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Towards a Smart Mix 2.0

Harnessing Regulatory Heterogeneity for Sustainable Global Supply Chains

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Abstract

Over the past three decades, efforts to address human rights and environmental risks in global supply chains have spurred a plethora of industry self-regulation, third-party certification schemes, voluntary due diligence guidelines, and mandatory supply chain regulations. The resulting heterogeneity of initiatives, instruments, and standards has been subject to much debate, with academics and policymakers calling for a “smart mix” of measures to strengthen the governance of transnational business conduct. In addition to creating public-private complementarities, this includes recent calls for a better interplay of governance actors located at the demand side and supply side of global supply chains, often linked to the “North” and the “South” of the world economy. In this paper, we explore the opportunities and challenges of harnessing regulatory heterogeneity for sustainable supply chains through such a “smart mix 2.0”. On a conceptual level, we show how public regulators can improve the design, uptake, and compliance with private sustainability standards through information provision, capacity building, economic incentives, and legal recognition. Conversely, private sustainability standards may compensate for some of the weaknesses of public regulation by offering more speedy, flexible, and less bureaucratic implementation. Moreover, bringing Southern actors into the governance mix promises to create regulatory regimes that are more context-sensitive, equitable, inclusive, and comprehensive in their coverage. However, there are also major challenges. This includes overly optimistic assumptions in the smart mix literature about the prospect of enabling and sustaining complementary and progress-oriented patterns of governance interactions between actors with often diverging interests, worldviews, and power resources. In our critique of the concept, we bring these issues to the fore, thereby advancing an analytical perspective that is more attuned to the political dimensions of smart governance mixes. In a case study of forest-risk supply chains (palm oil), we explore these issues empirically. We canvass the increasing regulatory heterogeneity and evolving nature of “smart mix politics” in this supply chain setting, illustrating that the road towards integrating governance measures across sectors and geographies is not a well-paved highway, but a winding road with many potholes, construction sites, and the occasional U-turn.

Abbreviations

CGF	Consumer Goods Forum
FLEGT VPAs	Forest Law Enforcement, Governance and Trade Voluntary Programme Agreements
ILO	International Labour Organization
IPOP	Indonesian Palm Oil Pledge
ISPO	Indonesia Sustainable Palm Oil
MMT	Million metric tons
MSPO	Malaysia Sustainable Palm Oil
NGO	Nongovernmental Organization
OECD	Organization for Economic Cooperation and Development
RSPO	Roundtable on Sustainable Palm Oil
UNGPs	United Nations Guiding Principles on Business and Human Rights
WTO	World Trade Organization
WWF	World Wildlife Fund

Introduction

Companies are increasingly expected by regulators, civil society actors, consumers, and investors to monitor and address human rights and environmental risks in their global supply chains. Over the past two decades, this has spurred the development of a plethora of initiatives prescribing responsible business conduct for global supply chains, ranging from firm-level corporate commitments, over industry-level initiatives and multi-stakeholder certification schemes, to due diligence guidelines developed by international organizations and mandatory supply chain regulation by states and regional organizations.

The point of departure for this paper is that little is known about the implications that the resulting heterogeneity in transnational business governance has for regulatory capacity and for achieving sustainability objectives. This heterogeneity surfaces both as a result of the increasing number of regulatory initiatives covering a sector, productive activity, region and/or issue area, but also as a result of the variation in the ways in which different regulatory initiatives go about prescribing and steering what firms need to do.

The focus of this study are recent debates among academics and policymakers about the need and feasibility of creating a “smart mix” of measures – i.e., governance arrangements in which public policies and private governance instruments complement one another (see Kinderman, 2016; Lambin et al., 2018; Maihold et al., 2021; Ruggie, 2013; United Nations, 2011). Against this background, this paper asks: What are the opportunities and challenges of creating smart policy mixes for sustainable global supply chains?

We explore this question by examining, first, both conceptually and empirically, the increasing heterogeneity of transnational business governance in terms of types of regulatory initiatives that have emerged. We then turn to a discussion of how literature perceives the effects of regulatory multiplicity and interactions among regulatory initiatives. Next, we focus on discussions about “smart mixes” of regulations and introduce their benefits and so far perceived drawbacks. We in particular pay attention to a recent move to broaden the scope of smart policy mixes. In addition to bridging the public and private divide, the paper reviews arguments about the importance of integrating standards and regulatory initiatives that are located at the demand side and supply side of global supply chains, often reflecting the “North” and the “South” of the global economy. This is what we refer to as a “smart mix 2.0”.

In a case study of the palm oil sector and supply chain, we illustrate these points further, by showing what regulatory heterogeneity means in this industrial and issue context, exploring the opportunities and challenges of realizing a smart governance mix for sustainability for this supply chain, and illuminating the role of demand and supply side initiatives in particular.

Regulatory Heterogeneity in the Governance of Sustainable Global Supply Chains – A Conceptual Assessment

Reduction of trade barriers, advances in technology for logistics and IT, as well as export-oriented growth strategies by emerging economy governments have advanced a reorganization of production on a global scale in many industrial and agricultural sectors since the 1980s. For many products nowadays, the organization of production is organizationally fragmented and geographically dispersed. This means that different businesses across borders, regions, and often continents engage in economic transactions in the design, production, marketing, and sale of commodities and goods. Such dispersion and fragmentation has inspired studies that denote these cross-border business-to-business economic activities through concepts such as Global Commodity Chains, Global Value Chains, and Global Production Networks (Dicken, 2003; Gereffi, 1994; Kaplinsky and Morris, 2001). Next to accurately mapping and describing the activities and exchanges in such chains and networks, the scholars contributing to these approaches also seek to answer two interrelated questions: who decides what gets produced in what way for what price and where?; and who gains what from this organization of production? (Dalles et al, 2019; Gereffi et al, 2005). Accordingly, studies have proposed that across sectors, value chains vary in terms of which so-called “lead firms” effectively call the shots in a value chain—because of market power, scale, a capability advantage, branding advantages, easier access to finance, control over particular resources or otherwise. This power differential allows these firms to largely determine the “governance” of value chains and capture the largest part of value from sales. The most famous distinction in the literature has been between buyer-driven chains, where retailers call the shots and producer-driven chains where manufacturers have most leverage.

In keeping with one of the intellectual sources of inspiration for these approaches, World Systems Theory, lead firms with most economic and organizational power, reaping the largest part of value, have often been identified as headquartered in Global North “Core Capitalist” Economies. Nongovernmental Organizations (NGOs), trade unions, politicians and journalists have increasingly become aware of these power differentials and have in recent decades used them to call on lead firm businesses to take responsibility for human rights breaches, sub-standard working conditions, and environmental degradation in their (increasingly globalized) supply chains. Firms are being invited, encouraged, pressured or required to use economic leverage over their suppliers to address these issues.

As a result, the contemporary global governance architecture of human rights, working conditions, and environmental sustainability now involves a range of instruments prescribing responsible conduct for businesses with regard to their global supply chains. Various studies have pointed out how crowded this field of supply-chain-focused instruments has become. Both the number of initiatives and their variation in type have baffled observers and practitioners alike. Academics have therefore sought to describe the variation and multiplicity of rules for business and understand the strengths and weaknesses of each regulatory type. Another strand of literature has sought to make sense of what the effects are of the multiplicity and heterogeneity of different regulatory activities. Some of these studies focus on impacts on efforts to improve human rights, labour, and environmental sustainability conditions (Grabs, 2020). Others discuss intermediary effects in terms of how multiplicity and heterogeneity of the regulatory environment influences multinational business strategy (Fransen et al, 2019), producers and governments in emerging economies (Schleifer et al, 2019), and the interactions of various regulatory instruments (Eberlein et al, 2014). This section discusses some of the key insights from these literatures and advances a particular approach to a “smart mix” of regulations. It uses the terms “regulation” and “regulatory” loosely, to refer to both governmental and nongovernmental actors and instruments, and in legal terms mandatory and more voluntary measures seeking to govern global supply chains. Throughout the discussion, however, when discussing particular regulation types, it will describe the character of such regulation specifically.

Voluntary, Supply Chain-Oriented Regulatory Initiatives

Studies making sense of the regulation of human rights, labour, and environmental sustainability in global supply chains, have first concentrated on a wave of – in legal terms – voluntary, soft-law regulatory efforts, taking off since the 1980s and continuing up until today, with a focus on big corporations and industrial sectors that target final consumer markets in Europe and North America (cf. Kolk et al, 1999).

While the regulatory initiatives emerging from this first wave can be categorized in various ways, we concentrate here on variation in function of regulations, and variation in sponsor, which is understood as the actors setting up and governing the instrument.

Table 1: Examples of Voluntary Standards by Their Sponsors and Their Function

Function Sponsor	Model code	Standard-setting and enforcement	Certification	Metagovernance
Corporate codes of conduct	-	Nike code; IKEA code	-	-
Industry standard		Responsible Care; Business Social Compliance Initiative	Worldwide Responsible Apparel Project	Global Social Compliance Program
Multi-stakeholder standard		Fair Labor Association	Rainforest Alliance; Forest Stewardship Council	ISEAL
Intergovernmental standard	ILO Code for multinationals	Global Compact	-	CEN Sustainable Cocoa Standard
NGO standard	Clean Clothes Campaign code	Worker Rights Consortium	-	-

In terms of function, observers noted the emergence of model codes (Kolk et al, 1999), highlighted in yellow in the table, and written up by parties that themselves a) were not involved in global supply chains and b) did not have the capacity to mandate responsible behaviour from business within or across jurisdictions. These codes therefore sought to inspire and socially pressure companies towards responsible behaviour. They prescribed conduct, but not how such conduct should be implemented, monitored, nor how compliance problems should be addressed. International organizations produced these codes, in part resulting from failure to design more ambitious, enforceable hard-law rules for multinational corporations in the 1970s and 1980s (Jenkins, 2001). The International Labour Organization (ILO) code serves as an example, and so does the first generation of the Organization for Economic Cooperation and Development (OECD) multinationals code. Also NGOs were involved at this stage, offering their particular perspective on what they thought business should do.

Then, academic attention turned to what companies themselves privately and voluntarily produced as rules for their individual supply chains, or for the supply chains of whole industries, see blue highlights in Table 1. Companies designed these codes as attention in Europe and North America rose about corporate involvement with Apartheid, child labour, major environmental crises such as oil spills, factory disasters and misleading corporate communication about health risks (Jenkins, 2001). Studies analysed both corporate codes of conduct and industry-level code programs, examining amongst others which norms businesses prescribed to their own conduct, to what degree these were taken from domestic law or international treaties and conventions, how specific or unspecific monitoring and implementation were described and prescribed, and how deep into the supply chain these codes were designed to reach: a first tier of suppliers with which they traded, or also deeper into suppliers trading with others (Van Tulder and Kolk, 2002)?

At the time of these studies, expectations about the ability of these initiatives to have meaningful beneficial effects for workers and communities at or near production sites in global supply chains were still low. Critical investigative journalism and activist research pointed at the gap between realities and aspirations described in codes (cf. SOMO, 2004). Those more optimistic about genuine business efforts to improve behaviour emphasized how code design was just a first step in a longer journey towards responsible conduct (Van Tulder and Kolk, 2002).

A next generation of regulatory initiatives, highlighted in dark green in the table, raised the expectation level about effective regulation, in at least two ways. First, many of these initiatives designed standards for responsible business conduct in a multi-stakeholder fashion, seeking inclusion from societal parties, signalling how standards and standard policies may possibly reflect broader societal agendas, and societal parties present may function as watchdogs for business behaviour (Fransen, 2012). Second, these initiatives presented more specific programs for implementation, monitoring and assurance of responsible behaviour in global supply chains. A subset of these initiatives introduced certification, signalling an appropriate level of compliance of one or more of the parties involved in a global supply chain with a standard for responsible business. Famous certification-focused initiatives accompanied such certificates with product labels, including Rainforest Alliance and Forest Stewardship Council. Others, such as the SA8000 standard and the WRAP standard, offered certificates to suppliers of multinational buying companies. The move towards these more ambitious private regulatory programs meant that some companies discarded their own individual code of conduct. Other companies sought to integrate their membership of multi-stakeholder and industry-programs for their global supply chains with an individual level code of conduct that left some room for emphasis on particular finesses.

These initiatives spurred a lively research agenda into the effects of regulatory initiatives for factory and farms, workers, communities near sites of production and various intermediary global supply chain actors, focusing on intensive manufacturing (Locke, 2013; Egels-Zanden, 2014), farming (Grabs, 2020; Schleifer and Sun, 2020; Ruben and Fort, 2012; Tampe, 2017) and forestry (Bartley, 2010).

For this reason, we have a good sense of the strengths and weaknesses of this type of regulatory initiatives. Across sectors and initiatives, it is apparent that most interventions of these regulatory initiatives seem to impact first-tier suppliers, but impact beyond the first tier is much rarer. Next to this, these initiatives seem to be stronger at improving certain issues than others. Impact studies of sustainable agriculture for instance can show beneficial impacts for supplying farmers in terms of economic indicators such as productivity enhancement, but more often problems in terms of compliance with worker rights and community rights. Within the category of labour rules, worker rights-oriented rules for companies and economic rights involving wage levels are much less likely to be complied with than rules emphasizing management systems and factory safety. Additionally, in many studies of initiatives targeting intensive manufacturing supply chains, there is a question of whether beneficial effects of regulations are sustainable over time, and not done away with by changes in management, changes in buying companies, or even closure of production sites (Locke 2013; Amengual and Kuruvilla, 2020). The volatility of supply chain organization here seems to run against the ambitions of regulatory initiatives promoting responsible conduct.

