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Philipp Blumenstein*, Robert C. Schmidt**,
Jessica Hastenteufel***

Development of key performance indicators of capital market-oriented entities in the Prime Standard since the introduction of DRS 20

1. Introduction

The group management report is one of the most important publicly accessible instruments for assessing the corporate governance of capital market-oriented businesses (Müller et al. 2012, p. 281). The German Accounting Standard 20 – Group Management Report (DRS 20) was published on 2nd November 2012 and contains the requirements for consolidated management reporting. The DRS 20 substitutes the standards DRS 5 – Risk Reporting, DRS 5-10 – Risk Reporting of Credit and Financial Services Institutions, DRS 5-20 – Risk Reporting of Insurance Companies, and DRS 15 – Management Reporting (Deutsches Rechnungslegungs Standards Committee e. V, 2012, pp. 38–39). According to § 315 of the German Commercial Code (HGB), the DRS 20 applies to all companies that have to prepare a group management report. In this context, the application of this standard to the management report in accordance with § 289 HGB is recommended (Deutsches Rechnungslegungs Standards Committee e. V, 2012, p. 6).

Since the financial year 2013, capital market-oriented companies listed in the Prime Standard have been obliged to present their management system and the performance indicators used in accordance with the requirements of DRS 20 in their management reports. In addition, significant changes in the management

* European Air Transport Leipzig GmbH (Germany), e-mail: philipp.blumenstein@icloud.com
** International University of Applied Sciences (Germany), e-mail: robert.schmidt@iu.org
*** International University of Applied Sciences (Germany), e-mail: jessica.hastenteufel@iu.org, ORCID ID: 0000-0002-4386-5771

ratios must be presented and explained. The purpose of this study is to empirically analyse the use of KPIs of Prime Standard enterprises since the introduction of DRS 20 and to provide important insights into changes regarding the use of key performance indicators. Thus, a total of 1,176 individual annual reports from 168 companies between 2013 and 2019 are incorporated into our analysis.

A similar study by Göck/Dresp analysed annual reports of 145 capital market-oriented companies regarding the key performance indicators used in corporate management but limited itself to one financial year only (Göck, Dresp, 2017, pp. 8–12). Several other studies have mainly dealt with value-based key performance indicators in the annual reports of DAX companies in the past. In contrast to this, this paper focuses – in addition to an empirical presentation of the use of key performance indicators – primarily on the development or modification of key performance indicators and their use. Thus, we focus on the following questions:

- How did the use of key performance indicators of companies listed in the Prime Standard change since the introduction of DRS 20?
- Which key performance indicators are changed most frequently?
- How often do the analysed companies adjust their key performance indicators?

To answer these questions, we examine a large sample of corporate publications to determine, by means of descriptive statistics, a comprehensive picture of possible changes in the management systems regarding the key performance indicators used and to illustrate their development.

2. Methodology

2.1. Scope of the study

The study is based on the publicly available information of Deutsche Börse AG with all companies listed in the Prime Standard. This list contains information from 302 companies that fulfil the requirements of the Prime Standard (as of 1st December 2020).

The selection of the enterprises that are considered for our study consists of two steps. First, a rough distinction of the companies is made based on three criteria. In a second step, more enterprises are excluded if their inclusion would have created significant limitations for the overall analysis; for example, due to missing annual reports or due to an indistinct description of their management systems and key performance indicators.

For the preliminary screening of potentially relevant entities, only companies listed in the Prime Standard are considered, for which the following conditions apply:

- only companies located in Germany,
- that do not belong to the financial sector (i.e., banks or insurance companies),
- that have been constantly listed in the Prime Standard since the year 2013.

These limitations are made to ensure the comparability of the analysed entities. This is especially important with regard to the exclusion of businesses that belong to the financial sector as they have to fulfil additional regulatory requirements that would lower the comparability of the reports.

As a result, 112 companies had to be excluded from the analyses. These include 22 companies headquartered abroad, 45 companies from the financial sector, 42 companies with IPOs after 2013, and three companies that have not been consistently listed in the Prime Standard since the year 2013.

Factors such as unclear descriptions of management systems or key performance indicators significantly determine the second step in our screening process. For this purpose, the publicly available annual reports are considered. To be able to collect data on the performance indicators from these reports, the following criteria must be met:

- continuous presentation of the key performance indicators since the year 2013,
- sufficient description of the management system including the performance indicators.

In this step, 22 more enterprises had to be excluded. In total, the selection process led to the exclusion of 45 percent of all companies listed in the Prime Standard, so that in the end only 168 companies fulfilled all of the relevant criteria and were selected for the evaluation.

