Saving face and facing climate change: Are border adjustments a viable option to stop carbon leakage?

Eva Palacková

Abstract
This article argues that imposing a carbon tariff on imports from the EU’s trading partners could deliver tangible climate results but would also provoke strong trade repercussions. Ideally, the implementation of the Paris Agreement remains the best solution for the planet. But ambitious domestic climate policy in the absence of an international commitment to reduce carbon emissions puts the EU at a competitive disadvantage. While continuing its leadership on climate action, the EU has addressed the threat of displacing its production and its emissions elsewhere by subsidising European industry with carbon credits, an approach which has had unconvincing results. Carbon border adjustments could be a controversial but better option.

Keywords
Carbon border adjustments, Climate change, Carbon leakage, EU ETS, WTO, Trade, Competitiveness

Introduction
Calls to tax products imported to the EU according to their carbon-intensity, that is, how much CO₂ was emitted in the process of their production (and transportation), have been floating around since the establishment of the EU’s carbon trading system, which obliges EU producers to buy and sell emissions permits to cover the amount of carbon they emit. As part of EU policy to safeguard industry’s international competitiveness, energy-intensive sectors exposed to global trade receive a portion of their permits at no cost to avoid them moving their production (and thus their emissions) abroad in a process known as ‘carbon leakage’.

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The debate on the fairness and effectiveness of the current system vis-à-vis cheaper imports has now been reinvigorated by Commission President-elect Ursula von der Leyen (2019), who has announced that she will introduce a Carbon Border Tax. In the past, similar ideas have been proposed but have never been approved by the decision-makers on either the EU or the national level—with legislators disputing their emissions abatement benefits, denouncing their protectionist nature, fearing the geopolitical consequences or questioning the mere legal feasibility of the measures in view of WTO rules. Will the proposal be passed this time around?

This article will examine the above-mentioned points of friction and identify the way forward. First, it will elaborate on the intricacies of carbon leakage; then it will evaluate the feasibility of establishing a carbon border tax and analyse the possible trade repercussions; finally, it will suggest the most optimal solution.

Out of sight, out of mind

‘Carbon leakage’ is a technocratic term for an obvious problem. By pricing CO$_2$, the EU cap-and-trade system inadvertently makes European carbon-intensive products more expensive and therefore disadvantaged on the global market. This can lead to European companies curbing production or shifting their investments (and thus their emissions) abroad. Whole industries could theoretically be outsourced, and the EU would end up re-importing the emissions it is striving to reduce. This would damage both the environment and the European economy. Carbon leakage has further complexities (Will 2019): producers from non-EU countries with less stringent climate regulations not only have a competitive advantage on the global market but also benefit from the climate action of the first-movers (free-riding). Moreover, as the EU moves away from fossil fuels, more of these resources become available to other countries.

The EU Emissions Trading System (EU ETS) is the cornerstone of the EU’s climate policy and aims to reduce industry emissions in the most cost-effective way, in line with the EU’s commitment to the Paris Agreement to cut its greenhouse gas emissions by 40% by 2030. The EU ETS has been in place since 2005, operating in three phases, with the fourth one due to cover 2021 to 2030. Each phase has brought with it a set of reforms to improve the functioning of the system, including the way in which it handles the complex realities of carbon leakage. A list of exposed sectors—the ‘carbon leakage list’—was introduced in 2013, and these industries were provided with a free allocation of emissions allowances in order to safeguard their international competitiveness and prevent carbon leakage. The free allocations will gradually decrease after 2026 to reach zero by 2030.

Competing or complimentary proposals for a carbon inclusion mechanism (Simon 2017) or a carbon border adjustment—both essentially intending to factor the CO$_2$ price into imported products in addition to, or instead of, giving away carbon credits to vulnerable EU industries—have been suggested since the first discussions on carbon leakage and as recently as during the latest ETS reform in 2018. Any debate on an EU-wide tax
is always controversial as national governments have sole competency over fiscal policy. For this and other reasons, the proposals for a carbon border tax have never been approved by decision-makers on the EU or the national level (Van Asselt et al. 2019). Yet many stakeholders, ranging from non-governmental organisations to businesses, are warming up to the idea (BusinessEurope 2019). Also, political parties across the spectrum seem to be on board in France, for example, which has historically been a strong advocate for the policy, with President Emmanuel Macron calling for carbon border tariffs as an incentive for the implementation of the Paris Agreement (Simon 2012; 2018). Is there, then, the necessary overall momentum?

