

# NON-FINANCIAL INDICATORS IN THE VALUATION PROCESS – CURRENT TRENDS

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**Abstract:** This article is motivated by the needs to make non-financial indicators more accessible to and clearer for both general public and experts, especially because of the rapid expansion of non-financial indicators and a complete absence of publications that would cover this topic.

The main aim of this article is to emphasize the growing influence and contribution of the non-financial indicators related to social and environmental changes in society, which has a significant impact on individual companies. Furthermore, the purpose of this study is to define the key terms and show how they relate to the non-financial indicators. The article also aims to describe the importance and the use of the non-financial indicators and define the future development in the non-financial indicators.

Measuring the non-financial indicators of a company is a new practice. The need to include the non-financial aspects in the business's evaluation has forced economic development, during which the environment has become highly unstable and characterized by global competition and rapid technological progress. The economy has turned into a very tough competitive environment. Even for the purpose of valuing an enterprise, it is not enough to compare its activities only from one point of view. The financial indicators themselves seem insufficient, mainly because they are largely historical and may not be enough for the analysis of the future development. The contribution of this paper is primarily the determination of the non-financial indicators and their influence on society and companies. Non-financial indicators are compared to the financial indicators, as it is so far insufficiently addressed topic. Systems of evaluating the performance of companies based on a combination of indicators (financial and non-financial) could become a tool for managing and enforcing a corporate strategy in the short term and especially long term.

**Keywords:** Non-financial indicators, critical success factors, balanced scorecard, corporate social responsibility, key performance index.

**JEL Classification:** G32.

**APA Style Citation:** Hálek, V., Borkovcová, A., & Hašek, F. (2020). Non-financial Indicators in the Valuation Process – Current Trends. *E&M Economics and Management*, 23(1), 60–74. <https://doi.org/10.15240/tul/001/2020-1-005>

## Introduction

In a global environment, where a major part of a business operates in an international environment, financial indicators seem insufficient, especially because they are

historical indicators; they are unstable and do not reflect future developments. The instability in the environment of competition urges businesses to introduce a strategy focusing on the critical areas and factors that have impact

on the business survival in the long term (He & Lu, 2018; Peršič, Janković, & Krivačić, 2017).

Measuring the performance of companies must be based not only on the financial indicators but increasingly also on the non-financial ones. The financial indicators are best suited for use in strategic management, where they indicate whether the implemented strategy helps to improve. The non-financial indicators determine the short-term direction of the organization and their identification is usually quite complex and sometimes subjective. The non-financial indicators are usually determined based on the experience and knowledge of the managers of the company (Režňáková, Karas, & Strnadová, 2017).

Performance assessment systems based on combined sets of both financial and non-financial indicators have become a tool for managing and enforcing a corporate strategy in the short term as well as in the long term. (Altman, Sabato, & Wilson, 2008) In order to achieve this, one needs a tool that will show current business development. The direction of the business should accomplish its vision, mission and long-term goals, and a set of appropriately combined financial and non-financial indicators – an assessment system that can also be comprised of several assessment sub-systems.

### Definition of the Non-financial Indicators

Indicators are of non-financial nature (they cannot be expressed in units of currency). They can be measured easily or be practically non-measurable. They show the current and a potential competition position of business. They are predicates of future financial indicators. Their main problems are poor comparability of reporting, accuracy and a lack of common approaches to their verification (Mynhardt, Makarenko, & Plastun, 2017). It appears that the disclosure of this information by the companies themselves depends on the fact whether the information is positive or negative. The indicators sharing the positive information share 53% of companies according to A. Calu's 2015 survey, but those that deliver the negative information are only 33% shared (Calu, Negrei, Calu, & Viorel, 2016).

The tying of the long-term non-financial indicators to the top financial goals, which are part of a company's vision, makes a considerable contribution to high performance

sustainable over the long term and enhances competitiveness (Narkunienė & Ulbinaitė, 2018).

### Classification of the Non-financial Indicators

Several opinions exist on how the non-financial indicators should be classified. However, some classifications are contaminated by excessive generalisation, such as the classification into temporal, special and material, or overlaps with other field of expertise, such as the classification into analytical versus synthetic. Besides these two types of classification, other types are also available.

Ideally, the non-financial indicators should be divided into two classes (Hálek, 2016):

Hard:

- Measurable indicators that are quite easy to measure (a higher number of employees, less time to serve a customer).

Soft:

- Measurable indicators that are difficult to measure.
- Usually measured through surveys (an actual increase in employee qualification, innovations).

The non-financial indicators must show a causal link to the company's long-term, strategic goals and performing well in the metrics must be one of the goals (Choong, 2013). The impact on human rights in the activities of the organization, particularly in African and Asian countries, should be also mentioned. (Hess, 2019; Laskar & Maji, 2017).

The non-financial indicators must be defined in such a way as to allow clear judgements whether or not an indicator has changed over the time, either for better or worse. The non-financial indicators are often focused on social aspects or the environment (Costa & Torrecchia, 2018).

If a change in soft indicators cannot be captured directly (the company is not able to define the soft metrics), a hard indicator must identify the change, which reflects the change in the soft metric. Then the hard indicator operates as a substitute indicator. Balanced scorecard is applicable in this case (Kang, Chiang, Huangthanapan, & Downing, 2015). This method includes not only the financial indicators but also other non-financial metrics (Gallo, Timková, Tomčíková, & Mihalčová, 2018). Balanced Scorecard, and especially the

information it brings, can also be very beneficial for the so-called Corporate Social Responsibility (CSR) (Gavurova, 2011; Asiaei & Bontis 2019). CSR is a set of ethical and social commitments that go beyond legal obligations. If a company chooses a CSR strategy that is completely voluntary, it can strengthen its business legitimacy in foreign markets. (Hadjikhani, Lee, & Park, 2016).

### Financial Indicators

They show the impact of company's policies (procedures) – they have historical importance for assessing the return on investment, for example. They are not interchangeable with the non-financial indicators, but links exist between these two groups. The financial indicators are a consequence of changes in the non-financial indicators (Evans, 2017; Raghunandan, 2019).

