

'Mirroring': The scope and limitations of EU trade agreements and autonomous actions



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'Mirroring': The scope and limitations of EU trade agreements and autonomous actions

ABSTRACT

The demand for 'mirror clauses' in EU free trade agreements (FTAs) or unilateral 'mirror measures' ('mirroring') has gained considerable traction in EU debates on trade and agricultural policy. This study advances a contextual understanding of the terms of 'mirroring' and concepts related to it, presents their economic, legal and operational consequences. It explores rules, potentials and limitations of applying EU sustainability standards to imports. In addition, the expressed need to ensure a fair competition for EU producers – another key motivation behind 'mirroring' – is critically assessed. It is examined how EU standards affect the balance of mutual benefits of trading partners, and different 'mirroring' approaches are explored. The study provides a summary of opportunities and risks to be considered beyond legal conformity for different trade-related options addressing sustainability and competitiveness concerns including 'mirroring'. The study concludes that the 'mirror' metaphor should not distract from the fact that well-established and tailor-made EU policies are available beyond potential 'mirroring' – especially in strengthening competitiveness.

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List of abbreviations

ACAA	Agreement on Conformity Assessment and Acceptance of Industrial Products
Ag-ERPs	Environment-related provisions for agriculture, fisheries, and forestry in FTAs
AGRI	EP Committee on Agriculture and Rural Development
AGRIFISH	Agriculture and Fisheries Council
AoA	WTO Agreement on Agriculture
CAP	Common Agricultural Policy
CBAM	Carbon Border Adjustment Mechanism
CETA	Comprehensive Economic and Trade Agreement
CSDDD	European Union Corporate Sustainability Due Diligence Directive
DG	Directorate-General
DG AGRI	DG for Agriculture and Rural Development
DSU	Dispute Settlement Understanding
EC	European Commission
ECOLEX	Environmental Law Database
EDB	Environmental Database
EGALIM	Loi pour l'équilibre des relations commerciales dans le secteur agricole et alimentaire et une alimentation saine, durable et accessible à tous
EP	European Parliament
EUDR	European Union Regulation on Deforestation-free products
EU-UK TCA	EU-UK Trade and Cooperation Agreement
FAO	Food and Agriculture Organization of the UN
FAOLEX	Food and Agriculture Organization Legal Database
FAOSTAT	Food and Agriculture Organization Statistical Database
FTA	Free Trade Agreement
GATT	General Agreement on Tariffs and Trade
GMO	Genetically modified organism
GSP	Generalised Scheme of Preferences
GSP+	Generalised Scheme of Preferences Plus
GTA	Global Trade Alert
IDOS	German Institute of Development and Sustainability
IPPC	International Plant Protection Convention

IUCN	International Union for Conservation of Nature
Lit.	Littera
MRA	Mutual Recognition Agreement
MRL	Maximum Residue Level
NPR (-PR)	Non-product-related (with product relation)
NTB	Non-tariff barrier
NTM	Non-tariff measure
OECD	Organisation for Economic Cooperation and Development
PCD	Policy coherence for development
PM	Product-related measure
PPM	Production- and process-related measure
PSE	Producer support estimate
RCA	Revealed comparative advantage
SPS	Sanitary and Phytosanitary Measures
STC	Specific Trade Concern
TBT	Technical Barriers to Trade
TRAINS	Trade Analysis Information System
TREND	Trade and Environment Database
TSD	Trade and Sustainable Development
UFLPA	Uyghur Forced Labor Prevention Act
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Programme
UNSCND	United Nations Single Convention on Narcotic Drugs
US	United States
USD	United States Dollar
USDA FAS	United States Department of Agriculture Foreign Agriculture Service
WITS	World Integrated Trade Solutions
WOAH	World Organisation for Animal Health
WTO	World Trade Organization

Executive summary

Policy actors have increasingly called for the inclusion of so-called 'mirror clauses' into EU Free Trade Agreements (FTAs) or for the adoption of unilateral 'mirror measures'. This approach, collectively referred to as 'mirroring', has gained considerable traction in the debate on EU trade and agricultural policy. It is basically about requiring imported goods to have been produced under exactly the same standards as those applied to EU products. It is closely tied to recent key EU initiatives, such as the Green Deal or agricultural policy measures, tightening requirements for agricultural production, for example by reducing the use of pesticides. This has raised concerns in view of the competitiveness of EU agricultural production, which have become particularly relevant in the context of the recent debate on the EU-Mercosur Partnership Agreement.

In this context, 'mirroring' is discussed as a means to further two different objectives: sustainability and competitiveness. The latter is an increasingly critical concern for European farmers. With the perspective of competitiveness, 'mirroring' is debated to compensate for new or expected regulatory provisions as they are perceived as creating a competitive disadvantage compared to third countries. Thus, 'mirroring' raises the question of whether EU standards should be applied to imported goods, and if so, to what extent.

Answering this requires a thorough, case-by-case assessment that considers the legal, economic and political dimensions, as well as the existing EU policy (environmental, consumer, health or agricultural) framework. In general, it appears that bilateral agreements and multilateral standard-setting should be preferred over autonomously setting 'mirror measures' as first-best solutions to address the issues at hand and secure global acceptance.

This study aims to advance the understanding of terms and context related to 'mirroring'. It cautions against stretching the meaning of the term 'reciprocity' beyond mutuality and consensus – principles that form the foundation of trade policy. Misuse of the term, as seen in recent unilateral US 'reciprocal tariff' measures, risks undermining the rules-based trading system.

Similarly, the term competitiveness can be understood in various ways and relating to different levels of aggregation and actors, ranging from the single farm and food processors to a whole country and region. Empirically, there is no clear evidence that the EU generally has stricter international regulations, but it is worth noting that research and data on this topic are limited. This makes it difficult to clearly demonstrate any competitive disadvantages resulting from regulatory differences. There is a need for a careful case-by-case assessment of specific provisions, in order to compare them internationally and identify their respective effects on competitiveness. Besides the need for economic evaluation, legal assessment is also required. Options to address sustainability and competitiveness objectives include trade policy measures at multilateral, bilateral or unilateral level, agricultural policy measures or private sector initiatives.

There are longstanding rules and standards at the multilateral level for many sustainability related issues, for example on public health issues related to food safety. Internationally adopted standards enable import alignment. Rules also exist for production-related environmental issues. Bilateral negotiations provide further scope for addressing issues and tools as yet not covered by the

multilateral level. In the area of competitiveness, tariff protection is regulated, and unfair competition can also be addressed through clear WTO rules.

All options have positive and negative consequences beyond costs directly linked to regulatory and legal compliance: such as distributional effects for the consumer, often not the focus of competitiveness-related perspectives, and administrative effects related to implementation and oversight. Bearing in mind the long-term impact on welfare and the potential for unintended consequences, it is important to consider the strategic effects. These include possible reactions by trade partners to unilaterally applied measures, which could, if negotiations of FTAs are hampered, result in the EU losing overall competitiveness in the long term. As far as the goal of competitiveness is concerned, other means may be more effective than restricting trade. For example, the Common Agricultural Policy (CAP) can not only compensate for potential competitive disadvantages related to public sustainability goals but also address broader factors relevant to competitiveness, such as strengthening farmers' position in value chains. Private initiatives may also contribute to sustainability and often draw on long-standing experience in international cooperation.

The overarching guiding principle for any policy choice should be dialogue and cooperation with trade partners, even for unilateral action. Building trust, reducing the risk of conflict, and preserving the stability of the global trading system – which is also a matter of self-interest – requires early and transparent engagement with trade partners. The EU should avoid introducing undefined concepts without clear objectives or consultation, as this could fuel protectionism and undermine the benefits of global trade, which would also have repercussions for the EU.

1 Introduction

The ongoing debate on 'mirroring' in EU trade policy has been sparked by concerns within the bloc's agricultural sector. Stakeholders contend that EU farmers face stricter requirements for health and environmental protection than producers in third countries. They argue that imported products should meet the same conditions as those applied to European producers. This demand for equal treatment, or 'mirroring', is sometimes also framed as a call for 'reciprocal treatment', requiring non-EU-producers and exporters to meet EU standards (Guyomard et al., 2024). Proposals to achieve this include inserting 'mirror clauses' into EU free trade agreements (FTAs), or the adoption of unilateral 'mirror measures'.

Achieving a high level of health and environmental protection within the single market and globally has long been a priority in EU agricultural and trade policies. 'Mirroring' introduces a new dimension, raising concerns related to fairness, equality and fair competition. This highlights a crucial aspect of the broader debate on the competitive position of EU agriculture. Recently, 'mirroring' has gained considerable traction in the EU and is tied to key EU initiatives such as the Green Deal and its agricultural dimension, such as the Farm-to-Fork and Biodiversity Strategies. The current Commission's Strategic Vision on Agriculture and Food, based on a stakeholder dialogue on agriculture, should also be mentioned. In trade policy, 'mirroring' has become a symbolic and contentious issue, especially among critics of recent EU FTAs such as the EU-Mercosur Partnership Agreement. Despite its growing political significance, 'mirroring' remains a loosely defined and highly politicised concept. The same applies partially to the terms 'competitiveness' and 'fair competition'. Neither the academic literature nor EU institutions, despite expressing related goals, have yet provided a comprehensive explanation of these notions or their conceptual boundaries.

This study attempts to advance understanding of these terms and examine their legal, economic and political implications, including in regard to broader strategic concerns. It explores the potential merits and limitations of 'mirroring' in light of the proposed implementation options using FTAs or unilateral measures. A comparative analytical approach is used, drawing on legal instruments, academic articles, policy reports and media commentary. Economic and legal assessments are applied.

The study is structured as follows: Chapter 2 introduces the political context in terms of narratives and public positions across Member States. It summarises third countries' reactions to European debates and related initiatives on 'mirroring', along with their own potential similar measures, and ends with a conclusion on how to understand the concept. Chapter 3 provides a critical assessment of different paths to address sustainability and competitiveness in international contexts. The economic assessment focuses on the major and recently politically prioritised goal of supporting competitiveness. It offers a review of existing concepts and empirical assessments of EU agriculture, especially international comparisons of the strength of different regulations and their impact on competitiveness. The legal assessment summarises the longstanding existing WTO rules, particularly on product standards, while also outlining the possibilities for applying regulating production processes to imports. Different tools for addressing sustainability in FTAs are explored like sanctions, alongside newer examples of incentives and rebalancing approaches. Specific

approaches to equivalency and mutual recognition are explained as offering flexibility by allowing deviations from identical targets. The chapter ends with a synopsis covering all different policy frames that can support sustainability and competitiveness. It summarises the pros and cons of these options for careful consideration, in particular regarding their potential indirect and unintended effects. Chapter 4 finally provides recommendations based on the assessments.

2 Understanding discourses, policy contexts, positions and terms

2.1 Evolution of the 'mirroring' debate

The debate on 'mirroring' began during the previous reform of the EU's Common Agricultural Policy (CAP). In 2019, the European Parliament's Committee on Agriculture and Rural Development (AGRI) proposed inserting a new Article 188a into Regulation (EU) No 1308/2013, which establishes a common organisation of the markets in agricultural products. It read, in part, as follows: 'Agriculture and agri-food products may only be imported from third countries if they comply with production standards and obligations consistent with those adopted, in particular in the field of environmental and health protection, for the same products harvested in the Union or made from such products'¹.

Although the proposal failed to pass and lacked explicit reference to 'mirroring', it marked the start of the debate, highlighting issues of equivalence and fairness later termed as 'mirroring' or 'reciprocal treatment'. This debate took place within the context of the Green Deal and its agricultural targets, including reducing pesticide use. These targets have further exacerbated the already serious concerns within the agricultural sector, particularly given rising cost pressures, the expected increase in foreign competition, and the EU's emphasis on pursuing further trade agreements. In 2021, a trilogue within the same legislative procedure resulted in joint statements calling for a 'proactive engagement at the multilateral level concerning the application of EU health and environmental standards to imported agricultural products'. The EU Commission was invited to report on 'the rationale and legal feasibility of applying EU health and environmental standards ... to imported agricultural and agri-food products as well as identifying the concrete initiatives to ensure better consistency in their application ... '².

¹ EP, Committee on Agriculture and Rural Development, Report on the proposal for a regulation of the European Parliament and of the Council amending Regulations (EU) No 1308/2013 establishing a common organisation of the markets in agricultural products, (EU) No 1151/2012 on quality schemes for agricultural products and foodstuffs, (EU) No 251/2014 on the definition, description, presentation, labelling and the protection of geographical indications of aromatised wine products, (EU) No 228/2013 laying down specific measures for agriculture in the outermost regions of the Union and (EU) No 229/2013 laying down specific measures for agriculture in favour of the smaller Aegean islands, A8-0198/2019, 7.5.2019, p. 141.

² Statements on Regulation (EU) 2021/2117 of the European Parliament and of the Council of 2 December 2021 amending Regulations (EU) No 1308/2013 establishing a common organisation of the markets in agricultural products, (EU) No 1151/2012 on quality schemes for agricultural products and foodstuffs, (EU) No 251/2014 on the definition, description, presentation, labelling and the protection of geographical indications of aromatised wine products and (EU) No 228/2013 laying down specific measures for agriculture in the outermost regions of the Union (OJ L 435, 6.12.2021, p. 262.) 2021/C 488/03, OJ, C 488/6, 6.12.2021.

In 2022, the French Presidency of the Council of the EU revisited these ideas and introduced the current terminology advocating 'measures to ensure that imported products are subject to the manufacturing standards in force within the EU, whenever this is necessary, to heighten protection of health and the environment, in compliance with WTO rules ... ('mirror measures')' (French Presidency of the Council of the European Union, 2022, p. 20), and similarly for 'reciprocal environmental and health production standards ... ('mirror clauses').' The French government emphasised reciprocity and fairness in competition, bringing the idea of 'mirroring' to the forefront of discussions within EU institutions, Member States and the public. The underlying issues have also been the subject of some academic reflection.

2.2 EU policy context of the 'mirroring' debate

Concerns about the competitiveness of EU agriculture against imports from countries with assumed lower standards gained momentum already back in the 2010s, particularly during negotiations to deepen trade ties with North American markets. In the context of the 'Transatlantic Trade and Investment Partnership' (TTIP) negotiations between the EU and the US, these concerns were driven by issues such as agricultural standards, food safety (for example, chlorinated poultry and genetically modified organisms [GMOs]) and the application of the precautionary principle (Rudloff, 2014). With Canada, similar concerns were raised in the context of 'Comprehensive Economic and Trade Agreement' (CETA) negotiations, as highlighted in the Schubert report (Gouv. France, 2017).

Further significant shifts occurred in this direction with the introduction of the Green Deal in 2019 aimed at achieving a climate-neutral EU by 2050. Central to this initiative are targeted strategies for the agricultural sector, notably the Farm-to-Fork and Biodiversity Strategies. These strategies propose significant and measurable changes to farming practices (EU COM, 2020b, 2020a). Key targets include increasing organically farmed land to 25 % of the EU's agricultural area by 2030, reducing nutrient losses by at least 50 %, cutting fertiliser usage by 20 %, halving the overall use and risk of chemical pesticides, significantly reducing the use of hazardous pesticides, designating 10 % of agricultural land as landscape features with high biological diversity, and cutting antimicrobial sales for farmed animals by 50 % by 2030. At the same time, the strategies strengthened the case for trade measures to protect EU producers from unfair competition due to assumed higher environmental standards in the EU (Baldon et al., 2021). Livestock farming is also the focus of planned evaluations and revisions of the Animal Welfare Regulation (Regulation (EC) No 1099/2009) and the Feed Additives Regulation (Regulation (EC) No 1831/2003). The food processing and consumption sectors will also face new sustainability requirements, such as mandatory labelling and procurement standards, along with defined targets for reducing food waste (Majerczyk, 2025). In particular, this sector may be affected by new documentary

requirements arising from due diligence initiatives, such as those concerning deforestation-free value chains under the EU Deforestation Regulation (EUDR)³.

