"The contribution of an FSC certification towards compliance with the EUTR requirements: A case study in Germany."

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ABSTRACT,

This paper identifies the contribution of an FSC certification towards meeting the requirements of the European Timber Regulation (EUTR) for importing companies in Germany. The study proposes an overall value of private certification by also considering market and customer pressure for private certification. A case study design at a medium-sized paper manufacturer in Germany was selected. Interviews with various stakeholders from the public and private sector have been conducted. Given the different implementation and interpretation approaches of the EUTR in terms of strictness across member states, previous studies from other European countries are not generalizable to the case of Germany where a rather strict implementation is observable. Using the Transnational Business Governance Interaction (TBGI) framework by Eberlein et. Al (2014), the findings imply that an FSC certification highly contributes complying with the EUTR due diligence requirements in the short to medium term given the current recognition of the certificate by the German competent authority and the usability of relevant information and mechanisms preexistent in the FSC system. However, the long-term recognition yields uncertainties given changing valuation of the FSC certificate by the German competent authority due to existing weaknesses in the current FSC system. The proposed findings are especially valuable for mediumsized companies in the pulp and paper industry given a topical assessment of the FSC certification value and its current strengths by also shedding light on potential uncertainties in the long-term future. Moreover, the study contributes to the TBGI literature through a recent assessment of the compliance contribution of an FSC certification in Germany. However, findings may not be generalizable to other industries than the paper and pulp industry.

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Keywords

EUTR, FSC, Private Forest Certification, Transnational Business Governance Interaction, Pulp and Paper Industry, Regulation

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1. INTRODUCTION

The European Timber Regulation - shortened in the following as (Regulation (EU) No 995/2010 of the European EUTR -Parliament and of the Council of 20 October 2010), implemented on 3rd March 2013, lays down "the obligations of operators who place timber and timber products on the market" and "counters the trade in illegally harvested timber and timber products through three key obligations."1 The key obligations include the prohibition of placing illegally logged timber on EU markets, the obligation for operators to have an appropriate risk management system in place and to keep records of their suppliers and their customers.² Following the second principle, companies must comply with when importing timber products into the EU, they must exercise due diligence. The due diligence includes information gathering, risk assessment and, if the risk is not negligible, risk mitigation. Such due diligence systems (DDS) can be created and run by the company itself or with the support of a third-party DDS, e.g. by NGOs or monitoring organizations. The risks of placing illegally logged timber on the market can be reduced with third-party certification. Such a third-party certification body is the Forest Stewardship Council (FSC).

The FSC is a non-governmental organization that certifies forests, company supply chains and products (See Appendix A) following 70 criteria and 10 principles which cover compliance with legality regulations and sustainability outcomes such as rights of workers and communities, biodiversity and high conservation values.³ Moreover, other certification programs such as the Program for the Endorsement of Forest Certification (PEFC) exist next to the FSC scheme. The major difference between the programs is that the FSC certification program balances economic, social, and environmental interest groups equally in terms of voting power whereas in the PEFC program forest owner's interests predominate.⁴

However, even if the FSC certification program, is in accordance with some of the EUTR requirements, it does not lead to a "green lane" for certified companies to automatically be a proof of the due diligence requirement of the EUTR. ⁵ Importing organizations are still responsible for ensuring the legality of wood products. Furthermore, as stated in an FSC document concerning questions and answers about the EUTR, it says that "[t]here were discussions about a "green lane" for certified products, but this was not accepted by the lawmakers."⁶ Both governance initiatives aim at fighting illegal logging. However, importing companies are required by law to comply with the EUTR requirements, whereas an FSC certificate is not mandatory.

Previous studies have outlined consequences of the interactions between supranational legislation and industry-led governance mechanism as competitive or cooperative, which may result in conflict or domination. ⁷ Consequences of the interaction between state-led and industry-led governance initiatives for companies are still lacking recent research. For example, a discussion among scholars on whether the implementation of the EUTR resulted in the expansion or dispensing of private forest certification by companies emerged (see Overdevest and Zeitlin 2014; Bartley 2014).

Other scholars such as Gavrilut et. Al. (2016) however, focused on whether an FSC certification among Romanian companies can be supportive in covering the requirements of the EUTR.8 The authors have found that generally, an FSC certificate helped Romanian companies complying with the EUTR requirements.9 This opens a new perspective on the interaction between supranational legislation and industry-led certification governance: interactions cannot be considered as only competitive or cooperative, rather they can be *supportive*. There is a major distinction between a *cooperative* and *supportive* interaction. Cooperation refers to the willingness of both parties to work together. Considering that European lawmakers did not accept the FSC certificate as automatic proof of compliance with the EUTR requirements, cooperation in this major point is denied. ¹⁰ Rather, the FSC certification took over a supportive role, considering that companies can make use of the FSC certificate for supporting compliance with the due diligence requirement.¹¹ However, the supportive role of the FSC certification for importing companies to comply with the EUTR requirements still lacks recent research.12

A recent study by Köthke (2020) found that awareness of the EUTR obligations among Chain of Custody (CoC) certified operators were higher than at non-certified companies. Additionally, the study concludes that compliance with the EUTR due diligence requirements is higher among CoC certified operators.¹³

Given the discrepancies relating to the compliance with the EUTR among certified and non-certified companies according to Köthke (2020), research is needed to elaborate on the precise value of private certification for importing companies, respectively referred to "market operators" under the EUTR.

Moreover, another perspective on the valuation of private certification is associated with customer and market demand for private certification. By clarifying the contribution towards EUTR compliance, the value of private certification in the context of customer and market demand is relativized. Specifically, whether a potential legal contribution outweighs or supports the customer and market demands and thus increases or decreases the value of private certification for importing companies. It is essential to analyze the German situation isolated from other European countries given highly different implementation and interpretation approaches across member states.¹⁴ Generalizations from other studies in various European countries are thus not applicable.

Hence, the bachelor thesis aims to elaborate on the complete value of the FSC certification for importing companies in Germany by focusing on the compliance aspect with the European Timber Regulation and answering the following question:

"To what extent does an FSC certificate support importing companies to comply with the European Timber Regulation in Germany?"

To further establish the relationship and impacts between FSC certified companies and the compliance contribution of private certification with the EUTR, a case company will be the focus of research. The case company is a certified paper manufacturer from Germany with an FSC Chain of Custody certificate. The pulp used for paper production is covered under the EUTR requirements and thus the company needs to seek compliance. The results are beneficial for the case company considering

- ⁹ See Gavrilut et. Al (2016), p. 10
- ¹⁰ See Forest Stewardship Council (2017), p. 2

- ¹² See Gavrilut et. Al (2016), p. 8
- ¹³ See Köthke (2020), p. 13

¹ European Parliament and European Council (2010)

² See European Parliament and European Council (2010)

³ See Forest Stewardship Council (2016) p. 2

⁴ See Keskatilo (2009), p. 1

⁵ See Forest Stewardship Council (2017), p. 2

⁶ Forest Stewardship Council (2017), p. 2

⁷ See Eberlein et. Al (2014), p. 4

⁸ See Gavrilut et. Al (2016), p. 6

¹¹ See European Commission (2012), p. 17

¹⁴ See European Commission (2018), p. 7

recommendations for the future, e.g. to rely on private certification in the sense of compliance contribution or suspending private certification in the long term given emerging uncertainties and constraints.

The remainder part of the thesis will start with a literature review on the concept of Transnational Business Governance (TBG), a placement of the thesis topic into the broader TBG concept and providing key insights of previous studies concerning the interactions between private forest certification and the EUTR. Afterwards, the methodology section describes how interviews were conducted and the collected data analyzed. Further, results from the analysis are presented. Finally, a discussion of the results will follow and the limitations the research faced are described.

2. THEORETICAL FRAMEWORK

2.1 Conceptualization

Major contributions towards the definition and conceptualization of Transnational Business Governance theory have been made by Eberlein et. Al. (2014). The authors combined studies from various domains, e.g. forestry, fishery, financial markets and identified similarities and convergences to build a profound conceptual framework.

Defining Transnational Business Governance (TBG), it can be referred to the rise of business regulations that do not only emerge from traditional state institutions. Rather several actors from the "private sector, civil society [and] hybrid public-private institutions operating in a dynamic transnational regulatory space" influence and create business regulations.¹⁵

TBG initiatives appear in several domains. Examples include accounting standards, labour rights monitoring, transparency standards and forest certification schemes. Moreover, TBG schemes interact with each other, also including the interaction between private and state-based governance initiatives.¹⁶ According to Eberlein et. Al. (2014), the forestry sector is a mature and well-studied TGB domain in which interactions are constantly changing especially with regards to the recent implementation of the EUTR which created new relationships.¹⁷ Further defining TBG, *Transnational* refers to cross national border arrangements with the involvement of "non-state actors [exercising] significant authority to perform regulatory functions alone or with state actors." ¹⁸ State herby refers to intergovernmental, supranational and trans governmental structures.¹⁹

Moreover, Eberlein et. Al. (2014) denote the *Business* definition to "[...] a focus on the regulation of commercial activity in pursuit of socially defined goals."²⁰ Furthermore, they state that "[...] in TBG, firms also exercise regulatory authority, performing functions such as agenda setting and rulemaking."²¹ Finally, Eberlein et. Al refer *Governance* to "regulatory governance" with the definition of Hale and Held (2011) as "organized and sustained attempts to change the behavior of target actors to further a collective end, through rules or norms and means of implementation and enforcement."²²

Moreover, *Interaction* is a key component of Eberlein et. Al's (2014) work and thus refers to *Transnational Business*

- ¹⁶ See Eberlein et. Al. (2014) p. 2
- ¹⁷ See Eberlein et. Al. (2014) p. 2
- ¹⁸ Eberlein et. Al (2014), p. 3
- ¹⁹ See Eberlein et. Al (2014), p. 3
- ²⁰ Eberlein et. Al (2014), p. 3
- ²¹ See Eberlein et. Al (2014), p. 3
- ²² Eberlein et. Al (2014), p. 3

Governance Interactions (TBGI). The addition of the *Interaction* dimension is established through the increased focus of scholars towards the relation between TBG and state regulation.²³

Considering the subsequent research, the Interaction dimension provides the fundamental basis of analysis for this paper. The authors state that "TBG schemes involve heterogeneous actors" such as NGOs, organizations, and governmental institutions which pursue "diverse interests, values, and beliefs".²⁴ However, these schemes "interact with one another and with state institutions in varied ways" such as intentionally or unintentionally.²⁵ This is important to consider when analyzing the interaction between the EUTR and the FSC certification scheme given reciprocal recognition of both governance initiatives. Moreover, interactions between "actors with differing regulatory goals create multiple institutions [and] competition, sometimes shading into conflict or domination [...]".²⁶ Eberlein et. Al. (2014) state that such conflict and domination occur in the forestry sector in which "[...] industry- and NGO-led certification programs compete for users and legitimacy – while all intersect with state and international regulation." 27 The interaction dimension will be further discussed in the following sections

Eberlein et. Al. (2014) conceptual framework builds the theoretical basis for this thesis by clearly defining the role each governance initiative holds. Further, the framework describes various modes of interactions that can occur between governance initiatives resulting e.g. in domination or cooperation. Moreover, the phenomenon of TBGI occurs in various domains and not only in the forestry sector which will be the focus of this paper. The next section addresses such complexity of TGBI and summarizes different streams of research.

