Kaunas University of Technology

School of Economics and Business

Research of Integrated Reporting Content Changes Based on EUROSTOXX 50 Companies

Master's Final Degree Project

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Kaunas, 2020

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Declaration of Academic Integrity

I confirm that the final project of mine, Justė Bugorevičienė on the topic „Research of Integrated Reporting Content Changes Based on EUROSTOXX 50 Companies“ is written completely by myself; all the provided data and research results are correct and have been obtained honestly. None of the parts of this thesis have been plagiarised from any printed, Internet-based or otherwise recorded sources. All direct and indirect quotations from external resources are indicated in the list of references. No monetary funds (unless required by Law) have been paid to anyone for any contribution to this project.

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Summary

Topic relevance. To be able to determine underlying value and hidden potential of an investment, investors analyze not only usual financial data but also company's impact for community, environment, and governance. One of the most promising tools for such analysis is considered integrated reporting. According to report issued by IIRC (2018) it was revealed that 95% of respondents of conducted research indicated IR as 'essential' or 'very useful' indicating prosperity of the practice. Since there is no unanimous rules and jurisdictions for integrated reporting, not to mention there is no audits of such reports, there is a need to identify if changes in the content of integrated reporting are happening and if the quality of reports is better so that it could be used when making investing decisions. While IR framework provides guidelines for disclosure of main content elements of the integrated report, there are a lot of freedom left for preparators to decide if information is material to be disclosed in the report. Therefore, investors, yet they value such information provided, cannot compare different business units to be able to make reasonable investing decisions.

Research problem – Various governmental organizations (EU, ISAB, IFA) and financial institutions (LSE) provide guidelines for IR, but there are still no unanimous rules and agreed formal presentation. To be able to connect large scope of information the potential companies provide, investors must convert it to reasonable and well-grounded value which is currently very challenging. Therefore, there is a need to identify if changes in the content of IR are happening and if the quality of reports is better so that it could help when making investing decisions. As a result, research problem is formed: **how content of integrated reporting is changing to provide more relevant information to investors**?

Research object – The change of integrated reporting content

Aim of the research – to analyze the changes in integrated reporting content and provide insights for possible development.

Objectives of investigation:

1. To perform analysis of integrated reporting theoretical principles and existing problems;
2. To identify requirements for content of integrated reporting and content change determinants;
3. To compose research methodology to identify how information provided in integrated reports changes during selected period;
4. To perform empirical research on the content of integrated reports of European companies and provide recommendations and conclusions.

Methods of investigation: analysis and review of scientific and specialized literature, content analysis, disclosure checklist, statistical analysis, graphical analysis.

Sample of research: Total of 65 integrated reports and 27 financial statements published in 2015-2018 by 19 different companies from EURO STOXX 50 index were included in the sample.

Results of investigation: Performed empirical research was divided into three sections: content analysis of IR by industry; comparison of content elements of IR included in IR database and IR presented voluntarily and comparison of content elements of FS and IR. It was concluded that companies from 2015 to 2018 improved disclosures of business model, risk and opportunities, strategy and resource allocation and performance content elements. Companies from different industries received higher scores for different content elements indicating that different information is considered material. Companies improved significantly disclosures of content elements in 2017 but scores decreased in 2018. Companies included in IR database received higher scores for disclosures of governance, business model, risk and opportunities, performance and basis of presentation. Companies not included in IR database received higher scores for disclosures of organizational overview and external environment, strategy and resource allocation and future outlook. FS received higher scores for risk and opportunities and basis of presentation content elements compared to IR. FS do not have any information disclosed in connection to strategy and resource allocation content elements.

Bugorevičienė, Justė. EUROSTOXX 50 įmonių integruotų ataskaitų turinio pokyčių tyrimas. Magistro baigiamasis projektas / vadovė prof. dr. Lina Dagilienė; Kauno technologijos universitetas, Ekonomikos ir verslo fakultetas.

Studijų kryptis ir sritis (studijų krypčių grupė): Verslas ir viešoji vadyba (Apskaita).

Reikšminiai žodžiai: integruota ataskaita; turinio elementai; nefinansinė infromacija.

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Santrauka

Temos aktualumas. Norėdami nustatyti pagrindinę investicijos vertę ir paslėptą potencialą, investuotojai analizuoja ne tik įprastus finansinius duomenis, bet ir įmonės poveikį bendruomenei, aplinkai ir valdymui. Integruotos ataskaitos yra laikomos viena iš perspektyviausių tokios analizės priemonių. Remiantis IIRC (2018) išleista ataskaita, paaiškėjo, kad 95% atlikto tyrimo respondentų nurodė IR kaip „esminę“ arba „labai naudingą“, kas indikuoja praktikos suklestėjimą. Kadangi nėra sukurtų vieningų integruotų ataskaitų taisyklių ir įstatymų, jau nekalbant apie tokių ataskaitų auditą, reikia ištirti, ar keičiasi integruotų ataskaitų turinys ir ar jų kokybė yra geresnė, tam kad galėtų būti naudojamas investavimo sprendimams priimti. Nors IR sistemoje pateikiamos integruotos ataskaitos pagrindinių turinio elementų atskleidimo gairės, rengėjams palikta daug laisvės nuspręsti, ar informacija yra pakankamai reikšminga, kad būtų atskleista. Todėl investuotojai, nors ir vertina tokią informaciją, negali palyginti skirtingų verslo vienetų, ir priimti pagrįstus investavimo sprendimus.

Tyrimo problema – Įvairios vyriausybinės organizacijos (ES, ISAB, IFA) ir finansinės institucijos (LSE) pateikia IR gaires, tačiau vis dar nėra vieningų taisyklių ir sutarto oficialaus pateikimo formato. Investuotojai, norėdami konvertuoti potencialių įmonių pateikiamą informaciją į patikimą ir pagrįstą vertę, turi apjungti didelį informacijos kiekį, kas šiuo metu yra labai sudėtinga. Todėl reikia išsiaiškinti, ar keičiasi IR turinys ir ar ataskaitų kokybė yra geresnė, kad tai galėtų padėti priimant investavimo sprendimus. Taigi, projekto problema formuojama klausimu: **kaip kinta integruotų ataskaitų turinys tam, kad būtų pateikta patikimesnė informacija investuotojams?**

Tyrimo objektas - integruotų ataskaitų turinio pokyčiai

Tyrimo tikslas – išanalizuoti, kaip kinta integruotų ataskaitų turinys ir pateikti rekomendacijas jų tobulinimui.

Tyrimo uždaviniai:

1. Atlikti integruotų ataskaitų teorinių principų ir esminių problemų analizę;
2. Apžvelgti atliktus tyrimus ir esmines publikacijas apie integruotas ataskaitas;
3. Sukurti tyrimo metodologiją integruotų ataskaitų turinio pokyčių pasirinktu periodu analizei atlikti;
4. Atlikti Europos įmonių integruotų ataskaitų turinio pokyčių empirinį tyrimą ir pateikti išvadas ir rekomendacijas.

Tyrimo metodai: mokslinės ir specializuotos literatūros analizė, turinio analizė, atskleidimų kontrolinis sąrašas, statistinė analizė, grafinė analizė.

Tyrimo imtis: Imtį sudaro EURO STOXX 50 indeksui priklausančių 19 įmonių 2015-2018 metais paskelbtos 65 integruotos ataskaitos ir 27 finansinės ataskaitos.

Tyrimo rezultatai: Atliktas empirinis tyrimas buvo suskirstytas į tris dalis: IR turinio analizė pagal pramonės sritis; IR, įtrauktų į IR duomenų bazę, turinio elementų palyginimas su IR, pateiktais savanoriškai, ir finansinių ataskaitų bei IR turinio elementų palyginimas. Buvo padaryta išvada, kad įmonės 2015 - 2018 m. patobulino verslo modelio, rizikos ir galimybių, strategijos ir išteklių paskirstymo bei našumo turinio elementų atskleidimą. Skirtingų pramonės šakų įmonės gavo aukštesnius balus už skirtingus turinio elementus, kas rodo, kad skirtinga informacija laikoma reikšminga. Bendrovės žymiai pagerino turinio elementų atskleidimą 2017 m., tačiau balai sumažėjo 2018 m. Bendrovės, įtrauktos į IR duomenų bazę, gavo aukštesnius balus už informacijos apie valdymą, verslo modelį, riziką ir galimybes, našumą ir ataskaitų rengimo atskleidimą. Į IR duomenų bazę neįtrauktos įmonės gavo aukštesnius balus už atskleistą organizacijos vidinę ir išorinę aplinką, strategiją ir išteklių paskirstymą bei ateities perspektyvas. Finansinės ataskaitos gavo aukštesnius balus už riziką ir galimybes bei ataskaitos rengimo turinio elementus. Finansinėse ataskaitose nepateikiama informacija, susijusi su strategijos ir išteklių paskirstymo turinio elementu.

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Introduction

Topic relevance. In a world where business models are changing rapidly and physical capital no longer represents the real value of the company, investors turn to find help from hard data to soft information sources. To be able to determine underlying value and hidden potential of an investment, investors analyze not only usual financial data but also company's impact for community, environment, and governance. One of the most promising tools for such analysis is considered integrated reporting. This kind of reports becomes more and more important for investors as it provides information not included in regular financial data. According to report issued by IIRC (2018) leading countries in IR adoption is United Kingdom, France, Australia, Brazil, Japan, Malaysia and South Africa, where IR is mandatory to be provided by Johannesburg Stock Exchange. To add more, the same report reveals that 95% of respondents of conducted research indicated IR as 'essential' or 'very useful' indicating prosperity of the practice. Even though various governmental organizations and financial institutions provide guidelines for integrated reporting, there is still an issue if information is reliable to be used in investing decisions. Since there is no unanimous rules and jurisdictions for integrated reporting, not to mention there is no audits of such reports, there is a need to identify if changes in the content of integrated reporting are happening and if the quality of reports is better so that it could be used when making investing decisions. Integrated reporting includes environmental, social and governmental structures and projects of a business unit but as for now there is no agreed formal presentation of such information. While IR framework provides guidelines for disclosure of main content elements of the integrated report, there are a lot of freedom left for preparators to decide if information is material to be disclosed in the report. Therefore, investors, yet they value such information provided, cannot compare different business units to be able to make reasonable investing decisions.

Research problem – Various governmental organizations (EU, ISAB, IFA) and financial institutions (LSE) provide guidelines for IR, but there are still no unanimous rules and agreed formal presentation. PWC (2019) in its research of environmental, social and governmental (ESG) reporting study points out that information which investors desire to obtain before making the decision and what corporates present is two very different things. Naynar, Ram, Maroun (2018) completed research also add that there is a perception gap because companies do not fully understand what information is valued by their stakeholders as well as disclosing information too sophisticated for end users to understand. To be able to connect large scope of information the potential companies provide, investors must convert it to reasonable and well-grounded value which is currently very challenging. Therefore, there is a need to identify if changes in the content of IR are happening and if the quality of reports is better so that it could help when making investing decisions. As a result, research problem is formed: **how content of integrated reporting is changing to provide more relevant information to investors?**

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Research methods: analysis and review of scientific and specialized literature, content analysis, disclosure checklist, statistical analysis, graphical analysis.

1. Basic principles of integrated reports and problem analysis

Nowadays business conditions and environment are changing rather rapidly forcing entrepreneurs to find new ways to create some competitive advantage. This results in new business ecosystems and models which cannot be positioned in one of the usual business groups. Even though businesses have evolved, reporting standards have not changed significantly over the years. Physical capital no longer represents the real value of the company; therefore, investors demand additional information to be able to determine underlying value and hidden potential of an investment. Investors analyze not only usual financial data but also a company's impact on a community, environment and governance. As a result, financial statements become insufficient to provide full picture and a need for more complex and wider reports is formed.

1.1. The concept of Integrated Reporting

IR is considered one of the most promising tools for such analysis. According to International IR Framework (IIRC, 2013), "integrated report is a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term." In contrast to usual financial statements, integrated report provides information about environmental, social and governmental structures and projects of a business unit. Financial statements represent only part of the operations of a company. Meanwhile, integrated reporting aims to create a holistic view of a company by presenting its operations, business model and strategy in the context of material, social and environmental issues.

Integrated Report is a new and evolving corporate report whose primary purpose is, first and foremost, to offer investors an integrated presentation of key factors that are critical to current and future value creation (IIRC, 2013). Creators of these kind of reports rely on the sustainability report as a basis for their integrated report as well as non-financial information the company has. In an integrated report, the organization provides a concise summary of how its strategy, management, operations and prospects create value for the company over time. Therefore, IR is not intended to be an excerpt from the traditional annual report, nor the annual financial statements, together with the sustainability reports. However, the integrated report interacts with other reports by providing a link to additional details that are provided separately.

However, even though the framework for providing integrated reports was introduced by IIRC in 2013, such kind of reports are still voluntary for business units to provide. Currently IIRC in its database provide links to more than 500 webpages of different companies, which has referenced IR framework in their integrated reports (IIRC, 2019). Even though the number of companies providing such reports is increasing, the amount is significantly lower than the number of mandatory financial statements which are provided annually.

Reports are already long and growing in scope: one report can be even 400 pages long. However, reports have evolved in isolation, fragmented, resulting in a lack of correlation between organizational strategy, management, operations, financial and non-financial performance. Meeting the growing demand for information requires a new business reporting model to support accountability development, combining individual reports into a single, integrated whole. As a result, integrated reports were launched. (IIRC, 2011).

The beginning of integrated reporting is linked to the development of corporate reporting. Corporate accountability is based on financial statements, management reports, governance, payroll and sustainability reports, while reflecting their interdependencies and disclosing them in integrated report. At the end of the twentieth century, PricewaterhouseCoopers developed the Value Reporting Framework, the first step towards IR. The first version of the integrated report was written in the early 21st century and the process of developing the IR structure continued. In 2009, a code of governance principles of King III of South Africa was issued which recommended that companies prepare integrated reports. In 2010, King's III Code entered into force, South Africa was the first country to have legal rules for integrated accountability. As a result, in May of 2010, an Integrated Reporting Committee was established in South Africa to develop guidelines for good IR.

In August 2010, Prince's Sustainability Reporting Project (A4S) and the Global Reporting Initiative announced the establishment of the International Integrated Reporting Council (IIRC). Its purpose is to establish a International Integrated Reporting Framework (The International <IR> Framework) to help organizations communicate information to investors and other stakeholders in a clear, concise, consistent and comparable manner.

In November 2012, the IIRC published a prototype of the International IR Framework and in December 2013, the final version of the International IR Framework was released (Global Reporting Initiative, 2012). Currently, IR is not mandatory for companies, but is expected to become mandatory in the near future.

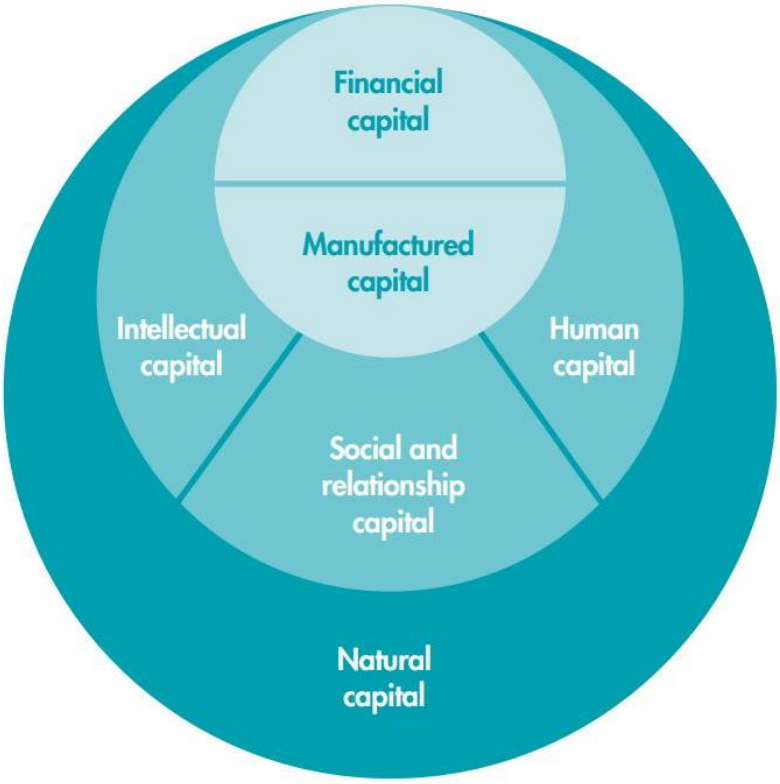

Fig. 1. Six capitals in IR (IIRC, 2013)

As it is shown in Figure 1, the integrated reports distinguish six different types of capital (IIRC, 2013):

- Financial capital is the most well-known type of capital in corporate reporting. Financial capital can take many forms, including stocks and bonds, bank deposits and interest, bills, dividends, loans, and many other financial instruments, including cash.
- Manufactured capital means the production of physical objects made available to an enterprise for use in the production of goods or services, including buildings, equipment and infrastructure. In most cases, manufactured capital is the main product(s) sold by the company.
- Intellectual capital means knowledge-based intangible assets, including intellectual property such as patents, copyrights, software, rights and licenses, and organizational capital such as implied knowledge, systems, procedures and protocols.
- Human capital - the competencies, capabilities, experience and motivation of employees to innovate (IIRC 2013) including their ethical values and loyalty, ability to lead and work in a team.
- Natural capital means all environmental resources and processes that provide goods or services, including air, water, land, minerals and forests, biodiversity and ecosystems. Natural capital describes the direct impact of a company on the environment, including resource savings and prevention of pollution.
- Social and relationship capital - institutions and relationships within and between communities, stakeholders, and other networks, and possibilities to share information to enhance individual and collective well-being (IIRC, 2013). Social and relationship capital represents the company's network, relationships with customers, sponsors, other partners, and stakeholders.

Another important document defining how integrated report should be prepared and providing practical insights on its preparation was presented by IIRC and International Federation of Accountants (IFAC) in 2015. Even though the guide (IFAC, 2015) is prepared together with IIRC, there are some points both documents define differently as well as the fact that both stresses out different aspects.

Even though both documents point out the same aim of IR - to explain users how value is created within organization over time – definitions of integrated report, value creation and user of IR differ. While IIRC, as indicated in the beginning of this section, points out each component of integrated report as well as different time frame ("in the short, medium and long term", (IIRC,2013)), IFAC shortens the definition generalizing IR components to "all factors" and does not differentiate different time scales. Similarly, the user of integrated report is named in detail in IIRC framework, while IFAC stressed financial connection between the company and user of the report while only generalizing on the rest of users as "other". On the opposite, value creation definition is relatively more general in IIRC provided framework, while IFAC identifies mission, vision, strategy and other factors as the main components of value creation.

The IIRC Framework is a theoretical concept strongly focused on the influence of six capital resources disclosure. The document actively promotes the implementation of integrated thinking in the organization. It is proposed for companies to organize their activities to be conducted on a continuous basis with six capital resources, and this should be reflected in an integrated report. The essence of integrated thinking is revealed as accomplishing the goals of an organization's strategy through six capital resources and thereby creating value for the organization.

IFAC guidance - is more practice-oriented, with examples from real organizations. However, this paper hardly mentions the six capital resources, the ongoing discussion is limited to financial capital, and does not define what capital resources within an organization include and how they should be disclosed in an integrated report. While the purpose of both documents is to expose the value creation process, this paper narrows down which measures of value creation should be discussed.

1.2. Brief review of financial statements

Financial statements usually comprise of 4 main reports: balance sheet, income statement, statement of changes in equity and cash flow statement. Even though usually these 4 reports are followed by explanatory notes with mandatory more detailed disclosures of information provided in the reports, basically financial statements as it is in the name, provides information about financial position of the company. The objective of financial statements is to provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions (Deloitte, 2018).