Even though companies in the Czech Republic focus on the non-financial indicators rather rarely, a growing trend can be observed over recent years, particularly in international companies. The Czech Republic is becoming to follow western countries, in which two-point-of-view assessment (using both financial and non-financial indicators) is a regular practice. In some countries, companies specialise in measuring the non-financial indicators, and the know-how of these companies lies in their own systems of assessment (Soltes & Gavurova, 2015; Kislingerová, 2011). The fact that the financial indicators are inadequate has been also confirmed by other research studies, which mention, for example, insufficiency when the company focuses on environmental or social impacts (Docekalova & Kocmanova, 2015).

### Why the Financial Indicators are not Enough

The main problems connected with using solely the financial indicators as a corporate assessment system are specified below (Hálek, 2016):

- Both absolute and relative financial indicators cannot be calculated until the end of the accounting period and as such they are of historical importance.
- They are indicators with a delay.
- They show consequences rather than causes, particularly with respect to negative phenomena.
- They are inappropriate for predicting future developments and creating strategies – they lack any evident links to corporate strategy.

- Focusing exclusively on the financial indicators results in neglecting the long-term corporate goals and concentrating on the short-term ones.
- They provide a one-dimensional view of corporate operations.
- They lack transparency and are unreliable – they have to be subjected to a thorough analysis and checked against the reality.
- If used for expressing goals, there is a risk of distortion by management whitewashing the results (whitewashing accounts may work in the short term but will fail in the long term).
- They cannot be used for assessing some corporate indicators, such as customer satisfaction.

To sum up, the primary application of financial indicators lies in generating historical data. However, pinning one's attention only to the financial results leads to misunderstanding the given field of business, which is unsustainable for the long term (Altman, Iwanicz-Drozdzowska, Laitinen, & Suvas, 2016).

At present, the general public cannot be satisfied only by using the information contained in the financial statements attractiveness (Petryk et al., 2018).

The gap in this topic lies in the ratio of the strengths and weaknesses of the non-financial indicators to their use as a complement to the financial indicators. The benefits of the non-financial indicators will also become increasingly important with an increasing emphasis on the approach focusing on people in companies and their social image. Another aspect of the increasing importance of these indicators is the ever-increasing interest in the environment. All of this causes a fact, that the gap between the importance of financial and non-financial indicators is decreasing.

The results of a survey involving more than 1,800 questionnaires conducted in the Czech Republic and Poland show that innovative corporate culture is better than bureaucratic or supportive culture (Sokolova et al., 2018). Managers should promote an innovative culture that includes, among others, a value system that should include current non-financial indicators.

In this article we focused mainly on small and medium-sized enterprises (SMEs) because one of the priorities of the Czech Government is to support the competitiveness of small and medium-sized enterprises, representing more

than 1 million economic entities in the Czech Republic, ie 99.84% of all entrepreneurs. At the same time, they employ over 1.8 million employees, accounting for about 51% of exports and about 56% of imports. The small and medium-sized enterprises play an important role in the development of the endogenous potential of individual regions in the Czech Republic, as they are significantly business and socially connected with the region and form the regional business backbone. (BusinessInfo, 2019). Overall, SMEs account for 99% of all businesses in the EU (Europa, 2019). The non-financial indicators are useful and unforgettable, but they are not sufficient in themselves. They are often subjective, incalculable, and their quality reflects people's experience and knowledge. Non-financial may include, for example, credibility or knowledge. This means that the existing non-financial indicators are incomplete, but their needs are strongly individual (Cheng, 2012).

Concepts like CSR, KPI and CSF are from the authors' point of view the key non-financial indicators in terms of degree of explicitness. Their selection and use in a particular company

is then determined by the subject of business, knowledge of management, the importance of processed data and the interpretation of their outputs to the external environment.

**SME**

Small and medium-sized enterprises (SMEs) are defined in the EU recommendation 2003/361.

The main factors determining whether an enterprise is a SME are (Europa, 2019):

- staff headcount;
- either turnover or balance sheet total.

These ceilings apply to the figures for individual firms only. A firm that is part of a larger group may need to include staff headcount/turnover/balance sheet data from that group, too.

Stimulating entrepreneurship and innovations, SMEs promote Europe's competitiveness, economic growth and employment. Such businesses generate 75% of GDP across the EU. It is expected that in the future will these organizations play a major role not only in the economy but also in innovation (Venckeviciute & Subaciene, 2015).

**Tab. 1: SME**

Company category	Staff headcount	Turnover	or	Balance sheet total
Medium-sized	< 250	≤ € 50 m		≤ € 43 m
Small	< 50	≤ € 10 m		≤ € 10 m
Micro	< 10	≤ € 2 m		≤ € 2 m

Source: Europa, 2019

**Corporate Social Responsibility (CSR)**

CSR is a voluntary integration of social and environmental aspects in corporate operations and interactions. These aspects may be one of the company's chief activities of interest and may even be above the one which is required by laws and regulations. CSR has a significant and very positive impact on the financial performance of the company, especially in developed countries (Manzoor, Rehman, Usman, & Ahmad, 2019). One of the groups of companies that should place a greater emphasis on CSR, not only in developing countries, are insurance companies (James & Pelumi, 2019; Amarah & Langston, 2017; Dumay, Frost, & Beck, 2015).

**Critical Success Factors (CSFs)**

CSFs are the factors that express clear failure or success. They are employed to judge whether an objective, either short-term or long-term, has been achieved or not. They may be related to employee qualifications, policy settings, or processes or technologies (Ashworth, Tucker, & Druhmman, 2019).

Alternatively, the critical success factors can be defined as a set of the key areas of company's activities in which the company has to achieve the desired results in order to achieve corporate goals and fulfil a corporate mission. This idea is based on the assumption that each company has a mission that describes the

reason for its existence and its future direction and reflects the company's values and vision. In order to accomplish the mission, the company needs to make sure that everything works well in the key areas rather than just achieve the objectives defined for the accomplishment of the mission.

