

ization promotes allows for better transparency regarding environmental policy and allows for global cooperation in environmental sustainability (Destek, 2019; Tang et al., 2020).

However, current worldwide economic trends are pointing towards the exact opposite of globalization. Deglobalization is a contagious movement that many countries are starting to follow through protectionist policies because of immigration crises, shared global financial crises and rising inequalities that have been linked to the interdependence of globalization (Balsa-Barreiro, Vié, Morales, & Cebrián, 2020). For example, Trump's US administration undermined globalization by promoting trade-wars, running on protectionist policies, and increasing tariffs on international trade (Ritchie & You, 2021). This rise in deglobalization came hand in hand with disregard of global environmental protection treaties as seen by US's temporary exit from the Paris Treaty under the Trump administration.

Sustainability and protectionism have been linked together by many researchers (Bechtel et al., 2011; Mukherjee & Rath, 2017; Vargas-Hernández, 2020). This is because environmental policies are met with less backlash when they restrict trade, which can lead to some nations taking advantage. This is very relevant to recent developments in worldwide palm oil trade.

When traditional energy sources, such as fossil fuels, are increasing cost of energy imports and undermining energy security through their fluctuating prices, the demand for alternative energy sources worldwide is only rising. Alternative energy sources, such as biofuels, derived from oil crops. Palm oil is the most popular oil-crop biofuel feedstock produced in Southeast Asia (Mukherjee & Sovacool, 2014). Apart from the region's ideal climactic conditions for the feedstock, palm oil is so popular because it has a high return on land and lower production costs than other biofuels, leading to higher reliable employment in rural areas and economic development (Ayompe, Schaafsma, & Egoh, 2021; Mukherjee & Sovacool, 2014). However, there has been much debate among scientists on whether the palm oil crop is a more sustainable option rather than traditional energy sources.

The debate focuses on three main aspects regarding environmental sustainability of the palm oil crop, the greenhouse gas (GHG) emissions, the biodiversity threat, and the indirect changes in land use (ILUC) consequent of the production and use of palm oil biofuel. In relation to the GHG emissions, several studies show that the GHG emissions of palm oil are comparable to that of fossil fuels, and to counteract the emissions of the palm oil the same amount of crop

used in combustion needs to be grown again (Haberl et al., 2012; Meijide et al., 2020; Searchinger, 2010). Certainly, critical voices exist. Research indicates that if a palm oil crop farm uses the excess co-products of palm oil processing, rather than throwing them away, and if the farm itself is Roundtable on Sustainable Palm Oil (RSPO) certified, major decrease in GHG emissions could be seen (Pleanjai & Gheewala, 2009; Schmidt & De Rosa, 2020). Regarding the biodiversity threat of the palm oil crop, the deforestation practices to clear land for the crop and the lower species diversity the palm oil crop land can hold endanger indigenous species. In Southeast Asia, only 8% of all forest ground remains completely intact from palm oil crop activities (Meijaard et al., 2020). In Indonesia specifically, 39% of new expansion of smallholder palm oil farmers went into forest areas, meanwhile these palm oil croplands hold 47%-90% less biodiversity than forests (Meijaard et al., 2020). This expansion directly threatens forest-dependent animals, such as *Panthera tigris*, *Helarctos malayanus*, *Pongo pygmaeus*, *Casuaris unappendiculatus*, and *Dendrolagus goodfellowi* (Meijaard et al., 2020). On the other hand, ILUC risk is high when forests and grasslands are cleared because of activity sparked from biofuel production in another area indirectly (Mukherjee & Sovacool, 2014). Scientists all agree that ILUC risk is difficult to be observed and measured (Mukherjee & Sovacool, 2014). However, many different authorities claim that palm oil biofuel is a high-ILUC risk.

