

ORIGINAL ARTICLE

# Trade and Sustainable Development: Non-Economic Objectives in the Theory of Economic Policy\*

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(Received 1 March 2023; accepted 1 March 2023)

## Abstract

While the theory of economic policy offers a potential framework for thinking about the joint pursuit of economic objectives (EOs) and non-economic objectives (NEOs), over time the theory of economic policy was formalized in a way that considers NEOs as constraints that are given, rather than as goals that may themselves be endogenous alongside EOs. We examine the analytical treatment of NEOs as co-determined with EOs, revisiting some of the ground broken by Alan Winters in his analysis of NEOs. We review the place of NEOs in the theory of economic policy, discuss current practice in the representation of such objectives as exogenous constraints, and develop an argument for representation of NEOs as objectives in themselves.

**JEL codes:** I38; F13; O24

**Keywords:** Non-economic objectives; endogenous economic policy; trade policy; issue linkage; values

## 1. Introduction

States pursue national prosperity and security through external policies spanning a range of instruments. These include trade policy (tariffs, nontariff measures, trade agreements for goods and services), development cooperation (financial grants and loans), regulation of inward and outward direct investment and movement of people (temporary and longer-term migration), access to public procurement markets, and control of trade in dual use technologies and military products. States also use external policies to protect or project their values. This can take the form of production requirements that apply to imports (labour standards; environmental sustainability regulations) and efforts to promote specific values and norms – e.g., political and civil rights, human rights more broadly – through bilateral engagement, or international cooperation to protect the global commons (e.g., reduce greenhouse gas emissions,). Values also drive regulation in new areas such as digital trade and digital technology, e.g., ethics guidelines for trustworthy artificial intelligence, or addressing the potential for online harms and discrimination across age, gender, or ethnicity. In the case of the European Union (EU), the Treaty of Lisbon explicitly calls for trade and investment policy to support and promote EU values and standards relating to human rights, labour rights, the environment, and sustainable development. This is

\*Prepared for the conference in honour of L. Alan Winters, Economic policy, openness and development, European University Institute, 6–7 September 2022. We are grateful to a referee, Ingo Borchert, Will Dodds, and Maurice Schiff for helpful comments and suggestions. Support from the ESRC Centre for Inclusive Trade Policy (UK) is gratefully acknowledged (Hoekman).

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operationalized by conditioning access to the EU market on the pursuit and realization of non-economic objectives (NEOs), complementing the use of trade policy to achieve economic objectives (EOs).

The need to consider both EOs and NEOs when thinking about policy was recognized over a century ago (Pigou, 1920). Over time, the theory was formalized in a way that considers NEOs as constraints, not as goals that should be included explicitly into the objective function and be part of the analysis of policy. This was the subject of two important articles by Alan Winters.<sup>1</sup> In this paper, we retrace some of the ground tilled in his work. We first review the place of NEOs in the theory of economic policy (Section 2), discuss the literature (Section 3), propose an alternative representation (Section 4), and discuss the operationalization of approach (Section 5).

## 2. NEOs in the Theory of Economic Policy

The theory of economic policy offers a framework for thinking about the joint pursuit of EOs and NEOs. It can be reduced to three basic questions (Hoekman and Nelson, 2020):

- What is the problem?
- What instruments are available to deal with the problem?
- Of those instruments, which politically feasible one(s) achieves the goal at lowest cost?

Because the policy choice problem proceeds as an optimization problem, getting clarity on the objective function of the relevant decision-maker is essential. That is, ‘the problem’ must be defined relative to some clearly understood preferences over outcomes of the policy process. In a sense, an EO is relatively easy to understand in this context. By defining the objective as improving economic efficiency, we automatically have a straightforward metric for evaluating both the costs and benefits of the (absence of) policy in question. This is not the case for NEOs. For example, while income distribution is obviously an economic metric, goals with respect to income distribution do not strictly follow from distortions in the economy *per se*, but from broader political struggles or widely held values in civil society. Thus, income distribution goals are non-economic – similarly for national security, human rights, or any other objectives justified in this way.