As mentioned, the French EU Council Presidency advocated for 'mirror clauses' as a means to maintain competitiveness under 'higher EU standards' (French Presidency of the Council of the European Union, 2022). By the end of 2023, widespread farmer protests intensified public debate around the unfairness and competitiveness challenges due to imports from countries with potentially lower standards (Matthews, 2024). In response, the EU Strategic Dialogue in 2024 proposed using sustainability benchmarks as a possible basis for 'mirror measures', drawing analogies to the Carbon Border Adjustment Mechanism (CBAM). This opened discussion on the methodological and practical challenges of implementation (EU COM, 2024b).

Beyond the Green Deal, additional strategic initiatives address general challenges to EU trade, and specifically the interconnection of competitiveness, security and sustainability priorities:

- Following Russia's full-scale invasion of Ukraine and the subsequent trade disruptions, the EU Commission underlined in 2022 the necessity for resilient and sustainable food systems, though without explicitly addressing standards (EU COM, 2022b). However, criticism from neighbouring countries regarding competitive pressure generated by autonomous trade measures supporting Ukrainian food exports prompted concerns about the risk associated with 'low standards' of Ukrainian imports (Pryshchepa, 2024).
- The 2022 EU Commission report on the 'Application of EU health and environmental standards to imported agricultural and agri-food products' found that the EU already enforces strict sanitary, phytosanitary, antimicrobial resistance and end-product standards on imported agri-food products. The EU also uses multilateral agreements, bilateral trade agreements and unilateral measures, such as EUDR, to address production practices in third countries. Furthermore, the report recommended intensifying multilateral and bilateral engagement, ensuring coherence across trade, development and environmental policies, and incorporating sustainability objectives into future framework legislation and FTAs to support the global transition towards sustainable food systems (EU COM, 2022b). Additionally, the report provided a systematic overview of categories of regulatory standards, distinguishing between product-related measures (PMs) and production- and process-related measures (PPMs), within both multilateral rulemaking and EU policy development contexts (EU COM, 2022b).
- The EU's 'Vision for Agriculture and Food' builds directly upon the Strategic Dialogue's final report, which outlined an inclusive, multi-stakeholder framework for the sector's future (EU COM, 2024b, 2025a). It also builds on key German precedents, such as the Borchert Commission's 2023 recommendations on animal husbandry and the broader *Zukunftskommission Landwirtschaft* report of 2024 (ZKL, 2024). It places strong emphasis

³Regulation (EU) 2023/1115 of the European Parliament and of the Council of 31 May 2023 on the making available on the Union market and the export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No 995/2010 (Text with EEA relevance), OJ L 150, 9.6.2023, pp. 206–247.

on improving the competitiveness of agriculture across the value chain while reducing administrative burdens. Although the Vision does not explicitly invoke 'mirror measures', it frames the EU's trade agenda through the principles of reciprocity and strategic autonomy, concepts frequently associated with food sovereignty and global food security objectives (EU COM, 2025a, pp. 11, 25). It advocates for stronger alignment of production standards applied to imported products, notably regarding pesticides and animal welfare, while stipulating that such measures must remain 'in line with international rules'. Notably, it highlights the restrictive impact of unilateral measures imposed by trading partners on EU exports, though without providing specific examples or empirical evidence (EU COM, 2025a, pp. 11, 13). The Vision emphasises 'deepening reciprocity to the Member States for further elaboration' and advocates a cooperative approach to 'work with FAO and our international partners in driving the development of a common approach to allow a comparable and fair assessment of sustainability aspects on food production globally, complementing the EU's work on benchmarking sustainability' (EU COM, 2025a, p. 12). In her inaugural address to the new College of Commissioners, President von der Leyen stressed fair and adequate farmer income while committing to continued strategic dialogue (EU COM, 2024a). In 2025, the EU Parliament Committee on Agriculture and Rural Development reaffirmed in their opinion on the CAP post-2027 that the EU should reaffirm to have the highest standards in terms of food safety, animal welfare, and environmental and social protection. It stresses that future legislation should be science-based and promote the economic competitiveness of farms. In response, the Committee on the Environment, Climate and Food Safety proposes the systematic inclusion of mandatory 'mirror clauses' in all trade agreements (EU Parliament, 2025a, 2025b).

- Within the broader framework of European competitiveness enhancement, the EU has initiated de-bureaucratisation and simplification measures, as outlined in the Draghi report and the Competitiveness Compass (Draghi, 2025; EU COM, 2025c). In alignment with the competitiveness objective, the application date of several pieces of legislation with implications for the agricultural sectors has been postponed to support preparation and reduce their perceived regulatory burden. This includes the EUDR (Niranjan, 2025; Nixon, 2025; Thomadakis, 2025).
- The negotiations for the EU's next Multiannual Financial Framework (MFF) for the period 2028–2034 have begun with the EU Commission's initial proposal (EU COM, 2025b). The structure of the MFF has already attracted criticism regarding the perceived inadequacy of agricultural budget allocations and the substantial discretionary authority granted to Member States (Matthews, 2025). The implications of this institutional flexibility for competitiveness and sustainability objectives are unclear and depend on future sustainability programme specifications and subsequent Member State decisions.
- The precise regulatory provisions and associated fiscal implications of the forthcoming revision of the animal welfare legislation, which is designed to revise existing legislation in accordance with the objectives of the Farm to Fork Strategy and build on the 'Strategic Dialogue for the Future of Agriculture', await clarification (EU COM, 2024b). This may

necessitate amendments to regulations governing slaughter practices and animal transport conditions. Other initiatives include extending antibiotic regulations – which are planned to come into force in September 2026 – to imported products (EU COM, 2024c). Similarly, the EU legislation to enforce zero maximum residue limits (MRLs) for specific neonicotinoids (clothianidin and thiamethoxam) will enter into force in March 2026 (Commission Regulation (EU) 2023/334, 2023).

2.3 Divergent positions among EU Member States

The public discourse on 'mirroring' significantly across EU Member States, reflecting divergent stakeholder interests and government positions. Criticism, support and concerns regarding 'mirroring' often intersect with broader discussions about European agricultural competitiveness, sustainability, and domestic food security. The next section presents selected examples to illustrate the range of positions and narratives expressed by Member States in this debate. These examples provide a general overview of key arguments but do not constitute an exhaustive account. Moreover, national positions should be understood as dynamic and subject to change over time. During the discussion on the 'Vision for Agriculture and Food' at the Agriculture and Fisheries (AGRIFISH) Council meeting in May 2025, several Member States emphasised the need for reciprocity in standards, particularly with a focus on plant protection and animal welfare. France also emphasised reciprocity and urged the introduction of 'mirror clauses', stricter import controls, and an EU inspection force. Austria, Belgium, Italy, Luxembourg and Slovakia supported the idea of reciprocal standards and a level playing field. Others, such as Ireland, showed a more cautious approach at least in this meeting, emphasising the EU's status as a major exporter and advocating balanced measures that preserve high EU standards while considering the potential impact on EU exports (EU Council, 2025).

France is regarded as the first and leading explicit proponent of 'mirror clauses', particularly through the *Loi pour l'équilibre des relations commerciales dans le secteur agricole et alimentaire et une alimentation saine, durable et accessible à tous* (EGALIM), which came into force in 2018. This legislation aims to ensure fair trade relations, promote sustainable agriculture, and improve animal welfare and environmental standards domestically. Debates on 'mirror clauses' intensified during negotiations on EGALIM 3 in 2023, with a particular focus on reciprocity for imported agricultural products (J.O. France, 2023). In late 2024, an extension to Article 44 of the EGALIM was proposed, advocating a ban on imports of agricultural products banned in the EU, thus ensuring strict reciprocity (Assemblée Nationale, 2024). Previous French initiatives in 2021 sought to introduce similar reciprocity measures during the CAP reform, albeit unsuccessfully. Despite these setbacks, the French EU Council Presidency in 2022 prioritised 'mirror clauses' and reaffirmed its commitment to reciprocity and fairness in international trade (Evain & Le Henaff, 2023). In June 2025, in response to Brazilian President Lula da Silva's invitation to stop blocking the finalised EU–Mercosur Partnership Agreement, President Macron repeated the demand to incorporate 'mirror clauses' in that agreement (Caulcutt & Gijs, 2025). Later, France and Poland released a statement calling for improvements in the agreement, specifically aligning import standards, explicitly mentioning animal welfare, environmental and social standards, and the goal of a level playing field

(Ministère de l'Europe et des Affaires étrangères, 2025). However, recent developments in France suggest a slight shift in approach: The *Loi Duplomb*, adopted in July 2025, allows for the conditional use of the neonicotinoid acetamipride, which had been prohibited since 2020. Key arguments supporting this law include concerns about competitiveness and the need to simplify bureaucratic processes (le Monde, 2025a). There is contentious debate on this legislation, and a petition against the law has been initiated (le Monde, 2025b). The current debate can be traced back to France's 2008 Ecophyto plan, which set the ambitious goal of reducing pesticide use by 50 % by 2025 (Demarty, 2024). According to a report for the French National Assembly, the EU already implements a limited set of sector-specific measures that could be identified as 'mirror measures', including restrictions on imports of hormone-treated animal products (Directive 96/22/EC) and products from animals that do not meet EU slaughter standards (Regulation EC 1099/2009) (Thomin, 2024).

In 2021, the **Austrian** National Council adopted a resolution opposing the EU-Mercosur Partnership Agreement, reaffirming its support for a balanced and open EU trade policy, while insisting that any agreement must uphold EU social, environmental, consumer and food safety standards (Parlament der Republik Österreich, 2021). It stated that imports should be subject to the same animal welfare, environmental and sanitary requirements as EU products, underpinned by enforceable rules on transparency, traceability and human rights safeguards (EU Council, 2023). At the AGRIFISH Council in March 2023, Austria reiterated the need to strengthen EU agricultural production, preserve the integrity of the internal market and ensure food security, arguing that 'mirror clauses' are essential for maintaining fair competition. The government also saw the need for compatibility of any 'mirror clauses' in the EU-Mercosur Partnership Agreement with WTO rules, so as not to upset the delicate balance achieved after two decades of negotiations (Bundesministerium Arbeit und Wirtschaft, 2024). Other stakeholders share this position: the Austrian Chamber of Agriculture has called for stricter import controls to protect domestic producers; the Austrian Farmers' Association has warned that an influx of cheap meat could undermine Austria's high animal welfare, environmental and climate protection standards, threatening sustainable small-scale farming; and the Austrian Trade Organisation has insisted that the EU-Mercosur Partnership Agreement must safeguard the quality and competitiveness of European agricultural products (Bauernbund, 2024; Handelsverband Österreich, 2024; Jung-Leithner, 2024).

In **Belgium**, the government argued that third countries should meet EU standards on animal welfare, health, and deforestation through an FTA – provided strict on-site compliance controls are enforced. Therefore, the government is in support of close cooperation with trading partners so that European standards can indeed be met in the long term (EU Council, 2022). Moreover, the government expressed its approval for the implementation of 'mirror clauses', as emphasised by Flemish Environmental Minister, Ms Demir. Considering the farmers' protests, she called on the government to persuade the EU to include 'mirror clauses' in FTAs with third countries (Belganews Agency, 2024; Guillot, 2024). In late 2024, in alliance with France, the Belgian government decided not to support the EU-Mercosur Partnership Agreement unless it included a strict 'mirror clause' (Foote, 2024; The Brussels Time, 2024). National agricultural organisations went even further and argued that in light of the targets established within the Green Deal, the implementation of

incomplete and impossible to control 'mirror clauses' was insufficient. They called for a halt to negotiations with Mercosur (FUGEA, 2024).

In **Bulgaria**, the National Grain Producers Association has expressed criticism of the EU-Mercosur Partnership Agreement, citing unequal competitive conditions as a major concern. According to the association, differing environmental, social, and production standards between the EU and Mercosur countries result in lower costs and provide a competitive edge to Mercosur (BTA, 2024). Therefore, it could be inferred that the association would advocate for the introduction of 'mirror measures'.

Germany exhibits a divide between government and stakeholder perspectives. In 2022, the government stated that references to health and environmental standards in bilateral FTAs can be useful for achieving sustainability goals. The government supports the Commission's position that the applicability of such an approach should be examined on a case-by-case basis, considering both the specific standards and the individual trade partner (Deutscher Bundestag, 2022). The 2025 coalition agreement supports 'mirror clauses' within the WTO framework (Bundesregierung, 2025). At the EU Agriculture Council on 13 June 2022, Germany highlighted the potential negative impact of 'mirror clauses' on low-income countries and advocated for sustainable agriculture standards (EU Council, 2022). In contrast, the German Farmers' Association (DBV) strongly supports 'mirror clauses' in EU trade policy, demanding that future agreements ensure that duty-free imports comply with EU standards. The DBV calls for strict enforcement through inspections and audits to protect domestic agriculture from competition based on lower standards (DBV, 2020). Similarly, Slow Food argues for mandatory 'mirror clauses' as essential for environmental sustainability, public health protection and fair competition (Slowfood, 2024).

In **Ireland**, government discussions have focused on embedding robust environmental provisions in FTAs to preserve a level playing field regarding sustainability, while occasionally acknowledging the relevance of trade policy options. Ministers have urged the EU Commission to secure commitments on environmental compliance, insisting that imports produced under laxer standards must be barred from the EU market (GOV.IE, 2023). National environmental organisations have also been vocal in their opposition to the EU-Mercosur Partnership Agreement, arguing that an influx of South American beef, produced to lower environmental and animal welfare standards and benefiting from economies of scale, would threaten small, family-run cattle farms already under financial pressure. Reflecting these concerns, there is widespread support from Irish NGOs for 'mirror clauses' to ensure that all imports meet the same production and environmental criteria required of domestic producers, thereby protecting local agriculture and ensuring fair competition (Environmental Pillar, 2024).

Italy has emerged as a strong advocate for 'mirror clauses', with both government and civil society actors supporting their implementation. Italian policymakers stress the need for equal standards in FTAs to ensure that imports comply with stringent EU standards (Governo Italiano, 2023). Civil society actors, including Slow Food Italy, advocate eliminating double standards, especially concerning pesticide use and residue limits, arguing that 'mirror clauses' are crucial for global equity, environmental integrity and public health protection (Slowfood Italia, 2024). Italian stakeholders have also been highly critical of the EU-Mercosur Partnership Agreement. For

example, *Confagricoltura's* president cautioned that the agreement could compromise EU food safety standards and disrupt agricultural markets. Although Italy supported FTAs with Canada, Japan and New Zealand, *Confagricoltura* sees major risks in the FTA with Mercosur (Decode39, 2024).

In the **Netherlands**, the Dutch parliament withdrew its support for the EU-Mercosur Partnership Agreement in 2020, citing (1) lower agricultural standards in Mercosur countries relative to EU requirements, and (2) insufficient enforcement mechanisms to ensure compliance. The Netherlands highlights significant risks of increased unfair competition for European farmers (Tweedkamer, 2020). Dutch farming and civil society groups welcome this parliamentary stance, which reinforces concerns about unfair competition and implicitly supports 'mirror clauses' to enforce EU production standards. However, Dutch think tanks raise critical concerns about their WTO compatibility, practical enforceability, and the negative impact of 'mirror clauses' on developing countries' market access and regulatory burdens (Zwaan, 2024).