With almost 30 percent, the industrial sector is the largest sector, followed by the software industry with nearly 14 percent of the companies analysed. The pharmaceutical and healthcare sector represents the third largest industry with close to 12 percent. The technology-, utilities-, consumer-, chemicals- and automobile sectors are almost equally represented in the Prime Standard with six to seven percent of all companies (Fig. 1). All other sectors comprise less than ten companies and thus represent only a minor percentage.

To improve comparability, companies are grouped by size into four equally sized categories. Group 1 companies are the smallest companies and Group 4 companies are the largest ones. Thus, for each business year, the three criteria "market capitalisation", "revenue", and "number of employees" are taken from the annual reports.

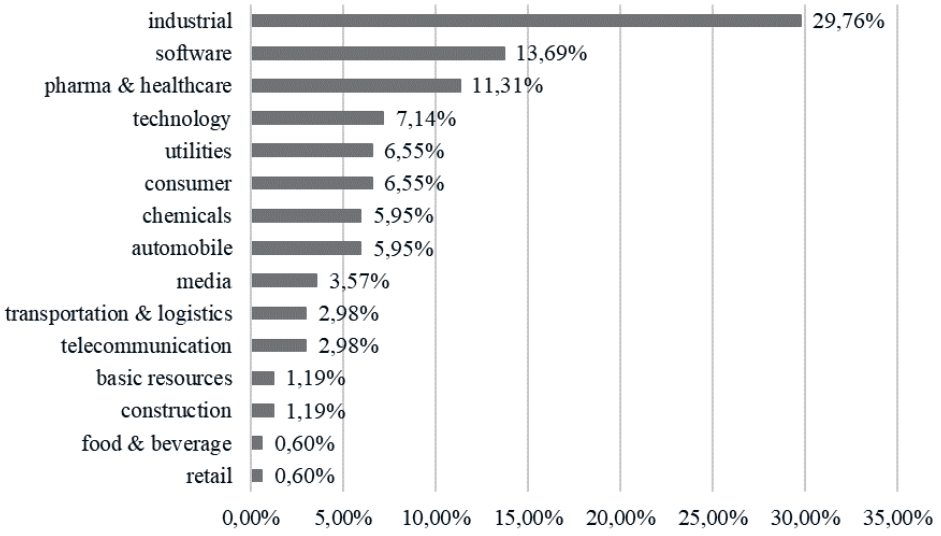

Figure 1. Selected companies classified according to industry sector

For each criterion, the first step is to compile a ranking for each year. These rankings are then averaged across the three characteristics in such a way that each criterion is considered equally important for the final ranking. For example, a company that has the highest market capitalisation in the year 2013 (and is therefore ranked first according to this criterion) but is only ranked fourth and seventh for turnover and number of employees, receives a fourth rank on average for the year 2013. By combining the three criteria and averaging them, we can better compare the three characteristics and thus the size of the organisations. Based on this, rankings in terms of company size are created for the years 2013 and 2019. Moreover, an average is calculated for the entire study period. In this way, a consistent presentation of the research results is ensured for the entire period under review.

2.2. Identifying key performance indicators in management reports

Analysing management reports requires a considerable amount of time and effort, as all data must be analysed manually. Another complicating factor is that there are no uniform guidelines on how a management system and performance indicators must be disclosed. As a result, different presentations of management systems must be evaluated. The differences range from companies that report

about their management system only in a short paragraph (e.g., TELES AG Informationstechnologien, 2019, p. 10) to businesses that describe their management system in detail on several pages (e.g., Fraport AG 2019, 67–72). In most cases, the reports are copied from previous years and are only adjusted in the event of changes, so that the reports on the management systems generally resemble each other over the years.

First, all management-relevant performance indicators are compiled. The focus is always on the KPIs that are mentioned in the management system of a company. Basically, a KPI is always attributed to the respective business year in which it is mentioned. For enterprises where the financial year differs from the calendar year, the performance indicator is allocated to the subsequent year. The performance indicators of the business year 2013/2014 are thus assigned to the year 2014. To standardise different descriptions for the same key figures and to make them comparable for statistical purposes, the KPIs will initially be summarised. For example, the key indicators "amortisation period" and "payback period" are summarised as payback period.