In addition, across various sectors, studies show a lack of economic incentives for supplying producing firms to seriously engage with the rules to which they are made subject by buying firms. This is because supplying firms fail to profit from complying with sustainability, worker and human rights rules, or even bear extra costs of implementing rules (Ponte, 2019). Faced with a buying firm that may both demand lower prices and compliance with responsible business conduct regulations at the same time, producing suppliers often conclude that buying firms are not serious about the latter and engage in window dressing or obfuscation (cf. Serdijn et al, 2020). Faced with a buying firm that is serious about business

conduct regulations, but keeps the proceedings of selling “fairly” produced goods to the final market itself, producing suppliers are encouraged to disengage from producing for global supply chains (Ponte, 2019).

More generally, studies point out that regulatory initiatives for global supply chains are too limited in scope anyway because of their focus on sites of economic activity integrated into supply chains. This prevents successfully addressing broader social, political, and environmental issues that evade such sites of economic activity geographically (Auld et al, 2015). Improving environmental sustainability on a farm, or human rights in a factory, maybe for a short while, may then be an accomplishment that does not structurally solve underlying societal problems.

While these voluntary regulatory initiatives vary with regard to their inclusiveness of governance, there is no convincing evidence across the board that multi-stakeholder governed initiatives perform consistently better than business-only governed initiatives when it comes to the structural compliance issues mentioned here. Inclusiveness of governance of these voluntary regulatory initiatives seems to be a virtue in and of itself that sometimes enhances legitimacy of the organization (Dingwerth and Pattberg, 2009; Schleifer, 2019; Schleifer et al, 2020; Schouten and Glasbergen, 2015) but not evidently its effectiveness or problem-solving capacity.

A final type of voluntary nongovernmental sponsored regulation of global supply chain, is highlighted in light green in Table 1, and will be discussed further below. It involves attempts to steer responsible business behaviour across existing regulatory instruments, focusing on coordination problems arising from a multiplicity of regulatory initiatives, and is referred to as meta-governance initiatives (Derkx and Glasbergen, 2014; Pekdemir and Glasbergen, 2016).

Multiplicity in Voluntary Regulatory Initiatives

So far, we have discussed the emergence of different types of regulatory initiatives separately. But it is clear to the reader that the proliferation of initiatives and types of initiatives is consequential for the quality of business regulation as well, and that initiatives are likely to interact and therefore have interactive effects on various actors in the global supply chain. What is the effect of a multiplicity of regulatory initiatives targeting global supply chains? This section discusses diagnoses of nongovernmental regulatory multiplicity and presents theories warning against or speaking in favour of multiplicity and heterogeneity.

Scholarship initially focused in particular on multiple voluntary, nongovernmental actor-driven regulatory initiatives focusing on the same global supply chains and issue areas (Auld, 2014; Sabel et al, 2000; Cashore et al, 2004), and studies listed possible problems that could result. If producing firms would supply to different buyers that participated in different voluntary regulatory initiatives that addressed environmental sustainability and/or human rights criteria (a phenomenon occurring in many global supply chains, including coffee, cocoa, tea, forested goods, and apparel), producing firms would for instance a) have to meet differently formulated standards; b) have to contribute financially to multiple monitoring and assurance systems; c) and have to reserve precious production time to undergo multiple audits. Coordination problems, incongruence, and confusion would ensue, lowering effectiveness of each regulatory initiative involved, and disincentivizing producing firms and buying firms from engaging with voluntary regulations (Fransen, 2015; Schleifer et al, 2019).

More generally, observers worried about a possible race to the bottom effect occurring, where with multiple regulatory initiatives addressing the same issue area and global supply chain, the regulators would be incentivized to make rules laxer, easier or programs cheaper

in order to attract more firms. Regulatory standards could then drop below a threshold where compliance would no longer mean significant improvements in environmental sustainability, human rights, or working conditions (Fransen, 2011).

However, multiplicity of regulatory initiatives does not necessarily have to lead to competition, overlap, and incongruence. After all, various regulatory initiatives can focus on a similar sector, but on different stages of a supply chain, on different categories of producers, on different production regions, and different sustainability issues. An IT-electronics firm could for instance be participating in one initiative regulating working conditions in laptop assembly and with another initiative focused on human rights in mining raw materials for chips. Similarly, one regulatory initiative may focus on human rights in cotton production, while another focuses on working conditions in apparel production. In terms of focus on supplier types, mining- or agriculture oriented regulatory initiatives may exclusively deal with either smallholder or large producers in an industry's supply chain. And regulatory initiatives may choose to limit their geographic focus or the issue area of responsible business conduct. Such multiplicity among initiatives may be lamented by firms who would prefer a "one stop shop" for their responsible business conduct agenda and now have to participate in various initiatives at the same time. But in terms of addressing responsible conduct in global supply chains, the initiatives are not in each other's way.

Fransen et al (2019) have for this reason examined the state of regulatory multiplicity across a range of product groups, describing variation in regulatory multiplicity with some sectors being very crowded, in ways that also signal coordination and transaction problems for regulators and firms alike (such as apparel, cocoa, and coffee), and other sectors less so (including chemicals and carpets) (also see Fiorini et al 2019).

Moreover, the debate about the actual consequences of multiplicity of nongovernmental voluntary regulatory initiatives is not fully settled. Various authors claim that multiplicity could have beneficial consequences for regulatory effectiveness (Glasbergen, 2011; Overdeest, 2010; Overdeest & Zeitlin, 2014). Competition may lead to race-to-the-top dynamics and regulatory innovation and divisions of labour among regulators through experimentation. Overlap among regulatory initiatives, although possibly burdensome for those subject to standardization, may in some cases enhance the effectiveness of standards in terms of raising compliance levels of producers (Dietz et al, 2021).

The emergence of nongovernmental voluntary meta-governance initiatives seeking to address coordination problems, transaction problems and other challenges faced by a multiplicity of nongovernmental voluntary initiatives, is indicative of the degree to which regulators and firms themselves consider multiplicity of regulatory initiatives problematic. The most famous meta-governor in the sustainability field nowadays is the ISEAL Alliance, which functions as a global interest association for multi-stakeholder governed voluntary regulators of global supply chains that use third-party verification systems (Loconto and Fueilleux, 2013). Next to this, in particular the global retail association Consumer Goods Forum (CGF) has spawned initiatives to coordinate and align voluntary regulations addressing their supply chains. And there have been various commodity-specific meta-governance initiatives, for instance focused on tea, cocoa, coffee, and seafood (Fransen, 2015). Note how a few global supply chains nowadays have multiple meta-governors addressing problems emerging from regulatory multiplicity—an ironic development that increases complexity.

Towards Governmental and Mandatory Regulatory Activities for Supply Chains

While voluntary regulatory initiatives described above proliferated, there have been various actors promoting government- or international organization-based mandatory rules for global supply chains as well. Some of these actors have never been (fully) convinced of the promise of voluntary regulatory initiatives in the first place (Kinderman, 2016). Alternatively, actors have been disappointed with the fruits of voluntary regulatory instruments towards responsible business conduct, or they feel that voluntary regulations should in some way be complemented with hard-law interventions in order to become more effective.

First, it is apparent that the logic that voluntary regulatory supply chain-oriented instruments could stand-in for a state that is itself at present incapable of enforcing social and environmental regulations, does not seem to work for many sectors and sites of productive activity. This is because of mentioned scope limitations of supply-chain oriented regulations, but also because of lack of uptake of such regulations across the industry, and countervailing activities from various other nongovernmental actors with interests other than promotion of environmental sustainability, worker, community, and human rights.

Second, in some supply-chain oriented regulatory initiatives, rules for responsible business conduct actually go against government policies of exporting countries. This is for instance when they seek to advance rights of individuals, associations, or communities that experience legally or extra-legally repression by the state. Here too, private voluntary regulations then tend to fail (Bartley, 2018; Kocer and Fransen, 2009).

As a result, there have been efforts to design binding regulations for business activities in global supply chains.

One of the ways of doing so has been so-called legality approaches (Bartley, 2014; 2018): making responsible conduct in the supply chain conditional for access to a final market for suppliers. The US Lacey Act, the addendum about trade of conflict minerals in the Dodd/Frank Act and the European Union Forest Legality Enforcement and Governance Voluntary Partnership Agreements (FLEGT VPAs) program are known examples of discrimination among products for entry into European and American markets using human rights and/or environmental sustainability criteria. So far, legality has been introduced for particular subsets of responsible business conduct issues, such as sourcing illegally logged wood, or sourcing diamonds from the Democratic Republic of the Congo.

Discriminating for entry into markets has always been a thorny issue given existing international trade rules. Experimentation with discrimination among products on the basis of “fairness” and “sustainability” criteria has been considered legally allowed under certain exceptions. These include situations in which exporting countries voluntarily agree to collaborate in a process of discrimination according to responsible business criteria (as in the case of the FLEGT VPAs). With the current governance crisis of the World Trade Organization (WTO) and its courts of dispute settlement and appeal, it is likely that more room for experimentation of these kinds of legislation will appear.

In addition, and often intermixed with legality approaches, government initiatives have proliferated that use due diligence requirements for responsible business conduct in global supply chains. Some of these legislations are issue-specific (e.g., the UK Modern Slavery Act and the Dutch Child Labour Act), some are more generally addressing responsible conduct (e.g., the French Vigilance Law).

The kick-off to proliferation of due diligence requirements in various countries have been the

soft-law Guiding Principles on Business and Human Rights of the United Nations Human Rights Council (often abbreviated as UNGPs) established in 2006. This is because the UNGPs do not only describe the responsibilities of business in protecting human rights, but also target governments in their role as human rights protectors. Part of this responsibility is taking care of proper business regulation, and all signatories of the UN are therefore indirectly encouraged to think about governance of market actor behaviour that may have some bearing on human rights issues at home—or abroad. As a result, the due diligence requirements, described in the UNGPs as the main activities expected from business in terms of human rights, are increasingly also used in new government legislation targeting multinationals that these states host. Initiatives towards new legislation inspired by the UNGPs are on their way or have been concluded in the UK, France, Germany, Switzerland, the Netherlands, the US, Canada, and Australia. The OECD follows the UNGPs example and creates both sector-specific and generic due diligence requirements for multinational business operations. The EU institutions currently prepare generic due diligence regulation for the European market.

Due diligence regulations slightly alter the logic of responsible business conduct regulation. Corporate codes of conduct, model codes, industry codes, and multi-stakeholder standards all prescribe what good corporate behaviour looks like, and develop the expectation that businesses need to comply with this, thereby mimicking government laws of for example environment and labour. Due diligence, in contrast, prescribes a corporate attempt to do the utmost to prevent a bad situation from happening, and the utmost to remedy bad situations that still arise. Compliance with due diligence regulation for global supply chains is therefore something different than compliance with a labour law or an environmental law, that lays out corporate obligations in explicit labour and environmental terms. Due diligence compliance involves having effective systems in place for doing risk analysis and responses to detected risks.

Due diligence regulations may vary in their obligations on buying businesses: some legislation requires firm disclosure of information; other regulations require activities to implement actions towards remedying wrongdoings in the supply chain. Some legislations are a mix of soft and hard law, offering both encouragements and invitations to some part of responsible business conduct, and a few hard requirements for others. Some legislations will spell out what is the norm for responsible business conduct against which due diligence activities will be monitored, others will leave room for interpretation to firms on norms (LeBaron and Rühmkorf, 2017). In the literature, scholars are on the fence about whether to categorize some of the legislations that mostly require or encourage corporate disclosure. Some prefer to call these legislations transparency regulation, seeking to distinguish it from other legislation that also identifies firms' obligations to act on wrongdoings (Ford and Nolan, 2020).

With most due diligence legislations in development or of recent build, most studies investigating their effects are preliminary, based on small sets of (mostly European) business cases. Studies so far suggest that firms develop more generic rather than specific understandings of their human rights obligations, often are unspecific in their risk analysis and in their approach towards stakeholder consultation, and fail to describe their implementation activities (Shift, 2019; Ibanez et al, 2020). Within most samples, a small majority of firms subject to regulation is reporting on work being done as a response to legislation, such as risk analyses and supply chain inventories. LeBaron and Rühmkorf (2017) moreover compare more stringent due diligence legislation with liability implications for non-compliant companies to legislations without such liabilities and find for a small sample that the former spurs more corporate policy and reporting activity.

A final category of hard law binding rules recently emerging through the state come from court cases that settle on business obligation to protect human rights or pursue environmental sustainability with regard to suppliers across the borders of the jurisdiction in which the court case is taking place (Bright et al 2020).

Public and Private Regulations Interacting: The Case for a Smart Mix

With the development of (inter-)governmental, more hard-law oriented instruments governing global supply chains, the discussion on multiplicity of regulations gains a new dimension. Because of the assumed hierarchical position of governmental regulation over nongovernmental regulations, theoretical expectations have emerged of how governmental and mandatory regulations and voluntary regulations on the other would interact.

The term “smart mix”, referring to the productive combination of various regulatory types to advance human rights and environmental sustainability has become a popular catch phrase describing expectations scholars and policymakers have of the interactive effects of public and private regulations.

