ORIGINAL ARTICLE

Addressing Negative Effects of Trade Liberalization: Unilateral and Mutually Agreed Flanking Policies

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Abstract

The conventional approach to trade liberalization has been to liberalize trade through international agreement and address subsequent domestic fallout and spillovers through domestic policies. In consequence, international obligations in trade liberalization are not legally connected with 'flanking' measures to address their negative effects. We discuss the shortcomings of this conventional approach with respect to labor adjustment and environmental protection: for political reasons, trade liberalization requires today the simultaneous regulation of labor and environmental spillovers. We suggest a novel approach to trade liberalization that includes the necessary flanking policies as part of, or linked to, the international agreement itself. This novel approach seeks to achieve the best of both worlds: reaping the benefits of international trade while making sure that negative spillovers are effectively addressed. To illustrate the intricacies of this approach, we introduce a new conceptual framework covering the negative effects of trade liberalization and flanking or mitigating policies, and a proposed novel approach in the form of trade liberalization packages and package treaties. Trade liberalization packages and package treaties are currently emerging around the world (e.g. sustainable palm oil in EFTA–Indonesia) and deserve our close attention.

Keywords: Regulatory silos; anti-trade sentiments; flanking; labor adjustment; environmental protection; package treaties

1. Introduction

In this paper, we explain the limitations of the traditional silo/subsidiarity approach to addressing negative social and environmental spillovers of *international* trade liberalization by implementing *domestic* flanking policies. We then suggest considering the concept of 'mutually agreed flanking policies' as a way to overcome the silo/subsidiarity approach. For that matter, we develop definitions and typologies of 'negative spillovers' of trade liberalization, of 'flanking policies',¹ and of 'trade liberalization packages' and 'package treaties'.

The conceptual framework emanating from this is intended to guide and support future research into new and innovative policies preventing, minimizing, or addressing negative social and environmental spillovers of trade liberalization.

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¹For an introduction to the term and concept of 'flanking policies', see N. Laurens, C. Winkler, and C. Dupont (2024) 'Sweetening the Liberalization Pill: Flanking Measures to Free Trade Agreements', *Review of International Political Economy* 1.

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2. The Gains and Pains of Trade Liberalization

2.1 Problem Setting

International trade typically benefits the aggregate welfare of the nations that open-up to trade. Yet, trade liberalization also generates economic displacements within nations and may contribute to negative social or environmental spillovers.² The traditional prescription, pushed for by economists and international organizations such as the WTO or the World Bank, has been to liberalize trade through *international* agreement and subsequently address such domestic fallout and spillovers by implementing so-called flanking policies *domestically*.³ This conventional approach relies on (1) silos: no connection between liberalization and flanking, and (2) subsidiarity: liberalization, internationally; flanking policies, domestically. In reality, however, this approach has not always worked well; too often trade has been liberalized (internationally), but domestic flanking policies to address economic disruptions and spillover effects on the environment or society were not enacted, came too late, or were not specific or effective enough.⁴

As a result, the support for trade liberalization has waned. Popular resentment of globalization has driven anti-trade sentiments to heights not seen since the 1930s in key geographies.⁵ In the US, the focus has been on jobs and economic displacement. Europe has worried more about environmental spillovers. Both are increasingly pulling back trade liberalization on national security grounds.⁶ This trend has intensified further since the outbreak of the COVID-19 pandemic and the war in Ukraine.⁷ The risk is that moves toward de-globalization compromise the extensive benefits that open trade has brought to countries. In many developing countries, in turn, international trade is considerably less liberalized. Often for fear of negative spillovers, these countries have refrained from further opening-up to trade in the first place.⁸ As a result, in those countries, the untapped gains of trade are larger.⁹ Finding reliable means to reduce the negative spillovers of trade liberalization therefore promises a considerable payback for them.

In order to provide alternatives to the traditional approach to trade policy, new analyses and solutions to addressing negative spillovers of trade liberalization are therefore needed. This is particularly true also because key geographies will need to deal with additional negative spillovers of trade liberalization soon: service-intensive economies are likely to face new and substantial challenges since automation of jobs has entered a new era (i.e. the fourth industrial revolution) propelled by both machines and artificial intelligence, thereby also reaching services industries. ¹⁰ As most of the relevant literature concentrates on the displacement of jobs due to imported goods, displacements due to services imports, automation in services, or changes in intellectual property rights have been neglected. Current trade adjustment policies and programs (and their academic analyses) are therefore not tailored to the particularities of job-displacements in the services

²See e.g. C. McAusland (2008) Gobalisation's Direct and Indirect Effects on the Environment. OECD.

³See also M.J. Trebilcock (2014) *Dealing with Losers: The Political Economy of Policy Transitions.* Oxford University Press. ⁴See e.g. J. Goldstein and R. Gulotti (2021) 'America and the Trade Regime: What Went Wrong?', *International Organization* 75, 524; T. Meyer (2020) 'Misaligned Lawmaking', *Vanderbilt Law Review* 73, 151.

⁵See e.g. J.L. Broz, J. Frieden, and S. Weymouth (2021) 'Populism in Place: the Economic Geography of the Globalization Backlash', *International Organization* 75, 464.

⁶See e.g. S. Lincicome (2021) 'Manufactured Crisis: "Deindustrialisation", Free Markets, and National Security', Policy Analysis 907, CATO Institute, 27 January 2021.

⁷See also M. Dabrowski (2024) 'The Risk of Protectionism: What Can Be Lost?', *Journal of Risk and Financial Management* 17, 374.

⁸Evidence of negative spillovers of trade liberalization for developing countries is mixed, see B. McCaig and M.S. McMillan (2020) 'Trade Liberalisation and Labour Market Adjustment in Botswana', *Journal of African Economies* 29, 236; N.V.T. Le, T.X. Hoang, and T.Q. Tran (2022) 'Growth, Inequality and Poverty in Vietnam: How Did Trade Liberalisation Help the Poor, 2002–2008', *International Journal of Social Welfare* 31, 86; A.K. Jadoon and A. Sarwar (2020) 'Is Trade Liberalisation Pro-Poor in Pakistan? Evidence from Large-Scale Manufacturing', *The Australian Economic Review* 53, 360.

[&]quot;See also M. Abubakar (2024) 'Globalisation and Output Growth Nexus in Sub-Saharan Africa: The Critical Role of Trade Liberalisation', *Journal of the Knowledge Economy* 15, 2218.

¹⁰M.-H. Huang and R.T. Rust (2018) 'Artificial Intelligence in Service', Journal of Service Research 21, 155.

sector or following changes in intellectual property rights (e.g. patents covering artificial intelligence of the type that is responsible for the automation of work).¹¹

In addition, next-generation technologies – including digital platforms, block chain, artificial intelligence, and cloud computing – are facilitating the exchange between buyers and sellers globally as well as enhancing the security of transactions by creating transparency and the trust needed to underpin international transactions. As highlighted by the McKinsey Global Institute, '[a]s these technologies diffuse through global value chains, they will create openings for new players and opportunities for incumbents to shift their business models. Different regions of the world may also be able to develop new competitive advantages'. ¹² This further emphasizes the likelihood that new forms of negative spillovers of trade liberalization are about to emerge and new industries will be affected, particularly in industrialized, service-intensive economies. Reconsidering the traditional approach to addressing them primarily on the domestic level has some urgency, particularly given the established shortfalls of the approach.

2.2 The Limits of the Silo/Subsidiarity Approach in Labor Adjustment

The challenges of addressing negative spillovers of trade liberalization based on the silo/subsidiarity approach alone can be well illustrated by the mixed results from domestic trade adjustment policies. These policies are – theoretically – explicitly designed to address negative spillovers of trade liberalization on jobs. However, they typically suffer from a number of flaws, which are linked to the limitations of the silo/subsidiarity approach.