In accordance with the CSF concept, it is quite sufficient to define and choose just those phenomena (factors) which are most relevant to the success of the company or a specific plan or scheme. As a result, the number of the phenomena for monitoring can be reduced to units (usually 4 to 7), instead of monitoring tens, hundreds or thousands of phenomena, which would be ineffective. Monitoring a large number of phenomena would not make it possible to make adequate assessments and draw conclusions.

Main characteristics of CSFs (Hálek, 2016):

- are practicable;
- can be influenced;
- are measurable;

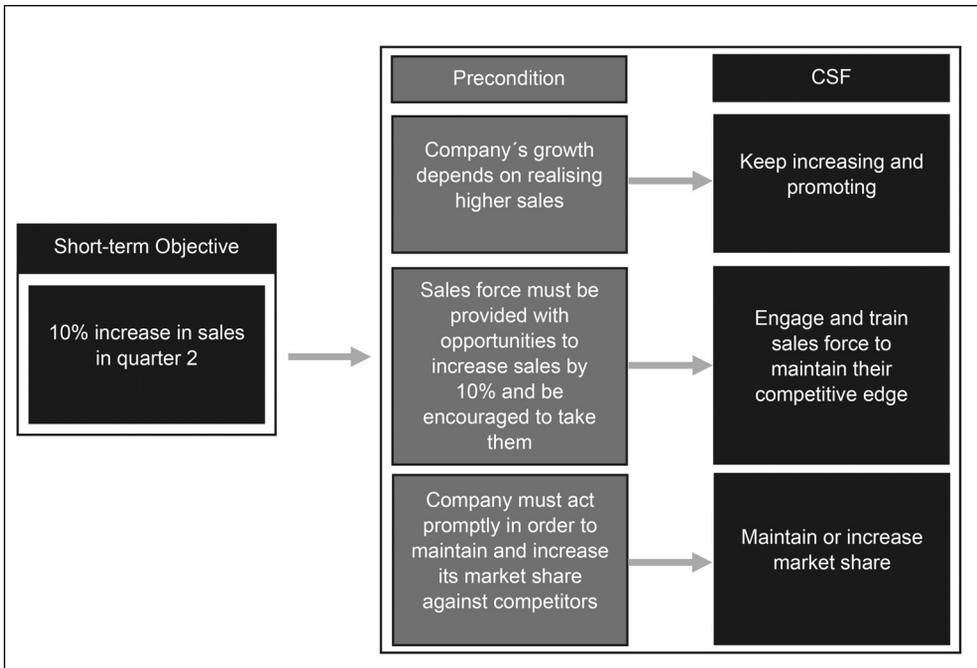
- encourage pro-activity;
- are independent of each other, and
- are in accordance with the company's mission and vision.

CSFs can be also classified into (Hálek, 2016):

- internal – these are under the control of the management, such as sales force training;
- external – these cannot be controlled by the management, such as the price of petrol;
- monitoring – these focus on the current condition of the company, such as observance of standards, and
- adapting – these focus on the company's growth and development.

According to the CSF concept, a company should first identify its CSFs and pay most attention to them so as to put them into practice because this will facilitate fulfilling strategic goals, accomplishing the mission and implementing the vision. The difference between the company's goals and CSFs is

**Fig. 1: Example of defining CSFs using short-term objective**



Source: own based on Hálek (2016)

shown in Fig. 1. It is normal that several CSFs are assigned to one goals and vice versa.

For each business, CSFs are limited to the number of areas in which the results, if satisfactory, ensure that the business is successful in the competitive environment. In other words, these are the key areas in which everything must work well if the company is to fulfil its resolutions and intentions. CSFs follow from the results of a group analysis of dominant influences.

### Key Performance Indicators

Key Performance Indicators (KPIs) are indicators associated with a process, service, or the whole enterprise and express the required performance (quality, efficiency or economy). In other words, they quantify goals and enable strategic performance to be measured. The KPI system reflects the Critical Success Factors (CSF) (Závadský, Korenková, Závadská, Kadárová, & Tuček, 2019).

KPIs can be defined as indicators that help a company to achieve its objectives by defining and measuring the progress in these objectives. If you have a look at KPIs, you will know whether you are approaching the objective or not. At the same time, you will see (1) the progress made as yet and (2) the progress yet to be made to reach the objective (Badawy, El-Aziz, Idress, Hefny, & Hossam, 2016).

### Difference Between CSFs and KPIs

The CSF aims to identify what has the key importance to the company in a specific area with respect of strategic management, such as increasing customer satisfaction, whereas the KPI is an indicator which can be connected with that CSF – a number of warranty claims or a number of re-purchases (Závadský et al., 2019).

The important thing with KPIs is that the metrics are measurable, which requires a data base as a source of data for calculating the indicators. This may require increased IT costs as a result of automated collection of data in a given segment of the business (Sari, 2015).

For example, stock turnover can be calculated quite easily using accounting data but calculating the planned use of machines may be more difficult. Most businesses potentially have a broad data base but lack sufficient means for data collection, let alone data mining.

### VM Model

Other terms besides CSF and KPI that are used in connection with the non-financial indicators are defined below (Hálek, 2016):

Vision:

- Is an ideal of the future target condition of business, expressed in a few sentences or just a single sentence.

Mission:

- Expresses the meaning of the business existence for the society and the purpose for which the business exists (what the business provides).

Long-term goal:

- Generally speaking, a goal is a desired future condition, and long-term goals are those to be achieved in a period longer than 1 year.
- They are not of operative nature.

Short-term objective:

- Objectives to be achieved in several months up to 1 year.
- They are of operative nature.

Metrics:

- Provide an answer to the question what specific phenomena are to be measured.
- Define measurement parameters and all calculation parameters and formulas.

Measurement:

- Provides answers to the questions: where, how often and by which will be the measurement performed.
- Provides specific (quantitative) results.

All these terms (including CSF and KPI) are closely related to the assessment systems discussed in the following chapters.

