

Green Quadriga? - EU - Taxonomy, Non-Financial-Reporting Directive, EBA Pillar III ESG risks and IFRS Foundation

Dirk Beerbaum¹

¹*Aalto University School of Business, beerbaumdirk@gmail.com*

“It is now clear that creating long-term value requires a focus on both financial and sustainability performance.” *Klaus Schwab, World Economic Forum Founder and Executive Chairman*

ABSTRACT: After years of conceptual discussions, sustainability finance is uplifted to the execution agenda. Several regulators have been proposing or are proposing new requirements on sustainability reporting, ESG metrics and standardization of ESG disclosures. The EU-Taxonomy issued by the EU commission, the European Banking Authority (EBA) launches consultation on Environmental, Social and Governance (ESG) risks as well as the IFRS Foundation on sustainability reporting and the Non-Financial Reporting Directive (NFRD) also reflecting the European Green Deal (EGD). This research note assesses and comments these green initiatives, which have different underpinnings and implications for market participants. In order to meet the EU climate and energy targets for 2030 and reach the objectives of the European Green Deal, it is fundamental to direct investments towards sustainable projects and activities. The current COVID-19 pandemic has reinforced the need to redirect capital flows towards sustainable projects in order to make our economies, businesses and societies, in particular health systems, more resilient against climate and environmental shocks and risks with clear co-benefits for health. To achieve this, a common language and a clear definition of what is ‘sustainable’ is needed. The EU Commission Non-financial Reporting Update (NFRD) however issues which are material to environmental and social objectives can have financial material impact. This is why the action plan on financing sustainable growth called for the creation of a common classification system for sustainable economic activities, or the “EU taxonomy”. The EU-taxonomy represents the most comprehensive classification schema for sustainability on a worldwide basis. The research note concludes with a summary of all four initiatives and the assessment that the initiatives need to be coordinated and reconciled to each other, particularly the NFRD and the EBA Pillar 3 disclosures on environmental, social, and governance (ESG) risks.

KEYWORDS: EU taxonomy, Sustainability Taxonomy, Task-Force on Climate-related Disclosures (TCFD), ESG Pillar III disclosures, Sustainable Reporting, Sustainability Standards, Behavioural Economics, Decision-usefulness and XBRL, Climate Change

Introduction – The background of Sustainability Reporting in the context of the Financial Crisis

In the last 10 years since the break out of the financial crisis 2008/09 a lot was accomplished for the development of models, which can better predict future losses. However, the best model cannot predict long forecast horizons. Based on the experience with IFRS 9 typically forecast horizon comprise of less than five years. This is since longer forecast time horizons cannot be reliably estimated. This is also very often mentioned in the academic literature. One of the most prominent economic theory, which encompass the uncertainty of the prediction of future events is the random walk theory (Taylor, 1982). In addition to that, people under a behavioral approach do not behave rational. Considering behavioral economics encompassing a wide range of psychological, economic and sociological laboratory and field experiments human proved beings deviating from rational choices.

Climate change represents one of the most pressing problems in the age of globalization as for exacerbating more risks than ever before in terms of water crises, food shortages, constrained economic growth, weaker social cohesion and increased security risk. The implementation of climate stability accounts for the most challenging contemporary global governance predicament that seems to pit today's generation against future world inhabitants and is also represent the greatest threat to long-term sustainable financial stability (Puaschunder, 2017). To better cluster risks associated with climate change and to be able to develop a reporting taxonomy the following three climate risk channels are introduced (Carney, 2016).

- Physical risks
- Liability risks

- Transition risks

Physical risks imply the danger on the value of financial and non-financial assets which are caused by the damages from climate change and weather-related events. Heat stress, extreme weather scenarios, sea level rise, drought and extreme wind situations.

Liability risks result from incurred losses from climate change, which will be forced to be compensated via litigation (Herweijer et al., 2009). Transition risks are associated with the adjustments towards a lower-carbon economy, as conversion could cause sudden changes in policy, consumer preferences, technology and physical risks. The sustainability taxonomy will need to address physical and transitional risks (Labatt and White, 2011). Before further elaborating the taxonomy, the authors will provide a historical overview on Sustainability Reporting.

“Yes, ESG is complicated. Together, we can simplify it,” by Maha Eltobgy, Head of Shaping the Future of Investing and Member of the Executive Committee, WEF, and Janine Guillot, CEO of the Sustainability Accounting Standards Board (SASB)(Ailman et al., 2017) .

They observe that “in the absence of consistent, comparable, and reliable sustainability information, these investors are effectively aiming with one eye closed.” While “confusion and perceptions of competition are a barrier to progress,” they argue that their work is “guided by the same north star” and commit to ongoing cooperation.

History of Sustainability Reporting

There is no exact agreement on what constitutes exactly “Sustainability Reporting”, which is why many of the previous research deals with the challenge to develop standards for defining and reporting sustainability (Aras and Crowther, 2009). The following section applies an inductive approach to sustainability by focusing on the de-facto reporting practice by companies.