2.2 The distinction of research in TBGI

Considering the complexity of TBGI, the framework can be filled with using various theoretical perspectives and is applicable in numerous domains. For example, a rationalistic approach, focusing on the power relationships among rational actors; Sociological approaches focusing on legitimation for shaping interactions and inter-organizational and interpersonal relationships; or an institutionalist approaches analyzing interactions driven by structural forces and the application of various concepts to the TBG framework.²⁸

The research of this paper will gather around the line of researchers considering the implications of interactions for regulatory effectiveness.

Given the convergence of rules and norms in the forestry sector, namely the FSC standards and the EUTR requirements, the resultant role of the FSC certificate towards compliance with the EUTR for importing companies fits into the stream of research. Even though this thesis does not evaluate regulatory effectiveness directly, the contribution of private governance initiatives towards complying with transnational state-led regulation indirectly affects regulatory effectiveness with regards to potential convergence and intersections of rules and norms. Moreover, the implications of the interaction between private governance initiatives (e.g. third-party certification) and state-led

- ²⁴ Eberlein et. Al (2014), p. 3
- ²⁵ See Eberlein et. Al (2014), p. 3
- ²⁶ Eberlein et. Al (2014), p. 4

²⁸ See Eberlein et. Al (2014), p. 4

¹⁵ Eberlein et. Al. (2014) p. 1

²³ See Eberlein et. Al (2014), p. 4

²⁷ Eberlein et. Al (2014), p. 4

governance (e.g. the EUTR) for organizations acting and being dependent on both governance schemes will be assessed. One might expect that the convergence of both governance initiatives leads to an easier compliance for one and the other. It might be the case that standards in the FSC system already suffice to automatically comply with the EUTR standards and vice versa. This thesis focuses on identifying the convergence relationship and the implicated consequences, in the context of e.g. costs, reputation, market demands, for the case company and thus determines the overall value of private certification.

2.3 Implications of the interaction between private certification schemes and mandatory state-led regimes for companies

Implications for businesses resulting from the interaction of private certification schemes and mandatory state-led regulations can have various forms. Analyzing the literature, frequently discussed topics are whether the mandatory timber regulation result in an uptake of private certification schemes of companies or not. And secondly, whether this results in "green washing". Following major contributions have been done by Overdevest & Zeitlin (2014); Bartley (2014) and Abbot & Snidal (2009) in this field:

Overdevest & Zeitlin (2014) suggest that the mandatory due diligence will stimulate forestry firms and importers "to join private-certification schemes as a cost-effective alternative to creating and administering their own free-standing risk management systems."29 Contrary to Overdevest & Zeitlin (2014), Bartley (2014) disagrees that the legality regime, in form of the EUTR, will support the expansion of private forest certification among organizations.³⁰ Bartley further argues that "If managing risk under the legality regime is the primary goal of retailers and manufacturers, it is unlikely that they will make the substantial commitments required for certification [...]."31 He states that often large firms rely on internal monitoring and tracing programs rather external certification. Additionally, Bartley argues that if companies are not able to develop their own internal systems, companies are able to "draw on a growing set of services that are offered by third parties but are not equivalent to forest certification", for example "legality audits offered by the Rainforest Alliance and Société Générale de Surveillance (SGS)".³² Hence, a discord among scholars on whether the EUTR increased the uptake of private forest certification among companies exists and thus questioning their compliance value. Moreover, it is observable that Bartley and Overdevest & Zeitlin differentiated between the sizes of the companies. Bartley often referred to "large firms". Given the discord in the literature, one need to act with caution when generalizing assumptions regardless of an organizations size and hence resources available for complying with the EUTR requirements. The size and resources of this case study's organization need to be considered as well.

Rather than focusing on whether private certification will increase or not, Abbott and Snidal (2009) observe that compliance costs for firms could raise and a shopping around for the weakest or most favorable standard can occur.³³ However, due to the obligation to comply with the EUTR by law, a shop

around for the weakest standard is not possible anymore. Given that the EUTR is a European mandatory regulation all companies importing EUTR covered products are obligated to comply with the regulation. Otherwise substantial fines are expectable.

Still, it might be the case that abandoning the higher, voluntary FSC certification is more beneficial for companies due to potentially lower standards required by the EUTR. Bartley states that there is an increasing trend of firms orienting towards the lower bar of legality, which is complying with the EUTR, rather than sustainability, that is being privately certified. He expects "many other organizations prioritizing traceability, reframing "sustainability" as "legal and responsible sourcing" and accepting third-party verification of legality as analogous or equivalent to forest certification." This would lead to "[...] a significant decline in the market for certification."³⁴

Furthermore, other studies have focused on identifying drivers and motivations for companies to adapt to voluntary certification schemes. Some studies, similar to the research aim of this thesis, particularly identified legal implications for certified companies concerning complying with legislation. In this context, major contributions have been made by Gravrilut et. Al. (2016). The following section outlines the major findings in the mentioned field of research.

Eberlein et. Al (2014) illustrate that "[...] interest and value alignment enables cooperation while misalignment produces conflict." ³⁵ Additionally, "schemes may overlap in terms of members, rules, issue focus, addressees, regulatory functions and other features." ³⁶

Such an overlap is observable with the FSC certification and the aims of the EUTR which both state to fight illegal timber logging. Additionally, an overlap in terms of its members is observable: FSC-certified companies must comply with the EUTR by law and additionally with the FSC standards, which in turn is not mandatory. Consequently, there is a double membership for FSC certified companies.

Given such overlap, it is necessary to identify reasons and benefits for companies for being voluntary certified. Eberlein et. Al. (2014) found that industry characteristics such as vulnerability to reputational pressure, are important drivers for private certification. 37 Further relating to industry characteristics, Overdevest & Zeitlin (2014) state that private forestry certification has become more broadly institutionalized as good business practice.³⁸ Such institutionalization among the industry is based on common beliefs and perceptions about the benefits private certification must yield, otherwise it would not be industrywide spread. Following the research of Galati et. Al. (2017) on what the key motivations of Italian companies were to adopt to voluntary environmental certification, results show that mostly non-market benefits such as signaling to customers as well as moral and ethical aspects were reasons for adapting to voluntary environmental certification rather than achieving price-premiums on the market.³⁹ This is supported by the research of Palus et. Al. (2018) which found that within a Chain of Custody (CoC) certified supply chain, certified input materials are often overpriced whereas a retailing company receives no or minimum price premiums by selling certified products.

- ³⁶ Eberlein et. Al (2014), p. 9
- ³⁷ See Eberlein et. Al (2014), p. 9
- ³⁸ See Overdevest and Zeitlin (2014). p. 32

²⁹ Overdevest and Zeitlin (2014), p. 38

³⁰ See Bartley (2014), p. 95

³¹ Bartley (2014), p. 97

³² Bartley (2014), p. 97

³³ See Overdevest and Zeitlin (2014), p. 24 *Original text from Abbott and Snidal ("The Governance Triangle: Regulatory Standards Institutions and the Shadow of the State", 2009) not publicly available.

³⁴ Bartley (2014), p. 104

³⁵ Eberlein et. Al (2014), p. 8

³⁹ See Galati et. Al. (2017)

Additional results of the study show that companies use certification mainly as a tool to prevent illegal logging rather than achieving sustainability.⁴⁰ Following the results of Palus et. Al (2018) that companies mainly make use of CoC certificates to prevent purchasing illegal logged timber, the role of such certificates towards complying with the EUTR needs to be examined since legality is the key scope of the EUTR.

Given that private certification can be used for the risk assessment and mitigation procedures under the EUTR due diligence obligations, a supportive function of certificates towards compliance is already evident.⁴¹ However, a precise assessment of the overall value of private certification towards compliance relating to other aspects, such as market demand, is missing. Measures for such assessment can include the value of possessing a certificate versus possessing no certificate and the implications regarding compliance with the EUTR, e.g. through the recognition of certificates by competent authorities checking compliance of companies in practice. Further, occurrence of extra costs and work for companies regarding compliance assuming no certification or vice versa the costs and work being saved for companies when being certified need to be identified. On the other hand, extra costs and work might occur when being

certified regarding the role of certification towards compliance, versus potential saved costs and work when not being certified. A similar approach in the context of TBGI have been made by Gavrilut et. Al. (2016).

The authors conducted research on whether EUTR requirements can be covered by FSC certification in Romania. Results show that 40% among Romanian FSC-certified companies stated that certification "is useful in reducing the risk of trading illegal timber and timber products". The remaining respondents "equally agreed that forest certification is useful for information access and risk assessment of the suppliers."⁴²

Furthermore, the authors found that generally, "certification requirements had prepared companies to better deal with administrative routines, which also improved their ability to comply with the EUTR [...]" in Romania.⁴³

Considering the overall target of the EUTR and the FSC certification program, it can be concluded that both address illegal logging and promote sustainable forest management.44 Gavrilut et. Al. (2016), particularly compared the FSC standards against the requirements of the EUTR regarding the risk assessment procedures (see Table 1 in Appendix B). It is observable that the FSC certification scheme primarily covers the risk assessment requirements of the EUTR. However, even though the study provides insights on whether EUTR requirements can be covered by FSC certification, it was not the focus of the paper which implies that further research is needed. Additionally, Gavrilut et. Al.(2016) limit their results to the fact that the surveys were conducted in March 2014, "when the EUTR was not yet formally implemented in Romania" and "stakeholders could not yet fully consider the potential impact of the EUTR on their businesses".45 Furthermore, one need to be cautious when generalizing Romanian perceptions, given the different political and economic conditions compared to Germany as well as the different interpretation and implementation approaches of the EUTR.

⁴⁰ See Palus et. Al. (2018) p. 708

⁴⁴ See Gavrilut et. Al (2016), p. 2

⁴⁵ Gavrilut et. Al (2016), p. 8

Taking up the previous research of Gavrilut et. Al. (2016), the next section incorporates two reports comparing the FSC criteria and principles with the legal requirements of the EUTR.

2.4 Comparison of the FSC standards against the EUTR requirements

A detailed comparison of certification standards with the EUTR requirements has been conducted by Proforest in 2012.