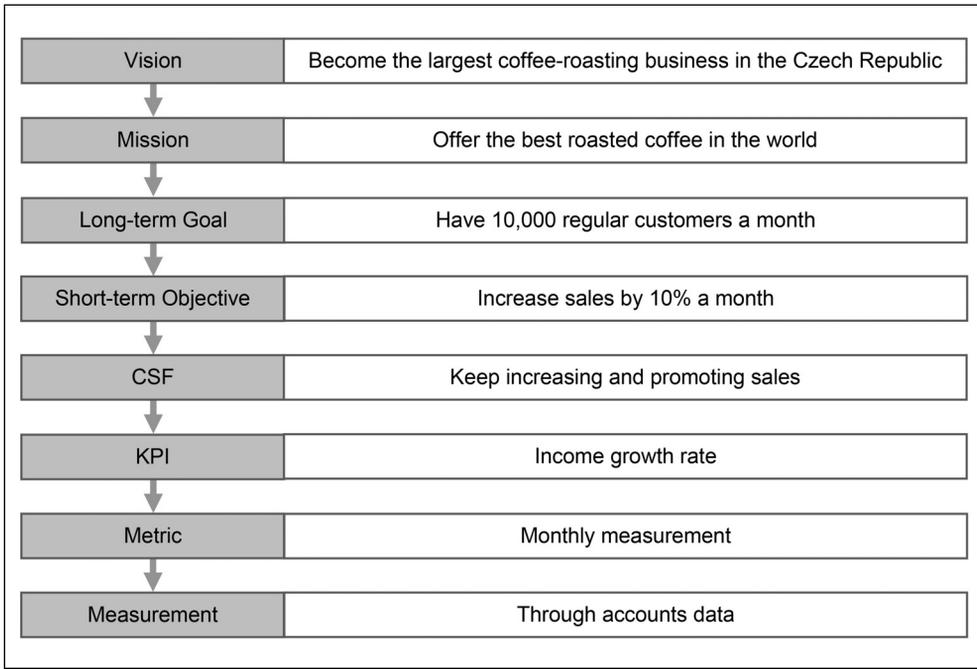
### Assessment System

A comprehensive set of methodologies (procedures) to measure specific non-financial (as well as financial) indicators. A vast majority of assessment systems are mixed systems that take account of both non-financial and financial indicators (Aluchna & Roszkowska-Menkes, 2019).

The assessment systems are classified into the following categories (and the micro economic category splits into sub-categories):

1. Microeconomic level:
  - systems without fixed KPIs and CSFs (not full-fledged systems);
  - systems with fixed KPIs and CSFs (full-fledged systems).
2. Macroeconomic level.

Fig. 2: VM model and example source



Source: own based on Hálek (2016)

**VM Model**

The VM model is to describe the links between the terms vision, mission, long-term goal, short-term objective, CSF, KPI, metrics, and measurement. Examples are provided as well.

The VM model is an aid for identifying the non-financial (as well as the financial) indicators, the CSFs and the KPIs to be measured. The identification process starts from the vision and continues up to the metrics (measurement). As illustrated in Fig. 2: Example of Defining CSFs for Short-term Objective, it is quite likely that a single short-term objective involves several CSFs (and the adequate number of KPIs, metrics and measurements).

**1. Methodology and Goals of this Article**

The initial research into the use of the non-financial indicators in practice began by wider research and dividing this topic on ways and tools to identify bankruptcy in a company. The

very foundation was to obtain input data for both financial and non-financial analysis. Economic data of 1,000 companies operating in the Czech Republic were collected. Then all available information was processed first in the form of financial analysis. More detailed data were collected from a selection of 100 companies, which met the necessary data set for this research. The data became the foundation for assessing the economic condition of companies using the CCB (corporate and commercial bank) bankruptcy model, which was created for the purpose of recognizing bankruptcy risks with a focus on companies in the Czech Republic. Part of the initial research was the question of whether the financial analysis indicators are fully sufficient to assess bankruptcy. The detailed methodology of the initial research is described above for information purposes only. For the purpose of this article, only the non-financial indicator part was used. The authors had at their disposal a case study from ČEZ

and Monelez International as a source in the definition of methodological limits.

This excluded the question of the non-financial indicators from the financial analysis as a separate component. In the framework of this independent processing, attention was focused on the definition of the non-financial indicators, their anchoring in the existing professional literature, while identifying methods and procedures for their determination, evaluation and interpretation as an independent and integral part of the analysis, not only in a bankruptcy situation.

Based on these facts, the following objectives were set:

1. To emphasize the growing influence of the non-financial indicators related to social and environmental changes in society.
2. To define terms and show how they are related to the non-financial indicators.
3. To describe the importance and the use of the non-financial indicators.

Research questions were identified:

RQ1: What is the current meaning of the non-financial indicators?

RQ2: What is the link between the non-financial indicators and the current trends? Especially between the microeconomic trends in sociological (HR issues) and the macroeconomic trends in environmental parameters.

To answer RQ 1, contextual interviews were used, as the best method of investigation about the importance of metrics by non-financial indicators.

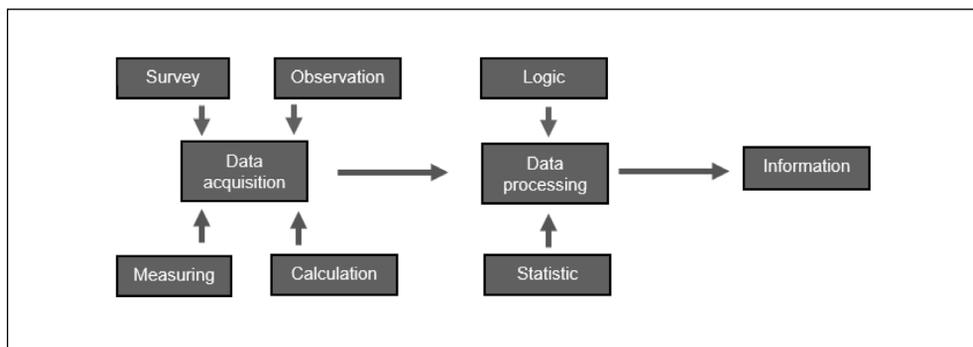
## 2. Current Situation in Defining the Non-financial Indicators in the Czech Republic and EU: Practical Examples

Is it relevant to ask when business should start to measure the non-financial indicators or at what point of doing business the non-financial indicator methodology should be introduced? The general rule is that measuring the non-financial indicators is relevant for medium-sized and large businesses or even for small businesses if they operate in an international environment and expect to grow into medium-sized business. The following diagram illustrates the basic process visualization of the research findings, commonly used in social sciences.