Loosely speaking, an EO seeks to restore efficient conditions in an otherwise perfectly competitive economy when faced with some form of distortion, while a NEO is not related to efficiency as a goal. The meaning of ‘EO’ as the response to the failure of satisfying the marginal conditions for efficiency, and the evaluation of optimal instruments to respond to such situations are clear in the case of EOs, but less so for the case of NEOs. A first problem with defining an objective function for the analysis of NEOs concerns the legitimacy of a given NEO. Because the goal of an EO is to increase efficiency, such goals will have a *prima facie* plausibility.<sup>2</sup> The legitimacy of any given claim to a NEO is unclear and might be considered ‘essentially contested’ (Gallie, 1955; Collier *et al.*, 2006). There are a potentially very wide range of values in terms of which such a NEO might be justified, many political actors that might legitimately deploy such values, and many bodies of technical knowledge that might be legitimately used to support them. Without clarity about the nature and form of the objective function, it is not clear what it means to claim that something is a NEO.

A second problem concerns trade-offs between a given NEO and other objectives. A decision-maker must consider how to allocate scarce resources across a variety of goals, for example

<sup>1</sup>Winters (1989, 1990).

<sup>2</sup>This plausibility underlies the Kaldor–Hicks type of argument in favour of any policy that increases efficiency (Hicks, 1939, Kaldor, 1939). However, as Pigou (1920, Chapter 1, Section 8) argues, while efficiency objectives might well conflict with NEOs, undermining any clear conclusions of the overall effect of a policy based on EOs alone, it is legitimate to consider the economic effects.

income distribution, defence, environmental, public health, and education. While these are often treated independently in both the relevant political institutions and research, they are linked in the grand general equilibrium. A fully adequate objective function should consider the trade-offs implied by that general equilibrium. This requires a well-specified objective function that embodies those trade-offs.<sup>3</sup> Such trade-offs are often ignored, reflected in a focus on a broad range of NEOs that implicitly are treated as equally important, with all to be pursued through the instrument of trade policy.

### 3. Major Contributions to the Literature on NEOs

The fundamentally practical orientation of classical and early neoclassical economics meant that many of the policies analysed would be considered non-economic today (e.g. poverty, employment, growth, and national security). As a result, there have been some attempts to claim that this early work had an explicit notion of NEOs (Elmslie, 2004, Maneschi, 2004). Of course, mercantilist (Viner, 1948) and statist (List, 1885) analysts also presented analyses that addressed NEOs, e.g., national security. A systematic differentiation between EOs and NEOs in welfare analysis seems to go back no further than Pigou's (1920) classic *The Economics of Welfare*. For Pigou, the distinction was whether a policy could be evaluated in terms of the "measuring rod of money" (Pigou, 1920). Specifically,

though no precise boundary between economic and non-economic welfare exists, yet the test of accessibility to a money measure serves well enough to set up a rough distinction. Economic welfare, as loosely defined by this test, is the subject-matter of economic science. (p. 11)

While this appears to rule NEOs out of 'economic science', Pigou stresses there is bidirectional causation between economic and non-economic phenomena, so that the focus on economic welfare will always be incomplete. Nonetheless, Pigou goes on to argue that:

a change in one part never *measures* the change in the whole, yet the change in the part may always *affect* the change in the whole by its full amount. If this condition is satisfied, the practical importance of economic study is fully established ... The real objection is not that economic welfare is a bad *index* of total welfare, but that an economic cause may affect non-economic welfare in ways that cancel its effect on economic welfare. (p. 12. Italics in original)<sup>4</sup>

While the theory of economic policy as applied to trade has roots in Meade's (1955) *Trade and Welfare* and the general theory of second best (Lipsey and Lancaster, 1956), the foundational work is in a series of exceptional papers by Max Corden (1957), Harry Johnson (1960), and Jagdish Bhagwati and colleagues (Bhagwati and Ramaswami, 1963; Bhagwati, 1967; Bhagwati

<sup>3</sup>Several readers have suggested that standard methods of policy comparison, in particular the marginal value of public funds (MVPF), can be applied to compare among NEOs. While both EOs and NEOs can be evaluated under a money metric, our distinction between EOs and NEOs concerns the objective of policy, not whether it is measurable in monetary terms. If sufficient information is available to use MVPFs to make welfare statements, one can work directly with welfare. For our purposes, the latter is cleaner (requiring fewer assumptions – in particular about the marginal utility of money to the decision-maker) and clearer, as the marginal conditions that reflect the comparisons are explicit about the comparisons being made. The difficulty of analyzing NEOs relative to EOs is not due to measurement, but the way such issues are embedded in political systems and the fact they do not rest on straightforward efficiency issues. To illustrate, consider environmental sustainability. As an EO, environmental degradation flows from an externality, the measurement of which is a technical engineering problem. Policies that offset the externality can easily be ranked in terms of their relative costs and evaluated under a social welfare function with a fixed commitment to environmental sustainability (the environmental NEO). A change in the environmental NEO is a change in the structure of the objective function and will change any policy with linkages to environmental policy. While these effects will be revealed in changes in marginal conditions, identifying and justifying the change is a matter of policy discourse, not engineering.