Financial statements are the oldest tool for financial information communication but requirements for this type of reports differ around the globe. While Australia, Canada and the European Union apply IFRS (IFRS, 2020) to set out rules for presentation of financial statements, US uses local GAAP creating a requirement gap when comparing similar information provided in the statements. While businesses are developing and the world is becoming a global marketplace, investors require consistency and unanimous rules so that reports would be easier to compare. Therefore, US is expected to gradually adopt IFRS practices in their GAAP.

Even though different accounting standards and rules for financial statements are applied around the world, in contrast to integrated reports, financial statements are mandatory to submit annually.

Despite the periodic submission and existing regulation, financial statements are criticized for showing small picture of a business in a fixed past time unit rather than being a tool for identification of the real entity value. The boost of investors requirements to create different reporting tool intensified when new business models became very popular. Nowadays with a help of internet many of the new businesses are operating globally without having big assets in their balance sheets. As a consequence, investors pointed to the main flaw of the financial statements – the lack of possibility to provide information about the prospect of the company, its hidden value, not shown in any numbers of the reports.

1.3. Concept of materiality

While it is noticed that more and more often investors turn to soft information sources to identify underlying value and hidden potential of a prospect investment, it is crucial for businesses to understand which information is relevant to be included in integrated reports. Nowadays, when systems generate tons of different data, it is a role of a general manager to see the benefits of the business unit and identify potential risk. In order to decide which points to include in reports, it is important to understand the concept of materiality.

The Securities and Exchange Commission (SEC, 1999) in accordance with the interpretation of the U.S. Supreme Court defines financial materiality as information presenting a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having

significantly altered the total mix of information made available. Financial materiality can also be applied not only on financial information, but other facts presented in integrated reports. In other words, materiality shows what information is significant for investors to make final investing decision. IFAC guidance (2015) defines information as material "if it could substantively affect the organization's ability to create value in the short, medium or long term" expressing more in relation to strategy rather than only financial results.

According to IIRC (2013) when evaluating the materiality of the matter, senior management and those charged with governance should evaluate the influence on financial capital, organization's strategy, business model or any of the six capitals relevant for the business unit over short, medium or long term. It is also stressed that materiality in IR is important for the conciseness of the report which both form one of the 6 Guiding Principles of IR framework.

PWC (2014) conducted survey of professionals identified main points what investors find useful in reports. The survey concluded that investors take materiality for granted in each report but as well values clear, specific information which is linked throughout the report.

1.4. Content differences of integrated reports

There are a few different scientific studies carried out to identify reasons why different companies choose to announce integrated reports voluntarily. Sia, Brahmana & Memarista (2018) in their research indicate that companies disclosing more than just financial information can benefit from an increased value of the firm as well as positive reputation in eyes of investors. According to Zadeh, Salehi, Shabestari (2018), Turmin, Hamid, & Ghazali (2016) and Bekiaris, Psimada, & Sergios (2014) researches, larger and older companies with better financial leverage, liquidity and profitability ratios, as well as broader ownership dispersion are more likely to present additional information in their reports. In addition to reasons mentioned earlier, Hassan (2015) and Mokhtar (2017) concludes that audit committee quality, level of risk, firm complexity, auditor type and frequency of board of directors' meetings also influence the level of information disclosed for public. To summarize the findings mentioned earlier, it can be stated that additional information to financial statements will be presented by:

- Larger, more complicated structured and longer operating companies;
- Companies having better financial ratios (financial leverage, liquidity, profitability);
- Companies having better reputation.

So basically, integrated reports for now is used to show the better part of a business rather than providing reliable information about underlying risks in everyday business activities and strategic overview for the future. To avoid greenwashing effect, creation of standardized forms of integrated reports is crucial.

Even though various governmental organizations (EU, ISAB, IFA) and financial institutions (LSE) provide guidelines for IR, there is still no unanimous rules and agreed formal presentation of IR. This results in an issue for potential investors if provided information is reliable to be used in investing decisions. PWC (2019) in its research of environmental, social and governmental (ESG) reporting study points out that information which investors desire to obtain before making the decision and what corporates present is two very different things. The idea that investors require to receive standardized information about company's long-term value creation to support long-term risk assessments is also discussed by Hales, J. (2018) who also stresses the importance of accountant role

and its changing responsibility scope trying to cover the gap between what is mandatory, investors desire and commercial secrets to disclose. Naynar, Ram, Maroun (2018) completed research also add that there is a perception gap because companies do not fully understand what information is valued by their stakeholders as well as disclosing information too sophisticated for end users to understand.

IR topic is quite fresh to be considered only in academic perspective and is developing more from practices businesses apply rather than theories created by academics. Since the database of such reports is still quite limited, academic research currently focuses on finding relationships between companies' characteristics, financial position and what kind of disclosures are presented in integrated reports rather than creating new practices or tools for analysis of information disclosed.

IR includes environmental, social and governmental structures and projects of a business unit but as for now there is no agreed formal presentation of such information. Therefore, investors, even though they value such information provided, cannot compare different business units to be able to make reasonable investing decisions. Since there are still no audits of integrated reports, investors face a risk of making an investing decision based on flawed information. For example, if the strategy provided in integrated report is based on unrealistic market conditions expectations or carbon dioxide reduction project presented is only to cover some higher environmental risks, the investor cannot know because of lack of formalization for integrated reports. In addition, rather than providing concise and structured reports, currently integrated reports can be as large as 400 pages which is very time consuming to use for analysis.

Even though investing practices are developing to start considering non-financial information when valuing a business, in the end, final investment decision is still expressed in numbers. To be able to connect large scope of information the potential companies provide, investors must convert it to reasonable and well-grounded value which is currently very challenging. Since there is no unanimous rules and jurisdictions for IR, there is a need to identify if changes in the content of IR are happening and if the quality of reports is better so that it could help when making investing decisions. Therefore, it can be concluded that there is a need to study how the content of IR is changing to provide more relevant information to investor.

2. Requirements for IR content and determinants of its changes

In order to gain a deeper insight into the characteristics of IR, it is appropriate to review the studies conducted on this subject as well as main requirements for integrated reports content stated in IR governing documents. Therefore, firstly in this section requirements for content elements stated in IR framework will be presented. Secondly, literature review will be divided in the following sections:

1. Studies analyzing factors influencing content of integrated reports
2. Studies analyzing characteristics of companies providing IR
3. Studies on preparation challenges of IR
4. Studies about interactions between IR and financial statements

Finally, research methods used in different studies will be presented and theoretical model for IR content changes research will be derived.

2.1. Content requirements in IR framework

The main purpose of IR is to encourage companies to present how value is created in short and long term. It is important to note, that in contrary to what information is provided in financial statements, integrated reports include both financial and non-financial information. As a consequence, it is commonly thought that IR encourages integrated thinking which leads to more effective business decisions and more transparent business practices. As it was stated in the first part of this paper, IR mainly focuses on the presentation of 6 capitals (IIRC, 2013). In addition to requirements clearly present all applicable capitals in IR, IIRC also states 8 interconnected content elements as main body of such report:

1. Organizational overview and external environment. This content element should state main company's culture indicators (mission, vision, values) as well as main operational points (activities, markets, ownership structure, competition in the market and position in value chain). It should also include main quantitative information about employees, revenue or similar in addition showing changes through different periods. Finally, this part should describe main factors influencing external environment (legal, commercial, social, environmental and political areas). It is important that information provided in this part would be sufficient to identify potential material risks of a company and their impact for its activities (IIRC,2013).
2. Governance. The main focus of this part should be on governing structures and how they affect value creation in short, medium and long term. This content element should combine not only the structure and features of governing bodies of the company but also processes and actions used by those charged with governance to execute, monitor and develop implementation of strategic decisions. In should also include innovative incentives and governance practices as well as linkage of remuneration and additional benefits to value creation within different period of time. (IIRC, 2013).
3. Business model. This content element should describe how company uses its inputs and business activities to transform them into outputs and outcomes. The main point of the description of business model is to show how it helps the company to implement strategic decisions and create value in short, medium and long term. It is advised that this content element could include not only detailed description of a business model main elements but also presenting a diagram. It is worth to note that to get the best result of business model presentation in IR report, the model

should show dependencies between main stakeholders, external environment and information provided in other content elements (IIRC, 2013).

4. Risk and opportunities. As the name of the content element states, it should describe main risk and opportunities, their possible impact for business activities and how company manages them in short, medium and long term. This section describing the threats and opportunities of the organization provides information on how external and internal factors affect the business, how the business identifies and responds to them. In addition, the likelihood and magnitude of either risk or opportunity should also be identified in the report. Compliance-based reporting prioritizes negative risk, but IR also addresses business opportunities as they create value in the long run. It is important to note that this content element discloses some level of uncertainty, therefore, IR framework notes that risks presented in this section should be considered using guiding principle of materiality (IIRC, 2013).
5. Strategy and resource allocation. This content element should identify strategic objectives in different time periods, strategic plans which are already implemented or to be implemented as well as resource allocation and measurement of implementation. Describing business processes indicates their dependence on resources in each process, so that recipients of information would understand how a business depends on capital and what impact it has on the business and its strategy. In addition, important linkage to other content elements must be considered in strategy and resource allocation disclosure which could include connection to business model, responses to risks and opportunities, competitive advantage and stakeholders' engagement (IIRC,2013).
6. Performance. This content element should include qualitative and quantitative information about achieved goals, comparison to set targets and key performance indicators (KPIs) for short, medium- and long-term goals. It is advised to include performance valuation in relation to all six capitals, as well as impact of significant regulations on the level of performance (IIRC, 2013).
7. Outlook. This content element should include an overview of challenges and uncertainties the company expects to encounter in different periods of time, their effects and company's preparation. It is important that information stated in this section would be realistic and based on grounded arguments. This section mainly takes into account legal and regulatory requirements for the company. Nevertheless, it is advised to provide connections to other content elements, references to reliable external sources of information as well as sensitivity analysis of KPIs or other used measurements (IIRC, 2013).
8. Basis of preparation and presentation. This final content element presents key points the company follows when choosing which information to include in IR. It should include but is not limited to materiality level, reporting boundary and their determination process and significant frameworks to evaluate material matters (IIRC, 2013).

Figure 2 shows how content elements of IR are positioned in value creation process of IR and their connection to the six capitals of IF framework.

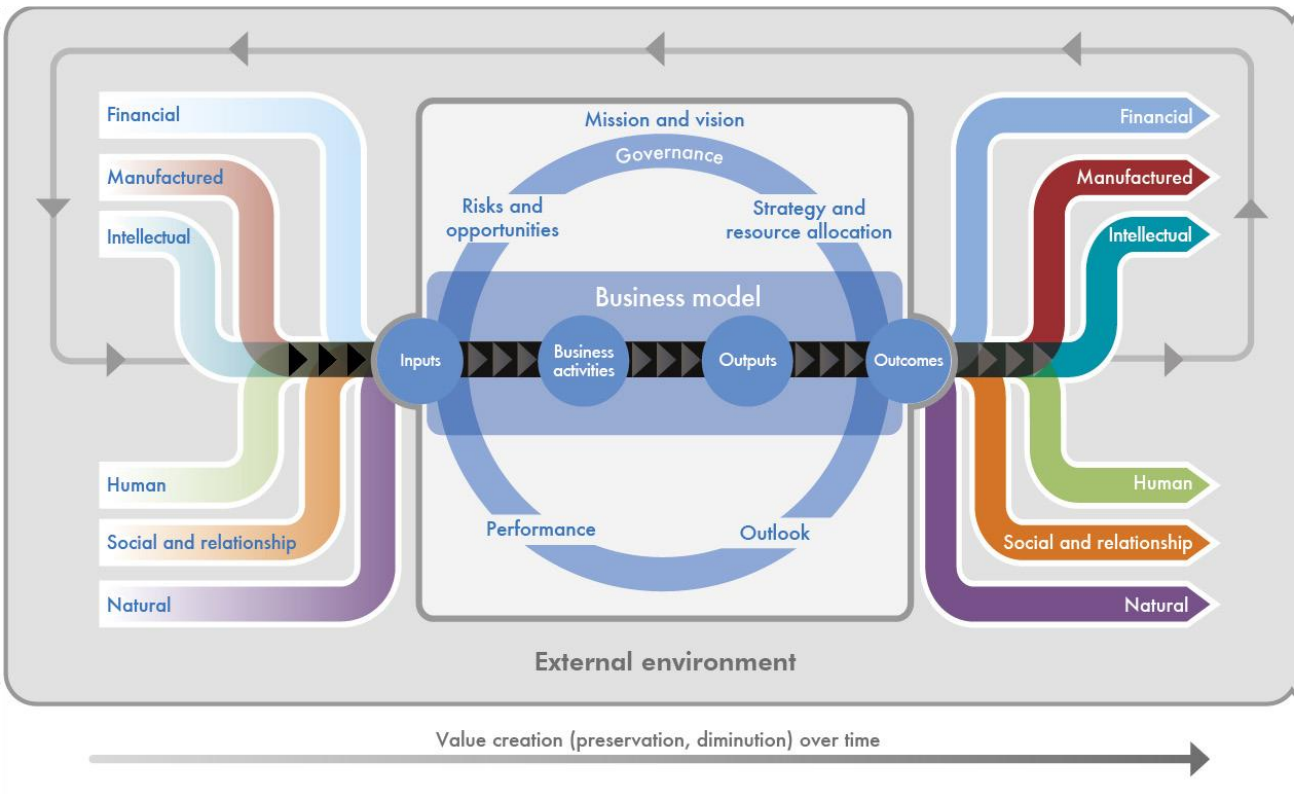

Fig. 2. Content elements in value creation process of IR (IIRC, 2013)

To summarize, it can be stated that company which is able to provide all required information and do it so that all material matters would be disclosed clearly for the stakeholders, provides a perfect integrated report. However, as it can be seen from the descriptions of the content elements in IR framework, there is a lot of grey zones not only when deciding in what format information should be presented but also which and how much of information should be included. For these reasons, a number of different studies are carried out about integrated reports which review will be presented further.

2.2. Factors influencing content of integrated reports

Bernardi and Stark (2018) conducted a study designed to analyze whether environmental, social and governance (ESG) criteria disclosure level provides effectiveness for IR. Authors base their research on the assumption that the more environmental, social and governance information is provided, the more useful it will be to stakeholders. The study revealed that integrated reports have an impact for the accuracy of analytical reports. The higher the ESG disclosure level, the more accurate the analysis of the company's market situation can be.

Frias – Aceituno et al. (2013) examined 750 multinational companies integrated reports and revealed that companies located in the countries of civil law where law and order indicators are high, are more likely to generate and publish a wide range of integrated reports, thus encouraging decision-making by the various stakeholders. Based on this data, two policy recommendations are formulated. First, national laws and safeguards may need to be developed in order to promote and ensure full transparency. Second, managers must be able to decide regarding relevant disclosure practices in the context of their legal environment to obtain the maximum benefit of their solutions.

Melloni et al. (2017) examined IR to reveal what factors influence conciseness, completeness and balance of integrated reports. Integrated reporting aims to cover company strategy, management, performance and prospects, the external environment of the organization and how it as a whole creates sustainable value. At the same time, IR must be comprehensive and balanced. When analyzing early reporters, the authors note that companies with weak financial position, integrated reports are usually much longer and less understandable and optimistic. It is also noticeable that companies with lower social performance are providing reports that are more vague and provide less information on their sustainability. The results also shows that the strategy and goals of an organization depend not only on the level of activity of the company but also on the nature of business activity.

Perego et al. (2016) performed interviews in order to draw conclusions on where improvements could be made in integrated reporting and its content. Semi-structured interviews show that experts realize that opinions of practitioners and theorists are divided and think that most businesses now have a poor understanding of IR value. The study discusses experts opinion on where IR could be improved. It is revealed that organizations should respond first questions about what integrated thinking means to an organization and how integrated thinking is applied in the organization.

Dragu and Tiron - Tudor (2013) investigated whether there is a correlation between voluntary submission of integrated reports and external political, cultural and economic factors. The study analyzes 58 integrated reports prepared by organizations participating in IIRC pilot program. The research aimed to reveal if the willingness of organizations to provide integrated reports was influenced by external factors such as cultural, political and economic. The study was conducted by analyzing the content of reports and using SSPS program for analysis of the systematized data. The study revealed a positive correlation between commitment to IR and political and economic factors, but the higher National Corporate Responsibility Index did not have significant influence for the voluntary submission of integrated reports.

In an article presented by Camilleri (2018), it is observed that organizations are increasingly disclosing essential information about their financial and non-financial capital resources in the integrated reports. Their purpose of providing integrated reports is to improve relations with institutions and stakeholders. Organizations are expected to communicate on all aspects of value creation, business models and strategic priorities. The paper discusses the practices of disclosure of integrated information by organizations, reporting and auditing characteristics. It is noted that practitioners may face the risk of focusing their attention on the form of their reports rather than the content of integrated reports. The study was conducted in two directions. First, the theoretical foundations were linked to leadership, institutional and legitimacy theories and recent developments in business communication. Second, regulatory measures, including the Global Reporting Initiative (GRI) sustainability reporting standards and the system of IR were critically assessed since these initiatives support organizations in integrated thinking and reporting.

The Camilleri (2018) discusses recent developments leading to the popularity of integrated thinking and IR and why financial and non-financial resources are included in the annual reports. The results show that investors and other financial entities remain the key stakeholders to many organizations, so they are still the primary users of corporate reports. However integrated information also helps professionals improve and strengthen their organizational management skills and organizations' relationships with institutions and the public, because IR covers the environment, social and management information.

Fasan and Mio (2016) in their study explored the key determinants of information disclosure among IIRC pilot program companies implementing IR system. In other words, it investigates which variables affect how companies provide information on their materiality measurement process. In order to test the hypotheses raised, a number of statistical analyzes were performed with manually collected data, including IIRC pilot program companies for the 2012 and 2013 financial years. The results show that the area in which the organization operates and some levels of the organization characteristics (board size and diversity) play an important role in determining financial statements misrepresentation and materiality to the stakeholder. It is also found that IIRC pilot program companies disclosed more information about financial report distortions that are significant to the stakeholders than their competitors who have not joined the program.

Frias-Aceituno et al. (2014) presented a study analyzing the fact that the business world complexity has led to increasing demands on companies for information on their financial performance, corporate governance and contribution to sustainability. The study revealed that monopoly companies are less likely to publish integrated reports, which would disclose information relevant to decision making. According to the theory of capital costs, the decision not to publish such a report would be made to preserve current high profits. On the other hand, company size and profitability have a positive impact on the likelihood of this type of reporting. In this point of view, business growth opportunities and scope are irrelevant.

Rensburg and Botha (2014) observe that organizations are forced to critically evaluate how they communicate their financial information to stakeholders. It is aimed, using integrated reports, to combine financial and non-financial performance valuation reports in a way that encourages corporate strategy. While disclosure of integrated information from organizations is noticeable by public, it is not clear how stakeholders valuate this information. The main purpose of this work was to investigate how financial information is used in accordance with new financial reporting standards. According to an online survey performed, this study found that very few stakeholders use integrated reports as a key source of information on finance and investment decisions and that these reports are considered additional information. Annual and interim financial statements of companies are still key business financial information. While stakeholders identified that they rarely use financial information on the internet at any time but have indicated that they are increasingly willing to do so.