Sustainability reporting occurs when organizations consider their impacts on a wide range of sustainability issues mainly based on transparent risk and opportunity analyses. A sustainability report publishes a corporations’ economic, environmental and social impacts alongside the organization’s values and governance model. Reports link strategy to commitment to a sustainable global economy. Sustainability reporting helps organizations to measure, understand and communicate economic, environmental, social and governance performance. Setting goals in the reporting helps to manage change. Concrete sustainability reporting comprises of non-financial reporting, triple bottom line reporting, Corporate Social Responsibility and integrated reporting, which combines financial with non-financial performance.

In the wake of sustainability reporting, organizations consider their impacts on people, planet and profits in the realm of sustainability. Sustainability reporting enables corporations to be transparent about risks and opportunities. Communicating to stakeholders, sustainability reporting allows to identify and communicate risks and opportunities for the organization. Transparency thereby leads to better decisions, which helps build and maintain trust in businesses.

Sustainability reporting is guided by the GRI Sustainability Reporting Standards, the Organization for Economic Co-operation and Development (OECD), the United Nations Global Compact and the International Organization for Standardization (ISO), which offers an international standard for social responsibility.

Corporate sustainability reporting has a history going back to environmental reporting. The first environmental reports were published in the late 1980s by companies in the chemical industry, which had serious image problems and were forced to make working conditions and environmental impacts transparent. The other group of early reporters was a group of committed small and medium-sized businesses with very advanced environmental management systems. Additionally, the tobacco industry adopted such reporting much earlier than the rest of the corporate world, in an attempt to attract new investors at a time when ethical investing was becoming increasingly popular.

Non-financial reporting, such as sustainability and CSR reporting, is a recent trend which has expanded over the last decades. Many companies now produce an annual sustainability report and there are a wide array of ratings and standards around intended to be a "vessels of transparency and accountability." Often, they also intend to improve internal processes, engage stakeholders and persuade investors.

Historically, sustainability reporting stems from the field of ecological economics and related topics in environmental economics and political economies. From the consumer perspective, marketing and transparency in the digital social media age played a role in propelling sustainability reporting. It covers basic approaches to the relationships between ecological and economic systems, both traditional and alternative economic theories and

worldviews. Most recently after the World Financial Recession of 2008 but also after the Paris Agreement, the role of economics in understanding and valuing environmental concern has increased. The relation of the economy and current environmental issues, such as climate change, biodiversity loss, land degradation, ocean acidification and freshwater use are introduced through this outlet. In total, the reports feature multiple approaches and analytical frameworks developed historically and by unconventional economists to frame and interpret these issues. Scientifically, the reporting is trace of the application of ecological economic principles to environmental problem-solving in different industries around the globe. The reports give an overview of economics with an application in the public domain define the relationship between the economy and the environment, the role of economic analysis in understanding and valuing the environment, and examine problems of social and economic development, environmental and related policies.

Considering the rising climate change awareness and demand for an economically efficient transitioning into renewable energy, the UN-led Earth League most recently incepted the Climate Risk and the Finance Sector working group in partnership with United Nations Environment Programme Finance Initiative (UNEP FI), the World Resources Institute (WRI), and the Global Challenges Foundation. The UNEP FI is a global partnership between the UNEP and the financial sector. Over 200 institutions, including banks, insurers and fund managers, work together with UNEP to capture the mutual impacts of environmental and social considerations on financial performance (Puaschunder, 2016b).

At the 3rd Conference on Financing for Development in July 2015 in Addis Ababa, and at the global summit on the Sustainable Development Goals in New York City in September

2015, external financing for development was proven as key driver of developing economies.

In the wake of the 2015 inception of the UN Sustainable Development Goals, a report was published by UNEP FI in cooperation with the PRI, UNEP Inquire and the UNGC that aims at elucidating debates surrounding environmental, social and governance issues in the light of fiduciary duty. The report is meant to foster investors' understanding and consideration of environmental, social and governance (ESG) issues in their investment decision making. The research stresses the point that a failure to consider long-term investment value drivers including ESG issues in investment practices is a failure of fiduciary duty. The report also touches on the implementation of sustainable finance and impact investment in order to propose practical action for institutional investors, financial professionals and policy-makers to embrace sustainable development (Puaschunder, 2016).

One of the most novel trends is the acknowledgement of role of political divestiture for sustainable development (Puaschunder, 2016). With political divestiture having increasingly become an element of fiduciary duty, particularly for investors with long-term horizons that oversee international portfolios, this Financial Social Responsibility means has also come closer to serving sustainable development. Sustainable investment is needed in global economic growth and development, especially in light of financing SDGs and developing countries being highly dependent on corporate contributions. There are massive worldwide financing needs for sustainable development and FDI plays a crucial role in bridging the investment gap, especially in developing countries. Due to stability and diverse development impact compared with other sources of finance, FDI is the most important component of external development finance to fragile economies. Over the past decade, FDI

stock tripled in least developed countries and small-island developing economies and quadrupled in landlocked developing countries. At the same time, inward FDI to the developing economics reached their highest level at USD 681 billion with a 2 percent rise in 2015 (Puaschunder, 2016; World Investment Report, 2015).