The **Polish** government has articulated clear reservations regarding the EU-Mercosur Partnership Agreement, primarily concerning whether Mercosur imports would meet EU regulatory standards. Poland maintained that the agreement was unacceptable unless explicit safeguards were included to ensure compliance with EU standards. Closely aligned with France, Poland's opposition highlights concerns about the potential unfair competition that EU farmers would face (GOV.PL, 2024). During Poland's 2025 election campaign, trade with Ukraine and unfair competition concerns emerged as dominant issues (Tilles, 2024). Political candidates universally emphasised the disparity between Polish farmers' mandatory compliance with stringent EU standards while competing with lower-quality imports. The government called for robust safeguard mechanisms in future FTAs to limit excessive agricultural imports and their market-distorting effects. It stressed the importance of maintaining EU-based production and strengthening the competitiveness of European agricultural products against imports from third countries (GOV.PL, 2025).

In November 2024, **Portugal** joined Spain, France and Italy in supporting reciprocity measures, underlining its commitment to fair competition and alignment with European standards (Ministerio de Agricultura, Pesca y Alimentación, 2024).

Romanian stakeholders, particularly those involved in agriculture – including the Romanian Minister of Agriculture and the agricultural association 'Alliance for Agriculture and Cooperation' (AAC) – have expressed concerns about the restrictive and burdensome nature of EU regulations on the agricultural sector. According to these stakeholders, the stringent EU standards and requirements place Romanian farmers at a competitive disadvantage compared to other countries, such as those in Mercosur. The AAC advocates simplifying EU regulations (Actmedia, 2025). This would reduce internal EU bureaucracy and excessive regulations, giving farmers more leeway and improving their competitiveness.

Spain situates 'mirror clauses' within broader discussions on EU food sovereignty in several statements by several actors (la Moncloa, 2024). The government argues that 'mirror clauses' are crucial for maintaining competitive fairness and ensuring that the environmental gains of the EU's Farm-to-Fork strategy are not undermined by external emissions. Such measures would require

EU-wide political consensus and international support, particularly at the WTO level. Spain has also emphasised that 'mirror clauses' should not serve a protectionist agenda but rather pursue a reciprocal rationale – helping address such global challenges as climate change, biodiversity loss, and microbial resistance (la Moncloa, 2022). Spanish stakeholders in the agricultural sector strongly support 'mirror clauses' to level the playing field for European farmers (EFEAgro, 2024).

The **Swedish** government takes a cautious stance on 'mirror clauses', and has expressed concern, including during discussions at the AGRIFISH Council on 13 June 2022, about their possible negative effects on international trade. Sweden highlights the risk of 'mirror clauses' hindering economic growth in developing countries, and points to unintended consequences for global equity and market access. It emphasises that measures should be assessed on a case-by-case basis, be designed to promote greater sustainability, and be enforceable. In addition, their potential impact on exporting and developing countries needs to be clearly understood before such measures are adopted (EU Council, 2022).

Beyond this overview of selected stakeholder positions, primarily from agricultural producers and environmentally focused NGOs, alternative perspectives from other economic stakeholders also warrant attention. Although processors and traders rarely articulate explicit positions on 'mirror clauses' or 'mirror measures', these stakeholders have expressed significant concern about unilateral regulatory measures, including the EUDR. Their emphasis has been primarily on the increased input costs and compliance-related expenditure associated with these regulatory frameworks (BDI, 2023; OVID, 2023).

2.4 Responses and similar practices of major trade partners

Disputes stemming from domestic regulatory measures constitute a longstanding phenomenon in international trade, with related complaints made under the WTO framework. Since 1995, approximately 1 500 Specific Trade Concerns (STCs) have been raised in total. These represent officially announced concerns by WTO Member States regarding newly notified measures relating to Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary (SPS) standards. More than a quarter of agricultural STCs target EU regulatory measures:

- The United States (US) has initiated 98 STCs against EU actions, including challenges to the tightened pesticide tolerances.
- Brazil has directed almost 40 % of all its STCs at EU regulations only, particularly concerning proposed veterinary antibiotic bans and CBAM.

Japan and India have expressed similar concerns regarding the MRLs of neonicotinoids, describing these measures as a form of 'green protectionism' that imposes European regulatory priorities on foreign producers (WTO, 2024b). CBAM is one of the EU's recent regulatory initiatives that has prompted responses from trade partners and led to WTO disputes. For example, Russia initiated proceedings in 2025 (WTO, 2025c). The dispute relates to an alleged export subsidy provided by the EU under the Emissions Trading Scheme for greenhouse gas allowances. The EU has declined to engage in consultations regarding this matter (WTO, 2025b).

Explicit references to 'mirroring' are only to be found in a few documented examples:

- Out of all 326 STCs filed against measures in the EU and its Member States, 10 cases are explicitly listed under the categorising search command 'mirror clauses' (see Table 3 in the Annex).
- In the **US**, business actors have consistently raised two key concerns about EU 'mirror measures': the importance of science-based risk assessment, and the need to preserve national regulatory sovereignty (AmCham EU, 2022). These tensions were particularly evident regarding the EU's revised MRLs for neonicotinoids in 2023, prompting formal US challenges at the WTO. US representatives argued that these measures prioritised environmental considerations over well-established methods of health risks assessment, claiming that they were 'simply an attempt to address the concerns of European farmers' (WTO, 2025d, 2025a). The EUDR represented a significant escalation, prompting bipartisan congressional opposition. During the Biden administration, lawmakers denounced the EUDR's compliance requirements as operationally unworkable and restrictive (Ross, 2024). This political consensus translated into concrete industry demands, with American wood and paper producers lobbying vigorously for postponing the implementation (EUWID, 2024). Under the second Trump administration, this opposition has taken legislative form through the proposed PROTECT USA Act. Currently under consideration in the US Senate, this bill suggests a systematic response to extraterritorial regulation, specifically targeting strategic sectors such as agriculture, energy and defence, and referencing the due diligence initiatives of the EU (Sen. Hagerty, 2025). The recently adopted EU Packaging Regulation (2025/40) has also raised criticism from the US. This regulation requires US recycling facilities to meet EU sustainability standards and obtain US certification of compliance (USTR, 2025). There are several WTO disputes reflecting different understandings of the US and the EU on handling risk and the precautionary principle, namely the cases on Hormones (DS26) and on Biotech (DS291) (WTO, 2008, 2009).
- **Brazil** imposed reactive measures, embedded in its defensive trade policy framework, through the Economic Reciprocity Law (No. 15.122/2025) (Negrão et al., 2025). Originally initiated in response to the EU's due diligence rules under the EUDR and CBAM, the law targets unilateral environmental measures imposed by trade partners that exceed Brazil's domestic standards. The debate around this law emphasises national regulatory sovereignty, which is perceived as being compromised by EU legislation (gov.br, 2025). The law also provides a legal basis for implementing Brazilian countermeasures when trade partners' policies undermine negotiated benefits under existing trade agreements. This provision has direct implications for the EU-Mercosur Partnership Agreement (Rudloff et al., 2025). However, the legislation ensures that such countermeasures can only be used as a last resort. Its application requires a demonstration that alternatives – including diplomatic, cooperative solutions – are not an option (Negrão et al., 2025).

Comparable 'mirror' approaches in third countries are difficult to identify: firstly, the idea of 'mirror measures' or 'mirror clauses' lacks an international definition, making systematic comparative policy analysis difficult and, in many cases, meaningless. Secondly, the notion of 'mirroring' in a sustainability context seems to be a distinctly European discourse. While some third countries may

implement measures that envisage similar objectives, they are rarely formulated or justified using the same language or legal concepts:

- The **US** Lacey Act of 1900 was significantly expanded in 2008 to prohibit trade in illegally sourced plants and derived products, particularly timber (Prestemon, 2015). Originally designed to combat wildlife trafficking, the amended Lacey Act has become a critical tool in global efforts to curb illegal deforestation and unsustainable resource extraction, reflecting evolving priorities in trade-related environmental governance. More recently, the Uyghur Forced Labor Prevention Act (UFLPA) of 2021 represents a targeted US response to documented human rights abuses in China's Xinjiang Uyghur Autonomous Region. The legislation explicitly prohibits imports associated with state-sponsored forced labour systems targeting Uyghurs and other minority groups (US Department of State, 2025). By linking market access to compliance with labour rights standards, the UFLPA exemplifies how trade policy is increasingly being used to address non-commercial concerns, including human rights and ethical supply chains.
- In 2025, the **Kingdom of Saudi Arabia** notified the WTO of both SPS and TBT measures relating to poultry imports. This related to a certification requirement designed to ensure that chicken products from certified exporting companies conform to the Saudi Arabian national good agricultural practice standards (WTO, 2023).

2.5 Understanding terms and context

The ongoing discussion on 'mirror clauses' involves several terms, identifies objectives and policy options, and is based on assumptions that require further clarification – both for the ongoing discourse and for this analysis. To a limited extent, this clarification can be drawn from academic insights, as the relevant literature is still at a preliminary stage.

Such clarification needs to deepen an understanding of terminology. As the terms are embedded in the context of trade, agricultural and economic policy, and have economic and legal implications, some further conceptual reflection is required.

It is clear that the metaphorical term '**mirror**' captures the central concern in the discussion, which is that imported products should be subject to exactly the same regulatory conditions as domestic products. '**Reciprocal treatment**' probably conveys a similar message. Since the term does not promise any further clarification or additional insights, it is preferable to stick to the original terms 'mirror clause' and 'mirror measures', and to use the term '**mirroring**' to describe the overall idea. Another argument against using the term 'reciprocal treatment' is that it would require a clear and precise distinction from the term '**reciprocity**', whose long-established understanding in international trade law has recently been challenged by a controversial and incompatible concept of 'reciprocal tariffs' introduced by the US. The US concept deviates from the inherent meaning of reciprocity as actions based on mutual benefits and consensus, which is foundational for the international trade system. To illustrate the latter notion, the preamble to the Marrakesh Agreement Establishing the WTO notes that reductions of tariff and non-tariff barriers (NTBs) should be the result of 'arrangements' that are 'reciprocal and mutually advantageous'. The present study continues to subscribe to this notion of reciprocity.

Several of the terms in use, for example '**mirror clauses**' and '**mirror measures**', are compound nouns. In each case the notion of 'mirror' is followed by a modifier. A 'mirror clause' can be associated with FTAs, whereas 'mirror measure' can be understood as referring to unilateral action. Both meanings conform to the ordinary use of the terms⁴. On occasion, the term '**mirror provision**' is used. This is less specific, since 'provision' could imply any rule irrespective of whether it is embodied in an international agreement or an EU legal act.

However, these terms require clarification as to what 'mirror' means in context. The term itself is not operational – it is hardly suitable for use in FTA texts or an EU legal act. It is rather a **functional description** of clauses or measures that would bring about a 'mirroring' effect. In the most general sense, the above-mentioned wording (Section 2.1 above), as proposed in the European Parliament (EP), would qualify as a 'mirror clause'. In a more precise and specified way, any clause in a trade agreement or any EU measure that brings about '[t]he application of EU health and environmental standards to imported agricultural and agri-food products' would also qualify.

When both components of one of these compound terms are considered together, the term refers to an **EU standard** that applies not only to domestic production, but also to imported products. In many cases, a single rule covers both functions: regulating domestic goods and regulating imports. This is the case with EU product standards prescribing properties and characteristics, which are frequently applied to imports and domestic products alike. By definition, such product standards represent a 'mirror measure'. More relevant for the debate are situations where the application of a standard to imported goods is not 'automated' in this way. This is true for most standards, which relate to the production or processing of a product. In this case, a specific and separate decision is required to extend the application to imported products, which then evidently constitutes a 'mirror measure'. Such 'mirror measures' can be construed in various ways, which are sometimes combined. They may relate to border controls or placing on the market, may involve import fees, or establish supply chain due diligence obligations.

Further clarification is needed on the variety of **goals** pursued with the 'mirroring' approach. Clearly, the protection of health and the environment is at stake, as reflected in the aforementioned proposals, statements and reports. In the discourse, labour standards have been put forward, as has sustainability in general. One could roughly see the issues included in FTA chapters on Trade and Sustainable Development (TSD) as a proxy for this group of objectives. In addition to labour, animal welfare and sustainability, 'mirroring' is clearly also about ensuring fair competition for European producers. The balance between these two goals may vary between the various contributions to the discourse. However, it should be emphasised that 'mirroring' is grounded in these objectives. In this context, the mention of leakage (i.e. the disproportionate application of stringent standards that may lead to the relocation of EU producers abroad) shows clearly that these objectives might even be closely interlinked.

⁴ 'Clauses' in the ordinary term can be understood as 'a particular or separate article, stipulation or provision in any formal or legal document' (OED) whereas a 'measure' is understood as 'a legislative enactment proposed or adopted' (OED).

Lastly, it should be noted that the discourse is focused entirely on advocating the identical application of EU standards. The image of the 'mirror' thus represents a narrow **self-referential approach** in a wider field of available options for international interaction and solutions.

3 Critical assessment of 'mirroring': Economic and legal perspective

The emerging emphasis on 'mirroring' rests on assumptions that warrant systematic examination. These include whether comparative advantages resulting from different production conditions reflect normal international market functioning that may be beneficially utilised through trade, or whether they describe conditions that hinder optimal use of international opportunities. Further questions arise regarding whether the presumed causal links between regulatory standards and competitive disadvantage can be empirically validated, and whether regulatory differences necessarily require political responses through trade policy rather than alternative approaches.

The 'mirror' discourse advances two distinct but interconnected objectives. First, it seeks the broader application of EU standards and their objectives on sustainability to the benefit of consumers, producers and the environment in the EU and abroad. Second, it aims to promote what is termed 'fair competition' for European producers by addressing perceived regulatory disadvantages. The policy debate on 'mirroring' often focuses on mechanisms in bilateral trade agreements and unilateral trade measures as the main tools for achieving these objectives, but other options beyond trade, such as agricultural policy, can also pursue sustainability and competitiveness. Private actor initiatives independent of political intervention also exist.

This chapter carries out an in-depth examination of 'mirroring' in terms of its underlying concepts and objectives, through three analytical dimensions. First, it assesses the various elements potentially targeted by 'mirroring' options within the overall dimensions of sustainability and competitiveness. Additionally, it reviews the empirical evidence supporting the assertion that regulatory differences result in competitive disadvantages, while also scrutinising the methodological issues involved in establishing causal relationships between standards and competitiveness outcomes. Second, it examines the legal basis, rules and practical complexities involved in applying EU standards globally and bilaterally, particularly in relation to WTO rules. Third, the chapter explores the strategic consequences of bilateral versus unilateral regulatory alignment approaches, highlighting implications for the EU's trade relationships. Finally, the chapter concludes with a synthesis that identifies the potential opportunities and risks related to legal compatibility, economic and political costs which are associated with different policy options to be considered.

3.1 Need for policy intervention and the optimal regulatory level: Sustainability and competitiveness as public goods?

As the discourse surrounding 'mirroring' focuses on two main objectives – sustainability and competitiveness – a related question is how and whether these objectives should be addressed through trade intervention. Finding an answer to this question should start with an assessment of the extent of market failures, particularly those arising from public goods or externalities.

Sustainability domains often have characteristics of public goods, such as non-excludability and non-rivalry (Kaul et al., 1999; Samuelson, 1954). They can also be linked to both negative (e.g. groundwater pollution) or positive (e.g. biodiversity enhancement) externalities of production and consumption activities of private actors. Market mechanisms fail to provide public goods adequately or to effectively internalise externalities. The economic rationale for public intervention in achieving sustainability objectives focuses on maximising welfare.

