

What would be the impact of a possible EU Carbon Adjustment Mechanism on Ukraine?

David Saha, Georg Zachmann

Berlin, April 2020

Structure

1. Introduction
2. Current plans for an EU CBAM
3. Possible design of an EU CBAM
4. Carbon intensity of Ukraine's exports to EU
5. Potential impact of an EU CBAM on Ukraine

1. Introduction

Background:

- The EU Commission has announced the possibility of introducing a Carbon Border Adjustment Mechanism (CBAM) as part of its Green Deal
- A CBAM would tax goods imports into the EU according to the CO2 emissions generated by their production
- Purpose of a CBAM: To ensure that EU green measures do not lead to a shifting of CO2-intensive production to third countries
- Such a tax could affect Ukrainian exports to the EU

Purposes of this Policy Briefing:

- Explain the state of discussion around an EU CBAM
- Outline different design scenarios for the CBAM
- Analyse potential impact of the CBAM on Ukraine's exports to EU
- Purely hypothetical analysis for different possible implementations as no concrete CBAM proposal exists to date

2. Current plans for an EU CBAM

- An EU “Carbon Border Adjustment Mechanism” (CBAM) was proposed by Commission President Ursula von der Leyen in her election programme
- Intended to prevent “Carbon leakage”: “The expected relocation of carbon-intensive production from regions with tight emission regulation (i.e. high carbon prices) to regions with looser emission regulation (e.g. lower or no price on carbon)” (Zachmann and McWilliam 2020)
- In “The European Green Deal” communication (Dec. 2019), the Commission announced that it will propose a “carbon border adjustment mechanism, for selected sectors, to reduce carbon leakage”, if differences in the level of ambition persist worldwide.
- Inception Impact Assessment (March 5, 2020) contains 3 options for a CBAM:
 1. A carbon tax on selected products, both on imported and domestic products
 2. A new carbon customs duty or tax on imports
 3. The extension of the EU ETS to imports.
- Commission plans to submit a respective legal proposal by 2021.
- **An EU CBAM may be implemented eventually, but no concrete proposal exists nor is there a timeline for a definite implementation**