One of those authorities is the European Union (EU). With its new agenda to reach more sustainable energy targets, the EU adopted the Delegated Regulation 2019/807 that labelled palm oil as the only high-ILUC risk biofuel (WTO, 2019; Commission Delegated Regulation (EU) 2019/807). Through Article 26 (2) of its 2018 Renewable Energy Directive II (RED II) the EU acted against the biofuel by capping palm oil biofuel imports at 2019 level and having the imports slowly phase out by 2030 (Directive (EU) 2018/2001; WTO, 2019). This has consequently led to public outcry from palm oil farmers and governments in Southeast Asia who base their livelihood on the biofuel's sale. One of those governments was that of Indonesia, who has the most at stake as the largest producer of palm oil in the world.

Indonesia brought their concerns to the WTO using the Dispute Settlement Mechanism (DSM) by requesting consultation on December 9th, 2019. Their Dispute Settlement case "*DS593: European Union – Certain measures concerning palm oil and oil palm crop-based biofuels*" was built on Indonesia's claims that these recent measures EU had adopted against the palm oil biofuel were going against the General Agreement on Tariffs and Trade 1994 (GATT) and

Technical Barriers of Trade (TBT) Agreement (WTO, 2019). Under these claims, Indonesia was indicating that the palm oil measures taken by the EU were of protectionist nature and causing unnecessary barriers to trade.

The objective of this paper is to discuss whether the EU was acting in a protectionist manner when defining palm oil as high ILUC risk in the context of WTO case DS593. The paper will further discuss how the GATT and TBT Agreement of the WTO safeguards international trade by ensuring that there is a fair playing field and, in that framework, whether the EU is in violation of those agreements in case DS593. In this examination Articles I:1, III:4 and X:3 of GATT and Articles 2 and 5 of TBT will be examined more closely to ascertain whether the EU measures were taken to enhance sustainability goals or in a protectionist frame. Conclusions will follow.

2. ILUC risk or protectionism

2.1. Protectionism: A growing threat

Cletus, Chrystal and Wood (2004) define protectionism as actions and any type of protection that allow a government to improve the position of a domestic firm or industry over a foreign one. Literature on protectionism is rich and covers the recent trends of the rise of protectionism on a global scale. According to Walter (2021), backlash against globalization relates to the rising trend of protectionist and isolationist trade and government policies worldwide. In Walter's research, the way in which this backlash is realized is through the growing populism plaguing many countries' leadership such as Trump's "America First" mentality and Brexit. All of these are examples of protectionism as populist leaders tend to guard and protect domestic firms disproportionately to foreign ones, since populism is a political mentality that shifts the trade focus of a nation inward to invest on the "people". This inward focus of populism is a result of the perceived "losers" of globalization that political parties take advantage of to promote their populist campaigns (Norris & Inglehart, 2019). These "losers" of globalization are a result of the loss felt by certain populations of a country (especially the middle class) when the rising inequality within countries is contrasted by the rising equality between countries due to globalization (Van Aaken & Kurtz, 2019). Thus, although countries are becoming more able to gain access to the same resources and investment through trade, the internal state of many industries within countries is deteriorating with the increased competition from

worldwide products creating the “losers” of globalization. Furthermore, some researchers have found that deglobalization, or the limit and decline of worldwide trade is not temporary and is increasing proportionally to the rise of disdain against globalization. Kim et al. (2020) found that deglobalization trends are strongest in developed countries and predict that the expected continuation of deglobalization will lead to more conflict, uncertainty, and protectionism worldwide. The “losers” of globalization, deglobalization trends, and the rise of populism in tandem with the rise of protectionism has led to an overall rise in negative attitudes towards international organizations such as the WTO (Bearce & Jollif Scott, 2019). The current ongoing COVID-19 pandemic crisis is not helping this situation as it is accentuating extreme protectionist trade measures that go against WTO agreements such as the banning of exports under the guise of health protection (Curran et al., 2021). Hence, a global trend can be seen where countries are not only moving away from globalization and embracing protectionism but also actively finding ways to go against WTO agreements through questionable excuses.