Public intervention measures range from establishing an overall economic framework, and defining legal provisions such as standards, to providing financial incentives, including subsidies and tariff reductions – or conversely imposing penalties and tariffs. The optimal institutional actor and regulatory level for providing public goods or internalising externalities depends on their spatial and temporal scope (Chandra Jha, 2015; Swinnen & Vandemoortele, 2011; Urfei, 1999). Consequently, global public goods such as climate change and its mitigation are best managed multilaterally to address global costs and benefits. Conversely, local externalities may be more effectively addressed at local or regional levels, in ways that enhance welfare, reflecting specific local supply conditions and consumer preferences. This could potentially justify divergent regulations and standards in order to maximise welfare. A counterargument to nationally determined aims and standards is the risk of a race to the bottom, potentially creating 'pollution havens' that undermine sustainability objectives (Levinson & Taylor, 2008; Porter, 1999). Nevertheless, decentralisation and regulatory diversity can foster beneficial competition and innovation, supporting more effective approaches to sustainability.

Identifying specific sustainability-related public goods is not straightforward and carries the risk of prompting premature public intervention. **Climate change**, for instance, can be considered a global public good, as its effects are felt worldwide and it exhibits global non-rivalry and excludability. However, the magnitude of these effects varies significantly across countries. **Biodiversity** protection is less clear-cut as a global public good, as it contains local good aspects, such as the conservation of species unique to specific regions. Its global dimension may be reflected in the value of species diversity or in maintaining the global genetic pool (Perrings, 2005). **Global health** threats, such as antibiotic resistance, are often discussed as global public goods, while also acknowledging their partial private goods characteristics due to potential exclusion (R. D. Smith & MacKellar, 2007). **Food safety** can be considered an international public good as part of public health that may threaten populations in importing countries through trading unsafe products. **Food security** represents another example, often characterised by mixed public and private good features (Tweeten, 1999). Moreover, **ethical considerations** such as human rights and religiously influenced attributes (e.g. kosher or halal production) may also be understood as public goods (Johan & Schebesta, 2022). **Animal welfare**, as a multidimensional issue, encompasses various aspects such as nutrition, environment, health, both regarding human and animal health, and animal behaviour (Mellor & Beausoleil, 2015). These different dimensions are often not specified in stated political objectives aimed at supporting animal welfare. Its ethical connotation is often defined as public good (Espinosa & Treich, 2024). Additionally, these ethical public goods are often described as global, as they affect societal preferences across countries (Augenstein, 2016; Rollin, 2019).

Identifying sustainability-related public goods and their spatial dimension is not trivial, and overarching public goods such as animal welfare or biodiversity encompasses different subcomponents with varying spatial extents. The determination of public goods and their scope cannot be based on economic criteria alone. It depends on normative judgements, which evolve over time and vary across cultural and societal contexts. Assuming that preferences for certain public goods and externalities are shared worldwide can lead to an overestimation of the global dimension of public goods. This can also result in premature calls for global harmonisation of standards, or for the unilateral application of standards, despite the fact that local goods could benefit from maintaining diverging standards.

Economic competitiveness is increasingly emphasised alongside sustainability in the public debate on 'mirroring'. The surrounding overall economic policy framework, which ensures a well-functioning market, can itself be viewed as a public good. In the same way, open trade is also understood as a global public good, subject to the risk of the prisoner's dilemma: while national protectionism may seem rational for individual countries, it collectively undermines global trade. With this understanding, achieving the global optimum of open trade requires a strong overarching institution to enforce reliable rules – such as the WTO (Kaul et al., 1999).

The idea of 'eco-dumping' explicitly links competitiveness to sustainability. It refers to strategies by which countries lower sustainability standards as a means to reduce production costs and, in particular, to enhance export competitiveness (Kerr, 2006; Viner, 1922). In this context, the use of trade policy tools, such as tariffs, as potential corrective measures has been analysed (Kraus, 2000). Nevertheless, distinguishing between strategic dumping and diverging regulatory frameworks that reflect different conditions remains difficult. Modern trade theory explicitly recognises differences in product quality, which may arise from diverging consumer preferences and regulatory systems (Melitz, 2003; Vogel, 1997).

3.2 Competitiveness and regulatory influence: Measurement and comparison challenges

In current policy debates, 'mirroring' is often presented as a mechanism to ensure fair competition for EU producers (Zwaan, 2024). This politically framed aim is embedded within the broader policy context of the Green Deal and its potential effect on production costs, the criticised increase in bureaucratic burden, and longstanding concerns about the pressure of ongoing structural adjustments for individual farms.

Both the public debate and academic analyses refer to overlapping but distinct concepts, such as competitiveness, fair competition and level playing field. Policy design should begin with a diagnosis of the competitiveness problem. This involves identifying the underlying parameters influencing competitiveness and assessing whether the regulatory provisions are a contributing factor. Where claims of regulatory unfairness arise, the analysis must establish whether there are international differences in regulatory provisions, whether these differences create competitiveness disparities that warrant political action, or whether they simply reflect different national

conditions and preferences. Finally, it must be determined whether such disparities provide a valid rationale for trade-related 'mirroring' or for alternative measures.

3.2.1 Competitiveness: Concepts, methodological challenges and empirical evidence for the EU

Despite its frequent use in public discourse and academic literature, there is no universally accepted definition of competitiveness (Carraresi & Banterle, 2008, p. 1; OECD, 2021, p. 12). The term may refer to a variety of value chain actors (for example, producers and processors), or to broader categories of actors within the economic system (including producing or enforcing entities, such as public authorities) (Beck et al., 2024). Competitiveness can also be analysed at multiple spatial levels, from individual firms to national or regional economies. The OECD acknowledges the diversity of definitions, each with implications for measurement (OECD, 2021). It defines competitiveness as 'a measure of a country's advantage or disadvantage in selling its products on international markets' (OECD, 2014). The World Economic Forum defines it as a country's level of productivity, shaped by parameters across five pillars, including institutional and infrastructural settings (WEF, 2017) (see Annex Table 4).

Linking the understanding of country-level competitiveness to trade draws on classical trade theory, which identified comparative or absolute advantages, based on production costs (mainly labour costs), as key drivers of welfare gains from trade at national and global levels (Ricardo, 1817; Smith, 1776). Later refinements examined how differences in resource endowments, including immobile factors such as land, can shape competitiveness, alongside other capacities (Leamer, 1995). The question of whether protecting certain sectors through trade measures supports or – on the contrary – undermines competitiveness has been debated for a long time (Krueger & Tuncer, 1980).

The notion of a level playing field often refers to the idea of the overall policy frame and emphasises the regulatory and institutional conditions under which competition occurs. This includes the role of subsidies and other policy interventions that can distort competitive dynamics (Gillis, 2023). The related issues of fair competition and fair trade have been discussed extensively in the literature, with comprehensive historical overviews of debates and related policy tools used provided by Baghwati (1993).

Designing an evidence-based and effective policy to respond to expressed competitive disadvantages for EU farmers requires a sound analysis. However, there are still several methodological challenges. First, the concept of competitiveness is multidimensional. Few studies systematically compare the regulatory frameworks of the EU and third countries, and even fewer focus on causal links between regulatory divergence and actual differences in competitiveness. Furthermore, the concept applied in analyses, as well as the methodology and dataset used to evaluate and measure competitiveness, can significantly impact outcomes, potentially resulting in divergent policy recommendations (see Annex Table 4).

Approaches to analysing and measuring competitiveness can be broadly grouped into three categories: trade-related, cost- and productivity-related, and structural or systemic approaches

(Wijnands et al., 2008). Each of these faces specific challenges and can yield different results, for the EU:

(1) EU trade-related competitiveness. Respective approaches assess national competitiveness through trade performance. Balassa's Revealed Comparative Advantage (RCA) builds on Ricardian trade theory of comparative advantages (Balassa, 1965). Variants of this approach include separate analysis of export and import shares to assess competitiveness (Vollrath, 1991). For the EU, several studies indicate that the bloc has long been an internationally competitive agricultural actor, particularly with respect to exports (Matthews, 2022):

- *Wheat:* The EU has, for decades, consistently ranked among the top global wheat exporters (Statista, 2025). In 2024, it accounted for 15.3 % of global wheat production, making it the world's second-largest wheat-producing region (USDA FAS, 2025b).
- *Beef:* In 2023, the EU was the sixth-largest beef exporter, a position it has held since 2018. Although absolute export volumes are modest, the EU was the fourth-largest beef producer in 2024, accounting for 10 % of global beef production (USDA FAS, 2025a).
- *Sheep:* In 2024, the EU ranked fourth in global exports of sheep products, and has remained within the top five exporters of live sheep since 2011 (WITS, 2024).

High-value agri-food exports, particularly dairy products and olive oil, demonstrate strong EU competitiveness, as do processed foods such as confectionary and chocolate products (EU COM, 2025d). Producing these processed foods, however, depend heavily on international developments in raw material supply and prices.

Estimating future competitiveness also requires an examination of imports, especially for essential inputs. Competitiveness can be constrained by dependency on key inputs such as fertilisers, plant protection products, and protein-rich crops (Beck et al., 2024). The EU's reliance on imported fertiliser is marked by a concentrated supplier base. Its import dependency for use as high as 68 % of phosphates in 2019, with concentrated key suppliers of fertiliser in general – such as Russia, Morocco, and Belarus (Loi et al., 2024). This dependence may trigger price surges and supply vulnerabilities for agricultural production.

(2) EU cost- and productivity-related competitiveness. Cost- and productivity-based approaches link competitiveness to relative cost structures and productivity levels.

- **Producer prices** are sometimes used as a proxy for costs, but this measure must be interpreted with caution, since prices reflect multiple influences and may also capture product quality. Drawing on Emlinger & Guimbard (2025), the following pattern can be observed for 2020: EU **beef** producer prices exceeded those in Mercosur countries and in North America, but were lower than those in Australia. In **poultry**, EU producer prices were the highest compared to major trade partners, while in **wheat**, EU producer prices were lower than those of most competitors but higher than for Mercosur countries.
- Looking at **cost levels**, Havlik et al. (2025) estimate for EU-wide cost increases over the last decade of 40 % for energy, 35 % for fertilisers, and 12 % for feed and seed – due to market factors, geopolitical events, and supply chain disruptions.

- Productivity trends provide a more nuanced picture. **Total Factor Productivity (TFP)** measures agricultural output relative to a combination of inputs – such as land, labour, capital, and technology (Bureau & Antón, 2022; Latruffe, 2010). Some studies further disaggregate productivity by factor, with labour productivity being a common parameter (Beck et al., 2024). TFP in the EU has risen steadily since 2007, indicating that, by this measure, the EU has been competitive. However, Demarty (2024) highlights that in contrast to the increase for the EU, France's TFP has remained stable, citing rising labour costs – especially relevant for fruit and vegetables, but also for meat production – as a primary factor. Other factors he identifies include strict building permit rules, particularly relevant for poultry production, as well as more stringent environmental regulations compared to the EU average.
- **Labour productivity** has recorded the strongest gains, while capital- and land-productivity have grown more slowly. Agricultural income per working unit for the EU as a whole was an estimated 91.6 % higher in 2024 than in 2009 (Eurostat, 2024). Explanations vary: some emphasise general geographical advantages, such as soil and environmental conditions (Beck et al., 2024), while others highlight structural weaknesses, especially among small farms (Havlik et al., 2025). Labour productivity also differs widely across production systems and sectors, and tends to be higher in grazing livestock sectors and lower in labour-intensive branches such as horticulture (Giannakis & Bruggeman, 2018). Between 2013 and 2020, dairy systems recorded the highest annual growth rates in labour productivity in the EU since 2007 (Beck et al., 2024). Productivity trends also vary across EU Member States. Agricultural labour productivity increased in 13 EU countries in 2024 compared to 2023. The sharpest rate of increase was in Latvia (+46.9 %), followed by Luxembourg (+27.1 %) and Sweden (+22.5 %). The steepest rates of decline were registered in Romania (-16.8 %), Hungary (-15.5 %) and Poland (-12.5 %) (Eurostat, 2025).

Comparing EU cost- and productivity structures with other countries, such as Canada and the US, reveals broadly similar TFP growth from 1981 to 2020 (Jelliffe et al., 2024). However, the underlying drivers identified differ sharply: according to Jelliffe et al, the EU achieved gains primarily through resource efficiency, reducing agricultural inputs by 25 %, whereas North America increased output by 50 % largely through higher input use. Earlier findings by Ball et al. (2010) indicate that between 1973 and 2002, US agriculture showed a higher relative productivity level. Additional factors, such as exchange rate dynamics and relative input prices, have also contributed to differences in competitiveness.

(3) Structural and systematic parameters influencing EU competitiveness. Approaches that explicitly examine influencing factors go beyond trade- and productivity or cost-related indicators assessing the results. The Porter-Diamond approach combines a wide range of elements, including production costs, institutions and chance events, to identify sectoral competitiveness (Karácsony, 2008; M. E. Porter, 1990). Studies applying this framework to Hungarian wheat production, for example, have identified market information, machinery capacity, risk management and policy incentives as relevant factors for quality production. Beck et al. (2024) highlight the importance of farmers' positioning within the value chain, their exposure to price volatility, their access to

education and skills, and their exposure to production risks, particularly those related to climate change. Jambor and Babu (2016) emphasise a variety of additional factors, including land and labour productivity, land endowment, GDP per capita, Producer Support Estimates (PSEs), WTO membership and tariff levels. They also stress that 'a more complex set of economic, environmental and social factors determines whether a country can realise its competitive potential' (Jambor & Babu, 2016).

All these analyses reveal a large range of different parameters. One of these is regulation, which can have both negative and positive effects on different aspects of competition and needs to be further evaluated.

3.2.2 Fair competition: Linking international differences in regulation to competitiveness

Isolating the specific impact of regulation on competitiveness and whether this reflects unfairness requires a detailed analysis. Some studies support the notion that strategic deregulation significantly enhances competitiveness by lowering costs, achieved by means of eco-dumping (Kraus, 2000; Xu, 2000). Whether diverging regulation is used strategically or reflects national conditions is hard to determine.

Differences in regulation

Analyses of regulatory impacts on competitiveness often focus on the trade-related dimension, typically narrowing in on specific products, value chains, and certain individual regulations. A large body of literature explores the impact of product standards, particularly those tied to food safety regulations (Hejazi et al., 2022; Karemera et al., 2022). Internationally comparative regulatory studies frequently examine differences between the EU and the US, or between the EU and strong economies, on one side, and developing countries, on the other (Baylis et al., 2008; Desta, 2008; Kosovska, 2013; Otsuki et al., 2001; Scheepers et al., 2007; Webb, 2015; Wieck & Rudloff, 2014).

More recently, several analyses have modelled the potential effect of the Green Deal⁵. However, they generally do not include a direct international regulatory comparison with third countries. Beckman et al. (2021) analyse the global and EU effects. Their comparison without the Green Deal and after its full implementation indicate that for the 20 products they cover, EU production could fall by between 7 and 11 % depending on the scenario, for example including trade shifts, while prices could rise by up to 60 %. The possible gains from price increases resulting from a decline in production depend on producers' responses and price elasticities (Matthews, 2022). Price effects could benefit producers, but for the European consumer could lead to an anticipated annual cost of 650 USD (Beckman et al., 2022). They project an overall reduction in global trade and a decline in EU imports of up to nearly 10 %. Henning et al. (2021) similarly anticipate a drop in EU production, especially for beef (-20 %) and cereals and oilseeds (-20 %) compared to a scenario without the Green Deal. Regarding prices, they estimate increases mainly for beef (+58 %), pork (+48 %), and

⁵ All studies assessing the potential impacts of the Green Deal base their simulations on its stated targets, such as reducing pesticides. However, the studies partially cover different sets of targets, and use different scenarios, methodological approaches and model assumptions.

to a lesser degree, for horticulture and wine (+18 %) as well as for cereals (+12 %). Concerning trade, the main result is a shift from net-exports to net-imports, mainly for cereals and beef, and an increase in net-imports for dairy produce and fruits and vegetables (Henning et al., 2021). Bremmer et al. (2021) model that, following implementation, the Green Deal could lead to production declining by up to 20 %, depending on the crop. The study concludes that the Green Deal could create a competitive disadvantage relative to imports from countries not subject to the same environmental restrictions. In particular, the authors raise concerns about increased trade dependency (Bremmer et al., 2021).

