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Changes in the capital account of the balance of payments regarding transactions in CO_2 emission allowances[1]

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[1] This contribution was prepared for the conference. The views expressed are those of the authors and do not necessarily reflect the views of the European Central Bank, the Bank of Spain, the BIS, the IFC or the other central banks and institutions represented at the event.

Changes in the capital account of the balance of payments regarding transactions in CO_2 emission allowances

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Abstract

The EU-ETS (European Union Emission Trading System) is a key EU instrument used to limit the amount of greenhouse gases released into the atmosphere. Trading CO_2 emission allowances has gained importance over the last few years due to the strong increase in the price of carbon allowances. On September 30, 2023, the Department of Statistics of the National Bank of Poland revised the data of the Polish balance of payments for the years 2013-2022 in the field of trade in CO_2 emission allowances classified in the capital account. Trading in allowances is cross-border, and the platform where auctions are held is the EEX (European Energy Exchange) in Leipzig. The article shows new data sources for the balance of payments, the method of recording emissions trade, and the impact on the size of data revisions. In addition, attention was paid to derivatives related to CO_2 emissions, which have also increased significantly recently. The article touches on classification issues, contributing to the current discussion on the shape of BPM7, and also addresses other challenges related to trading in CO_2 emission allowances.

Keywords: permits for emission, allowances, balance of payments, capital account

JEL classification: C82 (Methodology for Collecting, Estimating, and Organizing Macroeconomic Data; Data Access); F29 (International Factor Movements and International Business; Other)

Contents

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1. Introduction

The increase in greenhouse gases emissions, particularly CO_2, poses a serious problem recognized by the international community. To mitigate global warming, the Kyoto Protocol to the United Nations Framework Convention on Climate Change was adopted in 1997. Under this protocol, individual countries committed to reducing CO_2 emissions. In the European Union, this commitment was implemented through the Climate and Energy Package, which aims to reduce greenhouse gas emissions, increase the share of renewable energy, and enhance energy efficiency. One of the tools to achieve these goals is the European Union Emissions Trading System (EU ETS), established in 2005. The assumptions of the system were outlined in Directive No. 2003/87/EC, which established a system for trading greenhouse gas emission allowances in the Community and amended Council Directive 96/61//EC11.

2. European Union Emission Trading System

The EU ETS is the largest emission trading system (ETS) globally, with approximately 90% of the value of allowances traded within the system compared to all other global ETS. It is the world's first international emissions trading system which include all EU countries as well as Norway, Liechtenstein and Island. The European Union Emission Trading System is based on the assumption that the environment, particularly the air, should be treated as a common good. Therefore, similar to any common good, there is a risk of its excessive use and negative externalities. The primary goal of the ETS is to reduce CO_2 emissions by internalizing their costs. To achieve this, the ETS system sets an upper limit for CO_2 emissions for the entire European economy (the cap). Entrepreneurs covered by the ETS receive some allowances for free, while the rest must be purchased at auction or on the secondary market. Proceeds from auctions contribute to the budget revenues of the Member States, with at least half of these funds allocated to activities aimed at reducing greenhouse gas emissions.

The system is designed to incentivize enterprises to reduce CO_2 emissions, with the first reductions coming from installations where it is least expensive to do so. Companies that reduce their emissions can either keep the saved allowances to cover their future needs or sell them on the market. Consequently, companies for which reducing CO_2 emissions is relatively simple and low-cost opt for the former strategy, while those for whom modernization is unprofitable or impossible must buy allowances at auctions or on the secondary market

The European Union Allowance (EUA) represents the amount equivalent to 1 tonne of CO_2 emitted during a technological process. This allowance serves as a virtual unit for accounting carbon dioxide emissions from stationary installations or aircraft operators. The operator of a stationary installation is required to have an operator holding account in the Union Registry, while the aircraft operator must have an aircraft operator holding account in the Union Registry. Entities obligated to surrender allowances for CO_2 emissions include cement plants, heating plants, coking plants, iron and steel works, chemical plants, pulp and paper industries, power plants generating energy from fossil fuels with a capacity of at least 20 MW,