Walter (2021) states that this deglobalization and protectionism trend is limiting the power of the WTO’s DSM. The WTO uses its DSM to fight protectionism and to limit trade wars by allowing its members to voice when they believe violations of WTO agreements have occurred. The DSM then allows an independent panel, the appellate body, to review the cases. The panel rulings are usually followed because of the economic weight protectionism and consequent trade wars put on global value chains (Yildirim, 2020). Yet, with the global trends towards protectionism and deglobalization showcased through the recent Appellate Body crisis where no new judges were appointed because of the Trump administration, this economic weight is perceived less as a threat and consequently WTO’s DSM is becoming dismantled (Gantz, 2018; MacIsaac & Duclos, 2020; Sacerdoti, 2018).

2.2. Environmental protectionism and indirect land use change risk

One of the most recent ways in which the WTO’s agreements and DSM are becoming disregarded is through environmental protectionism. Also referred to as green protectionism in literature, environmental protectionism occurs when countries implement environmental policies to favor domestic industries and firms (Bai et al., 2021). Given that the EU is being suspected of protectionist

action against Indonesia due to RED II environmental policy, it could be considered a case of environmental protectionism. The EU has been suspected of environmental protectionism in the past. Levinson (2017) sites a 2016 case where car emissions regulations in the EU were stricter than those in the US regarding carbon dioxide emissions but not nitrogen oxide emissions. These regulations benefited the EU because cars that are made in the EU favor diesel engines that emit more nitrogen oxides than carbon dioxides. This resulted in a 13-16% tariff on imports of cars from the US. Although stricter regulations on carbon dioxide emissions in cars is helping the environment, the fact that it is leading to a tariff and that nitrogen oxide emissions in cars are not as regulated in the EU brings suspicion as to whether this is environmental protectionism. In the case of Indonesia, the relevant justification as to why palm oil was singled out by it being labelled as high ILUC risk can help shed light on whether the EU was committing environmental protectionism.

When considering how to calculate ILUC risk, only two scientifically approved methods are available (Mukherjee & Sovacool, 2014). The first method is called equilibrium modelling and uses prices of land (Mukherjee & Sovacool, 2014). The second method is called causal descriptive modeling and is dependent on providing a contrast between worldwide land use while the production of biofuel feedstock ensues and worldwide land use after no additional demand for biofuel (Mukherjee & Sovacool, 2014). In relation to Indonesia, the rich peat soils that are native to the area absorb carbon at a high rate. Fargione et al. (2008) found that a third of new palm oil farms in Indonesia are operating on these rich peat soils. Degrading these soils for palm oil farming releases tons of carbon and creates ILUC risk (Hooijer et al., 2006).

Although documented evidence exists concerning ILUC risk related to palm oil farming with the destruction of peat lands, the EU in their Delegated Regulation 2019/807 do not use any of the aforementioned methods of ILUC calculation. Instead, they use an equation which uses the annual expansion of the land use since 2008 in relation to the amount of that expansion that goes into land with high-carbon stock (WTO, 2019). Using this specific formula, only palm oil out of all oil crops is singled out as high-ILUC risk. This is considered peculiar by many researchers, such as Hinkes (2019) who evaluates this decision and concludes that treating palm oil biofuel differently is not adequately scientifically justified. Additionally, Hinkes (2019) adds that a clear understanding of what constitutes low-ILUC risk biofuels has not yet been established by the EU.

This puts the EU in a difficult situation regarding their reasoning and has allowed many scientists to publish research countering the EU's findings. Recent articles criticize the ambiguity of the Delegated Regulation 2019/807 and the fact that palm oil is singled out as the only high-ILUC risk biofuel through RED II (Arief et al., 2020; Tyson & Meganingtyas, 2020). The articles frame this different treatment as protectionist due to crops like the palm oil that are grown in the EU such as rapeseed and sunflower seed which were not listed as high-ILUC risk. This information is corroborated by recent research stating that first generation biofuels, such as rapeseed, are the least sustainable (Mat Aron et al., 2020). Additionally, rapeseed biofuel makes up the majority of domestic EU biofuel which makes the selection of only palm oil even more questionable (EBB, 2016).