Empirical work on international regulatory differences remains scarce. Regarding animal welfare, studies examine different components of this multidimensional concept, sometimes at an aggregated level without specifying individual aspects of animal welfare. Additionally, the overall legislative animal welfare objectives are often less quantitatively defined compared to certain aims for pesticide reduction targets, making assessment of their effects more difficult. Ferguson et al. (2025) highlight the overall methodological difficulties of measuring regulatory divergence. They find that countries may pursue similar animal welfare objectives through significantly different regulatory strategies, meaning that a simple comparison of provisions may yield misleading results. The findings of existing studies differ significantly, as they address different sustainability objectives, types of provisions and country samples (Annex Table 5).

Menghi et al. (2014) found significant variation in compliance costs across EU Member States and sectors. For broiler production, costs ranged from –1.1 % in Italy to +1.45 % in Germany, while the cost of pig production was 2.18 % in Germany and 3.5 % in Poland. The benefits, including subsidies, investments, additional revenues and productivity gains, were generally recognised by farmers, consumers and citizens. Internationally, Menghi et al. (2014) compared selected EU legislation with that of key beef trade partners, examining environmental protection, animal health (including feed regulations) and other animal welfare legislation in the United Kingdom, Argentina and Brazil. Complex equivalence assessments are carried out for these regulatory areas. For example, in terms of environmental legislation, Italy had the highest compliance costs within the EU based on some farm types. Among third country trade partners included in the study, Brazil had the highest compliance costs regarding nitrate legislation, though these were still lower than e.g. Italy's.

Animal welfare, an increasingly prominent policy goal, has been addressed far less frequently in the literature on competitiveness:

- A large-scale survey of almost 20 000 people in Bavaria found that around 40 % rated regulatory efforts in terms of documentation requirements related to animal welfare for different animals and organic farming as 'excessive', but no international comparison was included (Bayerische Staatsministerium für Ernährung, Landwirtschaft, Forsten und Tourismus, 2024).
- The EU COM's 2022 'Fitness Check on Animal Welfare' found that compliance costs of selected legislation covering also sub-aspects of animal welfare as a percentage of annual production cost varied significantly between sectors: nearly 11 % for laying hens, 1.5 % for pigs, and 0.26 % for broilers and slaughtered animals. No cost data were available for

transport. The benefits were mainly described in qualitative terms, with no quantified net effects. Although the Fitness Check compares regulatory frameworks across EU Member States, it lacks an international dimension. Horne (2018) estimated that EU legislation on animal welfare, food safety, food quality, and environmental standards increased poultry production costs by about 6 % compared to key competitors such as Brazil, the US, Thailand, Argentina, and Ukraine for the year 2017. According to Wimmer and Dakpo (2023), the US achieved historically and significant higher TFP growth than the EU (+60 % vs. +8 %) from 1961 to 2016. These differences were partially linked to diverging regulatory provisions, identified as stricter in the EU, concerning environmental protection, health, and GMOs that may have constrained technical progress during this period. However, a few EU countries (e.g. Benelux states, Spain and Ireland) matched US productivity levels by 2020 (Wimmer & Dakpo, 2023).

Impact of differences in regulation on competitiveness: conceptual challenges

There are several overarching challenges to assessing how identified regulatory divergence translates into competitiveness.

(1) Including benefits for net effects

Potential benefits should be considered to avoid overestimating the negative impact of regulatory costs. While such benefits are often acknowledged in principle, few studies attempt to summarise the final net effect of individual regulations. Cohen & Tubb (2018), for example, found evidence of positive competitiveness effects from environmental regulation, though not specific to agriculture. In their meta-analysis, they conclude that such environmental regulation tends to trigger innovation and, over time, increase national competitiveness. Additional benefits may derive from regulation-linked (conditionalized) subsidies, such as those conditional on compliance with Good Agricultural and Environmental Conditions (GAEC) under the CAP.

Other benefits arise from access to high-value market segments made possible by regulatory compliance. These benefits are often more difficult to quantify than compliance costs, as they typically affect 'soft' parameters such as reputation or consumer trust, and may only become visible over time (Swinnen, 2016). This makes it challenging to estimate the overall net effect of regulation on competitiveness.

(2) Including costs from enforcement and control

Evaluating the cost of implementation and enforcing regulations requires a wide range of cost categories, varying across actors and processes, to be accounted for. These include staff costs, technical expenses, and specific operational costs such as port inspections (Grainger et al., 2018; Petersen et al., 2024). Existing assessments are typically limited to case studies on specific products and processes: for example, Grainger et al. (2018) provide a detailed breakdown of the costs associated with importing meat into the United Kingdom and Kenyan flowers into the Netherlands. However, they do not provide an overall cost estimate. Du et al. (2025) finds that the UK's Trade and Cooperation Agreement with the EU (EU-UK TCA) resulted in substantially higher trade costs due to additional border checks, paperwork and other expenses. This led to a 36.1 %

decline in the value of UK agri-food exports to the EU, while prices increased by 17.6 % compared to pre-Brexit.

For the EUDR, several officially commissioned impact assessments include estimates of implementation costs: the EU Commission estimates that enforcement across all EU Member States will cost around EUR 18 million per year (EU COM, 2021). In relation to this, in Germany the competent authority estimates that around 20 000 administrative processes will be initiated daily, adding up to EUR 9 million per year (BLE, 2024). An additional cost component may arise from a 'retroactive externality' within highly integrated value chains. For example, an increase in production costs for a trade partner due to the need to comply with regulations on certain components can also raise production costs for processors (Beghin & Schweizer, 2020).

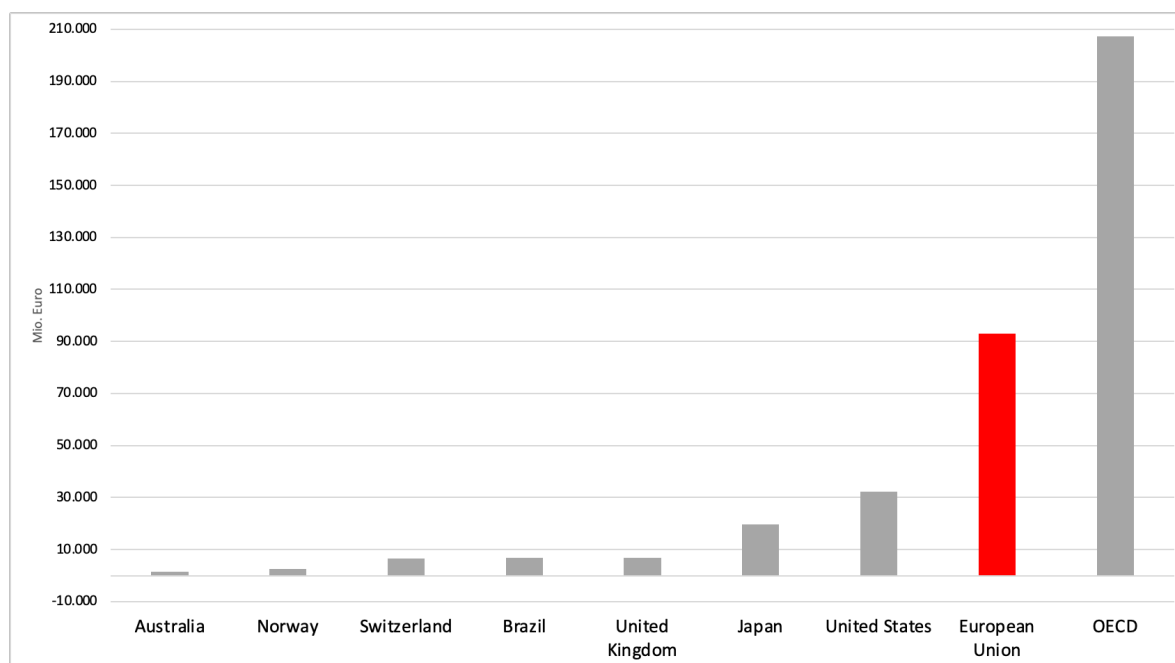
A complete welfare analysis of regulatory provisions requires assessment of their overall economic effects. For example, Henning et al. (2021, p.4) estimate for the Green Deal the total public adjustment costs to the EU at EUR 42 billion, the majority of which will be borne by consumers, who face an overall welfare loss of EUR 70 billion.

(3) Effects of general policy support on competitiveness

Traditionally, concepts and datasets used to measure competitiveness may already endogenously include political factors that enhance competitiveness (Bebek, 2017). Subsidies or investment aid can influence the outcome of competitiveness by stabilising farm incomes, reducing production risks, and enabling compliance with regulatory requirements. Therefore, measured competitiveness may partly be the result of supportive policies (Danna-Buitrago & Stellan, 2022).

The types and levels of agricultural support vary considerably across countries, and the relevant data often come from different databases (Annex Table 4). The EU has traditionally ranked among the regions offering relatively high levels of agricultural support, as measured for example by the Producer Support Estimate (PSE)⁶. Although the EU's PSE has declined over time, it remains higher than in several competing regions, such as Australia and Brazil, but lower than the average for the Organisation for Economic Cooperation and Development (OECD) (Figure 1).

⁶PSE expresses the producer support estimate and covers and summarises the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm-gate level, arising from policy measures that support agriculture, regardless of their nature, objective or impact on farm production or income. Different types of political support to the producer exist, such as market price support and other support for outputs and inputs. See OECD [PSE manual 2016](#).

Figure 1: International comparison of political support to agriculture, PSE, 2023 in EUR millions

Source: based on OECD (2025b)

Historically, the EU's trade partners have criticised the CAP for its spillover effects on international competitiveness, particularly under its earlier design in which subsidies were directly linked to production, thereby distorting trade (Matthews et al., 2017). In 1994, the WTO Agreement on Agriculture (AoA) introduced tariff and subsidy reduction commitments, as well as rules for their design, with the aim of avoiding trade-distorting support (Chigavazira, 2016). Since then, successive CAP reforms have progressively decoupled subsidies from current production, reducing their direct trade effects. Nevertheless, such subsidies can still influence the overall attractiveness of the farm sector and indirectly affect competitiveness (Jones & Bethmann, 2023; Kazukauskas et al., 2014). From the perspective of many countries in the Global South, the decades of coupled support and guaranteed prices provided to EU farmers are viewed as a form of 'historical injustice', which has helped establish a stable EU agricultural sector (Gonzalez, 2002). Besides the international effects, subsidies may also contribute to regulatory benefits when their payment is linked to compliance with specific regulatory requirements.

Looking at tariffs, they may influence domestic competitiveness and the competitiveness of others. The EU applies significantly higher duties on certain products, acknowledged as the most vulnerable to import competition: for example, on dairy products the maximum applied tariff is 132 %, and for fruit – 150 %, in the year 2023/24 (WTO, 2024c). Also, the EU can make use of a special safeguard under the AoA, and has reserved this option for more than 600 products, ranking behind only Norway and Switzerland in the number of tariff lines covered (Ungphakorn, 2020). The EU has applied this special safeguard for a limited number of products (WTO, 2024a).

As a large market actor, the EU may in principle affect world market price levels to improve its own terms of trade (Ogawa, 2007). However, associated welfare gains depend on the overall price and demand effects, and thus on market reactions. Additionally, such potential gains are often temporary and primarily accrue to producers being protected, while consumers face increasing

domestic prices (Alvarez & Yilmazkuday, 2025; FAO et al., 2011). Trading partners may be negatively affected, as depressed world market prices can erode their competitiveness (Rickard, 2004).

(4) International policy-spillovers

In interconnected trade relations, measures in competition and sustainability can affect related trading partners, which in turn has repercussions for the EU. Measures taken by the EU affecting production in third countries may influence its own competitiveness, for example by raising the cost of input factors for the EU processing industry (Weerdenburg, 2023). Analyses on the EUDR indicate other trade-related negative effects, such as requiring costly renegotiation or new market access offers as compensation (Rudloff et al., 2025). Such changes in trade patterns and the reallocation of production could undermine certain sustainability objectives, for example by increasing environmentally harmful production in other countries. Leakage effects of this kind are examined in some analyses of the Farm to Fork Strategy or the EUDR (Henning et al., 2021; Johnston et al., 2025). Other studies refer specifically to potential food security risks due to the Green Deal, for example by driving up food prices (Baquedano et al., 2022). Benefits are also possible. Gohin & Matthews (2024) demonstrate that applying certain EU provisions to imports could benefit foreign producers. However, their findings are limited to glyphosate restrictions on fruit and vegetables only. They acknowledge that broader Green Deal applications may initiate different effects that need to be carefully analysed (Gohin & Matthews, 2022).

In sum, the different strength of regulations across countries and their potential effects on competitiveness can only be determined on a case-by-case basis, given the methodological challenges described above. Such assessments must carefully examine the underlying reasons for regulatory differences and weigh both the related costs and potential benefits. Moreover, any policy responses should remain within the relevant legal framework and take into account their own costs.

3.3 Applying EU standards globally: WTO disciplines, FTAs and practical considerations

An assessment of 'mirroring' also has to look to its feasibility in view of the available tools and limitations in legal and practical terms.

In legal terms, the application of EU standards in international trade is governed by international trade law, primarily the rules of the WTO. They determine what measures WTO Members may take unilaterally in international trade, which is where 'mirror measures' come into play. Aside from these multilateral rules, the EU may conclude trade agreements with third countries that offer means for achieving EU standards by consensus in the form of 'mirror clauses'. In any case, limitations arising from practical conditions have to be taken into account, since they may impact the effective and efficient application of EU standards in trade.

3.3.1 The WTO legal framework for standards: Limits of unilateral action

Altogether, the WTO and its vast rulebook aim to secure access to foreign markets and ensure non-discrimination. Accordingly, rather than imposing standards itself, the WTO respects but also disciplines the right of members to regulate and apply standards. In view of the broader array of

policy objectives, which may be said to relate to sustainability in general terms, several WTO agreements and rules can come into play. With regard to sanitary and phytosanitary measures, the WTO Sanitary and Phytosanitary Measures (SPS) Agreement is the first to come to mind in connection with 'mirroring', since it specifically deals with standards and agri-food products. The WTO Agreement on Technical Barriers to Trade (TBT) Agreement applies to technical regulations and standards laying down 'product characteristics or their related processes and production methods', and sets out related requirements. Last but not least, the WTO's traditional core set of rules, the General Agreement on Tariffs and Trade (GATT), comes into play as it contains general disciplines on the treatment of imported goods at the border and in the market. The TBT and SPS agreements mutually exclude each other in terms of application. Each takes priority over GATT in the sense of *lex specialis*, leaving room for the application of the latter's provisions, where neither the SPS nor the TBT contain more specific provisions or are inapplicable.