Throughout the evaluation we noticed that many companies prioritise their key performance indicators and that some indicators seem to be more important than others. Delticom AG, for example, declares two indicators as key performance indicators and explains that in addition to these KPIs subsequent performance indicators are used (Delticom AG, 2014, p. 20). For this reason, all key performance indicators are categorised as main performance indicators or additional performance indicators. This provides the necessary differentiation and draws a complete picture of the performance indicators used. A key performance indicator must be identified in the management report as a company's main performance indicator. Any indicator that is not identified or explicitly declared as a main performance indicator is an additional performance indicator. Conjunctive adverbs such as "in addition", "furthermore" or "moreover" are interpreted as a sign that a KPI is not among a company's most significant performance indicators. If the performance indicators are described without any differentiation, then the indicators are automatically classified as main performance indicators.

2.3. Analysing changes in the management systems

Additionally, changes in the key performance indicators are documented. In this study the annual reports of the business year 2013 (or 2012/2013) are neglected. Usually, a comparison of the management report to the previous year is necessary to identify changes in the use of key performance indicators. Only in some cases changes are mentioned in the reports of the 2013 (or 2012/2013) financial year (e.g., Evonik Industries AG, 2014, p. 41). Thus, the identification of

changes in the year 2013 is not possible in most cases, as these changes require the comparison of management reports from the years 2012 and 2013. Due to the introduction of DRS 20 in November 2012, the obligation to describe the management system, including the key performance indicators used, only applies to annual reports from the years 2013 onwards. For this reason, the period from 2014 to 2019 is observed.

The documentation of each adjustment includes the changed performance indicator, the year in which the adjustment was made, the form of the modification, the reason for the modification (if any reason is mentioned), the priority of the performance indicator and its classification as a financial or non-financial indicator. The year in which the adjustment was made is the year in which the change is documented in the annual report. If an annual report explicitly mentions that a change will only take place from the next year onwards, then their change is only documented for the following year. For the sake of transparency, all modifications are classified into one of five categories:

1) the performance indicator is added to the management system,
2) the performance indicator is removed from the management system,
3) the performance indicator is now a main KPI,
4) the performance indicator is no longer a main KPI,
5) the performance indicator is adjusted.

Category 1 includes indicators that were not previously part of the management system or indicators that are mentioned again in the management system after at least one year without being mentioned. Category 2 includes all indicators that are no longer listed in the management system as main or additional performance indicators. Category 3 contains only indicators that were previously listed as additional performance indicators and have since become main performance indicators. Category 4 deals with all key performance indicators that have become less important for the enterprises over time and are thus no longer main key performance indicators. Finally, category 5 includes all adjustments of performance indicators without a shift in prioritisation or an addition to or exclusion from the management system. This mainly includes adjustments due to new regulations under the International Financial Reporting Standards (IFRS) or adjustments due to changed framework conditions.

Moreover, it is documented for the two categories 1 and 2 which priority an introduced or removed performance indicator has for a business. The prioritisation is based on the procedure already described. The following distinctions are made:

- the performance indicator will be or was a main performance indicator,
- the performance indicator will be or was an additional performance indicator.

The most important classification for the following analysis is the assessment of whether a documented change is a verifiable modification of a company's key performance indicators. For this purpose, the change is classified into four categories to answer the question of whether an entity clearly communicates such an adjustment. In this context, every apparent change is checked for plausibility in the annual reports. This procedure is intended to remove unclear changes from the analysis to minimise the bias in the results of the study. It should be stressed that according to the regulations of DRS 20, no justification must be given for changes regarding performance indicators. According to DRS 20.K47, only significant changes in the management system used in a group compared to the previous year must be disclosed. Nevertheless, a distinction should be made between changes with justification and changes without justification but with prior notice (Tab. 1). This is reasonable in the context of evaluating the investor relations of the assessed enterprises.

Table 1

Change categories and essential characteristics of each category

	Change category	Characteristics of the category
Adjustments	justification of the change	a justification for the change is given
	announcement of the change	there is no justification for the change, but the company communicates that a change was made
	plausible change	there is no justification and no company announcement for the implemented change, however, according to the described plausibility check, it can be assumed that a change was made
No adjustments	unclear	there has been a change in the annual report, but this change cannot be verified without further investigation

Furthermore, we will explain how additional changes are identified from the management reports that are not actively communicated by the respective company by an explanation or announcement. It is necessary to form these categories, as otherwise too many changes in the key performance indicators could remain undetected.

However, before a change in a key performance indicator can be assigned to the category "plausible change", a plausibility check must be performed in addition to a change identified by comparing information from management reports. For this purpose, several parameters must be checked:

- Is the change maintained in the following management reports?
- What information is communicated about the modified performance indicator in the annual reports before and after the change?
- Is there any information about this change in another part of the annual report?
- Does the enterprise justify changes for other key performance indicators?