### 2.1 Corporate Social Responsibility CSR Reporting

The top responsible corporation award has been annually organised by the Business for Society Platform in the Czech Republic since 2004. The award is the only ranking in the Czech Republic recognizing and evaluating the CSR strategies and projects in the long term. Initially, only focused on corporate philanthropy, the original concept and purpose of the ranking has grown to appreciate responsible corporate behaviour in a number of categories reflecting all the fields of CSR. However, the underlying idea remains the same: to promote responsible business in the Czech Republic and motivate more companies to introduce CSR (Škodová Parmová & Dvořáková Líšková, 2019).

Fig. 3: Basic process visualization of the research



Source: own

## 2.2 CSR at ČEZ Group

ČEZ is a large corporation. Therefore, it serves as an illustrative example of the use of the non-financial indicators and their benefits. ČEZ is a regular winner of the Top Responsible Corporation Award. The 2014 Annual Report of ČEZ reads:

“An integral part of our corporate culture, philanthropy characterizes ČEZ Group as a long-term supporter of education, culture, sports, and community life through corporate donorship.”

### Donorship

ČEZ Group continued to fulfil one of the pillars of its social responsibility through active donorship in 2014. For the eleventh time, it defended its first place in the TOP Responsible Corporation competition, organised by the Business for Society Platform, in the Most Generous Corporate Donor 2014 category based on the volume of donations.

ČEZ Group companies donated CZK 327.6 million in 2014, with direct donations accounting for CZK 158.0 million and contributions to the ČEZ Foundation amounting to CZK 169.6 million. This shows that ČEZ gets involved in donorship beyond its duties and understands it also as a channel for marketing. This is a good example showing that CSR activities do entail benefits for the company involved.

However, CSR has both benefits and darker sides. Some critics of CSR claim that for most companies CSR is a tool of diverting their attention from the ethical aspects of their business or covering up harmful business practices. This duality certainly makes it more difficult to evaluate companies because we must ask ourselves where to draw the line of ethics and what business practices should be considered harmful. It is necessary to make a rational assessment.

## 2.3 CSR at Mondelēz International

Mondelēz International is an international concern producing sweets, food and drink. Because of its size, the company just has to be involved in CSR and therefore has made CSR part of corporate marketing and image as many other companies have. Being also a marketing channel, the company's official Facebook profile often presents videos and news from various developing countries that report on supporting local communities and children in education, for instance. Such support is certainly very praiseworthy conduct.

## 3. Results

In general, the measurement of the non-financial indicators should start at the level of medium-sized enterprises, or even at the level of small enterprises, according to the EU classification (Commission Regulation (EC) No 800/2008, 2008). At the level of large enterprises, the measurement of the non-financial indicators should be a matter, of course, as well as in state-owned enterprises.

The principle of including social and environmental aspects in corporate strategy (besides the primary focus on generating profit) is also referred to as triple responsibility. Under this principle a company stands on three pillars: economic sphere, social sphere, and environmental sphere.

Several principles divided by triple responsibility are as follows:

Economic sphere:

- no corruption;
- transparency;
- good relationships with customers, shareholders and business partners;
- protection of intellectual property.

Social sphere:

- philanthropy;
- strict observance of human rights;
- observance of work-related standards.

Environmental sphere:

- environmentally friendly production (certification under ISO 14000, for instance);
- environmental policy at all levels;
- protection of the natural resources utilised.

### 3.1 Drawbacks of the Non-financial Indicators

The drawbacks of the non-financial indicators are as follows:

- identification of casual links to corporate goals;
- measurement of some non-financial indicators is complicated;
- (in)comparability of the non-financial indicators among businesses;
- assessment systems are difficult to implement;
- units of measure.

#### Identification of the Casual Links to Corporate Goals

It is necessary that the causal link of each non-financial indicator to corporate goals to be identified. Unfortunately, it is often the case that

no causal link to corporate goals is specified at all. This often results in choosing the wrong non-financial indicators and focusing on wrong goals, which in turn makes the application of non-financial indicators to the company meaningless and unnecessary.

However, identifying the causal links is not as problematic as it might seem if the VM model, defined by the authors, which defines the critical success factors and key performance indicators, is applied.

### **Measurement of Some Non-financial Indicators is Complicated**

Some non-financial indicators can really be rather complicated to measure – however, in essence, it is never impossible because it depends on the amount of potentially invested capital (money, human capital).

A general rule is that no disproportionate means should be spent on measurement where the benefit is not certain. The benefit should become clear with the use of the VM model. By this we should be able to make a tentative rational decision whether investing means in the measuring of the non-financial indicator is worth it or not.

### **(In)comparability of the Non-financial Indicators among Businesses**

The systems of the non-financial indicators are very difficult to compare among businesses as every system is unique because it is based on the current needs of the company. Even if two businesses are measured by a completely identical assessment system, this does not automatically imply comparability. Some assessment systems carry assessor's subjective bias and thus the results would only be comparable if obtained from the assessments made the same assessor.

The CSR comparison is an exception to this rule but even with CSR it holds true that the circumstances of the company as such (even if just on the basis of financial reports) should be taken into account.

### **Assessment Systems are Difficult to Implement**

The implementation of the assessment systems is problematic because of the following reasons:

- time-consuming;
- initial costs;
- scepticism of the people involved.

The implementation of some assessment systems may be a rather time-consuming process (and take even several years). Similarly, designing an assessment system may take a while (one year is quite common).

The initial costs of the implementation of complex systems are huge if the non-financial indicators are planned on a regular and long-term basis – where the purpose in the context of measuring the non-financial indicators will be the maximum automation and the elimination of any risk of bringing in errors. In such a case the costs refer not just to the money.

People's scepticism must be eliminated before the design of the assessment system is fully defined, by emphasising the benefits and the expected results.