The **SPS Agreement** has been developed in close connection with the WTO AoA and aims at preventing protectionism through SPS measures. According to its carefully defined Annex I, the agreement applies to an enumerated list of measures as set out in Annex I to the Agreement, which concerns the protection of human, animal or plant life and health against risks such as pests, diseases, additives, contaminants and toxins. Throughout the list, it is made clear that the agreement only covers the protection of humans, animals or plants *within the territory* of the respective WTO Member. For example, EU food safety standards imposing a maximum residue level for the products on the common market will be covered, as they aim to protect consumers within the EU against risks arising from products on this market. As has been rightly pointed out, however, 'a certification requirement related to the animal welfare of livestock in the exporting country' will fall outside the scope of application of the agreement (Lamy et al., 2022, p. 10). Where applicable, the SPS agreement reflects a science-based approach (Article 5.2), under which measures have to be based on a risk assessment, but also allows for a precautionary approach to a limited degree (Article 5.7). The agreement reflects a priority for international standards in calling on Members to base their measures on such standards, and to engage in their elaboration in relevant international fora, and it refers explicitly to the Codex Alimentarius Commission, the World Organisation for Animal Health (WOAH), and the International Plant Protection Convention (IPPC). These bodies provide internationally agreed standards, such as MRLs for various substances, as well as disease control standards. Thus, these fora establish harmonisation of standards based on consensus. Parallel to these product-related standards, broader guidelines – such as those concerning risk assessment – are also jointly decided. In addition, the WOAH draws up overall guidelines on process standards for animal welfare, which relate to production methods and husbandry – for example, regarding lighting or temperature (Animal Terrestrial Code, section 7).

The SPS Agreement allows WTO members to go beyond the level of international standards and opt for a higher level of protection. However, they need to provide additional justification in this case (Article 3.3). Furthermore, the SPS Agreement requires WTO Members to accept other Members' SPS measures as equivalent, even if they differ from their own, provided that such foreign measures achieve the same level of protection.

Where the SPS Agreement is not applicable, the WTO **TBT Agreement** may apply. It deals with technical regulations and standards as well as conformity assessment procedures. As Annex 1.1 sets out, a 'technical regulation' covers a '[d]ocument which lays down product characteristics or their related processes and production methods', and therefore covers not only 'product measures' (PMs), but also measures relating to process or production methods (PPMs). It is not yet entirely clear whether the TBT's applicability is confined to PPMs that are 'product-related' – so called PR-PPMs – which 'have some impact on the physical characteristics, safety or functionality of the end product', or whether it would also cover non-product-related standards (NPR-PPMs) (Sheargold, 2022).

The TBT Agreement strongly favours internationally agreed standards. Where available, such standards shall be used as a basis for technical regulations. Members deviating therefrom shall explain, upon request, why they consider international standards inappropriate (Article 2.2). Parties are further called upon to fully participate in the work of international standardisation bodies (Article 2.3). Where no such international standard exists, or where a Member intends to deviate from it, it shall publish a notice, notify other parties, make available proposals on request, and allow other parties to make comments (Article 2.5).

In addition to these two specific agreements, the WTO's broader and general rules as laid down in the **GATT** also come into play. One of its guiding principles is most-favoured-nation treatment, as enshrined in Article I:1 GATT, which prohibits discrimination against foreign goods based on their origin. Going further, GATT Article III:4 requires that imported products be treated no less favourably than domestic products once they have cleared customs at the border and entered the domestic market, a principle known as a 'national treatment' and generally regarded as a key requirement of non-discrimination (Hestermeyer, 2023). However, caution is necessary here: the requirement of national treatment is not met simply by showing that imported products are subject to the same rules as domestic products (that is, non-discrimination *de jure*). The GATT rules also prohibit discrimination *de facto* – when origin-neutral regulation disproportionately affects imports rather than similar domestic products. This calls for a comparison between the treatment of the imported and domestic products, which are considered 'like products' based on their characteristics, use, and consumer preferences. WTO dispute settlement is understood to apply an economic approach in this regard, asking whether the two products are directly competitive or can be seen as substituting each other (Lamy et al., 2022, p. 17). To give an example, in a recent dispute brought by Indonesia against the EU regarding the bloc's framework for the promotion of renewable energy and its specifications on so-called high indirect land-use-change-risk fuels, the panel considered palm oil to be a product 'like' rapeseed oil and soybean oil for the purpose of the non-discrimination test (WTO, 2025e). Where products are considered 'like', any difference in how they are treated by standards and regulations may easily amount to violation of national treatment. Furthermore, WTO law, according to GATT Article XI, only allows tariffs and prohibits quantitative restrictions on trade at the border, with the exception of cases where product-related standards in the market are made effective through border controls.

However, neither the national treatment test nor the prohibition of quantitative restrictions constitutes a final judgement under the GATT. The agreement contains a general exception clause

in Article XX, which allows Members to derogate from the general rules under additional conditions in order to pursue certain specifically defined legitimate policy objectives (Adinolfi, 2023). It allows Members to take measures necessary 'to protect public morals' (lit. a), or 'to protect human, animal or plant life or health' (lit. b). It also allows the adoption of measures 'relating to the conservation of exhaustible natural resources,' 'provided that such measures are made effective in conjunction with restrictions on domestic production or consumption' (lit. g). Thus, for it to be justified, a measure would have to meet the specific policy objectives and pass the test of necessity (lit. a and b) or the requirement of 'relating to' in lit. g. In addition, such a measure would have to comply with the additional conditions set out in the introductory clause of Article XX. These include that 'the measure may not be applied in a manner that would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade'.

The list of policy objectives in Article XX GATT covers many of the issues raised in the debate on 'mirroring'. For example, animal welfare may be covered by the public morality exception under lit. a, whereas environmental measures may be covered by lit. g. It should be noted, however, that to justify a measure that has the effect of prescribing activities within the jurisdiction of another Member and thereby affects its sovereign right to regulate, WTO Members must demonstrate a linkage between those impacts and their legitimate policy motivation. This is often referred to in WTO jurisprudence and writings as a 'sufficient nexus'. In the case of public morality, such a nexus exists where the measure is intended to prevent domestic consumers from being confronted with products considered immoral by virtue of their characteristics or the way in which they are produced. It is also clearly present where measures are designed to protect domestic consumers and domestic agriculture. In view of the protection of the environment, WTO jurisprudence has established that a WTO Member is entitled to take measures to protect global environmental goods such as the climate, biodiversity and forests (Stoll & Strack, 2023).

Taken together, these factors paint a complex picture of the requirements concerning the applicability of the SPS, TBT and GATT Agreements, how they interact, and how specific requirements applicable to each case should be applied and interpreted. Many of these issues have been clarified in WTO dispute settlement, but a number of questions remain unresolved to date, or are the subject of ongoing disputes. This is why a case-by-case analysis is required to assess whether WTO rules allow for the application of specific EU standards in international trade. The long list of dispute settlement proceedings against the EU shows that uncertainties remain in this area. Nevertheless, an overview reveals several points of decisive importance for the application of EU standards in international trade (Lamy et al., 2022, p. 21):

- Within broad limits, WTO rules allow for the protection of humans, animals and plants in the EU against risks arising from products and their characteristics. Such product-related measures and standards apply without exception to all products in the EU, and therefore automatically to imported goods. This long-established practice fulfils what is newly framed as 'mirroring'.
- WTO rules are stricter where it comes to measures that determine the way products are produced, without this having any specific impact on the products and their quality. This

particularly affects numerous EU standards on animal welfare, the environment and working conditions. The EU only applies a few such standards in international trade, and thus to imported goods (EU COM, 2022b under 2.2). WTO rules allow a Member to extend such requirements to imports and thus to prescribe methods and conditions of production outside EU territory in cases where a sufficient nexus exists to justify such an action (EU COM, 2022b, p. 6). Such a nexus exists where the measure's purpose relates to a matter of common concern, as is the case with the global climate, which can be seen as a global public good, or where a particular jurisdictional link exists, as is true for international transboundary externalities such as environmental impacts or the conservation of migratory species.

- The protection of animal welfare is less well established as a justification for trade measures than the protection of human, animal or plant life and health or the environment. It may currently be based on public morality as a legitimate exception under WTO law, if there is concrete and manifest social opposition to certain practices and if corresponding and consistent internal measures exist in politics and legislation in the importing WTO member. However, support at the international level is increasing.
- One of the fundamental principles of the WTO is non-discrimination, which is reflected in various contexts. What these particular rules have in common is that they are not confined to calling for formal equal treatment *de jure*, and require that domestic products be subject to at least the same requirements.
- As a matter of their sovereign right to regulate, WTO rules allow Members to pursue the aforementioned legitimate policy objectives and to determine the level of protection. However, measures need to correspond to the risk at hand and the level of protection. WTO rules address this by calling for scientific evidence – in the case of SPS – and requiring some degree of necessity or other forms of relationship.
- Furthermore, and in the interests of trade, they call for measures to be as least trade restrictive as possible, and require a balancing exercise.
- Within the scope of the SPS and TBT Agreements there is a particularly strong preference for international standards and an obligation to recognise foreign standards as equivalent.

This list of principles, criteria and conditions determines the legality of measures taken for the various legitimate policy objectives mentioned above, which more generally relate to sustainability as addressed in this paper and as one of the twofold objectives of 'mirroring'. As long as a measure pursues these objectives and stands the test of a case-by-case assessment as indicated above, it would be legal under WTO law. Such WTO legality would not be called into question should it turn out that the measure can also be understood to respond to the second element of 'mirroring', which is fairness in trade for European producers. However, fairness as such is certainly not a legitimate policy objective in itself – one that could justify unilateral trade restrictions along the lines just explained. Nevertheless, several other options are available in the WTO system when competition and the competitiveness of certain producers are at stake:

- Tariffs – as they have been agreed upon and are bound under the WTO – do protect domestic producers against competition from abroad, and might be increased by way of specific procedures.

- Measures are also available to protect domestic producers against unfair competition in trade caused by foreign producers (antidumping rules within the WTO Anti-Dumping Agreement) or governments (subsidies under the WTO Agreement on Subsidies and Countervailing Measures, and on agriculture – in the AoA), but in all cases it must be shown, through investigation procedures, that injury has been or may be caused to affected branches or industries. Safeguard measures are also available in the event of an increase in imports, to address market disruptions and the risks of injury to domestic producers under the WTO in general and the AoA more specifically.

3.3.2 Practical implications of applying EU standards in trade

Beyond questions of legality, the application of EU standards also raises questions of practicability. EU standards can be applied in international trade at the border through border controls or in the market (EU COM, 2022b under 2.2). Border controls can be considered effective because they prevent goods that do not meet EU standards from entering the common market in the first place. On the other hand, controls in the market itself can be strengthened by appropriate due diligence obligations to be fulfilled by importers and traders.

Compliance with product-related standards can be ensured to a large extent by inspecting the relevant product on-site, at the border, or in the common market (Lamy et al., 2022). Checking compliance with standards for processes and production methods in international trade, on the other hand, must relate to the circumstances of production in a third country, and requires relevant information or reliable certification from the third country. Such checks therefore require cooperation with producers, traders, exporters, and governments in a third country. The difference between product-related and production-related standards is particularly evident here. A comprehensive assessment of related costs is relevant not only for the approach to be effective but also for it to be efficient, although there are methodological challenges here (Chapter 3.2).

Table 1: Applying different types of sustainability standards to imported goods: overview

	PM	PR-PPM	NPR-PPM
Territorial scope	Products entering or in the EU	Products entering/in the EU and production abroad	Production abroad
Method of control	Inspection of product in the EU	Inspection of product in the EU and / or of production abroad	Production abroad
WTO conformity	SPS, TBT, GATT	SPS, TBT, GATT	SPS, TBT, GATT <i>plus</i> particular nexus required: • common concern or • other jurisdictional nexus
EU application	full	partly	very limited

Source: own compilation

3.3.3 Application of EU standards through FTAs and other agreements

In order to enable and promote the application of EU standards in trade beyond the narrow legal and practical limits of unilateral action, the EU makes use of international agreements in various forms. Above all, this is true for FTAs, but agreements on equivalence and mutual recognition, and even multilateral processes for the development of international standards, should also be mentioned. The agreements envisage several mechanisms, varying in respect of the obligations of parties and their interaction, and how the EU pursues its interests in promoting its standards and policies in terms of content and practical application.

(1) In few cases, agreements envisage partners **applying EU standards exactly as they stand**, as demanded in the 'mirror' debate. Aside from agreements concluded in the context of accession, FTAs must be mentioned here. That is particularly true for a number of recent FTAs, which contain special tariff preferences that are conditional on such products complying with EU standards:

- The tariff quota for shell eggs in the EU–Mercosur Partnership Agreement is a prominent example, as it links this preference to compliance with EU animal welfare standards.
- The same holds true for an additional tariff rate quota for high-quality grass-fed beef in the EU–New Zealand FTA.
- Also, some equivalency or mutual recognition agreements envisage such application of EU standards for certain sectors or products⁷.

(2) More frequently, agreements require, encourage, or incentivise partners to **align their own standards with EU standards and policies**.

- Equivalence agreements and decisions, as well as the mutual recognition of conformity assessments, may significantly facilitate trade and access to the common market and incentivise partners to bring their standards into line with EU standards and policies. Similar provisions are also frequently included in FTAs.
- FTAs may also require partners of the EU to follow certain basic principles laid down by the EU when developing and applying their own standards⁸.

(3) In individual cases, the agreements also support **partners' acceptance of the application of certain EU policies**. For instance, the CETA Joint Interpretative Instrument refers to the precautionary principle (para. 1 a).

(4) In order to promote its positions and policies, the EU furthermore extensively relies **on existing multilateral standards and intensively promotes their further development**:

- In this regard, EU FTA TSD chapters include the commitment of parties to international environmental agreements, and recently even to nationally determined contributions under the Paris Agreement.

⁷ e.g. Article 3 of the ACAA with Israel for industrial products.

⁸ Particularly in TSD chapters of recent FTAs, like the EU–Chile FTA and CETA, where the parties agree to not significantly lower their standards when altering their legislation.

- They also contain similar commitments to Codex Alimentarius Commission standards on food safety, and WHOA standards on animal welfare in their SPS chapters and other parts of the agreements.
- Furthermore, FTAs call for cooperation between parties and in multilateral fora, with a view to the further development of multilateral standards.
- In addition, the EU is heavily engaged on its own in various multilateral fora to promote its positions and support the further development of standards.

(5) The EU aims to use agreements to achieve oversight and thereby ensure the **effective enforcement** of its standards in third countries:

- This is achieved, for example, through mutual recognition agreements, which enable conformity assessments to be carried out abroad.
- Several FTAs envisage cooperation between parties in regard to certification schemes.

Overall, this shows that the EU can effectively promote and support the application of its standards in international trade in various ways by concluding agreements with other countries.

3.3.4 Leveraging FTAs and other agreements for mutual benefits

As the overview of possible agreements with third countries already shows, the discussion in the EU on 'mirroring' can hardly be conducted in a vacuum. When applying standards in trade, and thus modifying the conditions between domestic and foreign producers and prescribing methods of production outside its territory, the EU must be aware of its relationship to third countries and their interests and expectations. In trade and trade policy, such a relationship is based on the principle of mutual benefits. It envisages a balance being maintained in terms of the parties' rights, obligations and benefits under existing and potential new agreements as a result of negotiations, mutual concessions and a consensus between parties.

EU unilateral action and the lack of 'mutual benefits'

Where the EU unilaterally applies its standards in line with WTO rules, other Members may experience trade losses. At first glance, it appears that the EU can act unilaterally without taking the interests of other countries into account. This is true insofar as – legally – protective measures that comply with the WTO rules outlined above can largely be taken without having to obtain the consent of other trading partners or make concessions to them. It would seem that the WTO system offers barely any help to affected members to remedy such likely losses. WTO-consistent application of EU standards is considered legitimate use of policy space. Only in rare and exceptional instances of substantial trade loss suffered by a party due to an unforeseen measure may the affected parties lodge a so-called non-violation complaint through WTO dispute settlement. Complaints of this type are enshrined in Article XXIII:1(b) GATT and Article 26 Dispute Settlement Understanding (DSU). Through a non-violation complaint, a WTO Member can ask for compensation for the nullification or impairment of any benefit under the agreements due to an unforeseeable measure by another Member, even if the measure does not violate WTO rules. This way, the frustration of legitimate expectations can be remedied, and the procedure may eventually result in negotiations on the adjustment of commitments as compensation. However, because of

high thresholds, this specific procedure has rarely been used and has a very low success rate.⁹ Other WTO Members have limited prospects for 'retaliation' if they feel they have been affected by potential losses due to another Member legally applying a standard. Countermeasures, such as Brazil's 'Economic Reciprocity Law', have become quite predictable new method to build a national legal basis for such 'retaliation'. Apart from such formal legal considerations, however, it should be borne in mind that at various levels of international trade policy, countries affected by unilateral measures can express their opposition and demand compensation, as international trade and trade policy are characterised by numerous interdependencies. Next to more general policy considerations, it should be kept in mind that unilateral conduct faces a number of legal and practical limitations.