The case for carbon border adjustment

Subsidising the endangered industries with free carbon credits has not always resulted in the right incentives. Unintended consequences have included a weakened carbon price, windfall profits for industries with more credits than needed and reduced revenues for national governments (European Commission 2019). Thus, in terms of its twofold objective of avoiding carbon leakage and preserving competitiveness, the free allocation has succeeded mostly in the latter.

Would a CO₂ tax on imported products fare any better? Multiple comparative studies (Monjon and Quirion 2011; Burniaux et al. 2013) have analysed the different options and have come to interesting conclusions. First of all, border adjustment is more efficient than free allocation in reducing carbon leakage and the public revenues are also higher. However, border adjustments would lead to a productivity decline in energy-intensive EU sectors, due mainly to a decrease in European consumption. By putting a carbon price on imported products, the price signal is diffused throughout the rest of the economy—a key expected result of climate policy. Cost-efficient abatement requires energy-intensive products to be replaced by climate-friendlier goods, for example, in construction wood would replace cement and steel. In contrast, the free allocation prevents much of the above-mentioned substitution by limiting price increases for CO₂-intensive products.

To implement a carbon border adjustment, several attributes need to be considered. Should there be a carbon tax on imports or should imports be included in the EU ETS? At this point it should be noted that the text of the ETS Directive allows the existing carbon leakage measures to be replaced, adapted or complemented by carbon border adjustments and to include the importers of carbon leakage products in the EU ETS (European Commission 2018). Monjon and Quirion (2011) recommend an allowance-based approach, which obliges importers to buy and surrender allowances, as this system would reduce global emissions more and be more compatible with WTO rules. Weber (2015) also supports this approach as it reduces the risk of market distortion. It would ensure that the EU treats foreign goods no less favourably than comparable domestic goods, which is a condition of the General Agreement on Tariffs and Trade (GATT) regime. To comply with the Most Favoured Nation principle, a border adjustment would have to be imposed on all WTO members, so the EU could not exempt, for example, the
least-developed nations or countries engaged in climate action. Such an exemption could, however, be justified by its environmental benefits as required by GATT Article XX (conservation of exhaustible natural resources and health protection), in which case a border adjustment could take into account the carbon reduction efforts of the EU’s trading partners (Ismer and Neuhoff 2007). Moreover, non-compliance with the Most Favoured Nation principle does not seem to be an issue in practice (Kaufmann and Weber 2011). Most legal analyses conclude that border tax adjustments leave substantial uncertainties regarding their compatibility with WTO rules. However, Trachtman (2016) notes that the uncertainty of WTO law may not be a significant deterrent to the implementation of these measures, especially given the long litigation periods and the limited impact of the official countermeasures, which mostly consist of invalidation of the respective measure (Weber 2015).

**Be ready for the response**

Faced with import carbon taxes, the EU’s trading partners might revert to unilateral retaliation rather than awaiting the results of the WTO arbitration court ruling. The export losses would mainly affect China, the US, India and Russia, and could range from $400 million to $1.4 billion in the first year of implementation of the measure (Fouré et al. 2016). This may lead these countries to punish the EU by putting prohibitive duties in place. Fouré et al. (2016), however, also note, based on previous cases, that trade partners would most probably target European agriculture first, as the EU is the world’s biggest food exporter. Whatever the targeted sector, the retaliation is likely to be very strong.