The first Trade Adjustment Assistance (TAA) program was established by the US in 1962. The main goals of this program were to ease the transition, compensate harm, and reduce political pressure for protectionism.¹³ Literature comes to mixed conclusions with regard to the efficiency of the TAA program. According to Corson and Nicholson, the program was not working as well as it could have in the 1970s.¹⁴ Starting from the 1980s, the targeting of the program drastically improved, according to Decker and Corson.¹⁵ Regarding TAA's ability to address reemployment and income of displaced workers, the literature agrees that there was limited impact on earnings.¹⁶ There is more discrepancy concerning reemployment: Reynolds and Palatucci found that TAA recipients were significantly more likely to find reemployment¹⁷ while D'Amico and Schochet found that the program had largely neutral effects on labor force participation and employment.¹⁸ With regard to TAA's link to training, a number of studies found positive links between training and reemployment rates.¹⁹ A more recent analysis by Kim and Pelc shows that TAA serves as insurance for workers, given that in places where TAA benefits are higher, fewer requests for trade protection are seen. However, they concluded that since the

¹¹See D. Susskind (2020) A World Without Work: Technology, Automation and How We Should Respond. Penguin.

¹²S. Lund, J. Manyika, L. Woetzel, J. Bughin, M. Krishnan, J. Seong, and M. Muir (2019) *Globalization in Transition: The Future of Trade And Value Chains.* McKinsey Global Institute.

¹³J.D. Richardson (1982) 'Trade Adjustment Assistance Under the US Trade Act of 1974: An Analytical Examination and Worker Survey', in J.N. Baghwati (ed.), *Import Competition and Response*. University of Chicago Press.

¹⁴W. Corson and W. Nicholson (1981) 'Trade Adjustment Assistance for Workers: Results of a Survey of Recipients under the Trade Act of 1974', *Research in Labor Economics* 4, 417.

¹⁵P.T. Decker and W. Corson (1995) 'International Trade and Worker Displacement: Evaluation of the Trade Adjustment Assistance Program', *ILR Review* 48, 758.

¹⁶L. Marcal (2001) 'Does Trade Adjustment Assistance Help Trade-Displaced Workers?', Contemporary Economic Policy 19, 59; K.M. Reynolds and J.S. Palatucci (2012) 'Does Trade Adjustment Assistance Make a Difference?', Contemporary Economy Policy 30, 43; R. D'Amico and P.Z. Schochet (2012) The Evaluation of the Trade Adjustment Assistance Program: A Synthesis of Major Findings. Princeton, NJ: Mathematica Policy Research.

¹⁷Reynolds and Palatucci, supra n. 16.

¹⁸D'Amico and Schochet, supra n. 16.

¹⁹Marcal, supra n. 16; Reynolds and Palatucci, supra n. 16; D'Amico and Schochet, supra n. 16.

benefits of trade compensation are attributed to Democrats, the TAA program is likely to remain underfunded.²⁰

More fundamentally, therefore, Meyer concludes that due to the misalignment between TAA provisions - which are temporary, purely domestic, and require renegotiation and reauthorization in the US Congress - and trade liberalization commitments - which are indefinite, enshrined in international agreements and implemented by the executive branch - trade assistance is institutionally disfavored. This led to underfunded, unstable trade adjustment assistance, and even a temporary lapse of TAA in the 1980s²¹ and a termination until further notice since July 2022. It may also explain why only few people actually seek help through TAA. For instance, TAA accounted for a negligible part of the trade-induced increase in transfer payments by US federal and state programs in reaction to the so-called 'China-Shock'». Instead, the largest transfer increases were in federal disability, retirement, and in-kind medical payments. Historically, the main factor limiting trade's impact on US labor was that imports from low-wage countries were small.²³ However, following China's transition to a market-oriented economy and its accession to the WTO, the situation changed dramatically. The share of total US spending on Chinese goods rose from 0.6% in 1991 to 4.6% in 2007. In addition, US exposure to Chinese import competition affected local labor markets not only through a loss in manufacturing employment, but also through a decline in wages outside of the manufacturing sector. This decline was followed by a steep drop in the average earnings of households and rising transfer payments through various US federal and state programs – except through TAA.²⁴

Domestic trade adjustment policies – even if they were more aligned with trade liberalization than the US TAA program – generally appear to be ill-equipped to address peaks in the intensity of trade-related economic adjustments. This also has political reasons: as long as trade liberalization is not politically linked with flanking, the extension or enlargement of trade adjustment policies is up for discussion and re-negotiation, while trade liberalization is not (as trade agreements, once concluded, are 'forever deals' and need not be renewed). The European Union, for instance, introduced a program similar to the TAA program in 2006: the European Globalization Adjustment Fund. However, it has not been used very much. Between 2007 and 2016, only 140,000 dismissed workers benefited from it, half of whom had lost their jobs due to the financial crisis. Given its short life and the fact that it has not been employed a lot, there is only limited literature on the European Globalization Adjustment Fund to date.

Similarly, South Korea established in 2006 the Act on Trade Adjustment Assistance for Manufacturing and Related Service Industries with the purpose of helping workers and small or medium-sized enterprises (SMEs) that are negatively affected by trade liberalization to adjust to the transition or relocate their resources. The Korean government has, however, been strongly criticized for the lack of additional value that the program brings compared to general unemployment benefit policies, as well as for the hurdles that workers and SMEs have to overcome in order to benefit from the assistance.²⁶

²⁰S. Eun Kim and K.J. Pelc (2021) 'The Politics of Trade Adjustment Versus Trade Protection', *Comparative Political Studies* 54, 2354, 2358.

²¹Meyer, supra n. 4.

²²See e.g. C. McDaniel, 'If Congress Want More Trade, There's a Bill to Pay', *The Hill*, 31 March 2023, https://thehill.com/opinion/international/3927908-if-congress-wants-more-trade-theres-a-bill-to-pay/ (accessed 2 February 2024).

²³P. Krugman (2000) 'Technology, Trade and Factor Prices', Journal of International Economics 50, 51.

²⁴D.H. Autor, D. Dorn, and G.H. Hanson (2013) 'The China Syndrome: Local Labor Market Effects of Import Competition in the United States', *Amercian Economic Review* 103, 2121.

²⁵A. Sapir and G. Claeys (2018) *The European Globalisation Adjustment Fund: Easing the Pain from Trade?* Bruegel Policy Contribution, No. 2018/05.

²⁶Y.-H. Kim and S. Park (2019) 'The Republic of Korea's Trade Adjustment Policies and their Effects on Labour Market Adjustment', in M. Baccheta, E. Milet, and J.-A. Monteiro (eds.), *Making Globalization More Inclusive: Lessons from Experience with Adjustment Policies*. World Trade Organization.

Next to trade adjustment assistance policies, general unemployment benefit policies, social security, and access to training and education may also help in case of trade-related job-loss and economic displacement. They are, however, not specifically designed to pre-empt or minimize negative spillovers of trade liberalization on labor, and are often insufficient in addressing trade-related hardship of workers and in enforcing domestic redistribution.²⁷ These limitations of the silo/subsidiarity approach – the fact that trade liberalization continues even if no appropriate flanking policies exist or are linked to it - become even more apparent in the context of substantial shifts in trade relations and in the overall structure of the global economy. The fact that multinationals from G7 nations are moving their firm-specific knowhow to emerging markets and combining it with low-cost labor has changed the nature of comparative advantage from one based on national boundaries to one based on the transnational contours of global value chains.²⁸ As a result, globalization's impact has a finer degree of resolution and can boost or dash the fortunes of products, individual production stages, and individual jobs. Implications of global competition for job security can become more dynamic and therefore harder to predict: a small shift in the global market somewhere may mean that within weeks a local company grows tenfold or goes out of business.²⁹ In view of such profound changes in the economy, the general domestic social security net (based on the traditional silo/subsidiarity approach) does not suffice to prevent trade-induced long-term unemployment.³⁰

Finally, the silo/subsidiarity approach so far is broadly limited to public transfer payments. Relying on public funding alone to address trade-related job losses and economic displacement may not be an option for developing countries.³¹ In that sense, the traditional silo/subsidiarity approach to negative spillovers of trade liberalization – even if it is clearly limited – still comes with more options for industrialized countries than it does for other countries. Overcoming it is therefore also expected to benefit the integration of developing economies in the global market. In addition, flanking measures in the context of a developing country face particular challenges. For one, a weak institutional environment may hamper the effective implementation and enforcement of flanking measures.³² However, flanking measures are typically designed for the formal sector of the economy. Labor-related flanking measures which address the negative spillovers of trade liberalization in the informal sector of the economy (which, in developing countries, can represent a large part of the economy) remain largely untested to date.³³

²⁷They remain also – contrary to international obligations in trade liberalization – subject to political bargaining, see e.g. D. Cardoso and R. Branco (2018), 'Liberalised Dualisation. Labour Market Reforms and the Crisis in Portugal: A New Departure', *European Journal of Social Security*' 20, 31; E. Ferragina and A. Arrigoni (2021) 'Selective Neoliberalism: How Italy Went from Dualisation to Liberalisation in Labour Market and Pension Reforms', *New Political Economy* 26, 964.