As far as we have been able to trace, the first time the “smart mix” concept was used to refer to policy and regulation, was in public policy-oriented debates (Gunningham, Grabosky and Sinclair, 1998). The authors argued that rather than looking at a single regulatory instrument and its possible effects in addressing a societal problem, it would make more sense to look at the interactive effect of various policy instruments. Gunningham and colleagues argued against the “silver bullet” notion of one specific approach leading to the best results, instead arguing that various instruments in interactions could boost effectiveness, where some instruments could resemble more command-and-control regulation, while others would build on economic incentives, market dynamics, and/or co-regulation and partnership structures. Moreover, Gunningham et al also emphasized that different levels of policymaking (urban, national, international) may be interactively involved in creating smart mixes. The authors thereby sought to widen the perspective of thinking about effective policy across state departments, levels of public policymaking, and policy instruments. In particular inspirational for those following up on this work seem to have been the authors’ discussion of interactions between governmental policy instruments and business self-regulatory activities.

These interactions would inspire the consequent use of the smart mix concept in discussions about regulations for global supply chains, with an emphasis on the interplay between voluntary measures by market players and governmental interventions.

John Gerrard Ruggie, the architect of the UNGPs, used the “smart mix” language in his 2011 piece claiming that “States should not assume that businesses invariably prefer, or benefit from, State inaction, and they should consider a Smart Mix of measures—national and international, mandatory and voluntary—to foster business respect for human rights” (Ruggie, 2011: 5).

The idea behind smart mixes when addressing regulations for global supply chains, is that both voluntary nongovernmental and public regulatory instruments have inherent strengths and weaknesses – and interactions among these instruments can compensate for these, and lead to better regulatory performance overall. See Table 2 for perceived weaknesses of nongovernmental initiatives, possibly compensated for by governmental instruments.

As discussed above, some voluntary nongovernmental regulatory initiatives have been lacking in effectiveness because of uneven uptake by business. Governments can come in here through various policy instruments, for instance by providing more information about desirability of uptake, offering capability building and subsidies towards uptake, and then sanctioning non-uptake.

Other voluntary nongovernmental regulatory initiatives may have developed too weak standards, allowing business easy compliance without credible change. Here governments can call for higher standards, through information, economic incentives, or law (Maihold et al, 2021). One model is to establish the floor level of what a standard needs to look like and

that good voluntary regulatory initiatives cannot fall below. Another option is to reward those designing or adopting the highest among standards or declare what are elements of the gold standard (such as for example design of wage and income levels in labour standards, or reduction in emissions for environmental standards). Governments in this manner can also address regulatory multiplicity and reduce complexity and coordination problems that result from it, as nongovernmental regulators would be invited or pressured to converge and adapt.

Finally, governments can use all kinds of instruments to boost business compliance with private voluntary regulatory initiatives, using incentives, information provision, and assistance in capability building.

Table 2: Government Interventions Creating Smart Mixes by Compensating for Perceived Weaknesses of Private Regulations of Supply Chains.

	Uneven uptake	Weak standards	Standard multiplicity	Low compliance
Information provision	Better information signals on benefits uptake	Information on benefits higher standards	Information on benefits convergence	Better information signals on benefits compliance
Capability building	Training, skills development	Training, skills development	Training, skills development	Training, skills development
Economic incentives	Subsidies	Subsidies		Subsidies
Legal	Require uptake, penalties	Require floor level standard; require elements of high standard		Require level of compliance, penalties

Note: Government interventions adapted from Steurer (2010)

Conversely, look at Table 3, portraying perceived weaknesses of government instruments towards global supply chains, possibly compensated for by private initiatives. State regulations may come with their own weaknesses when addressing businesses and their supply chains on their own. They may be slow to emerge, lacking the implementation systems across jurisdictions, may not be in sync with business realities on the ground, lack flexibility and adaptability when circumstances change, create administrative burdens, and lack responsiveness to various actors affected by supply chains and their regulation. It is here that nongovernmental private regulatory initiatives may boast decades of experience in rolling systems out, more dynamism in designing, adopting, and revising policies, being in the know about business tools for and inherent dilemmas in managing global supply chains and their fit with regulatory requirements. Moreover, multistakeholder governed private regulatory initiatives may have more of an ear on the ground in terms of how new designs for regulating supply chains are appreciated by various interest groups.

Table 3: Private Regulatory Initiatives Compensating for Perceived Weaknesses of Governments Regulating Businesses in Supply Chains

Government regulation	Nongovernmental regulation
Slow	Quick to negotiate and organize
Lacking implementation and enforcement	Monitoring and assurance systems in place
Inflexibility	Standards adaptable to changing demands
Administrative burdens	Monitoring and assurance adapted to firm's management systems
Lack of responsiveness	Multistakeholder consultation

Smart mix studies emphasize that when it comes to policy interactions, smart mixes are not a case of “the more, the merrier”—too many instruments co-existing will not be effective (Van Erp et al, 2019). Next to this, not every interaction between hard-law and voluntary measures is necessarily smart. Misfits between instruments can and do occur, for instance when instruments send contradictory or incongruent signals to businesses about compliance. Moreover, smart mixes most of the time do not appear by grand design, but often evolve over time, with only in later stages conscious and strategic actions of regulators to create a good fit between the instruments out there (Van Erp et al, 2019; cf. Sabel and Zeitlin, 2008). This suggests limits to the agency that policymakers might have, and instead encourages sensitivity to the regulatory architecture as it emerges, and how agents may change the course of such evolution through effective re-building and re-designing.

Academic literature offers a set of ideas on how particular (inter-)governmental regulations and nongovernmental regulatory initiatives indeed may interact “smartly” to improve effectiveness of regulation.

For legality approaches to governing global supply chains, scholars have used the focus of most of these instruments on specific subsets of sustainability and human rights problems to argue for complementary functions between governmental mandatory and voluntary regulations. Successful legality can lay a mandatory foundation for responsible behaviour by firms that addresses a subset of sustainability problems, on top of which nongovernmental regulatory initiatives could expand to promote human rights and sustainable development using a broader set of criteria (Cashore and Stone 2012). A certificate such as provided by Forest Stewardship Council could then be adopted by firms seeking to expand sustainable forest management, while US and EU legality regulation would first as a minimum weed out illegal logging. Weeding out such practices would also make becoming compliant with voluntary regulations more attractive for less affluent producers, given how legality could rule out competition on the basis of unsustainable production in world markets and therefore raise prices.

Yet others argue that the establishment of (inter-)governmental rules would create an “orchestration” role for these public regulators as a form of a smart mix. Voluntary private regulatory initiatives would then still set rules and provide for monitoring and assurance, and this assurance would then be considered as a signal by public regulators that businesses were compliant with publicly set rules about responsible business conduct (Abbott, 2012). An example of this has been EU biofuel regulation based on private biofuel sustain-

ability regulations (Schleifer, 2013). The EU's recognition of these nongovernmental systems assures support from the industry while saving EU and its member states the hassle of setting up a costly compliance system. For private biofuel regulators, EU regulation means an expansion of their activities, probably including uptake of its regulations by businesses that would otherwise not engage with these.

Orchestration of this type can also be mimicked in the context of recently adopted or evolving human rights and sustainability due diligence regulation by the EU, or by governments in the UK, Germany, France, and elsewhere. Here, compliance with nongovernmental rules may function as a signal to public regulators that firms have done (a part of) their due diligence with regard to detecting risks in their supply chain, doing their best to prevent breaches and correcting them where grievances were voiced. To this end, most private regulatory initiatives should probably update their approaches, and create more emphasis on risk analysis and effective grievance mechanisms, in order to fit their voluntary regulatory approaches to mandatory requirements to due diligence. There are indeed various regulatory initiatives in the process of revising their approaches to this end (Fransen, 2018; Fransen et al, 2019).

Criticizing Smart Mixes

One can also criticize the smart mix concept's contribution to understanding interactions between public and private regulations for global supply chains, in particular in the context of the current wave of due diligence legislation.

The smart mix literature is quite optimistic about the ability of rules and policies (whether private or public) to lead to progressive societal change—maybe a bit too optimistic. As far as the literature identifies conflicts of interest among parties involved in human rights and environmental sustainability issues, smart mix proponents propose that the right combination of regulations can alter incentives or viewpoints of key actors, or encourage consensus, so that the activities of business, societal, and governmental actors become more in line with the objectives of regulations. Similarly, the literature does not deal extensively with the possibility that power differentials among actors could be structural obstacles to smart mixes. Here too, the assumption appears to be that powerful (business, government, societal) actors could be affected in such a way by smart mixes that a) they will not oppose the design of smart mixes; b) their substantial disagreement with regulations or interactions of regulations will not adversely affect the regulation's effects; or c) their power will be turned towards achievement of the regulation's objective.

Various studies call this assumption into question, with most empirical attention going to business political activities opposing the public regulations that would be included in a smart mix (Kinderman, 2016; LeBaron and Rühmkorf, 2019; Curley and Lally, 2022).

Next to businesses, private regulators themselves, or private regulation as an increasingly prevalent phenomenon, may be a political force hindering the emergence of legislations that proponents would call "smart", in light of public-private complementarity. Private-public interactions can, like private regulatory interactions, take the shape of turf battles. Alternatively, the prevalence of private regulation may decrease citizen appetite for government legislation, in spite of private regulatory initiative's perceived failures (Burgoon and Fransen, 2017; Kolcava et al, 2021).

Ford and Nolan (2020) find that what regulations require in terms of corporate due diligence activities is currently a poor fit with most voluntary regulatory initiatives, in particular because of demands for transparency in legislation and the relatively non-transparent use of social audits in voluntary regulatory initiatives. Bartley (2014) similarly envisions the emergence of service-firm oriented initiatives that may lead forested goods-importing

firms to ignore or leave multi-stakeholder governed initiatives. So while hard law may spur new private-public regulatory interactions, these authors indicate that new legislation may sideline existing private regulatory initiatives.

Opposition to rules may be one way to undercut smart mix potential. Another way may be half-hearted participation in governmental initiatives by various key actors, symbolic compliance by actors not fully sold on the mix, and opportunism. In the field of deforestation policies, Rutt et al (2018) for instance point at lack of progress in implementation, speculating that government leaders repeated their enduring commitment to the FLEGT VPAs in spite of lack of progress and undesirable environmental outcomes, in an effort to attract or appease major developmental assistance donors.

A final way in which conflicting interests adversely influence public-private complementarity is when private regulatory initiatives deemed less effective for their role, for instance because of low standards and lax policies, are allowed entrance to the mix anyhow because of political pressure, watering down the effectiveness of the mix as a whole, as Schleifer's (2013) analysis of the EU's biofuel governance scheme indicates.

In addition, perhaps as a consequence of the migration of its key concept from public policy studies, the smart mix literature underemphasizes the global scope of regulations, the inequalities between world regions and how this factors into power relations between states and firms in a global economy.

To start off with relations between states, smart mix discussions are relatively silent on the fact that regulations (whether public or private) for supply chains apply across borders and address actors and activities spanning the borders of sovereign states. Mandatory due diligence targets buying firms in global value chains, requiring interventions of those firms with other firms. Countries with producers supplying to these buying firms, or to intermediary firms, suddenly find themselves within the scope of non-home government-initiated, extra-jurisdictional regulation. Governments of countries supplying to global value chains may not appreciate their firms and citizens being made subject to other country's regulations within their own jurisdictions.

Pushback to such extra-jurisdictional interventions may take the form of countries referring to international trade law, interpreting these regulations as unlawful barriers to trade and seeking to use dispute settlement mechanisms to release their home businesses from these restrictions. Such efforts may be successful. But more broadly, the politics behind these moves should be recognised as a desire on the part of states to protect sovereignty and policy autonomy. States ambitious to protect their sovereignty have an impulse to derail or frustrate efforts at extra-jurisdictional regulation (Bartley, 2014).

What is more, most of the regulations targeting firms for due diligence, currently are developed within Europe, North America, and Australia, but the application in global supply chains means that they address suppliers from Asia, Africa, and Latin America. International Relations literature has recently paid stronger attention to the many ways in which hierarchies among states persist in the international order, with states from Global South continents finding themselves somehow made subordinate in global governance, in formal and informal ways (Zarakol, 2017). It also describes how governments from Asia, Latin America, and Africa respond to such hierarchies, which some scholars (and policymakers!) would consider the continuation of colonial domination in a different guise. Scholars therefore study defection from global governance organizations, derailing of governance, and development of alternative governance organizations by Global South governments, in an effort to improve their ability to shape international rules and policy agendas (Deitelhoff, 2021). This is an additional reason to consider tension, contention, and conflict in the making of smart mixes in the Global North, that target actors in the Global South.

Another significant issue with the smart mix involves its lack of sensitivity to global supply chains dynamics. While smart mix concept users are well aware that the public-private regulatory complementarities theorized address global supply chains, a lot of the conversation about how markets are altered by smart mixes does not effectively deal with the organizational fragmentation and geographic dispersion of the economic activities covered by the regulation, and the power dynamics involved in global trade and the global organization of production.

This is problematic, because smart mix approaches are then in danger of assuming that firms in home countries as buyers have the power to effectively act in their supply chains, making their suppliers do things as a result of regulatory requirements. This may not work that well in reality.

The assumed “lead firm” status in a buyer-driven chain does not always translate into effective leverage over suppliers in the case of due diligence regulations. Take the case of apparel. While the chain itself may deserve the analytical label of “buyer-driven”, with power indeed asymmetrically in favour of retailers at large, a European retail firm, whether large or medium sized, can often not force a supplier at which it has only placed a small volume order, to do things it would not otherwise do. Lead firm power does not equate with successful leverage over each supplier relevant for complying with regulation.