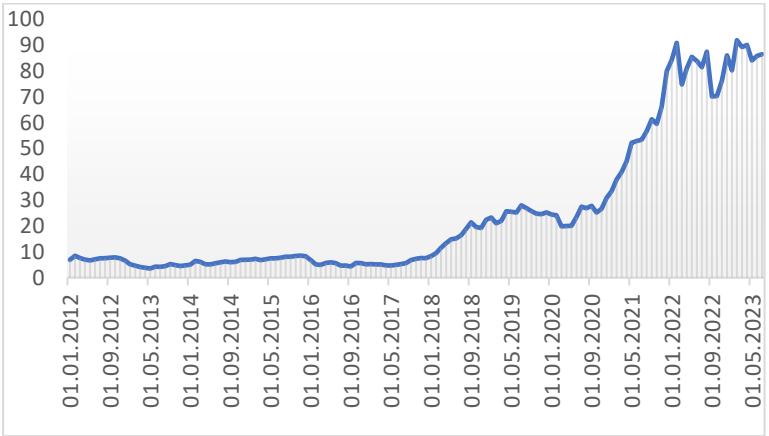
The final allocation of free allowances depends on various factors, with current practices primarily considering efficiency standards for certain installations or industries. Installations in the EU demonstrating the highest efficiency in CO_2 emissions are identified using benchmarks. Less efficient installations, despite requiring more permits, receive a free allocation limited to the benchmark set for them.

Sectors or products at risk of carbon leakage are provided with a 100% free allocation, based on benchmarking criteria. Conversely, electricity producers, capable of passing on emissions trading costs to consumers, are ineligible for free allocations.

Each year, companies are required to surrender enough permits to cover their total emissions for the previous year; failure to do so results in penalties. When a company reduces its emissions, it can retain additional allowances for future use or sell them to another entity in need. The remaining 55% of emissions originate from sectors not covered by the ETS system, known as non-ETS sectors (see the Effort Sharing Regulation). These sectors include households, waste, agriculture and transport (excluding air transport), which are challenging to control due to the high fragmentation of issuers.

Trading in CO_2 emission allowances has gained significant importance in recent years due to the strong increase in the price of carbon dioxide emission allowances. Until the end of 2017, the price for European Union Allowances was below 15 euros. In 2018, the price increased to around 25 euros, remaining at a similar level through the third quarter of 2020. Since then, there has been a rapid increase, resulting in the price exceeding three times its value in 2023, reaching around 80 euros per EUA. This increase was caused by several factors, including fundamental aspects such as the decreasing cap for EUAs each year. Speculation may have played a role, especially given the increase in uncertainty following the Covid-19 pandemic.

Figure 1. Price for 1 EUA on the secondary market in 2012-2023 (in euro).



Source: EEX

The introduction and development of the ETS system in the European Union occurred over four phases. Phase I (2005-2007), known as the pilot phase, focused on establishing infrastructure for monitoring emissions and trading allowances. However, oversupply led to a drastic drop in prices from EUR 20-30 in 2005 and 2006 to almost zero by 2007.

Phase II (2008-2012) adjusted allowances based on actual emissions data from Phase I. Despite efforts to address oversupply, prices remained low, around EUR 5, due to reduced emissions during the economic crisis.

Phase III (2013-2020) marked a significant departure, with a uniform EU-wide emission ceiling and reduced free allocations. While 52% of permits were issued free of charge, the remainder was purchased through auctions or the secondary market. Despite emissions reduction goals, prices remained relatively low until 2018, reaching approximately EUR 20. Due to the Covid-19 pandemic and the recession it caused, allowance prices did not increase significantly until the end of Phase III.

Phase IV (2021-2030) strengthens the ETS by further limiting allowances and reducing free allocations. The starting emission ceiling for 2021 was set at 1,572 million tonnes, with prices stabilizing around EUR 80-90/t by 2023.

Certificate management in the EU ETS

Operators of installations participating in the EU-ETS are required to have an account in the EU Registry for their installation in the European Emissions Trading System (EU-ETS), managed by the EU and intermediaries appointed by the operator. This facilitates monitoring the allocation of free allowances from the EU, surrendering of allowances, and transfer of incoming and outgoing allowances (purchase/sale) on the registry account.

The Union Registry aims to ensure accurate accounting of all allowances issued under the EU-ETS, enabling tracking of changes in owners of permits stored in electronic accounts, similar to how a bank records its clients and their account balances.

Regulated entities within the EU-ETS must surrender one EUA unit for each 1 tonne of CO_2 emitted in the following year. Surrender typically occurs by April 30 each year, though as of 2024, surrender will take place by September 30.

If fewer EUAs are submitted for surrender in a given year than CO_2 was emitted in the previous year, this will result in penalties. Each EUA certificate not presented for surrender by the end of April may incur a penalty, typically EUR 100 per certificate or per tonne of CO_2 emitted. However, enterprises are still obligated to submit the missing allowances for surrender despite the penalty. Allowances that can be voluntarily removed from the Registry account are not counted toward the refundable quantity.