²⁸R. Baldwin (2016) *The Great Convergence: Information Technology and the New Globalization*. Harvard University Press.

²⁹Negative effects of globalization for individual companies also depend on the respective management reaction to competition, see e.g. T. Matsuura (2021) 'Heterogeneous Impact of Import Competition on Firm Organisation: Evidence from Japanese Firm-Level Data', *The World Economy* 45, 2251; U.E. Osita-Ejikeme and E. Amah (2021) 'Globalisation and Survival of Small and Medium Scale Enterprises in Rivers State', *African Journal of Business and Economic Development* 1.

³⁰See e.g. G. Engbersen, K. Schuyt, J. Timmer, and F. van Waarden (2006) *Cultures of Unemployment: A Comparative Look at Long-Term Unemployment and Urban Poverty*. Amsterdam University Press.

³¹See e.g. M. Vodopivec (2009) 'Introducing Unemployment Insurance to Developing Countries', IZA Policy Paper No. 6; F. Cirelli, E. Espino, and J.M. Sanchez (2021) 'Designing Unemployment Insurance for Developing Countries', *Journal of Development Economics* 148, 102565.

³²See E. Berglöf and S. Claessens (2006) 'Enforcement and Good Corporate Governance in Developing Countries and Transition Economies', *The World Bank Research Observer* 21, 123.

³³See e.g. P. Navarette-Hernandez, M. Alford, and F. Toro (2023) 'Inclusive Informal-to-Informal Trade: The Poverty Alleviation Potential of Street Vendors' Trade Networks in Santiago de Chile', *Third World Quarterly* 44, 1844; C. Cisneros-Acevedo (2022) 'Unfolding Trade Effect in Two Margins of Informality. The Peruvian Case', *The World Bank Review* 36, 141; V. Ponczek and G. Ulyssea (2022) 'Enforcement of Labour Regulation and the Labour Market Effects of Trade: Evidence from Brazil', *The Economic Journal* 132, 361.

2.3 The Limits of the Silo/Subsidiarity Approach in Environmental Protection

Similarly to the labor adjustment costs of trade liberalization, negative spillovers of trade liberalization for the environment are also traditionally addressed at the domestic level and in reaction/subsidiary to international obligations in trade liberalization. Typically, an increase in economic productivity – at the national level, but also across borders – can lead to environmental degradation, while it may also increase environmental protection, particularly in the long run. Consideration for the various spillovers of trade liberalization for the environment therefore deserves regulatory consideration. More recently, trade liberalization has come under pressure particularly in industrialized economies due to its perceived or proven negative effects on the environment. In addition, international obligations in trade liberalization tend to benefit foreign competition if environmental standards are increased at the domestic level without extraterritorial application or replication. In consequence, international obligations in trade liberalization are increasingly perceived to stand in the way of more effective environmental protection at the domestic level; a concern that has gained traction particularly in view of global warming.

This development illustrates the limits of the traditional silo/subsidiarity approach particularly well: trade liberalization today requires (for political reasons³⁷) the simultaneous regulation of environmental spillovers that can no longer be achieved purely at the domestic level. Hence, market access in industrialized nations has become contingent on environmental standards along the entire value chain. To avoid unilateral measures in this regard – such as the unilateral trade-related measures within the scope of the EU Green Deal³⁸ – countries are required to abandon the traditional silo/subsidiarity approach in trade liberalization and engage either in the creation and enforcement of international trade-related environmental standards³⁹ or in international cooperation to address environmental spillovers of trade liberalization.

2.4 The Alternative of 'Mutually Agreed Flanking'

This paper eschews the solution of walking away from organizations such as the WTO or from open trade. Rather, it examines the alternative of revisiting how trade agreements are designed – to move away from subsidiarity and silos toward a novel and more integrated approach: One that includes the necessary flanking polices⁴⁰ that pre-empt, minimize, or address the negative effects of trade as part of, or more explicitly linked to, the international trade agreement itself. We call this approach 'mutually agreed flanking' (see the precise definitions below). This novel approach seeks to achieve the best of both worlds: reaping the benefits of international trade while making sure that negative spillovers are effectively addressed.

Mutually agreed flanking could be a powerful tool to overcome the silo/subsidiarity approach and ensure that the necessary adjustment mechanisms are implemented domestically. It would

³⁴For an overview of recent studies and evidence of the impact of trade on the environment, see N. Van Tran (2020) 'The Environmental Effects of Trade Openness in Developing Countries: Conflict or Cooperation?', *Environmental Science and Pollution Research* 27, 19783.

³⁵L. Rudolph, F. Quoss, R. Buchs, and T. Bernauer (2022) 'Environmental Concern Leads to Trade Skepticism on the Political Left and Right', *International Studies Quarterly* 66, sqac060.

³⁶See e.g. E. Aisbett and M. Silberberger (2021) 'Tariff Liberalization and Product Standards: Regulatory Chill and Race to the Bottom?', Regulation & Governance 15, 987; C. Sieber-Gasser, S. Kalra, and A. Vishwas Sheth (2021) 'Sustainable Development Goals vs Non-Discrimination in WTO Law: Does the End Justify the Means?', Indian Journal of International Economic Law 13, 82, 100.

³⁷Rudolph et al., supra n. 35.

³⁸See also M. Kettunen, E. Bodin, E. Davey, S. Gionfra, and C. Charveriat (2020) An EU Green Deal for Trade Policy and the Environment: Aligning Trade with Climate and Sustainable Development Objectives IEEP Brussels/London; S. Koch and N. Keijzer (2021) The External Dimensions of the European Green Deal: The Case for an Integrated Approach. DIE Bonn.

³⁹See H. Verbruggen and O. Kuik (2023) 'Environmental Standards in International Trade', in P. van Dijck and G. Faber (eds.), *Challenges to the New World Trade Organization*. Kluwer Law International.

⁴⁰See also Laurens et al., supra n. 1.

require that governments, prior to joining an international trade agreement or trade liberalization initiative, develop a set of domestic policies that deal with the disruptions that the treaty or initiative is likely to cause. Adopting such domestic policies would become a prerequisite – under either domestic law or the international agreement or initiative itself (or both) – to joining an international trade agreement or trade liberalization initiative. The 'package' of a trade liberalization agreement or initiative combined with the necessary flanking policies would need to be ensured ex ante and be regularly monitored ex post.

At a time when support for international trade is in a global crisis and causing life-and-death situations (e.g. in the COVID-19 crisis or situations of war or sanctions), it is essential to find the right strategies to preserve the benefits of open trade while more effectively dealing with its negative spillovers. Identifying the right strategies would enable the gains of trade to materialize with appropriate re-distribution and corrective mechanisms in place. Detecting novel ways of how to maintain both trade liberalization and the necessary adjustments have the potential of shaping the way future international trade agreements are developed.

3. General Definitions

We propose the following definitions and conceptual framework of negative effects, flanking measures, trade liberalization packages, and package treaties.