### **Unit of Measure**

With the financial indicators the values obtained are usually expressed in units of currency; with the non-financial indicators the situation is completely different – the values obtained are expressed in various units, such as time or number of items (Chow & Van der Stede, 2006).

## **4. Discussion**

### **4.1 Application of the Non-financial Indicators in Practice**

The non-financial indicators find their application particularly in the following areas:

- change management;
- strategic management;
- assessing current condition of business;
- assessing retrospective condition of business;
- predicting states.

### **Change Management**

Change management focuses on changes in general and their implementation and enforcement in the life of business. Alternatively, change management can refer to the activities aiming to facilitate and speed up the changes in order to implement a corporate strategy effectively (Vandangeon-Derumez, Djedidi, & Szendy, 2019).

It is quite easy to get relevant and quality data for change management – if business wants to apply change management, it needs to use some of the pre-defined assessment systems (or design its own system) and implement the necessary changes using the data collected and assessed.

For the purpose of change management, changes can be divided into:

- developmental (strategic) and
- operational.

The developmental changes are those that have impact on, i.e. trigger changes in, the processes, resources, management or running of the business.

A typical example of the developmental changes is the building of a corporate strategy through strategic management (i.e. the implementation of developmental changes). In other words, it is the management of those changes that affect the whole company, by implementing such changes. The developmental changes are quite often affected through separate projects with the use of the full potential of project management.

The operational changes are those that have no impact on triggering changes in the processes, management or running of the business, and may concern partial process or technology changes or the changes affected in the course of the project (without affecting the result of the project) (Jantunen, Tarkiainen, Chari, & Oghazi, 2018). The operational changes have nothing to do with strategic management.

### Strategic Management

Strategic management uses change management in a broader context – changes are planned with regard to the strategy of the business. Defining goals and how they are to be achieved are the essential aspects in strategic management.

It is quite easy to get relevant and quality data for strategic management. In fact, change management provides the basis if business wants to apply change management, it needs to use some of the pre-defined assessment systems (or design its own system) and implement the necessary changes using the data collected and assessed. Strategic management is the key and top-level managerial activity, in which all the roles of a manager meet.

It is completely essential for strategic management that all employees know corporate goals, corporate mission and corporate vision and guide their own behaviour and conduct the fulfilment of the goals, the mission and the vision. Employees' motivation to achieve the goals and objectives is the only and true purpose of strategic management.

The long-term output of strategic management is a smooth-running and flourishing business (accomplishing the corporate mission and vision is not absolutely necessary because only a low percentage of companies are successful in this task). Strategic management should also produce a corporate strategy. It is usually a document or other declaration in writing that specifies the company's vision, mission and long-term goals plus a schedule for fulfilling these (Tonysheva & Chumlyakova, 2016).

The strategic management process is comprised of four fundamental, ever-repeating phases:

- strategy formulation;
- strategy plan;
- strategy implementation;
- strategy check, monitoring and assessment.

## 4.2 Assessing the Current Condition of the Business

This is usually done when the business is to be sold or merged with other business, especially if the transaction is international. Expert opinion can be commissioned to obtain an independent assessment.

Obtaining relevant and quality data for assessing the current condition of business is difficult but not impossible. The management strategy is the starting point, followed by describing and assessing the progress of implementation, i.e. the degree to which the corporate strategy is translated into practice (current progress against the strategic plan). The precondition is that the business has an assessment system in place.

If there is no assessment system in place, the precondition is that the business has done at least something as part of CSR. This can be evidenced through:

- documentation on the CSR projects implemented;
- contracts of donation;
- accounting data and bank account statements;
- certifications;
- witness statements.

If no assessment system is in place and no CSR projects have been implemented, no non-financial indicator assessment can be made. Given the variability in expert opinions, it is the expert's responsibility to decide how s/he would take account in her/his expert opinion of the

non-financial indicators obtained. The influence of the non-financial indicators obtained can be both positive and negative.

The non-financial indicators obtained from the CSR activities are the easiest to be taken into account in expert opinions and usually bring a positive note. Thus, they are in favour of the company or the defendant assessed in the expert opinion (Abdel-Maksoud, Dugdale, & Luther, 2005).

### 4.3 Assessing the Retrospective Condition of the Business

These assessments are required particularly in criminal proceedings. Expert opinion can be commissioned to obtain an independent assessment. The retrospective assessments are very complicated even if there is an assessment system in place because it is often the case that the relevant documentation has not been preserved due to the age of the data.

If there is no assessment system in place or the system's documentation has not been preserved, the precondition is that that the business has done at least something in CSR by providing the documentation for CSR projects, contracts of donation. Then the procedure is the same as with assessing the current condition of business – and the expert is to consider how the non-financial indicators obtained should be taken into account. If no assessment system is in place and no CSR projects have been implemented, no non-financial indicator assessment can be made.

#### Prediction of States

Prediction of states in the area of the non-financial indicators is discussed in the chapter on Informatics and New Dimension of Measuring the non-financial Indicators.

### Conclusions

The conclusion of this article should be a clear understanding of the concept of the non-financial indicators and of its increasing importance and importance of these non-financial indicators in relation to the competitiveness of the company and its evaluation. The main contribution of this article was to emphasize the increasing impact of the non-financial indicators related to the social and environmental changes in society, which have a significant impact on individual companies. In addition, these objectives have also been completed: the terms were defined

and it was shown how they relate to the non-financial indicators. The importance and the use of the non-financial indicators were also discussed.

Corporate social responsibility (CSR), which is also the best comparable non-financial indicator, appears to be one of the most important tools (Mohelska & Sokolova, 2018). The article should show its clear meaning, importance and necessity to identify the CSR area in companies. The main importance of CSR and other non-financial indicators of companies is the continuous growth of the company by means of causal links to the company's goals, which are constantly trying to meet these indicators. Without the use of CSR, it is not possible to achieve optimal business growth, as the company must stand on three pillars. Apart from the economic area, the other two pillars are the social and environmental areas, the development of which is ensured by CSR.

The topic of non-financial indicators has the potential for further research, particularly in the analysis and comparison of companies using the non-financial indicators, as opposed to those that use only the financial indicators.