When considering whether the EU's regulations are environmentally protectionist in case DS593, one must look at the fact that palm oil was singled out as a sustainability threat with high-ILUC risk. The fact that palm oil is a sustainability threat in its current production conditions is supported by scientific research, but only palm oil being singled out as high-ILUC risk is not. Other unsustainable EU-domestic oil crop biofuels exist and are not listed as high-ILUC risk because what constitutes low-ILUC risk is not properly defined.

3. Methodology

Qualitative descriptive research was conducted to explore the issues underlying case DS593. Hence, the research is focused less on numerical data since the purpose of this research is not to indulge in hypothesis testing and has the goal to describe and understand whether the EU's new environmental regulations regarding palm oil are protectionist (Zegeye et al., 2009). This research paper uses secondary data. This means that existing research and work relating to ILUC-risk, protectionism, globalization, the WTO, and palm oil sustainability were reviewed and used to critically evaluate case DS593 (Zegeye et al., 2009). The analysis conducted by the Author included primary data in the form of the legal texts of WTO regarding GATT and TBT agreements.

Case studies focus on the contextual conditions of a specific event and collect detailed information about this specific event (Palmquist et al., 2020). They aim to analyze issues relating to specific events, organizations, or environments. Looking in-depth at case DS593 and studying the context of the case indicates that the research design followed in this paper is a case study.

This paper follows the format of similar WTO DSM case studies such as Anwarul's (2021) and Bown's (2020). These case studies are explanatory case studies because they aim to create a cause-effect relationship and discuss real-life situations that cannot be explored through experimental methods (Baxter & Jack, 2009).

4. Findings: WTO agreements

Currently experiencing a standstill in relation to market liberalization and multilateralism, the future of the WTO is dependent on its members deviating from protectionism (Flach, 2021). The main WTO agreements that shield the WTO members from protectionism are the GATT 1994 and TBT Agreement. The system under which WTO members can solve issues regarding potential breaches of these WTO agreements is the Dispute Settlement Mechanism. Yet, as discussed previously, the DSM is facing some critical issues regarding its Appellate body temporarily being inoperative. Even though there seems to be a sense that the DSM is being dismantled, it is important to note that many countries have stated their faith in the future of the WTO DSM. This is evident by the fact that WTO member-countries are still voicing their disputes to the DSM even during and after the Appellate body crisis, like case DS593.

It is also vital to understand that there has been precedent in the DSM regarding a case similar to the environmental protectionism disputed in the DS593 case. This means that the DSM has been well-equipped to handle cases like DS593; when countries use environmental policy to limit trade in an unfair and discriminatory way, such as the EU is in DS593. The case which provides precedent is DS58 USA Import prohibition of certain shrimp and shrimp products (WTO, 2021a). Under this case, India, Malaysia, Pakistan, and Thailand brought a complaint against the US in 1997 regarding its policy mandating that all shrimp fishers use special mechanisms that do not harm local turtle populations. This US policy resulted in a huge import ban of Indian, Malaysian, Thai, and Pakistani shrimp, affecting local economies. The complainants used the GATT agreement to state that this policy was discriminatory because the US allowed their Western allies more time to implement changes in their fishing mechanisms and even gave financial and technical support to those allied countries regarding these changes. Under the DSM, the US lost, and the complainants won until the US changed its policy introducing flexibilities for the complainants. This precedent can help in strengthening the consequent conclusion after the analysis of

how the EU followed or went against GATT and TBT agreements in case DS593. If the EU put in place a discriminatory policy, then by precedent the DSM should acknowledge that.