3.1 Negative Effects of Trade Liberalization

3.1.1 Definition and Typologies

We define a negative effect of trade liberalization as any negative effect, be it in the exporting country, the importing country, or a third country, caused by the liberalization of international trade. Negative effects, as we define them, may be proven, potential, or perceived (e.g. concerns of domestic stakeholders regarding negative effects). The focus lies, among others, on negative effects on labor, environment, gender and indigenous people, and security. Furthermore, we distinguish between *domestic* effects and *international* effects, and between *necessary* and *incidental* effects.

Domestic negative effects of trade liberalization are spillovers which take effect purely domestically. These include job losses, local pollution of ground water, discrimination of women at the workplace, or marginalization of indigenous people.

International negative effects of trade liberalization are spillovers which are cross-border in a physical sense (e.g. CO2 emissions causing climate change globally) or are of mutually agreed common concern to nations as reflected in international conventions (e.g. loss of biodiversity or a violation of fundamental human rights in one country which affects the common concern of all countries).

Necessary negative spillovers are spillovers required for the gains of trade to materialize. The gains and losses from trade are ineluctably tied. As former WTO Director General Pascal Lamy put it: 'Trade works because it is painful [i.e. resources are shifted from inefficient to efficient producers]. It is painful because it works.'⁴¹ Trade and competition provide gains because they force producers and companies to be more efficient. 'Losers' from trade need to invest elsewhere or find another job. Facilitating this transition and providing safety nets for people in need are ways in which trade, and the overall gains that come with it, can be made more digestible. To the extent that fair competition and genuine comparative advantage therefore inevitably create both winners and losers, certain negative effects of trade liberalization are necessary for the generation of trade benefits to occur in the first place. They are defined as real income (or welfare) losses suffered by individuals or firms in the absence of market distortions. Necessary negative effects need to be addressed or minimized rather than pre-empted.

⁴¹See e.g. P. Lamy (2015) The New World of Trade: The Third Jan Tumlir Lecture. Jan Tumlir Policy Essays, ECIPE, 4.

Incidental negative effects are negative effects that are not normally required for the benefits of trade to occur. They may, for example, be caused by a certain type of unfair competition (i.e. subsidized or dumped imports or imports that are cheaper because of sub-par social or environmental standards in production processes).⁴² We define them as losses that occur to some individuals and firms because international trade exacerbates existing market distortions that are not initially priced in (e.g. unemployment, imperfect competition, or environmental spillovers). *Incidental* negative spillovers need to be pre-empted, where possible. If not, flanking policies are needed to minimize or address them.⁴³

3.1.2 Negative Effects on Labor

Negative effects of trade liberalization on labor, such as economic displacement and job-losses, or pressure on wages and on labor standards, are well-documented⁴⁴: these are typically *domestic* negative spillovers. Addressing domestic negative effects of trade liberalization on labor requires a set of policy responses that tackles both types of negative effects – the *necessary* and perhaps even predictable negative spillovers typically linked with additional market access commitments, and the *incidental*, unpredictable negative spillovers which are linked with unfair competition or the sheer size of global competition (e.g. the so-called 'China shock').

There are also *international* negative effects of trade liberalization on labor, according to our definition. This is for instance the case if trade liberalization leads to an increase in the consumption of products or services involving forced or child labor as the violation of fundamental labor rights is of common concern to all nations.

3.1.3 Negative Effects on the Environment

Trade liberalization may also come with negative effects on the environment.⁴⁵ An increase in demand for agricultural products in one country, for instance, may lead to an increase in deforestation in another. Outsourcing of carbon-intensive production to places where no climate change legislation applies may lead to 'carbon leakage', and an increase in consumption driven by trade may lead to an increase in local waste.

Negative effects of trade liberalization on the environment are typically not *necessary* (hence *incidental*). *Domestic* negative effects of trade liberalization on the environment consist of local environmental degradation (e.g. ground water pollution or waste that stays within the country). Other negative effects of trade liberalization on the environment, however, are not purely domestic but cross-border in nature and hence international (e.g. CO2 omissions, cross-border air pollution, or loss in biodiversity). Addressing negative effects of trade liberalization on the environment requires a targeted set of flanking policies, tailored to the specificities of each effect.

3.1.4 Negative Effects on Gender Equality and Indigenous People

We are also interested in reducing negative effects of trade liberalization on gender equality and indigenous people. Both are linked with the tendency of trade liberalization to exacerbate already

⁴²See e.g. B. Hoekman (2016) 'Subsidies, Spillovers and WTO Rules in a Value-Chain World', *Global Policy* 7, 351; S.A. Pager and E. Priest (2019) 'Redeeming Globalization through Unfair Competition Law', *Cardozo Law Review* 41, 2435.

⁴³They are typically associated with what Rodrik termed 'Hyper-Globalization': short-term economic gains through trade liberalization at the cost of labor exploitation and environmental degradation. See e.g. D. Rodrik (2019) 'Globalization's Wrong Turn: And How It Hurt America', *Foreign Affairs* 98, 26.

⁴⁴See e.g. R. Faley, D. Greenaway, and J. Silva (2010) 'Trade Liberalisation and Human Capital Adjustment', *Journal of International Economics* 81, 230; S. Stone, P. Sourdin and C. Legendre (2013) *Trade and Labour Market Adjustment* (OECD Trade Policy Papers no. 143); L. Baccini, M. Guidi, A. Poletti, and A.B. Yildirim (2022) 'Trade Liberalization and Labor Market Institutions', *International Organization* 76, 70.

⁴⁵See e.g. J. Ederington, A. Levinson, and J. Minier (2005) 'Footloose and Pollution-Free', *The Review of Economics and Statistics* 87, 92; R. Lopez (1994) 'The Environment as a Factor of Production: The Effects of Economic Growth and Trade Liberalization', *Journal of Environmental Economics and Management* 27, 163; N. Laurens, C. Brandi, and J.-F. Morin (2021) 'Climate and Trade Policies: From Silos to Integration', *Climate Policy* 22, 248.

existing inequalities in the economy. For instance, women may be less likely to work in export-dependent industries than men, and could therefore be less likely to benefit from trade liberalization. Indigenous people, however, are typically already at risk of losing their livelihoods due to problematic practices of large-scale agri-business, a risk that may grow if export opportunities for agricultural products increase. Policy responses are required to ensure that trade liberalization does not work against efforts to increase gender equality or to strengthen indigenous rights.

Negative effects of trade liberalization on gender equality and indigenous rights are typically not *necessary* (hence *incidental*) and *domestic*, although some may violate fundamental human rights of common concern to all nations, and hence be *international*.

3.1.5 Negative Effects on Security

Trade liberalization may also lead to negative effects on security.⁴⁸ It may, for instance, lead to shortages of essential goods or over-dependence on imports from unreliable trade partners. Trade liberalization may also enable foreign companies to access technology that is essential to military interests or to collect other sensitive data. It may also play a role in the meddling with elections in foreign countries.⁴⁹ Negative effects of trade liberalization on security are *incidental* and for the most part *domestic*.

3.2 Mitigating Measures

3.2.1 Definitions and Typologies

We define *mitigating measures* as laws and regulations that may mitigate negative effects of trade liberalization (proven, potential, or perceived) even though they are not specifically designed to do so and/or are not specifically linked with trade liberalization, i.e. they are enacted without legal or factual link to trade liberalization. Mitigating measures are mostly part of a country's general regulatory framework on, for example, labor, education, or the environment.

We distinguish between *unilateral* mitigating measures and *mutually agreed* mitigating measures.

Unilateral mitigating measures are enacted by a country unilaterally, without the agreement or consent of other countries potentially affected by them (e.g. a country's unilaterally set education or vocational training policy). In the silo/subsidiarity approach, addressing negative effects of trade liberalization relies primarily on unilateral mitigating measures.

Mutually agreed mitigating measures are committed to by a country with the agreement or consent of other countries (legally binding or not) potentially affected by such policies (e.g. a country's labor policy implementing an International Labor Organization (ILO) convention with the agreement of trading partners).