In the Proforest Report, several certification and verification schemes were assessed against the "definition of applicable legislation under the EUTR and the requirements set out in the implementing regulation", precisely risk assessment and mitigation.⁴⁶ The report summarizes that the FSC principles and criteria meet the legality definition under the EUTR. However, the principles do not explicitly refer to each requirement, e.g. environment, forest management and biodiversity conversation. Additionally, "legal requirements related to trade and customs" as well as the Controlled Wood certification do not meet the EUTR requirements for compliance.⁴⁷

However, the topicality of the comparison is questionable given the adoption of the FSC system to "better comply with the specific requirements of the EUTR [...]."⁴⁸

A recent comparison has been made by NEPcon (2019), an international NGO promoting sustainability as well as an accredited UK monitoring organization under the EUTR.

The report summarizes that the FSC scheme complies with the legality requirements in terms of "legal rights to harvest, taxes and fees, timber harvesting activities/regulation [and] third-party rights." 49 Other categorized requirements such as system requirements, transparency and auditing process are compliant as well. However, the trade and transport requirements are not met by the chain of custody certification. Whereas the Forest Management (FM) and Controlled Wood (CW) standards explicitly require compliance with the legislation in terms of trade and transport. Consequently, the report concludes that the FSC Chain of Custody certificate (CoC) is not enough for complying with the risk assessment and mitigation requirement. 50 However, with regards to the different interpretations of the EUTR requirements by various competent authorities, the UK competent authority (NEPcon) may assess the value and role of private certification differently than other European competent authorities.

Given the theoretical basis of FSC standards being predominantly compliant with EUTR requirements (CoC and FM certification) an assessment on the precise contribution of such certificates for certified companies towards achieving compliance with the EUTR needs to be conducted. Moreover, the underlying reasons for not accepting FSC certification as a "green lane" for compliance with the EUTR needs to be assessed and the general contributions of the certifications towards achieving contrasting potential additional costs required when not being certified. As mentioned at the beginning of this paper, a recent study by Köthke (2020) identified discrepancies between certified and non-certified firms and their compliance with the EUTR, stating that certified firms complied more often than noncertified firms.⁵¹ This supports the research aim of this paper to

- ⁴⁷ See Proforest (2012), p. 15
- ⁴⁸ See FSC (2015), p. 1
- ⁴⁹ See NEPcon(2019), p. 5
- ⁵⁰ See NEPcon (2019), pp. 11-15
- ⁵¹ See Köthke (2020), p. 13

⁴¹ See European Commission (2012)

⁴² Gavrilut et. Al (2016), p. 6

⁴³ Gavrilut et. Al (2016), p. 10

⁴⁶ Proforest (2012), p. 6

assess the extent of how much an FSC certification contributes to the compliance with the EUTR.

The following section describes the analytical framework used for the collection and analysis of the data and provides the transition to the methodology section.

2.5 Analytical framework

The Transnational Business Governance Interactions framework by Eberlein et. Al. (2014) (See Table 2 in Appendix C) will serve as the basis for further research of this paper.

The intention of Eberlein et. Al. (2014) for creating the framework was to define the analytical space associated with TBGI and guide scholars "framing their research without losing sight of the whole." ⁵² Further, the framework increases the comparability of research in the several domains TBGI take place and thus enabling progressive development.⁵³

Scholars analyzing interactions of state-led and private schemes in the forestry sector have numerously made use of the TBGI framework (e.g. Gavrilut et. Al 2016; Overdevest & Zeitlin 2014; Bartley 2014; Cashore and Stone 2012, 2014).

The framework is divided into two axes, the dimensions of the interactions and the components of regulatory governance. Each axis aggregates six dimensions, respectively components.

Regulatory governance components include "(i) framing the regulatory agenda and setting objectives; (ii) formulating rules or norms; (iii) implementing rules within targets; (iv) gathering information and monitoring behavior; (v) responding to non-compliance via sanctions and other forms of enforcement; and (vi) evaluating policy and providing feedback, including review of rules."⁵⁴

Eberlein et. Al. (2014) identify for each of the six components six key questions for analyzing interactions. These are: "(i) who or what is interacting; (ii) what drives and shapes the interactions; (iii) what are the mechanisms and pathways of interaction; (iv) what is the character of the interactions; (v) what are the effects of interaction; and (vi) how do interactions change over time?"⁵⁵

Referring to the authors, these questions are not exhaustive, nor should any single study focus on all of them. Further, the framework intends to accommodate diverse theoretical and methodological approaches.⁵⁶

This thesis will focus on the *Compliance promotion, enforcement* (v) in the regulatory component axis and in the dimensions of interaction axis on the *Character of interactions* (iv) and *Effects of interactions* (v), given that both components are relevant for evaluating the contribution of FSC certification towards complying with the EUTR requirements.

2.5.1 Character of interaction

Four broad categories are emerging when looking at the *Character of interactions*. These include competition, coordination, cooptation, and chaos.⁵⁷ According to Eberlein et. Al. (2014), competition can occur for e.g. reputation, legitimacy, price (e.g. certification costs) or product differentiation (e.g. strictness of requirements). Further, coordination can take place in form of division of labor, learning from each other or "copy proven recipes for success". ⁵⁸ Cooptation might occur through "convergence on norms and activities", resulting in domination.⁵⁹ A chaotic character of interaction can be reflected

in form of e.g. unpredictability of the interactions and displaying no clear pattern. 60

However, TBG schemes may simultaneously take multiple forms of interactions as well as they can change forms over time.⁶¹

2.5.2 Effects of interaction

While scholars mainly have focused their analysis on whether e.g. legal verification will strengthen TBG in forestry or not; whether and why differences among schemes exist; or whether regimes are fragmented or monopolistic, Eberlein et. Al. (2014) suggest researching "the effects of interactions on the regulatory capacity and performance of actors in a regulatory space." ⁶² For example, "how processes of enrolling, mobilizing, or orchestrating actors contribute to regulatory capacity and performance of actors [or] schemes [...]". ⁶³ Synergies with state regulation might increase over time due to complementation of public standards or addressing similar targets resulting in the enhancement of regulatory capacity or uptake of standards by producers and other actors.⁶⁴

With the analytical framework, the authors identified key interfaces of interactions between state-led regulations and their way of interaction with private, non-state driven governance schemes in any given domain, not exclusively the forestry sector. The regulatory components and key questions of interactions enable a focused research and a proper placement of such research into the whole picture.

Further, clear guidance for methodological aspects, such as the focus of analysis, is provided through the framework.

Moreover, the framework is not exhaustive and allows flexibility. Given such a basis, the framework builds an ideal basis for the case study ensuring focused and flexible research.

To sum up the foregone sections, a recent study by Köthke (2020) attested an easier compliance with the EUTR requirements when being FSC certified versus not being certified. Despite the discussion on whether the EUTR led companies to further adapt to voluntary private certification to easier comply with the EUTR requirements (see Bartley 2014 and Overdevest & Zeitlin 2014) other studies found a significant contribution of private certification towards complying with the EUTR requirements in Romania (see Gavrilut et. Al. 2016). However, no study focused either on a precise value of private certification taking other factors such as market and customer demand into account nor did any recent study addresses the situation in Germany. As already explained, the implementation and interpretation of the EUTR among member states differ substantially, both in terms of regular audits and allocated resources for implementation, and secondly in recognition of private certification towards compliance with the due diligence requirements. Given the theoretical and analytical frameworks provided by Eberlein et. Al. (2014), such value of private certification for the specific case of a medium-sized company in Germany will be assessed.

- ⁶⁰ See Eberlein et. Al. (2014), p. 11
- ⁶¹ See Eberlein et. Al. (2014), p. 12
- 62 Eberlein et. Al. (2014), p. 13
- ⁶³ Eberlein et. Al. (2014), p. 13
- ⁶⁴ See Eberlein et. Al. (2014), p. 13

⁵² Eberlein et. Al. (2014), p. 8

⁵³ See Eberlein et. Al. (2014), p. 8

⁵⁴ Eberlein et. Al (2014), p. 6

⁵⁵ Eberlein et. Al (2014), p. 6

⁵⁶ See Eberlein et. Al. (2014), p. 6

⁵⁷ See Eberlein et. Al. (2014), p. 11-12

⁵⁸ See Eberlein et. Al. (2014), p. 11

⁵⁹ See Eberlein et. Al. (2014), p. 12

3. METHODOLOGY

3.1 Research design

Given the exploratory character of the research question and the applicability to practice, the case study design was selected. Tellis (1997) stated that: "An empirical investigation of a contemporary phenomenon within its real-life context is one situation in which case study methodology is applicable." ⁶⁵

Furthermore, Baxter and Jack (2008) conclude with the widespread recognition of case studies for answering "how" and "why" type questions. ⁶⁶ Associating the proposition of this study's research question "*To what extent...*" as a mixture of a "how" and "why" type question, a case study format is appropriate in this context.

A German medium sized paper manufacturer served as the case company. Given that the company imports pulp from outside the EU, the company is obligated to comply with the EUTR requirements. Additionally, to be able to sell to larger customer, the case company is FSC certified, precisely Chain of Custody certified. Moreover, the case company possesses other certificates as well, such as a PEFC Chain of Custody certificate. Given less resources available compared to similar larger corporations, the value of such private certification cannot be neglected. Especially with factors such as extra costs and work associated with voluntary private certification but contrary other factors such as customer and market demand for private certification. The addition of potentially easier compliance with the EUTR requirements due to private certification may stimulate the overall value of the FSC certification into a clear direction, that is making it highly valuable or whether it is worth considering alternatives in the long term future. Especially for medium sized organizations, associated risks and constraints are not negligible regarding the overall position in the market.

3.2 Data collection and analysis

The case study was conducted in a qualitative way, including 4 semi-structured interviews lasting between 30-60 minutes. 2 of the 4 interviews were conducted via telephone. 1 interview was conducted using video communication. Another interview was conducted face to face on the case company side.

Interviewees participated in this research included various stakeholders concerned with the interaction of the FSC certification scheme and the EUTR requirements. Next to the chief purchasing officer of the FSC certified case company, a section leader from the German Federal Office for Agriculture and Food, the German competent authority auditing market operators that must fulfil the EUTR requirements, was interviewed. Furthermore, the authorized officer and market service leader of the FSC Germany was interviewed. To gain an industry wide picture of the pulp and paper industry, an advisor of the German Association of Paper Manufacturers was interviewed as well.

The full list of questions can be found in Appendix D.

Even though interview questions were created before the interview and used as guidance during the interview, the conversation was kept open allowing to ask follow-up questions and discussions around the topic. The questions were created by using the analytical framework by Eberlein et. Al. (2014), focusing on the *Character of Interaction* and the *Effects of the Interaction* in the *Compliance, promotion, and enforcement* column (see Table 2 in Appendix C). For each component, questions were created. Beside the two categories, contextual questions referring to the FSC certification and the EUTR were asked in the beginning of each interview. Depending on the

interviewees background, contextual questions differed. Moreover, questions posed to the interviewees regarding the two components, *Character of Interaction* and *Effects of Interaction*, differed as well, given the different expertise an interviewee, respectively an informant, had.