In Poland, the National Centre for Emission Balancing and Management (Krajowy Ośrodek Bilansowania i Zarządzania Emisjami, KOBiZE) maintains a national database collecting data on greenhouse gas emissions and other substances. One of KOBiZE's primary tasks is to administer the European Union Emission Trading System (EU ETS) in Poland, including maintaining the Polish part of the EU emission allowance registry.

All European Union Allowances got ISIN codes, unfortunately these ISIN codes does not get possibility to distinguish which EU government issued that allowance and date of issuance.

Table 1 List of general EU-prefix ISINS for EUA

ISIN	Description
EU000A1RRN98	EU ALLOWANCE UNITS (EUA)
EU000A1RN5R34	EU Aviation Allowance Units (EUAA)
EU000A1PPRA6	EU ALLOWANCE UNITS (EUA) Period 3
EU000A2QMW50	EU ALLOWANCE UNITS (EUA) Period 4
EU000A2QMW68	EU Aviation Allowance Units (EUAA) Period 4

Source: European Commission

After EUA allowances are introduced to trading, they can be traded on the secondary market. Any entity, whether an individual or a company, that has opened an account in the EU Registry can buy and sell EUA, regardless of whether it is itself covered by the EU ETS. In particular, they may also be banks and other financial entities. Trading in the carbon market can take place directly between buyers and sellers or through exchanges and other intermediaries. Although all EUAs share the same properties and are therefore interchangeable, markets trade different EUA-related instruments that differ in terms of delivery time and settlement method. After EUA allowances are introduced to trading, they can be traded on the secondary market.

Trading in emission allowances

Each Member State receives a pool of emission allowances and, in principle, all these allowances should go to the stock exchange and be sold on the primary market. Auctions are organized by the EEX stock exchange, income is transferred to member states.

EEX is the main auction platform for EU countries. For Polish emission of EUA, separate auctions are held on EEX every two weeks (on Wednesdays). Similar but weekly (on Fridays) auctions for Germany government are held. For other the remaining 25 EU countries, auctions are held every Monday, Tuesday and Thursday.
Both London's ICE and Leipzig's EEX offer also derivatives (futures) on emission permits. These instruments are settled only by delivery of the underlying instrument. It can be called hybrid. Until the expiry date of a given series of futures, they are settled like typical futures, i.e. through daily financial settlements after the end of each trading session. However, holders of positions that remain open on the expiry date of the contracts are obliged - depending on the direction of their position (long/short) - to purchase or sell a specific number of emission permits at the price on the expiry date of the contracts. This method of settlement is rare in futures markets, where cash settlements predominate and there is usually no purchase or sale of the underlying instruments at the end of the contract.

In practice, the price on the expiry date of the contracts is very close to the price of emission permits on the spot market on a given day. This is possible, as with any type of futures, due to the possibility of arbitrage between the futures market and the cash market of the underlying instrument. The advantage of futures contracts,

apart from the ability to hedge against EUA price changes, is also, unlike auctions, a guarantee of purchasing or selling a predetermined number of allowances. The execution of transactions is guaranteed by clearing houses associated with stock exchanges, while in the case of auctions there is a risk of order reduction.
The following futures series are available at any time:

- annual, settled in December; nine (EEX) or seven (ICE) series settled in the current year and the coming years,
- quarterly, settled in March, June and September; eleven (EEX) or nine (ICE) series settled in the current and upcoming quarters, except for quarters ending years,
- monthly, settled at the end of each month, except for the months ending quarters; three series settled in the current and next months,
- daily, with a lifetime equal to one trading session.

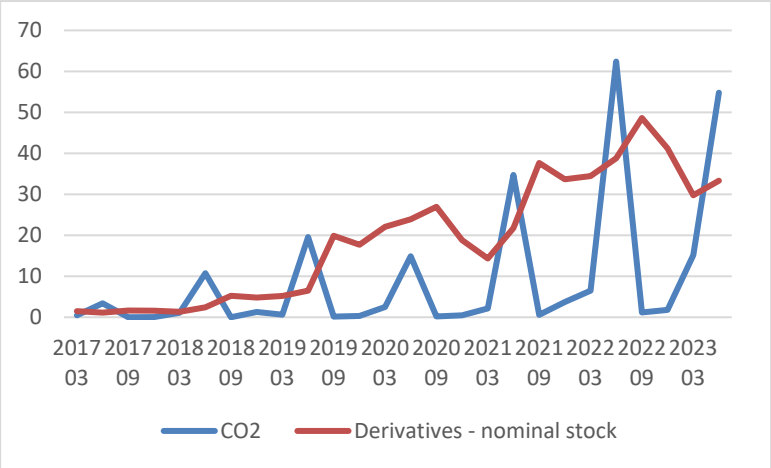
The most frequently traded futures contract on the CO_2 market is the December contract.