Abeysekera (2013) produced and presented an article with the goal to create and offer IR model for businesses. The paper discusses the use of intellectual property in the market dedicated models that have created a quality foundation for improving financial reporting - to demonstrate the value created by the company without limiting it to financial information. But this kind of reporting focus on just one or two non-financial indicators. For example, those focused on intellectual resources non-financial reports mainly contain information on environmental and social issues and company actions in these areas. Reports of this nature lack information as one factor (such as intellectual resources) affects another factor (such as social activity) internally in the company and how it will affect the company's operations and its financial and non-financial performance.

The article under review presents integrated reports as a valid model to demonstrate non-financial factors. The integrated reports cover various non-financial and financial resources (a type of capital) of the company and reveals how those resources affect the organization's operations accomplishing goals of the organization and how value will be created for stakeholders. The author develops and proposes a model for how the information could be disclosed in integrated reports. The paper

stipulates that the integrated reports must disclose information about the company's path to achieve the vision and goals by including retrospective and intended actions. The author states that when auditing such reports, it would be appropriate to discuss in the audit report if provided information reveals how the organization's vision and goals are being achieved and whether the information disclosed may be useful to stakeholders.

Maroun (2018) attempted to describe an alternative approach to reliability and to identify initial elements of an 'explanatory assurance model'. Traditional methods of providing reliable information, determined by current professional standards are risk-based models in which basic focus is on the veracity of published data, not on the information provided to users for interpretation or analysis. Therefore, they are not appropriate to express qualitative, subjective or future focused evaluations usually included in integrated reports. The study was conducted in response to calls from the International Auditing and Assurance Standards Board (IAASB) for more innovative credibility models to address the reporting needs of modern organizations. The article suggests a practical approach to reliability and clarity of information through IR.

The study identifies elements of the explanatory reliability model to focus on interpretation and analysis of the information presented in the integrated report rather than the underlying data. That includes clarity in the value creation process presented in the integrated report, management discussions and analysis methods; and reasonableness of the review process which is used to ensure credibility of qualitative, subjective and future focused statements made in the integrated reports.

Brown and Dillard (2014) set the goal to critically consider IR in order to expand dialogue and discussion on how accounting and reporting standards can help or undermine efforts to promote sustainable business practices. The authors link ideas and findings of scientific and technological research with literature on sustainable reporting forms to incorporate the current debate on mainstreaming the benefits of IR as a change initiative that can contribute to sustainability. In the article an overview of the accounting role of an organization in adopting sustainability practices in three main ways is provided. First, it discusses accounting changes that go beyond the organizational level and to broaden existing approaches of business participants to social and environmental reports. Currently most of professional and academic literature are focused on. Second, the article emphasizes the assessment processes of political factors that are not sufficiently explored in the existing accounting literature. Third, the author proposes a new framework for evaluating individual disclosure initiatives, such as integrated reports, not forgetting the major challenges of sustainability issues. Brown and Dillard (2014) argue that integrated reports, as defined by IIRC, provides a very limited and one-sided approach to assessing and reporting on sustainability issues. The paper notes that IR meaning, and design are far from stabilized.

Haller and van Staden (2014) introduced the goal of contributing to the current debate on IR and proposing a practical tool that could help with the application of the integrated approach in business practice. The future of IR and the likelihood of its applicability globally will depend on the appropriate reporting tools available to reveal the key ideas behind IR. The authors point out that there are no such measures for reporting. In this article, the authors propose the use of value-added reports as a complementary, useful and therefore relevant IR tool. The study aims to promote academic and institutional discussion on how to apply the concept of IR on companies' level. Because the proposed value-added reporting characteristics are in line with the principles and concepts developed by the IIRC in IR project, as well as the main purpose of integrated thinking.

Based on a review of international literature and research, the paper states that presentation of a structured traditional value-added measure in the recommended overhead value reporting can become a practical and effective reporting tool for integrated reports. The proposed value-added reports are not only in line with the underlying IR principles, but also reports the impact of different types of capital included in the integrated reports and thus complement and reflect the concept of IR.

Lodhia (2015) examined the bank (Goodbank) transition to IR and identified the factors behind this transition, providing insights for other companies who want to participate in IR practices. This study finds that a business with a financial background and non-financial property environments, can apply innovative reporting methods. It is tried to initiate awareness of reporting and recognition of the potential value of IR, as well as the basic guidelines of such practices and the organizational ethical values and objectives based on economic, a combination of social and environmental aspects that make up economic, social and environmental structure.

The author reveals that in order to create IR as a practice, organizations need to have a good practical understanding of IR and management. In addition, in the IR rules and guidelines it must be specified how IR practices work. Organizations need to have a clear view of their operating structures, ethical values, principles and related structures and processes.

Oshika and Saka (2017) designed a study to offer basic IR performance measures (KPIs) that reveal the sustainability of a company through empirical analysis. The analysis focuses on companies that have survived for over 100 years and have already achieved sustainability. The authors studied these companies to uncover the financial characteristics that distinguish sustainable companies from other businesses. An empirical research was carried out using data collected from organizations registered in 136 countries. The evidence is provided that the distribution of value-added and stability of profitability distinguishes firms sustainability. The study proposes value-added distribution and profitability stability as key performance indicators for IR.

Gunarathne & Herath (2016) in their paper present a checklist to assess the gap between corporate reporting practices and the IIRC Guidelines on preparing an integrated report. Analyzing existing literature, authors develop a checklist which can be used as a tool for IR assessment by managers and as a catalyst for the development of IR.

To summarize, it can be concluded that studies reviewed under this section identified these main factors influencing diversity of IR:

1. *Form and scope of integrated reports.* Authors identify that in order to find acceptable format for IR, requirements for content may suffer. In addition, investors identify that due to large scope IR are only used as additional information when making an investing decision. Nevertheless, it is noted that the higher the level of ESG disclosure, the more accurate market analysis of the company can be performed.
2. *Political, economic factors and form of law* in the country may influence the commitment of organizations to provide IR.
3. *Monopolies, companies with smaller less diversified board and companies not included in IIRC pilot program* are more likely to publish IR without disclosing significant misrepresentation in IR.

2.3. Characteristics of companies providing IR

A number of different research studies have been carried out to find out characteristics of different companies publishing integrated reports on a voluntary basis.

Sia, Brahmana & Memarista (2018) conducted a research on 583 non-financial listed companies in Malaysia over the year 2013. Content analysis and regression model was used in the research. Authors concluded that companies disclosing more than just financial information can benefit from increased corporate value, as well as positive reputation in the eyes of investors.

According to research by Zadeh et al. (2018) performed on 301 listed companies in Iran, larger and older companies with better financial leverage and liquidity ratio, as well as a smaller equity distribution are more likely to provide additional information in their reports. Researchers used cross-sectional data statistical method in their work.

Turmin et al. (2016) carried out a research with 310 publicly listed Malaysian corporations. Complex index from 41 attributes was created and data analyzed using descriptive statistics and multiple regression model. It was concluded that the level of non-financial information provided by the companies differs depending on the company size, profitability and economic sector.

Hassan (2015) in his research using multiple regression model on 37 non-financial listed companies in Abu Dhabi and Dubai financial markets concludes that quality of audit committee, firm size, level of risk and firm complexity positively impacts the level of strategic non-financial information provided to stakeholders.

Mokhtar (2017) conducted a meta-analytic review of 59 research papers and summarized that firm size, profitability, leverage, auditor type as well as investor protection, masculinity, economic development, construction of disclosure index and measurement proxies for independent variables moderate the association between profitability, leverage and the level of disclosed non-financial information.

Another group of researchers choose to look at the relationship between IR and characteristics of a company rather than delving deep into the content of the reports presented. For example, Bekiaris et al. (2014) in their work, using multiple regression analysis looks for dependencies and relationships between financial and non-financial information, and size, financial leverage, or other characteristics of the entity.

To summarize, it can be stated that additional information to financial statements will be presented by:

- Larger, more complicated structured and longer operating companies;
- Companies having better financial ratios (financial leverage, liquidity, profitability);
- Companies having better reputation.

2.4. Studies on preparation challenges of IR

Chaidali and Jones (2017) investigated why organizations lack confidence in new professional initiatives. The authors note that after the IIRC issued recommendations for IR, a significant number of companies view integrated reports suspiciously and avoid disclosing information to stakeholders. For these reasons, the authors decided to conduct a study that would initiate a debate on the need for

new and professional innovations. The study was conducted by interviewing fifteen executives and corporate consultants.

The interviews revealed that company executives do not trust integrated reports and are afraid to disclose too much information. Respondents expressed concern that IR would lead to additional costs as they would need additional assistance from financial advisers. Respondents also mentioned that they lack information on how preparation of integrated reports differs from other sustainability reports. Organizations lack an understanding of the benefits that IR can bring to many other factors that prevent companies from avoiding IR. However, in addition to all the worrying factors, the integrated reports have attracted a lot of attention and managers would like to try to produce them, having received positive examples from other market participants.

Brusca, Labrador and Larran (2018) conducted a situation analysis based on document analysis and semi-structured interviews to reveal the challenges and problems faced by organizations preparing integrated reports. The article analyzes the Spanish university UCA (Universidad de Cádiz). A considerable amount of information was gathered through interviews with key people involved in the preparation of the reports. The remaining information was disclosed through the analysis of the prepared integrated reports.

The study found that the reports were based in part on the recommendations of IIRC, the report is actively linked to the university's strategic objectives, lacks information on some types of capital, and lacks a holistic presentation of the company's situation. It can be said that the reports provided by the university are really focused on sustainability but are not integrated. The key issue revealed by the study is that even if a university strictly adheres to the recommendations of the IIRC, it would still be difficult to consider an integrated report as the organization itself is not actively focused on all six types of capital. Thus, in order to provide IR, organizations must first promote integrated thinking in companies, thus increasing the quality and comprehensive disclosure of IR.

Laptes and Sofian (2017) sought to analyze and apply the practices of Danone, a member of the IR pilot program, in preparing integrated reports. The authors discuss that current economic situation poses new challenges and responsibilities that companies have to face when communicating with stakeholders about sustainable development. This includes the protection of the interests of all economic operators involved and the pursuit of environmentally friendly activities. Therefore, integrated reports have been proposed to simplify communication. This relatively new type of reporting is constantly evolving at the international level and has been better understood through the practical application of the Integrated Accountability Pilot Program. In order to convey the benefits of integrated reports, the author conducted a case study of integrated reports from one of the participants in the pilot program.

The investigation showed that the company decided not to prepare integrated reports. In the first year of the pilot program, Danone prepared and submitted an integrated report, but the following year decided to submit two reports on economic, social and sustainability indicators instead of one integrated report. One of the main reasons for not submitting was that, although the IIRC has developed and issued recommendations, there is no structured framework for reporting. The report produced was very voluminous and covered a lot of information, which can make it difficult to read for less financially savvy stakeholders.

Veltri and Silvestri (2015) examined the South African University (UFS) integrated report by comparing it with the framework developed by the IIRC to verify that the UFS integrated report meets the key objectives set by the IIRC. The study aims to discuss the nature of intellectual and non-intellectual capital disclosure in the higher education sector and to initiate a discussion between theorists and practitioners. The integrated reports of the University of South Africa include the content elements of the International Integrated Reporting Board system as labels, but this does not reinforce the content presented. In terms of the principles of the IIRC guidelines, the analysis of UFS integrated reports shows that UFS does not follow the recommended framework. In short, data lacks perspective orientation, information is not interconnected, stakeholder relationships are not highlighted, and the organizational potential for value creation is not revealed.

To summarize the reviewed studies, it can be concluded that after conducted research authors identified several challenges for the development and preparation of IR:

1. Companies try to hide the flaws of content of the report by labeling information according provided official guidelines.
2. There is no structured framework for IR.
3. Reports can be too difficult for all stakeholders to understand due to its volume.
4. There is some difficulty for companies to distinguish the difference between sustainability and integration of reports. In order to provide integrated report, the company itself should promote integrated thinking.
5. Companies are afraid to disclose too much information.
6. Companies worry that creating IR will require additional consultation, therefore, will be costly to produce.

2.5. Studies about interactions between IR and financial statements

Even though there are a lot of different studies regarding content and form of IR as well as companies' characteristics which provide IR, only a small number of studies analyze interactions between financial statements (FS) and IR. What is more, those studies which focus on connections between these two reports are mainly about the disclosure of different capitals in IR or implementation of these reports rather than looking for ways to use both reports for investing decisions.

Lee & Yeo (2015) in their paper examines the association between IR and firm valuation. Using a sample of listed firms in South Africa, the association between cross-sectional variation in IR disclosures and firm valuation is examined in the period after the implementation of IR. It is concluded that firm valuation is positively associated with IR disclosures and that it is stronger in the firms with higher organizational complexity. Furthermore, in firms with higher external financing needs, the sub-sample of firms with higher IR have higher firm valuations. This indicates that this mitigates the information asymmetry between corporate insiders and external suppliers of capital. Additional analysis indicates that firms with high IR outperform those with low IR both in terms in stock market and accounting performance.

Shanti (2018) states in the research that due to transparency increase in financial reporting with the help of IR, family firms traded in Indonesian Stock Exchange receives higher earnings quality. The research analyses reports between 2014 and 2017. The study also indicates that larger sized companies with larger leverage discloses a higher volume of information.

Camodeca, et al. (2019) use a theoretical and empirical model to investigate the adoption of the IR framework as a strategic choice to signal intellectual capital (IC) to equity investors, with specific reference to the pharmaceutical industry. The research uses voluntary disclosure model developed by Verrecchia (1983), also introducing the role of financial analysts to derive a directly reproducible empirical equation. This work shows that in equilibrium, only firms with sufficient IC have decided to adopt IR, resulting in rational investors' willingness to pay more only for the forecasted earnings of integrated reporters.

Lemma et al. (2019) in their paper examine whether a firm's decision to provide IR is associated with its financing decisions and whether financial reporting quality mediates the relationship. A sample of 832 firm-year observations was employed based on a dataset drawn from companies listed on the Johannesburg Securities Exchange (JSE) for the period between 2009 and 2015. The research concludes that firms that provide IR tend to have lower levels of leverage, and this effect is partially mediated through financial reporting quality. The partial effect of financial reporting quality on leverage is stronger for firms that provide IR than is the case for other firms. The findings suggest that IR enables firms to employ equity financing, which is a more informationally-sensitive source of capital than debt financing.

Pavlopoulos et al. (2019) examines the association between the level of the quality of IR disclosure and a firm's market valuation. Analyzing data during the years of 2011 to 2015, the research shows the positive relation between firm performance and the quality of IR disclosure. Furthermore, it is examined the way in which the quality of IR disclosure improves the value relevance of summary accounting information (i.e., the market value of equity) and can create value. Examination shows that the level of the quality of IR disclosure is more significant when firms tend to exhibit a higher value relevance of summary accounting information (i.e., the book value of equity and earnings). Finally, more effective use of IR has resulted in abnormal stock returns being positively associated with earnings quality.

2.6. Overview of research methods applied

After conducted comprehensive literature review it can be noticed that studies on IR generally use several types of data analysis methods. Table 1 shows reviewed authors split by different research method.

Table 1. Research methods applied in reviewed IR studies

Method	**Applied in studies**
Content analysis	Bernardi and Stark (2018); Frias – Aceituno et al. (2013); Melloni et al. (2017); Dragu and Tiron - Tudor (2013); Camilleri (2018); Abeysekera (2013); Maroun (2018); Brown and Dillard (2014); Haller and van Staden (2014); Lodhia (2015); Sia et al. (2018); Brusca et al. (2018); Laptes and Sofian (2017); Veltri and Silvestri (2015); Grassmann et al. (2019)
Indexes	Turmin et al. (2016); Mokhtar (2017)
Regression analysis	Dragu and Tiron – Tudor (2013); Fasan and Mio (2016); Frias-Aceituno et al. (2014); Oshika and Saka (2017); Sia et al. (2018); Zadeh et al. (2018); Turmin et al. (2016); Hassan (2015); Bekiaris et al. (2014); Lee & Yeo (2015); Shanti (2018); Lemma et al. (2019); Pavlopoulos et al. (2019); Grassmann et al. (2019)
Checklist for disclosures	Gunarathne & Herath (2016); Camodeca et al. (2019)
Survey	Rensburg and Botha (2014)

Method	Applied in studies
Interview	Perego et al. (2016); Chaidali and Jones (2017); Brusca et al. (2018)

The method of data analysis usually depends on the chosen research direction, but in general it can be stated that in studies often combinations of several methods of analysis are chosen. For example, Grassmann, Fuhrmann & Guenther (2019) in their research apply content analysis to integrated reports to identify variables, which are then investigated and used to develop a regression model. In order to understand which method is the most appropriate to use in the research, short description and main advantages and disadvantages of each method are shown in Table 2.

Table 2. Descriptions, advantages and disadvantages of IR research methods

Method	Description	Advantages	Disadvantages
Content analysis	A method that allows objective and draw reliable conclusions from a systematic examination of the properties of the text. The method of analysis makes it possible to avoid subjective interpretation of the text while achieving the objectivity of the analysis (Luobikienė, 2007).	Unobtrusive; Possible to replicate; Simple application (Allen, 2017)	Hard validity assessment; Limited to recorded content (Allen, 2017)
Indexes	"the activity where a researcher applies meaning to raw data by assigning key words or phrases. <..> Indexing is an activity by which data is broken down, conceptualized and then re-formulated." (Bloor & Wood, 2006)	Easy comparability; Easy track of changes (Crossman, 2019)	Complicated calculation techniques; Summarized data used; Provides abstract view; Hides inequality in data (Crossman, 2019)
Regression analysis	Quantitative method used to test the nature of relationships between a dependent variable and one or more independent variables (Berk, 2004).	Ability to determine relative influence of variables; Ability to identify anomalies (Berk, 2004)	Flawed model if data is incomplete or used incorrectly; Requires certain level of statistics knowledge from researchers (Berk, 2004)
Checklist for disclosures	"Is used to encourage or verify that a number of specific lines of inquiry, steps, or actions are being taken, or have been taken, by a researcher. These surface in a variety of forms throughout data collection and analysis and thereafter as part of either writing or review." (Given, 2008)	Comparability of data through different periods; Possible to use for investigation of phenomena which in other ways can not be quantified (Given, 2008)	Highly depends on the data collected; Could be difficult to replicate data collection (Given, 2008)
Survey	"Questioning individuals on a topic or topics and then describing their responses" (Jackson, 2011).	Fast and cheap to conduct; Collected data easy to analyze; Reliable; Versatile (Fowler, 2009)	Inflexible; Validity issues; Human bias of respondents; Differences in understanding (Fowler, 2009)

Method	Description	Advantages	Disadvantages
Interviews	"Qualitative research technique which involves "conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program or situation" (Boyce & Neale, 2006)	Possible to collect detailed information; Researcher controls the process; Possible to clarify during the process (Gubrium & Holstein 2001)	Takes more time to conduct than other methods; Difficult to replicate; Risk of interviewee and interviewer biases (Gubrium & Holstein 2001)

To summarize, when choosing the right research method, all of them have their advantages and disadvantages, but final decision mainly depends on the scale, scope and availability of the data as well as the concept which is analyzed and its core characteristics.

2.7. IR content changes theoretical model

From performed literature review, it can be concluded that IR content and its development depends on various internal and external factors influencing the company as well as on the level of key stakeholders' involvement. In order to derive IR that would fulfill requirements of all stakeholders and would include all relevant information, companies must evaluate which financial and non-financial information they have is material to be included in the final report. This defines the level of disclosed information under every content element of IR. For the purpose of this thesis, IR content is analyzed based on IR framework by IIRC. Figure 3 shows theoretical model of content changes of IR research and identifies main factors influencing final report and disclosure of content elements.