3.2.2 Unilateral Mitigating Measures

Unilateral mitigating measures are typically concerned with uneven distribution of the gains of trade within the country through redistribution mechanisms. Redistribution refers to active government interventions (e.g. through tax credits, subsidies, loans, etc.) aimed at compensating

⁴⁶See e.g. M. Fröhlich (2023) 'Promoting Gender Equality in International Trade Agreements: Pioneering or Pipe Dream?', in I. Krstic, M. Evola and M.I.R. Moreno (eds.), *Legal Issues of International Law from a Gender Perspective*. Springer; M.S. Cohen (2021) 'The Pink Trojan Horse: Inserting Gender Issues into Free Trade Agreements', *International and Public Affairs* 5, 75.

⁴⁷See e.g. L. Kehoe, T.N. P. dos Reis, P. Meyfroidt, S. Bager, R. Seppelt, T. Kuemmerle, E. Berenguer et al. (2020) 'Inclusion, Transparency, and Enforcement: How the EU–Mercosur Trade Agreement Fails the Sustainability Test', *One Earth* 3, 268.

⁴⁸See e.g. K. Heydon (2024) *The Trade Weapon: How Weaponizing Trade Threatens Growth, Public Health and the Climate Transition.* Polity Press; K. Hopewell (2022) 'Beyond US-China Rivalry: Rule Breaking, Economic Coercion, and the Weaponization of Trade', *AJIL Unbound* 116, 58.

⁴⁹See also M. Pinchis-Paulsen (2022) 'Let's Agree to Disagree: A Strategy for Trade-Security', *Journal of International Economic Law* 25, 527.

sectors of society that have suffered most from a country's opening up to trade. The most common form and type of unilateral mitigating measures are education and employment policies addressing trade-related job losses. These policies are generally unilateral in nature as they are not backed-up or have resulted from the agreement or consent of other nations.

Unilateral mitigating measures may also include domestic laws on environmental protection, waste water treatment, prevention of pollution, national carbon trading systems, maternity leave, or social security.

3.2.3 Mutually Agreed Mitigating Measures

Mutually agreed mitigating measures result from international negotiations and agreements. Various international treaties and initiatives serve as international mitigating measures in the sense that they create global minimum standards that also apply in trade relations. To name a few, such international mitigating measures include the Paris Agreement, ILO Conventions, Human Rights treaties, the UN Framework Convention on Climate Change (UNFCCC), the Kyoto and the Montreal Protocols, and the Convention on Biological Diversity (CBD).

3.3 Flanking Policies

3.3.1 Definition and Typologies

By flanking policies, we mean policies that can mitigate negative effects of trade liberalization, or the concerns of domestic stakeholders regarding said effects, or both, and that are legally or factually linked to such trade liberalization.⁵⁰

With 'legally linked', we mean policies set out in the same legal or political instrument that includes the trade liberalization (e.g. labor commitments in the EU–South Korea Free Trade Agreement or the domestic implementation of tariff preferences for sustainable palm oil in the European Free Trade Association (EFTA)–Indonesia PTA). With 'factually linked', we mean policies that are specifically responding to or are otherwise tied to trade liberalization (e.g. the EU's Carbon Border Adjustment Mechanism (CBAM) responding to 'carbon leakage' caused by international trade).

We distinguish between *mutually agreed* and *unilateral* flanking policies, between *inward-looking* and *outward-looking* flanking policies, and between *agreement-specific* and *general* flanking policies.

Unilateral flanking policies are policies that are enacted by a country unilaterally, without the agreement or consent of other countries potentially affected by such policies.

Mutually agreed flanking policies are policies committed to by a country with the agreement or consent of other countries (legally binding or not) potentially affected by such policies.

Inward-looking flanking policies target domestic negative effects of trade liberalization.

Outward-looking flanking policies target negative effects of trade liberalization abroad.

Agreement-specific flanking policies are policies that address negative effects linked to a specific trade agreement or other international instruments that include trade liberalization (legally binding or not).

General (not agreement-specific) flanking policies are policies that aim to address negative effects of trade liberalization in general, independent of a specific trade agreement or other international instruments that include trade liberalization.

3.3.2 Unilateral Flanking Policies

Unilateral flanking policies include, for instance, trade adjustment laws and policies, laws on corporate justice, corporate taxation, due diligence obligations with regard to forced labor or child labor, and conflict minerals, import-bans linked with forced labor, child labor, conflict minerals

⁵⁰See also Laurens et al., supra n. 1.

or illegal logging, or unilateral policies linked to combating carbon leakage. Such unilateral flanking might be with reference to international conventions (e.g. domestic labor laws based on ILO conventions) but remains, per our definitions, unilateral flanking if the enforcement action is done without the agreement or consent of other countries (e.g. unilateral enforcement of obligations in ILO Conventions or in MEAs as against imported products without the agreement of the exporting country).

3.3.3 Mutually Agreed Flanking Policies

Mutually agreed flanking policies can take the form of linking market access in a trade agreement itself with a specific flanking measure (e.g. linking a tariff preference to palm oil imports being sustainable), or more generally, by incorporating environmental or labor standards in a trade agreement or in a trade liberalization initiative. Examples include the incorporation of ILO Core Conventions in the EU–South Korea and EU–Viet Nam PTAs, the obligation not to lower existing levels of labor protection in the Dominican Republic–Central American Free Trade Agreement-, or the obligation to meet the goals under the Paris Agreement on Climate Change in the EU–New Zealand PTA. Factually linked mutually agreed flanking policies can be found, for instance, in labor-related provisions under the Indo-Pacific Economic Framework for Prosperity (IPEF).

3.3.4 Inward-Looking Flanking Policies

These policies target the necessary domestic negative effects of trade liberalization (e.g. job displacements in inefficient import-competing industries in the absence of distortions) as well as incidental domestic negative effects of trade liberalization created by trade exacerbating domestic distortions. They can be unilateral or mutually agreed.

Examples include the TAA program, and trade remedies.

3.3.5 Outward-looking Flanking Policies

These policies target incidental negative effects of trade liberalization created by trade exacerbating distortions abroad (e.g. social or environmental negative externalities in the country of production), knowing that the representative individual in the importing country can also be directly affected by such foreign distortion (e.g. import-competing industries suffering job losses because of labor standards abroad that are below ILO standards, or individuals in the importing country simply caring about abusive labor standards abroad). They can be unilateral or mutually agreed.

Examples include the tariff preferences for sustainable palm oil in the EFTA-Indonesia PTA and labor or environmental clauses in PTAs pushed for by the EU or the US.

3.3.6 Agreement-Specific Flanking Policies

Agreement-specific flanking policies are tailored to address negative effects of a specific trade agreement or other international instruments that include trade liberalization. They are typically sector- and geography-specific, in anticipation of or reaction to a specific bilateral and/or regional trade agreement or initiative. Impact assessments may play a key role in the design and implementation of agreement-specific flanking policies should they identify a particular risk for a specific negative effect linked to a trade agreement.

Examples include the tariff preferences for sustainable palm oil in the EFTA-Indonesia PTA, or the North American Free Trade Agreement (NAFTA)-Transitional Adjustment Assistance (NAFTA-TAA).

3.3.7 General (Not Agreement-Specific) Flanking Policies

General flanking policies are flanking policies (i.e. legally or factually linked to trade liberalization) that generally address negative effects of trade liberalization, i.e. not effects of a specific trade agreement or instrument. A good example is the US TAA program, which is not linked

to a specific trade agreement. Undisputed minimum standards in environmental protection or in labor protection embedded in a trade agreement or in any other international instrument that includes trade liberalization typically constitute general flanking policies.

3.4 Trade Liberalization Packages and "Package Treaties"

3.4.1 Definitions

Our conceptual framework intends to capture and organize particularly mutually agreed flanking policies that may – directly or indirectly – contribute to preventing, minimizing, or addressing negative effects of trade liberalization. We distinguish between *trade liberalization packages* and *package treaties*.