<sup>4</sup>We will see this emphasis on measurability in Winters' analysis of 'so-called NEOs' (Winters, 1989).

et al., 1969).<sup>5</sup> These papers define EOs in terms of distortions and policies in terms of responses to these distortions. They develop a clear analytical framework that permits explicit answers to the instrument identification, ranking, and choice problems in an optimizing, welfare theoretic framework.<sup>6</sup> Because the goal is economic efficiency, evaluation in terms of marginal conditions, and degrees of deviation from those conditions, permit a sensible and sophisticated analysis of policy choice and evaluation. For the case of NEOs, however, these economists implicitly follow Pigou in assuming that such objectives cannot be analysed with the measuring rod of money and therefore do not fit comfortably in the framework applied to EOs.

The preferred approach of the modern theory of economic policy to NEOs is to treat a policy target that deviates from the undistorted equilibrium as a constraint in the analysis and to identify the optimal intervention to achieve that target. Corden (1957) is the first systematic analysis of NEOs in the context of a recognizable theory of an economic policy framework.<sup>7</sup> Corden considers an industrial policy, adopted 'say for strategic or other political reasons' (p. 240) that involves greater production of the import-competing good than would occur in the undistorted equilibrium and shows that, for a large economy, the optimal policy involves the application of both an optimal tariff and a production subsidy. Johnson (1960) develops this sort of analysis in much greater detail under the label of a 'scientific tariff' – a tariff that balances the standard costs of protection against NEOs that might be affected by the tariff. Referring explicitly to the then new theory of the second-best (Lipsey and Lancaster, 1956), Johnson suggests that a tariff might apply to both a distortion (as in the case of a large, free-trading country) and to a situation where 'the most appropriate remedy is somehow ruled out and where the tariff would produce some improvement' (p. 341). But, argues Johnson, this remains well within standard welfare economics and is just a policy ranking/assignment problem again. Instead, Johnson is interested in policies that seek to promote 'non-economic objectives of various kinds, identified in one way or another with the effects of the tariff on domestic production and consumption of certain products' (p. 341).

Johnson considers tariffs as an instrument to achieve five specific NEOs:

- a) A tariff to promote national self-sufficiency and independence.
- b) A tariff to promote diversification, industrialization, or agriculturalization.
- c) A tariff to promote a 'way of life'.
- d) A tariff to promote military preparedness.
- e) A bargaining tariff.

Unlike Corden, Johnson does not consider instruments other than the tariff. In a later paper, Johnson (1965) sketches an analysis of NEOs consistent with that of Bhagwati and Ramaswami's (1963) formalization and extension of the theory of economic policy. However, it is Bhagwati (1967) and especially Bhagwati and Srinivasan (1969) who develop an analysis of NEOs that is fully consistent with the theory of economic policy. As with Corden, for Bhagwati and Srinivasan NEOs are simply constraints that are given from outside the analysis.<sup>8</sup> Bhagwati et al. (1998, p. 351) list the 'four classic types of noneconomic objective' as:

<sup>5</sup>All three of these leading scholars have provided syntheses of this literature: Johnson (1965), Bhagwati (1971), and Corden (1997). Wong (1995) is an excellent textbook treatment of this material.

<sup>6</sup>This approach assumes the existence of a well-behaved social welfare function and focuses on the marginal conditions associated with an optimal policy. This was a reasonable strategy, given that the goal was to develop the policy *framework*. While the architects of the theory of economic policy were clear on the bodies buried in the assumption of a well-behaved social welfare function (see e.g. Bhagwati et al., 1998, Chapter 18), this awareness seems to be missing from much current application of the basic reasoning.

<sup>7</sup>Corden (1957), building on Meade (1955), appears to be the first application of the instrument ranking/assignment rule analysis that became central to the theory of economic policy.