According to the World Investment Report 2015, investment community trends will still be geared towards investment liberalization, promotion and facilitation in the future. Global FDI flows are expected to reach \$1.4 trillion in 2015, implying a 11 percent increase. Capital flows are expected to increase further to \$1.5 trillion and \$1.7 trillion in 2016 and 2017 (Trade and Development, 2015). With a concerted effort by the international investment development community, FDI in weak economics could quadruple by 2030. In the future, economic diversification should target at fostering greater sustainability in these most vulnerable countries (Puaschunder, 2016b; World Investment Report, 2015). For the future the world's leading Stock Exchange Commissions seek to further support the PRI and consider innovative ways how to partner with the UNGC. Sustainable development impact reporting can thereby highlight sustainable development criteria such as environment and social standards. For instance, the United States' Overseas Private Investment Corporation (OPIC) uses about 30 development indicators to evaluate job creation and human capacity-building, sustainability effects as well as impacts on environmental and community benefits (World Investment Report, 2015). In addition, specific sustainable development outcomes could be screened if being in line with industrial development strategies and regional economic cooperation. Future monitoring could comprise of an ombudsperson and facilitator to help ensure a vital sustainability climate.

Sustainability Reports offer information on the efficiency and unknown potentials as well as possible downturns of SRI. In a cost and benefit analysis, SRI implies short-term expenditures, but grants long-term sustainable investment streams. In the short run, screened funds have a higher expense ratio in comparison to unscreened ones – that is social responsibility imposes an instantaneous ‘ethical penalty’ of decreased immediate shareholder revenue (Tippet, 2001, Mohr and Webb, 2005). In addition, for investors the search for information and learning about CSR is associated with cognitive costs. Screening requires an extra analytical step in decision making, whereby positive screens are believed to be more cognitively intensive than negative ones (Little, 2008). Screening out financial options lowers the degrees of freedom of a full-choice market spectrum and risk diversification possibilities (Biller, 2007).

On the long run, SRI options offer higher stability, lower turnover and failure rates compared to general assets. Being based on more elaborate decision-making processes, once investors have made their socially responsible decision, they are more likely to stay with their choice (Little, 2008). As a matter of fact, SRI options are less volatile and more robust during cyclical changes (Bollen, 2007). SRI measurement deficiencies stem from intangible and time-inconsistent pay-offs as well as measurement errors. SRI studies are methodologically limited as for small sample sizes due to the relative novelty of Financial Social Responsibility, inconsistencies in the short time frames under scrutiny and differing modelling techniques used to estimate investment returns (Jones et al., 2008). Most SRI studies do not take externalities on the wider constituency group into consideration, which lowers the external validity of the results and calls for a more whole-rounded examination of SRI with a global perspective.

Principles-versus rule-based Sustainability Taxonomy

The development of a sustainability taxonomy should also consider existing best-practice taxonomies for corporate reporting (Beerbaum and Puauschunder, 2019b, Beerbaum, 2016, Beerbaum et al., 2019, Beerbaum et al., 2017). Historically, either an inductive or deductive methodology to develop a taxonomy can also be referenced to the principles-based vs. rule-based debate in the academic literature about accounting taxonomies (Benston et al., 2006). The principles-based vs. rule-based debate in the U.S. was rediscussed after the Enron and WorldCom accounting scandal 2002 (Nobes, 2005). An intense discussion whether US GAAP should become more principles-based, as rules-based standards might give rise to “cook-book accounting”, without considering a substance-over-form approach (Parfet, 2000). So, if there is no discretion to the chef, the taste will always be the same. US GAAP tends to be mechanical and inflexible. Clear-cut rules have some advantages, but the risk is that this approach motivates financial engineering designed specifically to circumvent these knife-edge rules, as is very often given proof in the tax literature (Healy and Palepu, 2003). According to Nelson (2003) a standard should not be seen as only principles or rule-based but should rather be regarded as more or less rule-based.

According to a behavioral analysis, Nelson concludes that rules can improve the accuracy of the communication of the standard setter and reduce imprecision associated with aggressive reporting due to unawareness of existing rules (Nelson 2003). Nelson does not consider that rules increase imprecision but also enable companies to structure transactions to meet the accounting rule without following the true economic substance of the transaction. This is one of the main arguments by supporter of principles or concepts-based accounting (Maines et al., 2003). They point to the challenge when moving from a rule-based to a

concepts-based standard setting, as informed professional judgement and expertise for the implementation is increasingly required.

Overview of existing Sustainability Reporting Taxonomies

The Global Reporting Initiative (GRI) issued after a long development period a taxonomy covering sustainability reporting. Sustainability reporting consists of the “practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development” (Global Reporting Initiative, 2013). “Sustainability reporting” is followed as a general term which consists of reporting on economic, environmental, and social impacts (Kolk, 2008).