Creating mutual benefits in agreements

(1) Trade facilitation and cooperation

As is clear, various types of agreement exist that allow the EU to see its own standards applied in international trade beyond the legal and practical limits of unilateral action:

- Mutual benefits can be achieved through international harmonisation, mutual recognition or the adoption of standards, thereby removing barriers to trade, **facilitating international trade**, and creating a level playing field. This requires the parties involved to be willing to compromise on the level and wording of their standards. Such an approach can also lead to learning processes that bring standards closer together.
- Mutual benefits can also arise from **cooperation** between parties. The EU offers its partners technical cooperation in different forms with regard to EU standards and their practical application. In addition, many agreements provide for cooperation on certification and oversight, which can facilitate trade between the parties.

(2) Market access

Furthermore, mutual benefits can be achieved and secured by means of market access. A huge advantage of FTAs is that they grant preferential market access in return for a wide range of commitments and concessions and allow a balance of such mutual benefits to be maintained in various ways in order to preserve a level playing field.

The purpose of **creating mutual benefits** is already served by the very nature of FTAs, as they tie together the numerous concessions, obligations and rights of both sides by way of a package deal:

- Mutual benefits are also created much more specifically where special market access concessions for certain products are linked to the observance of related EU standards, as is the case with the aforementioned tariff quotas for shell eggs in the EU–Mercosur Partnership Agreement, and for beef in the EU–New Zealand Agreement.
- Paragraphs 40 and 41 of the Annex to the TSD chapter in the EU–Mercosur Partnership Agreement must also be highlighted; they stipulate that the EU commits to offer additional

⁹For a list of all WTO non-violation claims in WTO dispute settlement, see p. 40 et seq.: https://www.wto.org/english/res_e/publications_e/ai17_e/tableofcases_e.pdf.

market access for products contributing to sustainable forest protection and for resource-efficient products. The two lists are jointly defined (Rudloff et al., 2025).

This balance of rights, obligations and benefits can be maintained throughout the duration of FTAs through a series of mechanisms:

- In the event of a **breach of obligations** with regard to EU standards or policies, the EU can initiate dispute settlement procedures under the FTA and ultimately restrict market access as a way of retaliation. However, it should be added that, to date, in most EU FTAs the option of taking such retaliatory measures is excluded for breaches of obligation under TSD chapters, due to the EU traditionally preferring a cooperative way of resolving disputes in this area. The EU recently changed course, as witnessed in the EU–NZ and EU–Chile Agreements.
- Similarly, the EU–UK TCA envisages a so-called '**rebalancing**'. According to Article 411 of the EU–UK TCA, the EU is allowed to unilaterally restrict the UK's preferential access to the common market should the UK fail to meet its obligations to maintain certain levels of protection as enshrined in pre-specified pieces of EU legislation. While consultations have to take place, the mechanism relieves the EU from having to go through the full dispute settlement procedure under the TCA to remedy a breach of obligations on the part of the UK.
- On the other hand, partners to agreements with the EU have asked for a rebalancing where **the EU has unilaterally introduced new or increased existing standards**. Confronted with the adoption of the EUDR, the Mercosur countries asked for a clause to be added to the EU–Mercosur Partnership Agreement to allow for rebalancing in the event that the EU unilaterally adopts further standards restricting trade flows. This demand was met by amending the dispute settlement chapter to include non-violation complaints in line with the respective WTO rules, as explained above, in order to remedy the frustration of legitimate concerns. As such a claim would only succeed if the measure could be deemed unforeseen, it is unlikely to have much relevance.¹⁰

To complete the picture, it is important to note that the EU also promotes its standards in other contexts, thereby addressing the demands of the debate.

EU standards play a role in various programmes offering preferential trade arrangements with developing countries. Under the Generalised Scheme of Preferences (GSP), the EU unilaterally offers partial or full tariff reduction on two-thirds of all products originating from low and lower-middle income countries, given that the latter subscribe to a number of international standards. In 2021, the Paris Agreement was added to this list.

Under the Generalised Scheme of Preferences Plus (GSP+), the same tariffs are reduced to zero for those low and lower-middle income countries, provided they implement 27 international

¹⁰ For a comprehensive analysis of the rebalancing mechanism in the EU–Mercosur Partnership Agreement, see Rudloff et al. 2025.

conventions related to human rights, environmental protection, and good governance. These references partially go beyond the coverage of bilateral FTAs (for a comprehensive comparison, see Scientific Advisory Board on Agricultural Policy, Food and Consumer Health & Protection at the Federal Ministry of Food and Agriculture, 2023, p. 189 ff). For example, additional references include the OECD Anti-Bribery Convention and the UN Single Convention on Narcotic Drugs (UNSCND). In cases of non-compliance, preferences may be withdrawn, although this has only occurred four times to date (Immenkamp, 2024).

Challenges and opportunities for the EU in negotiations

A unilateral extension of the number of EU production standards applicable to its trade partners is possible within a number of clear legal and practical limitations. Such action offers the advantage of immediate and global applicability. However, it may cause trade losses in third countries. In addition, it entails risks regarding WTO compatibility and does not make full use of the potential for effective and efficient implementation through cooperation with individual partners. To maximise the overall welfare gains from trade and to support the EU's policy objective of further trade diversification, negotiations and cooperation should be preferred over unilateral approaches wherever possible.

FTAs are particularly well-suited for this purpose, because, as previously outlined, they allow the EU to implement sustainability standards linked to trade advantages and enforcement mechanisms. FTAs are therefore an important instrument in discharging the EU's role as a trailblazer in the global, green and just transformation. The 'Brussels effect' refers to the EU's ability to use soft power to spread its values around the world, primarily through FTAs (Bradford, 2020). The prospect of preferential access to the EU internal market can significantly increase EU trade partners' willingness to make concessions – especially as FTAs are package deals, enabling trade-offs across the board among the various pertinent issues. In FTA negotiations – and also in multilateral standard-setting contexts – the EU risks missing out on opportunities if it sticks to its own standards as they stand without allowing for flexibility and compromise. While the 'mirroring' debate tends to focus on the former more rigid approach, greater flexibility could yield better results overall.

It should also be noted that the EU's negotiating power is on a declining trend. Its share of world trade is falling (Rudloff, 2025). In addition, it is facing growing competition from other players and increasingly needs to make more concessions to conclude FTAs and thus secure a competitive position for the EU economy in the world. Given today's disruptive US trade policy, and in view of the challenges that the WTO faces regarding progress in the Doha Round and other negotiations, and in view of dispute settlement, the EU must continue its efforts to rapidly expand its network of FTAs (Stoll, 2020, 2025). These circumstances are lowering the EU's ability to achieve maximum concessions from its partners in time-consuming negotiations.

From the trade partners' perspective, efforts to extend the application of EU standards are likely to be perceived as a drop in their competitive advantages. This is true, even though the EU's standards are not always the most ambitious. In animal welfare in particular, other countries may have stricter standards for some related aspects. For instance, in terms of the transportation of

animals, the maximum allowed time in transport is subject to much greater restrictions in Switzerland (Swiss Federal Council, 2018), a country that has even recognised animal dignity in its constitution (Swiss Federal Assembly, 1999). Similarly, New Zealand pioneered the first ban on exports of live livestock by sea in 2023, while Norway has established more restrictive housing requirements, including prohibitions on cubicle stalls and mandatory pasture access provisions that surpass current EU standards (Animal Legal & Historical Center, 2024; Ministry for Primary Industries, 2023).

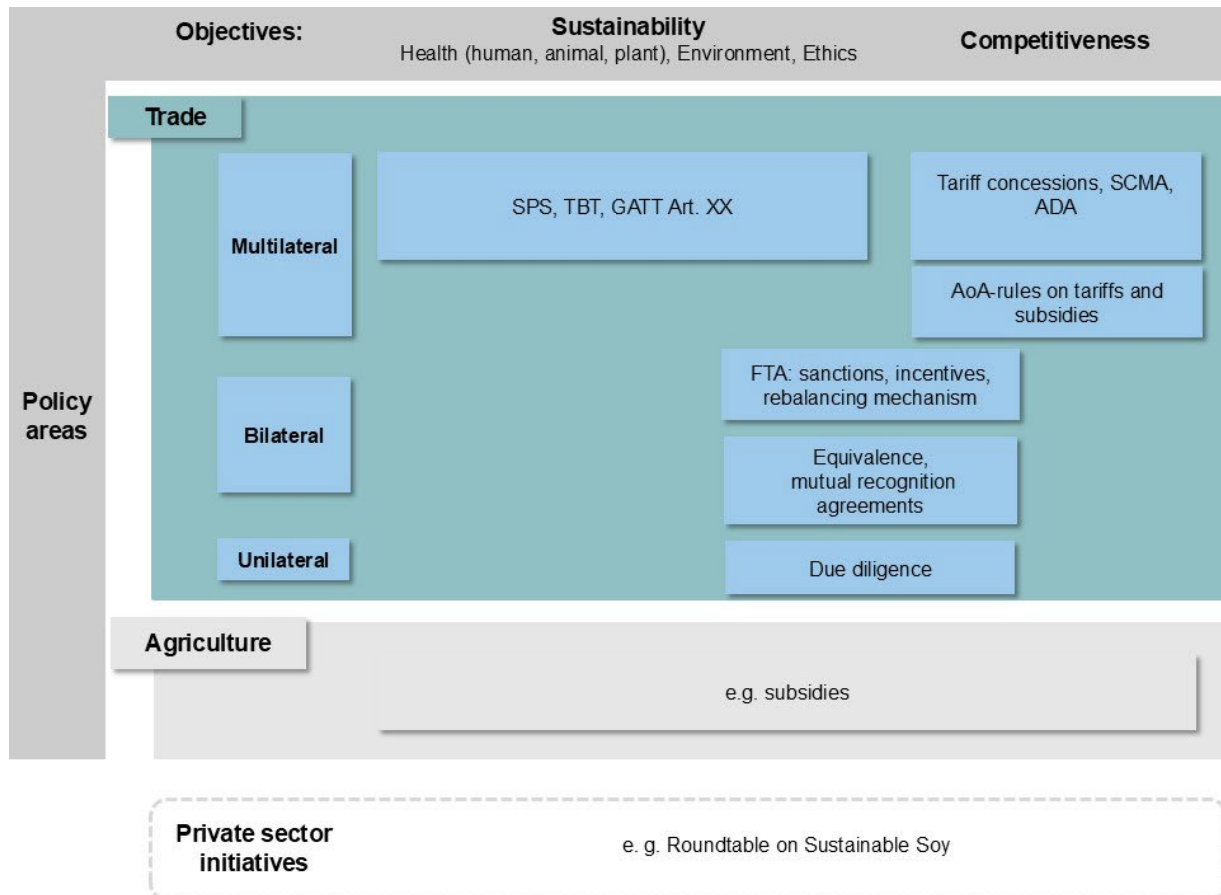
The EU is also determined to conclude FTAs with developing countries, especially partner countries of the Samoa Agreement. Such negotiations should be guided by the Policy Coherence for Development (PCD) framework, which calls for development objectives to be taken into account in policies likely to have positive impacts in developing countries. It should be noted that these developing countries already often enjoy extensive access to the EU internal market under the GSP and GSP+ programmes. Thus, it is important to offer developing countries comprehensive, reliable and long-term prospects for technical cooperation. It should also be noted that, due to differences in the level of economic development and negotiating power, developing countries are particularly critical of the extension of EU standards in international trade. Thus the justification behind the EU standards should always be highlighted.

In sum, these broader aspects beyond legal conformity, direct compliance and enforcement costs should be considered when addressing sustainability and competitiveness concerns.

3.4 Synopsis: Policy options for addressing sustainability and competitiveness concerns

The debate on 'mirroring' in trade policy has focused on two distinct yet interrelated objectives: promoting sustainability and safeguarding competitiveness. While FTA 'mirroring', or unilateral actions, have attracted the most public and political attention, these represent only a small proportion of the policy instruments available. The broader policy landscape includes multilateral, bilateral and unilateral measures within trade policy and domestic agricultural policy – which may also cover competition-related measures – as well as a wide range of private-sector initiatives (see Figure 2).

Figure 2: Policy frameworks to cover sustainability and competitiveness: rules and possible measures in trade policy



Source: own compilation

Within the areas related to **trade policy**, the following options can be considered:

- **Multilateral solutions** are the **first-best option** for addressing global public goods or transboundary externalities. There is long-standing experience with standard-setting in many areas, mainly on PMs referred to in WTO agreements. These are also grounded in long-standing, internationally negotiated consensus and supported by mechanisms for dispute resolution. Regarding sustainability, some PPMs, especially those relating to the behavioural aspects of animal welfare (such as those affected by transport or husbandry requirements), are addressed less explicitly. The WOHAI develops some relevant guidelines. Targeting issues for multilateral coverage involves time-consuming and expensive decision-making processes, and equal participation should be ensured. More informal cooperation platforms, while lacking binding enforcement powers, can serve as valuable testing grounds for pioneering issues outside the multilateral scope, developing best-practice guidelines and testing certification schemes, as demonstrated by the Forum for Sustainable Palm Oil in supporting the implementation of EUDR (Forum Sustainable Palm oil, 2023). Such initiatives should rely on equal participation of all parties, supported by capacity building, especially for developing countries. On competitiveness, tariffs are agreed multilaterally within the WTO, reflecting the principle of mutual benefits. However, several exceptions exist to

protect domestic markets, such as measures against dumping or subsidies defined as trade distortive. These actions must follow established rules and be based on clearly demonstrated damages. Specific agricultural rules reinforce the need to weigh trade-offs across countries, as they aim in principal to avoid trade distortion, guided by the general perspective of open trade, albeit with certain exceptions.

- **Bilateral approaches to 'mirroring'** offer greater flexibility and speed in achieving consensus on sustainability targets when multilateral agreements prove challenging or even unattainable. **FTAs** offer more leeway for the application of EU standards and policies beyond the legal and practical limitations that the EU would face when acting alone. They can incorporate a variety of instruments, ranging from sanctions and conditional market access to novel rebalancing clauses. Where multilateral coverage is limited, they can serve as a basis for pioneering new standards with like-minded partners. However, their more frequent and widespread use could distract from the process of building multilateral consensus. **Equivalency Agreements and MRAs** are another option for overcoming regulatory divergencies and facilitating trade by also allowing for own paths to be followed. They are in principle easier to conclude since they are limited in scope.
- **Unilateral measures** represent the least cooperative form of trade-related intervention. Existing measures on sustainability like due diligence rules are often applied to specific targets, provisions, or groups of products. While these measures may better reflect EU societal preferences and are potentially easier to determine without negotiating with a trade partner, they risk not satisfying WTO compatibility, and can also prompt retaliatory action, cause trade diversion, and make it more difficult to conclude trade negotiations.