<sup>8</sup>Bhagwati and Srinivasan do consider an analysis in which the NEO is included in the objective function, but it remains a constrained value of one of the arguments in the social welfare function. While Johnson's analysis is informal, he seems to see NEOs as continuously variable and relatively directly comparable to economic objectives.

1. Production of a good should not fall below a certain level.
2. Consumption of a good should not exceed a certain level.
3. Import (or export) of a good should not exceed a certain level.
4. Level of factor use in a good should exceed a certain level.

Unlike the case of EOs, where the objective is to increase efficiency by ‘fixing’ a distortion, these are not actually objectives, but instruments for achieving objectives given from outside the model. There is no real way to compare, in welfare terms, the level of achievement of an NEO with EOs (as suggested in Johnson, 1960, 1965), but, for each of the NEOs listed above, there is a parallel EO which is characterized by the same ranking of policies.<sup>9</sup> This is proposition 3.ii in Bhagwati (1971):

When distortions have to be introduced into the economy because the values of certain variables have to be constrained, the policy interventions that do this can be ... welfare ranked. b. The ranking of these policies is further completely symmetrical with that under the ‘corresponding’ class of [economic objectives]. (p. 18)

As with EOs, the ranking is based on using the least distorting method of pursuing the NEO.

In addition to countless applications of this logic, several papers formally extend the basic 2-good  $\times$  2-factor  $\times$  2-country analysis. For example, Vandendorpe (1974) shows that extension to the  $m$ -factor  $\times$   $n$ -good is straightforward,<sup>10</sup> and that the optimal NEO structure involves a differentiated (as opposed to uniform) tax structure, involving a standard optimal tariff structure if the country is economically large. Given current interest in global value chains (GVCs), Tan’s (1971) analysis of the case with ‘imported materials, inter-industry flows and non-trade goods’ is worthy of particular note.<sup>11</sup> Finally, Rodrik (1986, 1987) makes the important point that, in a full political economic equilibrium, the ranking of interventions in terms of cost may differ from the ranking that does not consider response by politically engaged agents.

In a pair of extraordinary articles, little noticed outside of agricultural economics literature, Alan Winters appears to reject the Corden–Johnson–Bhagwati approach to the modelling of NEOs and returned to the core approach of Pigou. The central argument is as follows:

The existence of legitimate objectives other than maximising aggregate income is indisputable, but it is wrong to characterise them as ‘non-economic’, hence our use of the term ‘so-called non-economic objectives’ (SNOs). It is true that most of these objectives pose analytical difficulties for economists ... Nevertheless, for so long as the objectives are amenable to measurement and analysis in money terms, even if only crudely, they are economic in the sense defined by Pigou. They are also economic in the sense that their achievement requires the absorption of real resources which could otherwise have been used for other objectives. Thus, while SNOs may raise issues that require analysis in other dimensions, e.g. sociology or aesthetics, they necessarily entail a critical economic dimension because the scarcity of resources means that choices have to be made between conflicting desires.

Winters does not reject the distinction between policies aimed at improving efficiency and policies that derive from preferences over issues normally considered outside the economy. Rather, he argues we can evaluate the latter type of objectives in straightforwardly economic

<sup>9</sup>Bhagwati (1971, p. 77) refers to this parallelism as ‘dual’, with the scare quotes reflecting that Bhagwati is aware that this is not mathematical duality. Many later papers drop the quotes.

<sup>10</sup>Ohyama (1972, p. 58) and Lloyd (1973) develop closely related  $m$ -factor  $\times$   $n$ -good analyses with policy fixed prices and/or quantities.

<sup>11</sup>Yu (1975) also considers intermediate goods and Yu (1977) examines optimal effective protection with NEOs.

terms.<sup>12</sup> Winters clearly has a notion of NEOs in the objective function but, because he has no way of evaluating the satisfaction of such objectives, he essentially follows Bhagwati and Srinivasan (1969) in treating them as in some way fixed so that he can ask whether the instruments actually applied are those warranted by the theory of economic policy. This has the effect of essentially treating the NEOs as constraints that can be satisfied at greater or lesser cost. However, this practical concession is embedded in a discussion of the general problem of economic policy, which is deeper and subtler than the standard approach to the theory of economic policy. The key to that sophistication is an explicit recognition of the importance of the objective function to the theory of economic policy generally, whether for EOs or NEOs. It is to this that we now turn.