For the sake of this research, external environment includes political, economic, social, technological, environmental and legal factors having effect on the company, its activities, strategy and value which strives to meet the requirements of key stakeholders – employees, investors, shareholders and community. As a consequence, management evaluates financial and non-financial information possessed and identifies which is material and should be included in integrated report to ensure conciseness. This means that by indicating content as material, management decides the fulfillment of each content element and the level of disclosure of the matter. By following the guidelines of IR framework, companies divide information into relevant content elements and disclose information for the stakeholders to use. Therefore, by studying the changes of IR content, it is possible to identify trends of which information is considered material and how this perception changes through selected period.

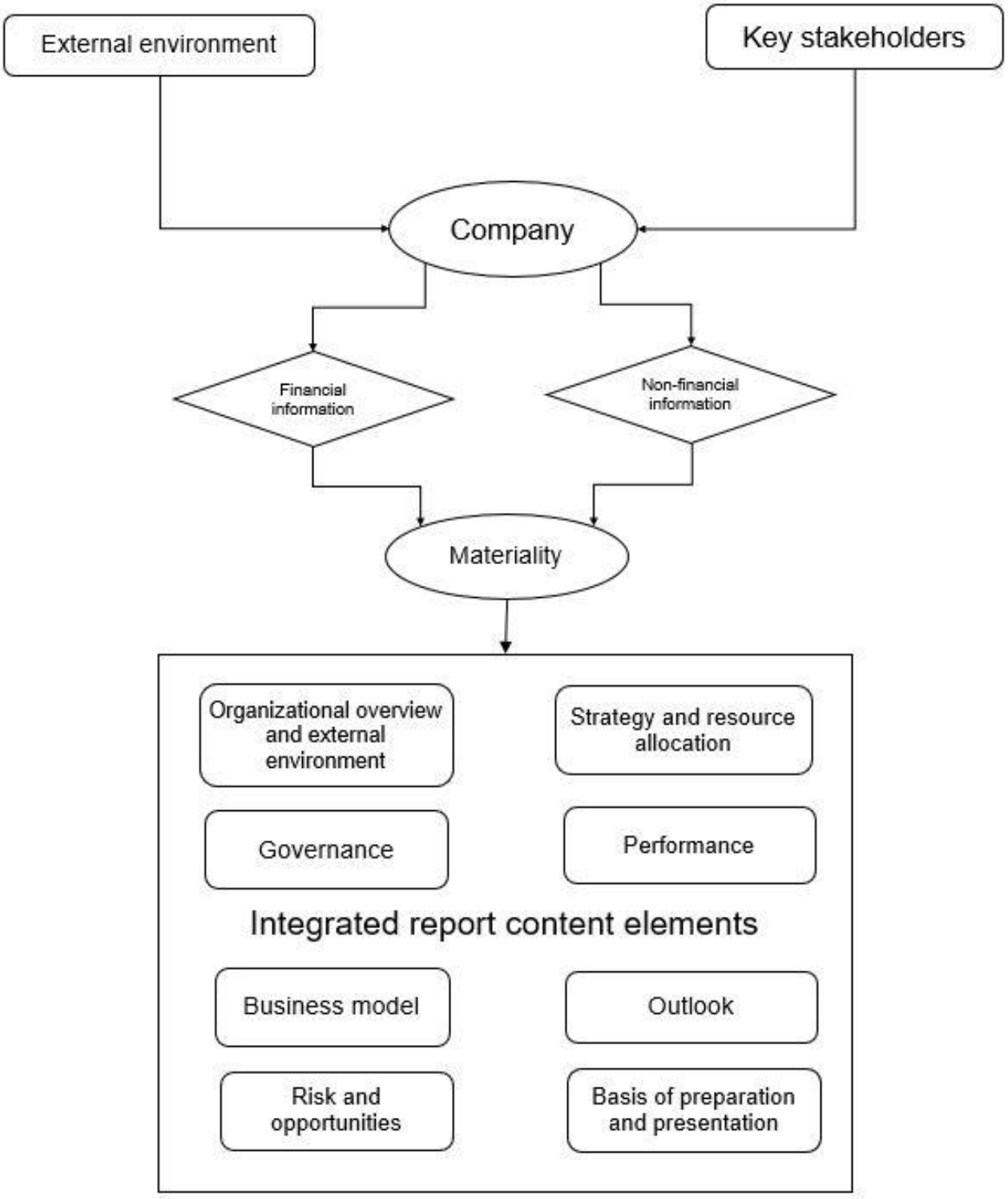

Fig. 3. Theoretical model of IR content changes research

Based on theoretical model presented, in next chapter research methodology of content changes of IR will be defined. Later results of conducted research will be presented.

3. Content changes of integrated reports research methodology

The main aim of empirical research is to analyze the changes in IR content and provide insights for possible development. It is important is to note that the purpose of this thesis is not to identify reasons why companies disclose different levels of information under different content elements but to analyze different levels of disclosure.

Process of empirical research comprises of five steps (see Figure 4). First, integrated reports (IR) and financial statements (FS) for the sampled companies will be collected. Then, using selected checklist both IR and FS will be analyzed, and each relevant component of reports will be scored. For obtained data, statistical analysis methods will be applied and insights and interpretation of received results will be provided. For empirical research content analysis, scoring system and statistical analysis methods will be used.

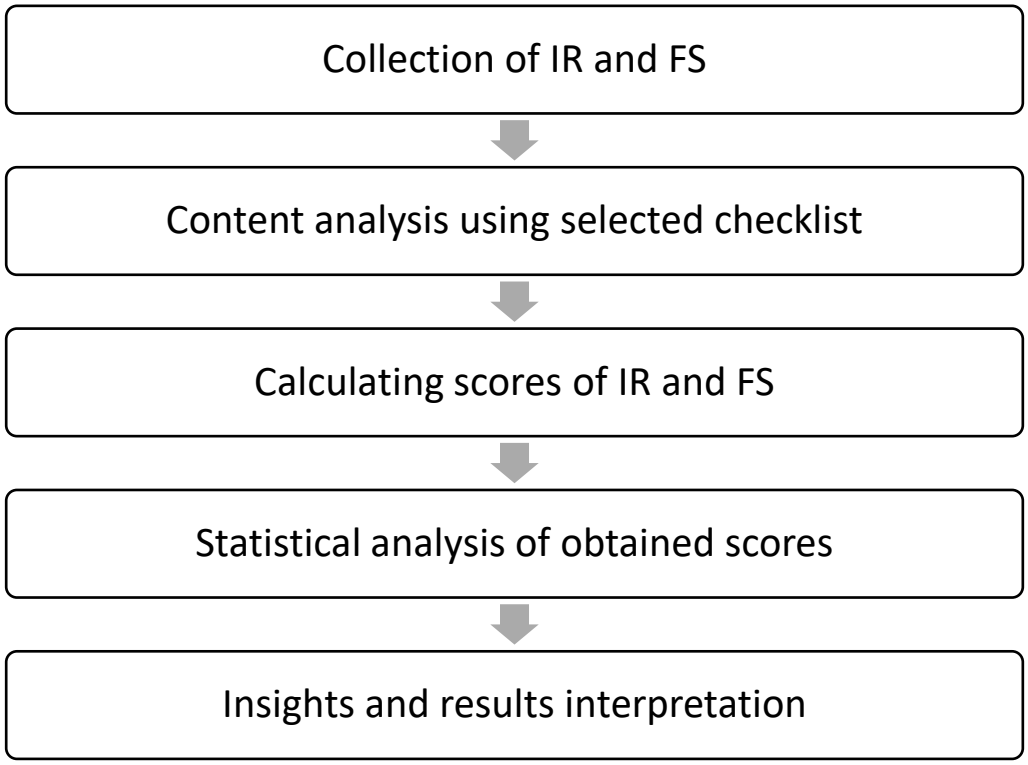

Fig. 4. Process of empirical research

For the content analysis of IR, checklist developed by Gunarathne & Herath (2016) is used. The checklist was selected due to the fact that it corrected main flaws of initial checklist created by Stent and Dowler (2015) which was created in 2011. In addition, the checklist provides comprehensive and clear scoring system to be applied in the study. Not to mention that content elements follow the structure of IR framework, making it easier to understand. Maximum scores of each part of the checklist is provided in Table 3 while full checklist is provided in Appendix 1.

Table 3. Checklist maximum scores

Content element	**Maximum score**
Organizational overview and external environment	14
Business model	15
Risk and opportunities	8
Strategy and resource allocation	6
Governance	8
Performance	13
Future outlook	4
Basis of presentation	8
Totals	**76**

When IR content changes research flow is defined, data sources and reliability will be described in the following section. In addition, data sample will be selected which will be used to identify IR content changes using the steps selected in this section.

European companies that are included in the Dow Jones EURO STOXX 50 index as at 2019 December 31st have been selected for analysis. The list of companies included in the index is provided in Appendix 2. EURO STOXX 50 is a blue-chip supersector leaders representing index for the Eurozone. It includes companies from 8 Eurozone countries: Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands and Spain (STOXX, 2020).

Companies included in this index are selected because they all operate in the euro area, therefore, all companies' financial and non-financial information must comply with EU requirements and directives, which simplifies reporting analysis and comparability. First, companies which provided integrated reports were identified. Then, financial statements of these companies for the same period were obtained. As the annual integrated and financial reports are chosen for examination, the period of 2015-2018 was chosen, when EU Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups was already in force.

Financial statements and integrated reports were obtained from official corporate websites, while general financial indicators and company characteristics were collected through the Bloomberg database. As the companies listed in the index are traded on stock exchanges, this ensures the reliability of the reports, as all companies must perform annual audit. On the other hand, as a particular geographical region is chosen, the results obtained will not necessarily reflect global trends of IR. Selecting a specific index limits that sampled companies will not reflect the distribution of sectors across the population.

Firstly, companies which are quoted in official IR database were identified (14 companies), then websites of all companies included in the EURO STOXX 50 index as at 2019 December 31st were checked and additionally companies providing separate integrated reports were added to the sample (5 companies). Total numbers of reports distributed in the period 2015-2018 is shown in Table 4.

Table 4. Data sample

	2015	2016	2017	2018	Total
IR reports provided and recognized in official IR database	12	14	14	14	54
IR reports provided	0	3	3	5	11
Total IR reports collected	12	17	17	19	65

It is important to note that not all sampled companies identified report as "Integrated report". Collecting data for the sample it was identified three types of different report names:

- Integrated report
- Annual report
- Sustainability report

In order to be included in the sample, report not identified as integrated had to be included in IR database. Most of the sampled reports (36 reports of 65) were identified as "Annual report". Some of the reports were identified as sustainability reports (6 of 65). All these reports are included in IR database as examples of IR framework application, therefore, for research purposes, these reports are considered equal to integrated report. Companies providing annual report included financial statements as part of the report and did not provide it separately. As a consequence, for further research purpose, FS only for companies which provided sustainability and integrated reports were obtained. Summarized FS and IR sample is provided in Table 5.

Table 5. IR content changes data sample by type of report

	2015	2016	2017	2018	Total
Annual reports	9	9	9	9	36
Integrated reports	1	6	7	9	23
Sustainability reports	2	2	1	1	6
Total IR reports collected	12	17	17	19	65
Total FS reports collected	3	8	7	9	27

To summarize it can be concluded that for IR content changes research total of 65 integrated reports and 27 financial statements published in 2015-2018 by 19 different companies were included in the sample. In next chapter following defined research process, data sample will be analyzed to provide insights about changes of IR content.

4. Empirical research of integrated reports content changes

Results of conducted empirical research of IR content changes are presented in this part of the paper. In the first part of this chapter, sample is analyzed, and results are presented using different criteria (country and market sector). In the second part of the chapter, comparison of a total evaluation of each report as well as each content element between different sectors throughout the period is performed and results are analyzed. In the final part of the chapter, comparison of each content elements scores of financials statements (FS) and integrated reports (IR) is conducted and results are analyzed. At the end of the chapter, summary conclusions are presented related to the results of the study.

4.1. Descriptive statistics of the sample

Nineteen companies were included in the sample. As it was identified in the third chapter of the paper, all companies are included in EUROSTOXX 50 index. The list of sampled companies was divided into industries based on market sector they operate in. The list of the companies, their market sectors and industries are provided in Table 6.

Table 6. Industries of the sampled companies

Name	Market segment	No. of reports	Industry
Unilever NV	Consumer goods	4	Manufacturing (total 27 reports)
BASF SE	Chemical products	4	
Sanofi	Pharmaceuticals	3	
ASML Holding NV	Manufacturing equipment - technology	3	
Industria de Diseno Textil SA	Manufacturing clothing	4	
Safran SA	Manufacturing equipment - aerospace	1	
Bayer AG	Pharmaceuticals	4	
Koninklijke Philips NV	Healthcare equipment	4	
BNP Paribas SA	Finance	1	Finance (total 8 reports)
ING Groep NV	Finance	4	
AXA SA	Finance	3	
Enel SpA	Energy	4	Gas, oil and energetics (total 15 reports)
Iberdrola SA	Energy	4	
Eni SpA	Energy	4	
Schneider Electric SE	Energy	3	
Orange SA	Telecommunications	4	Services (total 8 reports)
Telefonica SA	Telecommunications	4	
Vivendi SA	Entertainment	4	Other (total 7 reports)
SAP SE	Software development	3	

All companies engaged to manufacturing activities, not depending on what type of products are manufactured, were assigned to manufacturing industry. This industry is the largest with 8 companies assigned (42%). Separate industry was assigned to companies manufacturing and selling energy related products/services. 4 companies selling and mining natural gas, oil and electric power were assigned to gas, oil and energetics industry (21%). 3 companies were assigned to finance industry (16%) which was separated from services industry (2 companies – 10%) since activities and regulations are very different for this type of companies. Finally, 2 companies engaged in entertainment and software development markets were assigned to industry "Other" (11%). Figure 5 shows how different industries are split in the sample of collected reports.

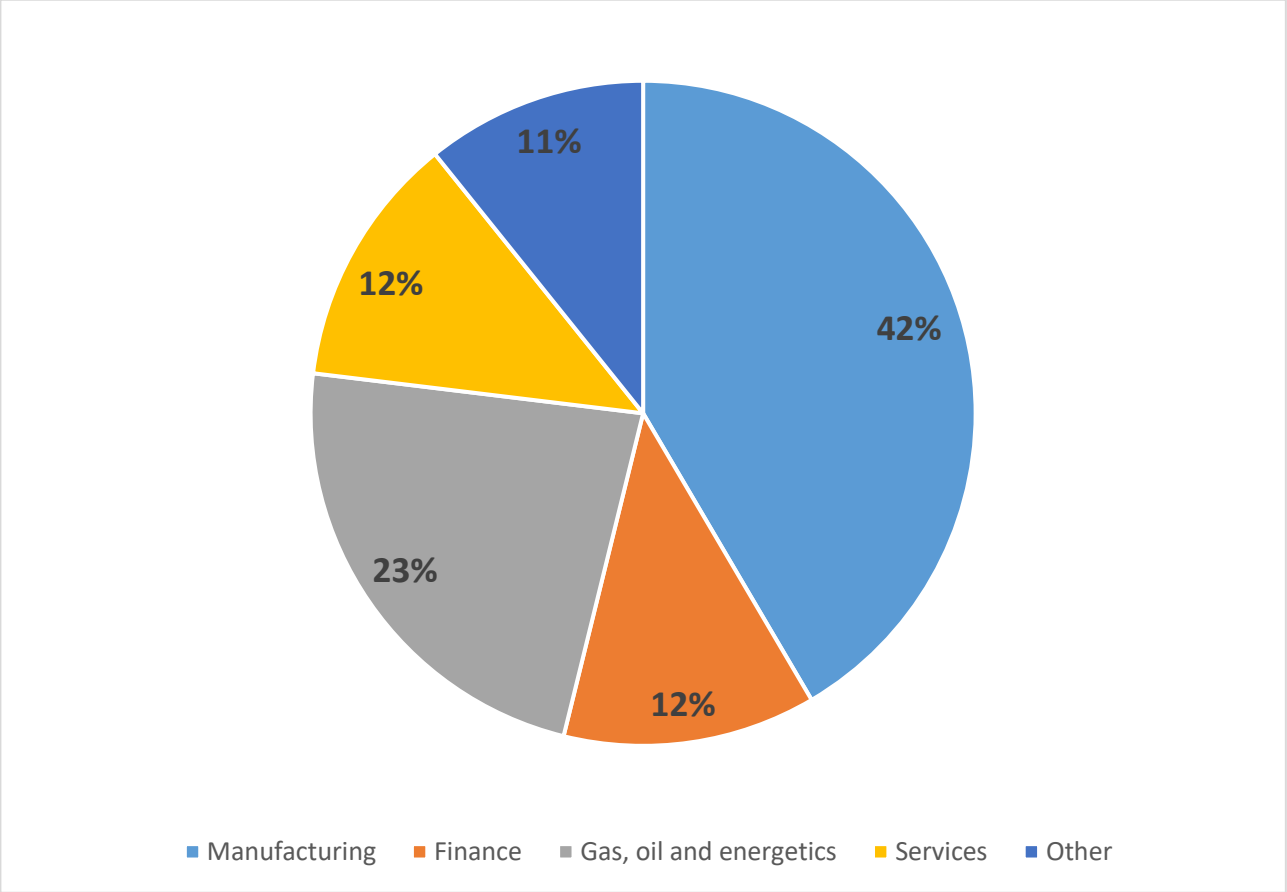

Fig. 5. Sampled companies by market sector industries

As it was mentioned before, the sample is combined from 19 European companies. Nevertheless, as it was indicated in third chapter, the sample does not represent all European companies, as mainly companies from 5 countries are included in the sample. The largest part of the sample is companies from France (37%) and Netherlands (21%). Spain and Germany take 16% each and the smallest part is from Italy - 10%. From results presented in Figure 6 it can be concluded that sample mostly represents West-European companies.