Beyond trade policy, domestic agricultural and competition policies can play a more direct role in supporting competitiveness. The **CAP** links sustainability objectives to direct payments and other forms of financial support, which may be strengthened to support sustainability-related public goods. Regarding competitiveness, rather than merely compensating for presumed disadvantages, these measures should focus more on enhancing factor productivity and strengthening market functions. This may include competition-related measures that strengthen the market power of farmers within supply chains or support innovation. **Private sector initiatives** such as the Roundtable for Sustainable Soy or the 'Initiative Tierwohl' in Germany have complemented public regulations, with the latter e.g. economically incentivising higher animal welfare standards. In many cases, these exceed public requirements and can improve value-chain quality (Fagotto, 2014; Isermeyer, 2019). Both private and public sector initiatives could benefit from international cooperation experience in the form of knowledge exchange or best practices for implementation. In order to facilitate rational and informed policy choices, the pros and cons of the measures discussed, and the related requirements to maximise their benefits, have to be taken into account (Table 2).

Table 2: Trade policy options for 'mirroring': pros and cons

	+	–	Preconditions for opportunities
Multilateral framework			
Multilateral standard setting and WTO rules	- Optimal level of cooperation for global public goods - Rules-based framework with longstanding experience - Consensus-oriented and frame to address conflicts disputes	- Time-consuming and costly - Limited coverage of newer process-related issues (e.g. animal welfare)	- Identify public goods and comply with WTO-criteria - Ensure fair participation in existing frameworks for trade partners
Informal multi-, and plurilateral cooperation	Pioneering new issues	Weak legal enforcement	Support fair participation and implementation
Bilateral framework			
FTA	- Pioneering new issues - Range of tools: sanctions, incentives, safeguards, rebalancing - Cooperation for effective controls of production abroad	- May slow down or hinder development of multilateral consensus - Concessions demanded	- Monitor spillover and effectiveness jointly with trade partner - Capacity-building for partner countries
Mutual recognition agreements (MRA) and Equivalence agreements	Easier to negotiate due to limited coverage	Limited coverage	Support exchange between partners
Unilateral framework			
Unilaterally required import measures	- Fully accommodating EU societal preferences - Regulatory expansion ('Brussels effect')	- Limits and uncertainties regarding WTO compatibility - Difficult control of production abroad - Costs due to negative impacts on trade negotiations and demands on compensation - Costs by reactive measures - Welfare and sustainability risks due to trade diversion	- Case-by-case assessment of regulatory differences and of WTO compatibility - Early dialogue with trade partner and accompanying support - Support implementing equivalence/mutual recognition and cooperation

Source: own compilation

4 Conclusion and recommendations

The term 'mirroring' remains conceptually imprecise. If interpreted as requiring imported goods to meet EU standards during the production process as a general rule, it would run counter to the rules and spirit of the international trade system and its rules. Reciprocity in trade policy rests on mutual agreement and consensus, not unilateral imposition. Any decision to promote sustainability or competitiveness objectives through 'mirroring' should be based on dialogue that takes into account the interests and constraints of trade partners. Whether and to what extent EU production standards should apply to imported goods in practice requires careful, case-by-case assessment, taking into account not only legal but also economic, practical and political factors. Currently, the debate is vague and overly general, often obscuring the wide range of instruments already available within EU trade, environmental, consumer and agricultural policy.

The following recommendations are based on the range of policy options that have been assessed in this study:

1. Support research and exchange on concepts and methodologies linking regulation to competitiveness

There is limited evidence to identify EU-wide regulatory causes behind competitiveness burdens. International comparisons of regulatory provisions and their effects on competitiveness are particularly complex. In particular, assessment of specific effects of individual regulatory provisions through case-by-case evaluation, should be further developed. They should cover all relevant components including benefits and contribute to existing institutional procedures, such as regulatory impact assessments. Provisions currently undergoing implementation, or changes such as those expected for animal welfare rules or the Green Deal, should be evaluated from the outset and alongside their implementation with a specific focus on their sustainability and on competitiveness impacts. Local expertise in both the EU and among trade partners is indispensable for taking into account potentially divergent conditions, which may be justified by differing local circumstances.

2. Take full account of all economic, legal and political causes, impacts and options

Discussing 'mirroring' and making rational policy choices regarding measures should take fully into account the underlying causes, contexts, options and impacts in economic, legal and political terms.

- As such, it has to take into account the fact that EU agriculture is deeply integrated into international trade in terms of both imports and exports, that EU agricultural production relies heavily on imported inputs, such as feed, and that consumers' legitimate interests including price effects also have to be considered.
- Close interdependencies in trade and in the global economy at different levels underline the need for consensus- and compromise-based solutions.
- Lastly, a full range of policy options is at hand internationally. They include the international harmonisation of standards, equivalence, mutual recognition, fair trade remedies, safeguards, tariff increases and domestically improved market power of farmers, the promotion of innovation and subsidies for sustainability-related public services.

3. Consider the wide range of policy options aiming at sustainability and competitiveness

When opting for trade-related 'mirroring', legal compatibility with existing trade rules, especially those of the WTO, should be the primary consideration. As the discussion so far has focused almost entirely on the competitiveness of agricultural producers, a number of effects have been largely overlooked and should be considered, for example, the distributional effects of price increases for consumers or the regulatory and enforcement costs. Furthermore, it is important to consider strategic effects, bearing in mind the long-term impact on welfare and the potential for unintended consequences. Such consequences include possible reactions by trade partners with adverse feedback effects for the EU, and potential leakage through trade diversion that may weaken the effects of sustainability measures.

4. Support competitiveness through tailor-made measures other than trade-related ones

Competitiveness can be supported more directly and with fewer trade distortions by using instruments such as the CAP as well as private sector initiatives. Political actions should focus on evidence. In other words, they should address the identified underlying causes, for example by supporting total factor productivity instead of compensating for losses that are difficult to identify. In addition, the overall competition framework should be supported, for example by improving farmers' positions within value chains.

5. Maintain international dialogue as an overall guiding principle

Building trust, reducing the risk of conflict, and preserving the stability of the global trading system require early and transparent engagement with trade partners. The EU should avoid introducing undefined concepts without clear objectives or consultation, as this could fuel protectionism in third countries and undermine the benefits of global trade – which also has repercussions for the EU.

At a time when the security and predictability of the international trading system are being shaken by erratic American trade policy and the unilateral imposition of so-called reciprocal tariffs by the US, the EU would be well advised to refrain from contributing to a further loss of trust by introducing new, undefined terms with unclear intentions and without consultation with trade partners. Applying these undefined terms to define trade measures could raise the level of protectionism and jeopardise the benefits of global trade – again with repercussions for the EU.

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Annex

Table 3: Specific Trade Concerns in the e-ping database identified through search term 'mirror clauses'

IMS ID	Agreement referred to	Title	Member raising STC	Member supporting STC	First date raised	Last date raised	Number of times raised
795	TBT	European Union – Proposal for a regulation on horizontal cybersecurity requirements for products with digital elements (ID 795)	China	Philippines	21.06.2023	13.03.2024	3
786	TBT	European Union – Proposal for a Regulation on packaging and packaging waste amending Regulation (EU) 2019/1020 and Directive (EU) 2019/904, and repealing Directive 94/62/EC (ID 786)	India; Mexico; Russian Federation; United States; China	Guatemala; India; Türkiye	08.03.2023	26.03.2025	7
685	TBT	European Union – Draft EU Batteries Regulation (implementation of the European Green Deal) (ID 685)	Republic of Korea; Russian Federation; China	India; Republic of Korea; Canada	02.06.2021	26.03.2025	12
657	TBT	France – New legislative requirements about index of repairability of electrical and electronic equipment (ID 657)	China		28.10.2020	02.06.2021	3
592	TBT	European Union – Concerns on regulations with regard to eco-design requirements for various products in EU (ID 592)	China		20.06.2019	24.02.2021	6

534	SPS	EU import tolerances for certain pesticides to achieve environmental outcomes in third countries (ID 534)	Ecuador; India; Australia; United States; Brazil; China; Colombia	Dominican Republic; Ecuador; Argentina; Guatemala; India; Indonesia; Israel; Japan; Kenya; New Zealand; Paraguay; Senegal; United States; Uruguay; Brazil; Canada; Chile; Colombia; Costa Rica	23.03.2022	19.03.2025	10
377	TBT	European Union – Tobacco products, nicotine containing products and herbal products for smoking. Packaging for retail sale of any of the aforementioned products (ID 377)	Dominican Republic; Guatemala; Honduras; Indonesia; Malawi; Mexico; Mozambique; Nicaragua; Nigeria; Philippines; Ukraine; Zambia; Zimbabwe; Cuba		06.03.2013	19.03.2014	4
306	TBT	France – Loi No. 2010-788: The National Commitment for the Environment (Grenelle 2 Law) (ID 306)	Argentina; India; Republic of Korea; South Africa; Uruguay; Brazil; China; Cuba		15.06.2011	30.10.2013	8
256	SPS	European Union – Import restrictions on cooked poultry products from China (ID 256)	China		18.10.2007	28.10.2009	4
35	TBT	European Communities – Directive 2002/95/EC on the Restriction of the Use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) and Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) (ID 35)	Egypt; Israel; Japan; Jordan; Republic of Korea; Malaysia; Australia; Mexico; Thailand; United States; Bolivarian Republic of Venezuela; Canada; China		31.03.1999	20.03.2012	28

Source: ePing platform, WTO, 2025a.

Table 4: Overview on databases covering international differences in competitiveness and regulations

Database/Approach	Organisation and/or data source	Type of data/information	Time frame	Product/Market sector differentiation	Differentiation of regulation(s)
International differences in competitiveness					
Revealed comparative advantage (RCA)	United Nations Conference on Trade and Development (UNCTAD)	Real trade patterns, based on Ricardian trade theory SITC 3-digit trade data	1995–2023	yes	not covered
Effective exchange rate (EER), possible adjustments considering costs, prices and exports	- International Monetary Fund (IMF) for 90 countries - Eurostat for EU	- Nominal exchange rates - Real rates adjusted by prices, labour costs or export relations	1970s–present (IMF) 1999–present (Eurostat)	no	no
Producer prices	Food and Agriculture Organization Statistical Database (FAOSTAT)	Farm-level prices at first sale	1961–2024	yes	no
World Competitiveness Ranking (WCR) (69 countries, EU MS individually covered)	International Institute for Management Development (IMD)	336 indicators combining quantitative data and survey 4 dimensions: performance, government efficiency, business efficiency, infrastructure	1989–present	no	no
Hinrich-IMD Sustainable Trade Index (STI) (30 economies, EU not covered)	- IMD - Hinrich Foundation	Trade, macro data (WTO, IMF and COMTRADE, World Bank) and sustainability data (mainly GTA)	2022–present	no	no
OECD export performance	OECD	Volume and growth rates of exports (goods and services)	1975–today	yes	no

Global Competitiveness Index (GCI)	World Economic Forum	140 countries across 12 pillars of competitiveness covering 169 indicators: institutions, infrastructure, ICT adoption, macroeconomic stability, health, skills, product market, labour market, financial system, market size, business dynamism, innovation capability	1979–2019	broad categories like transport	no
Costs and productivity	OECD	- unit labour costs - unit GDP per employee	1970s–present	yes, OECD and selected other countries	no
International regulatory differences					
SPS and TBT–references					
Database on specific trade concerns (STC), ePing	WTO	- Notifications of SPS and TBT measures - Trade concerns	STC 1995–present ePing 2012–present	broadly, e.g. if related to TBT, SPS	yes
Environmental issues					
Environmental database (EDB)	WTO	- Notifications submitted by WTO members - Trade Policy Reviews of WTO members	1995–present	no	yes
Gateway to environmental law (ECOLEX)	FAO, International Union for Conservation of Nature (IUCN) and United Nations Environment Programme (UNEP)	International and domestic legislation incl. soft-law, treaties' decisions	1960–present	only as far as related to specific regulation covered	yes
Legislative and policy database on food, agriculture and natural resources management (FAOLEX)	FAO	National legislation, policies and bilateral agreements on food, agriculture and natural resources management	1950s–present	yes	yes

Trade and Environment Database (TREND)	German Institute of Development and Sustainability (IDOS)	Environmental-related measures in FTAs	2010–2018	no	yes, if in FTAs
Environment-related provisions for agriculture, fisheries, and forestry in FTAs (Ag-ERPs)	FAO	Specifies TREND for links with agriculture, forestry and fisheries sectors	1995–2022	no	yes, if in FTAs
Global Environmental Non-tariff measures Database (END)	Robert Schuman Centre, University of Florence	Combining WTO platforms and ePing	1995–present	no	yes
Animal welfare					
Animal Welfare legislation database (AWLD)	Global Animal Law (GAL) Association	Summarises different legislation in place in different countries	2019–present	no	yes, at broad legislative level
Animal Legal and Historical Center Website	Michigan State University College of Law	Animal welfare legislation, respective legal cases and policy material	2002–present	in terms of different animal types	yes, at broad legislative level
Animal Protection Index	World Animal Protection	Ranking of animal welfare policy and legislation in different countries based on 7 scores for 4 targets	2014–present	no	yes
Other					
Services Trade Restrictiveness Index	OECD	Qualitative regulatory information collected from laws and regulations on services and trade policy	2014–present	yes	yes
NORMLEX Information System on International Labour Standard	International Labor Organization ILO	• Ratification of ILO Conventions • Monitoring of applications	since ILO membership of countries	no	yes, according to different ILO conventions
Overall/Combined					
Trade Analysis Information System (TRAINS)/ World Integrated Trade Solutions (WITS) on NTMs	UNCTAD/ World Bank	• Number per country and product • Related indicators	2010s–present	yes	yes

Global Trade Alert (GTA)	University St. Gallen	• Number per country based on notifications • Own classification of trade effects	2009–present	yes	yes
Dashboard Deep Trade Agreements	World Bank	Coverage of different policies (labour, environment, subsidies) in selected FTAs	2017–present	broadly, e.g. if related to TBT, SPS	no
Frequency Index and coverage ratios	World Bank and UNCTAD	Distribution of NTMs across eight categories of NTMs for all countries	2012–2021	no	yes, if in FTAs
Agricultural Policy Monitoring data set	OECD	• Compares different types of support in agriculture • Different effects for producers and consumer	1990s–present	yes	yes, if related to financial support
Performance Monitoring and Evaluation Framework (PMEF)	EU	Output, result and context and impact indicators	2023–present	yes	yes, linked to CAP measures no international comparison
AgIncentives database	OECD, FAO, the Inter-American Development Bank, The World Bank, and IFPRI	Combing existing indicators on nominal rate of protection and of assistance	2005–present	yes	limited to certain categories linked to financial support
Global indicators of regulatory governance	World Bank	• inclusiveness of actors in regulatory processes • Survey to track stakeholder interaction with regulatory authorities	2017–2018	no	yes

Source: own compilation

Table 5: Range of methods and findings on regulatory effects on competitiveness (selected studies)

Study	Products	Regulations	Concept of competitiveness	Third country-comparison
Menghi et al. (2014)	Dairy, beef, sheep meat, pork, broiler, wheat, apple, wine grapes	Animal welfare, animal health environment, food safety	Trade and production cost-based	Depending on import-relevance for a specific product: Brazil, Argentina, Australia, New Zealand, United States, Ukraine, Chile, South Africa
EU COM 2022: Fitness Check Animal Welfare	Pigs, laying hens, broiler, calves	Animal welfare	• Trade and production cost-based • Mix of quantitative and qualitative approaches (literature – and survey based)	No international comparison
Horne (2018)	Poultry	Animal welfare, food safety, environmental provisions	Production cost	Brazil, US, Thailand, Argentina, Ukraine
Bremmer et al. (2021)	Wheat, rapeseed, sugar beet, maize, apples, tomatoes, wine, olive, citrus, hops	Green deal provisions (targets)	Trade and production cost-based	Morocco (only for tomatoes)

Sources: EU COM (2022); Horne (2018); Menghi et al. (2014), Bremmer et al. (2021)

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