Depending on the case, additional, individual, and specific data must be examined. Any information that is considered in a follow-up evaluation and that is not verified may lead to an unclear change in classification.

However, if a single indicator is changed several times within the period under review between the years 2014 and 2019 without any justification or announcement, this does not mean that this change is automatically considered 'unclear'. Here, too, more information must be reviewed, and a subjective decision must be made as to whether these modifications should be included in the evaluation. However, it cannot be excluded that despite this careful review, changes are identified as plausible changes although they are not, or vice versa. This must be kept in mind especially when considering absolute values. For this reason, we focus on relative results when considering changes. Due to the large number of changes that could be analysed, we consider the results to be reliable despite the described limitations and that they allow additional analyses to be carried out.

3. Results of the empirical study

3.1. Introductory overview

The assessment of the key performance indicators is performed in two steps. In the first step, the performance indicators of the examined Prime Standard companies from the years 2014 and 2019 are compared to identify possible changes since the introduction of the DRS 20. For this purpose, the main features of the management systems and the key performance indicators of these years are identified. These include the number of performance indicators in the management

systems as well as other statistical characteristics of the use of performance indicators. The most frequent KPIs in the years 2014 and 2019 are then compared to each other. Finally, the adjusted and non-adjusted indicators are aggregated. The management systems of the years 2015 to 2018 are not described in detail, as changes in these management systems can be shown better by presenting the actual modifications. This is because if, for example, the KPI "EBIT" is no longer used by one company in one year but is newly introduced by another enterprise in that same year, then the number of EBIT key figures used would not change, although there is a change in two companies. The comparison of management systems from the years 2014 and 2019, however, could reveal fundamental changes. In addition, the status quo of the key performance indicators used by companies listed in the Prime Standard will be described. In a second step, the changes in the performance indicators will be evaluated to gain a detailed insight into the development of the performance indicators of the businesses examined. This is to identify changes that cannot be observed by comparing single performance indicators directly.

3.2. Management systems of the years 2014 and 2019

3.2.1. Introduction

In total, 482 different indicators are used by the 168 companies examined. However, despite the different descriptions, some of these indicators measure the exact same thing and can therefore be aggregated to 267 different indicators in total. The differences between the individual companies in the number of KPIs used are huge, and ranges from one (Bastei Lübbe AG 2014) to 25 used key performance indicators (adidas AG 2020).

3.2.2. Essential characteristics of the management systems

The comparison of the main structural characteristics of the management systems in the years 2014 and 2019 does not show any significant changes (Tab. 2).

The management systems became marginally larger, i.e., on average three percent more key performance indicators were used in 2019 than in 2014. The number of companies using additional performance indicators also increased from 48 percent to 58 percent. Among other things, this could result from the small increase in the number of key performance indicators overall, which also leads to more companies making a distinction between main and additional key performance indicators. The number of companies using non-financial performance indicators increased from 37.5 percent in 2014 to 41.7 percent in 2019.

However, the average number of non-financial performance indicators used by these companies remained almost the same.

Additionally, no significant differences could be identified in the individual sectors regarding the development of the use of indicators. The problem in presenting the sectors is the usually small number of companies in the individual sectors, which means that a comparison of the sectors is only of limited use.

Table 2

Comparison of the key characteristics of the key performance indicators of the years 2014 and 2019

		2014	2019	Trend
All KPIs (main + additional)	**average, total**	**6.7**	**6.9**	**+**
	median, total	**6**	**6**	**o**
	average, financial KPI	5.6	5.7	+
	median, financial KPI	5	5	o
	average, non-financial KPI	1.1	1.2	+
	average, non-financial KPI, adjusted[1]	2.9	2.8	–
	median, non-financial KPI, adjusted	2	2	o
Main KPIs	**average, total**	**4.6**	**4.4**	**–**
	median, total	**4**	**4**	**o**
	average, financial KPI	4.1	3.8	–
	median, financial KPI	4	3	–
	average, non-financial KPI	0.5	0.6	o
	average, non-financial KPI, adjusted	2.7	2.7	o
	median, non-financial KPI, adjusted	2	2	o
Additional KPIs	average, total	2.1	2.5	+
	average, financial KPI	1.5	1.9	+

[1] The addition "adjusted" indicates that the values only relate to those companies to which the corresponding classification applies.