Moreover, as global value chain scholarship points out, the firms targeted by due diligence regulation as well as private regulatory initiatives are often not powerful lead firms in buyer-driven chains in the first place. In various sectors, suppliers, and intermediary actors such as traders, that are expected to comply with regulations that the buying firm is subject to, are theorized to have significant power themselves. Think here of for instance traders in palm oil or cocoa chains, turnkey suppliers in ICT electronics chains, and mass full package suppliers for athletic footwear (Grabs and Carodenuto, 2021; Merk, 2014; Sturgeon, 1999).

In addition, while due diligence regulation emerging mostly in Northern countries, for many commodities and goods, Northern markets are decreasing in importance for many Southern export countries, with domestic and South-South trade gaining in significance (Horner and Nadvi, 2018). It may therefore be that the relative power position of Northern buying firms targeted by smart mixes is decreasing relatively to buyers from markets that do not have private regulations or legislations for supply chains in place (cf. Schleifer, 2016; Schleifer, 2017; Schleifer and Sun, 2018).

A major concern in global value chains is who captures what value, and for many sectors the observation has been that lead firms from the North were profiting more relative to other types of firms. Inequality in value capture defines many chains, according to analysts, and on top of this come regulatory activities for compliance with private and public regulators which, as studies show, are raising costs for poorer producers as well (Schleifer et al 2019), or may lead buying firms rather than supplying firms to profit (Ponte, 2019).

Finally, also in global value chains, the colonial past colours the present, rendering the interactions between economic actors in compliance with Northern private regulators and legislators possibly contentious. Many interactions between Northern and Southern economic actors are between former colonizing country residents, and former colonized country residents. Moreover, a significant part of the structure of trade in cocoa, coffee, palm oil, tea and a few other commodities has historically been shaped by colonial entrepreneurs.

Inspired by some of these criticisms, the smart mix-concept is therefore in the process of being remoulded to involve buyer-supplier and North-South concerns next to public-private interactions, a trend to which we now turn.

Towards “Smart Mix 2.0”, “Second Generation Smart Mix”: Public and Private, North and South

A significant amount of environmental sustainability and human rights regulations for supplying producers in Asia, Africa, and Latin America since the 2000s has been developed by actors from these regions. These regulators focus their efforts on industries in exclusively their home countries, and in their mission and vision emphasize the perspective of suppliers as key to informing the regulatory approach. These regulations vary along the dimensions of nongovernmental to governmental in terms of actors involved and policy instrument developed. Some initiatives involve various stakeholder groups from such countries, others focus more exclusively on business or government involvement. Some initiatives are exclusively designed and governed by groups from these countries, while others allow for input from OECD markets (Schouten and Bitzer, 2015; Wijaja and Glasbergen, 2016; Bitzer and Marazzi, 2021; Langford, 2019; Langford and Fransen, 2022).

Examples include the Indonesia Sustainable Palm Oil standard (ISPO), the Chinese CSC9000T standard for manufacturing sectors, the Indonesian tea standard Lestari, the Indian tea standard Trustea, the Brazilian Soja Plus standard, and the South African wine code WIETA. ISPO is at the government controlled and mandatory end of the scale. Trustea is an example of a voluntary standard with less government involvement. The Indonesian and Brazilian initiatives more or less exclude input from outside their country borders, while Trustea, Lestari and WIETA allow input from foreign (mostly European) market representatives. Some of these initiatives focus on products that are not destined for export to OECD markets, but instead to domestic or regional markets. Others regulate products for all market destinations.

Scholarship on these so-called “Southern standards” emphasizes that these supplier-oriented regulations have qualities that distinguish them from regulations designed by/with/for buying firms from Europe and North America.

First, these initiatives reflect that *what counts as environmentally sustainable, socially fair and just should be context-sensitive*, and building a regulatory initiative applying on a national level allows for such context-sensitiveness. This means taking into account levels of economic development, historical legacies of the economy and the state, the political climate and culture, and the design of laws. Regulations designed by or for buying firms from outside these countries may too easily adopt a one-size-fits-all approach across countries and world regions, leading to ineffectiveness.

Second, Southern standards call attention to *cost aspects of regulation and poverty as a source for lack of uptake of regulations*, or lack of compliance with regulations. Buyer-driven regulations are often expensive and require significant investments from supplying producers before they can be audited for compliance. As discussed above, there are also concerns that these investments do not lead to returns in terms of higher prices for supplied products. Supplier-driven regulations may mind costs and be sensitive to capability problems.

Third, Southern standards show that *sense of ownership and sovereignty matters in rule-making*—the reception and recognition of rules may be more favourable if firms themselves see that rules are from their own place of the world and are designed by or supported by institutions on the domestic level that they already consider legitimate and authoritative. Southern standard governors bank on this by emphasizing the local grounding, and often, their relation to domestic government (Langford and Fransen, 2022).

Fourth, Southern standards teach us *that not all economic production with environmental sustainability and human rights implications is Northern-market bound*. Domestic supply chains and regional supply chains increasingly matter for commodities like tea, palm oil, and forest products.

Fifth, Southern standards illustrate that *not all global supply chains are governed by Northern-based lead firms, and/or even if that is the case, that other firms have significant decision-making power* when it comes to designing rules for environmental sustainability and human

rights. Indeed, some of the Southern standards focus on sectors that are not buyer-driven in orientation (e.g., palm oil). Others do focus on traditionally buyer-driven chains, but the reorientation of suppliers to markets beyond the OECD may in the future lessen the power of at least Northern buying firms (Nadvi and Horner, 2018).

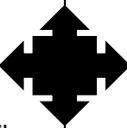
Next to standard-setting in countries predominantly supplying to global supply chains, various governments have also contributed to jurisdictional and landscape programs in the producer countries.¹ Going beyond individual supply chains, jurisdictional programs refer to place-based, government-led multistakeholder processes with jurisdiction-wide sustainability goals (Hovani et al., 2018). The objective of these programs is to achieve “jurisdictional sustainability”, which is the “successful transition to sustainable development – encompassing social, environmental, and economic dimensions – across an entire political geography” (Earth Innovation Institute, 2018: 1). The point of landscape or jurisdictional programs is to *include broader geographic areas in improvement processes* and not only the firms integrated in global supply chains. These programs therefore broaden the scope of multistakeholder governance to *include a range of more domestic-oriented economic and political actors* in production jurisdictions and landscapes supplying natural resources to global, regional, and domestic markets.

The observation that Southern standards and landscape\jurisdictional approaches embody these qualities of supplier-oriented regulation does of course not necessarily lead authors to conclude that they are more successful in tackling regulatory problems as policy instruments on their own. These regulations too can be ineffective in many ways, and disappoint their sponsors, participants, and beneficiaries. For instance if they set standards too low to create meaningful environmental and social impacts, or if they cater their policy approach too much to one interest group (business?), to the detriment of others (local communities? workers?). But, more broadly, from a smart-mix perspective, they indicate that smartness in a regulatory mix is about more than minding the public-private and voluntary-mandatory divide. Bringing in supplier-driven and buyer-driven perspectives, and in geographic terms, perspectives from the Global South and North, could also make regulatory mixes smarter.

See Table 4, where we distinguish between both private and public divides, as the original concern of smart mix regulations for global supply chain and complement this with an emphasis on demand- versus supply side-oriented initiatives. A smart mix 2.0 would create complementarities across the two dimensions, linking sectors and geographies.

Table 4: Dimensions of a Smart Mix 2.0

Sector/geography	Demand side	Supply side
Public	Public demand side: e.g., supply chain regulation	Public supply side: e.g., national certification schemes, jurisdictional programs
Private	Private demand side: e.g., Buyer or NGO-driven voluntary standards	Private demand side: e.g., producer-driven standards



¹ In the context of this study, the terms jurisdictional and landscape programs are used interchangeably (for details see Earth Innovation Institute, 2018).

By explicitly bringing in supply side-sponsored policy instruments, smart mix 2.0 approaches are arguably more responsive to:

- Local contexts in the design of regulations
- economic equity issues, in terms of the costs of regulation as a barrier to participation and compliance, and what buyer behaviour towards suppliers can lessen their ability to comply with regulations
- inclusiveness on a North-South dimension, offering more opportunities for Southern interests and voices to speak to regulations
- sovereignty of the various parties involved in a smart mix
- variations in the division of economic power among actors in supply chains

Applying this line of thinking to the interaction between in particular due diligence-oriented regulatory instruments from Europe and North America on the one hand, and a range of other regulations, that includes supplier-driven regulations from Southern origin, on the other, we can identify some key concerns for the evolution of smart mixes 2.0 building towards due diligence.

First, with some due diligence legislation being implicit about what counts as responsible business conduct in terms of social, human rights, and environmental criteria, and yet other being more explicit, the question becomes whether contemporary and future supplier-oriented regulatory initiatives in terms of their levels of standards can fit with such legislation, and then be used as due diligence instruments. Can due diligence legislators appreciate the context-sensitivity argument to supplier standards, if it means having firms being compliant with a lower standard than the one considered by Northern legislators?

Second, various due diligence laws explicitly require or encourage stakeholder consultation. What counts as such, and may stakeholder consultation translate well from Northern to Southern societies and markets? Supplier-driven initiatives at face value are a great instrument to boost the inclusion of Southern stakeholder voices. But, at the same time, Langford and Franssen (2022) note that “multi-stakeholderism” is prescribed often as a universal value for organizing regulations, but in particular Northern expectations about societal interest representation may get considerable push back from Southern business and government representatives. Does that hamper the evolution of a smart mix?

Third, due diligence laws require or encourage more transparency. Ford and Nolan (2020) already emphasize that such transparency is a challenge for existing buyer-driven nongovernmental voluntary regulatory initiatives relying on commercial social audits. It may be equally or all the more so for supplier-driven initiatives. Is transparency also something that can be contextually re-interpreted for Southern regulatory initiatives to fit with Northern due diligence instruments, or will only full disclosure work?

Finally, we would plea to also bear in mind “the bigger picture”: environmental sustainability, human rights, and working conditions are about more than regulations and actors in supply chains. There is a world of political and social interactions beyond these regulatory instruments that can affect the effectiveness of these mixes, in particular when it comes to interactions between state and citizens, firm managers and workers, firms and their direct environment, etc. It is worth bearing this in mind to remain a) modest about what smart mixes can and cannot do; and b) attentive to the fact that those policymakers contributing to smart mix solutions may also have ability to influence other spheres of society that may contribute to or hamper progress on environmental sustainability or human rights dimensions.

Harnessing Regulatory Heterogeneity for Sustainable Palm Oil? A Case Study

The second part of the paper complements the conceptual assessment through an illustrative case study. The focus of the analysis is the palm oil sector and supply chain, which has seen a proliferation of public, private, transnational, and domestic sustainability standards in recent years. Arguably, the industry constitutes an “extreme case”² of regulatory heterogeneity, which makes it particularly relevant for the purpose of this paper. For the analysis, 14 semi-structured interviews and background conversation with key informants were conducted between March and May 2022. The interviews targeted experts and stakeholders in the public and private sector as well as actors linked to the demand side and supply side of the palm oil supply chain (see Annex 1). In addition to the interviews, the analysis draws on policy documents, media reports, secondary literature, and grey literature. In the presentation of the case study, we proceed in three steps: First, we provide the reader with background information about the palm industry and the structure of its supply chain. Second, we map the increasing regulatory heterogeneity in this industry. Third, engaging with the concept of a Smart Mix 2.0 as developed above (see Table 4), we explore the political dimensions of integrating public and private and demand-side and supply-side measures in this supply chain setting.

Case Background

Palm oil is one of the world’s most highly traded agricultural commodities, and Indonesia and Malaysia are the biggest producers and exporters of the commodity, accounting for approximately 90% of global supply (analysis of data from FAOSTAT). The development of the modern industry took shape in Malaysia in the 1960s. Responding to declining rubber prices, the Malaysian government diversified its agriculture sector and invested in the expansion of its palm oil sector as part of an export-oriented development strategy. In the 1980s, the promotion of an industrial and privatized plantation sector also became a key government policy in Indonesia (Cramb & McCarthy, 2016).

² An extreme case is a case that takes on an extremely high value in the variable of interest. This makes extreme cases particularly relevant for illustrative purposes.