In addition to futures contracts, futures options are traded on the stock exchanges in London and Leipzig. They are settled on the expiry date by delivery of the underlying instrument - in this case, an appropriate number of futures for emission permits (of course, if the option holder decides to exercise them). Before the expiration date, options are settled similarly to futures, i.e. through daily financial settlements after the end of each trading session.

Derivatives for EUA

As it has been mentioned before, on certain markets there are possibilities to issue and trade with the use of financial derivatives CO_2 permits, either on regulated markets or OTC. Large international financial intermediaries are present on that market. Our experience shows that Polish enterprises quite often use derivatives for buying and selling CO_2 permits. Nominal value of derivatives is comparable with the value of CO_2 permits to be surrender in the near future. The value also shows seasonality – there is a decline of nominal value of derivatives before the period when permits will be surrender.
It has to be underlined moreover, that our analysis on CO_2 derivatives is limited due to some constrains of data sources used by the NBP to compile bop statistics. In the survey there is no possibility to distinguish between CO_2 permits and other type of commodities derivatives. We have decided to filter only those companies, that we think are involved in buying and selling CO_2 permits, however nominal value of derivatives should be treated as a proxy.

Figure 3. Derivatives vs surrendering of EUA in PLN billions



Source: NBP, KOBiZE

3. Classification of allowances for emission in BPM6

According to Balance of Payments par.13.14: *Emissions permits can be classified in the balance of payments in different ways, including the following:*

- *If a nonresident enterprise purchases an emission permit from a resident government, the payment is classified as a cross-border tax on production in most circumstances.[…]*
- *If the permit is tradable (*as European Union Allowances for emissions*), then it is an economic asset. A resale of this asset by resident to a nonresident enterprise is recorded under contracts, leases, and licenses in the capital account*[2].

During the process of classification of cross border trade of EUA it should be taken into account that allowance allow to emit one tonne of CO_2 equivalent during one year. The EUA are fully register in EU Registry and are transferable. Another crucial issue that should be taken into account is that EUA are tradable. There is primary and secondary market. EEX supports primary market, during the auctions companies could buy EUA. The secondary market is also supported by stock exchanges, but also OTC transactions are important.

The next issue it is that permits does not have a corresponding liability. According to BPM6 par. 5.8 nonfinancial assets do not have a corresponding liability. For example, emission permits and commodities may be traded on organized markets similar to those of traded financial assets, but do not have a corresponding liability.

Summing up based on BPM6 EUA should be classified as nonproduced nonfinancial assets.

[2] IMF (2009), "Balance of Payments and International Investment Position Manual – 6th edition"

4. Revision of the Polish balance of payments data due to CO_2 emission allowances

Before the revision, data on trading in CO_2 emission allowances was not fully included in the Polish Balance of Payments (BoP). Specifically, the BoP lacked information on revenues from the primary market for trading CO_2 emission allowances, which is facilitated by the EEX in Leipzig.

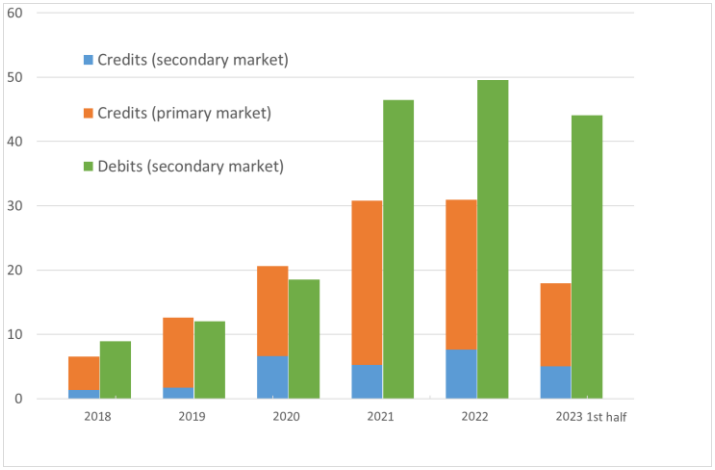
Previously data for trade on a on CO_2 emission allowances came from quarterly reports on the international trade of services DNU-K (component 481 - acquisition/disposal of non-produced and non-financial assets). These data concern revenues and expenses from trading in allowances. The DNU-K reports do not clearly indicate what part of nonproduced and nonfinancial assets relates to the purchase/sale of CO_2 emission allowances. Additionally, the form reports entities that meet certain reporting thresholds regarding revenues from providing services abroad or expenses from purchasing services abroad. The threshold caused that there was the coverage for that transactions could be questionable.