The GATT is the main instrument used by the WTO to limit international trading barriers and protectionism. Its Most-Favored-Nation Clause is the basis of GATT agreement's operation. This clause which is also referred to as Article I:1 of GATT, states that any preferential treatment given to a product or industry of a member must be given to a like product of a different member when trading with each other (WTO, 2021b). As the second most prominent WTO agreement shielding against protectionism, the TBT Agreement tries to ensure that any standards or conformity assessments do not discriminate and create unnecessary barriers to trade (WTO, 2021c). The agreement also recognizes the need for WTO members to create standards that protect the environment and enforce sustainability practices, thus do not consider these sorts of practices as a violation. By looking at how the EU followed or disregarded the GATT and TBT agreements a strengthened conclusion on whether, in the context of case DS593, the EU enacted environmental protectionism can be assessed.

4.1. General Agreement on Tariffs and Trade

In case DS593, Indonesia claimed that the EU is in violation of GATT and of TBT agreements when adopting the measures against palm oil. Under GATT agreement, the Most-Favored-Nation clause is relevant to this situation because by imposing sustainability criteria on palm oil and labelling it as high-ILUC risk while not naming any other biofuels as low-ILUC risk or high-ILUC risk, the EU is not giving similar treatment to like products. This action also goes against Article III:4 of the GATT which states that imported products from WTO members shall be faced with no less favorable treatment than similar domestic products (WTO, 2021b); similar products such as the EU's rapeseed biofuels. Finally, through the Delegated Regulation 2019/807 that the EU adopts, the EU seems to be in violation of Article X:3(a) of the GATT. The aspects of Delegated Regulation 2019/807 that are problematic are the unclear and vague criteria it adheres to palm oil when labelling it as high-ILUC risk and the exclusion of proper explanation of what low-ILUC risk biofuels consist of. Article X:3(a) states that all regulations put into action by WTO members must be reasonable, impartial, and uniform, none of which is followed by the EU (WTO, 2021b).

By not properly and scientifically elaborating what the EU considers as high-ILUC risk and low-ILUC risk, the EU singled out palm oil and does not offer other biofuels as sustainability risks. This goes against GATT Articles I:1, III:4 and X:3 (a). However, the EU can argue that the measures against palm oil were used parallel to GATT Article XX (b). GATT Article XX (b) lists the exceptions under which GATT Articles can be disregarded and not followed. In case (b) GATT allows for discriminatory regulations that protect human, animal or plant life on earth (WTO, 2021b). As discussed before, palm oil can be considered environmentally unsustainable and an ILUC risk due to the rich peat soil that is destroyed and the carbon emissions from that peat soil destruction. Furthermore, it is scientifically agreed upon that palm oil biofuel in Indonesia emits high Greenhouse gas (Germer & Sauerborn, 2007). The effects of such emissions are known to cause climate change and damage to plant life on earth. Hence, the discriminatory regulation of the EU can be justified against palm oil. Yet, the singling out of palm oil amongst like biofuels is not justifiable through the explanation the EU offers and thus, can still be considered to go against GATT agreement.

4.2. Technical Barriers to Trade Agreement

Indonesia has further claimed that the EU is going against Article 2.2, 2.9 and 5.8 of the WTO's TBT Agreement regarding the measures against palm oil (WTO, 2019). Article 2.2 of the TBT discusses how members must make sure that all measures and conformity assessment criteria they adopt do not have the goal or the effect of producing unnecessary barriers to international trade (WTO, 2021c). Furthermore, these regulations should not be overly trade-restrictive and should be only as restrictive as necessary to achieve a legitimate objective. Within the legitimate objectives listed in Article 2.2 of the TBT, protection of plant life and health of the environment is included. To evaluate these legitimate objectives, there must be scientific and technical basis to the objectives. Given what Article 2.2 of the TBT Agreement entails, it does not seem as though the EU is violating it. Although certification schemes exist, operating to verify the sustainability of palm oil such as the Indonesian Sustainable Palm Oil (ISPO), the GHG emissions and ILUC risk of palm oil is a legitimate reason to want to limit the consumption of palm oil biofuels. Furthermore, according to research on Indonesia by Carlson et al. (2017), although these certification schemes have lowered deforestation regarding palm oil production by 33%, these schemes have done

nothing to counteract the destruction of peat soils which emit carbon and increase GHG emissions. In this regard, the EU's measures against palm oil do have a legitimate objective of protecting the environment and thus, even though they are restrictive to Indonesian palm oil farms, are necessary. It is a different story regarding Article 2.9 and Article 5.8 of the TBT Agreement, however.