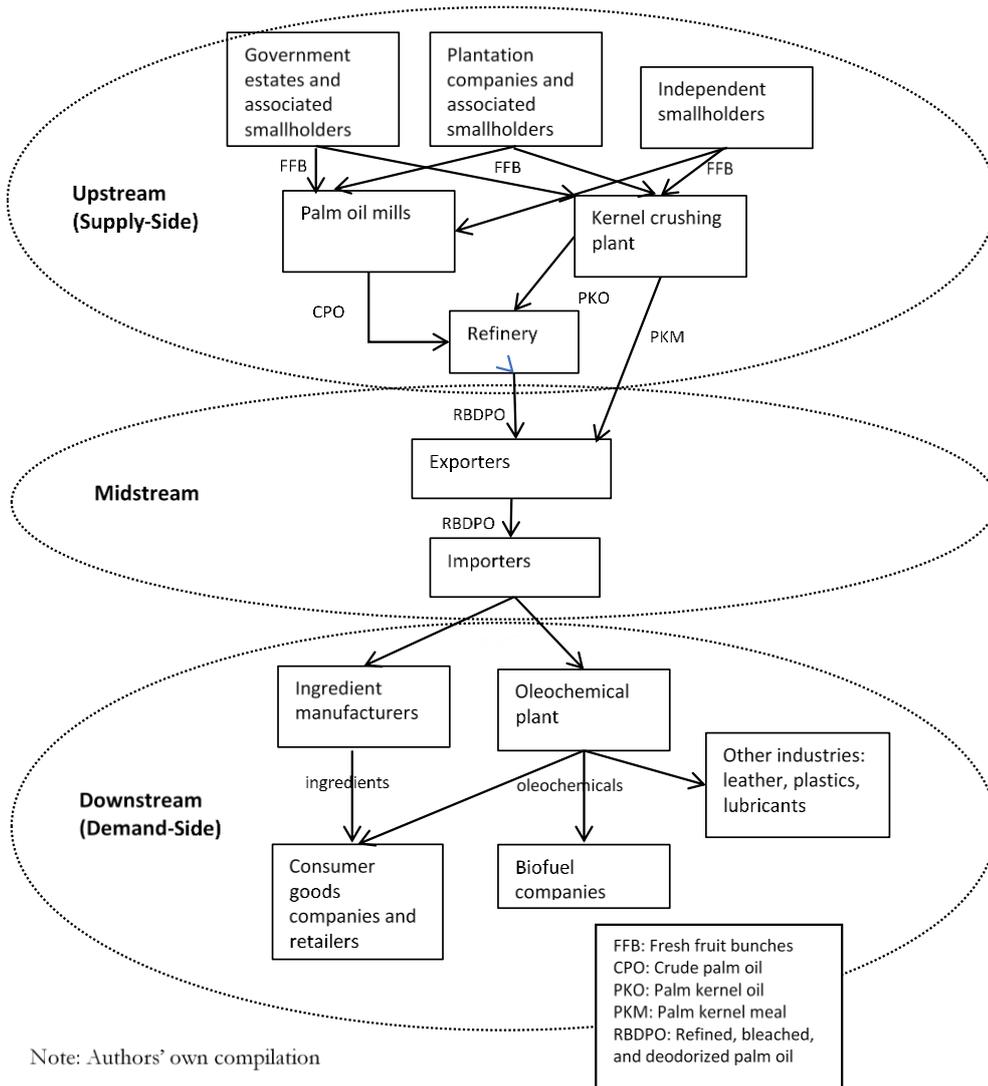
Until the 1980s, international agricultural trade was strongly restricted. However, in response to pressure from countries with large agricultural export industries, trade in agricultural goods was made an official agenda item of the Uruguay Round (1986 – 1993) of the General Agreement on Trade and Tariffs. This led to the inclusion of an Agreement on Agriculture in the treaties of the newly formed WTO, which was an important step in the globalization of agricultural supply chains. The liberalization of international trade in the sector was accompanied by domestic free trade policies. Many countries slashed their import and export tariffs for agricultural products, especially tropical commodities (Byerlee, Falcon, & Naylor, 2016: 8). The reduced trade barriers helped globalize these sectors by allowing retailers and consumer goods companies from around the world to source their agricultural raw materials more easily from foreign producers. In the 2000s, international trade in agriculture was further boosted by a commodity super cycle, which ushered in a period of sustained high global demand for natural resources, including agricultural commodities (Canuto, 2014). WTO statistics show how between 1990 and 2020 international agricultural trade more than tripled in value, from US\$442 billion to US\$1.492 trillion, with tropical commodities accounting for an important share. Generating a total of US\$32 billion in export value in 2020, palm oil has become one of the most valuable tropical export commodities (analysis of data from FAOSTAT).

The industry's globalization was accompanied by large-scale agricultural expansion in the producer countries. Between 2000 and 2020, oil palm cultivation in Indonesia alone increased from 2 million to 15 million hectares (+650%) (analysis from FAOSTAT). The development of industrial oil palm plantations has been a major driver of deforestation in the country (Austin, Schwantes, Gu, & Kasibhatla, 2019). For the island of Borneo, the Atlas of Deforestation of the Centre for International Forestry Research documents the scale of the forest loss (CIFOR, 2022). Deforestation also raises major livelihood and justice concerns. About 1.6 billion rural people, including many indigenous communities, live in and around forests. Deforestation thus threatens their economic wellbeing and traditions (Newton, Kinzer, Miller, Oldekop, & Agrawal, 2020).

The Global Palm Oil Supply Chain

The global palm oil supply chain can be divided into three main segments: an upstream segment (growers, processors, and refiners); a midstream segment (exporters and importers); and a downstream segment (ingredient manufacturers, consumer goods companies, retailers, and other industrial users) (see Figure 1). These segments are common to many primary commodity sectors. However, the palm oil value chain does not closely resemble the typical supply chain identified in the global value chain literature (see Gereffi, 1994, 1999; Gereffi, Humphrey, & Sturgeon, 2005). Instead of being buyer-driven or producer-driven, it is best described as trader-driven (Gibbon, 2001).

Figure 1: The Global Palm Oil Supply Chain (simplified)



The upstream end of the palm oil supply chain is characterized by three major modes of production: government estates, private plantation companies, and smallholdings. Historically, government estates were the most important mode of production. However, the modern industry is dominated by private plantation companies and smallholdings. In Indonesia, five large groups (PTPN III, Sinar Mas, Sime Darby, Astra Agro Lesarti, and Wilmar) control about two-thirds of the refining capacity. Otherwise, the production segment lacks vertical integration. Refiners source from a large number of palm oil mills (there are approximately 1,100 mills in Indonesia), which are controlled by 178 industrial groups (Trase, 2021: 2). In addition to privately owned estates, smallholder agriculture is an important mode of production. Indonesia has about 2 million small-scale oil palm farmers, with less than 25 hec-

tares of land (Jelsma & Schoneveld, 2016, 2). The Palm Oil Agribusiness Strategic Policy Institute estimates that the share of smallholder farms could reach 60% by 2030 (Saragih, 2017).

Occupying the midstream segment of the palm oil value chain, trading companies represent a crucial link connecting upstream producers to downstream buyers. Operating on very small profit margins, the business model of grain and oilseed traders has historically been based on bulk and economies of scale (Clapp, 2020: 24-57). As size is such an important factor for these companies, this segment of the palm oil supply chain is highly concentrated. In the case of Indonesia's palm oil trade, over 40% of the country's exports are handled by just four companies and their subsidiaries: Apical, Golden Agri-Resources, Musim Mas, and Wilmar (analysis of data from FAOSTAT; Trase, 2020).

On the downstream end, Europe remains an important end market for palm oil, although it is less important than in the past. In 2021, the EU-27 imported 6.6 million metric tons (MMT) of palm oil, making the bloc the third largest importer of the commodity, behind India (8.5 MMT) and China (7.1 MMT). Often overlooked by global supply chain analysts, Indonesia also has a large domestic market, using 15.5 MMT or 35% of total domestic production in 2021 (analysis of data from Index Mundi). In Europe, palm oil is used by a variety of industries, including the consumer goods and pharmaceutical industries. Moreover, palm oil-based oleochemicals are used in many industrial products and processes (e.g., plastics, lubricants, and leather). A significant proportion of global production is also processed into biodiesel. Until recently, the European Union used about half of its palm oil imports to this purpose, but recently a decision was made to phase out this practice by 2030 (Transport and Environment, 2020).

Increasing Regulatory Heterogeneity in the Palm Oil Supply Chain

Initially lagging behind other industries in the development of standards and implementation mechanisms for sustainable global supply chains (see World Bank, 2004), the agriculture sector has emerged as one of the most dynamic sites of transnational business governance in recent years. Particularly, the issue of commodity-driven deforestation in the tropics has received much attention from private, public, transnational, and domestic governance actors in recent years.

This section maps the regulatory heterogeneity in the palm oil industry. The scope of our mapping is delineated as follows. First, relating to the discussion in the first part of the paper, we describe the multitude of voluntary and mandatory sustainability standards, commitments, guidelines, and meta-governance instruments that are developed by private and public actors on both the demand side and supply side of global supply chains. Second, we limit our discussion to regulation with a transnational focus – i.e., regulatory schemes aimed at moving actors' behaviour toward a shared goal in at least two countries (see Roger & Dauvergne, 2016: 416). Legislation by consumer or producer countries is included here only if it has a transnational scope. This includes due diligence regulation for global supply chains in consumer countries and mandatory sustainability standards in producer countries that are at least partially directed at global markets. Third, in terms of the sectoral and geographic scope, the mapping focuses on the global palm oil supply chain, connecting Europe to the major producer countries in Southeastern Asia.

Demand-Side Measures

Private

The palm oil supply chain is governed by an increasing heterogeneity of private sustainability standards, including multistakeholder standards, company-level commitments, industry-wide standards, and meta-governance initiatives.

The first generation of private sustainability standards to address problems of deforestation and other sustainability issues in the palm oil supply chain emerged in the early 2000s. As part of a new theory of change, the World Wildlife Fund (WWF) sought to harness the power of lead firms in global supply chains to transform the agriculture sector (WWF, 2012). In 2004, the Roundtable on Sustainable Palm Oil (RSPO), a third-party certification scheme, was launched with the objective to make “sustainable palm oil the norm” (RSPO, 2014). Over the past two decades, the RSPO has become an important provider of sustainability governance in the industry. In 2019, approximately 3 million hectares (11% of global palm oil production) were certified by the organization.

In addition to the RSPO, Rainforest Alliance and International Sustainability and Carbon Certification or ISCC are active in the sector, but their certification uptake is comparatively small (ITC, 2021). Most certified palm oil is destined for Europe, where it reached a share of approximately 90% of total European imports in 2020 (EPA & IDH, 2021). While third-party certified palm oil is becoming the norm in Europe, uptake is still low in the industry’s fast-growing South–South supply chains. The WWF estimates that certification uptake in India and China (the world’s largest and second largest importers of palm oil) was only 2–3% and 4–7% in 2019, respectively (WWF, 2021).

In the 2010s, the above described certification-based mechanisms were complemented by a second generation of private regulatory measures. In 2010, the CGF, a network of 400 globally leading retailers and consumer goods manufacturers, pledged to achieve zero-net deforestation by 2020. Since then, retailers, manufacturers, and traders have made hundreds of zero-deforestation commitments for their global supply chains. By 2017, the advocacy network Forest Trends reported over 760 such commitments from 447 companies, with policy uptake being highest in the palm sector (Donofrio, Rothrock, & Leonard, 2017). According to Forest 500, in 2019, 73% of the major companies in the palm oil supply chain had adopted a sustainable commodity commitment (Forest 500, 2019, 3).

This wave of firm-level commitments was accompanied by another wave of collective, industry-wide initiatives, often with support from civil society organizations. Major initiatives include the UK Roundtable on Sourcing Sustainable Palm Oil (2012), the Palm Oil Innovation Group (2013), the European Palm Oil Alliance (2016), and the Soft Commodities Forum (2019).

More recently, twenty-one leading members of the GGF formed the Forest Positive Coalition of Action, as an initiative to succeed the CGF’s 2020 zero-deforestation pledge. The coalition has developed roadmaps to transform forest-risk supply chains, including the palm oil supply chain. As described in more detail below, the coalition has also made a pledge to transform entire production landscapes by supporting newly emerging jurisdictional and landscape programs (CGF Forest Positive Coalition of Action, 2021).

The proliferation of certification-based standards and individual and collective industry commitments in palm oil sector and other forest-risk commodity sectors also increased demand for meta-governance. Established in 2004 by a group of leading certification programs, the previously mentioned ISEAL Alliance and its various codes of conduct define best practices for “credible” private standard systems. This includes guidance on how certification programs can contribute to companies’ zero-deforestation commitments (ISEAL, 2016).

In addition to ISEAL, various other organizations provide meta-governance functions in the agriculture-deforestation policy space. One important forum for policy coordination is the Tropical Forest Alliance, a multistakeholder platform established by the CGF and the United States Government to support companies’ transition to deforestation-free supply chains. In recent years, the Tropical Forest Alliance and its members have become important advocates for creating a “smart mix of measures” to tackle the problem of commodity-driven deforestation (TFA, 2020).

Another meta-governor is the Accountability Framework Initiative. Launched in 2019 by a coalition of civil society actors, including the Rainforest Alliance, the Carbon Disclosure Project, and the Forest Peoples Programme, it supports companies in forest-risk supply chains to develop standards, implementation mechanisms, and reporting systems in compliance with international best practices. It also helps companies develop supply chain due diligence systems in a time in which such measures are becoming mandatory through public regulation.

Public

As the preceding section shows, the palm oil supply chain is governed by a multitude of voluntary private regulatory initiatives. Leaving the formulation and implementation of sustainability standards to companies and NGOs, governments have long taken a background role in this and other supply chain settings. However, this practice of “outsourcing governance” to private actors is coming to an end (see Mayer & Phillips, 2017).

In Europe and North America, governments increasingly use their agenda-setting and regulatory powers to set voluntary targets and legally binding due diligence obligations for companies supplying their markets. In the palm oil sector, following the 2015 Paris Agreement on Climate Change, seven European countries (Denmark, France, Germany, Italy, the Netherlands, Norway, and the United Kingdom) signed the Amsterdam Declaration, in which they committed their industries to sourcing 100% sustainable palm oil by no later than 2020. In 2018, the French government announced a National Strategy Against Imported Deforestation.

More recently, these and other non-binding commitments and strategies have been superseded by a hard law approach. As described in the first part of the paper, mandatory due diligence regulation to address environmental and human rights risks in global supply chains is an important regulatory trend among the advanced economies of the Global North. Complementing voluntary international frameworks (e.g., UNGP, OECD Due Diligence Guidelines), regulators in the EU, UK, and US use their authority to create mandatory due diligence obligations for companies supplying their markets with environmentally or socially “risky” products.