Each of the 4 interviews were audio recorded with the consent of the interviewees. Afterwards, transcripts with the help of the software *Amberscript* were created.

The transcripts were used to code the data. Coding has been done using the software QDA Miner 4. The coding procedure was a mixture of both inductive and deductive coding. Using the framework of Eberlein et Al. (2014), the first, deductive set of code was created. Specifically, the codes of Character of Interaction and Effects of Interaction were given. After analyzing the interview data, inductive subcategories were coded based on the interviewee's words. Table 3 in Appendix E further explains the emerged sub-codes and their definition. Moreover, Table 4 in Appendix E displays the quantity each code was applied. The emerged inductive subcategories were created based on a potential association with the given deductive subcodes, which are Character of Interaction and Effects of Interaction. Similar statements implying the same purpose were clustered and summarized into a subcategory. Other statements not directly associated with the deductive codes were not coded and considered unless there was a noticeable meaning.

3.3 Reliability and validity

Referring to triangulation, which is using multiple sources for the data collection, this research collected various perceptions of stakeholders concerned with the interaction of FSC certification and the EUTR. 67 As mentioned in section 3.2, various stakeholders with different professional backgrounds in the relevant context were interviewed. Backgrounds ranged from governmental to NGO and pulp and paper organizational and industrial character. The diverse perceptions ensured a reliable and valid picture on both components of the analytical framework given intersections of obtained results from each interview. Biases concerning the responses can be limited given that interviews were conducted independently, time-displaced, and without giving notice of previously obtained answers to interviewees. Each interviewee participating in this research did so voluntarily and with the consent to record the conversation. The semi-structured interview format ensured that participants could express their opinions freely.

However, biases concerning the posed questions cannot be completely excluded, although developed questions are built on a tested analytical framework. Moreover, the combination of a deductive and inductive coding approach facilitates the reliability and quality of data analyzed. Also, within the context of applying theory into practice. Additionally, given that the case study was conducted in the paper and pulp industry, transferability to other industries might be limited. However, given the widespread adoption of FSC certification in other timber-related industries and the same requirements under the EUTR, the results can serve as a basis for further considerations in other industries. Moreover, the results found are relevant for the case company and can be applied to other organizations in the same industry considering similar size and resources.

4. RESULTS

This section will present the results obtained from the interview analysis. As mentioned above, the Transnational Business Governance Interactions framework by Eberlein et. Al. (2014) (see Table 2 in Appendix C) will serve as an analytical basis for

⁶⁵ See Tellis (1997), p. 9

⁶⁶ See Baxter and Jack (2008), p. 556

⁶⁷ See Tellis (1997), p. 12

presenting the results. Specifically, the *Character of Interaction* as well as the *Effects of the Interaction* between the transnational state-led EUTR and the private forest certification scheme of the FSC will be presented in the following section.

Section 4.1 introduces the results of the character of the interaction between both TBG schemes. After understanding the relationship between both schemes, section 4.2 proceeds with the effects of the interaction for the case company.

The outline of this section is in line with the structure of the interviews. That is by first asking questions related to the character of the interaction with subsequent questions about the effects. The interpretation of the results follows in section 5.

Table 5 in Appendix F provides an overview of the main findings of the interviews using generic quotes of each interviewee illustrating the main tenor of answers given.

4.1 Character of interaction

This section approaches a full picture of the character of interactions between the EUTR and the private forest certification scheme of the FSC. Throughout the analysis of the collected data, the following subsections emerged and shape the character of interaction: Distinction of the FSC standards and the EUTR requirements, the type of the current relationship and different perspectives on the future relation.

4.1.1 Distinction FSC standards and EUTR requirements

When analyzing the character of interaction between the FSC scheme and the EUTR, a first analysis should point out the discrepancies between both governance initiatives.

Generally, all interviewees arrived at a certain consent that the FSC standards that need to be met for obtaining any FSC certification, e.g. Controlled Wood or Chain of Custody, go beyond the requirements of the EUTR for "market operators".

Interviewee 1, a section leader from the Federal Office for Agriculture and Food, the German competent authority examining EUTR compliance of market operators, stated that the "FSC just goes further than only legality" with regards to the EUTR requirements. However, even if the "scope of the FSC exceeds the EUTR", he claims that the FSC certification on the other side is not mandatory and "unfortunately does not prevail in the market". Further, he explains that "[...] there are many organizations that perceive private certification as not worth the costs since they are not able to pass on the incremental costs to the customers in form of a price premium. Consequently, a mandatory regulation has a completely different position regarding the enforcement."

Interviewee 2, the attorney and leader of the market services of the FSC Germany, concluded that "Buyers, that prefer FSC certified wood, they want sustainable wood products. Those do not accept only legal wood."

Interviewee 3, an advisor of the German Association of Paper Manufacturers, stated that "The FSC certification clearly exceeds the EUTR scope. The EUTR only requires statutory legality of the wood [...]. There, the FSC is clearly compelling."

Interviewee 4, a chief purchasing officer of a medium-sized and FSC certified paper manufacturer, stated that "FSC and EUTR are on the same level regarding sustainability aims in my opinion. However, I notice that the FSC gives the impression that they want much more. The FSC tries to reach out too much to the companies own interests in my opinion."

Further analyzing the interview data, interviewees pointed out clear discrepancies and differences between the FSC certification scheme and the EUTR.

From an FSC perspective, interviewee 2 described that "[...] We, the FSC, work on the other end [than the EUTR], that is

supporting sustainable forest management. The EUTR applies to the other end." He states that the EUTR tries to "cut out a red area" in which illegal logged wood, logged under violation of human rights, is placed on the European markets.

Additionally, interviewee 2 claimed that "the EUTR only requires wood to be statutory legal. Taking the example forest conversion, according to the EUTR that wood is legal since technical forest conversion can be stated as legal in a certain countries law whereas it practically is not sustainable." Moreover, he said that FSC Controlled Wood certified products however consider such technical legal forest conversion according to the EUTR, but if the case, deny accepting such wood from forest conversions to be claimed as Controlled Wood. Interviewee 4 encountered that "[...] both systems differ substantially. They have a different way of looking at things." He further argued that "The need to consider e.g. the corruption index for complying with the EUTR due diligence requirements is a significant difference to the FSC standards. Something like that does not need to be considered in the FSC standards."

Additionally, interviewee 4 concluded that "The EUTR is a regulation with statutory character. This implies a higher objectivity. The EUTR only wants to know the production chain, from the plant to production, via transportation to the import into the EU to the designated customer. That is, in my opinion, the maximum that can be expected by competent authorities."

From a competent authority perspective, interviewee 1 stated that "The product chain certification bears the big advantage of people checking physically what is on the paper with the reality in the wood and at different points in the product chain. That is a completely different intensity of checking." Further, he elaborated on the difference between both governance initiatives and said that "The EUTR focus is on legality whereas the FSC focus in on sustainability. This becomes clear when looking at the FSC principles and criteria: one criterion is legality." Further, he said that "[...] FSC and PEFC Chain of Custody certification is definitely the best risk mitigation method [...] since the whole supply chain needs to be certified."

However, even though the interviewees identified substantial differences between both governance initiatives, interviewee 1 and 2 argued that there are certain overlaps.

Interviewee 1 stated that "If one can generally assume that a certified product complies with the legality definition, why should one [a company] perform an additional due diligence. Generally, there is a small overlap. But as already said, the FSC system is a private and voluntary standard and consequently has several weaknesses as well."

Interviewee 2 concluded that "They [Companies] receive certified products. That is something the FSC system does since all previous actors in the supply chain comply with certification standards as well. Taking this into account, the FSC accomplishes at least that, what the EUTR requires in terms of the due diligence."

4.1.2 Type of current relation

Considering the previously identified discrepancies between both governance initiatives, the relationship between both is assessed.

Looking at the type of relationship, interviewees 1 and 2 judge the relationship as complementary.

Interviewee 1 from the German Competent Authority stated that: "The FSC certification is definitely complimentary towards the EUTR. It was clearly never an option to create a competition for both since the FSC exists already much longer than the EUTR." Furthermore, he continued: "We see the FSC certification scheme as complementary but would wish stricter supervision from the FSC since we would like to give the whole certification a higher value in terms of compliance with the EUTR." He described that "We observe that there are several companies that switched to certified products, or got certified, solely of the purpose to easier comply with the EUTR requirements."

Interviewee 2, from the FSC Germany, also concluded that "the relationship between the FSC and the EUTR can be best described as complementary. We, as the FSC, support sustainable forest management. The EUTR represents the elimination of illegally logged timber from the EU markets. Eliminating the import of illegally logged wood, that is complementary. And it is a wonderful interrelation in the end. Of course, there are also synergies since we have the Controlled Wood standard [which focuses on legality]. However, the existence of the FSC is not only due to the Controlled Wood standard. That is only a means to an end. However, Controlled Wood facilitates a good proof for complying with the due diligence requirements of the EUTR." Moreover, interviewee 2 concluded that due to a "collateral effect", the FSC certification supports market operators complying with the due diligence requirements.

Interviewee 4, however, stated that the relationship between the FSC scheme and the EUTR can be described as "rather competitive". Further, he explained that the competitiveness is due to the dominant position of the EU and the opportunity with the implementation of the EUTR in 2013 to "knock-out private forest certification". Moreover, he pointed out the "further acceptance of certification organizations in the EU" with the potential risk of a "decreased global competitiveness for European organizations when suspending private forest certification."

Considering the dependence of both governance initiatives towards each other, interviewee 4 already mentioned potential "decreased global competitiveness for European organizations when suspending private forest certification".

Interviewee 2 from the FSC Germany stated that: "Yes, there is a dependence between the FSC and the EUTR, for sure." He further argued that: "We want to be compliant with the EUTR." Interviewee 1 from the German competent authority confirmed that "Certification organizations adapt to legislation, also in case of the EUTR. However, on the other side, I do not think that the FSC influenced the legislative text of the EUTR." Further he stated that "The FSC benefits from the existence of the EUTR." Considering adaption of the FSC standards in dependence of the EUTR, interviewee 2 confirmed that adaption of the FSC standards have been made after implementation of the EUTR. He states that "changes with regards to the provision of information related to the wood origin have been made. Additionally, several changes relating to the risk assessment have been made that as well were not considered before. But now we are compliant. At least the risk mitigation covers the EUTR requirements for sure."

Interviewee 1 and 2 conclude that the current relationship is complementary. Interviewee 4 tend to evaluate the relationship as rather competitiveness. The three interviewees confirm that the FSC is dependent on the EUTR.