3. Possible design of an EU CBAM

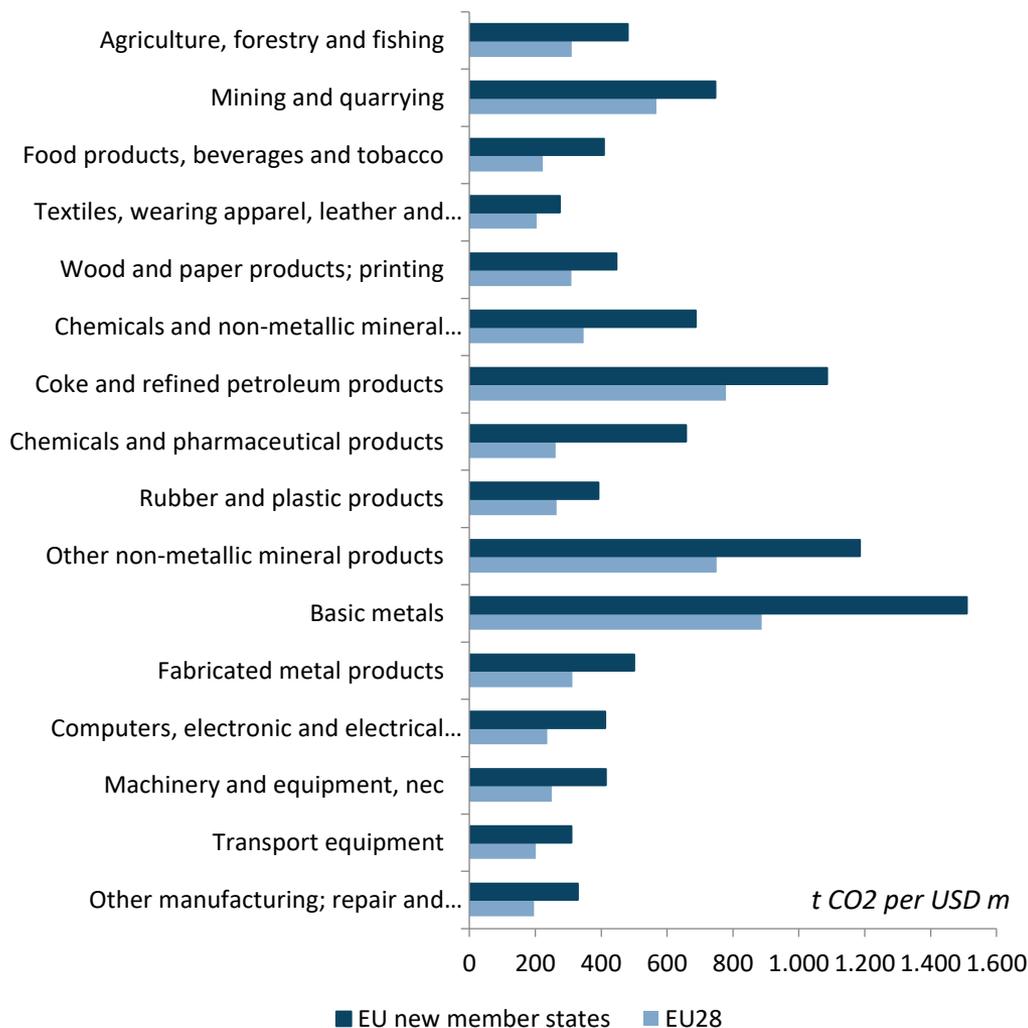
Main question: Scope of CBAM

| Scope | Description | Considerations for implementation |
|------------------------|---|---|
| Comprehensive coverage | All goods import to EU subject to CBAM | <ul style="list-style-type: none">• Difficult implementation, high transaction costs• But prevents leakage through value chain |
| Partial coverage | Only imports of selected (carbon-intensive) sectors subject to CBAM | <ul style="list-style-type: none">• Currently favoured by EC• Easier implementation• Avoidance possible: E.g. nails (no CBAM) instead of steel (CBAM) |

- A partial model would reduce complexity and transaction costs of a CBAM, but risk leakage through a move of emissions imports down the value chain
- The EC communication stated that they will prepare a proposal for a „carbon border adjustment mechanism, for selected sectors”
- Not impossible that a comprehensive model is favoured in the end

Rationale for partial or comprehensive CBAM

Carbon intensity of exports by industry, EU-28 and new EU member states, 2015



- Carbon intensity highest for lower-value products with energy-intensive production
 - High carbon intensity of metals, mining industry, minerals and coke exports
- As many of these products are extensively traded, often referred to as CITE (Carbon intensive, trade exposed)
 - At first glance, restricting a CBAM to CITE sectors makes sense
 - But: Mostly inputs into downstream sectors. Partial CBAM risks carbon leakage through moving down the value chain

Source: OECD.Stat

Implementation options and aspects



3 options for the basic design of the “tax”

1. Carbon tax, both on imported and domestic products
 2. Carbon tax/duty on imports, domestic products remain on EU ETS
 3. Including importers in EU ETS
- Inclusion in ETS probably easiest and most consistent approach



Ensuring WTO compliance

- Usually requires non-discriminatory treatment of imports
 - Some exception rules exist, but unlikely to be used
 - Also requires no discrimination among partner countries
- Compliance would require either an end of free ETS allowances in CITE industries or an EU-wide carbon tax