#### 4. NEOs in the Objective Function

As a branch of welfare economics dealing with optimal policy (and deviations therefrom), the objective function (i.e. that which is optimized) plays an essential role. The most obvious objective function is the Bergson–Samuelson social welfare function (SWF) (Bergson, 1938; Samuelson, 1947, 1956, 1981):

A function of all economic magnitudes of a system which is supposed to characterize some ethical belief – that of a benevolent despot, or a complete egotist, or ‘all men of good will,’ a misanthrope, the state, race, or group mind, God, etc. (Samuelson, 1947, p. 221)

Specifically,

we may write this function of the form

$$W = W(z_1, z_2, \dots),$$

where the  $z$ 's represent all possible variables, *many of them non-economic in character.* (p. 221, emphasis added)

Samuelson goes on to note that:

Between these  $z$ 's there will be a number of ‘technological’ relations limiting our freedom to vary the  $z$ 's independently. Just what the content of these technological relations will be depends upon the level of abstraction at which the specifier of value judgments wishes to work ... In other words, the auxiliary constraints on the variables are not themselves the proper subject matter of welfare economics, but must be taken as given. (pp. 221–222)

When Johnson (1960) refers to the ‘inchoate notion of balancing of results achieved against costs incurred’ across EOs and NEOs, he has in mind some such SWF. Winters extends his analysis beyond the scientific tariff. In describing optimal policy choice, Winters (1989, pp. 242–243) says:

Such intervention should ideally be thought of as society as a whole choosing between outcomes, a choice that depends on the relative weighting of various [NEOs] and private goods in social welfare.

Winters’ analysis reflects the same marginal conditions developed explicitly for the SWF analysis of Bergson and Samuelson:

<sup>12</sup>Given that he accepts the distinction between policies that respond to distortions and those that respond to some other source of policy demand, it is not clear that the ‘*so-called* non-economic objectives’ label is particularly useful. Thus, we will substitute ‘NEO’ for ‘SNO’ in direct quotations from Winters.

different policies will tend to deliver [NEOs] and other objectives in different proportions. If, at the margin, two policies trade-off a particular [NEO] against other goods at different rates, the government is essentially buying its [NEO] at two different prices; it should shift its custom toward the cheaper supplier, i.e. pursue the more efficient policy and reduce its reliance on the other. (p. 243)

This subtlety disappears when we turn to the more formal analysis building on Bhagwati and Ramaswami (1963) and Bhagwati and Srinivasan (1969) where the objective function is a SWF defined over consumption of final goods. This permits the analysis to proceed as if there was a representative private agent with well-behaved, standard neoclassical preferences. This is a sensible strategy for the analysis of EOs, since the point of policy is to 'fix' distortions and increase efficiency of the final, relative to the distorted, equilibrium. When we turn to NEOs, though, this is not consistent with the general programme of the theory of economic policy.

The great virtue of the theory is that its formal representation provides a powerful and flexible framework for organizing thinking about policy in practice,<sup>13</sup> the same virtue that characterizes the Bergson–Samuelson SWF. The fact that the NEOs may not be measurable in the same way as preferences over final goods is not a barrier to development of the relevant theory. To carry out the sort of analysis implied by Winters' work, the NEOs must be part of the SWF. Recall the separation between the objective of policy and the policy-ranking/assignment problem in the three basic questions characterizing the theory of economic policy. This permits the evaluation of policy interventions as instrumental to achieving a NEO, but not themselves as NEOs.<sup>14</sup> As the quotation from Pigou above suggests, while ignoring spillovers across NEOs and EOs, this is a first-order plausible approach to policy evaluation. That said, as both Johnson (1960) and Winters (1989, 1990) suggest, a more complete analysis of the welfare effects of policy should at least recognize such spillovers.

So, what would a simple framework for analysis of NEOs look like? Not surprisingly, we start with an objective function that incorporates NEOs. We consider a SWF that has two sorts of variables: final consumption goods; and NEOs:  $W = W(\mathbf{x}; \mathbf{n})$ . Here  $\mathbf{x}$  is a vector of final consumption goods and  $\mathbf{n}$  is a vector of NEOs (e.g. national security, environmental quality, etc.).<sup>15</sup> As a place to start, we consider  $\mathbf{n}$  relatively fixed over most policy-making situations.<sup>16</sup> However, changes in the non-economic environment will have effects on the full general equilibrium. Suppose that  $n_1$  is geopolitical security. As long as it is fixed, it is essentially embedded in the SWF, affecting the equilibrium but not changing it. However, suppose that  $n_1$  is a function of the geopolitical

<sup>13</sup>Winters (1989) provides an excellent illustration of this for the case of agricultural policy in OECD countries and for the case of food security in Winters (1990).