The way of recognizing EUA trade according to the new method

Data on allowances coming to the Polish part of the registry and leaving the Polish registry were obtained from KOBIZE. The requests were divided into: geographical structure (country of registry), number of units and period. According to the new method of recognizing transactions related to trading in CO_2 emission allowances, it is assumed that each transfer of allowances from the Polish registry to a foreign one or from a foreign registry to the Polish one is a sale or purchase of permits. Revenues include revenues from the primary market (revenues from Polish auctions on the EEX) and the secondary market (the number of allowances flowing from the Polish registry to foreign registries multiplied by the spot price from the secondary market). It was assumed that all Polish allowances are sold on the Leipzig stock exchange only to foreign entities. Outflows are the number of allowances transferred from foreign parts of the registry to the Polish registry, multiplied by the price of allowances from the secondary market. The price used to calculate revenues and expenses from the secondary market applies to trading on the secondary market on the European Energy Exchange and is a spot price.

According to the new method, starting from 2021 Poland is net importer of EUA. In 2022, Polish companies bought EUA for almost 50 billions of zlotys. At the same year Polish government sold EUA on primary market for 22 billions of PLN and on secondary market Polish companies sold EUA for around 8 billons of PLN.

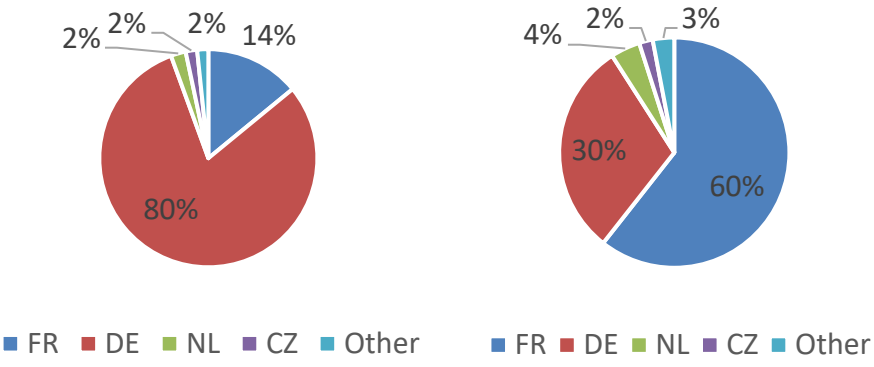
Figure 4. Trade of EU allowances in BoP in PLN billions



Source: NBP

Based on new method it could be noticed that most of Polish income form selling EU allowances from abroad come from Germany, in 2022 it was around 80%. Most of that income come from primary income, only part is from secondary market (when Polish companies sell EUA to German companies). In debits almost 60% of EUA are bought from French companies, Germany took second position with 30% of debits.

Figure 5. Geographical structure for credits (on left) and debits in EUA trade in 2022



Source: NBP

Changing the data source results in an adjustment to the capital account balance, but does not affect the current account balance. The scale of revision of revenues and expenditures in the capital account from 2013 to 2018 is the same and has an insignificant impact on the balance. Since 2019, revenues have been revised more strongly than expenses, which results in an increase in the balance. The increase in the balance in 2022, as a result of the change in methodology, amounted to PLN 5.9 billion, which results from a large adjustment in revenues from trading in CO_2 emission allowances (an increase of PLN 27 billion) and a large adjustment in expenses (an increase of PLN 21 billion). In 2022, the capital account balance amounted to PLN 15.2 billion.

5. Lessons learned

There is a market for EU allowances with buyers and sellers and a market price. In the European case the allowances are indistinguishable between countries and date of issuance. There is a derivatives market for CO_2 allowances. Both markets are important from macroeconomic perspective, and required attention from macroeconomic statisticians. Moreover it is expected that both markets will grow in the foreseeable future. The cross border activity is crucial for EUA and derivatives for them. It cannot be limited only to resident – resident transactions. As the unification of statistics is one of the objectives for updating the manuals, the common treatment of CO_2 allowances is necessary.

In our view the treatment of Emission Trading Scheme should be easy to adopt and consistent with accounting framework of enterprises.

The method of reporting the allowances should easily give the use an information on: what is the cost for the economy to buy the essential permits for production, as well as what is the revenue for the government resulted from sell the allowances. It is important to note that the cost for nonfinancial enterprises is different from the revenue for government due to the following factors: (i) some of permits are granted free of charge; (ii) there are price changes during the life of CO_2 allowances and financial intermediaries are involved in this trade, (iii) there is a net imports of allowances.