This taxonomy (Anonymous, 2007) was developed by the Global Reporting Initiative (GRI), a worldwide non-profit organization that founded a sustainability reporting framework that has been commonly used and applied on a worldwide basis since the 1990s (Hedberg and von Malmborg, 2003). The taxonomy consists of both quantitative and qualitative factors. The following main recommendations for external reporting elements are part of the so called “GRI Framework” (Global Reporting Initiative, 2013;(Beerbaum, 2015)) :

- Organizations should identify their stakeholders and provide disclosures explaining what actions have been taken to meet the stakeholders’ expectations and interests.
- Organizations should provide an executive summary of main impacts, challenges and opportunities.
- The report should disclose the performance of the corporation in a broader framework of sustainability.
- The report should comply with the requirements that:

- Transactions that have a significant economic, environmental and social impact are to be disclosed;
- Aspects which might influence decisions of stakeholders are to be externally reported;
- The report should include disclosures that incorporate indicators of the organizations' performance to enable an informed evaluation of the corporation's overall performance.
- The organization should assess, prepare and report information on a consistent basis.
- The reported information should be disclosed in a way that provides stakeholders with the possibility to assess whether the organization's performance may become volatile over time and enables them to perform peer analysis.
- The reported information should comply with the criteria of sufficient accuracy and completeness, enabling stakeholders to assess the organization's performance.
- The organization should submit information continuously so that stakeholders can rely on the constant availability of information to make informed decisions.
- The organization should follow a communication strategy that considers that stakeholders have access to and are able to follow the information using the report.
- The organization should collect, store, prepare, analyze and present information related to the preparation of a report in a manner that allows it to

undergo examination and establishes validation, control and materiality of the information.

- Specified standard disclosures
 - Disclosures on management approach
 - Topics by category:
 - Economic - economic business drivers, market shares, business strategy, procurement approach;
 - Environmental - emissions, pollution, supplier environment assessment, environmental grievance mechanisms;
 - Social – employment satisfaction and commitment practices, corporate volunteering;
 - Sector-specific commonly practiced disclosures.

The GRI-Taxonomy 2013 is available on the website of the Global Reporting initiative organization (Global Reporting Initiative, 2013); the taxonomy consists of seven main categories:

- Strategy and profile disclosures
- Economic category
- Environmental and labor category
- Human rights category
- Society category
- Product responsibility category
- CG-related matters are allocated under the category “Strategy and Profile disclosures”. The following are the governance-related disclosures based on the elements in the GRI-taxonomy (Global Reporting Initiative, 2013):

- Disclosure about governance structure including committees, responsibilities, description of the mandate and composition;
- Disclosure about the highest body of governance related to the chair's entitlement, remuneration in relation to the organizational performance;
- Processes and procedure of the highest body of governance to monitor the financial, environmental and social success of the organization and its compliance with the company's policies, national regulations and international codes and standards;
- Procedures for identification and remediation for conflicts of interests;
- One-tier boards have to disclose their number of independent members;
- Disclosure of the nomination and selection process for the members of the most senior body of governance;
- Procedures in place to evaluate the performance of the highest body of governance.

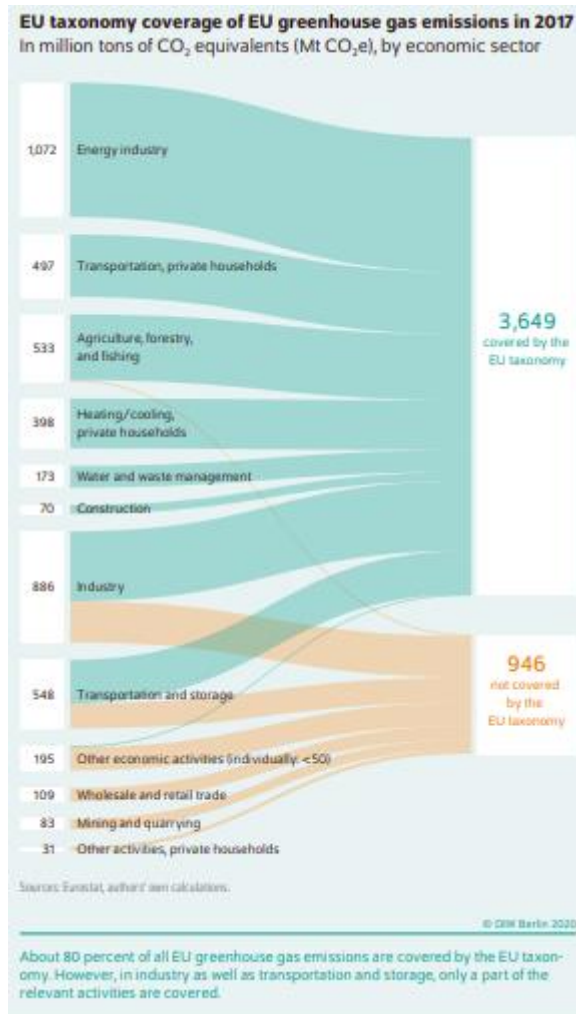
European Green Deal and EU-Taxonomy

In December 2019, the European Green Deal was introduced by the EU Commission, which aims to make the EU climate neutral by 2050. According to the commission's estimates to achieve the climate goals by 2030, additional investments of 350 billion euros per year until 2030 must be executed. For the success of the Green Deal it is pivotal that the EU's Action Plan for Financing Sustainable Growth and its EU taxonomy, a classification system for sustainable activities is implemented. The taxonomy defines criteria for around 80 economic activities, which an activity must fulfill to be classified as sustainable (Lucarelli et al., 2020).

In general, the taxonomy relates to two levels: the project level and the firm level. The project level refers to the classification on new investments, as an example construction of a new power plant, production facility, or building. The taxonomy can be used in the context of investment programs such or as a screening instrument for public funding programs, for example. At the firm level, a company can be used to be evaluated based on its sales or expenses that correspond to the taxonomy (Schütze et al., 2020). The EU-taxonomy addressed the issue, that currently, sustainability ratings at the firm level exist, however standardized criteria for rating sustainable investments are not applied. The taxonomy enables a better comparison of sustainable investment funds.

