information needs of accounting information users. Furthermore, financial accounting is the only instrument by which a comprehensive view on an enterprise can be reached (even if at present, conventional financial accounting views a business only from an economic side).

In the following part of our research we will try to assess whether a comprehensive view on an enterprise based on financial accounting and reporting is possible. We will focus on the assessment of "applicability" of financial reporting system regulated by International Financial Reporting Standards (IFRS) for this purpose.

4 ADVANTAGES OF DISCLOSING ENVIRONMENTAL AND SOCIAL ASPECTS OF A BUSINESS IN ANNUAL REPORTS AND THEIR INTERCONNECTION WITH ECONOMIC INFORMATION.

a) Comprehensive view of an enterprise

A basic advantage of reporting on environmental, social and economic dimensions in one document is that a comprehensive view of an enterprise can be achieved. The presentation of the information in an annual report enables to specify the influence of environmental and social aspects of business on performance and on financial position of an enterprise, and to assess the future risks connected with these aspects.

And, on the contrary, separate reporting on environmental and social activities results in an independent report (reports) that separates in fact closely connected areas.

Critical question which we will attempt to answer in the following text is whether financial accounting and reporting (within traditional standardized approaches) are prepared for this new role.

b) Higher reliability of information presented in financial statements

Higher reliability of data reporting on the environmental and social factors - in connection with financial accounting and reporting is also an advantage as the data are independently audited (an audit is either obligatory or initiated by an enterprise).

Critical question is whether an auditor is ready to verify environmental and social issues.

5 REFORMULATION OF FINANCIAL ACCOUNTING AND REPORTING AIMS, EXTENSION OF FINANCIAL ACCOUNTING SCOPE

Financial accounting, as described in national and international accounting standards, aims to present a true and fair view of an entity. Such "true and fair view" traditionally means that the accounting information truly informs about financial position of the entity and its performance and such information allows to estimate the progress of these two aspects of business success in the future. At present financial accounting concentrates only on the economic dimension of business activities connected with business aim - to maximize the profit and market value of an enterprise (further in the text the present system of financial accounting will be called "conventional accounting"). Conventional accounting (regulated by national and international accounting standards) still views an enterprise only as "a machine bringing profit" and does not take into account the impacts of the enterprise's activities on the society and environment. This approach may satisfy only narrowly formulated aims of investors (even though this statement is not generally applied) but it often conflicts with the interests and information needs of other groups of accounting information users.

6 CLASSIFICATION OF ENVIRONMENTAL AND SOCIAL ACTIVITIES IMPACT AND ITS LINK TO CONVENTIONAL FINANCIAL ACCOUNTING

The impacts of environmental and social activities of an entity can be divided into two groups:

1. Impacts projected into conventional financial accounting (transactions recognized by the conventional definitions of existing standards that affect assets, liabilities, equity, revenues and expenses).
2. Impacts not projected into conventional financial accounting (do not affect assets, liabilities or profit). These impacts are called externalities (defined above) and in most cases they cause the incompleteness of the data reported in conventional financial statements.

Ad 1. Information that can be monitored separately in conventional accounting

The first group of impacts is in most cases easy to separate by means of suitable analytical accounts and to disclose either directly in financial statements or in notes to financial statements. Such information can easily be verified by an auditor, and thus will carry a high level of reliability and comparability (in the time and also among enterprises).

In conventional accounting regulated by IFRS the following data can be recognized and monitored: social and environmental expenses, environmental investments, liabilities and receivables connected with social and environmental aspects.

a) Social and environmental expenses

Primary expenses can be recognized and monitored by the appropriate configuration of analytical accounts. Social and environmental expenses are particularly: disposal or waste recycling costs, elimination of products of combustion expenses, expenses on preventing environmental damages, expenses on environmental damages disposal, expenses on social activities (e.g. requalification courses), penalties imposed for environmental damages. Penalties and fines should be reported separately as they do not positively contribute to the environment, unlike the other above mentioned expenses.

Monitoring of secondary social and environmental expenses can be carried out by managerial accounting.

Complex recognition of these expenses is the first condition to their subsequent reduction that will positively influence both the total efficiency of an enterprise and the environment.

Particular definition of expenses related to the environment and social sphere is always to a certain extent controversial and dependent on each enterprise which sets its clear definition. However, the basic classification of the environmental and social dimensions should be standardized to enhance the comparability of the information among enterprises.

Consistent with the accrual principle, environmental and social expenses should be adopted from the period they arose in. The correct estimation of future expenditures related to the present events is vital. The enterprise should create provisions on those future environmental and social expenditures.

b) Environmental investments

It is necessary to distinguish between the expenses on sustainable development and the costs on long-term tangible or intangible ecological assets acquisition or subsequent expenditures for such assets appreciation (their increased capacity, useful life, efficiency, etc.). In conventional financial accounting these expenditures are recognized either as long-term assets or as the expenses that decrease net profit in that period in which they are spent in case the criteria for assets recognition settled in conventional accounting are not met. In both cases the expenditures should be disclosed separately in notes to financial statements.

Let us go to the point:

An asset is in IFRS defined as a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity. However, benefits are perceived only narrowly, from the economic view point.

A practical example of an application of general asset's definition is the prescribed approach to environmental investments in IAS 16. Equipments that were acquired for better safety or for environmental protection but that do not increase future economic effects of other parts of long-term assets - but only allow their running due to legislative requirements - should be measured only in the recoverable amount (as defined in IAS 36).