In Article 2.9, the WTO specifies the process under which regulations who do not have relevant international standards should be addressed, given that the regulation will have a considerable impact on the trade of other members (WTO, 2021c). This Article is directly relevant to case DS593 given that 8.4 million Indonesians are employed in the palm oil industry and the third and fifth biggest export markets for Indonesian palm oil are EU-members (Richardson, 2019; Statista, 2019). It is safe to say that the restrictions against palm oil in the EU will have a severe impact on the Indonesian industry. Under Article 2.9(1) the EU would have been required to make a publication to enable the affected member to understand the regulation at an early stage and under 2.9 (2) notify all members through the Secretariat of what products the regulations will target early enough to be able to make amendments to the regulations (WTO, 2021c). The EU did not take these steps. Moreover, the EU did not adhere to Article 2.9 (4) which states that there must be enough time allocated for discussion and allow for creation of a relevant commenting process about the regulation. Finally, in violation of Article 5.8 of the TBT Agreement, the EU did not make available in a timely manner the conformity assessment procedures relevant to what constitutes a low-ILUC risk biofuel in Delegation Regulation 2019/807.

The legitimate need to limit consumption of palm oil biofuel can justify the EU's trade restrictions on Indonesian palm oil, confirming that the EU is not violating Article 2.2 of the TBT Agreement. Yet, this legitimate need cannot justify the disregard of the appropriate notifying procedure under Article 2.9 and the lack of conformity assessment procedures regarding low-ILUC risk biofuel under Article 5.8 of the TBT Agreement, which EU is in violation of.

5. Discussion and conclusions

In assessing whether the EU has adopted protectionist measures one must focus not on the classification of palm oil as a high-ILUC risk but on the fact that the EU has not identified other high-ILUC risk biofuels. Additionally, the EU has not clarified what comprises low-ILUC risk. This lack of information can lead to the conclusion that the EU did not adequately structure their argu-

ment to provide concise regulations to protect the environment from the sustainability threat that palm oil poses. This sustainability threat is composed of the high GHG emissions, high biodiversity loss threat and ILUC risk associated with the degradation of rich peat soil lands in Indonesia because of palm oil farming. The fact that the EU does not provide any scientific justification for why domestic EU crop biofuels are not included as high or low-ILUC risk, paints the relevant EU regulations, Delegated Regulation 2019/807 and Article 26 (2) of RED II, as protectionist and discriminatory. This indicates that the relevant EU regulations can be considered an example of environmental protectionism.

In singling out palm oil and imposing restrictions on it the EU has also violated WTO agreements put in place to prevent protectionism. It has violated Articles I:1, III:4, and X:3 of the General Agreement on Tariffs and Trade and Articles 2.9 and 5.8 of the Technical Barriers to Trade Agreement against Indonesia.

Looking at case DS593, further deliberations and explanations are needed from the side of the EU. Yet, currently, developments regarding case DS593 have stalled with the formation of a panel on November 12th, 2020. The current timetable for when a report will be made available is 2022. Without these clarifications, the restrictive measures imposed on palm oil cannot have the desired effect of enhancing sustainability by eliminating the aforementioned threats and instead are environmentally protectionist.

This is problematic when looking at the implications of this for the whole WTO and its mechanisms as the growing protectionism only further creates more conflicts between countries. Specifically to this case, other interested parties such as other Southeast Asian countries that produce palm oil may also speak up against the EU regulation, creating more conflicts and complications. Overall, the EU, as a global power, is projecting the image of deglobalization by not following WTO agreements and partaking in environmental protectionism.

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