In the EU, mandatory due diligence regulations exist at the national level (e.g., French Duty of Vigilance Law, German Supply Chain Act, Dutch Child Labour Due Diligence Law) and the supranational level. At the supranational level, two due diligence regulations have so far entered into force. One is the EU Timber Regulation, which came into effect in 2013 and which bans the trade in illegal tropical timber. The other is the EU Conflict Minerals Regulation. Partially modelled on the United States' Dodd-Frank Act (Section 1502) (Koch & Burlyuk, 2020), it creates mandatory due diligence obligations for companies importing the "conflict minerals" of gold, tungsten, tin, and tantalum.

In addition to these regulations two further supply chain regulations are currently in preparation: 1) a deforestation-focused, sector-specific due diligence obligation for companies importing forest-risk commodities to the EU (proposal for a regulation on deforestation-free products); 2) a comprehensive and horizontal sustainability due diligence obligation for all companies of a certain size active in the EU common market (proposal for a regulation on corporate sustainability due diligence). The remainder of this section provides a brief description of the draft regulation for deforestation-free supply chains, which is most relevant for companies in the palm oil sector.

In November 2021, the EU Commission tabled a draft regulation for deforestation-free supply chains (EU Commission, 2021). While the legislation is still subject to revisions by the EU Parliament and the European Council as part of the EU's co-legislative procedure, the proposal's key elements are as follows:

First, the regulation establishes mandatory due diligence obligations for companies importing the forest-risk commodities of beef, cocoa, coffee, palm oil, soy, and timber (or products containing these commodities) into the EU. Based on the deforestation definition of the UN Food and Agricultural Organization³, companies must ensure that their imports are deforestation-free. Creating a need for full supply chain traceability, the regulation will require companies to develop due diligence systems, including information systems that collect geolocation data about the origins of their agricultural raw materials. Second, the draft regulation includes plans for a benchmarking system through which the EU Commission will determine exporting countries' level of risk. Due diligence requirements will be stricter for companies importing from "high-risk" and "standard-risk" jurisdictions, whereas the requirements are lowered for companies importing from "low-risk" jurisdictions. Third, as described in more detail below, the EU Commission has announced plans to flank its supply chain regulation with a forest partnership program to support relevant countries in protecting their forests and to help them meet the standards set out in the regulation. Finally, the Commission has stated its intention to intensify engagement and dialogue with other major consumer countries, such as China and the United States.

Supply-Side Measures

Private

In the palm oil producing countries, the lines between public and private are often blurred. Studying the formation of the palm oil industry in Indonesia and Malaysia, Cramb and

³ The UN Food and Agriculture Organization defines deforestation as "permanent reduction of the tree canopy cover below the minimum 10 percent threshold" (FAO, 2020, 6)

McCarthy (2016) describe how the expansion of the industry was driven by a state-industrial complex, comprising political, bureaucratic, and business elites. While the significance of state-owned companies has declined over time, the Indonesian and Malaysian governments remain strongly involved in all aspects of the industry. With this in mind, there are several sustainability-focused governance initiatives that can be labelled as supply-side driven and private-led.

As previously described, the upstream segment of palm oil supply chain is dominated by a group of large industrial conglomerates. These internationally oriented producers often also have major trading operations. While more hidden in the supply chain than the industry's consumer-facing manufactures and retailers, the sheer size of these companies has made them a target of transnational advocacy campaigns in recent years. In response to increasing pressures, Wilmar was the first major producer and trader to formulate a zero-deforestation commitment for its global supply chain in 2013 (Wilmar, 2013). Today, all the major traders and producer groups have zero-deforestation commitments in place and the rating platform Forest 500 provides detailed assessments of their policies.⁴

In addition, to the commitments made by individual traders and producers, supply-side companies have made several collective commitments, such as the Indonesian Palm Oil Pledge (IPOP). Launched at the United Nations Climate Change Summit in New York in 2014, IPOP was an initiative of major palm oil traders and internationally oriented producers to coordinate implementation of no-deforestation policies in Indonesia.

Another producer-led initiative was the Sustainable Palm Oil Manifesto signed by some of the industry's major groups, including Sime Darby, IOI Corporation, Kuala Lumpur Kepong Berhad, Musim Mas Group, and Asian Agri. In their manifesto, these companies committed themselves to increase the traceability and transparency of their supply chains, to conserve high carbon stock forests and peatlands, and to promote economic development and sustainable livelihoods. However, also this collective initiative proved short-lived. To identify high carbon stock forests and areas for legitimate oil palm expansion, the group funded a research project. However, after heavy criticism from environmental groups, which criticized the manifesto companies for failing to commit to an immediate end of deforestation for their operations (Ivancic & Koh, 2016), the group was dissolved.

Public

Given the importance of palm oil for the economies of Indonesia and Malaysia, state actors play a key role in all aspects of the industry, including the governance of sustainability. Over the past decade, government actors in both countries have sought to re-establish control in this strategically important policy field by creating national standards and certification regimes.

In 2011, the Indonesian government introduced a mandatory national standard for sustainable palm oil. Previously, the Indonesian Ministry of Agriculture had formed an inter-ministerial commission and issued a decree to bundle existing environmental regulations to create the legal basis for the ISPO scheme. In designing ISPO, the Ministry of Agriculture mimicked the RSPO and its standards. However, comparative assessments show that it is significantly weaker (McInnes, 2017; Wijaya & Glasbergen, 2016; Yaap & Paoli, 2014).

⁴ See <https://forest500.org/rankings/companies>

Deficits include ISPO's definition of high conservation value areas, the design of its environmental and social safeguards, and its recognition of customary land rights. Another deficit is ISPO's limited enforcement powers. To be effective, a mandatory program requires a credible sanctioning mechanism. However, ISPO does not have the authority to sanction. For the enforcement of its standard, it depends on horizontal and vertical cooperation from multiple ministries and subnational governments.

Yet another challenge is ISPO's limited organizational capacity, which makes it difficult to monitor the sector's approximately 1,500 companies (Hidayat, Offermans, & Glasbergen, 2018: 228). Moreover, ISPO is mandatory not only for palm oil companies but also for the country's two million smallholders. However, the number of smallholders certified under the scheme remains small. To date, only about 12,200 hectares of oil palm smallholdings, or 0.2% of the total oil palm area under smallholder agriculture in Indonesia, are certified (Jong, 2020).

While the ISPO program has struggled with global market recognition as a result of these deficits (Hidayat et al., 2018), there are signs of improvement. In March 2020, President Jokowi signed a presidential regulation to strengthen the ISPO certification system. The upgrade from a ministerial to a presidential regulation is a strong sign of political endorsement from the President, which will increase ISPO's authority. The directive also contains provisions to strengthen the organization behind the ISPO, including new sanctioning powers and increased financing for the certification of smallholders (Fahamsyah, 2020).

Following the example of Indonesia, also the Malaysian government has introduced a national standard and certification scheme for its palm oil industry. First launched in 2013 under the purview of the Malaysian Palm Oil Board and the Malaysian Palm Oil Certification Council, the Malaysia Sustainable Palm Oil (MSPO) program started as a voluntary standard. However, in 2020, the MSPO was made mandatory by the Malaysian government. The goal is to achieve 100% of coverage of the industry, including smallholders, by 2025. Producers that fail to comply with the regulation will be fined or have their license suspended. The Ministry of Primary Industries reports that so far 3.19 million hectares (approximately 55% of the country's total oil palm acreage) have been certified under the scheme. However, as in the case of Indonesia, a lack of coverage in the smallholder sector remains a problem. As of 2019, only 6.4% of Malaysia's oil palm smallholders had received MSPO certification (EFECA, 2020).

In addition to these efforts by national governments, subnational governments in both Indonesia and Malaysia are involved in the development of jurisdictional and landscape programs. In recent years, particularly Indonesia has emerged as an important policy laboratory for the jurisdictional approach (Seymour, Aurora, & Arif, 2020).

A pioneering district was Berau district in East Kalimantan. In 2008, the governor of Berau and The Nature Conservancy, an international NGO, began a dialogue about a low-emissions development strategy for the district. A multistakeholder working group was formed to develop an institutional framework and action plan for deforestation reduction in the district. In 2009, the Berau Forest Carbon Program was launched and began implementing pilot projects throughout the district (Anandi, Resosudarmo, Komalasari, Ekaputri, & Intarini, 2014). Initially focused on the pulp and paper industry, the program soon broadened its scope to include the palm oil sector, the main driver of deforestation in the district (CIFOR, 2019; Mafria, Rakhamdi, & Novianti, 2018). Supported by The Nature Conservancy, Berau regency launched a jurisdiction-wide sustainable palm oil program in 2015. The program seeks to increase transparency in oil palm licensing, improve the district's system for social

and environmental impact assessment, and strengthen smallholder inclusion and productivity.

The Berau Carbon Forest Program has served as an important point of reference for other jurisdictional and landscape programs in Indonesia. Today, seven Indonesian provinces (Aceh, North Kalimantan, West Kalimantan, East Kalimantan, Central Kalimantan, West Papua, Papua) are members of the Governors Climate Task Force, formulating province-wide visions and roadmaps for low-emission rural development (GCF Task Force, 2021). Moreover, at the district-level (the second level of local government in Indonesia) the *Linger Temu Kabupaten Lestari* or LTKL (Sustainable Districts Association) brings together nine districts from across Indonesia to develop and implement sustainable land use plans (LTKL, 2021).

Jurisdictional programs are also being developed by subnational governments in Malaysia. One of the most advanced jurisdictional programs can be found in the state of Sabah, one of the primary palm oil-producing states in Malaysia.

Towards a Smart Mix 2.0 for Sustainable Palm Oil?

The previous sections describe increasing heterogeneity in the governance of sustainability in the palm oil sector. Over the past two decades, private demand-side actors have sponsored a multitude of transnational sustainability standards (third-party certification-based standards and individual and collective industry standards and commitments). Actors linked to the supply side of global commodity chains have responded by developing national standards and certification systems. More recently, regulators in Europe and North America have taken steps to develop mandatory due diligence regulation for forest-risk supply chains, including the palm oil supply chain. Another trend in the governance of forest-risk commodities are new collaborations between subnational governments and transnational actors to develop jurisdictional and landscape programs for natural resource use. Against the background of the smart mix 2.0 concept developed in the first part of the paper, this section explores efforts to integrate public and private and demand-side and supply-side governance measures in the palm oil sector and the politics that surrounds these processes.

Integrating Voluntary Private and Public Regulatory Instruments

Public-private hybrid governance is an important feature of a smart policy mix, as previously defined. In the governance of forest-risk supply chains, there are several examples of complementary public-private interactions. An early example is the hybrid regime created by the EU Renewable Energy Directive of 2009. To ensure the extraterritorial implementation of a mandatory sustainability standard for biofuel production, the EU Commission engaged in the “orchestration” of private certification schemes (Schleifer, 2013). Following a benchmarking process, the Commission recognized select private standard systems, including the RSPO in the palm oil sector, as equivalent standards. Under the EU’s hybrid regime, companies importing biofuels or biomass for biofuel production into the common market can use the certificates of recognized private schemes to demonstrate compliance with the sustainability requirements of the Renewable Energy Directive.

Another example of complementary public-private interactions in global commodity governance is the UN-led New York Declaration on Forests of 2014. A high-level commitment

by governments, transnational corporations, and civil society organizations, the declaration included the private sector pledge of the CGF to eliminate deforestation from global supply chains by 2020 as one of its core policy objectives.

Yet another example is the above-mentioned Amsterdam Declaration by nine European governments to achieve “a fully sustainable palm oil supply chain by 2020” (Amsterdam Declarations Partnership, 2015). Therefore, the partnership’s implementation strategy mentions the RSPO as a baseline sustainability standard for the industry (Amsterdam Declarations Partnership, 2016).

According to analysts, the public endorsement and recognition of private sustainability standards in the context of these and other initiatives have played an important role in the large-scale uptake of third-party certification schemes in the European palm oil supply chain (interview 9).

These examples can be interpreted as elements of a smart mix between public and private governance measures in this policy space. In recent years, however, the integration of private sustainability standards in public regulation has become increasingly polarized in the EU (Interview 9). Parts of European civil society, including organizations like Greenpeace and Friends of the Earth, have long criticized sustainability certification for its ineffectiveness (Friends of the Earth Europe, 2008; Greenpeace, 2013). But also the EU Commission, previously an important champion of the hybrid governance approach, appears to have cooled on the idea of relying on private certification schemes to achieve its sustainability objectives.

A case in point is the above-described legislative proposal for mandatory due diligence regulation for forest-risk supply chains. Based stakeholder consultations, input from the European Parliament, and a commissioned study on forest-related certification schemes, the EU Commission decided against a more significant role for private certification schemes in its regulatory proposal. According to the Commission’s assessment, private certification schemes can facilitate compliance with due diligence requirements in some cases. However, variation in their transparency and stringency and problems with the quality of their verification and supply chain traceability systems, including problems with fraud and corruption, would reduce their usefulness from a public policy perspective. In addition, the Commission mentions the complexity and costs associated with the need to monitor the multitude of private sustainability standards that exist as a disadvantage of a hybrid governance approach. It also cites concerns that the costs of sustainability certification can be problematic for small-scale producers (European Commission, 2021: 48-49).

Interviews with EU regulators involved in the process leading up to the legislative proposal on deforestation-free supply chains further illustrate the Commission’s changed perspective on private certification schemes (interviews 3 and 10). *“Over the last couple of years, we have moved back to more command and control [regulation], as opposed to private market-based [instruments]. It’s a swing back of the pendulum. Private certification schemes are seen as helpful but not sufficient. Use them if they can help you deliver what you need to deliver on your obligations. But using them doesn’t relieve you of your responsibility. This is the major difference to other policies where the fact of using a certain certification scheme can actually free you of legal obligations and liabilities, which is not the case here”* (interview 3).