4.1.3 Future relation

Considering the results presented above concerning the current relationship, the interviewees revealed an estimation on how the relationship potentially will develop in the future. Even though the dimension of the future relation is not the focus of this paper, it gives valuable insights on what tensions there are in the current relation and how they might develop. Interviewee 1 described that "if the FSC standards would be more stringently adjusted and the supervision among a chain of custody becomes more reliable [...] it could be worth thinking about a higher weight of an FSC certification regarding compliance with the EUTR. However, now, we are worried that we have to back-paddle and realize that we have given the FSC too many premature praises."

In line with interviewee 1, interviewee 4 stated that "Currently, the FSC certificate is given a high value when it comes to compliance checks by the competent authority. However, I expect the value of certification to decrease in the future."

Interviewee 2, from the FSC Germany, stated that "The current relationship is not wrong. The situation is as good as it is. To achieve a green lane, that is seeing the FSC certificate as automatic compliance with the EUTR for certified companies, is of course not a bad thing, but the current situation is good as it is."

4.2 Effects of interaction

This section presents the result of the effects of the interactions between the EUTR and the private forest certification scheme of the FSC. A special focus has been made on the effects of the interaction for certified companies, respectively market operators. Throughout the analysis of the collected data, the following subsections emerged: The degree to which an FSC certification supports compliance with the EUTR; What additional costs are associated with a certification; And advantages, disadvantages, and risks a "green lane" of private certification could yield.

4.2.1 Compliance support of an FSC certification regarding EUTR requirements

Section 4.1 presented the character of the interaction between both governance initiatives. Building on the relationship, the effects for companies operating "between" both initiatives are assessed. First, the degree to which an FSC certification supports meeting the requirements laid down in the EUTR is presented.

Generally, all interviewees concluded that an FSC certification is an evident support for easier meeting the EUTR due diligence requirements.

In this subsection, special attention has to be given to the statements of interviewee 1, a section leader from the German Office for Agriculture and Food, the German competent authority responsible for monitoring the correct implementation of EUTR requirements by market operators importing wood products under the scope of the regulation and consequently determining the practical degree to which an FSC certification is valued during checks.

Concerning the first due diligence requirement, information collection, Interviewee 1 stated that the first step of a compliance check at market operators includes "a presentation of information relating to the origin of wood, the amount, address of the previous supplier etc. according to article 6.1 a of the regulation". Further, he described that "with an FSC certification it should not be a problem to retrieve such information since with a chain of custody certification, every link in the supply chain is required to possess such information from their previous suppliers." Interviewee 1 continued: "Another criterion according to the last dash of article 6.1 a of the EUTR, referring to the proof of the wood products complying with the current legal provisions, the FSC certificate is a considerable alleviation. That is why we, as a competent authority say, that if the market operator is certified, we assume compliance with the current legal provisions."

Concerning the second due diligence requirement, risk assessment, interviewee 1 stated that "In a second step, the

market operator has to present a risk assessment, regarding the origin of the wood and other risks and whether the risk can be seen as negligible or not. Generally, that is easier and faster if the market operator possesses a certification. Consequently, if the market operator is certified and purchases certified products, the risk can be seen as negligible. However, it is no absolute 'green light' since there can be certain products and origins where the risk cannot be marked as negligible."

Consequently, for the third due diligence requirement, risk mitigation, interviewee 1 stated that "With regards to article 6.1c of the EUTR, no mitigation is necessary since the risk assessment resulted in a negligible risk, due to the certification."

Additionally, interviewee 1 described that "If organizations are certified, the awareness regarding the EUTR requirements is generally higher [...] and thus easier to fulfill."

Regarding organizations that are not certified, interviewee 1 identified several burdens, such as "the problem to present certain legality proofs after the challenge of breaking down complex supply chains and receive relevant information for the risk assessment and in turn also bears challenges for the risk mitigation." He concluded that "it [complying with the EUTR due diligence requirements] is always easier with certification."

The statements of interviewee 1 are supported by interviewee 4 who for example said that "Yes, during checks by the competent authority, the FSC certificate is given a high value." He said that this is due to the "preexisting infrastructure created through certification systems and this is helpful when EUTR checks are performed at our organization."

Moreover interviewee 3, from the German Association of Paper Manufacturers, described that "Generally, with an FSC or PEFC certification, one can be sure that the risk assessment required by the EUTR does not have to be as intense as without certification." Further he explained that "With an existing certification, there are already lots of documents which can be used for the risk assessment under the EUTR" and that without certification such effort would be "significantly higher".

Interviewee 2, from the FSC Germany, reasoned that the goal for the FSC is to "support certification holders to comply with the EUTR requirements". He confirmed that it is the "intention of the FSC to help certification holder to acquire the relevant information from previous supplier that is needed for the EUTR due diligence". Additionally, he stated that even the Controlled Wood certification "facilitates the proof and compliance with the due diligence requirements of the EUTR".

Further, interviewee 2 mentioned that the FSC observed a "massive increased demand of FSC certification after the implementation of the EUTR in 2013".

4.2.2 Additional costs

Considering the compliance support of an FSC certification regarding the EUTR due diligence requirements, additional costs coming along with a certification need to be considered. Precisely, what the additional costs are for complying with both governance initiatives rather than only complying with the mandatory EUTR. Thus, costs and benefits for complying with the voluntary FSC standards are to be considered.

Both, interviewee 2 from the FSC Germany, and interviewee 4, a chief purchasing officer at a certified organization, agreed to a certain extent that with the FSC and the EUTR two parallel governance initiatives exist which in some points cause double costs.

Interviewee 2 stated that "Yes, it is partly double work and costs for certified organizations. If I purchase and import FSC certified products, I still must perform due diligence. That is of course an addition then. However, generally I think that if an organization has thought about a due diligence system, then there are only onetime launching costs and afterwards it should run on their own." However, interviewee 2 did not specify any amount that could entitled to those "launching costs". Further, he explained that the "differentiation performed by organizations, to understand what the FSC system renders and what the EUTR requires, and thus identifying the discrepancies, causes transaction and administrative costs."

Interviewee 4 mentioned that "currently, there are two parallel programs, which is of course not good for the economy since it means double costs due to certain overlaps". Further, he argued that it does not support the "competitiveness of organizations". Moreover, he entitled the costs due to an FSC certification with "about 7.200€ to 12.600€", given that at his organization a quality engineer is 8 to 14 days occupied monitoring compliance with the FSC standards. Further, he stated that "at the moment, an FSC certification is more costly than the EUTR". However, he expects the costs of the EUTR to rise in the future.

Furthermore, interviewee 4 concluded that: "The question about the value of an FSC certification does not arise because the market conditions require us to be certified. Thus, you simply must take the costs." However, he mentioned that with solely looking at the compliance support of a certificate regarding the EUTR, he would not advocate becoming certified, unless given a "green lane". That is seeing an FSC certificate as automatic proof for complying with the EUTR requirements.

4.2.3 Advantages and risks of a "green lane"

Considering such a "green lane", the interviewees generally perceived the weight of the risks coming along as greater as the potential benefits.

Interviewee 1, from the German competent authority, argued that the FSC is a voluntary, non-governmental system and the EUTR a mandatory, law-based regulation and that "it does not fit together". He further explained that "competent authorities would not be able to influence the work and criteria used of such non-governmental organizations" and that the "sphere of influence of the government" would be limited. He reasoned that "there are certain weaknesses in the current FSC system, not by default caused by the FSC himself but out of the scope their influence". He stated that there are currently "forgeries, especially in China, which claim on bills to sell certified materials which are in fact not certified". He identified the risk of a potential "abuse of the FSC system to easier comply or circumvent the EUTR requirements".

Interviewee 2, from the FSC Germany, confirmed that there are "currently mistakes in the system that need to be eliminated". He further argued that this could lead to a "difficult relationship towards the competent authorities which could be held responsible for abuses of the FSC system as well".

Interviewee 4 would also not promote such a green lane. He stated as well that it could give the FSC "sovereign rights to influence the competent authorities" which he would "not welcome". On the other hand, he mentioned that a "green lane" could "make the life of certified organizations easier in the first step, however not in the long run."

From a competent authority perspective, interviewee 1 stated that "it could be a simplification for organizations and also competent authorities considering that checks could be performed faster". Further, he states that the FSC system could be "promoted" and that it could have "positive impacts on the forests due to a rising acceptance of sustainable forest management since the FSC standards go beyond only legality". Interviewee 2 confirmed that a "green lane" would "promote forest certification since additional costs for the due diligence under the EUTR would be eliminated".

5. INTERPRETATION AND DISCUSSION

This section will interpret and discuss the above-presented results in relation to the at the beginning proposed research question:

"To what extent does an FSC certificate support importing companies to comply with the European Timber Regulation in Germany?".

Guided by the TBGI framework of Eberlein et. Al. (2014), this section will start by interpreting and discussing the outcomes related to the character of interaction and the effects of the interaction between both governance initiatives, concluding with a discussion about the research question answer.

5.1 Discrepancies between both governance initiatives

A first interpretation of the results includes the identification of the discrepancies between the voluntary, private forest certification of the FSC and the mandatory, state led EUTR. The discrepancies are important to consider with regards to the actual research question since the frame of potential contributions of a certification towards compliance with the EUTR requirements can be further specified by identifying differences and hence clarify overlaps.

Looking at section 4.1.1, all interviewees mentioned that the FSC standards for any of the FSC certification (e.g. Controlled Wood or Chain of Custody) go beyond the scope of the EUTR in terms of their strictness. Specifically, the EUTR represents the legality standard whereas the FSC standards include legality and, that is exceeding the EUTR, sustainability requirements certified organizations must comply with. That is because an FSC certification flow along an FSC chain of custody supply chain. Whereas the EUTR primarily includes on-site audits at European market operators analyzing documents and thus assess the reliability and plausibility of compliance with the certain EUTR requirements. This discrepancy can be explained by looking at the characters and structures of both governance initiatives.

The FSC certification is mainly used for sales purposes and is driven by customer demands, as in the case company. Specifically, customers of the case company require an FSC certification to sell their finished product to the end-consumer as certified as well in turn. This demand reaches a certain extent to which it would not be possible for the case company to sell non-certified products to powerful customers, such as retailers. Even though a price premium on certified products cannot be achieved and "signaling to customers" was a major reason for adopting to forest certification as shown by a study of Galati et. Al. (2017).⁶⁸ Moreover, this is in line with the findings of Overdevest & Zeitlin (2014) that private forestry certification has become more broadly institutionalized as good business practice.⁶⁹

Given the value of the certification for marketing and sales purposes on the downstream end of the supply chain, private certification standards need to achieve a certain level of strictness to be trustworthy enough for labelling a private certification on products as a competitive advantage and buying decision in the end consumers mind. Looking at the character of the EUTR, it is a mandatory, supranational regulation applicable in the EU. Given that transnational regulation needs to make a trade-off between implementing a certain standard to the EU without decreasing the global competitiveness of European firms, this can be one explanation attempt to the "lower" bar of legality. As also described by Bartley (2014). The new enforced standard to the EU can be simplified as placing only legal logged wood products on the market and thus fighting international illegal logging of primeval forest. With the current scope of "only" legality requirements, the competitiveness of European companies operating in the timber industry is not hindered. Whereas higher standards and regulation could impose a competitive disadvantage for European companies on the global market. McDermott & Sotirov (2018) stated that Germany's initial position was against the implementation of the EUTR given that industry associations perceived the EUTR requirements as burdensome legislation. ⁷⁰ Consequently, the EUTR requirements are less strict and have a narrow scope than the private forest certification of the FSC.