A trade liberalization package is a treaty or other international convention, agreement, or joint declaration (whether legally binding or not) that includes commitments (legally binding or not) on both trade liberalization and flanking policies to address negative effects of such trade liberalization or the concerns of domestic stakeholders regarding such effects, or both.

A *package treaty* is a legally binding treaty or other international convention or agreement that includes legally binding commitments on both trade liberalization and mutually agreed flanking policies. Being limited to legally binding commitments, package treaties constitute a sub-set of trade liberalization packages.

To the extent that 'deep trade agreements' often include legally binding provisions on labor or the environment, or otherwise commit to certain flanking policies, 'deep trade agreements' are generally package treaties. However, 'deep trade agreements' are classified as 'deep' because they address matters that are not traditionally understood as 'trade'. As a result, a PTA can be 'deep' by addressing, for example, e-commerce, investment, intellectual property, or asylum, without including flanking policies. In this sense, not all 'deep trade agreements' are also package treaties and, hence, only a sub-set of 'deep trade agreements' are also package treaties. They are called package treaties not because they address matters going beyond traditional trade topics, but because they include legally binding provisions on both trade liberalization and mutually agreed flanking. Moreover, as we define 'treaties' broadly, trade liberalization packages include international instruments that are not legally binding, i.e. not PTAs. As a result, trade liberalization packages include international instruments beyond PTAs and beyond 'deep trade agreements' so that some trade liberalization packages are not 'deep trade agreements'.

3.4.2 Trade Liberalization Packages: Type of Linkages

As mentioned above, trade liberalization packages are international instruments which link trade liberalization to flanking. Such linkage can be established in a legally binding instrument (e.g. in a PTA or a package treaty) or in a political (i.e. not legally binding) instrument (e.g. an international initiative such as the EU–US Trade and Technology Council (TTC) or the IPEF).

In terms of what the packaged flanking policies included in a trade liberalization package are based on or refer to, we found three different types of instruments: (1) flanking by reference to international agreements (e.g. ILO Conventions or MEAs), (2) flanking by reference to domestic laws (including a commitment to enact new flanking policies, maintain or not lower existing levels of flanking, or to effectively enforce flanking policies), and (3) flanking by reference to private standards (international or national). Package treaties can feature one or several of these ways to tie trade liberalization to flanking policies.

The most common form of a trade liberalization package or a package treaty consists of the incorporation of a number of international treaties into an international trade agreement (1). More recently, ILO core conventions, international environmental treaties, or climate accords are typically incorporated into international trade agreements (e.g. in the chapter on labor or

⁵¹See e.g. A. Mattoo, N. Rocha, and M. Ruta (eds.) (2020) Handbook of Deep Trade Agreements. World Bank.

on sustainable development). This serves the purpose of ensuring a minimum standard in trade-related standards, such as labor or environmental protection.

The same applies in principle also to the incorporation of private standards into the international trade agreement or into market access or trade commitments in general (e.g. the Global Arrangement on Sustainable Steel and Aluminum (GASSA)) (3). Such linkages protect fair competition within the process of trade liberalization and prevent a race-to-the-bottom in non-product-related processing and production methods between trading partners. Clearly, the incorporation of international treaties or private standards into the international trade agreement also serves the dissemination and enforcement of trade-related international norms, which trading partners agree to be particularly relevant in the context of trade liberalization.

Where market access is rendered conditional upon meeting a private standard (3) (e.g. tariff preferences limited to RSPO certified palm oil in the EFTA–Indonesia PTA), trade liberalization can be limited with reference to a specific non-product-related processing or production standard. Such conditionality is clearly linked with sustainability concerns, but also deeply embedded in the promotion of value-driven globalization: only sustainable products should receive preferential treatment, using market access as a means to initiate a race-to-the-top in standards in non-product-related processing and production methods. EFTA–Indonesia incorporates in trade relations with Switzerland three different private labels for sustainable palm oil (RSPO, ISCC PLUS, POIG) which are mandatory for tariff preferences.⁵² EU–MERCOSUR potentially ties tariff preferences to EU standards in egg production.⁵³

Trade liberalization packages or package treaties may also lock-in a certain level of protection in domestic law (2). Such so-called 'ratchet-clauses' used to be applied primarily for locking-in a certain minimum level of market access and/or trade liberalization (particularly in services trade liberalization). More recently, they are also being added to labor and environment chapters of international trade agreements with respect to a minimum level of domestic protection. Newer international trade agreements use these clauses to bind the levels of protection of the environment or of labor in domestic law at the time of the negotiation of the PTA. Trade liberalization packages or package treaties may also require changes in domestic laws or flanking policies. In the case of the US–Mexico–Canada Agreement (USMCA), for instance, a special provision was inserted to place an obligation on Mexico to enact domestic legislation regarding worker representation in collective bargaining.⁵⁴ The ratification of the USMCA was made conditional by the US Congress on Mexico fulfilling this commitment.⁵⁵ Like incorporation of international treaties (1) or private standards (3) into the international trade agreement, such clauses referring to domestic laws or flanking policies (2) serve fair competition between trading partners.

3.4.3 Trade Liberalization Packages: Temporal Elements

Linkages between trade liberalization and flanking policies in trade liberalization packages or package treaties may be established before, during, or after the negotiation and implementation of the trade liberalization package or package treaty. Most prominently, trade-related international treaties may be tied to an international trade agreement by either requiring their ratification and/or implementation prior to the ratification of the international trade agreement,⁵⁶ or

⁵²C. Sieber-Gasser (2021) 'Palmöl in der EFTA-Indonesien Wirtschaftspartnerschaft: Details des neuen Präferenzmechanismus, Informationslage zum Zeitpunkt des Referendums und Gewährleistung der Abstimmungsfreiheit', sui generis 271.

⁵³For a general discussion, see I. Offor (2020) 'Animals and the Impact of Trade Law and Policy: A Global Animal Law Question', *Transnational Environmental Law* 9, 239.

⁵⁴Worker Representation in Collective Bargaining in Mexico, Annex 23-A USMCA.

⁵⁵For details, see M.A. Corvaglia (2021) 'Labor Rights Protection and Its Enforcement under the USMCA: Insights from a Comparative Legal Analysis', World Trade Review 20, 648.

⁵⁶Viet Nam ratified the ILO Convention No. 98 on Collective Bargaining and adopted a revised Labor Code prior to the ratification of the PTA with the EU. Viet Nam had to do so, since the ILO Convention No. 98 was incorporated into the

their ratification and/or implementation after the ratification of the international trade agreement.⁵⁷ A trade liberalization package or package treaty may also be conditional upon certain ex-ante changes to domestic law, without which the treaty would not enter into force, or include flanking commitments with reference to domestic laws to be implemented or enforced ex post, once the treaty had entered into force.

3.4.4 Trade Liberalization Packages: Quality of Commitments

Flanking commitments in trade liberalization packages or package treaties may range from an obligation to merely ratify or enact flanking measures to an obligation to effectively enforce flanking measures. Flanking commitments in trade liberalization packages or package treaties may or may not fall within the scope of international dispute settlement proceedings.

When incorporating trade-related international treaties into PTAs, obligations under such treaties (e.g. ILO Conventions) may be covered by dispute settlement mechanisms in the PTA. Violations of obligations in trade-related international treaties may therefore become sanctionable. Package treaties thus not only expand trade liberalization, but also strengthen the enforcement of obligations in incorporated trade-related international treaties.

In the case of 'ratchet-clauses' linking trade liberalization to minimum levels of domestic protection, maintaining the locked-in level of protection may become a binding obligation under the PTA and impact on the right to regulate. Ratchet-clauses in environmental or labor protection are therefore typically balanced with the right to regulate: lowering levels of protection cannot be used to encourage investment and/or to enhance a competitive trade advantage.