Both types of applications can influence a firm's cost of capital. At the project level, funds from public programs can be linked to the taxonomy to provide funding advantages. At the firm level, anchoring the taxonomy in corporate reporting will lead to increased transparency that can be considered when valuating firms: the idea behind the taxonomy is that it should provide incentive to firms to incorporate high shares of taxonomy-aligned

activities which should lead to higher profit due to increased market demand on the capital market and thus more favorable financing conditions as well.



Source: Schütze et al. (2020)

Sustainability Reporting approach proposed by the IFRS Foundation

Based on the survey conducted by the IFRS Foundation sustainability reporting is expected to continue to increase its importance for investors. The following stakeholders are defined by the consultation paper.

- **Investors**—Large institutional investors request disclosure of climate risks and sustainability indicators. These investors demand decision useful information including sustainability reporting and want comparable and verifiable information. Investors are, together with preparers, the driving force behind the increasing number of calls for clear, consistent and comparable sustainability information. Asset managers and institutional investors are currently facing an increasing set of expectations from their customers, clients and beneficiaries, while contending with underdeveloped data and analytics on investable assets and significant cost pressures.
- **The corporate sector**—Increasing numbers of companies are committed to developing their sustainability reporting on a voluntary basis. However, depending upon local jurisdiction such commitments are partly driven by regulation, consumer behaviour, investor demand and the recognition of the impact that managing sustainability risks can have on long-term value creation. There is so far a plurality of different reporting practices developed and therefore a broad consensus is reached that the current practice of sustainability disclosure is inefficient and sometimes ineffective due to a lack of commonly accepted standards and the inability to compare the information reported or provide assurance. Due to that sustainability disclosures are complex and therefore cost-intensive compared to standardized disclosures.
- **Companies** also lack clarity about how they should external report on the impact of climate-change transitions. There is no specific accounting, enterprise risk management valuation methodologies which could be

recognized as industry standard. Concerns are also emerging over increasing regional and domestic regulatory requirements and their impact on global competitiveness. The corporate sector has implemented by initiating voluntary reporting on sustainability. Compared to the development of expected credit loss, a principle on sustainability cost measurement metric would need first to be developed and once applied by all a standard of reporting on sustainability would provide transparency on sustainability finance.

- **Central banks**—Central banks are increasingly focused on climate-related risks and sustainability more broadly as important drivers of supervising financial stability. Prudential regulators are starting to incorporate climate analyses into stress tests, and regulatory stress testing of banks and insurers increasingly includes estimates of climate-change impacts. Physical risks by increasing natural catastrophes, storms, extreme weather conditions increase macroeconomic dependencies from climate risks. This area is evolving quickly because of the intensifying demand to understand the impact of climate change on companies. The Network of Central Banks and Supervisors for Greening the Financial System (NGFS) has been established to help strengthen the global response required to meet the goals of the Paris agreement and to enhance the role of the financial system in managing risks and mobilizing capital for green and low-carbon investments in environmentally sustainable development.

- **Market regulators**—Regulators’ involvement in sustainability reporting is influenced by their governments’ public policy positions. For a long time sustainability and corporate governance matters were assumed to be path dependence and therefore not possible to standardize as also reflecting cultural differences(Beerbaum and Puaschunder, 2019b). Consequently, regulators’ views of sustainability reporting are more prominent in some regions, such as Europe or China, where securities and banking regulators are key leaders of policy initiatives. However, the International Organization of Security Commissions (IOSCO) is currently considering how its members could be involved in sustainability reporting

The Non-Financial Reporting Directive (NFRD)

An overview of current legislation, transposition and review clauses the Non-financial Reporting Directive (Directive 2014/95/EU, NFRD) is an amendment to the Accounting Directive (Directive 2013/34/EU) and was adopted in 2014. However, the NFRD is currently under the European Commission’s review and there is a need to align its provisions with the Taxonomy Regulation (Hakahuhta, 2020). Very early the EU has acknowledged with the NFRD Directive that the disclosure of non-financial information is considered as vital for managing change towards a sustainable global economy (Beerbaum and Puaschunder, 2019a).

The objective of the NFRD to disclose of non-financial information by certain large undertakings can be seen in connection to integrated reporting (Beerbaum et al., 2019).

Under the NFRD, large listed companies, banks and insurance companies ('public interest entities') with more than 500 employees have to mandatorily report within its management

report on the policies they implement in relation to social responsibility and treatment of employees; respect for human rights; anti-corruption and bribery; and diversity on company boards (in terms of age, gender, educational and professional background) (Slack and Tsalavoutas, 2018). The main change to previous legislation is that NFRD requires companies to disclose those non-financial key performance indicators, which are used to steer the company by the management. NFRD can also be seen in the context of the balance scorecard, which combines financial with non-financial performance indicators (Butler et al., 2011, Kaplan and Norton, 1995).