Table 2 cont.

	average, non-financial KPI	0.6	0.6	o
	companies using additional KPIs	**47.6%**	**57.7%**	**+**
	average, total, adjusted	**4.4**	**4.5**	**+**
	median, total, adjusted	**3**	**3**	o
	average, financial KPI, adjusted	3.5	3.7	+
	average, non-financial KPI, adjusted	2.9	2.8	–
Companies using non-financial KPIs	**total**	**37.5%**	**41.7%**	**+**
	companies using non-financial KPIs as main KPIs	**20.2%**	**22.0%**	**+**
	companies using non-financial KPIs as additional KPIs	**20.2%**	**21.4%**	**+**
	companies using **only** non-financial KPIs as main KPIs	17.3%	20.2%	+
	companies using **only** non-financial KPIs as additional KPIs	17.9%	19.7%	+
	companies using non-financial KPIs as main **and** additional KPIs	2.3%	1.8%	–

3.2.3. Comparison of the key performance indicators

The comparison of the most frequent performance indicators of the years 2014 and 2019 provides some insights that were examined by analysing the changes. There are changes regarding the relative use of the five most common key performance indicators in the years 2014 and 2019. Overall, the KPI "revenue" is used approximately five percent more frequently, the KPI "free cash flow" ten percent more frequently, the KPI "ROCE" three percent more frequently and the KPI "EBITDA" five percent more frequently. Only the use of the KPI "EBIT" decreases by five percentage points. When analysing the individual groups of companies according to size, we noticed that the key figures "ROCE" and "free cash flow" are mainly used by larger capital market-oriented enterprises. For companies in group 4, the use of ROCE has increased by nine percentage points since the year 2014. Finally, Figure 2 illustrates the most common main and additional key performance indicators for the years 2014 and 2019.

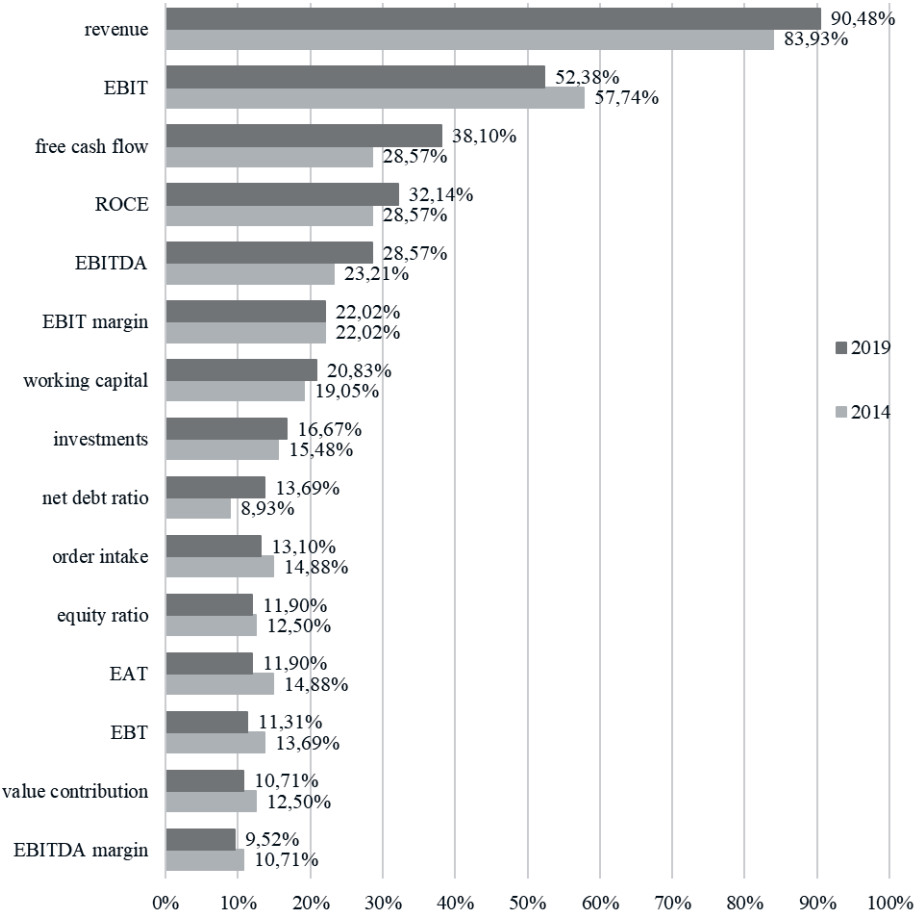

Figure 2. Illustration of the main and additional financial KPIs of the management systems in the years 2014 and 2019

3.3. Changes in the key performance indicators

3.3.1. Essential characteristics of the modifications

For 145 out of 168 companies, we were able to identify a total of 804 potential changes in the key performance indicators, of which only 557 changes from 125 enterprises are plausible. Consequently, the plausibility check leads to the exclusion of the modifications in 30.7 percent of all identified modifications and thus they are not taken into consideration for the analysis. 36 companies have intentionally or unintentionally disclosed unclear changes in their management

reports. In this context, 20 companies use a purely qualitative presentation of their management systems and 16 use a mix of tables and qualitative presentation. It can therefore not be stated without further reflection that a qualitative method of presentation favours the ambiguities in the modifications.