6. Practical recommendation about future classification of permits for emissions

a) From balance of payments point of view the simplest solution is to do not implement any change to BPM6 recommendations. EU Registry for allowances support information to regular and on time produce statistical data with proper quality. Based registers from each EU country we could get information about inflow and outflow of EUA and knowing country of registers we could produce geographical breakdown.

   In such concept the moment of surrender could be classified as resident - resident transaction and it will not be included in bop. Unfortunately that simplification requires that income of governments from auctions will, with no delay, influence on budget deficit.

b) Thinking about transactions about permits for emissions we should take into account the moment of transactions when they are sold on primary market and when they are surrendered.

   That moment of surrendering of allowances is crucial from National Account perspective. It reflects moment of paying of taxes due to production.

So thinking about allowances we should take into account that double nature of that issue:

- The moment of issuance of allowances on primary market and tradable on secondary market (either on stock exchange or OTC).
- And the moment when allowances are surrendered.

In that context second best solution for balance of payments compilers in EU will be:

- recognize allowance as nonproduce nonfinancial assets (only for secondary market)
- recognize government income from issuing allowances on primary market – as pre payment of taxes – liability of government foreign companies (usually that assumption is truth because primary market is highly concentrated with dominance of financial intermediaries)
- in the moment of surrendering we will have to make recalculations via other changes – it will not influence bop, but International Investment Position only. From foreign government liabilities we will deduct value of surrendered allowances (for simplification on issuance value, some additional revaluation in NA for companies will be needed). The taxes will be recognizes as resident vs resident transaction.

c) If allowances during its tradable period of life would be recognized as financial instrument another problems would be met. As we present in our article allowance do not have corresponding liability, so they should not be recognized as financial instrument according to BPM6. But bookkeeping perspective the picture is much more complicated. Some companies classified allowances as intangible assets, some as financial instruments (In accordance with the EU MIFIR regulation, CO_2 emission allowances are treated as financial instruments.). Based on analysis of few balances of Polish enterprises we find that companies have intention to surrender allowances classified them as intangible assets, financial intermediaries (companies which do not have intention to surrender allowances) classified them as financial instruments. But that analysis was done on only few companies and it could not be treated as representative, rather as suggestion.
If allowances will be recognized as financial instrument BoP and NA compilers will face a lot of new difficulties. Government issuing financial instrument on foreign market will know that stock exchange second site of transaction. But government will not have information that transactions of his instrument on secondary market. On the other hand enterprises which bought EUA will not have knowledge which EU government issued that instrument, we will have no possibility to make proper geography breakdown or even we will have not information whether e.g. Polish company bought financial instrument issued by Polish government. From practical reasons it will be impossible to record these transactions. That conception will be only feasible if another simplification will be made that not EU governments, but EU Commission is issuing allowances.

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NARODOWY BANK POLSKI

Challenges in compiling CO2 emission allowances in the bop statistics in Poland

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Madrid, 13th February 2024

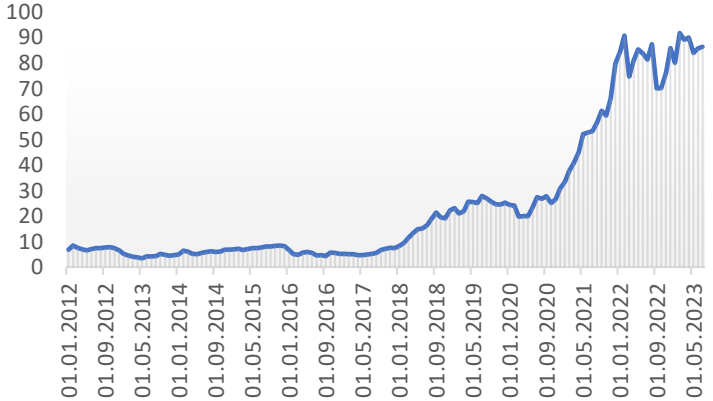
Outline:

- Emission Trading System
- Current BoP classification
- Data sources
- Results
- Lessons learned

Emission Trading System – key issues (1)

- EU Emissions Trading System (EU ETS) sets an overall limit (the „cap”) on the greenhouse gas emissions.
- Cap decreases each year. Companies are either given ot buy allowances whithin the cap.
- European Union Allowance (EUA) is a tradable unit which entitle an installation to emit 1 tonne of carbon dioxide equivalent during one year.
- By 30 September each year installations must surrender EUA to cover each unit of emissions from the previous year.
- Primary market- EU governments sell permits at auctions organized by EEX. There is secondary market supported by stock exchanges but also OTC.
- Most of the trading on the secondary market takes place through derivatives (EEX, ICE).

Price for 1 EUA on EEX in euro



In 2022, the price was more than 8 times higher than in 2016.