The EU first experienced a coordinated backlash in 2012 when it attempted to include international flights in the EU ETS (Vihma and Van Asselt 2014). Brazil, China, India, Japan, Mexico, Russia, South Africa and the US came together and urged the EU to leave the handling of international aviation emissions to the International Civil Aviation Organization. Their joint statement (Russian Aviation 2012) lists possible retaliation measures including international dispute settlement, legal action prohibiting the signatory countries’ airlines from participating in the EU ETS, restricting their markets for EU carriers and imposing additional levies on them. In addition, China put its order of 55 Airbus planes on hold (Vihma and Van Asselt 2014). Germany and France, the countries in which Airbus manufactures, became wary of the threats, as did the UK, as London is a major international hub (Vihma and Van Asselt 2014). The European Commission swiftly ‘stopped the clock’ on the proposal and tasked the International Civil Aviation Organization with bringing forward a viable solution (Scheelhaase et al. 2018). This is, to an extent, still pending—the international scheme will start in 2021 on a voluntary basis and only become mandatory in 2027, some 15 years after the initial discussions.

The above-mentioned aggressive response indicates how strong the backlash could be if the EU put a carbon levy on imports. At the same time, the EU’s response compromised the Union’s external credibility when it retreated in the face of coordinated pressure. It should not be forgotten that at that time the US was under the leadership of the climate-conscious President Barack Obama and that more forceful measures might be
expected from the current administration. In fact, the world in 2019 is now a very different place, and President Xi Jinping’s China, President Jair Bolsonaro’s Brazil and Prime Minister Narendra Modi’s India would also not remain idle.

It could be argued that the EU is already in the midst a trade war. In 2018, US President Donald Trump imposed tariffs on steel and aluminium, and these tariffs continue to batter the EU’s producers. In May the world’s largest steel producer, Luxembourg-based ArcelorMittal (2019), announced that it would be reducing its annual steel production in Poland, Spain and Italy by three million tonnes. U.S. Steel’s Slovak plant announced in June that it would be cutting its workforce by around a fifth (Reuters 2019). A recent study found that even the tariffs that the US and China have imposed on each other have hit the EU more severely than the two countries themselves (Mao and Görg 2019), incurring more than one billion dollars in indirect tariff burdens. The reason for this is that Chinese exports are often intermediaries that are used in further manufacture, so if the US increases tariffs on Chinese inputs used to make, for example, the Apple iPhone, the product is then exported to the EU at a higher price. Carbon border adjustment could essentially be the EU’s way of retaliating against this war while pursuing its climate ambitions. But should the EU choose to adopt such a policy, it cannot afford to backtrack again.

The best way forward

Notwithstanding the strong case for the implementation of carbon border adjustment, it is only the second-best option to avoid carbon leakage. The best way to achieve it is to have most emitters on board with a global climate policy (Altamirano and Vielle 2011) and to agree on an international carbon price. The EU should continue to concentrate its political weight on the thorough implementation of the Paris Agreement, call on its partners to deliver on their commitments at the next UN climate conference (COP25) taking place in Chile this December and to increase their ambition by 2020.

As the world’s largest trading bloc and largest economy, with a per capita gross domestic product of €25,000 for its five hundred million consumers, the EU should use its leverage to negotiate comprehensive free-trade agreements and reinforce the binding provisions on environmental protection, climate change, biodiversity and forests, including the obligation to implement the Paris Agreement. The EU is the top trading partner for 80 countries, while in comparison the US is the top trading partner for just a little over 20 countries, so the relative scope of the EU’s global economic influence is significant.

As demonstrated above, putting a carbon tax on imports does not boost domestic production. A comprehensive industrial strategy to improve the EU’s competitiveness on the global market is urgently needed. In addition, the EU must promote research and development, create a market for new business models based on a circular economy, support innovative companies with sustainable solutions for the future and seek its competitive advantage in the field of clean technology.
Conclusion

The proposal to address carbon leakage by putting a CO₂ tax on imports from non-EU countries lacking sufficient emissions-reduction measures has long been in the drawer. It has even made its way on to the negotiating table, but it has never been signed by EU decision-makers due to doubts over its effectiveness and fears of trade repercussions. This article shows that a well-designed policy that includes energy-intensive importers in the EU ETS would reduce carbon leakage and strengthen the CO₂ price signal, and could be compatible with WTO rules. The EU should, however, be ready for strong trade retaliation. In this regard the best way forward is to prepare industry for the transition to a low-carbon economy while continuing to lead the way in the global implementation of the Paris Agreement. In the meantime, however, until there is sufficient commitment from the major emitters to decrease their carbon emissions, the EU has enough economic leverage to flex its trade muscle.

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