During the evaluation, a rate of change is defined, which represents the average number of changed indicators per company and year. In relation to the 125 companies whose key performance indicator changes are evaluated, this value is 0.74. It shows the dynamics in the change of key performance indicators. 34 percent of the companies modified their performance indicators between one and three times in the period under review, and about 21 percent of the businesses changed their management system between four and six times during this period. Only 20 percent of the companies analysed changed their performance indicators more than six times.

Furthermore, it cannot be confirmed that companies with larger management systems change their KPIs more frequently than those with smaller management systems. The annual change rates of the companies studied are presented over the average size of the respective management systems. The average size of a management system is the average number of key performance indicators of the individual companies from the years 2014 to 2019. All explicit changes, both for main and additional key performance indicators, are considered. When analysing the graphs, no correlation can be found in the data. This is confirmed by the calculation of the Pearson's correlation coefficient. It is 0.31 and thus shows a weak linear correlation.

Figure 3 shows how the modifications are categorised. Only the three categories of changes that can be identified as such according to the plausibility check are included. 54 percent of these changes were not communicated by the companies, which means they were neither justified nor announced. For 29 percent of the modifications there was a justification and for 17 percent there was at least an announcement by the company, but without a corresponding justification. In this context, 88 percent of the changes were made to financial KPIs. Only 12 percent of the modifications related to non-financial performance indicators.

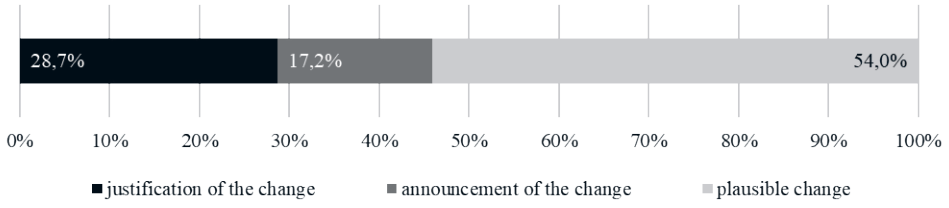

Figure 3. Change categories without "ambiguous" changes

Furthermore, the type of change in the KPIs is presented. A total of 42 percent of the changes relate to performance indicators that were added to the management systems. In contrast, 34 percent of the changes relate to performance indicators that were removed from the management systems. In total, 76 percent of the modifications analysed relate to performance indicators that were either added to or removed from the management systems. The remaining 4 percent of the changes relate to indicators that have already been part of the management systems. Modifications of the indicators occurred in 11 percent of the amendments. In 8 percent of the cases, key performance indicators that were previously used as main KPIs were downgraded to additional KPIs. However, these indicators remain part of the management system, but with a lower priority for the respective companies. Moreover, 5 percent of the modifications involve upgrading an additional performance indicator to a main KPI (Fig. 4).

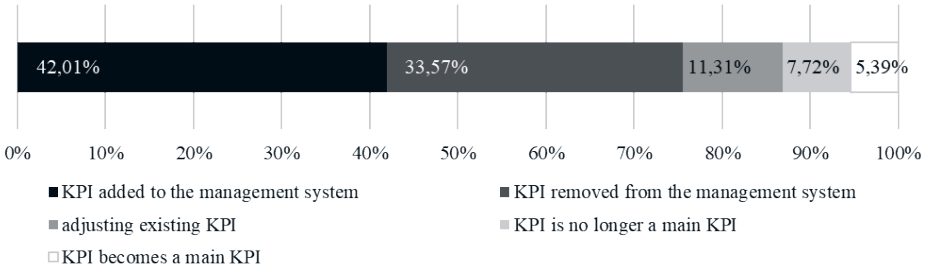

Figure 4. Classification of changes in the KPIs

In addition, the changes will be analysed more closely where key performance indicators were either added to or removed from the management systems. This is the case for about 76 percent of all changes, as shown in Figure 4. Figure 5 shows that slightly more key performance indicators were added to the management systems than were removed from them, with 39 percent of the changes affected. The percentage of KPIs that were added to or removed from the management systems as additional KPIs is about 12 percent.