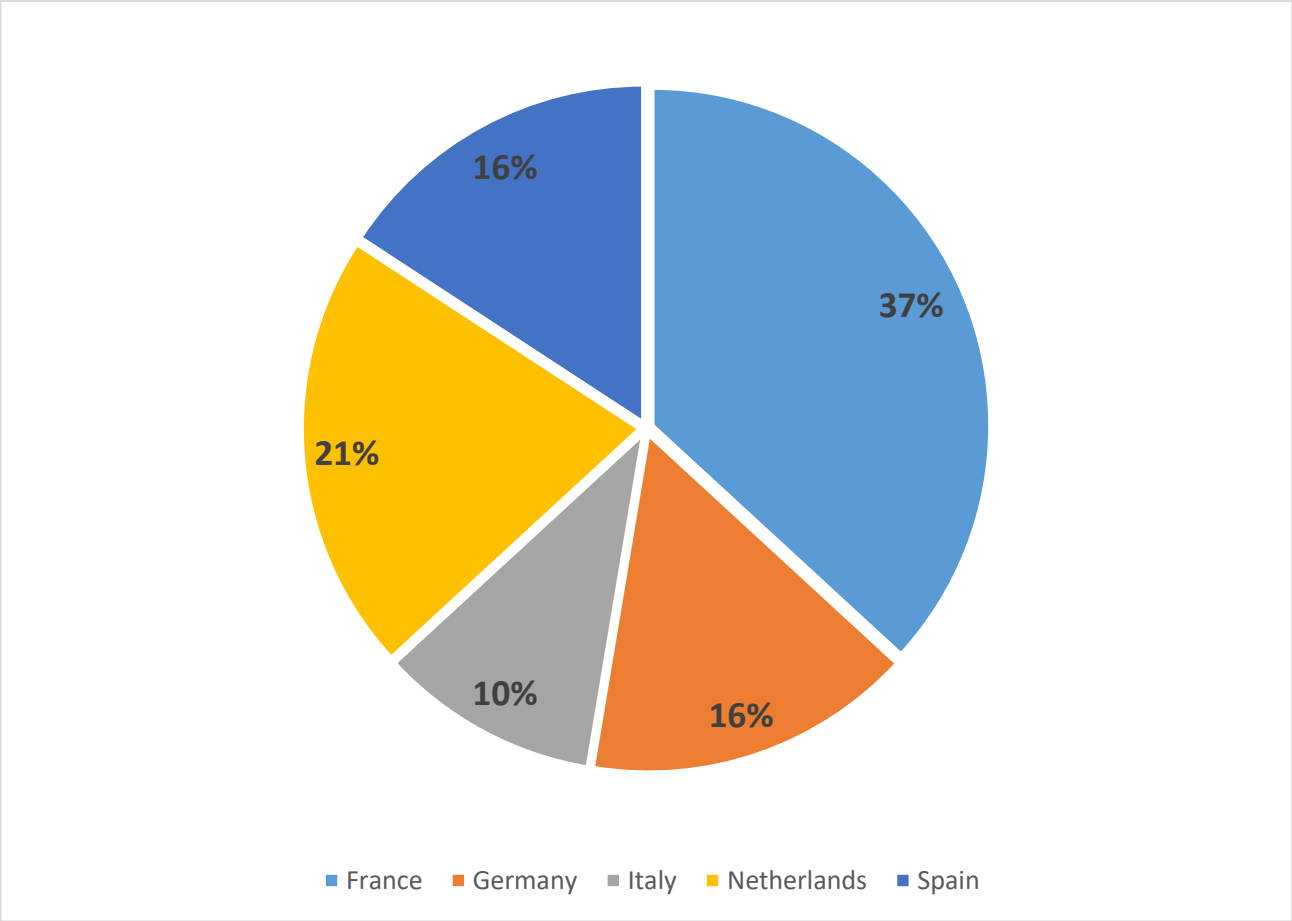

Fig. 6. Sampled companies by country

From performed mean analysis it can be noticed that companies, which are included in IR database as examples of best practices provide a lot larger reports in scope (on average 241 pages). Companies not included in the database and providing reports voluntarily on average provide reports of around 81 pages. This is almost three times smaller reports compared to recognized practices. Some of the reasons for the difference this large could be that:

- companies filter information to be disclosed to show the company more positively;
- companies provide separately all financial information, i.e. do not include consolidated financial statements in integrated report as in case of annual reports in the sample.

Nevertheless, the main goal of this paper is to analyze the changes of the content of IR, therefore, reasons for differences between scope and scale of reports between different companies could be a possibility for a further research in the field.

4.2. Content analysis of integrated reports of EUROSTOXX 50 companies

In this part of the chapter, detailed analysis of content elements scores is presented. Figure 7 shows how total score of content elements evaluated using selected checklist changes in 2015-2018 period. Maximum total score of the checklist which can be received is 76 points, but it can be noticed that the average score in all periods does not exceed 50 points. The largest deviations through the chosen period was in finance and other industries. It is important to note that companies in other industry developed provided reports and increased total score while reports provided by companies in finance

industry received lower scores. It is important to realize that the deviation of results between industries highly depends on the number of companies included in the industry. While for instance there are 8 companies included in manufacturing industry, there are only 2 companies in other industry, meaning that averages can fluctuate less if more companies would be included in the category. As indicated in chapter 3, since limited amount of companies are included in the sample, this causes limitation for results interpretation in terms of whole population. Equally important is to note that the purpose of this paper is not to identify reasons why companies disclose different levels of information under different content elements but to analyze different levels of disclosure.

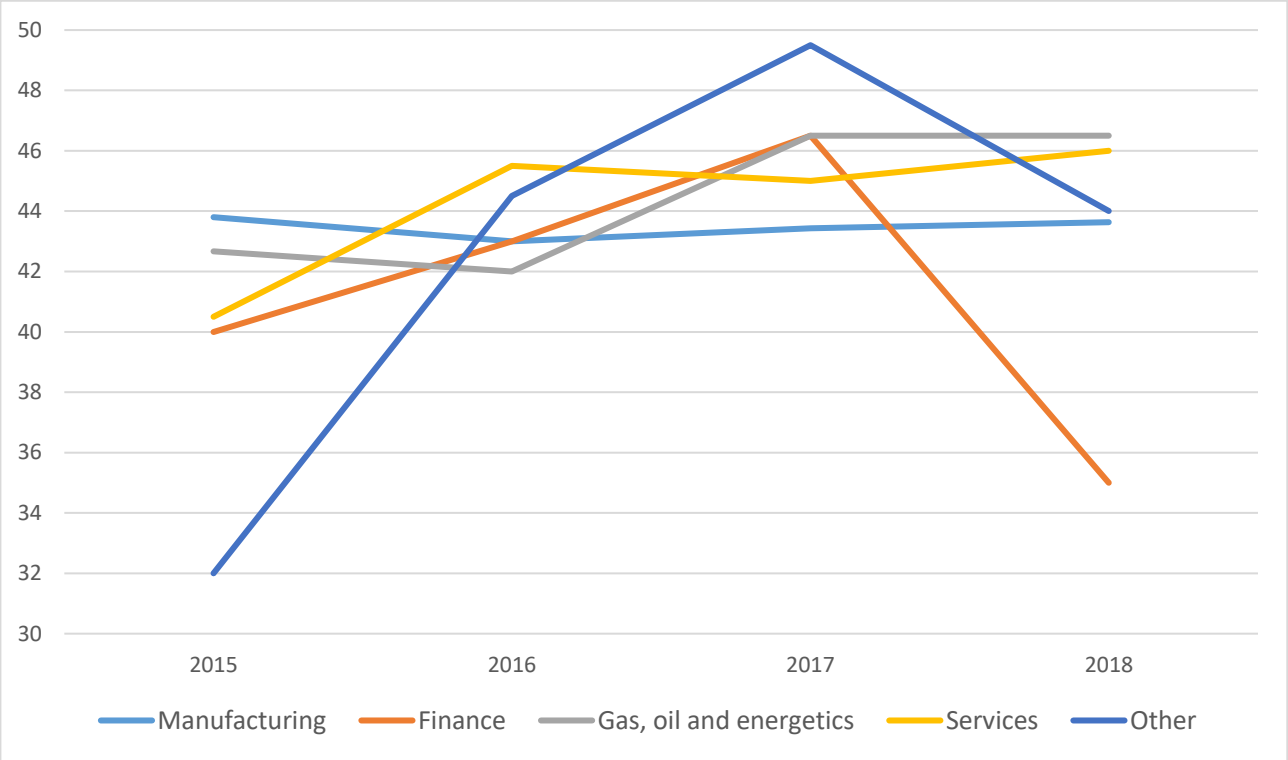

Fig. 7. Change of total content score by industry in 2015-2018

From figure 7 it can be concluded that most of the companies provided integrated reports with above average content elements evaluation. In addition, most of the companies develops reports in a positive way. Scores of companies in manufacturing, services, gas, oil and energetics industries during the period varies the least. This could indicate stability in reporting practices in the sectors as well as consistent approach to disclosures within companies. Nevertheless, total score of the integrated report does not show all the differences between industries. This is due to the fact, that different companies may value different type of information and scores for disclosures between content elements may vary. In the same way, the same company can have better scores between different years, indicating improvement of the report. Further detailed analysis of each content element between industries is provided. First graphical analysis of industry of each content element is presented. Later calculated total averages by year for each checklist item included in content element are analyzed.

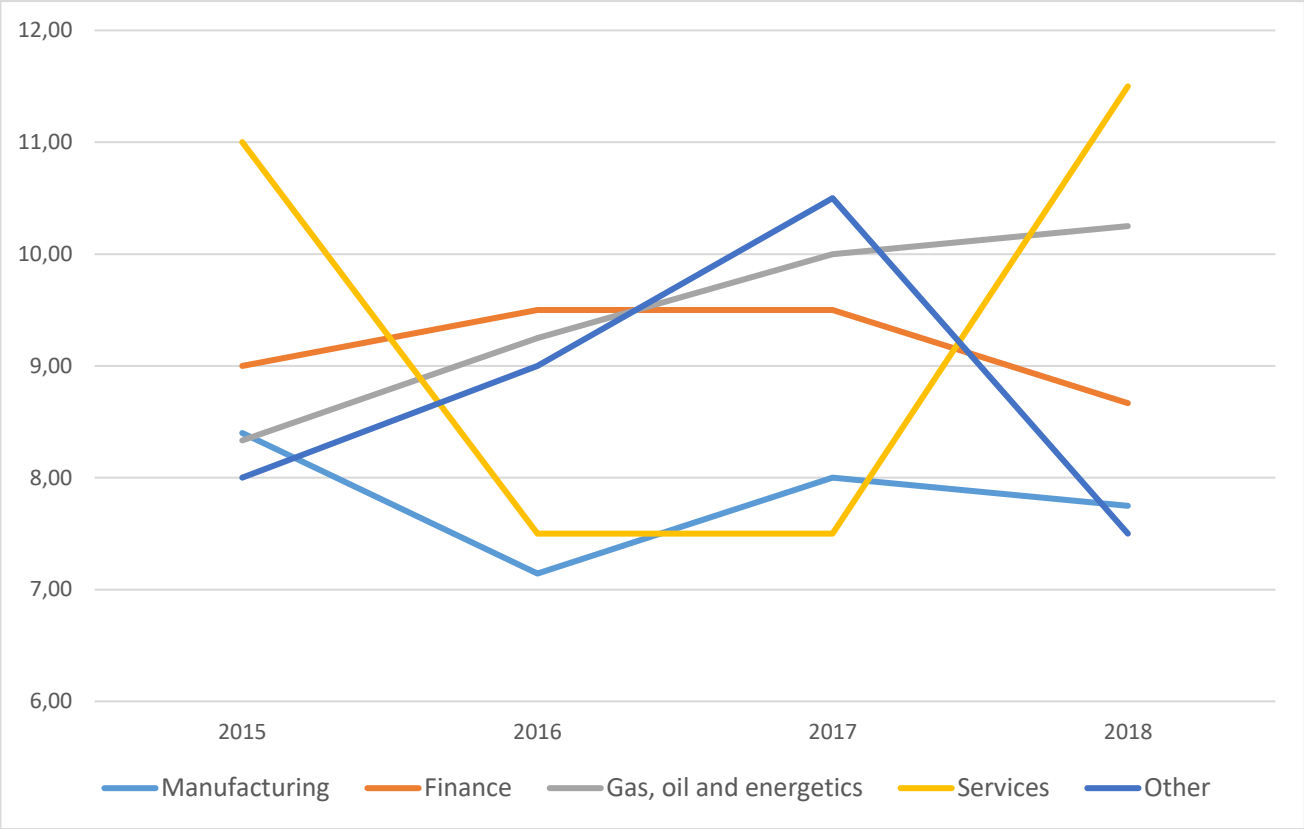

Fig. 8. Change of organizational overview and external environment score by industry in 2015-2018

Valuation results of **organizational overview and external environment.** Figure 8 shows how scores of organizational overview and external environment content element change throughout the period. Maximum score for this content element is 14 points. It is noticeable that none of the industries reach maximum point valuation, but total score for this content element is always above average. It is worth to point out that lowest scores are received by manufacturing industry (varying from 7,14 to 8,40), while largest deviations can be seen in services and other industries. From Figure 8 it can be concluded that gas, oil and energetics and finance industries were the most consistent disclosing information about organization and external environment.

Table 7. Organizational overview and external environment detailed scores

Content element	**2015**	**2016**	**2017**	**2018**
Value, ethics, and culture (points 0-2)	1,17	1,00	1,12	1,05
Ownership and operating structure (points 0-1)	0,58	0,59	0,29	0,53
Principal activities, markets, products, services (points 0-1)	1,00	1,00	1,00	1,00
Competitive landscape, market positioning and positioning within the value chain (points 0-3)	1,67	1,53	1,53	1,53
Key quantitative information [employees, revenues, locations, & changes] (points 1-2)	1,67	1,29	1,35	1,53
Legal, commercial, social, environmental, political (points 1-5)	2,75	2,76	3,59	3,16
Total	**8,84**	**8,17**	**8,88**	**8,8**

As it can be seen from Table 7, that all companies provided information about principal activities, markets, products, services and received maximum scores for this content element. In addition, high

scores were received for disclosing key quantitative information about employees, revenues, locations, and changes. It can also be noticed that average scores were received for ownership and operating structure disclosure. It can be assumed that this type of information is relatively easy for companies to collect and present because usually most of it is included in financial statements.

Even though it is common to think that large companies usually have defined values, mission, vision and other company cultural attributes, conducted research revealed that not all of this information is included in IR. Furthermore, scores for competitive landscape and market position were around average, indicating that companies do not provide market and external environment related information which can also be noticed from last content element average scores. This could indicate that companies either are not willing to share market insights which are not beneficial for the company with the stakeholders; does not perform detailed analysis in order to be able to disclose reliable information or some of the points requested by IR framework are not applicable for the entity. In either case, it is relevant to point out that selected checklist for research and scoring system are not adapted so that it would adjust scores for IR if some of information is not applicable for the sampled unit and information is not included in the report. Finally, as mentioned before, reasons and factors affecting the level of disclosures of content elements is not the purpose of this paper and could be a topic for further research.

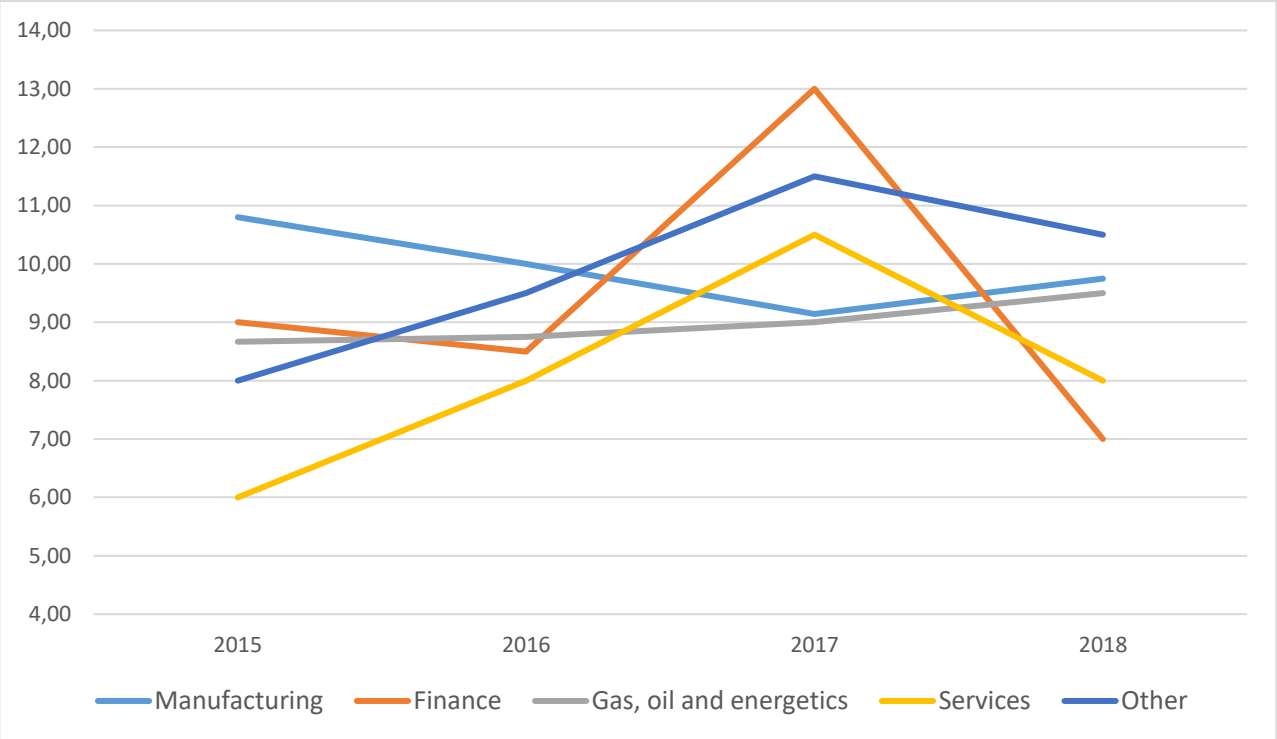

Fig. 9. Change of business model score by industry in 2015-2018

Valuation results of **business model.** Figure 9 shows how scores of business model content element change throughout the period. Maximum score for this content element is 15 points. It is noticeable that none of the industries reach maximum point valuation, but there are slightly higher scores in 2017. It is worth to point out that this content element changes through the selected period deviates more compared to previously analyzed scores of content element of organizational overview and external environment. From Figure 9 it can be concluded that gas, oil and energetics industry was the most consistent disclosing information about business model.

Table 8. Business model detailed scores

Content element	2015	2016	2017	2018
Key elements of the business model (1 each for input, process, output and outcome)	3,00	2,47	2,59	2,11
Diagrammatic presentation (1 = diagram, 4= explanation of each element to the organization)	3,67	4,24	4,47	4,11
Narrative flow based on the business model (0=no flow, 1= moderate level, 2= good flow)	0,92	0,59	0,88	0,89
Critical stakeholders' identification and other dependencies (points 0-1)	0,42	0,47	0,65	0,68
Connection to information covered (strategy, risk, opportunities, performance) (points 0-3)	1,08	1,47	1,41	1,37
Total	**9,09**	**9,24**	**10,00**	**9,16**

Table 8 indicates detailed scores of business model content element. From average scores it can be concluded that most of the companies provided diagrammatic presentation of the business model but did not explain all required elements and/or did not include all of them in the model. In addition, companies mostly provided moderate level narrative flow based on the business model during the period. Besides the fact that in 2015 critical stakeholders' identification disclosure was quite weak, companies developed IR during the period to receive higher scores in 2018. Finally, it can be noticed that the most difficult part for companies to disclose was connection to information covered in other content elements. At the same time, it is important to note that there is no clear guidance in IR framework how this connection should be revealed in the report, thus, also indicating one of the drawbacks of selected checklist – it does include in scoring system all IR framework suggested points for content elements, but does not solve the problem of possible subjectivity when valuating connections and sufficiency of the information.