5.2 Compliance support of an FSC certification regarding the EUTR requirements

Given the explanation of the discrepancies between both governance initiatives in the previous section, the intersection of both initiatives becomes clear: That is ensuring legality.

Since the focus of this paper is to shed light on how an FSC certification helps importing companies in Germany complying with the EUTR, the overlapping aim of ensuring, and proofing, to place only legally logged timber products on the European market, builds the common basis for such assessment.

As previously mentioned, the EUTR aim can be, extremely simplified, described as ensuring the legality of wood. The minimum FSC standards require legality (e.g. Controlled Wood certification) as well but primarily exceed legality to the extent of ensuring sustainability by considering various criteria and principles to be met by certified organizations.

Looking at the results in section 4.1.2, relating to the current relationship of both governance initiatives, the interviewees came to the consent of a complementary relationship, although interviewee 4 leaned towards a rather competitive relationship.

Trying to explain the result of a complementary relationship of both governance initiatives, it again can be referred to the abovementioned intersection of a certain legality standard. Specifically, both the FSC and the EUTR claim to fight illegal logging, however, the extent and strictness differ.

Considering the tendency of interviewee 4, the chief purchasing officer of the case company, to describe the relationship as rather competitive, he further explained that this is due to the "dominant position of the EU". As he further stated that with the EUTR implementation, the EU technically would have been able to "knock-down" the FSC, the likelihood of such "knock-down" is rather low given the previously identified decreased global competitiveness of European firms when suspending the FSC scheme. However, such dominant position of the EU might be continuously concerning the relationship to the FSC, assuming that a radical change in the market, in form of a decreased recognition and valuation of private certification by endconsumers, could lead the EU to e.g. implement a sort of "EUTR certification" and hence at least lawfully replace an FSC

⁶⁸ See Galati et. Al. (2017) p. 172

⁶⁹ See Overdevest and Zeitlin (2014). p. 32

⁷⁰ See McDermott and Sotirov (2018), p. 182

pillar is the valuation and recognition of end-consumers. However, potentially threatened by the EU's dominant position. That is why the relationship, in a broader sense, can also be described as competitive.

Coming to the focus of this paper, which is assessing the extent to which an FSC certification supports compliance with the EUTR requirements, all interviewees consent that an FSC certification is highly helpful in terms of complying with the EUTR requirements.

Special attention has been given to the statements of interviewee 1, from the German competent authority, since information regarding the practical valuation and recognition of an FSC certificate concerning the EUTR compliance from a primary source were given. Moreover, the other three interviewees confirmed the statements of interviewee 1 that an FSC certification is given a high value during EUTR audits, implying a high reliability.

Interviewee 1 specifically referred to the three due diligence requirements of the EUTR, that are information collection, risk assessment and if the risk cannot be categorized as negligible, risk mitigation. Further he described that due to the already existent infrastructure of a certification system, the relevant information that is needed for fulfilling the EUTR requirements is already there as well. Given the interpretation of the German competent authority of the FSC system as "reliable enough", FSC certified companies can make use of a sort of "double advantage". That is: a) Using the certification system for receiving (already existent) and relevant information for the first two due diligence requirements of the EUTR, and thus can categorize the risk as often "negligible" and b) fulfil the customer/market demands of selling/producing certified products and hence are able to reach a broader market segment.

Assuming no private certification, in this case FSC certification, organizations need to set up a due diligence system their own, without the assistance of certification organizations. This would imply higher costs given e.g. the potential lack of experience with setting up a due diligence system. Furthermore, especially complex supply chains require a professional due diligence system which efforts to create could easily exceed the benefits obtained through being independent, as mentioned by interviewee 2 as well. This is in line with the findings of Overdevest & Zeitlin (2014), that private certification schemes can serve as cost-effective alternatives to creating an own, independent risk management system for companies.⁷¹

Furthermore, customer/market demands may not be fulfilled by selling products without certification, resulting in a narrowed focus on market segments as already described above, and thus may cause indirect costs through e.g. sales losses as well.

However, benefits of being "independent" from certification organizations may become visible in the long run, after an own due diligence system is running smoothly. E.g. there is no dependency on the valuation of the FSC certification by competent authorities, which may change in the future. Hence, uncertainties relating to the FSC-EUTR relation can be eliminated with a smoothly running, independent DDS that fulfils the EUTR requirements.

To conclude, launching costs of setting up an own due diligence system may exceed the initial costs of making use of a DDS of a certification organization, including the risks of high penalties imposed by competent authorities when not having a proper DDS in place. Moreover, certification is still required by most customers. However, in the long run, an independent DDS may save costs and reduces uncertainties regarding the future valuation of FSC certificates by the German competent authority.

On the other hand, looking at the costs for companies operating under both governance initiatives, the interviewees identified additional costs as well. Specifically, the additional costs for being FSC certified rather than only complying with the EUTR requirements. Without considering the market/customer demand side, that is the main pillar of the FSC, it would technically suffice meeting the "lower" EUTR requirements only and thus save the direct costs of being certified. Again, without considering indirect costs related to the smaller focus of the market segments resulting when not being certified.

In the case company, costs associated with an FSC certification are estimated to be between $7.200 \in$ and $12.600 \in$ annually. Moreover, it was mentioned by the chief purchasing officer that currently, an FSC certification is more costly than compliance with the EUTR. However, one has to take into account the use of the certification system with the above-mentioned contribution for fulfilling the EUTR requirements, e.g. receiving relevant information easily.

Assuming no certification, a due diligence system must be established independently without using the basis of the FSC scheme. However, the FSC scheme evidently contributes to an easier compliance with the EUTR requirements currently, due to the previously mentioned reasons. Moreover, the decreased scope of the sales market due to selling/producing products without certification needs to be considered which would result in a loss of sales revenue with regards to the limited number of customers accepting non-certified products.

This is in line with what has been said by the purchasing officer of the case company and summarizes the current status quo of the FSC certification adequately: "There will not be a discussion on whether an FSC certificate is valuable or not, the market requires it. That's why you simply have to take the costs." To conclude with the answer to the research question

"To what extent does an FSC certificate support importing companies to comply with the European Timber Regulation in Germany?"

it can be said that an FSC certification evidently supports complying with the EUTR requirements given the convergence of *legality* norms of both governance initiatives which in turn builds a common basis.

Moreover, the infrastructure of e.g. an FSC Chain of Custody certification can be well used for fulfilling the due diligence requirements of the EUTR. Herby, the German competent authority currently entitles the FSC system as reliable enough to assume a negligible risk for German market operators placing timber products on the EU market for the first time.

Furthermore, a "double advantage" of being certified has been identified. The mentioned use of the FSC infrastructure for fulfilling the EUTR's due diligence requirements as well as meeting customer and market demands, and hence reaching a broader market segment, outpace the scenario of not being certified and meeting solely the requirements of the EUTR.

However, caution must be exercised looking at the uncertainty of future valuation of the FSC certification by the German competent authority.

Given the current valuation of the FSC certificate, the recommendation for the short to medium turn is to remain with an FSC certification since it evidently contributes to meeting the EUTR due diligence requirements. However, in the long run, if

⁷¹ See Overdevest and Zeitlin (2014), p. 38

changes in the market regarding the status of the FSC certification occur and the valuation by the German competent authority decreases, setting up an independent DDS may be considerable.

5.3 Green lane uncertainty

Looking beyond the primary scope of the research question, discussions about a "green lane", that is recognizing an FSC certification as automatic proof for complying with the EUTR requirements, raised after the implementation of the regulation in 2013. The interviewees were asked to describe their individual advantages and risk associated with a "green lane".

As mentioned in section 4.2.3, all interviewees perceived the risk that could be associated with a "green lane" as greater as potential advantages. However, this was expectable given certain weaknesses and frauds in the current FSC system. Especially with looking at the south-east Asian sector, frauds and wellforged FSC claims on bills are ordinary, not by default a problem the FSC caused but indirectly caused through gaps in the existing system. Moreover, the FSC Germany even stated that the current relation "is good as it is now", without a green lane. This is to a certain extent caused by the resulting high responsibility that would load on the FSC system assuming a "green lane". Associated with a potential risk of failure, due to weaknesses in the system, and thus a potential resulting loss of the certification's credibility. Hence, the current relation of a "complementary" and supporting certification scheme to the EUTR may be, with regards to current weaknesses in the FSC system, a desirable position. However, this may be simplified to the fact that the current FSC system is "not ready" for becoming a green lane. Referring to the results in section 4.2.3, this can be confirmed by all interviewees, including the German competent authority as well as the FSC Germany itself. Most likely, the claim of the FSC for being recognized as a "green lane" may get louder when current weaknesses are eradicated. With regards to e.g. the current pilot project with blockchain technology, to ensure an even more closed chain of custody and avoid frauds 72, claims for a higher role of the FSC certification in relation to the EUTR may become stronger in the future. And consequently, the relation more competitive.

6. IMPLICATIONS AND LIMITATIONS6.1 Theoretical implications

This research has been conducted in the theoretical field of Transnational Business Governance Interactions (TBGI). Major contributions to this field have been made by Eberlein et. Al. (2014) which developed a theoretical and analytical framework. A similar research to this paper has been conducted by Gavrilut et. Al. (2016) which focused on the compliance support of an FSC certification regarding the EUTR among Romanian companies. However, no research focused on the specific situation in Germany so far. A recent study by Köthke (2020) identified that CoC certified companies often easily complied with the EUTR due diligence requirements than non-certified companies.⁷³ However again, no precise assessment of the situation for German organizations has been made and hence indicated further research. This case study addresses this gap in the literature by providing an assessment to which extent an FSC certification contributes to the fulfilment of the EUTR requirements. The necessity of such recent assessment deduces from the assumption of Eberlein et. Al (2014) that interactions may change forms over time.⁷⁴ Moreover, this study provides recent insights concerning the current relation of the FSC towards the EUTR as well as implications for medium-sized organizations in Germany operating under both governance initiatives. No previous study addressed the specific constellation of a medium-sized organization with the unique implementation and interpretation approach of the German competent authority regarding the recognition of private certification before. Provided results contribute completing a national TBGI situation derived from supranational regulation. By assessing other European governance-business interactions, a nexus of differences can be grasped, and hence various implications deduced, implying that further research can be carried on from this study.