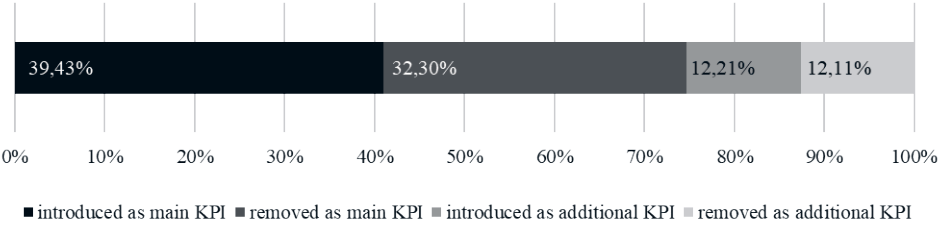

Figure 5. Classification of modifications to KPIs removed or added to the management system

Finally, we analysed the changes in relation to the size of a company. Figure 6 shows the percentage of justified or announced changes as well as the percentage of plausible changes in the groups 1–4 sorted by size. While 61 percent of the 181 documented changes in group 4 were disclosed, only 21 percent of the 106 documented changes in group 1 were disclosed. The number of companies that continuously communicate their changes increased steadily with the size of the enterprise. Group 2 companies report on implemented changes in about 43 percent of the changes examined. For companies in Group 3, the percentage is somewhat higher at 48 percent of the changes communicated.

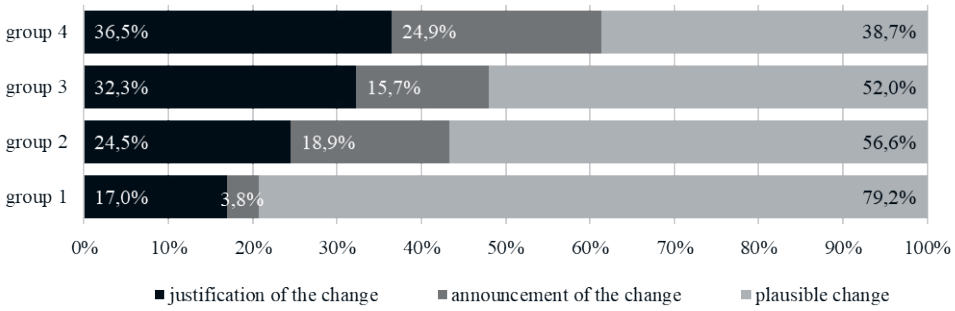

Figure 6. Change categories by company size

3.3.2. The most frequently changed KPIs

In total, 136 different KPIs were changed by 125 companies between the years 2014 and 2019. The analysis of the modifications shows that EBIT, EBITDA, ROCE, and free cash flow are the most frequently changed key performance indicators. About every fourth reported adjustment relates to one of these four ratios. However, revenue was also changed often. As in the presentation of the management systems, adjusted and non-adjusted KPIs are considered together.

A detailed analysis of the changes of the key figures "EBIT", "EBITDA", "ROCE", and "free cash flow" confirms the identified changes by comparing the key performance indicators. Out of these ratios, EBIT is the only one companies were using less. We noticed that EBIT was mostly replaced by other earnings ratios. Depending on the current framework conditions and investment goals, enterprises seem to switch between different earnings ratios in order to be able to present the current business situation as advantageously as possible with the respective ratios.

For the KPIs "EBITDA", "ROCE" and "free cash flow", the trend observed by comparing the performance indicators can also be confirmed. All three KPIs were used more frequently in 2019 when compared to 2014. The KPI "EBITDA" showed certain parallels to the KPI "EBIT", as it usually replaces other earnings

figures or is replaced by them, too. The ROCE continued to have a strong influence on the management systems of the companies studied and was used more frequently, especially by group 4 companies. The free cash flow frequently replaced other cash flow figures and was also used more frequently by smaller companies in 2019 than in 2014. The changes in revenue were not evaluated due to the focus of the analysis (Fig. 7).