For private certification schemes this means that they are likely to play a more limited role under the planned regulation for deforestation-free supply chains, especially when compared to their role under the biofuel directive. Unlike in the case of biofuel, compliance with

private certification schemes will not provide companies with a so-called “green lane” into the EU market. In this regard, the Commission’s proposal states that “*certification or other third party verified schemes could be used in the risk assessment procedure, however, they should not substitute the operator’s responsibility as regards due diligence*” (EU Commission, 2021: 29). While the legislative process was not completed at the time of writing, this passage illustrates a lack of strong endorsement of private certification schemes from the EU Commission.

For their part, private standard-setting organizations have welcomed the EU’s shift towards a hard law approach in the governance of sustainability in global supply chains. This includes support for the EU Commission’s regulatory proposal for no-deforestation supply chains. In general, the planned regulation is seen as complementary to the work of private sustainability standards. In particular, the fact that the policy will raise the regulatory floor for all companies in the targeted commodity sectors, including companies that had previously not engaged in any form of sustainability governance, is seen as beneficial. Moreover, some expect that certification schemes, despite only lukewarm endorsement by the EU Commission, will benefit as companies with little experience with supply chain traceability are likely to rely on third-party verification to meet their due diligence obligations (interview 6).

However, the representatives of private sustainability standards have also raised several concerns about the proposed regulation. An overarching concern is that the regulation’s narrow focus on deforestation and requirement for full supply chain traceability could undermine sustainable development in the producer countries and existing efforts to govern it (interview 4). We discuss this concern in more detail below.

First, the regulation’s narrow focus on deforestation could lead to companies paying less attention to other dimensions of sustainability, such as labour rights, human rights, and economic livelihoods. This could lead to a scenario in which the planned regulation undercuts more comprehensive private sustainability standards, as companies are incentivised to prioritize compliance with the mandatory no-deforestation requirement included in the regulation (interview 9). The experience with the previously mentioned Renewable Energy Directive, which included no social criteria (e.g., labour rights, food security), illustrates the danger. In the biofuel case, European industry actors responded to public regulation by abandoning more comprehensive multistakeholder initiatives, such as the Roundtable on Sustainable Biomaterials, in order to create their own, more narrow, certification schemes to demonstrate compliance with the regulation (Schleifer, 2013).

Second, by prohibiting the importation deforestation-linked products into the EU market, the planned regulation requires companies to ensure full supply chain traceability. The major certification schemes, including the RSPO, offer supply chain models, such as fully segregated and identity preserved supply chains⁵, which provide the required level of traceability. On a technical level, they are thus compatible with the proposed regulation. However, supply chain traceability creates costs and that these costs increase with the level of traceability that is required. For European forest-risk supply chains, the proposed regulation is likely to trigger a shift from less expensive supply chain models (i.e., mass balance and credit systems) towards the previously mentioned segregated and identity preserved supply chain models (interview 6). The difference in cost between these models is significant. In the case of RSPO certification the market premium for a ton of fully separated certified

⁵ For more details on the different supply chain traceability models see this report by the European Palm Oil Alliance and IDH (2021: 46-47)

palm oil is US\$ 50-70, compared to US\$ 10-20 for mass balance, and US\$ 2-3 for the credit model (Watson, 2011). Whether or not companies rely on third-party certification in their due diligence systems, the regulation's requirement for full traceability will create costs for importers, which will need to be distributed somehow between supply chain actors. Existing research on the distributional consequences of complying with sustainability standards shows that powerful lead firms often push compliance costs upstream in global supply chains (Ponte, 2019; Schleifer, Fiorini, & Fransen, 2019). For small-scale producers these costs could be prohibitively high, which could lead to their exclusion from deforestation-free European supply chains.

Relatedly, there are concerns that risk-averse lead firms could pre-emptively cut high-risk suppliers from their supply chains. The risk of non-compliance is highest in the smallholder sector, in which traceability is very difficult to establish (WRI, 2018). Against this background, organizations like the RSPO have raised concerns that the EU no-deforestation regulation, if enacted in its current form, could have a negative impact on the livelihoods of smallholders and local communities in the producer countries (RSPO, 2021a).

To address these and other concerns, the members of the ISEAL Alliance advocate for a stronger role for "credible" certification systems under the regulation.⁶ As explained by one of our interviewees: *"There is room for certification to play a broader role than foreseen in the current proposal. We would preferably see our role strengthened and enlarged so that we can support a more holistic approach"* (interview 6). In a policy paper, ISEAL has elaborated on the roles that credible private standard systems could play in a "smart policy mix" to address deforestation in global supply chains. According to the paper, credible systems can function as an indicator of compliance with the legislation, a source of information in the risk assessment process, a tool to be used in risk mitigation, a tool to engage and protect smallholders and indigenous peoples, and as a mechanism to go beyond the minimum criteria of the regulation (ISEAL, 2022).

While the legislative process had not been concluded at the time of writing, there is no indication that the EU Commission is planning to change its position towards a stronger integration of private governance mechanisms in its deforestation-free supply chain regulation (interviews 3 and 10). It remains to be seen how the EU Parliament will position itself on the issue of third-party certification. However, at this point, the most likely outcome is a hybrid regime "light", in which private certification schemes are given a limited role, without strong endorsement or formal recognition by EU regulators.

Downstream companies in forest-risk supply chains will have to respond to the changing regulatory context in the EU and other consumer markets. For all firms, with some exceptions for small- and medium-sized companies (EU Commission, 2021: 12-13), importing beef, cocoa, coffee, palm oil, soy, and timber (or products containing these commodities) into the EU compliance with the no-deforestation supply chain legislation will be mandatory. By creating a so-called regulatory level-playing field, mandatory due diligence legislation can be said to reduce strategic uncertainty and complexity for these companies. Under the previous (largely voluntary and private) regime, firms had to decide individually to what extent and through what instruments (e.g., third-party certification or firm-level code of conduct) they would engage in sustainability governance. However, the claim that mandatory due diligence regulation reduces uncertainty and complexity for businesses is only partially true. As mentioned above, the legislation creates mandatory obligations for only a

⁶ ISEAL refers to "credible certification systems" as systems that comply with its various codes of best practice, such as the ISEAL Code of Best Practice for the Setting of Social and Environmental Standards (see ISEAL, 2014).

narrow set of deforestation-related risks. Beyond that firms still must decide whether and how they address broader sustainability risks in their global supply chains (e.g., labour rights, livelihood concerns). Against this background, we warn that a minimalist strategy, which ignores these other concerns carries significant risk for at least two reasons. First, the scope of the regulation could soon be broadened, particularly if companies' behaviour is perceived to have adverse social effects, such as endangering smallholder livelihoods. Second, even in the absence of more mandatory regulation, advocacy groups, consumers, and the media will continue to pressure companies on these issues, thus creating reputational risks for businesses and their shareholders.

Integrating Regulatory Instruments on the Demand Side and Supply Side of Global Supply Chains

While political enthusiasm among EU regulators for public-private hybrid governance may have waned somewhat in recent years, this dimension of a smart policy mix for forest-risk supply chains is relatively well institutionalized. In contrast, governance interactions between actors located on the demand side and supply side of global supply chains have been much more unstable and conflict prone.

In the palm oil supply chain, much has been written about the disconnects and antagonisms that exist between transnational private standards and national sustainability standards and certification schemes in the producer countries (Pacheco, Schoneveld, Dermawan, Komarudin, & Djama, 2018; Schouten & Hospes, 2018). In the case of Indonesia, this research shows how the interactions between the RSPO, the leading global certification scheme, and the government-led ISPO program have been characterized by conflict and competition. Citing concerns about national sovereignty, the ISPO scheme was launched by the Indonesian government to regain control over sustainability regulation in its palm oil industry.

Another example of conflictive interactions between demand-side and supply-side actors is the above-mentioned IPOP. Following the New York Declaration on Forests of 2014, the initiative brought together a group of international traders and internationally oriented producers to coordinate implementation of their zero-deforestation commitments in Indonesia. However, shortly after its inception the Indonesian government ordered its dissolution, arguing that the initiative would violate Indonesian law and threaten the livelihoods of smallholders (Dermawan & Hospes, 2018).

Some analysts are more optimistic about the relationship between the RSPO and ISPO, arguing that it has improved over time (Brandi, 2021). However, recent tensions between the EU and Indonesia over the use of palm oil in biofuel production have created a more difficult political environment for collaboration. Following a decision by the EU to ban palm oil-based biofuels, Indonesia responded by filing a lawsuit against the EU with the WTO. According to one of our interviewees, the conflict over biofuels is having a negative effect on all aspects of collaboration on sustainability between Indonesia and European actors in the palm oil supply chain (interview 13).

Producer country governments have also voiced criticism of the EU Commission's regulatory proposal for deforestation-free supply chains, which some analysts have described as a "*neo-colonial trade policy*" targeting developing countries (Third World Network, 2022). At the same time, there are also actors in the producer countries that view the planned

regulation more favourably (interview 12). For example, a more supportive response to the Commission's proposal has come from civil society organizations in the Global South. In a joint statement, 35 Indonesian NGOs welcomed the proposal, calling it a *"step-change in the response of consumer countries in Europe to the pressing challenges of the climate crisis"*. But the coalition has also raised concerns about the proposal's one-sided approach, which fails to provide incentives and support for producer countries, thus risking to undermine existing initiatives to improve forest and land governance in these countries (Auriga Nusantara, 2022).

Similar concerns were voiced by several of the stakeholders we interviewed. One of them described the matter as follows: *"In the EU discussion, the dots are not really being connected between the demand-side regulation and the supply-side measures that need to happen. And that's where I think this is not what I would call a smart mix it all"* (Interview 4).

An accompanying supply-side measure that was considered in the EU policy discussion leading up to the deforestation-free supply chain regulation was the FLEGT VPA approach in the timber sector. Over the past decade and half, the EU has negotiated multiple FLEGT VPAs with tropical forest countries to support the implementation of its due diligence regulation on illegally logged timber (the EU timber regulation). FLEGT VPAs are bilateral trade agreements between the EU and timber-producing countries, which are accompanied by a multi-stakeholder process to build national legality verification systems, which, once approved by the EU Commission, provide access to the common market (see Overdevest & Zeitlin, 2014). Civil society groups have lobbied the EU Commission to use VPA-like agreements as a supply-side measure in support of the planned deforestation-free supply regulation (Ozinga, 2020). However, in response to a regulatory fitness check of the effectiveness and efficiency of existing VPAs, the EU Commission decided against this policy option.

The fitness check document mentions enhanced stakeholder participation and improvements in forest governance in some countries as a positive outcome of the FLEGT VPA approach, however, it finds that after more than 15 years only one out of 15 VPA countries (Indonesia) had an operating licensing system in place and that the timber products covered by FLEGT licences amounted to only 3% of EU timber imports in 2018 (European Commission, 2021).

Following the negative fitness check, the question of the future of the FLEGT VPAs became a highly controversial issue. In response to a strong reaction from organizations invested in the policy, a decision was made to retain existing VPAs, but political support for the approach within the EU Commission appears to have evaporated. *"If you apply a strict, very logical approach, you would say that in the new world that focuses on averting any deforestation, an international agreement that focuses on illegal logging has no place anymore. (...) We don't want to show a cold shoulder to the countries that have already invested very much in those processes, so we keep them alive. But it's not going to deliver the same benefit as in the past"* (interview 3).

As an alternative measure, the EU Commission has announced plans to flank its deforestation-free supply regulation through a series of forest partnerships to provide support to relevant partner countries. However, much remains unclear about the nature of these partnerships. Interestingly, the forest partnerships are also not developed by DG Environment, which has the lead on the no-deforestation supply chain regulation, but DG International Partnerships. In 2020, a "Forests for the Future Facility" was launched to assist the work of DG International Partnerships in this area (European Union, n.d.). However, otherwise, there is no information on the EU Commission's webpages about the state and design of the

forest partnerships, suggesting that they are still at an early stage of development. One of our informants with insights into the process also raised concerns about a lack of coordination between the two DGs on the issue. *“The countries that are being prioritized are not at all the most important countries for deforestation and commodity supply chains. So, it is not really at all linked to this regulation. (...) It seems that the people within the Commission working on the EU regulation don't seem to be talking to the people working on the forest partnerships, and they [the forest partnerships] don't seem to be the answer to this concern of getting support to the countries that need it to bring the production standard up to be aligned with the EU regulation”* (interview 5). This assessment was echoed by another informant: *“They're not particularly well designed. They're just kind of another aid mechanism, really. They're not linked to key commodities or key countries. So, it's quite a stark example of lack of integration of Commission decision making* (interview 9).

The fading of political support for the VPA approach and the incoherence of the forest partnerships designed to replace it point to a weakening of the EU Commission's supply-side strategy. More broadly, these developments suggest that the EU, in stark contrast to the smart mix rhetoric, is reverting to a more unilateral approach in the governance of its forest-risk supply chains. Citing the long-time horizon and resource intensity of the FLEGT VPAs, several of our interviewees mentioned capacity limitations as one of the reasons for this policy shift (interviews 4 and 10).

So, while the planned due diligence regulation for deforestation-free products is currently missing a strong supply-side component, transnational governance interactions are intensifying between private demand-side actors and newly emerging jurisdictional programs in the producer countries.