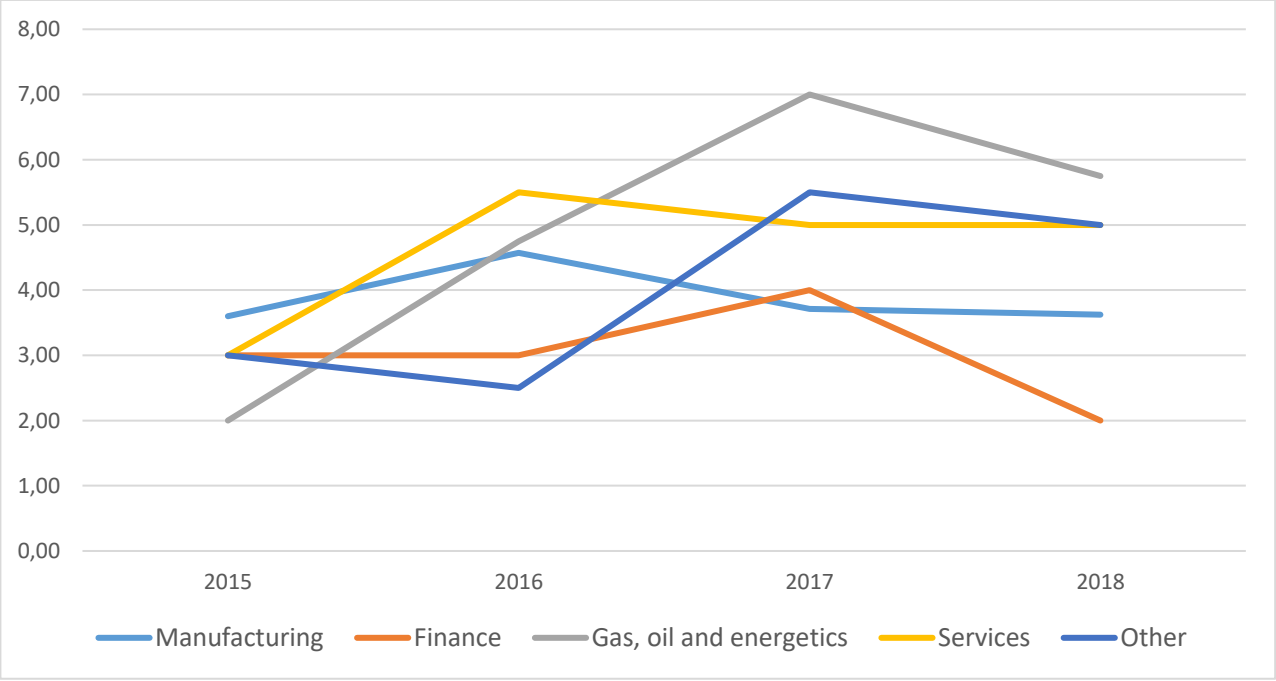

Fig. 10. Change of risk and opportunities score by industry in 2015-2018

Valuation results of **risk and opportunities.** Figure 10 shows how scores of risk and opportunities content element change throughout the period. Maximum score for this content element is 8 points. It is noticeable that none of the industries reach maximum point valuation, but there are slightly higher scores in 2017 as well as it was in business model content element scores. From Figure 10 it can be concluded that most of the industries improved disclosures compared to initially published reports in 2015, except finance industry which received lower scores in 2018.

Table 9. Risk and opportunities detailed scores

Content element	**2015**	**2016**	**2017**	**2018**
Key risks and opportunities (maximum of 2 points, 1 for describing risks; 1 for describing opportunities)	0,83	1,06	1,35	1,26
Assessment of the likelihood and impact (1 each =explanation of the risk &opportunity likelihood; magnitude of impacts 1 each for risk and opportunity))	1,58	2,06	2,18	1,84
Steps to mitigate/manage risk or opportunity (1 each for risk and opportunity)	0,58	1,18	1,35	1,00
Total	**2,99**	**4,30**	**4,88**	**4,10**

From detailed scores of risk and opportunities content element provided in Table 9, it can be concluded that companies mainly disclose information related to one of the points – either risks or opportunities. For instance, if company does not indicate key risks, it will not assess its likelihood and impact, will not provide its management steps, consequently, will not receive maximum scores for this disclosure. Since all three content elements are connected, it would be beneficial to separate risks and opportunities in used disclosure checklist and obtain scores separately, so that more reliable evaluation could be received.

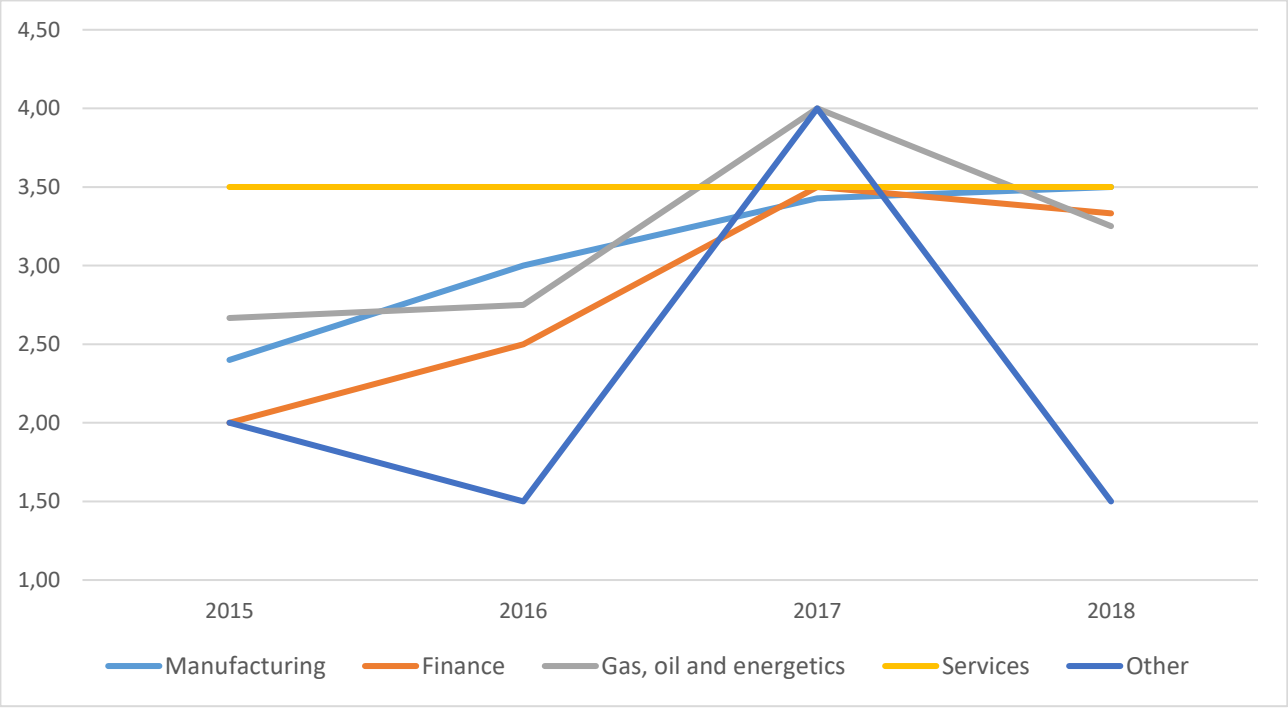

Fig. 11. Change of strategy and resource allocation score by industry in 2015-2018

Valuation results of **strategy and resource allocation.** Figure 11 shows how scores of strategy and resource allocation content element change throughout the period. Maximum score for this content element is 6 points. It is noticeable that none of the industries reach maximum point valuation, there are slightly higher scores in 2017 as well as it was in previous two content elements scores but most of the scores are below average. From Figure 11 it can be concluded that even though companies in other industries managed to improve strategy and resource allocation content element disclosure in 2017, they possibly eliminated most of information in 2018 as scores were at the level of 2016. In addition, companies in services industry were consistent providing information about this content element through the period but did not improve. As mentioned earlier, reasons for changes or, in this case, stability of scores, could be a topic for further research.

Table 10. Strategy and resource allocation detailed scores

Content element	**2015**	**2016**	**2017**	**2018**
Short, medium, long term objectives (0= no mention; 1= strategic objectives stated without relevant time frame; 2 = strategic objectives and their time frames are listed)	0,5	0,76	1,00	1,32
Implementation plans (in relation to business model) (0 =no specific description; 1= specific actions taken/planned are described)	0,42	0,65	0,53	0,47
Resource allocation plan (0=no plan, 1= plan)	0,75	0,29	0,59	0,32
Measurement of achievements and outcomes (0= no mention; 1= strategic objectives stated without relevant time frame; 2 = strategic objectives and their time frames are listed)	0,92	1,06	1,53	1,11
Total	**2,59**	**2,76**	**3,65**	**3,22**

From Table 10 it can be seen that companies improved disclosure of strategic objectives and their measurement: while in 2015 most of the companies did not mention strategic objectives in their IR, by 2018 most of the companies not only listed strategic objectives but also some of them identified time frames. Nevertheless, on average almost half of the companies did not provide implementation plans in relation to business model through the period. Coupled with the fact that disclosure of resource allocation plan scores decreased during the period, it can be concluded that companies usually provides information about strategic objectives and their measurement, but do not include implementation plans and/or resource allocation plans.

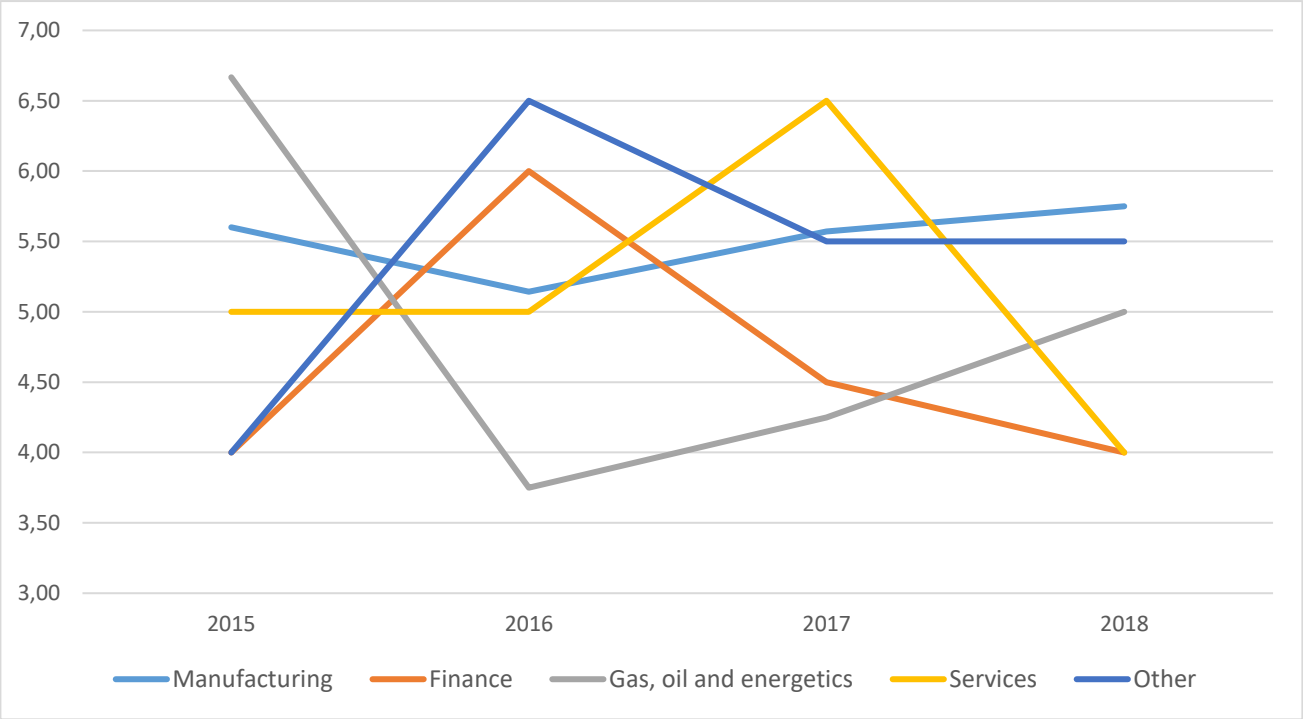

Fig. 12. Change of governance score by industry in 2015-2018

Valuation results of **governance.** Figure 12 shows how scores of governance content element change throughout the period. Maximum score for this content element is 8 points. It is worth to point out that gas, oil and energetics industry companies received high points in 2015 but adjusting the level of information provided in later periods, received significantly lower scores. From Figure 12 it can be concluded that manufacturing industry companies were the most consistent through the period.

Table 11. Governance detailed scores

Content element	**2015**	**2016**	**2017**	**2018**
Leadership structure, diversity and skill set of those charged with governance (1 = members of the BoD/committees listed; 2 = their experience and skills are listed as well)	1,67	1,47	1,47	1,37
Actions taken to monitor strategic direction (0= no actions determinable from narrative; 1 =determinable actions)	0,67	0,59	0,65	0,58
Reflection of culture and ethical values in use of and effect on the capitals, relationship with key stakeholders (0 = no mention of cultural values/ethics in the given context; 1 = culture and values determinable from narrative; 2 = express statement regarding culture and values in relation to capitals/stakeholders)	1,00	1,29	1,18	1,16
Governance exceeds legal requirements (0=no, 1= yes)	0,67	0,35	0,47	0,47
Compensation policies and plans (1 =standard minimum disclosure; 2 =elaborate)	1,50	1,35	1,47	1,53
Total	**5,51**	**5,05**	**5,24**	**5,11**

Table 11 indicated detailed scores of governance content element. From obtained scores it can be concluded that all of the companies list the members of Board of Directors and provides at least standard minimum disclosure on compensation policies and plans. Nevertheless, strategic direction

monitoring actions received lowest scores from all the content elements, indicating that significant part of the companies does not provide this type of information in their IR. Finally, while most of the companies' culture and values are determinable from narrative, most of the companies do not exceed legal requirements. On the other hand, it is important to note that these two types of content elements included in the checklist according to IR framework are dependent on subjective valuation of the reader of the report.

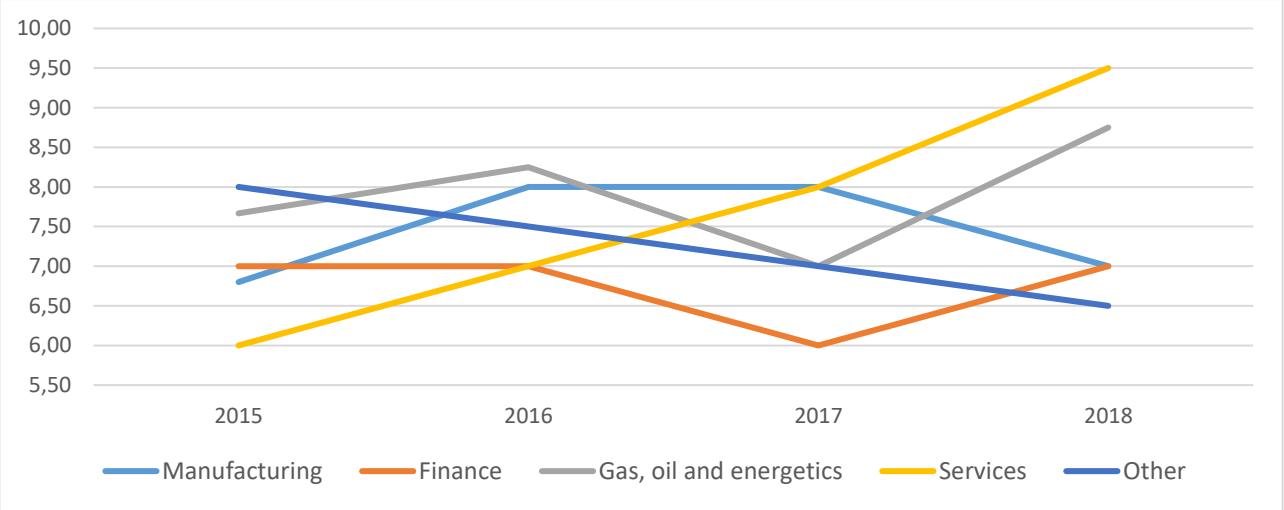

Fig. 13. Change of performance score by industry in 2015-2018

Valuation results of **performance.** Figure 13 shows how scores of performance content element change throughout the period. Maximum score for this content element is 13 points. It is noticeable that none of the industries reach maximum point valuation. Nevertheless, services industry companies improved the content element the most through the period, receiving lowest points in 2015 and highest in 2018. From Figure 13 it can be concluded that despite significant improvement in services industry, scores of the rest of the industries deviate less. However, since scores did not improve significantly, it could be assumed that companies do not invest much time to the disclosures of this content element or does not have performance systems established in the company. On the other hand, the reasons for such scores could be a topic for further investigations.

Table 12. Performance detailed scores

Content element	**2015**	**2016**	**2017**	**2018**
KPIs (0 =no mixed performance measures; 1 =KPIs or equivalent)	0,33	0,41	0,53	0,37
KRIs (0 = no key risk indicators described; 1 = KRIs or equivalent)	0,33	0,65	0,76	0,42
Explanation of KPIs and KRIs of significance, implications, methods and assumptions used in compiling them (1 each)	1,83	2,12	2,41	2,32
The organization's effect on the capitals (0=no consideration to the six capitals; 1 =consideration of two capitals; 2 = all material capitals considered)	1,00	1,12	0,59	1,11
State of key stakeholder relationships (1= mention; 2 = elaborate)	1,42	1,47	1,18	1,47
Key stakeholder responses (1= mention; 2 = elaborate)	1,50	1,47	1,53	1,37
Comparison of actual results vs target (0 = no comparison provided; 1 = comparison given)	0,58	0,53	0,41	0,53
Total	**6,99**	**7,77**	**7,41**	**7,59**

Detailed scores of performance content element are provided in Table 12. From obtained scores it can be summarized that at least half of the companies provide information about KPIs or KRIs used as well as actual results comparison to defined targets. However, mainly consideration of two capitals is disclosed in IR of sampled companies. It can also be concluded that all companies at least mention state of key stakeholders' relationships and their responses, while there is a significant part of companies elaborating on both points. It is worth to point out that for a clearer valuation, explanation of KRIs and KPIs could be scored separately in the checklist, while scoring system for the effect of the capitals could be reviewed to show the level of disclosure of all six capitals rather than scoring 2 and "all material" ones.

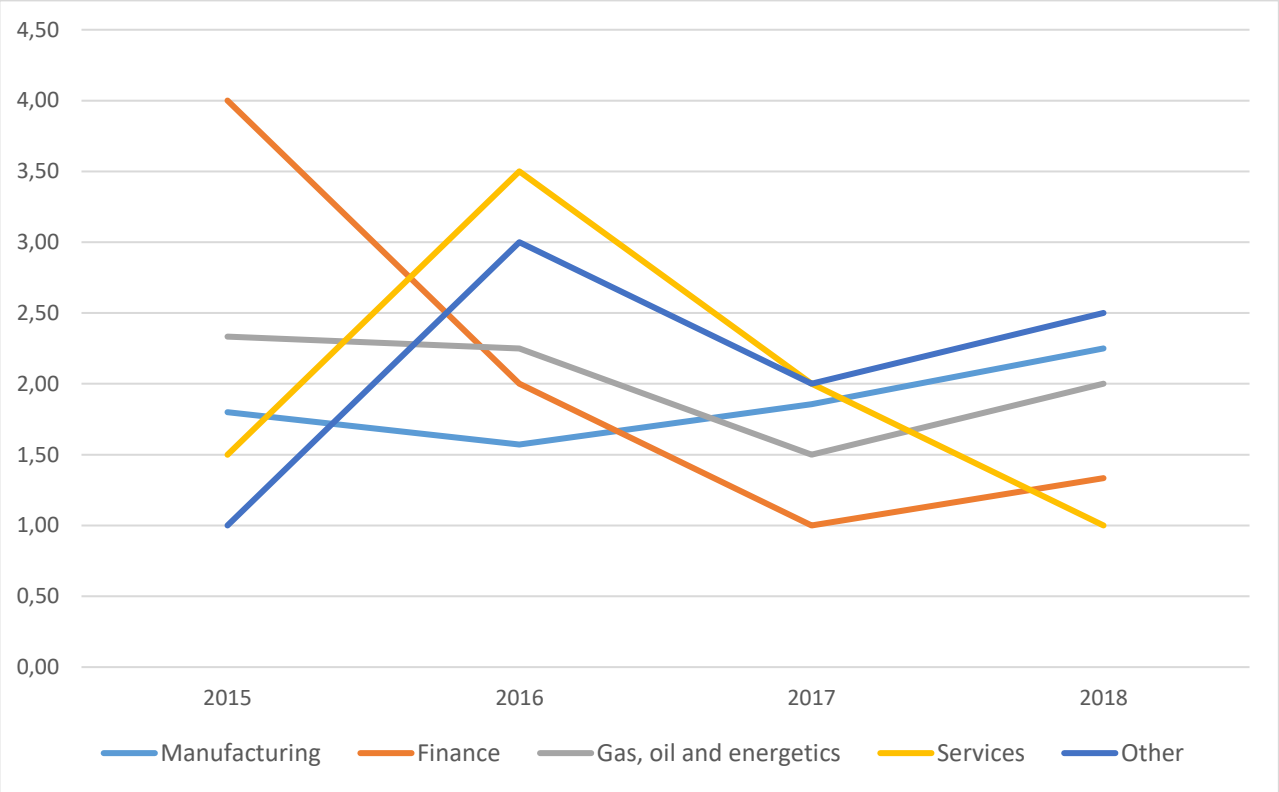

Fig. 14. Change of future outlook score by industry in 2015-2018

Valuation results of **future outlook.** Figure 14 shows how scores of future outlook content element change throughout the period. Maximum score for this content element is 4 points. It is noticeable that finance industry reaches maximum point valuation in 2015, but disclosure scores decrease significantly in later periods.