Emission Trading System – key issues (2)

- EUA cannot by linked to a specific issuing country or to even an issue date.
- Every EU permit issued maybe surrendered in any EU country (e.g. permit issued by Germany in 2017 may be surrendered by Polish company in Poland in 2024.
- BOP perspective - trade in emission allowances between residents and non-residents (accounting for changes in economic ownership).
- National Accounts focus mainly on issuance of emission allowances by government and surrender of allowances by resident companies.

List of general EU-prefix ISINs:

ISIN	Description
EU000A1RRN98	EU ALLOWANCE UNITS (EUA)
EU000A1N5R34	European Union Aviation Allowance (EUAA)
EU000A1RRPA6	EU Allowance Units Periode 3
EU000A2QMW50	EUA Allowance Units Periode 4
EU000A2QMW68	EUAA Allowance Units Periode 4

Current BoP classification of emissions permits

- Allowance entitles the holder to do a certain activity: to "emit 1 tonne of carbon dioxide equivalent during a specified period“
- Allowance does not grant property rights
- Allowance is registered and transferable
- Allowance is tradeable
- Allowance does not have a corresponding liability

Allowances should be classified in

nonproduced nonfinancial

assets

Based on IMF BPM6, nonproduced nonfinancial assets include:

Contracts, leases and licences – marketable operating leases, permissions to use natural resources, permisions to undertake specific activities, entitelmant to future goods on an exclusive basis.

Trade on emission permits: data sources (1)

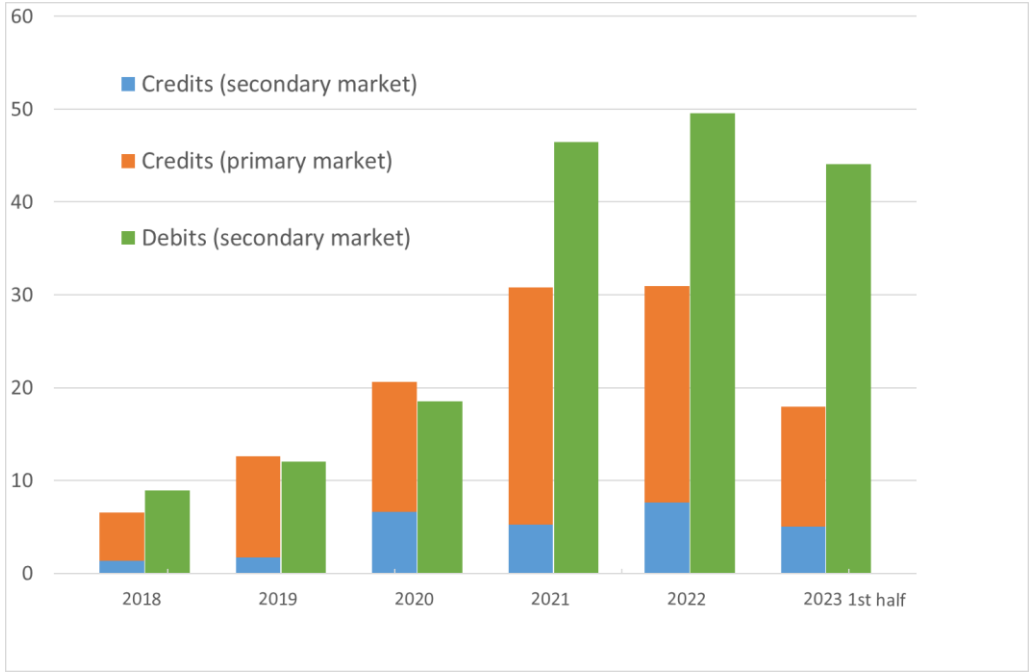
- The National Centre for Emissions Management (KOBiZE)
  - One of the basic obligations of KOBiZE is to manage and administer the Polish part of the EU ETS in Poland, including operation of Polish part of the Union Registry.
  - KOBiZE operates the National Database, where data on emissions of greenhouse gases (GHG) and other substances is collected. The Database is a constantly improved tool offering unique information on emission sources, their spatial location and detailed data on operation of every installation covered by the reporting system. It also enables acquiring precise information based on real data, which is submitted by the entities in the process of annual reporting.
- European Energy Exchange (EEX) – common auction platform

Trade on emission permits: data sources (2)