The costs exceeding the recoverable amount should not be capitalized and should be account as expenses (the prudence principle applied). There is a question– if an enterprise acquires an ecological equipment not needed for its business (e.g. this equipment is not required by law) it will be very difficult to prove the value from use of such installed equipment. Also the fair value of the installed equipment (if available) will probably be smaller than purchased costs. The restriction on capitalization of purchased cost or the application of IAS 36 can have a negative impact on decision making whether to acquire such asset . In such a case, environmental and economic criteria are in contradiction.

The rules for the recognition of internally generated intangible assets (see IAS 38) are even stricter.

c) Recognition and measurement of liabilities and receivables connected with the environment and social aspects

IFRS require that liabilities originated from ecological and social activities of an enterprise are recognized and reported in time. These liabilities are important for the assessment of creditor's risks (see IFSR Framework and IAS 37). IFRS simultaneously restrict liabilities to be compensated with receivables from the third party (e.g. from insurance). IAS 37 also requires the duty to recognize and report constructive obligation.

Contingent liabilities should be included in notes to financial statements.

It is evident that the definition of liabilities (IFRS Framework), and the requirement to reporting of provisions (IAS 37) and contingent liabilities reporting in accordance with the accrual and prudence principle is a good base for separate measuring and reporting of liabilities related to the environmental and social issues.

d) Grants and tax reliefs

An important condition to get a grant on social and environmental programs is to monitor and prove the efficiency of the grant. An entity must obtain such information from financial accounting. It is appropriate to report the titles and amount of grants and tax reliefs within the environmental and social reporting. The expenses that are fully or partially compensated from the grant must be monitored separately. Providing of such information in accounting system is a standard practice.

However, in case that a grant is used as a compensation of lost profits (e.g. a grant requires an entity not to engage in specified activity) it is appropriate to evaluate also the lost profit from e.g. no engaging in specific activity, to apply a multidimensional approach. The lost profit could be a lost opportunity cost that cannot be recognized and reported in financial conventional accounting (though managerial accounting is able to work with this category).

Ad 2. Social and environmental aspects of business that cannot be monitored in conventional financial accounting (externalities)

Externalities (definition above) are social and environmental consequences of business which cannot be recognized in conventional financial accounting. General view on the phenomena cannot be identified as there is a variety of them. Externalities are pragmatically divided in two groups: positive externalities and negative externalities.

a) Positive externalities

Positive externalities are e.g. counterbalance, gains to environmental investments (mentioned above) which are often recognized as the expenses in that period in which they were spent (see IAS 16 and IAS 38), or counter (gains) from social investments (expenses on employment of disabled people, expenses on education of employees, on social development of a region, etc.). Some of these gains can be evaluated (measured). They should be reported as a complex of profits or losses quantified from conventional financial accounting. From the multidimensional point of view they are the "missing" part of profits or losses.

If the expenditures to social and environmental investments decrease the profit of an entity because they are quantified only by conventional financial accounting and the entity is not able to show the effects from such investments, it can be demotivating for such an entity to spend such expenditures.

If externalities cannot be measured they should be verbally described.

b)Negative externalities

An entity "pays" for achieved profit (revenues) with polluted air, water, decreasing ozone in the atmosphere, expensive disposal of waste. But these negative effects of business cannot be monitored in conventional accounting as they are not paid by an entity in fact. The whole society bears these effects.

Remark: Society (governments) have been trying to internalize these externalities in the last decades. Governments try to internalize the negative externalities on an entity by imposing direct payments or levying taxes (e.g. taxes on disposal of future waste, payments for air pollution, etc.), and impose undirected economic instruments (e.g. emission permission). Such measures cannot be applied in all cases and even if it is possible the total devastation cannot be recovered. It is nearly impossible to evaluate some damages which are in many cases irreversible.

Generally can be said that the quantification of these externalities is difficult. If they were measurable in money (remarks above), the society would internalize them to an entity.

In such cases the "accounting based on physical measuring units" which expresses, for example, the volume of product combustion released into air can be recommended. The data should be in all cases supplemented with comparable data from the last year (alike the information from financial statement). If the values increase there is a clear signal that sustainable development is endangered. In literature this approach is named "The Environmental Sustainable Cost Aproach"[5] . This approach offers futher improvements –a connection with economic data, e.g. the comparison of an amount of negative externality with an amount of production or the comparison with revenues. An index indicator allows abstracting from the changes in the volume of production. The other approaches "The Inventory Approach", "The Resource Flow/Input-Output Approach" will not be mentioned due to the extent and aim of this paper.[6]

7 DISCLOSURE OF FUTURE CONCEPTION OF AN ACCOUNTING UNIT AND THE DISCLOSURE OF USED METHODS INCLUDING ALL THREE DIMENSIONS OF BUSINESS

In the previous two parts of this paper. We have discussed the economic, social and environmental aspects of business and looked for possible ways how to report all those factors and their interconnections.

Reported information would not to be complete without the disclosure of entity´s policy, its approaches to recognizing and reporting on particular elements, its methods of measurement, presentation and reconciliation of changes between the beginning and the end of the current period and, last but not least, its resort strategy and tactics concerning its future development. Such information is common, by IFRS required part of financial information in annual reports. In conventional accounting such information concentrates only on economic information. If we want to include in an annual report also the information about environmental and social dimensions of a business and connect this information with economic information, we should disclose

5 Gray, R., Bebbington, J.: Accounting for the Environment, second edition, SAGE, reprint 2003, ISBN 0761971368.

6 In detail e.g. in: Gray, R., Bebbington, J.: Accounting for the Environment, second edition, SAGE, reprint 2003, ISBN 0761971368

the information in the same structure as the information about economic dimension. Thanks to the information a user of accounting information (respectively sustainable accounting information) can have a complete, multidimensional view of the present situation but also of the future development of an entity, its future opportunities and risks.

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