<sup>14</sup>This is not so clear in Bhagwati and Srinivasan (1969) and their followers. The explicit analysis of the objective function in Bhagwati and Srinivasan is peculiar in two ways. First, the authors suggest that introducing NEOs in the SWF 'raises the question of whether it is meaningful at all to distinguish between economic and non-economic objectives when both sets of objectives enter the utility function as arguments' (Bhagwati and Srinivasan, 1969, p. 37). As we have noted above, the key distinction between EOs and NEOs has nothing to do with the content of the objective function but has to do with the goal of policy. Second, instead of introducing an actual NEO in the objective function, Bhagwati and Srinivasan simply introduce the relevant constraint, missing the separation of objective from the policy-ranking/assignment problem that is the core of the theory of economic policy.

<sup>15</sup>Many NEOs are public goods, whereas the vector  $\mathbf{x}$  would ordinarily comprise private goods. Some NEOs can be treated as EOs by focusing on them as public goods, but this is not satisfactory. The fundamental problem is not under-production due to free rider problems, but that the conception of them as an object of policy has to do with their place in the objective of the decision-maker. The issue is not the failure of a standard marginal condition (which is the case with public goods), but something about the state of the particular NEO.

<sup>16</sup>Francois and Nelson (2014) develop an analysis in which governments vary in the weights they place on aggregate social welfare and on industry rents, and then seek to back out those weights as revealed by policy outcomes in a CGE model of the EU economy.

situation. Drawing on a classic paper by Wolfers (1951) to characterize the state of the geopolitical system in terms of proximity to the ‘pole of power’, where national survival is at stake and all policy is subordinated to defence of the nation,<sup>17</sup> if we measure the geopolitical situation ( $G$ ) as lying on a continuum between the pole of power and the pole of indifference, we can represent  $n_1 = f^{n_1}(G)$ . While stable under normal situations, an event (such as the launch by Russia of a war against Ukraine) that causes a shift toward the pole of power will cause a shift in the SWF (in particular, a shift in the relative weights on the various NEOs) which, in turn, affects the overall equilibrium. For example, this will cause shifts in policy affecting both allocation of domestic resources and patterns of trade (embargoes, friend-shoring, etc.).

We can carry out a similar exercise for any other NEO. For example, we might consider an environmental objective whose state is a function of current environmental conditions. The variable reflecting perception of those conditions might be changed in the direction of a life-threatening environmental catastrophe by an event such as the 2011 Fukushima nuclear disaster or a series of unusually hot summers. Changes in one or more NEO variables should then be evaluated (i.e. traded off) in the objective function with effects on the final equilibrium as a function of perceived relative seriousness of the changes and the costs of responding to the changed situation in the new equilibrium.<sup>18</sup>

Beyond discrete changes in the non-economic policy environment, a more nuanced connection between EOs and NEOs is their embedded relationship in terms of claims on resources, changes in non-economic outcomes due to economic policy (a key point of Winters 1989), and the political constraints that NEOs may place on policy targeting EOs. This points to an implicit connection between the economic outcomes driving and affected by economic policies, and the extent to which those policies also drive non-economic outcomes. As Finger (1981) has stressed, the information made available to interested political agents in terms of costs and benefits (winners and losers) plays an important role when formulating policy. Without a proper understanding of substantive economic policy linkages to non-economic outcomes, even technocratic or ‘numbers based’ assessments may lead to sub-optimal policy outcomes.<sup>19</sup> Administrative constraints, i.e., whether policy mechanisms actually have the degrees of freedom necessary to balance elements of  $\mathbf{x}$  against elements of  $\mathbf{n}$  may be another important factor.

## 5. Towards Operationalization: Trade and Sustainable Development

As noted previously, NEOs figure centrally in the rhetoric surrounding EU trade policy, with market access conditioned on the implementation of labour and environmental policies and outcomes in partner countries. This linkage strategy raises many practical questions, including whether it is effective, whether distinctions can (should) be made across different NEOs (are some more important than others?), the relationship between trade and other instruments (substitutes? complements?), and the consequences of conditioning trade on NEOs for realization of the EU’s commercial interests.