6.2 Practical implications

The research provides a topical assessment of the valuation of FSC certifications regarding the contribution towards fulfilling the EUTR requirements. Especially with regards to the high contribution of certification towards the due diligence mentioned under the EUTR, this research provides a basis for further interpretation of companies to consider certification as a method to easier comply with EUTR requirements or not. Moreover, this research provides companies with a transparent evaluation of such contribution considering additional costs of certification and risks that may evolve in the future concerning the relationship of both governance initiatives.

For the case company, especially the analysis of the future relation and valuation of FSC certification is useful in order to determine the added value of certifications in the medium to long run with regards to the dynamic and constantly changing relationship between both governance initiatives. Furthermore, next to the already existent valuation of private certification for customer and sales purposes, the added value for easier meeting EUTR compliance has been identified and thus provides a more complete picture of the total value of private certification. The value of private certification can be used to determine the strategic value and thus builds the basis for further decisionmaking such as seeking for alternatives or increase investments in private certification. However, by still considering long term uncertainties and constraints such as changing recognition of the certificate by the German competent authority in the future.

6.3 Limitations and further research

The design and execution of this research resulted in potential limitations that could hinder the transferability to other fields and industries as well as influences the interpretation of the obtained results. Given the research scope, all created subsections added to the TGBI framework of Eberlein et. Al. (2014) are not exclusive. Moreover, the subsections were created based on answers obtained through the interviews. Different interview partners might have resulted in the creation of different questions and subsections and thus to different findings.

Furthermore, the perspective of the EU Commission is missing which could have been from high value. Provided questions remained unanswered to the point of the completion of this thesis.

Moreover, the results obtained were primarily focusing on the paper and pulp industry, in which the case study organization operates. Hence findings may not be generalizable to the other general wood related industries. Furthermore, results are not transferable to other European countries given the different interpretations and recognitions of FSC certification by different European competent authorities.

⁷² See FSC (2019)

⁷³ See Köthke (2020), p. 13

⁷⁴ See Eberlein et. Al. (2014), p. 12

Further research may take the results of this research into account and focus on different industries rather than the pulp and paper industries and hence compare applicability. Moreover, assessments in other European countries and their recognition of FSC certification may be conducted. Equally important is the comparison of various private certification schemes such as the PEFC and its contributions to legal compliance with the EUTR. Additionally, given the dynamic relationship and the running pilot project of the FSC with blockchain technology to further ensure reliability, impacts towards a "green lane" are interesting to consider in future research.

7. CONCLUSION

By conducting interviews on the various perspectives on how an FSC certification contributes to comply with the EUTR requirements, this topical assessment revealed the current character of interaction as well as effects of such interaction for the analyzed case company, building on the TBGI framework developed by Eberlein et. Al. (2014). Using the framework, this study implies that an FSC certification is highly useful regarding the contribution to the compliance with the EUTR due diligence requirements for the case company, given that both governance initiatives operate under the common denominator of ensuring the legality of wood products. However, apart from the common basis, both governance initiatives differ in their scope. Furthermore, the study has found that especially the German competent authority values a certification in terms of information collection, risk assessment, and, if necessary, risk mitigation. Moreover, an FSC certification does not only contribute to the compliance with the EUTR. Further, especially in the paper and pulp industry, organizations such as the case company are required to produce and sell certified products due to market demands towards the downstream end of supply chains. However, the study has identified uncertainties concerning the relation between both governance initiatives in the future given current weaknesses in the FSC system and a changing valuation approach of the EU and the national competent authority.

To sum up, an FSC certification is in the short to medium run highly useful in terms of contributing to the EUTR compliance with the due diligence requirements. Nevertheless, cost-benefits need to be evaluated in a company and industry-specific context. This research can serve as a basis for further consideration.

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APPENDIX A: TYPES OF CERTIFICATIONS

Certificate name ⁷⁵	Certification for ⁷⁶	Standard
Forest Management Certification	Forests: "Logging operations are socially beneficial, regarded an environmental perspective and are economically viable"	10 principles any forest operation must adhere ranging "from maintaining high conservation values to community relations and workers' rights [to] monitoring the environmental and social impacts of the forest management." ⁷⁷
Chain of Custody	Supply Chains: "All products throughout the chain are from certified forests. Raw material used are produced in a responsible manner."	"The CoC certificate is the path taken by products from the forest to the point where the product is sold with an FSC claim and/or it is finished and FSC labelled. The CoC certificate includes each stage of sourcing, processing, trading and distribution where progress to the next stage of the supply chain involves a change of product ownership." ⁷⁸
		"The objective of the standard is to provide minimum management and production requirements for CoC within an organization in order to demonstrate that forest-based materials and products purchased, labelled and sold as FSC certified originate from well-managed forests, controlled sources, reclaimed materials, or a mixture of these, and any associated claims are legitimate and accurate." ⁷⁹
		Compliance with timber regulation: ⁸⁰
		"The organization shall ensure that its FSC-certified products conform to all applicable timber regulation by:
		 Having procedure in place to confirm that imports conform to trade and custom laws Upon request collect and provide information on species and country of harvest to companies further down the supply chain that needs information to comply with timber regulation []"

⁷⁵ See Forest Stewardship Council "Types of FSC Certificates"
⁷⁶ See Forest Stewardship Council "Types of FSC Certificates"
⁷⁷ Forest Stewardship Council (2017c) p. 3
⁷⁹ Forest Stewardship Council (2017c) p. 5
⁸⁰ See Forest Stewardship Council (2017c) p. 13-14

Controlled Wood	Products:	Categories of unacceptable sources ⁸² :
	"Allow organizations to avoid the categories of wood considered unacceptable. Controlled Wood can be mixed with FSC certified wood in production processes. Resulting in the label "FSC MIX X%" (minimum 70% of FSC certified wood must be used for claiming the MIX label)"	 "Illegally harvested Wood harvested in violation of traditional and human rights Wood from forests in which
	 Ranking of certification claims on products ⁸¹(Highest = 1): 1. FSC 100% (all materials used FSC certified) 2. FSC Mix Credit / FSC Mix x% (mixed FSC-certified raw materials with controlled wood certified raw materials to a certain % but minimum 70% of FSC certified material used) 3. FSC Controlled Wood (see description above) 	 high conversation values are threatened by management activities Wood from forests being converted to plantations or non-forest use Wood from forests in which genetically modified trees are planted"

APPENDIX B: TABLE 1

Table 1. Elements of EUTR covered by the FSC certification scheme.

EUTR: Risk Asses	sment Procedure and Risk Mitigation Procedures Criteria	FSC Certification Scheme	
	Assurance of compliance with applicable legislation, which may include certification or other third-party-verified schemes which cover compliance with applicable legislation.	Principle 1 includes legality criteria and national application of legality	
Risk Assessment Procedures	Prevalence of illegal harvesting of specific trees pecies	Certification/verification is made by a body which is accredited to evaluate against a forest management/chain of custody standard.	
	Prevalence of illegal harvesting or practices in the country of harvestand/or sub-national region where the timber was harvested, including consideration of the prevalence of armed conflict.	Certification/verification audits include review of documentation and system, and assessment in the forest/company.	
	Complexity of the supply chain of timber and timber products.	The mixing of certified/verified and uncertified material in a product or product line is allowed, but the uncertifier material must be covered by a verifiable system which is designed to ensure that it complies with legality requirements (FSC Controlled Wood).	
Risk Mitigation Procedures	Except where the risk identified is negligible, risk mitigation procedures may include requiring additional information or documents and/or requiring third party verification.		

EUTR: the EU Timber Regulation; FSC: Forest Stewardship Council.

Table 1: Elements of EUTR covered by the FSC certification scheme ⁸³

⁸¹ See Forest Stewardship Council (2017c) p. 12
⁸² See Forest Stewardship Council (2017b) p. 5
⁸³ Gavrilut et. Al. (2016), p. 7

APPENDIX C: TABLE 2

Dimension of interaction	Component of regulatory governance					
	Goal/agenda setting	Rule formation	Implementation	Monitoring, information gathering	Compliance promotion, enforcement	Evaluation, review
Who or what interacts						
Drivers and shapers						
Mechanisms and pathways						
Character of interaction						
Effects of interaction						
Change over time						

 Table 1
 Transnational business governance (TBG) interactions: An analytical framework

 Table 2: Analytical Framework 84

APPENDIX D: INTERVIEW QUESTIONS

Interview German Association of Paper Manufacturers (VDP)

Measured Dimension	Question
Contextual FSC Certification	 How many paper manufacturers possess a certification in your association? What are the major reasons for certifications? Next to the FSC certification, are there other certification schemes that are usual in the industry? And what are reasons for choosing other schemes than the FSC? What are advantages of the FSC scheme compared to others?
Contextual EUTR	5. Before implementation of the EUTR 2013, what was the position of the association towards the EUTR?6. How would you judge the current implementation? Are requirements audited as stated in the regulation?
Character of Interaction	 To what extent do EUTR and FSC certification have the same overall target? What are significant differences regarding compliance of the FSC standards and EUTR requirements? What are similarities between the FSC standards and EUTR requirements?
Effects of Interaction	 From your experience, is an FSC certification to any extent valued by the competent authorities, namely the BLE? Do you think that possessing an FSC certificate is useful for companies to (better) comply with the EUTR requirements? And why? Are there any disadvantages when for companies that are not certified concerning compliance with the EUTR requirements?

⁸⁴ See Eberlein et. Al. (2014), p. 7

Measured Dimension	Question
Contextual FSC Certification	
Contextual EUTR	 After the implementation of the EUTR in 2013, the BLE as the German competent authority is responsible for checking EUTR compliance of companies. How do such checks are performed in practice? Is the implementation and inspection in other EU countries on the same level than Germany?
Character of Interaction	 To what degree are certification considered when assessing companies and their compliance towards the EUTR? Respectively, what role do certifications have? How can the relation between the FSC scheme and the EUTR be best described? As competitive, supportive, or rather complementary? a. Is there any dependence between the two governance methods? (E.g. if there are certain changes inside the EUTR, do the certification programs automatically follow and adjust or even vice versa?) What is your opinion on the future state of the FSC certification relation concerning the compliance with the EUTR? Do you think that a "power struggle" between both will occur, and increase, respectively the pressure on accepting the FSC certification as a green lane?
Effects of Interaction	 6. Generally, do FSC certified companies perform better in compliance checks than companies without certification? a. Do you think that possessing an FSC certificate is useful for (better) meeting the EUTR requirements? And why? b. Precisely, what aspects of an FSC certification is useful for companies to better comply with the EUTR requirements? c. On the other side, what disadvantages do FSC certified firms regarding compliance with the EUTR? 7. What are significant differences between the EUTR and the FSC certification, respectively, why is a certification is not enough to reach automatic compliance with the EUTR due diligence requirement? a. What is extra required by companies to fulfill the EUTR requirements, next to fulfilling the certification standards? 8. Hypothetically, what problems and risks could occur when considering certification as a green lane for compliance with the EUTR? a. On the other hand, what would be advantages of a green lane?