However, the NFRD leaves a fair amount of flexibility in the implementation of its provisions. In particular, it does not require the use of a non-financial reporting standard or framework, nor does it impose detailed disclosure requirements (such as lists of indicators per sector). Accordingly, it gives companies significant flexibility to disclose relevant information in the way they consider most useful. It has to be noted, that at the time of the first issue of the law there was on EU side no standardized framework such as EU-taxonomy existing. The characteristics of the NFRD is principles-based. As a result, companies may include a non-financial statement in their management report or, under certain conditions, prepare a separate report. Although international institutions such as the Group Integrated Reporting (GRI) had already developed a framework when the initial NFRD was issued, there was a clear view which framework should be applied or whether a new framework would need to be developed, which at the end resulted into the development of the EU-Taxonomy.

Due to the principles-based character of the NFRD it was enacted that companies can use international, European or national guidelines to produce their statements. International and European non-financial reporting frameworks and standards include, inter alia, the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB), the International Integrated Reporting Framework (IIRC), the Task Force on Climate related Financial Disclosures (TCFD), the United Nations (UN) Guiding Principles Reporting Framework, the UN Global Compact, the OECD guidelines for multinational enterprises and ISO 26000.18 or the German Sustainability Code (DNK) is an example of a national non-financial reporting standard.

Many articles have concluded that the NFRD as implemented by companies has not shown more transparency on non-financial reporting disclosures (Björklund, 2021, Fiandrino and Tonelli, 2021, Hummel, 2020). As shown by the outcome of several consultations, this concept has, however, been found to be difficult to implement, as many stakeholders argue that the directive does not include an adequate definition of the concept of materiality (Hakahuhta, 2020). Therefore, it is not surprising that the request for reforms has been increasing steadily in the last years. The Commission, in July 2020, mandated the European Financial Reporting Advisory Group (EFRAG) to develop recommendations for a potential future European non-financial reporting standard in 2021. Moreover, the NFRD leaves companies some room for maneuver by stipulating that where the company does not pursue policies in relation to one or more of the five matters mentioned above, the non-financial statement shall provide a clear and reasoned explanation for not doing so ('comply-or-explain').

European Banking Authority (EBA) Pillar III ESG risks

European banking Authority (EBA) has started to request feedback for the implementing technical standards for Pillar 3 disclosures on environmental, social, and governance (ESG) risks, defined in the requirements under Article 449a of the Capital Requirements Regulation (CRR) (Gyura, 2020). The proposed standards from the EBA put forward comparable disclosures that address how climate change may exacerbate other risks within the balance sheets of institutions, how institutions are mitigating those risks, and the green asset ratio on exposures financing the taxonomy-aligned activities. The consultation package includes tables for qualitative disclosures on ESG (Coleton et al., 2020) risks and templates for quantitative disclosures on climate-change-related physical and transition risks. It also includes templates for quantitative information and key performance indicators (KPIs) on climate change mitigating measures, including the green asset ratio on taxonomy-aligned activities and other mitigating actions. As specified in CRR, these disclosure requirements are expected to be applicable from June 2022 on an annual basis during the first year and biannually thereafter. The comment period for this consultation ends on June 01, 2021.

On the quantitative side, the implementing standards propose comparable disclosures on climate-change-related transition and physical risks. In case of climate change physical risks, institutions should start working on the identification of exposures toward sectors and geographies exposed to climate change events linked to physical acute and chronic risks; a disclosure template for this information has been included for consultation. The proposed implementing standards also include quantitative disclosures on institutions' mitigating actions supporting their counterparties in the transition to a carbon-neutral economy and in

the adaptation to climate change. In addition, they include a green asset ratio, which identifies the institutions' assets financing activities that are environmentally sustainable according to the EU taxonomy, such as those consistent with the European Green Deal and the Paris agreement goals.

On the qualitative side, the consultation paper includes three tables that specify the disclosure requirements for ESG risks. These disclosures are designed in line with the discussion paper that EBA has published in preparation for the report that the authority has to draft following Article 98(8) of the Capital Requirements Directive (CRD IV). The tables and instructions rely on the definitions, terminology, and structure presented in that paper. Thus, the consultation paper sets out proposals for the disclosure of qualitative information on the ESG risks that may manifest on institutions' balance sheets from the impact of these ESG factors and risks on their counterparties through main transmission channels (including physical and transition channels). Qualitative disclosures are expected to complement the quantitative information when interpreting the information on carbon-related activities or the green asset ratio.

When developing these proposals, EBA has built on recommendations from the FSB Task Force on Climate-related Financial Disclosures (FSB-TCFD), EC's non-binding guidelines on climate-change reporting, and on the EU taxonomy. EBA has developed this consultation paper in parallel and consistently with the Advice to EC on disclosures under Article 8 of the Taxonomy Regulation, including a common proposal for a green asset ratio. EBA has deliberately designed the green asset ratio disclosure requirements to match the data and timelines that large corporates under the Non-Financial-Reporting Directive (NFRD) are required to produce following Article 8 of the Taxonomy Regulation. In its

factsheet on ESG disclosures, EBA acknowledged the potential difficulty in obtaining accurate data, due to which banks can use proxies, estimates, and ranges where reliable data is not yet available. EBA expects reliable data for the green asset ratio from December 2022 from counterparties subject to the NFRD disclosure obligations; however, expectation is much longer, until June 2024, for other data including those from small and medium enterprises, corporates below 500 staff members, and retail counterparties.