The use of purely financial indicators is inadequate and leads to misunderstanding of business in the area. At present, the trend of cost reduction and constant pressure to increase the competitiveness of the company, the sustainable development of these aspects are just the non-financial indicators, which together with the financial indicators help to determine the necessary direction of the company.

The authors unequivocally advocate strengthening the non-financial indicators in relation to the financial indicators as an evaluation criterion of the company's success in the overall evaluation system. Unfortunately, at present, the non-financial indicators are not firmly anchored in legislation, unlike the financial indicators in the Czech republic.

**Acknowledgments:** *The paper was written with the support of the specific project 2020 grant "Determinants of cognitive processes impacting the work performance" granted by the Faculty of Informatics and Management, the University of Hradec Králové, Czech Republic.*

## References

- Abdel-Maksoud, A., Dugdale, D., & Luther, R. (2005). Non-financial performance measurement in manufacturing companies. *The British Accounting Review*, 37(3), 261–297. <https://doi.org/10.1016/j.bar.2005.03.003>
- Altman, E., Iwanicz-Drozowska, M., Laitinen, E., & Suvas, A. (2016). Financial and nonfinancial variables as long-horizon predictors of bankruptcy. *The Journal of Credit Risk*, 12(4), 49–78. <https://doi.org/10.21314/jcr.2016.216>
- Altman, E. I., Sabato, G., & Wilson, N. (2008). The value of non-financial information in SME risk management. *SSRN Electronic Journal*, 6(2). <http://dx.doi.org/10.2139/ssrn.1320612>
- Aluchna, M., & Roszkowska-Menkes, M. (2019). Non-financial Reporting. Conceptual Framework, Regulation and Practice. In *Corporate Social Responsibility in Poland* (pp. 213–236). Cham: Springer. [https://doi.org/10.1007/978-3-030-00440-8\\_14](https://doi.org/10.1007/978-3-030-00440-8_14)
- Amarah, B., & Langston, C. (2017). Development of a triple bottom line stakeholder satisfaction model. *Journal of Corporate Real Estate*, 19(1), 17–35. <https://doi.org/10.1108/JCRE-03-2016-0017>
- Asiaei, K., & Bontis, N. (2019). Using a balanced scorecard to manage corporate social responsibility. *Knowledge and Process Management*, 26(4), 371–379. <https://doi.org/10.1002/kpm.1616>
- Ashworth, S., Tucker, M. P., & Druhmman, C. K. (2019). Critical success factors for facility management employer's information requirements (EIR) for BIM. *Facilities*, 37(1/2), 103–118. <https://doi.org/10.1108/F-02-2018-0027>
- Badawy, M., El-Aziz, A. A. A., Idress, A. M., Hefny, H., & Hossam, S. (2016). A survey on exploring key performance indicators. *Future Computing and Informatics Journal*, 1(1–2), 47–52. <https://doi.org/10.1016/j.fcij.2016.04.001>
- BusinessInfo. (2019). Malé a střední podnikání. Retrieved November 1, 2019, from <https://www.businessinfo.cz/cs/dotace-a-financovani/male-a-stredni-podnikani.html>
- Calu, A., Negrei, C., Calu, D. A., & Avram, V. (2016). Reporting of Non-Financial Performance Indicators – A Useful Tool for a Sustainable Marketing Strategy. *Amfiteatru Economic*, 17(40), 977–993.
- Cheng, Y. (2012). The Construction of Indicator System for Performance Measurement of Chinese Enterprises Based on Balanced Scorecard. *Asian Social Science*, 8(8). <https://doi.org/10.5539/ass.v8n8p155>
- Choong, K. K. (2013). Understanding the features of performance measurement system: a literature review. *Measuring Business Excellence*, 17(4), 102–121. <https://doi.org/10.1108/mbe-05-2012-0031>
- Chow, C. W., & Van der Stede, W. A. (2006). The use and usefulness of nonfinancial performance measures. *Management accounting quarterly*, 7(3), 1–8.
- Costa, M., & Torrecchia, P. (2018). Social, environmental and financial information. In *Current issues in corporate social responsibility* (pp. 25–44). Cham: Springer. [https://doi.org/10.1007/978-3-319-70449-4\\_3](https://doi.org/10.1007/978-3-319-70449-4_3)
- Docekalova, M. P., & Kocmanova, A. (2015). Evaluation of the effectiveness of manufacturing companies by financial and non-financial indicators. *Procedia-Social and Behavioral Sciences*, 213, 491–496. <https://doi.org/10.1016/j.sbspro.2015.11.439>
- Dumay, J., Frost, G., & Beck, C. (2015). Material legitimacy: blending organisational and stakeholder concerns through non-financial information disclosures. *Journal of Accounting & Organizational Change*, 11(1), 2–23. <https://doi.org/10.1108/JAOC-06-2013-0057>
- Europa. (2019). Co je to MSP? Retrieved from [https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition\\_en](https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en)
- European Union. (2008). Commission Regulation (EC) No 800/2008 of 6 August 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty (General block exemption Regulation).
- European Union. (2003). Commission Recommendation (EC) 2003/361/EC of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises.
- Evans, J. C. (2017). The Influence of Corporate Social Responsibility to Corporate Financial Performance. *Journal of Applied Accounting and Taxation*, 2(1), 54–60. <https://doi.org/10.5281/zenodo.1306548>
- Gavurova, B. (2011). The Balanced Scorecard System in Enterprise Management. *Ekonomický časopis*, 59(2), 163–177.
- Gallo, P., Timková, V., Tomčíková, L., & Mihalčová, B. (2018). Importance of financial and non-financial indicators in companies with the balanced scorecard concept. *Quality - Access to Success*, 19(165), 34–38.