Obligations are also typically linked to flanking measures in the form of 'ratchet-clauses' to effectively enforce existing levels of protection in domestic legislation: without the commitment to effectively enforce domestic legislation, there is essentially no reason for a 'ratchet-clause'. International trade agreements which cover regulatory convergence may also entail obligations to inform and consult with trading partners when revising trade-relevant national legislation. Such provisions can be found in the Comprehensive Economic and Trade Agreement (CETA), ⁵⁸ for instance.

4. Matrix of Negative Effects and Flanking Policies

The above leads to the following matrix of our conceptual framework for domestic and international negative effects of trade liberalization in relation to unilateral and mutually agreed flanking measures, organized around the concepts of mitigating measures, trade liberalization packages, and package treaties Figure 1:

We are particularly interested in the green and yellow boxes since we estimate that the largest policy space and greatest potential for effectiveness in addressing negative effects of trade liberalization are to be found in either unilateral or in mutually agreed trade liberalization packages and in package treaties. Both boxes abandon the traditional silo/subsidiarity approach in trade liberalization and serve the purpose of strengthening trade-related concerns vis-à-vis international trade obligations.

EU-Viet Nam PTA. See also K. Marslev and C. Staritz (2022) 'Towards a Stronger EU Approach on the Trade-Labor Nexus? The EU-Vietnam Free Trade Agreement, Social Struggles and Labor Reforms in Vietnam', *Review of International Political Economy* 1.

⁵⁷E.g. the obligation of Korea to fully implement ILO Core Conventions in the KOREU (Art. 13.4). For details, see M.J. Garcia (2022) 'Sanctioning Capacity in Trade and Sustainability Chapters in EU Trade Agreements: The EU-Korea Case', *Politics and Governance* 10, 58. Similarly, the obligation of China to ratify and fully implement ILO Core Conventions in the EU-China Comprehensive Agreement on Investment (not in force). For details, see e.g. J. Chaisse, *FDI and Sustainable Development in the EU-China Investment Treaty: Neither High Nor Low, Just Realistic Expectations* (Columbia FDI Perspectives CCSI 2022).

⁵⁸See e.g. Chapter 21 on 'Regulatory Cooperation' of CETA: 'The Parties [...] discuss regulatory reform and its effects on the Parties' relationship.' (Art. 21.4(a)i).

	Negative Effects		
	domestic	international	
	KOREU, USMCA, CAFTA, NAFTA-TAA, aso.	EFTA-Indonesia, WTO fisheries subsidies, EU-New Zealand, maybe green steel initiative, ACCTS, aso.	Package Treaty
mutually agreed	EU-Viet Nam, safeguards, anti- dumping, phasing-in, IPEF, aso.	CITES, TIST, TTC, IPEF, aso.	Packages
	ILO Conventions, Human Rights, CEDAW, UNDRIP, aso.	Paris Agreement, UNFCCC, Kyoto Protocol, Montreal Protocol, CBD, aso.	Mitigation
unilateral	TAA, corporate due diligence/value chain liability, minimum wages for posted workers, collective bargaining rights, circular economy, aso.	EUDR, CBAM, EU greenwashing legislation, child labor/forced labor due diligence/ban, conflict minerals ban, human trafficking, aso.	Packages
elinu	education, unemployment insurance, minimum wages, maternity leave, waste reduction, nondiscrimination, indigenous rights, aso.	carbon emission trading system, subsidies for solar panels/electric cars, green energy, deforestation, protection of biodiversity, aso.	Aitigation

Figure 1. Illustration of conceptual framework.

4.1 Matrix Explained

The *Mitigation* box includes the general social security net (e.g. access to training and education, unemployment insurance, minimum wages, maternity leave) along with general domestic legislation addressing the *domestic* negative effects of trade liberalization (e.g. waste reduction, indigenous rights, protection of ground water). *Mitigation* may also have a focus on *international* negative effects (e.g. carbon emission trading systems, subsidies for green goods and green energy, protection of forests and of biodiversity).

Unilateral trade liberalization packages addressing a domestic negative effect include, for instance, the US TAA program along with domestic corporate due diligence legislation, collective bargaining rights (since they are tied with trade liberalization), or minimum wages for posted workers. Unilateral trade liberalization packages addressing an international negative effect include unilateral measures addressing trade-related aspects of climate change (e.g. 'carbon leakage' in CBAM, deforestation in the European Deforestation Regulation (EUDR)) or of common concern (e.g. elimination of child and forced labor through import bans or domestic corporate due diligence obligations).

Mutually agreed mitigation establishes international minimum standards addressing the domestic or international negative effects of trade liberalization. This includes on the domestic side minimum standards regarding labor protection (ILO Conventions) or the protection of indigenous rights (UN Declaration on the Rights of Indigenous Peoples (UNDRIP)) or of women's rights (UN Convention on the Elimination of All Forms of Discrimination against Women

(CEDAW)), and on the international side regarding climate change mitigation (UNFCCC, Paris Agreement), the protection of biodiversity (CBD) or fundamental human/labor rights protection (of common concern to all nations).

We include safeguards, anti-dumping and phasing-in in PTAs in the group of mutually agreed trade liberalization packages addressing domestic negative effects: they are clearly tied with trade liberalization but their enactment remains voluntary. Mutually agreed trade liberalization packages addressing international negative effects include, most notably, the Convention on International Trade in Endangered Species (CITES) (protection of biodiversity), which specifically regulates 'trade in species threatened with extinction' without, however, creating trade commitments (and hence not being a package treaty).

The group of package treaties addressing domestic negative effects includes, for instance, PTAs which combine trade liberalization with flanking policies that address negative effects on labor (obligation to implement and enforce ILO Core Conventions in EU–South Korea Free Trade Agreement and in the Central American Free Trade Agreement; Mexico's obligation to enforce collective bargaining rights in domestic legislation in USMCA). IPEF may potentially qualify as a package treaty should it tie trade commitments with flanking policies addressing domestic and/or international negative effects. The same can be said about the EU founded Critical Raw Materials Club. Finally, the group of package treaties addressing international negative effects includes, for example, the EFTA–Indonesia PTA (deforestation and biodiversity). Similarly, the WTO fisheries agreement combines trade commitments with flanking policies addressing international negative effects (biodiversity). The GASSA is a candidate for an international package treaty since it is supposed to combine trade commitments with flanking policies (climate change).

4.2 Current Examples of Trade Liberalization Packages and Package Treaties

The concept of a trade liberalization package under this project transcends the classic treaty. It includes solutions that take other forms, including political packaging or packaging by domestic parliaments (e.g. conditioning ratification or renewal of a trade agreement to the provision of commensurate trade adjustment assistance). The practice of adding mutually agreed flanking policies to an international agreement is not entirely new. Throughout the post-war period, some international agreements have included commitments to adapt domestic policies in ways that facilitate implementation of the international commitments. Many nations package trade agreements politically with other domestic policies to compensate or reward particular constituencies. New is to some extent the use of such 'packaging' as flanking measures to address the negative effects of trade liberalization.

While many if not most international trade agreements concluded within the past 15 years contain some form of incorporation of trade-related international treaties (typically in the chapter on labor and environment or sustainable development), more recent package treaties take a more comprehensive approach to mutually agreed flanking measures that form an integral part of market access. We observe that package treaties tend to focus on reduction of other negative effects of trade liberalization than trade liberalization packages⁵⁹ and consider to a much lesser degree the flanking of necessary negative effects of trade liberalization. Furthermore, package treaties tend to have stronger packaging with regard to negative effects on labor than on environment, gender, or indigenous rights. Packaging in order to address climate change is a particularly recent phenomenon. To give a few examples of package treaties:

⁵⁹See e.g. Mattoo et al., supra n. 51; K. Heyl, F. Ekardt, P. Roos, J. Stubenrauch, and B. Garske (2021) 'Free Trade, Environment, Agriculture, and Plurilateral Treaties: The Ambivalent Example of Mercosur, CETA, and the EU-Vietnam Free Trade Agreement', Sustainability 13, 3153; LSE Trade Policy Hub, Comparative Analysis of Trade and Sustainable Development Provisions in Free Trade Agreements (LSE 2022).