Table 13. Future outlook detailed scores

Content element	**2015**	**2016**	**2017**	**2018**
Management's expectations (0 = no statement; 1=no time frame only expectation described; expectation described with time frame =2)	0,83	1,24	1,12	1,00
Potential implications (0= no consideration given; 1 = mention)	0,67	0,35	0,29	0,42
Organizational readiness (0 = no description provided; 1 = readiness explained)	0,50	0,59	0,29	0,53
Total	**2,00**	**2,18**	**1,70**	**1,95**

From detailed scores of future outlook provided in Table 13, it can be summarized that most of the companies provide management's expectations without time frame and while organizational readiness is usually explained, the level of potential implications is low but the score is increasing through the period.

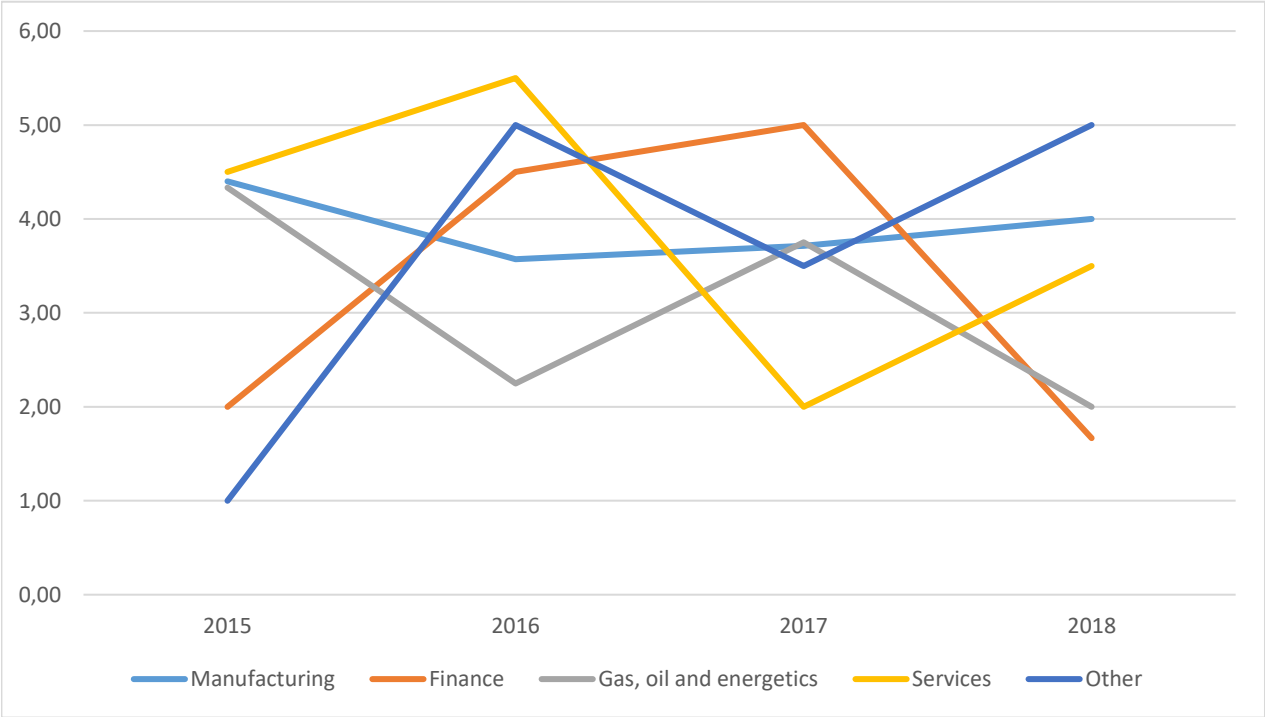

Fig. 15. Change of basis of presentation score by industry in 2015-2018

Valuation results of **basis of presentation.** Figure 15 shows how scores of basis of presentation content element change throughout the period. Maximum score for this content element is 9 points. It is noticeable that none of the industries reach maximum point valuation, even more most of the scores are below average.

Table 14. Basis of presentation detailed scores

Content element	**2015**	**2016**	**2017**	**2018**
Material issues/determination, impact on creating/preserving value (0= no discussion of material issues; 1 = description of some elements of material issues disclosure; 2 = determination of materiality described, impact on creating/preserving value considered)	0,58	0,82	0,88	0,79
Reporting boundary (0= no boundary, 1 = boundary is determinable, 2=boundary determinable and the process explained)	1,00	1,06	0,76	0,79
Significant frameworks and methods used to quantify or evaluate material matters (0= no frameworks or method used, 1= frameworks and methods used)	0,42	0,53	0,65	0,47
Assurance (0=No assurance, 1= mandatory audit, 2= independent external assurance on non-financial reporting)	1,42	0,94	0,88	0,74
Conciseness (0= no conciseness, 1= balance between conciseness and completeness and comparability)	0,50	0,41	0,47	0,47
Total	**3,92**	**3,76**	**3,64**	**3,26**

From Table 14 it can be noticed that analyzed IR lack determination of materiality. In addition, reporting boundaries are usually just determinable, missing explanation of the process. While most of the reports do not include frameworks and methods, most of them have mandatory audit. It is worth to point out that in 2015 more reports had independent external assurance on non-financial reporting and in later periods scores reduced significantly. Finally, it can be summarized that only around half of the reports had balance between conciseness and completeness and comparability.

After conducted content analysis of IR reports of EUROSTOXX 50 companies, it can be concluded that:

- Companies from 2015 to 2018 improved disclosures of business model, risk and opportunities, strategy and resource allocation and performance content elements.
- Companies from different industries received higher scores for different content elements indicating that different information is considered material:
    - Companies improved significantly disclosures of content elements in 2017 but scores decreased in 2018.
    - Total score of companies in finance industry decreased the most, while scores of companies in other industries improved from 2015-2017 and decreased again in 2018.
    - Companies in services and other industries had largest scores changes for organizational overview and external environment content element. While services industry companies received lower scores for 2016-2017 and improved in 2018, other industry companies improved in 2015-2017 and decreased to lowest point in 2018.
    - Companies in services, finance and other industries improved disclosures of business model up to 2017, but scores decreased in 2018.
    - Companies in finance, gas, oil and energetics and other industries improved disclosures of business model up to 2017, but scores decreased in 2018.
    - All industries improved strategy and resource allocation disclosures in the period, except companies in other industries.
    - Even though in 2015-2017 companies in services and finance industries improved their scores for governance, in 2018 both industries received lowest scores.
    - Services and gas, oil and energetics industries' companies improved performance content element the most in 2015-2018.
    - Companies in finance industry reaches maximum point valuation in 2015 for future outlook, but disclosure scores decrease significantly in later periods.
    - Basis of presentation scores are below average indicating that companies do not disclose enough information about materiality, reporting boundaries, assurance, and conciseness though positive changes are noticeable.
- Disclosure checklist could be improved by adjusting content elements so that calculated scores did not differ if some information is not applicable for the sampled company; possible subjectivity when valuating connections and sufficiency of the information should be eliminated; risks and opportunities as well as KPIs and KRIs should be separate content elements and scored individually; scoring system for the effect of the capitals could be reviewed to show the level of disclosure of all six capitals.

4.3. Comparison of IR included in IR database and published voluntarily

IIRC has a database of IR reports which are recognized as positive practices of IR framework application. Nevertheless, there are companies included in EUROSTOXX 50 index, which are not included in the IR database, but also provide IR in their website. To identify the differences between IR content changes from a different angle, in this section scores of IR included in IR database and not included in the database will be compared. As it was identified in chapter 3 of this paper, companies not included in IR database, did not have any reports published in 2015, as a consequence, comparison will be made for period of 2016-2018. It is important to note that, as it was identified in table 3, the number of cases included and not included in IR database differs, henceforth, making a limitation to this paper to generalize results for whole population.

Table 15. Average number of pages of IR in 2016-2018

	2016	**2017**	**2018**
Not included in IR database	56,00	110,33	79,20
Included in IR database	237,29	239,86	260,93

From Table 15 it can be seen that companies included in IR database provide much longer reports compared to the companies not included in IR database in the same period. Even though number of pages of companies who provides IR voluntarily increased in 2017, it decreased in 2018, while companies included in IR database each year provided longer reports. From the first sight, it might look that since the scale of reports which are included in IR database are larger, requirements for content elements in IR framework should be met easier. However, as it is shown in Figure 16, the gap between total scores received is not that big as it is in case of scale. It is worth to point out that the change of total score through the period of 2016-2018 is similar between both report groups: total scores were the highest in 2017 and again decreased in 2018. Even though the difference between total scores is not big, to understand which content elements are disclosed better in different groups, comparison of each content element will be provided further.

Fig. 16. Change of total score in 2016-2018

Figure 17 shows how scores of organizational overview and external environment content element change throughout the period for IR database and voluntarily presented IR. Maximum score for this content element is 14 points. It is noticeable that total score for this content element is always above average. It can be concluded that companies included in IR database were more consistent disclosing information about organization and external environment throughout the selected period, because scores for this content element deviated less compared to voluntarily provided reports. On the other hand, even though IR database companies were consistent, voluntarily presented reports improved significantly, therefore, receiving higher scores for the disclosed information.

Fig. 17. Change of organizational overview and external environment scores in 2016-2018

Figure 18 shows how scores of governance content element change throughout the period. Maximum score for this content element is 8 points. It is worth to point out companies included in IR database were consistent through the period and received quite similar scores for governance content element through the period. What is even more, the score slightly increased indicating that companies improved reporting through the period. On the other hand, companies not included in IR database received comparably lower scores for this content element and the scores deviated significantly in 2016-2018 period. As it was described in earlier paragraphs, this content element includes points related to company strategy, culture and ethical values as well as their relations to six capitals. It could be that companies which provide reports voluntarily, does not follow IR framework strictly and ignores min concept of six capitals, even though provides some information.

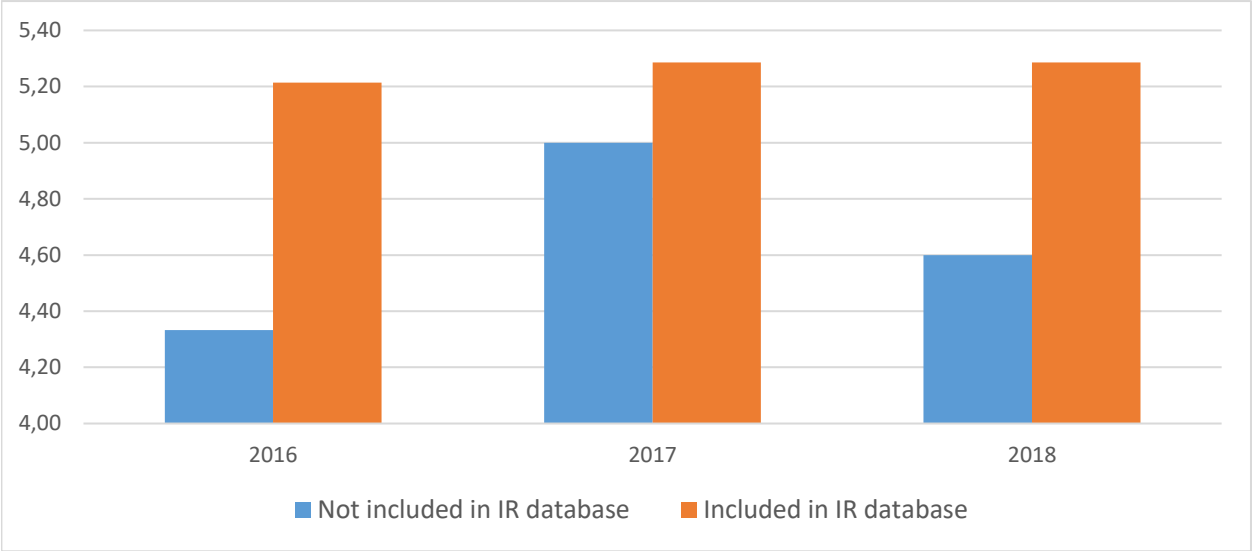

Fig. 18. Change of governance scores in 2016-2018

Figure 19 shows how scores of business model content element change throughout the period. Maximum score for this content element is 15 points. It is worth to note that both IR groups received higher than average scores. Nevertheless, voluntarily presented IR received significantly lower scores especially in 2018. Even though both – IR database and voluntary IR – scores decreased. From Figure 19 it can be concluded that again companies included in IR database presented information about business model more consistently and according to IR framework.

Fig. 19. Change of business model scores in 2016-2018

Figure 20 shows how scores of risk and opportunities content element change throughout the period. Maximum score for this content element is 8 points. It is noticeable that while in 2016 companies providing IR voluntarily received higher scores for this content element, later IR database companies

improved their disclosures. However, both groups changed their IR disclosure in 2018 and received lower scores. Since tendency from 2017 is similar in both groups it can be concluded that reporting trends are similar in IR database companies and voluntarily announced IR.

Fig. 20. Change of risk and opportunities scores in 2016-2018

Figure 21 shows how scores of strategy and resource allocation content element change throughout the period. Maximum score for this content element is 6 points. It is noticeable that companies announcing IR voluntarily received higher scores than IR database companies. In addition, scores for this group of reports were above average throughout all period and improved indicating that companies better disclosed information related to strategy and resource alloction. In contrast, IR database companies improved their scores in 2017, but later got worse results. Not to mention the fact that throughout the selected period this group of reports exceeded average only in 2017.

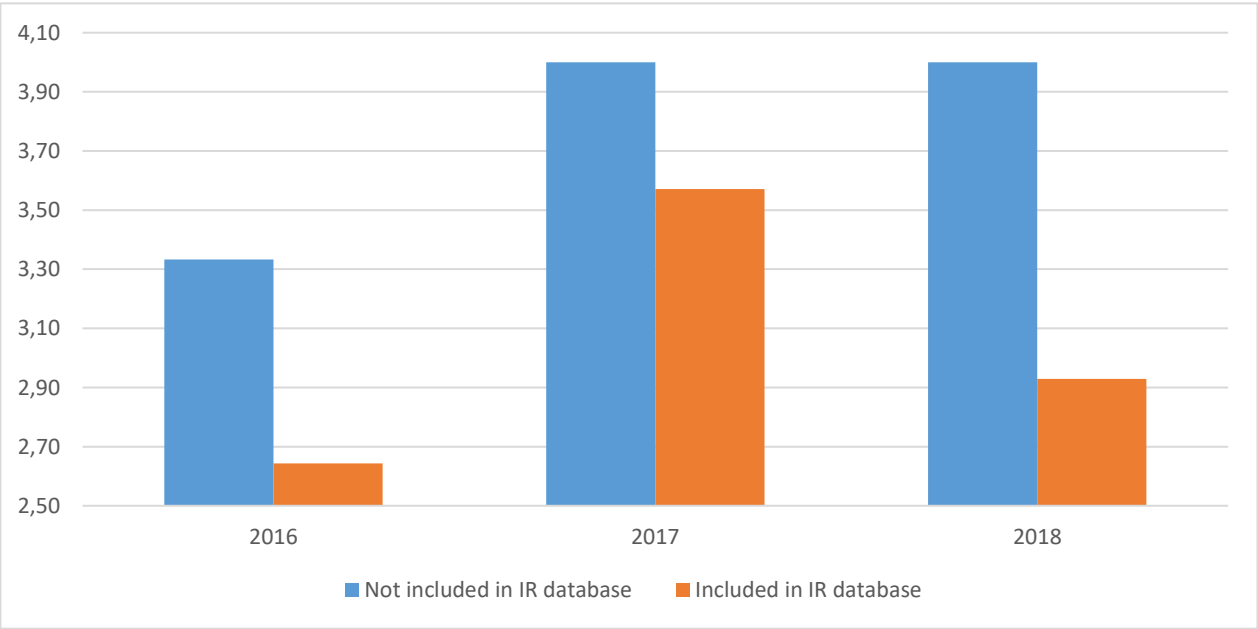

Fig. 21. Change of strategy and resource allocation scores in 2016-2018

Figure 22 shows how scores of performance content element change throughout the period. Maximum score for this content element is 13 points. It is strange to point out that scores for this content element is inverted: while IR database companies received higher scores in 2016 and 2018 by significant difference, companies not included in IR database received higher scores in 2017. Nevertheless, it can be concluded that IR database companies improved their disclosures of performance content element, while voluntarily announced IR received worse scores indicating not sufficient disclosure of KPIs/KRIs and performance system.

Fig. 22 Change of performance scores in 2016-2016

Figure 23 shows how scores of future outlook content element change throughout the period. Maximum score for this content element is 4 points. It is noticeable that the difference between IR database companies and those not included in the database is very small. However, again companies providing reports voluntarily received higher scores throughout the period indicating more sufficient disclosure of management's expectations.

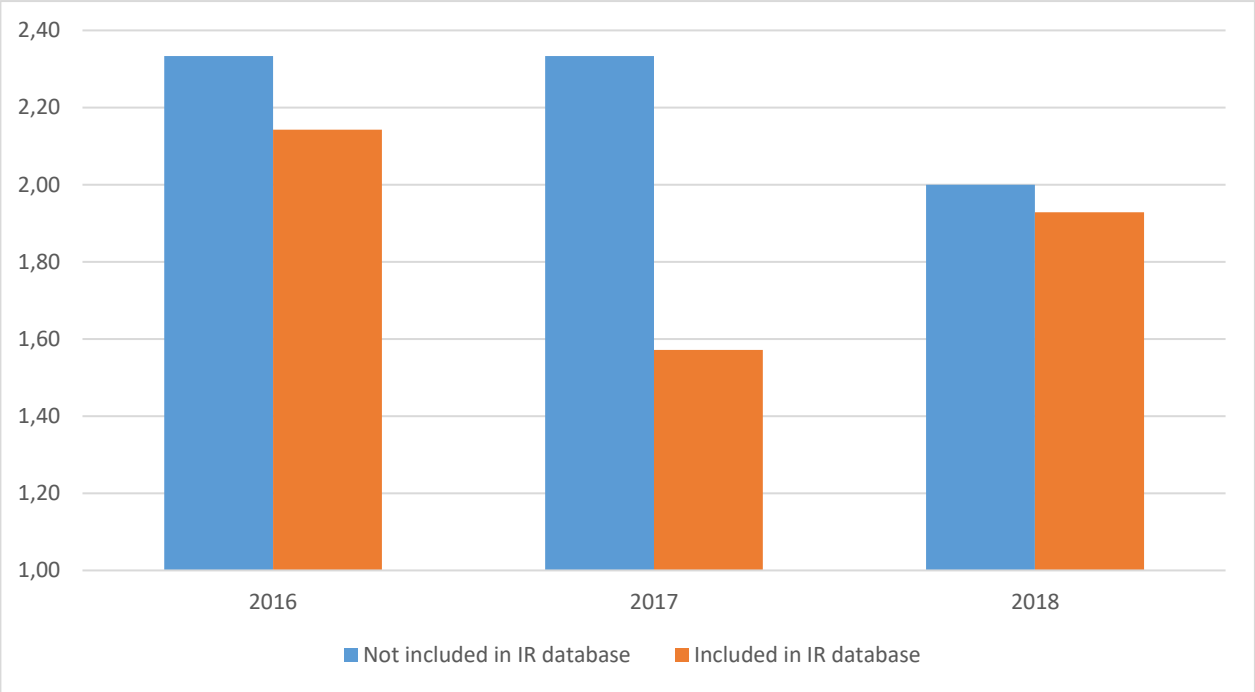

Fig. 23. Change of future outlook scores in 2016-2018

Figure 24 shows how scores of basis of presentation content element change throughout the period. Maximum score for this content element is 9 points. It can be concluded that both IR groups were consistent through the selected period, as scores do not deviate significantly in both groups. However, both groups did not reach average score indicating poor disclosure of this content element. In this case, companies included in IR database received higher scores, but as mentioned earlier not high enough to be considered as qualitative disclosure.