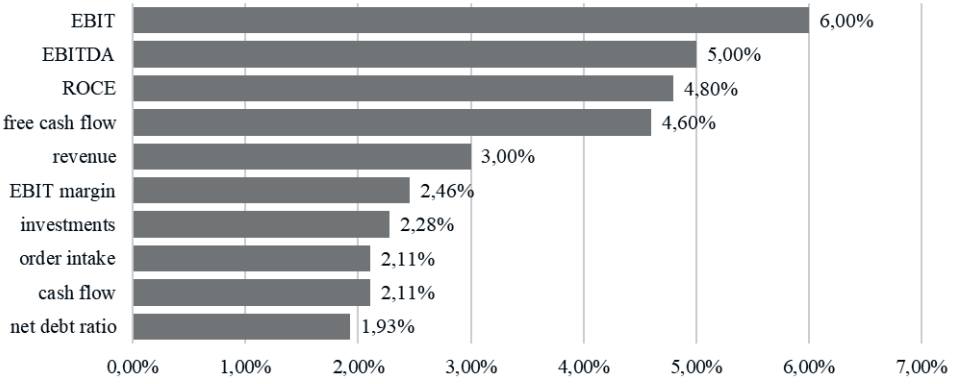

Figure 7. Most frequently changed KPIs between 2014 and 2019

4. Recommendations

The assessment of the annual reports and the extraction of the key performance indicators as well as their changes were faced with difficulties and obstacles. Due to the different ways of disclosing information about the management systems and the sometimes considerable differences in quality between the individual companies, the analysis was time-consuming and is subject to a few assumptions. The overall very low percentage of enterprises with a distinct communication of modifications confirms the urgent need for a standardised presentation of key performance indicators and their modifications, which will now be discussed in detail.

To present the performance indicators and their changes more transparently, we develop a re- commendation for action for a standardised method of presentation. Due to the high number of companies that make a distinction between main and additional performance indicators, there should first be a standardised, table-based presentation of both the main performance indicators and possible additional performance indicators. The results have shown that this prioritisation of key performance indicators is mostly implemented by companies with management systems of above-average size. The management systems of the companies that disclose additional key performance indicators are, with an average

of 8.4 KPIs, about 1.7 KPIs larger than the average. Due to the large number of indicators, it makes sense for businesses to subdivide the indicators into main and additional indicators to keep the management systems as clear as possible. However, this distinction is not regulated in DRS 20, which means that there is currently no obligation to implement it.

For standardisation, it would generally be helpful if such a differentiation were to become mandatory. Each company could decide for itself which indicators are to be classified as more or less important or whether this differentiation is necessary at all. The identified and classified key performance indicators could be presented in a table, for example, to minimise the scope for interpretation.

Furthermore, it is recommended that the changes themselves should also be presented in a table. Currently, many businesses, especially smaller ones, do not comply with the obligations to present changes as regulated in DRS 20.K47 or cause confusion with a non-transparent presentation of the management system. By presenting the key performance indicators in a table, including a description of the changes, the information asymmetry between a company and its stakeholders could be reduced. A qualitative description of management systems should by no means be omitted, but the representation in the form of a table could be seen as a mandatory supplement.

DRS 20.K47 refers to the disclosure of so-called "significant changes". It is recommended to replace the wording with "any changes in the key performance indicators in the management system" to reduce the scope for interpretation at this point as well. These changes in the interpretation of DRS 20 could lead to changes in the management systems being communicated more transparently. Justifications for changes can still be communicated by the enterprises but should not be mandatory and should not be included in DRS 20.K47. Finally, Table 3 illustrates a possible way of presenting the KPIs and their changes in management reports.

Table 3

Potential, standardised presentation of key performance indicators in a management report

Main KPIs	Additional KPIs
– revenue – EBIT – ROCE	– employee engagement – investments – free cash flow
Changes from the previous year	
– The free cash flow is no longer a main key performance indicator, but it is still used as an additional key performance indicator. – The performance indicator ROCE is added to the management system and is a new main key performance indicator.	

5. Conclusion

This paper provides insights into the management systems of companies listed in the Prime Standard with regard to the development of its key performance indicators since the introduction of DRS 20. They also show that there are various weaknesses in the implementation of DRS 20 with regard to the presentation of key performance indicators and the communication of their modifications. In total, only 46 percent of the changes in the performance indicators assessed are communicated accordingly by the companies. The larger the company, the more frequently changes in the performance indicators are communicated directly.

Based on a detailed plausibility check of observed changes in KPIs, recommendations for action are presented for an adjustment of DRS 20 aimed at a standardised presentation of the key performance indicators and their changes. Such a presentation would reduce the information asymmetry between a company and its stakeholders and improve the transparency of group management reports.

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Summary

This paper examines the performance indicators of 168 Prime Standard entities since the introduction of DRS 20, focusing on the core question of how the use of performance indicators has changed over time. For this purpose, we compare the published key performance indicators from various companies in different years to point out existing differences. Furthermore, we examine which KPIs are changed most often and how frequently businesses adjust their performance indicators. The companies examined are differentiated according to size and sector.

JEL classification: G00, G34, M41

Keywords: *DRS 20, Prime Standard, key performance indicators*