2 options for calculation of carbon content of imports

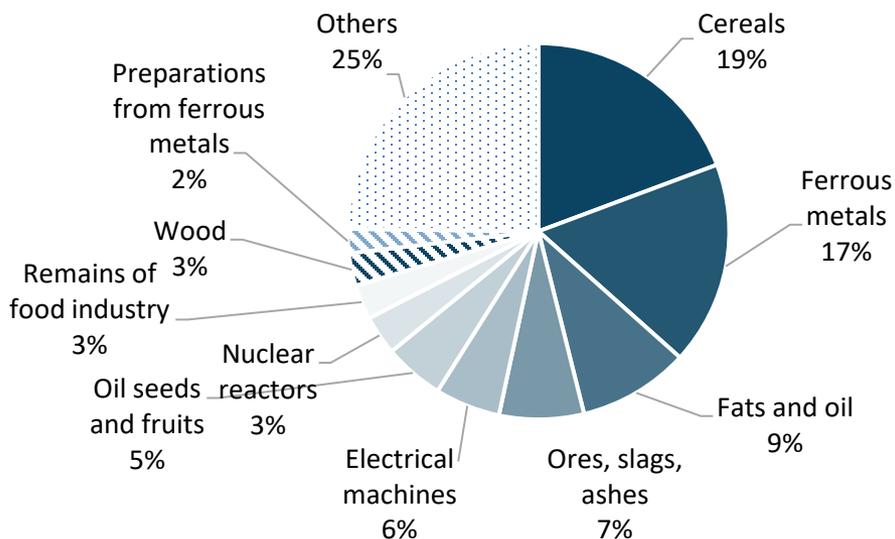
1. Using benchmark values, e.g. those used for free ETS allowances:
Based on emissions of 10% least polluting EU installations
=> Unrealistically low values, regardless of prod. technology
2. Calculation of actual emissions: Complex work for exporting companies, effectively a technical barrier to trade (TBT)

- **Inclusion of imports in EU ETS & (gradual) phasing-out of free allowances most plausible**
- **Calculation method remains uncertain**

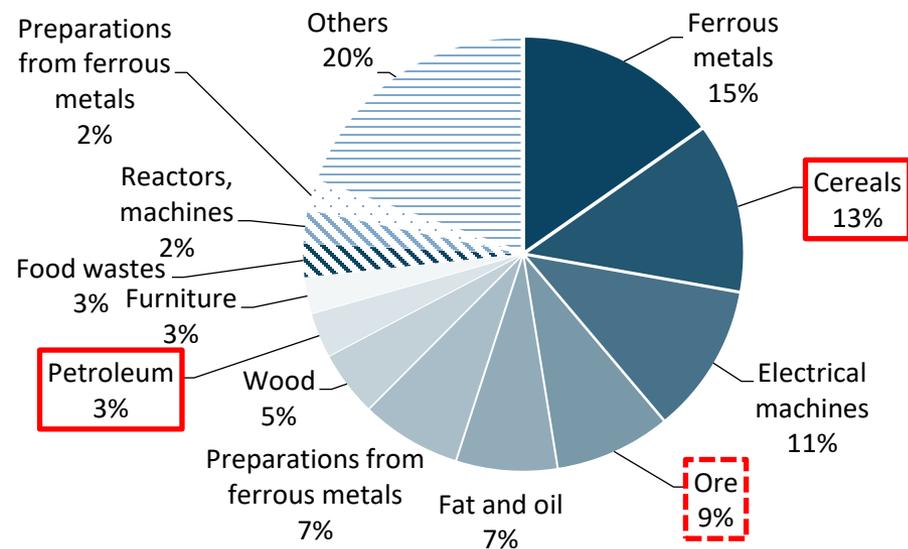
4. Carbon intensity of Ukraine's exports to EU