In recent years, there has been a shift in strategy among international NGOs working on sustainability in global production to go “beyond supply chains” (TFA, 2022). Central to this new governance agenda are the above-described jurisdictional and landscape programs. International Northern NGOs, like The Nature Conservancy, the Earth Innovation Institute, IDH, WWF, and others have functioned as “backbone organizations” for many of these programs, providing important coordination and management function in support of these processes (Hovani et al., 2018: 18). And while lead firms have long been reluctant to accept responsibility beyond their supply chains, there are signs for a change in strategy. Failing to meet their 2020 zero-deforestation targets, leading retailers and manufactures have announced plans to step up their engagement in production landscapes. An important catalyst for this was the COP26 Climate Summit in Glasgow in 2021, which put nature and the nexus between agriculture and deforestation at the centre of international climate negotiations. As part of the CGF's newly formed Forest Positive Coalition of Action, global buyers have presented plans to scale up 22 jurisdictional and landscape initiatives in Brazil, Chile, Indonesia, Malaysia, Mexico, and Russia (CGF Forest Positive Coalition of Action, 2021).

Seeking to link global supply chain initiatives with jurisdictional programs, private standard-setting and certification organizations also are in the process to adapt their standards and systems to measure and verify sustainability at jurisdictional scale. This includes efforts by the RSPO to upscale its supply chain-centred certification system. Currently, the RSPO is testing its jurisdictional certification pilot framework in several subnational district in Indonesia and Malaysia (RSPO, 2021b).

Moreover, the ISEAL Alliance has developed good practice guidelines for companies to make “credible” jurisdictional claims (ISEAL Alliance, 2020). Recently, several organizations have also launched platforms to facilitate large-scale “jurisdictional sourcing”

(Boshoven et al., 2021). One example is the SourceUp initiative of IDH, a platform to connect “verified sourcing areas” (i.e., landscapes that comply with a set of key performance indicators, including forest loss) to global buyers and investors. The platform currently includes 25 landscapes, however, none of them has yet reached the status of a verified sourcing area (interview 1). Similar to SourceUp in its purpose and design is the Rainforest Alliance-led LandScale platform.

Another initiative is the Indonesia-focused Terpercaya Initiative of the European Forest Institute to develop key performance indicators for “jurisdictional sustainability”. In partnership with Trase, a supply chain transparency initiative, the Terpercaya indicators have recently been incorporated in the Transparency Pathway tool, a methodology to trace subnational jurisdictions’ supply chain links to consumer countries (EU REDD Facility 2022).

These examples illustrate efforts by private actors to create an institutional infrastructure for integrating demand-side and supply-side actors and instruments in the governance of forest-risk commodities. These efforts are not without challenges, though. One challenge identified by our interviewees is a growing plethora of standards, systems, and platforms surrounding jurisdictional and landscape programs and evidence for a lack of coordination as well as competition between organizations creating those systems (interview 7). There is a trend towards increasing institutional heterogeneity in this area, a problem that appears to be endemic to the world of private sustainability governance.

Another challenge is uncertainty about the level of commitment by global lead firms to engage in beyond-supply-chain-approaches, such as jurisdictional and landscape programs. At COP26, the members of the CGF’s Forest Positive Coalition of Action made a commitment to transform production landscapes. However, so far, sustainability practitioners only observe a “*careful shift*” among risk-averse global buyers (interview 1). Hence, the prospect of large-scale jurisdictional sourcing remains uncertain.

There also is a risk that mandatory due diligence regulation in the EU and other demand-side jurisdictions will incentive companies to refocus their sustainability strategies on eliminating deforestation in their own supply chains, instead of investing time and resources in more holistic approaches.

Smart Mix Politics: Summary and Discussion

As supply chains expanded beyond state borders with the onset of globalization, so have efforts to govern responsible transnational business conduct. In the fields of human rights and environmental sustainability this has produced a potpourri of industry self-regulation, third-party certification schemes, international due diligence guidelines, and mandatory supply chain regulations over the past two decades. These efforts have traditionally been led by actors in the Global North (Schleifer et al, 2019). However, in recent years, governments, and business groups from producing countries in Africa, Asia, and Latin America are increasingly active in developing “Southern standards” for their local, regional, and global supply chains.

In this context of increasing regulatory heterogeneity in the “global value chain world”, policymakers, practitioners, and academics are calling for a better integration and interplay of public and private and demand-side and supply-side measures. The objective of such a “smart governance mix” is to promote productive interactions of various regulatory types to advance human rights and environmental sustainability in global supply chains. But what are the opportunities and challenges of harnessing regulatory heterogeneity to this effect? This paper explores this question through a conceptual assessment and illustrative case study. In this concluding section, we synthesize and discuss our main insights.

To recap, John Ruggie, the architect of the UNGPs, introduced the idea of a smart mix to policy debates about the implementation of corporate due diligence standards (Ruggie, 2011). This early discussion on smart governance mixes for sustainable global supply chains focused on the need to create complementarities between public and private governance measures. Thematically closely related debates have played out in the academic realm, including in discussions on orchestration in sustainability governance (Abbott, 2012; Schleifer, 2013), transnational hybrid governance (Larsen et al., 2018; Ponte & Daugbjerg, 2015), and private authority and public policy interactions (Cashore, Knudsen, Moon, & van der Ven, 2021; Renckens, 2020). While much of the policy and academic discussion has been centred on this public–private dimension, we observe a broadening of the smart mix discussion in recent years (e.g., TFA, 2020). To capture this shift, we use the term of a smart mix 2.0, which, in addition public-private complementarities, advocates for the integration of governance measures across the demand side and supply side of global supply chains.

In our conceptual assessment, we reflect about possible benefits associated with such a smart governance mix. We show how public regulators have all kinds of instruments at their disposal (e.g., information provision, capacity building, economic incentives, legal recognition) to improve the design, uptake, and compliance with private sustainability standards. Conversely, private sustainability standards can compensate for some of the weaknesses of public regulation by offering more speedy, flexible, and less bureaucratic implementation. Moreover, the advanced version of the concept, which brings Southern standards into the governance mix, presents opportunities for creating regulatory regimes for addressing en-

environmental and human rights concerns in global supply chains, which are more context-sensitive, equitable, inclusive, and comprehensive in their coverage. However, we also identify numerous challenges, pitfalls, and blind spots. An overarching concern we raise in our discussion is the sometimes naïve optimism permeating the smart mix literature that actors with often diverging interests, viewpoints, and power resources can be brought together in complementary and progress-oriented patterns of interactions. In our critique of the concept, we bring these issues to the fore. Connecting with the works of scholars such as Kinderman (2016), we advance a perspective that is more attuned to the political dimensions of smart governance mixes. Beyond the functionalist and normative-prescriptive leanings of much of the smart mix discussion and related discussions (see literature on orchestration, e.g., Abbott 2012) this leads to an analysis that is more attuned to the ways in which politics shapes governance interactions in fragmented institutional landscapes. The result is a politically grounded understanding of the potential and limitations of harnessing regulatory heterogeneity for sustainable global supply chains.

For illustrative and exploratory purposes, we apply this perspective to the case of the European palm oil supply chain in the second part of the paper. The palm oil supply chain and other forest-risk supply chains are characterized by increasing regulatory heterogeneity, including a multitude of private sustainability standards, plans for mandatory supply chain regulation in the EU, and national certification regimes in the producer countries. To better address sustainability challenges in this supply chain setting, various actors have called upon the EU to adopt a smart governance mix (ISEAL, 2022; TFA, 2020). In the following, we revisit some of the key insights from our case study to illustrate the nature of “smart mix politics” in this issue area.

On the first dimension of the smart governance mix 2.0 concept (cross-sectoral, public and private measures), our analysis focuses on the integration of private certification schemes into the EU’s emerging mandatory due diligence regime for forest-risk supply chains. We describe the development of hybrid regime “light” in this issue area, in which voluntary private instruments play a less important role when compared to other supply chain regulations (e.g., EU Renewable Energy Directive, UK Modern Slavery Act). While the use of private sustainability standards is permitted, EU regulators have decided against directly endorsing, supporting, or formally recognizing them. Hence the use of third-party certification schemes does not free companies from their legal liability under the planned regulation, nor does compliance with them provide companies with a “green lane” into the EU market. So far, the lobbying efforts by voluntary standard-setting organizations for a deeper integration of certification systems into the emerging regime have been unsuccessful. Our analysis points to several interrelated reasons for this shift towards a more public-oriented governance mix in this issue area: the experience with the use of private certification schemes in a comparable setting (biofuels), vocal opposition against private sustainability certification from parts of European civil society, the results of external studies and public consultations, and the views and perceptions of the bureaucrats responsible for the regulation. As a result, the regulation’s design foresees a lesser role for private regulatory instruments; although, it remains to be seen what their role will be in practice.

Assuming that the final regulation will not be substantially different from the Commission’s proposal on the issue of certification schemes, several scenarios are possible. One scenario is that despite a weak formal role for private certification schemes, the regulation will raise the regulatory floor for all companies importing forest-risk commodities into the EU market, thus creating a so-called level playing field. This could increase demand for third-party certification, especially from firms with little previous experience with sustainability governance, thus leading to a stronger role for these programs in practice. An alternative scenario is that the regulation’s narrow focus on deforestation could disincentivise companies to engage in more comprehensive third-party schemes (e.g., schemes including labour rights, standards for sustainable livelihoods, etc.), thus undermining their role in the future regulatory regime. Adopting a minimalist strategy, which only focuses on compliance with the regulation’s mandatory components, carries significant risks for companies, however.

These risks arise from the possibility of future re-regulation as well as continuing reputational pressures on companies from civil society.

In sum, our analysis finds evidence for a more limited role for private governance in this case and uncovers the politics surrounding this decision. Future research should determine whether the EU no-deforestation regulation is an outlier in this regard or whether there is a broader policy trend towards less private governance involvement in public supply chain regulation.

On the second dimension of the smart mix 2.0 concept (cross-geography, demand-side and supply-side measures), we canvass the state of transnational governance interactions. In the palm oil sector, interactions between demand-side and supply-side actors have often been conflictual. Examples include regulatory competition between global and “home-grown” certification schemes, the shutting down of private governance initiatives by the Indonesian government, and the political controversy surrounding the EU’s biofuel policy. Differences over policy design (e.g., the stringency of standards and monitoring and enforcements regimes) and sensitivities around national sovereignty, often enmeshed in colonial histories, contribute to these conflicts.

Running counter to the idea of a smart governance mix 2.0, there also is evidence that EU regulators have shifted towards a more unilateral approach with the planned no-deforestation supply chain regulation. This would end the more ambitious supply-side policy through which the EU had complemented its due diligence regulation for tropical timber. In the context of its FLEGT policy, the EU has engaged numerous tropical forest countries in bilateral trade agreements and multistakeholder processes to develop national legality verification systems for the export of legal tropical timber. However, concerns over the long-time horizon, resource intensity, focus on legality, and inconclusive results of the VPA approach has undermined political support for the policy among EU regulators. As an alternative measure, the EU Commission has announced plans to support supply-side countries through a set of new forest partnerships. However, they remain at an early stage of development and observers are concerned about a lack of coordination between the different departments within the EU Commission working these issues. Overall, the case study evidence suggests that the EU has scaled down its ambition to complement its planned due diligence regulation with a strong supply-side strategy.

One area which has seen some progress in linking governance actors from demand-side and supply-side countries are newly emerging jurisdictional and landscape programs. Recent years have seen a flurry of activity by global civil society organizations and local governments to develop governance mechanisms to implement sustainability standards across entire landscapes and jurisdictions, as opposed to individual supply chains. This has been accompanied by efforts to develop verification systems and market platforms to facilitate “jurisdictional sourcing”, in which well-performing jurisdictions are rewarded by global buyers through preferential sourcing agreements. Recent commitments by leading retailers and manufactures to step up their engagement in production landscapes is a positive development in this regard. However, the jurisdictional approach brings its own challenges, including complex coordination problems and, when it comes to jurisdictional sourcing, complex technical challenges of developing jurisdictional-scale traceability and assurance systems.

In conclusion, this paper shows on both a conceptual and empirical level that the road towards a smart mix 2.0 is not a well-paved highway to sustainable global supply chains. Instead, it is better described as a winding road with many potholes, construction sites, and the occasional U-turn. We argue that it is important in analysis of this road to always mind the politics involved in (re-)designing regulations and their interactions. And we emphasize that while some of the significant political and regulatory interactions may take place along the axes of public to private regulations, it is pertinent to mind evolutions on the supply to demand axis as well.

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Annex: List of Interviews

Number	Interviewee	Country	Type	Date
Interview 1	Development agency	Netherlands	Zoom interview	22.03.2022
Interview 2	European public sector organization	Finland	Zoom interview	29.03.2022
Interview 3	European Union regulator	Belgium	Zoom interview	04.04.2022
Interview 4	Association of standard-setting organizations	United Kingdom	Zoom interview	06.04.2022
Interview 5	Business forum	Switzerland	Zoom interview	07.04.2022
Interview 6	Certification organization	Malaysia	Zoom interview	08.04.2022
Interview 7	Civil society organization	Indonesia	Zoom interview	11.04.2022
Interview 8	Consultancy firm	Indonesia	Background conversation	12.04.2022
Interview 9	Independent policy consultant	United Kingdom	Zoom interview	14.04.2022
Interview 10	European Union regulator	Belgium	Zoom interview	19.04.2022
Interview 11	Certification organization	Netherlands	Zoom interview	22.04.2022
Interview 12	Government ministry	Indonesia	Zoom interview	28.04.2022
Interview 13	University	Indonesia	Background conversation	17.05.2022
Interview 14	Certification organization	Malaysia	Written answers to interview questions	30.05.2022

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