USMCA: Chapter 23 of the USMCA includes enforceable labor provisions that represent a significant departure from NAFTA. Among other things, it forces Mexico to pass legislation that improves the collective bargaining capabilities of labor unions as well as introducing a minimum wage requirement in the automotive industry. A range of Mexican labor reforms were set up as an ex ante pre-condition for the US Congress to support the adoption of the USMCA.

EU–*South Korea*: Chapter 13 not only requires the ratification, but also the effective implementation of ILO Core Labor Conventions. This particular obligation has been part of the dispute settlement between the EU and Korea by referral to a panel of experts.

EU-Viet Nam: Viet Nam ratified the ILO Convention No. 98 on Collective Bargaining and adopted a revised Labor Code prior to the ratification of the PTA with the EU. Viet Nam had to do so since the ILO Convention No. 98 was incorporated into the EU-Viet Nam PTA.

EFTA–Indonesia CEPA: Art. 8.10 commits Parties to ensure that all traded vegetable oils comply with defined minimum standards in sustainability. The effective implementation of Art. 8.10 results in tariff preferences that are conditional upon sustainability certification.

4.3 New Types of Trade Liberalization Packages

Although some package treaties exist (as per above), there is room for 'stronger' package treaties, particularly with regard to pre-empting or minimizing incidental negative effects of trade liberalization on environment, gender, and indigenous rights, and with regard to addressing necessary negative effects of trade liberalization (specifically vulnerable sectors/jobs). These might take the form of commitments in the international trade agreement itself to set aside sums of money that will be spent on domestic adjustment or redistribution, or requirements that the other country implements changes in this respect.

For example, Meyer has put forward the proposition that countries agree under international trade agreements to domestically redistribute wealth through taxes as part of the deal. Similarly, Pelc has suggested that countries should build domestic trade adjustment programs into regional trade agreements to protect domestic workers in the face of job displacement and to avoid the imposition of ex-post tariffs that could lead to trade wars. Another example of how to address economic adjustment can be found in Norway's financial and technical support to Indonesia in its efforts to combat deforestation: This effort is now linked with the EFTA-Indonesia PTA which only liberalizes trade in Indonesian palm oil which is certified for sustainability. Aside from such pioneering insights, however, the exploration of the role of multilateral and regional trade rules as a method to help the world to deal with the negative effects of trade remains largely unchartered.

This is illustrated, for example, by the Environmental Goods Agreement of the Asian Pacific Economic Cooperation (APEC): APEC grants tariff concessions on a list of 'green' goods ('goods that directly and positively contribute to green growth and sustainable development objectives'). This particular form of trade liberalization – limited to trade which is necessary for greening the economy – overcomes the traditional silo/subsidiarity approach in trade liberalization entirely by focusing on the benefits of trade for the society and the environment alone, without concessions to industries associated with more negative effects. In a similar vein, the Agreement on Climate Change, Trade and Sustainability (ACCTS) is limited to unilateral liberalization of trade in

⁶⁰T. Meyer (2017) 'Saving the Political Consensus in Favor of Free Trade', Vanderbilt Law Review 70, 985.

⁶¹K. Pelc (2019) 'China Should Demand that the US Compensate American Workers Hurt by Trade', The Hill, 11 November 2019, https://thehill.com/opinion/international/469940-china-should-demand-that-the-us-compensate-american-workers-hurt-by/ (accessed 2 February 2024).

⁶²See Government of Norway, 'Contribution Agreement Concluded: Norway Delivers USD 56 Million in Results-Based Support for Indonesia's FOLU Net Sink 2030 Climate Goals' (Press Release, 19 October 2022), www.regjeringen.no/no/aktuelt/norway-delivers-us\$-56-million-in-results-based-support-for-indonesias-folu-net-sink-2030-climate-goals/id2936675/ (accessed 2 February 2024).

⁶³APEC 2012 Leaders' Declaration, Annex C - APEC List of Environmental Goods.

environmental goods and services, while at the same time also addressing 'greenwashing' and harmful fossil fuel subsidies.⁶⁴ Contrary to the APEC Environmental Goods Agreement,⁶⁵ market access concessions in ACCTS apply on a most-favored nation basis and the agreement is structured in such a way as to enable additional countries to join. ACCTS can, hence, be seen as the best example of a trade liberalization package today, designed to address negative effects of trade liberalization for the environment, while at the same time using trade as a means to strengthen efforts in climate change mitigation and greening the economy worldwide.

It is through this approach – the unapologetic focus on trade as a force for good – that trade liberalization not only mitigates its own negative effects but has the potential to create positive spillovers for labor and the environment in general. For this reason, trade liberalization packages deserve our attention.

5. Concluding Remarks

We can currently observe how the international rules-based trading system becomes the victim of its own success; like every system, the international rules-based trading system has its flaws (e.g. the race-to-the-bottom in non-product related processing and production methods). And for various reasons these flaws persisted unaddressed over a long period of time: While it was always recognized that trade liberalization may have some negative effects for individual businesses, it is only more recently that the urgency of addressing incidental negative effects on labor and the environment has come to public and political awareness. Addressing them, however, requires leaving to some degree the trodden paths of the existing regulatory logic in the international rules-based trading system. Given the deep engraving of the principle of non-discrimination in all of economic law, adapting the regulatory logic of international trade regulation to modern-day challenges is no easy task. Evidently, new approaches to trade policy – particularly with regard to overcoming the regulatory silos – are required in order to secure the benefits of the international rules-based trading system.

If we believe the findings of the *Club of Rome*,⁶⁶ then the trading system we currently all depend on is ultimately pointed directly at its own destruction.⁶⁷ Changing this direction and therefore correcting the current projections benefits world welfare, peace. and the protection of the climate and the environment.

For this, we need further research. We need a better understanding of negative effects linked with trade liberalization. In particular, we need to understand which kind of negative effects are ultimately inevitable and what kind of measures work to reduce incidental negative effects. Furthermore, we have to deepen our knowledge of the factors that contribute to – or prevent – the successful implementation of measures that work toward a positive transition in the global market. In particular, the political ramifications of the new trend in conditional unilateral trade liberalization (e.g. IPEF, GASSA, or Critical Raw Materials Club) deserve close attention. Aside from the examples cited in this paper, there may, furthermore, be other variations of trade liberalization packages that we could learn from – if we had a comprehensive global

⁶⁴See Joint Ministerial Statement on Conclusion of Negotiations for the Agreement on Climate Change, Trade and Sustainability, 2 July 2024, www.mfat.govt.nz/en/media-and-resources/joint-ministerial-statement-on-conclusion-of-negotiations-for-the-agreement-on-climate-change-trade-and-sustainability (last accessed 2 September 2024).

⁶⁵P.C. Mavroidis and D.J. Neven (2019) 'Greening the WTO Environmental Goods Agreement, Tariff Concessions, and Policy Likeness', *Journal of International Economic Law* 22, 373.

⁶⁶D.H. Meadows, D.L. Meadows, J. Randers, and W.W. Behrens (1972) The Limits to Growth, A Report for the Club of Rome's Project on the Predicament of Mankind. Universe Books, 183.

⁶⁷See D.H. Meadows, D.L. Meadows, and J. Randers (1992), Beyond the Limits: Global Collapse or a Sustainable Future. Earthscan Publications; D.H. Meadows, D.L. Meadows, and J. Randers (2004) Limits to Growth: The 30-Year Update. Earthscan Publications; J. Randers (2012) 2052: A Global Forecast for the Next Forty Years. Chelsea Green; G.M.J. Randers (2016) Reinventing Prosperity: Managing Economic Growth to Reduce Unemployment, Inequality and Climate Change. Greystone Books.

overview of the existing regulatory packaging landscape. We need to study how existing package treaties could be rendered more effective and develop new ideas for trade adjustment policies and for the minimization of the incidental negative effects of trade liberalization. Finally, we need to identify changes at the national level that enable overcoming the current silo approach. Insights from all disciplines are required in this effort, as well as from trade practitioners.

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