Interview German Federal Office for Agriculture and Food (German competent authority)

Paper Manufacturer - Case Company

Measured Dimension	Question
Contextual FSC Certification	 What certificates doe K\u00e4mmerer possess? When did K\u00e4mmerer started its aim for being an FSC certified company? What was the reason behind the decision for being FSC certified? What does it practically mean to comply with the FSC standards? a. What costs or extra work do occur? b. Did the certification increase bureaucracy? c. (If extra costs and work occur) Would you consider the extra costs and work worth the certificate? If so, why? E.g. What are the advantages of being FSC certified? 5. What are potential disadvantages of being FSC certified?
Contextual EUTR	 6. Before implementation of the EUTR in 2013, Germanys initial position was against the regulation throughout the legislation process. Scholars stated reasons were the strong lobbying power of the German industry to avoid "burdensome" regulations for their companies. What was your initial position when discussions about the EUTR started considering effects on your day to day tasks at Kämmerer? 7. How would you perceive the current implementation of the EUTR? Is it rather beneficial or constraining the company? a. If beneficial, what are certain benefits? b. If constraining, what are constraints? 8. Considering its current implementation, to what extent is Kämmerer being checked for complying with the EUTR requirements? a. How are such "checks" performed, considering the competent authority, the amount of checks per year and its procedure? b. What documents are necessary to have as a proof?
Character of Interaction	 9. Looking at the regular checks for complying with the EUTR by competent authorities, do they take into account the FSC certificate in a certain way? 10. Do you think that the FSC and the EUTR are working towards the same goal, that is fighting illegal logging? 11. Is there a significant difference between complying with the FSC standards and the EUTR requirements? a. If yes, what are the differences and what do they mean in terms of extra costs and work considering the voluntary compliance with the FSC standards? b. If no, what are the similarities? E.g to what extent equal the FSC principles and criteria the EUTR requirements? 12. How can the relation between the FSC scheme and the EUTR be best described from a company perspective? As competitive, supportive, or rather complementary and why?
Effects of Interaction	 13. Do you think that possessing an FSC certificate is useful for (better) meeting the EUTR requirements? And why? a. Precisely, what aspects of an FSC certification is useful for companies to better comply with the EUTR requirements? b. On the other side, what disadvantages do FSC certified firms face regarding compliance with the EUTR? 14. The FSC certificate does not mean a green lane for compliance with the EUTR requirements currently. Do you agree with the decision that the FSC certificate means no automatic proof for compliance and why? 15. Assuming that in the future an FSC certificate would mean a green lane for complying with the EUTR, what benefits would that bring to Kämmerer? E.g. less bureaucracy, saved costs and time for e.g. checks a. On the other hand, would there be any disadvantages? 16. Coming back to the non-green lane for FSC certified companies, is it still valuable to remain an FSC certificate when looking only at the usefulness for meeting the requirements of the EUTR?

 a. If it's not valuable solely from the aspect of usefulness for meeting EUTR requirements, would there be any alternative certification scheme that would fit better? 17. Lastly, from a company perspective, do you have any suggestions regarding the current relation between the FSC and the EU concerning compliance of FSC schemes with the EUTR for the future? What would be the most desirable relation for Kämmerer?
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Forest Stewardship Council Germany

Dimension	Question
Contextual FSC Certification	 Can you briefly describe the FSC principles and criteria companies must comply with? E.g. the Chain of Custody Certificate or Controlled Wood
Contextual EUTR	 Do you think the implementation of the EUTR was the right decision and why? How did the implementation of the EUTR changed principles and criteria? What adjustments have been made and why?
Character of Interaction	4. Is there a significant difference between complying with the FSC standards and the EUTR requirements?
	 a. What are similarities between the FSC certification scheme and the EUTR? 5. Does the FSC standards outperform requirements of the EUTR generally? a. If yes, in what particular aspects?
	 b. If no, which aspects are different? 6. How did the implementation of the EUTR changed principles and criteria? What adjustments have been made and why? a. (If there were adjustments) How did the adjustments changed the relation of
	 7. How can the relation between the FSC scheme and the EUTR be best described? As competitive, supportive, or rather complementary?
	a. Is there any dependence between the two governance methods? (E.g. if there are certain changes inside the EUTR, do the FSC automatically follow and adjust or even vice versa?)
	 8. Do you agree that FSC certified companies are able to comply easier with the EUTR more easily than non-certified companies and why? a. Considering the competent authorities performing regular audits at companies for checking compliance with the EUTR, do you see that the FSC certificate is
	valued?9. With the EUTR implementation, is there an uptake of FSC certification observable or did the amount of certified companies (e.g. through Chain of Custody certification)
Effects of Interaction	decrease throughout the years? 10. The FSC certificate does not mean a green lane for compliance with the EUTR requirements currently. Do you agree with the decision that the FSC certificate means
	no automatic proof for compliance and why (not)?11. What were major reasons for not considering the FSC scheme as automatically compliant with the EUTR?
	 12. What does the non-green lane for FSC certified companies mean in terms of compliance with the EUTR? a. E.g. Are there extra costs or work? Does the bureaucracy increases?
	13. Considering the non-green lane, is it still valuable for companies to remain with the FSG scheme? Why?
	14. Looking at the FSC's future strategy, is such green lane of FSC certificates desirable, respectively the ultimate goal, and why (not)?a. If yes, how should it be achieved? What would be the effects for FSC certified compariso?
	companies? 15. Hypothetically, what positive and negative effects for companies could occur when considering certification as a green lane for compliance with the EUTR?
	16. Lastly, how does the optimal relation between the FSC and EU would look like considering the compliance with the EUTR requirements?

APPENDIX E: TABLE 3 & 4

Interaction Component according to Eberlein et. Al. (2014) TBGI framework	Description Eberlein et. Al. (2014)	Emerging subsection	Definition of subsection	
	"[] interactions take numerous forms, falling	Distinction FSC standards and EUTR requirements	ThedifferencebetweentheFSCstandardsandtheEUTR requirements.	
Character of Interaction	into roughly four categories: Competition [], Coordination [], Cooptation [], Chaos []; "Schemes in a domain may overlap,	Type of relation Type of relation Type of relation Type of relation Type of relation Type of relation The type of relationship bet the FSC certific and the requirements.		
	each claiming authority and intersecting with each other on multiple issues []" - p. 12	Future relation	How the future role of the FSC certificate should be towards (compliance with) the EUTR.	
		Compliance support	To what degree an FSC certificate can support compliance with the EUTR.	
Effects of Interaction	"We suggest a an intermediate inquiry: the effects of interactions on the regulatory capacity and performance of actors in a regulatory space."; "Similarly, one might ask how processes of enrolling, mobilizing, or orchestrating actors contribute to the regulatory capacity and	Additional costs	Costs in terms of additional work, e.g. bureaucracy, needed when complying with both FSC Standards and EUTR requirements or respectively the additional costs for not being certified and the compliance with the EUTR requirements.	
	performance of actors, schemes, and larger regulatory complexes." - p. 13	Ad dis "g ha au wi th	Advantages and disadvantages a "green lane" could have. "Green lane" = automatic compliance with the EUTR through possessing an FSC certificate.	

Table 3: Explanation of Codes

Category	Code	Count	% Codes	Cases	% Cases
Effects Interaction	Compliance support	44	25,30%	4	100,00%
Interaction Character	Distinction FSC standard and EUTR requirements	28	16,10%	4	100,00%
Contextual	FSC	20	11,50%	4	100,00%
Contextual	EUTR	18	10,30%	4	100,00%
Interaction Character	Type of relation	14	8,00%	3	75,00%
Interaction Character	Future relation	12	6,90%	3	75,00%
Criticism	Criticism FSC	11	6,30%	2	50,00%
Criticism	Criticism EUTR	11	6,30%	4	100,00%
Effects Interaction	"Green Lane"	10	5,70%	3	75,00%
Effects Interaction	Additional costs	6	3,40%	2	50,00%

Table 4: Quantity of Codes

APPENDIX F: SUMMARY MAIN FINDINGS

Interviewee 1: German Competent Authority

Interviewee 2: FSC Germany

Interviewee 3: German Association of Paper Manufacturers

Interviewee 4: Case Company

	Character of Interaction			
	Distinction FSC-EUTR requirements	Type of current relation	Future relation	
Interviewee 1	FSC standards go beyond the EUTR requirements; "FSC has a different intensity of checking than the EUTR"; "Still overlaps"	"Definitely complementary"; FSC is dependent on the EUTR	"Worth thinking about higher valuation when FSC improves its system"	
Interviewee 2	FSC standards go beyond the EUTR requirements; "FSC works at the other end";	"Can be best described as complementary"; FSC is dependent on the EUTR	"The current situation is good as it is now"	
Interviewee 3	FSC standards go beyond the EUTR requirements	"Complementary"	"FSC needs to improve its weaknesses then maybe a higher valuation"	
Interviewee 4	FSC standards go beyond the EUTR requirements; "Both systems differ substantially"	"Rather competitive given the dominant position of the EU"; FSC is dependent on the EUTR	"I expect the valuation of the FSC certificate to decrease in the future"	

	Effects of Interaction		
	Compliance support	Additional costs	Advantages and risks of a "green lane"
Interviewee 1	Support of DDS requirements; "Complying with the EUTR requirements is easier when being FSC certified"	-	"Competent authorities would not be able to influence the actions of the FSC"; "There are weaknesses in the FSC system"; "But could be a simplification for the organizations and checks could be performed faster"; "Green lane could also have a positive impact on the promotion of forest certification"
Interviewee 2	"It is the intention of the FSC to help certification holders comply with the DDS requirements"	Double costs to a certain extent; "Must still perform due diligence"	"There are currently mistakes in the FSC system that need to be eliminated"; "Green lane would lead to a difficult relationship with the competent authorities"; "Additional costs for organizations would be eliminated"
Interviewee 3	"The efforts for the risk assessment are significantly lower with FSC certification"	-	"It would promote forest certification and more companies would adapt to it"
Interviewee 4	"FSC certification is highly valued by German competent authority"	Double costs to a certain extent; "Does not support the competitiveness" "FSC certification costs around 7.200€ - 12.600 €"; "FSC certification is more costly than the complying with the EUTR"; "But market requires us to be certified"	"This would influence the sovereign rights of the competent authorities"; "However, green lane would make the life of certified organizations easier, but not in the long run"

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