- Hadjikhani, A., Lee, J. W., & Park, S. (2016). Corporate social responsibility as a marketing strategy in foreign markets: the case of Korean MNCs in the Chinese electronics market. *International Marketing Review*, 33(4), 530–554. <https://doi.org/10.1108/IMR-03-2014-0104>
- Hálek, V. (2016). *Nefinanční ukazatele*. Hradec Králové.
- He, C., & Lu, K. (2018). Risk management in SMEs with financial and non-financial indicators using business intelligence methods. *Management, Knowledge and Learning International Conference 2018*, 16.–18. May. (pp. 405–418). Italy: Naples.
- Hess, D. (2019). The Transparency Trap: Non-Financial Disclosure and the Responsibility of Business to Respect Human Rights. *American Business Law Journal*, 56(1), 5–53. <https://doi.org/10.1111/ablj.12134>
- James, I. A., & Pelumi, I. O. (2019). Corporate Social Responsibility. *Ilorin Journal of Human Resource Management*, 3(2), 21–33.
- Jantunen, A., Tarkiainen, A., Chari, S., & Oghazi, P. (2018). Dynamic capabilities, operational changes, and performance outcomes in the media industry. *Journal of Business Research*, 89, 251–257. <https://doi.org/10.1016/j.jbusres.2018.01.037>
- Kang, J. S., Chiang, C. F., Huangthanapan, K., & Downing, S. (2015). Corporate social responsibility and sustainability balanced scorecard: The case study of family-owned hotels. *International Journal of Hospitality Management*, 48, 124–134. <https://doi.org/10.1016/j.ijhm.2015.05.001>
- Kislingerová, E. (2011). *Nová ekonomika: nové příležitosti?* Praha: C. H. Beck.
- Laskar, N., & Maji, S. G. (2017). Corporate Social Responsibility Performance and Firm Performance: A Cross Country Analysis from Asia. *IPE Journal of Management*, 7(1), 138–148.
- Mohelska, H., & Sokolova, M. (2018). Management approaches for Industry 4.0 – the organizational culture perspective. *Technological and Economic Development of Economy*, 24(6), 2225–2240. <https://doi.org/10.3846/tede.2018.6397>
- Narkunienė, J., & Ulbinaitė, A. (2018). Comparative analysis of company performance evaluation methods. *Entrepreneurship and Sustainability Issues*, 6(1), 125–138. [https://doi.org/10.9770/jesi.2018.6.1\(10\)](https://doi.org/10.9770/jesi.2018.6.1(10))
- Pati, R. K., Nandakumar, M. K., Ghobadian, A., Ireland, R. D., & O'Regan, N. (2018). Business model design – performance relationship under external and internal contingencies: Evidence from SMEs in an emerging economy. *Long Range Planning*, 51(5), 750–769. <https://doi.org/10.1016/j.lrp.2018.01.001>
- Peršić, M., Janković, S., & Krivačić, D. (2017). Sustainability Accounting: Upgrading Corporate Social Responsibility. In *The Dynamics of Corporate Social Responsibility* (pp. 285–303). Cham: Springer.
- Manzoor, M. S., Rehman, R. U., Usman, M. I., & Ahmad, M. I. (2019). How Corporate Governance and CSR disclosure affect Firm Performance? *E&M Economics and Management*, 22(3), 20–35. <https://doi.org/10.15240/tul/001/2019-3-002>
- Mynhardt, H., Makarenko, I., & Plastun, A. (2017). Standardization of sustainability reporting: Rationale for better investment decision-making. *Public and Municipal Finance*, 6(2), 7–15. [https://doi.org/10.21511/pmf.06\(2\)](https://doi.org/10.21511/pmf.06(2))
- Petryk, O., Kurylo, O., Karmaza, O., Makhinchuk, V., & Martyniuk, O. (2018). Non-financial reporting of companies and the necessity of its confirmation by auditors in Ukraine. *Problems and Perspectives in Management*, 16(2), 385–395. [https://doi.org/10.21511/ppm.16\(2\).2018.35](https://doi.org/10.21511/ppm.16(2).2018.35)
- Raghuandan, A. (2018). Are Non-Financial and Financial Misconduct Related?: Evidence From Federal Agency Penalties. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3307594>
- Režňáková, M., Karas, M., & Strnadová, M. (2017). Non-financial factors of performance. *Scientific Papers of the University of Pardubice, Series D, Faculty of Economics*. 188–198.
- Sari, R. P. (2015). Integration of Key Performance Indicator into the Corporate Strategic Planning: Case Study at PT. Inti Luhur Fuja Abadi, Pasuruan, East Java, Indonesia. *Agriculture and Agricultural Science Procedia*, 3, 121–126. <https://doi.org/10.1016/j.aaspro.2015.01.024>
- Sokolova, M., Zubr, V., Cierniak-Emerych, A., & Dziuba, S. T. (2018). The level of organizational culture as a constant challenge for company management – an empirical research in the Czech Republic and Poland. *E&M Economics and Management*, 22(1), 145–156. <https://doi.org/10.15240/tul/001/2019-1-010>
- Soltes, V., & Gavurova, B. (2015). Modification of Performance Measurement System in the Intentions of Globalization

Trends. *Polish Journal of Management Studies*, 11(2), 160–170.

Škodová Parmová, D., & Dvořáková Lišková, Z. (2019). *Regions in context (1st edition)*. České Budějovice: University of South Bohemia In České Budějovice.

Tonysheva, L. L., & Chumlyakova, D. V. (2016). Corporate social responsibility: The principles and the process of integration into the system of strategic management. *Asian Social Science*, 12(9), 115–123. <https://doi.org/10.5539/ass.v12n9p115>

Vandangeon-Derumez, I., Djedidi, A. & Szendy, E. (2019). An experiential approach to

learning about change management. *Journal of Management Development*, 38(9), 708–718. <https://doi.org/10.1108/JMD-03-2018-0110>

Venckeviciute, G., & Subaciene, R. (2015). European Initiative Influence upon Lithuanian SME Performance Measurement. *Procedia – Social and Behavioral Sciences*, 213, 261–267. <https://doi.org/10.1016/j.sbspro.2015.11.535>

Závadský, J., Korenková, V., Zavadská, Z., Kadárová, J., & Tuček, D. (2019). Competences in the quality management system evaluation based on the most worldwide used key performance indicators. *Quality – Access to Success*, 20(169), 29–41.