Conclusion and Synopsis of ESG regulatory initiatives and requirements towards ESG

The initiatives have different dimensions. While the EU-Taxonomy mainly classifies sustainability and deviates from non-sustainability, while Pillar III ESG defines risk disclosures on ESG risks and is applicable for banks and investment companies what is the impact on risk management. NFRD has a wider implication, as it applies to listed companies, as well as banks and insurers. The revision for the NFRD is expected to clarify what needs to be reported by companies on the risks and impacts on their activities.

| | EU Taxonomy | NFRD | Pillar III ESG | Sustainability Reporting |
|--------------------------|---|---------------------------------------|--|--|
| Issuer | Eu Commission | EU Directive | EBA | IFRS Foundation |
| Principal vs. rule-based | Rule based | Principles-based | Rule-based | Principles-based |
| Main objective | Classification and definition of sustainability | Principles on non-Financial reporting | Quantitative and Qualitative Disclosure on ESG | Preparation of an Accounting Standard for sustainability |
| Effective/ Status | 2022 | 2022 expected | 2021 consultation started | Consultation started |

This paper conceptualizes four regulatory initiatives towards sustainability, which are under early consultation or in its final stage to become legally binding. Although all four

regulations focus on Environmental, Social and Governance changes and focus on the framework of sustainability, the approach, the methodology and the timing are different.

While the EU taxonomy intends to classify and define sustainability, Pillar III ESG defines qualitative and quantitative new disclosure rules, the NFRD further details non-financial reporting requirements and the IASB starts in early stage to become also the standard setter for sustainability.

The EU taxonomy as it does not derive existing laws or regulation and sums up deductively into a taxonomy, what is e.g. the approach of the IASB taxonomy or the US GAAP taxonomy, the EU taxonomy itself becomes the standard setting on what exactly sustainability is segregated from non-sustainability. This is very important in the light of the demand for sustainability reporting to ensure that not a green “washing” is done, that sustainable investments are not supported, which do not really follow principles of sustainability. This also implies that non-sustainable industries as not classified as part of sustainable, will not get the same EU investments, which was already defined as part of the COVID19 aid program.

The Pillar III ESG disclosures are specifically issued requirements from the banking supervisory and define rules for qualitative and quantitative disclosures only applicable for banks and financial institutions. Non-financial reporting directive address all companies non-financial reporting requirements. The NFRD is an update to existing principles, which are criticized for its effectiveness.

Finally, it becomes apparent that the initiatives and regulations are not reconciled to each other. A lot of double requirements will be created, as ESG would become part of Pillar III regulatory disclosures, the MDA via non-Financial reporting directive and also considering the IASB accounting requirements, for which the companies it will be the challenge to present concise and non-contradictory financial and non-financial reports. The reconciliation and alignment between the regulation on disclosure requirements on ESG, EU-taxonomy and the risk disclosures is important prerequisite regulators need to accomplish so that market transparency is increased.

References

- AILMAN, C., EDKINS, M., MITCHEM, K., ELIOPOULOS, T. & GUILLOT, J. 2017. The next wave of ESG integration: Lessons from institutional investors. *Journal of Applied Corporate Finance*, 29, 32-43.
- ANONYMOUS 2007. Tag - You're It! GRI Releases XBRL Taxonomies. *Business and the Environment*, 18, 1-6.
- ARAS, G. & CROWTHER, D. 2009. Corporate sustainability reporting: a study in disingenuity? *Journal of business ethics*, 87, 279.
- BEERBAUM, D. 2015. *Towards an XBRL-enabled corporate governance reporting taxonomy. An empirical study of NYSE-listed Financial Institutions*. University of Surrey.
- BEERBAUM, D. 2016. *Towards an XBRL-enabled corporate governance reporting taxonomy.: An empirical study of NYSE-listed Financial Institutions*, BoD–Books on Demand.
- BEERBAUM, D., LÖW, E. & ILLIG-MARTIN, T. 2019. Towards an Integrated Reporting Taxonomy in Europe—An analysis of 40 annual corporate reports regarding their value creation disclosures. *Journal of Applied Research in the Digital Economy (JADE)*.
- BEERBAUM, D., PIECHOCKI, M. & WEBER, C. 2017. Is there a conflict between principles-based standard setting and structured electronic reporting with XBRL? *European Financial and Accounting Journal*, 12, 33-52.
- BEERBAUM, D. & PUASCHUNDER, J. M. 2019a. A Behavioral Economics Approach to Sustainability Reporting. Available at SSRN 3381607.
- BEERBAUM, D. & PUASCHUNDER, J. M. 2019b. Towards an XBRL-enabled Sustainability Taxonomy—A behavioral accounting approach. *Journal of Applied Research in the Digital Economy (JADE)*.
- BENSTON, G. J., BROMWICH, M. & WAGENHOFER, A. 2006. Principles - versus rules - based accounting standards: the FASB's standard setting strategy. *Abacus*, 42, 165-188.
- BILLER, A. 2007. Socially responsible investing now part of the landscape. *Benefits & Compensation Digest*, 44, 12.
- BJÖRKLUND, J. 2021. *Reviewing the Non-Financial Reporting Directive: An analysis de lege lata and de lege ferenda concerning sustainability reporting obligations for undertakings in the EU*. Uppsala University.
- BOLLEN, N. P. 2007. Mutual fund attributes and investor behavior. *Journal of Financial and Quantitative Analysis*, 42, 683-708.
- BUTLER, J. B., HENDERSON, S. C. & RAIBORN, C. 2011. Sustainability and the Balanced Scorecard: Integrating Green Measures into Business Reporting. *Management Accounting Quarterly*, 12.
- CARNEY, M. 2016. Resolving the climate paradox. *Bank of England, Speech*, 22.
- COLETON, A., FONT BRUCART, M., GUTIERREZ, P., LE TENNIER, F. & MOOR, C. 2020. Sustainable Finance: Market Practices. *European Banking Authority Research Paper*.
- FIANDRINO, S. & TONELLI, A. 2021. A Text-Mining Analysis on the Review of the Non-Financial Reporting Directive. Bringing Value Creation for Stakeholders into Accounting. *Sustainability*, 13, 763.
- GLOBAL REPORTING INITIATIVE. 2013. *GRI-Taxonomy 2013* [Online]. Available: globalreporting.org [Accessed 15/05/2015].
- GYURA, G. 2020. ESG and bank regulation. *ECONOMY AND FINANCE: ENGLISH-LANGUAGE EDITION OF GAZDASÁG ÉS PÉNZÜGY*, 7, 366-385.
- HAKAHUHTA, T. 2020. Disclosure of Non-Financial Information—Amendments to Reporting under the EU Taxonomy Regulation.
- HEALY, P. M. & PALEPU, K. G. 2003. The fall of Enron. *The Journal of Economic Perspectives*, 17, 3-26.
- HEDBERG, C. J. & VON MALMBORG, F. 2003. The global reporting initiative and corporate sustainability reporting in Swedish companies. *Corporate social responsibility and environmental management*, 10, 153-164.
- HERWEIJER, C., RANGER, N. & WARD, R. E. 2009. Adaptation to climate change: threats and opportunities for the insurance industry. *The Geneva Papers on Risk and Insurance-Issues and Practice*, 34, 360-380.
- HUMMEL, K. 2020. The European Union Non-Financial Reporting Directive: Evidence on Regulatory Parameters and Firm-Value Consequences. Available at SSRN 3744653.