Ukraine's exports by product group, 2019

Total exports: USD 50 bn



Exports to EU: USD 21 bn

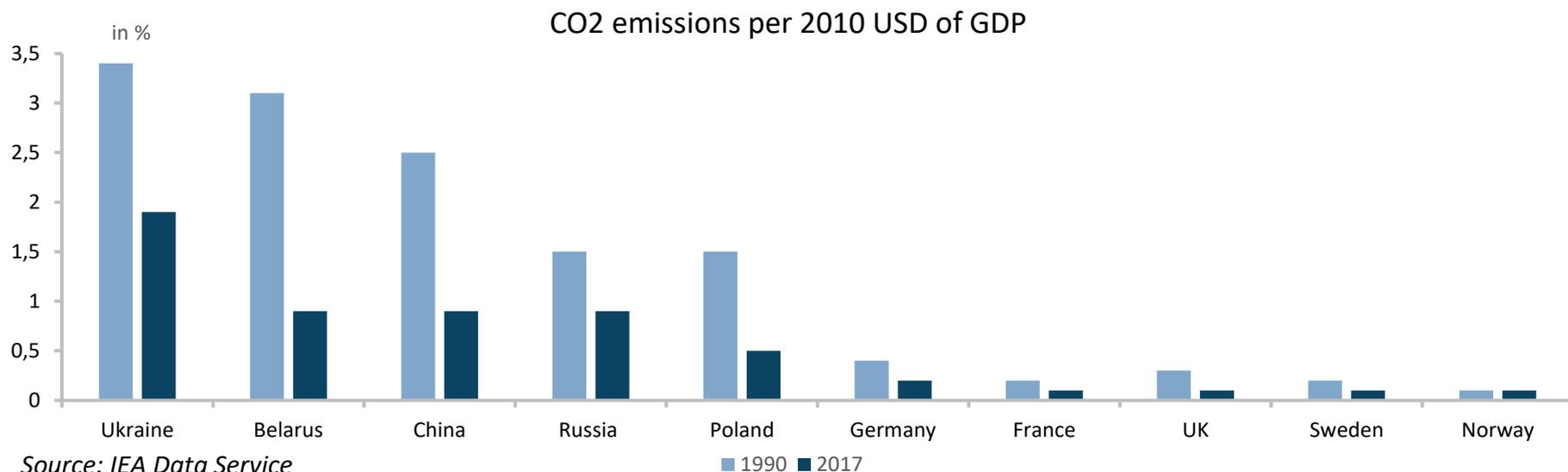


Source: Ukrstat, 2019

- Only exports to EU (42% of total goods exports) would be exposed to CBAM
- Most exposed products: Metals exports, USD 3.1 bn in 2019
- Also: Petroleum products (USD 0.7 bn), possibly: Ores (USD 1.7 bn)
- Other large exports not very emission intensive
- **16% - 27% of exports to EU are emissions intensive**

Emission intensity of the Ukrainian economy

Carbon intensity of selected countries, 1990 and 2017



- Despite decrease 1990-2017, Ukraine remains extremely carbon intensive due to heavy reliance on fossil fuels, low energy efficiency and sector structure
- Much of carbon intensity due to electricity and heat sector
- UA steel production also more emissions-intensive than in other countries
- High reliance of steel production on coal/coke (70% oxygen furnace vs 68% electric arc with relatively clean fuel mix in USA, Zachmann and McWilliam 2020)

5. Potential impact of an EU CBAM on Ukraine (1)

Direct impact: Implications of EU policy choices for Ukraine (1/2)



Comprehensive or partial coverage of the CBAM?

- Main impact on UA due to steel/petroleum products exports, which would be targeted in partial coverage CBAM
- Partial coverage would reduce compliance burden (emissions calculation) on less emissions-intensive industries
- Main impact not dependent on comprehensive/partial coverage



Implementation through tax or extension of ETS to imports

- Under ETS, emissions prices vary cyclically (for all producers)
- Tax/customs duty implementation: No specific impact on UA exports compared to any other duty/tax



WTO compliance

- Would probably imply that EU producers also pay for CO₂ emissions (phase-out of free ETS allowances or EU carbon tax)
- No discrimination possible among different exporters to EU
- Controlled for the level of emissions, UA exports are not made worse off on EU market vs. EU/third country producers

Potential impact of an EU CBAM on Ukraine (2)