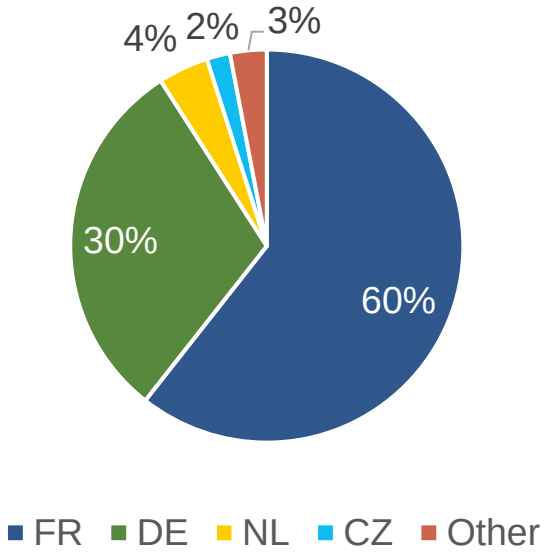
- EEX
  - Number of permits sold by Polish government
  - Price of permits on Polish auctions
  - Average price of permits on secondary market
- The National Centre for Emissions Management (KOBiZE)
  - Inflow of permits to the Polish register from abroad (including geographical breakdown)
  - Outflow of permits from the Polish register abroad (including geographical breakdown)
  - But also
    - Number of permits surrendered
    - Number of permits granted free of charge by Polish government to Polish enterprises
    - Number of permits held by Polish enterprises

Results

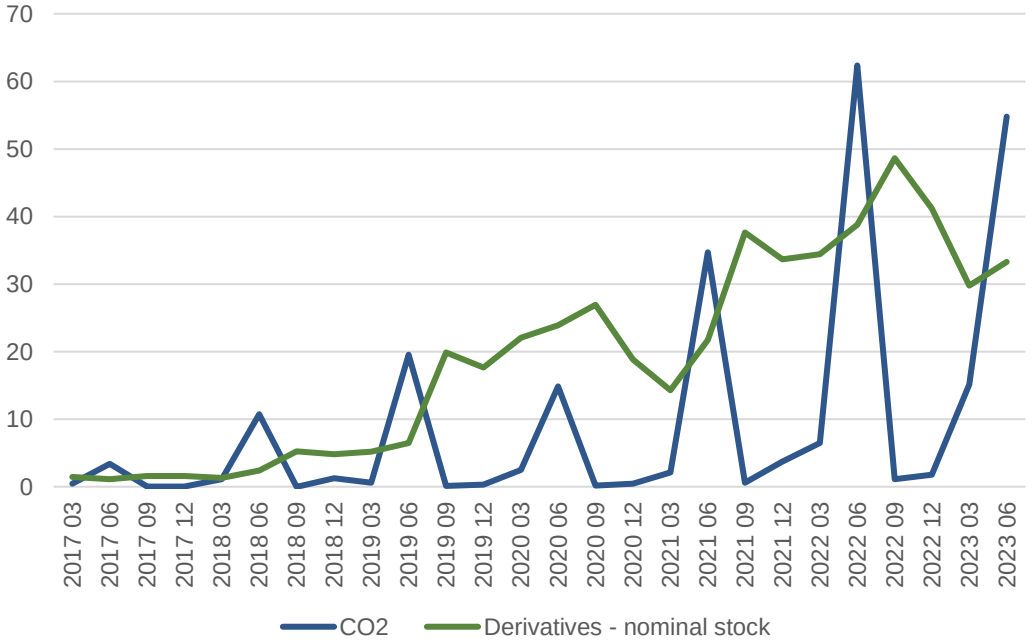
Trade of EU allowances in BoP in PLN billions



Geographical structure for debits in 2022



Derivatives vs surrendering of EUA in PLN billions



- Value of permission rights surrounded – seasonality (to be changed in the future)
- Increasing nominal value of derivatives for CO_2 emission permits

Lessons learned (1)

1. There is a market for EU allowances with buyers and sellers and a market price. In the European case the allowances are indistinguishable between countries and date of issuance.
2. There is a derivatives market for CO_2 allowances.
3. Both markets are important from macroeconomic perspective. It is expected that both markets will grow in the foreseeable future.
4. The cross border activity is crucial for EUA and derivatives for them. It cannot be limited only to resident – resident transactions.

Lessons learned (2)

5. The treatment of Emission Trading Scheme should be easy to adopt and consistent with accounting framework of enterprises.

6. The method of reporting the allowances should easily give the use an information on: what is the cost for the economy to buy the essential permits for production, as well as what is the revenue for the government resulted from sell the allowances. It is important to note that the cost for nonfinancial enterprises is different from the revenue for government due to the following factors: (i) some of permits are granted free of charge; (ii) there are price changes during the life of CO_2 allowances and financial intermediaries are involved in this kind of trade, (iii) there is a net imports of allowances.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