- JONES, S., VAN DER LAAN, S., FROST, G. & LOFTUS, J. 2008. The investment performance of socially responsible investment funds in Australia. *Journal of Business Ethics*, 80, 181-203.
- KAPLAN, R. S. & NORTON, D. P. 1995. Putting the balanced scorecard to work. *Performance measurement, management, and appraisal sourcebook*, 66, 68.
- KOLK, A. 2008. Sustainability, accountability and corporate governance: exploring multinationals' reporting practices. *Business Strategy and the Environment*, 17, 1-15.
- LABATT, S. & WHITE, R. R. 2011. *Carbon finance: the financial implications of climate change*, John Wiley & Sons.
- LITTLE, K. 2008. *Socially responsible investing: Put your money where your values are*. New York: Penguin.
- LUCARELLI, C., MAZZOLI, C., RANCAN, M. & SEVERINI, S. 2020. Classification of Sustainable Activities: EU Taxonomy and Scientific Literature. *Sustainability*, 12, 6460.
- MAINES, L. A., BARTOV, E., FAIRFIELD, P., HIRST, D. E., IANNACONI, T. E., MALLETT, R., SCHRAND, C. M., SKINNER, D. J. & VINCENT, L. 2003. Evaluating concepts-based vs. rules-based approaches to standard setting. *Accounting Horizons*, 17, 73-89.
- MOHR, L. A. & WEBB, D. J. 2005. The effects of corporate social responsibility and price on consumer responses. *Journal of consumer affairs*, 39, 121-147.
- NELSON, M. W. 2003. Behavioral evidence on the effects of principles-and rules-based standards. *Accounting Horizons*, 17, 91-104.
- NOBES, C. W. 2005. Rules-based standards and the lack of principles in accounting. *Accounting Horizons*, 19, 25-34.
- PARFET, W. U. 2000. Accounting subjectivity and earnings management: A preparer perspective. *Accounting Horizons*, 14, 481-488.
- PUASCHUNDER, J. M. 2016. Mapping climate justice.
- PUASCHUNDER, J. M. 2017. Financing climate justice through climate change bonds. *Oxford Journal of Finance and Risk Perspectives*, 6, 1-10.
- SCHÜTZE, F., STEDE, J., BLAUERT, M. & ERDMANN, K. 2020. EU taxonomy increasing transparency of sustainable investments. *DIW Weekly Report*, 10, 485-492.
- SLACK, R. & TSALAVOUTAS, I. Integrated reporting decision usefulness: Mainstream equity market views. *Accounting Forum*, 2018. Elsevier.
- TAYLOR, S. J. 1982. Tests of the random walk hypothesis against a price-trend hypothesis. *Journal of Financial and Quantitative Analysis*, 17, 37-61.
- TIPPET, J. 2001. Performance of Australia's ethical funds. *Australian Economic Review*, 34, 170-178.
- TRADE, U. N. C. O. & DEVELOPMENT 2015. *World investment report 2015: Reforming international investment governance*.