Direct impact: Implications of EU policy choices for Ukraine (2/2)



Calculation of carbon content of imports

- Using ETS benchmark values for emissions: Ukrainian producers would even pay less than EU producers as benchmark calculated on 10% most efficient EU industries
 - As price for affected goods in EU rises: Reduced demand for these goods, but UA producers do not lose competitiveness
 - Using actual CO₂ intensity: Ukrainian exports subject to higher CBAM than producers from countries with cleaner technologies
 - UA producers lose competitiveness vs. “cleaner” producers plus demand effect due to increased price in EU
 - Calculation of carbon content may be a hurdle for smaller companies
 - Likely “intermediate” scenario: Adapted benchmark (e.g. EU average emissions) with the option for companies to prove they are less emissions-intensive than the benchmark
- Important difference

Potential impact of an EU CBAM on Ukraine (3)

Indirect impact

- CBAM could lead to re-routing of exports and split e.g. the steel market in two markets for “green steel” and “dirty steel”. Non EU “green steel” producers might export own produce and import “dirty steel” for their own needs
- Phasing out free ETS allowances in the EU may benefit UA as these function as an implicit subsidy when allowances were allocated too generously
- Partial coverage CBAM could be an incentive for investing in downstream technologies in UA to evade CBAM
- CBAM could stoke global protectionist tendencies

Further considerations

- If CBAM is waived for imports from countries with an “adequate” carbon pricing, UA might consider introducing a carbon tax to ensure revenues stay in UA
- Should follow and participate in EU discussion on whether CBAM proceeds should be fed back to the respective countries of origin
- Political considerations may contribute to regulatory exceptions of some countries from CBAM on basis of (alleged) use of cleaner technologies etc

References

- G. Zachmann, B. McWilliam (2020): „A European carbon border tax: much pain, little gain“, bruegel, Policy Contribution, Issue no.5.
- F. Guarascio, J. Ekblom (2019): “Explainer: What an EU carbon border tax might look like and who would be hit”, Reuters, <https://www.reuters.com/article/us-climate-change-eu-carbontax-explainer/explainer-what-an-eu-carbon-border-tax-might-look-like-and-who-would-be-hit-idUSKBN1YE1C4>
- M. Mehling, H. van Asselt, K. Das, S. Droege (2019): “What a European ‘carbon border tax’ might look like”, voxeu.org, <https://voxeu.org/article/what-european-carbon-border-tax-might-look>
- D. Gros, C. Egenhofer, N. Fujiwara, A. Georgiev, S. Guerin (2010): “Climate Change and Trade: Taxing carbon at the border”, CEPS research paper, <https://www.ceps.eu/ceps-publications/climate-change-and-trade-taxing-carbon-border/>
- EU Commission (2019): “A European Green Deal, Striving to be the first climate-neutral continent”, <https://ec.europa.eu/info/node/123797>.

About the German Economic Team



The German Economic Team (GET) advises the governments of Ukraine, Belarus, Moldova, Georgia and Uzbekistan regarding the design of economic policy reform processes and a sustainable development of the economic framework. As part of the project we also work in other countries on selected topics.

In a continuous dialogue with high-level decision makers of the project countries, we identify current problems in economic policy and then provide concrete policy recommendations based on independent analysis.

In addition, GET supports German institutions in the political, administrative and business sectors with its know-how and detailed knowledge of the region's economies.

The German Economic Team is financed by the Federal Ministry of Economics and Energy (BMWi). The consulting firm Berlin Economics has been commissioned with the implementation of the project.

CONTACT

Garry Poluschkin, Project Manager Ukraine
chervyakov@berlin-economics.com

German Economic Team
c/o BE Berlin Economics GmbH
Schillerstraße 59
10627 Berlin

Tel: +49 30 / 20 61 34 64 0
info@german-economic-team.com
www.german-economic-team.com
Twitter: @BerlinEconomics
Facebook: @BE.Berlin.Economics

Implemented by