Answering these questions requires a conceptual framework that recognizes the inherent interdependencies between the various EOs and NEOs that are at stake. Such a structural framework is necessary to inform decisions on trade-offs between NEOs, given inevitable resource and other constraints that differentially affect the (opportunity) cost of attaining any given NEO. This in

<sup>17</sup>The other extreme is what Wolfers calls the ‘pole of indifference’, where there is no national security stake. Most of the time, states find themselves somewhere between these two poles. As a first-order of approximation, it seems reasonable to treat this as a continuous variable.

<sup>18</sup>Of course, a major environmental disaster or other large shocks change the underlying economic conditions and any effects on the decision-maker preferences that might run through changes to the relevant  $n$ ’s.

<sup>19</sup>Thomas and Benjamin (2020) argue that in the case of catastrophic storm damage in the Bahamas, failure to consider non-economic loss and damages contributed to policy assessments concluding that the cost of rebuilding outweighed the benefits. Essentially, the policy assessment was incomplete in important ways.



turn requires information on the relative priorities accorded to different NEOs by decisionmakers and those they represent. No distinction is made in the Treaty of Lisbon between different NEOs – implicitly all are equally important. In practice, of course, implementation of EU external policy reflects such prioritization, but it is usually situational, giving rise to legitimate criticism that EU pursuit of its values through its trade policy is rather arbitrary (Pelkmans, 2021). While this is inevitable to some extent, and governments must (be able to) respond to changed circumstances, greater ex ante clarity on the rank ordering of EOs and NEOs would help.

This was recognized in the recent review of the approach taken by the EU on trade and sustainable development. The European Commission (2022a) notes that, looking forward, implementation of trade and sustainable development chapters and provisions in trade agreements will focus on a smaller set of NEOs that are agreed to be priorities. This is a step forward, but such prioritization is not evident in other EU policies that centre on NEOs, such as the draft directive requiring firms to exercise due diligence over their international supply chains to ensure these conform with a long list of international treaties and conventions signed by the EU (European Commission, 2022b). Implicitly, all NEOs included in the Annex to the draft directive are considered equal. This also applies in the EU's ex ante trade Sustainability Impact Assessments (SIAs) and associated consultation processes that are used to inform decisionmakers (and negotiators) on the potential impacts of prospective trade agreements or other trade initiatives on NEOs. The methodology for SIAs and consultations simply lists NEOs. SIAs are limited to an effort to assess if trade liberalization will impact on a given NEO (see Rojas-Romagosa, 2020). Consultations include surveys that ask respondents whether they believe a trade agreement will affect a long list of NEOs, with each NEO considered independently on a stand-alone basis (Hoekman and Rojas-Romagosa, 2022).

Better integrating NEOs into the objective function in policy assessments would both recognize the need and provide a basis for consideration of trade-offs across and within EOs and NEOs. If accompanied by mechanisms that are designed to generate information about the relative priorities that different stakeholders accord to NEOs and about the prevailing constraints, this would assist analysts to determine appropriate weights (reflecting preferences over NEOs) in SIAs and policy assessment more generally. Such mechanisms should include a focus on generating information on the costs associated with improving the prospects for achieving NEOs in different contexts (low vs. middle income country partners; authoritarian states vs. democracies; small vs. large traders). Instruments that can be used to generate information on priorities accorded to different NEOs, potential instruments to pursue them and their relative costs include deliberative polling (Hoekman and Rojas-Romagosa, 2022), value chain platforms in partner countries (Findlay and Hoekman, 2020), and targeted surveys (Yildirim et al., 2021). Doing so would allow the standard CGE models used in SIAs to better inform policymakers and civil society on how trade policy may impact on NEOs and assist in the prioritization of which NEOs to target in a specific context and period. It would also help address the related challenge of messaging that surrounds the assessment of potential policy impact, a point stressed by Finger (1981). In the case of climate policy, Köberle et al. (2021) argue for changes in the framing of policy experiments and in the communication of the costs of policy inaction.<sup>20</sup> This will be important in the upcoming challenges to trade policy by the move to carbon border taxes (specifically CO<sub>2</sub>) on traded goods, and the analysis and framing of such analysis in the policy debate and likely trade litigation.

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<sup>20</sup>See e.g., Copland (2020) on the framing of public messaging on environmental policy to attack economic policy targeting NEOs (specifically carbon pricing policies).

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