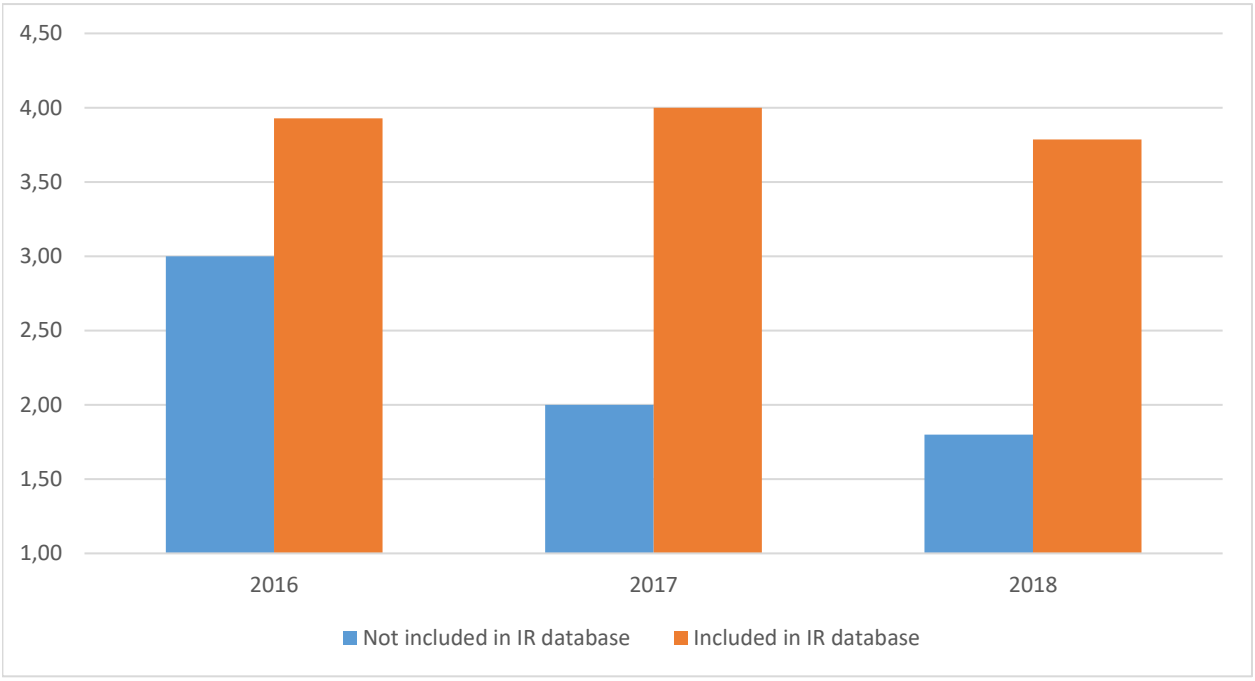

Fig. 24. Change of basis of presentation scores in 2016-2018

To summarize this section, it can be stated that:

- Total scores were higher of companies included in IR database.
- Companies included in IR database received higher scores for disclosures of governance, business model, risk and opportunities, performance and basis of presentation.
- Companies not included in IR database received higher scores for disclosures of organizational overview and external environment, strategy and resource allocation and future outlook.

4.4. Comparison of financial statements and integrated reports content

In this section of the chapter comparison between IR and FS scores of EUROSTOXX 50 companies will be provided to identify main differences between these report types.

Table 16. Average number of pages of IR and FS in 2015-2018

Type of report	2015	2016	2017	2018
Integrated report (IR)	224,50	205,29	217,00	213,11
Financial statements (FS)	287,00	156,00	213,29	210,22

From Table 16 it can be seen that volume of different types of reports is quite similar through the period of 2015-2018, except in 2016 when FS were significantly lower in volume. From the first sight, it might look that since the scale of reports is so similar, requirements for content elements in IR framework should be met easier. However, since all sampled FS are completed under IFRS requirements which have detailed description for each disclosure, it could be assumed that most of the information provided in IR framework should be missing. To understand which content elements are disclosed and which are not in different types of reports, comparison of each content element will be provided further.

Table 17. Comparison of average content elements scores in FS and IR in 2015-2018

Year	Type of report	Organizational overview and external environment	Business model	Risk and opportunities	Strategy and resource allocation	Governance	Performance	Future outlook	Basis of presentation
2015	IR	8,83	9,08	2,75	2,58	5,50	7,00	2,00	3,92
	FS	5,00	2,00	3,00	0,00	2,00	1,00	1,00	5,00
2016	IR	8,18	9,24	4,29	2,76	5,06	7,76	2,18	3,76
	FS	5,00	2,00	3,00	0,00	2,00	1,00	1,00	5,00
2017	IR	8,88	10,00	4,88	3,65	5,24	7,41	1,71	3,65
	FS	5,00	2,00	3,00	0,00	2,00	1,00	1,00	5,00
2018	IR	8,79	9,16	4,11	3,21	5,11	7,58	1,95	3,26
	FS	5,00	2,00	3,00	0,00	2,00	1,00	1,00	5,00

As it is shown in Table 17, in most cases IR received higher scores compared to FS for different content elements. However, better scores for FS were for risk and opportunities and basis of

presentation content elements. This could be due to the reason that according to IFRS standards at least information about currency risk must be disclosed and elaborated in FS. In addition, for all large listed companies audit of FS is mandatory as well as identification of materiality, reporting boundaries, assurance, and conciseness. Nevertheless, from results provided, it can be seen that FS prepared according to IFRS requirements do not have any information disclosed in connection to strategy and resource allocation content element. This is due to the fact that FS shows historic data rather than future prospects or current company processes. As a consequence, understandably scores of FS of business model, governance, performance and future outlook are also lower compared to IR scores. After all notably FS scores for organizational overview and external environment content element show that this type of reports include at least basic information required by IR framework, missing points related to environment, social and political aspects as well as company culture. To conclude, it can be stated that even though the volume of reports s quite similar, FS are missing some important disclosures to be treated as a stand alone document for company valuation.

Conclusions and recommendations

1. To be able to connect large scope of information the potential companies provide, investors must convert it to reasonable and well-grounded value which is currently very challenging. Since there is no unanimous rules and jurisdictions for IR, there is a need to identify if changes in the content of IR are happening and if the quality of reports is better so that it could help when making investing decisions. Therefore, there is a need to study how the content of IR is changing to provide more relevant information to investor.
2. To identify requirements for content of integrated reporting and content change determinants; After conducted literature and IR framework review, main content requirements and its change determinants were identified. As a basis for content analysis IR framework proposed content elements were used. Literature review identified 3 main groups of content determinants: factors influencing content of IR; company characteristics and preparation challenges:

   – Form and scope of integrated reports. Authors identify that in order to find acceptable format for IR, requirements for content may suffer. In addition, investors identify that due to large scope IR are only used as additional information when making an investing decision. Nevertheless, it is noted that the higher the level of ESG disclosure, the more accurate market analysis of the company can be performed. Political, economic factors and form of law in the country may influence the commitment of organizations to provide IR. Monopolies, companies with smaller less diversified board and companies not included in IIRC pilot program are more likely to publish IR without disclosing significant misrepresentation in IR.
   – Larger, more complicated structured and longer operating companies, companies having better financial ratios (financial leverage, liquidity, profitability) and companies having better reputation are more likely to provide additional information to financial statements.
   – Companies try to hide the flaws of content of the report by labeling information according provided official guidelines. There is no structured framework for IR, therefore, reports can be too difficult for all stakeholders to understand due to its volume. There is some difficulty for companies to distinguish the difference between sustainability and integration of reports. In order to provide integrated report, the company itself should promote integrated thinking. Companies are afraid to disclose too much information. Companies worry that creating IR will require additional consultation, therefore, will be costly to produce.

3. Defined research process consisted of five steps: collection of reports, content analysis using selected checklist, calculation of scores, statistical analysis of scores and insights and results interpretation. Gunarathne & Herath (2016) adapted disclosure checklist was selected for empirical content analysis research. The sample included EURO STOXX 50 companies and consisted of 65 integrated reports and 27 financial statements.
4. Performed empirical research on the content of integrated reports of EURO STOXX 50 companies was divided into three sections: content analysis of IR by industry; comparison of content elements of IR included in IR database and IR presented voluntarily and comparison of content elements of FS and IR. The following conclusions for each of sections was made:

   – Companies from 2015 to 2018 improved disclosures of business model, risk and opportunities, strategy and resource allocation and performance content elements. Companies from different industries received higher scores for different content elements indicating that different information is considered material. Companies improved significantly disclosures of

content elements in 2017 but scores decreased in 2018. Total score of companies in finance industry decreased the most, while scores of companies in other industries improved from 2015-2017 and decreased again in 2018. Companies in services and other industries had largest scores changes for organizational overview and external environment content element. While services industry companies received lower scores for 2016-2017 and improved in 2018, other industry companies improved in 2015-2017 and decreased to lowest point in 2018. Companies in services, finance and other industries improved disclosures of business model up to 2017, but scores decreased in 2018. Companies in finance, gas, oil and energetics and other industries improved disclosures of business model up to 2017, but scores decreased in 2018. All industries improved strategy and resource allocation disclosures in the period, except companies in other industries. Even though in 2015-2017 companies in services and finance industries improved their scores for governance, in 2018 both industries received lowest scores. Services and gas, oil and energetics industries' companies improved performance content element the most in 2015-2018. Companies in finance industry reaches maximum point valuation in 2015 for future outlook, but disclosure scores decrease significantly in later periods. Basis of presentation scores are below average indicating that companies do not disclose enough information about materiality, reporting boundaries, assurance, and conciseness though positive changes are noticeable.

- Total scores were higher of companies included in IR database. Companies included in IR database received higher scores for disclosures of governance, business model, risk and opportunities, performance and basis of presentation. Companies not included in IR database received higher scores for disclosures of organizational overview and external environment, strategy and resource allocation and future outlook.
- In most cases IR received higher scores compared to FS for different content elements. However, better scores for FS were for risk and opportunities and basis of presentation content elements. This could be due to the reason that according to IFRS standards at least information about currency risk must be disclosed and elaborated in FS. In addition, for all large listed companies audit of FS is mandatory as well as identification of materiality, reporting boundaries, assurance, and conciseness. Nevertheless, FS prepared according to IFRS requirements do not have any information disclosed in connection to strategy and resource allocation content element. Understandably scores of FS of business model, governance, performance and future outlook are also lower compared to IR scores. Even though the volume of reports is quite similar, FS are missing some important disclosures to be treated as a standalone document for company valuation.

Recommendations:

Disclosure checklist could be improved by adjusting content elements so that calculated scores did not differ if some information is not applicable for the sampled company. In addition, possible subjectivity when valuating connections and sufficiency of the information should be eliminated. Also risks and opportunities as well as Key Performance Indicators (KPIs) and Key Risk Indicators (KRIs) should be separate content elements and scored individually. Finally, scoring system for the effect of the capitals could be reviewed to show the level of disclosure of all six capitals.

During conducted research it was identified possibilities for further studies:

- Reasons for differences between scope and scale of reports between different companies;

– Reasons and factors why companies disclose different levels of information under different content elements.

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Appendixes

Appendix 1. Checklist

Content Element	Maximum Score
Organizational overview and external environment	**14**
Value, ethics and culture (0= no mention; 1 = general comments on adherence to ethical values; 2 = code of conduct reference, list of values, etc.)	2
Ownership and operating structure (0=no mention; 1 =ownership and operating structure described)	1
Principal activities, markets, products, services (0= no specifics on principal activities; 1 = activities/markets/products services listed)	1
Competitive landscape, market positioning and positioning within the value chain (1 mark for each)	3
Key quantitative information [employees, revenues, locations, & changes] (1= 1-2 elements; 2 =3-4 elements)	2
Legal, commercial, social, environmental, political (maximum of 5 points, 1 for each context)	5
Business model	**15**
Key elements of the business model (1 each for input, process, output and outcome)	4
Diagrammatic presentation (1 = diagram, 4= explanation of each element to the organization)	5
Narrative flow based on the business model (0=no flow, 1= moderate level, 2= good flow)	2
Critical stakeholders' identification and other dependencies (0= No stakeholder engagement, 1=explicit stakeholder engagement)	1
Connection to information covered [strategy (V & M), risk, opportunities, performance) (0=no connection, 1=1-2 aspects, 2= 3-4 aspects, 3= more than 4 aspects)	3
Risk and opportunities	**8**
Key risks and opportunities (maximum of 2 points, 1 for describing risks; 1 for describing opportunities)	2
Assessment of the likelihood and impact (1 each =explanation of the risk &opportunity likelihood; magnitude of impacts 1 each for risk and opportunity))	4
Steps to mitigate/manage risk or opportunity (1 each for risk and opportunity)	2
Strategy and resource allocation	**6**
Short, medium, long term objectives (0= no mention; 1= strategic objectives stated without relevant time frame; 2 = strategic objectives and their time frames are listed)	2
Implementation plans (in relation to business model) (0 =no specific description; 1= specific actions taken/planned are described)	1
Resource allocation plan (0=no plan, 1= plan)	1
Measurement of achievements and outcomes (0= no mention; 1= strategic objectives stated without relevant time frame; 2 = strategic objectives and their time frames are listed)	2
Governance	**8**
Leadership structure, diversity and skill set of those charged with governance (1 = members of the BoD/committees listed; 2 = their experience and skills are listed as well)	2
Actions taken to monitor strategic direction (0= no actions determinable from narrative; 1 =determinable actions)	1
Reflection of culture and ethical values in use of and effect on the capitals, relationship with key stakeholders (0 = no mention of cultural values/ethics in the given context; 1 = culture and values determinable from narrative; 2 = express statement regarding culture and values in relation to capitals/stakeholders)	2
Governance exceeds legal requirements (0=no, 1= yes)	1
Compensation policies and plans (1 =standard minimum disclosure; 2 =elaborate)	2
Performance	**13**
KPIs (0 =no mixed performance measures; 1 =KPIs or equivalent)	1

KRIs (0 = no key risk indicators described; 1 = KRIs or equivalent)	1
Explanation of KPIs and KRIs of significance, implications, methods and assumptions used in compiling them (1 each)	4
The organization's effect on the capitals (0=no consideration to the six capitals; 1 =consideration of two capitals; 2 = all material capitals considered)	2
State of key stakeholder relationships (1= mention; 2 = elaborate)	2
Key stakeholder responses (1= mention; 2 = elaborate)	2
Comparison of actual results vs target (0 = no comparison provided; 1 = comparison given)	1
Future outlook	**4**
Management's expectations (0 = no statement; 1=no time frame only expectation described; expectation described with time frame =2)	2
Potential implications (0= no consideration given; 1 = mention)	1
Organizational readiness (0 = no description provided; 1 = readiness explained)	1
Basis of presentation	**8**
Material issues/determination, impact on creating/preserving value (0= no discussion of material issues; 1 = description of some elements of material issues disclosure; 2 = determination of materiality described, impact on creating/preserving value considered)	2
Reporting boundary (0= no boundary, 1 = boundary is determinable, 2=boundary determinable and the process explained)	2
Significant frameworks and methods used to quantify or evaluate material matters (0= no frameworks or method used, 1= frameworks and methods used)	1
Assurance (0=No assurance, 1= mandatory audit, 2= independent external assurance on non-financial reporting)	2
Conciseness (0= no conciseness, 1= balance between conciseness and completeness and comparability)	1
Totals	**76**

Created by Gunarathne & Herath (2016).

Appendix 2. List of EUROSTOXX 50 companies as at 2019.12.31

Name	**Country**	**Ref. to IR and FS reports**
LVMH Moet Hennessy Louis Vuitton	France	
SAP SE*	Germany	https://www.sap.com/investors/en/reports.html
Anheuser-Busch InBev SA/NV	Belgium	
Unilever NV*	Netherlands	https://www.unilever.com/investor-relations/annual-report-and-accounts/archive-of-annual-report-and-accounts/?datetype=year&monthfrom=1&yearfrom=1929&monthto=12&yearto=2019
L'Oreal SA	France	
TOTAL SA	France	
Sanofi	France	https://www.sanofi.com/en/investors/reports-and-publications
ASML Holding NV	Netherlands	https://www.asml.com/en/investors/annual-report
Airbus SE	Netherlands	
Linde PLC	Ireland	
Allianz SE	Germany	
Siemens AG	Germany	
Industria de Diseno Textil SA*	Spain	https://www.inditex.com/en/investors/investor-relations/annual-reports
Volkswagen AG	Germany	
Deutsche Telekom AG	Germany	
Enel SpA*	Italy	https://www.enel.com/investors/a/2016/09/annual
Safran SA	France	https://www.safran-group.com/finance/publications-0?financial_term_id=252
Banco Santander SA	Spain	
Kering SA	France	
BASF SE*	Germany	https://www.basf.com/global/en/investors/calendar-and-publications/publication-finder.html
Bayer AG*	Germany	https://www.investor.bayer.de/en/reports/annual-reports/overview
Vinci SA	France	
BNP Paribas SA	France	https://invest.bnpparibas.com/en/annual-reports
AXA SA*	France	https://www.axa.com/en/investor/annual-and-interim-reports
EssilorLuxottica SA	France	
Iberdrola SA*	Spain	https://www.iberdrola.com/shareholders-investors/annual-reports

Daimler AG	Germany	
Air Liquide SA	France	
Adidas AG	Germany	
Danone SA	France	
Eni SpA*	Italy	https://www.eni.com/en-IT/investors/reports.html
Schneider Electric SE	France	https://www.se.com/ww/en/about-us/investor-relations/regulatory-information/annual-reports.jsp
Bayerische Motoren Werke AG	Germany	
ING Groep NV*	Netherlands	https://www.ing.com/Investor-relations/Financial-performance/Annual-reports.htm
Intesa Sanpaolo SpA	Italy	
Deutsche Post AG	Germany	
Orange SA*	France	https://www.orange.com/en/Group/Individual-shareholders/News/Archives/Integrated-annual-reports
Muenchener Rueckversicherungs-Gesellschaft Aktiengesellschaft in München	Germany	
Engie SA	France	
Telefonica SA*	Spain	https://www.telefonica.com/en/web/responsible-business
Koninklijke Philips NV*	Netherlands	https://www.results.philips.com/publications/ar18#/
Banco Bilbao Vizcaya Argentaria	Spain	
Vivendi SA*	France	https://www.vivendi.com/en/investment-analysts/regulatory-information/annual-reports/
Amadeus IT Group SA	Spain	
Koninklijke Ahold Delhaize NV	Netherlands	
CRH PLC	Ireland	
Fresenius SE & Co KGaA	Germany	
Societe Generale SA	France	
Unibail-Rodamco-Westfield	France	
Nokia Oyj	Finland	

*Companies included in IR database