

International trade from the perspective of supply chain fragmentation

E-Leaders

Prague, 5 – 7 June, 2023

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Globalization

- Strong connection among economies
- FDI proliferation
- Trade liberalization
- Specialization in production among countries and high mutual dependence

FDI Increase

- it leads to intra-corporate operations across state borders
- it is facilitated through trade liberalization – multilateral trading system, preferential trade agreements
- it resulted into growing trade in intermediate products

Trade in intermediate products

- It leads to a significant increase of vertical specialization and outsourcing, as side effects of economic globalization
- It leads to changes in organizational charts of business relations (decisions on suppliers and consumers are done by the companies themselves, but by their Headquarters)
- It leads to an increase of trade flows across borders

= **Global Value Chains**

International Trade Theories

- Absolute advantages (Smith)
- Comparative advantages (Ricardo)
- Different levels of country production factors (Heckscher, Oli)
- Technological gap (Possner)
- Demand factors (Linder)

All take into consideration traditional trade: movement of goods accross borders with a change of ownership

International Trade Theories overcomes

Intra- sectoral trade

- high proportion of industrial trade accounted for two-way exchange of products within the same category of goods
- trade with close substitutes that require customers with different preferences in different countries

Reasons:

- economies of scale at the firm level
- increased specialization
- existence of imperfect competition

Development of intra-sectoral trade

- More in more developed economies
- Export-oriented countries
- In economies that are flexible as for the competitiveness environment
- BUT: Chances for developing economies

International Trade Theories overcomes and problems

- Transit trade (goods is transported through the territory of a country)
- Re-export (goods is imported and next exported to another country) and quazi-transit trade (goods is imported and next exported to a country of the same customs union – free circulation)
- Merchanting (goods is not physically present in the country from which it is traded)
- Trade by non residents (goods is traded by subjects that are not residents of country in which the goods is produced and exported or into which it is imported and consumed)

Quazi-tranzit trade

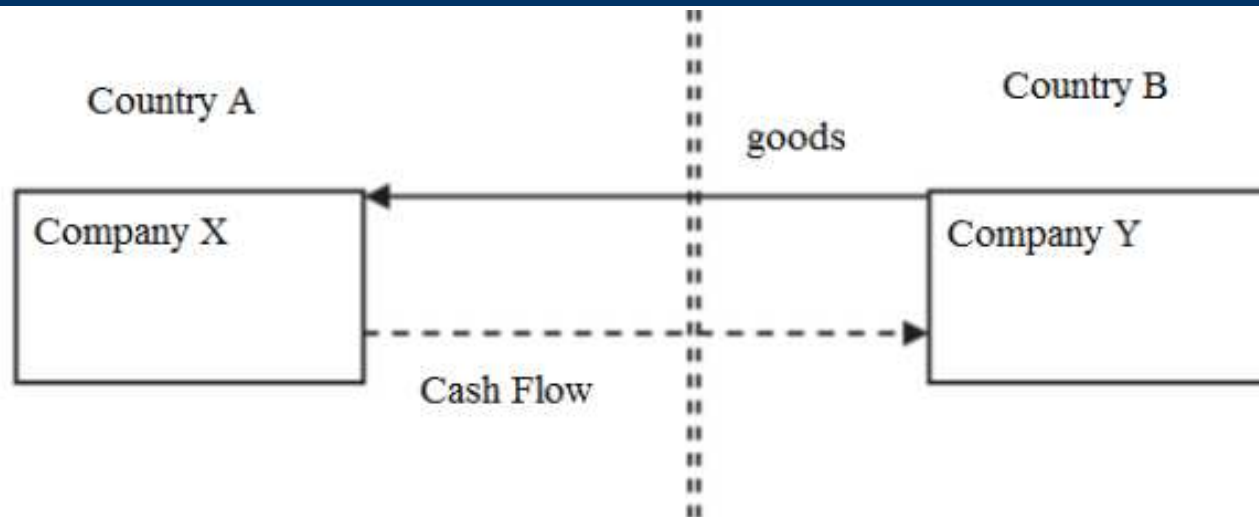
- Problem in statistics of foreign trade and trade balances namely of EU countries
- It leads to overestimation of foreign trade of an EU member country which serves as a port of entry to the EU
- Transaction within EU (Intrastat) do not require to provide country of origin (sometimes not known) = this import phenomenon is referred to as a 'Rotterdam effect'
- Trade across EU states borders (within EU) : ownership is not changed, but goods is traded at higher prices

Trade by non residents

Activity	Motivation
Distribution of activity - rental of warehouses, logistics operations, purchase import / export, domestic sales	Logistics
Sales Channels - export gateways (eg. West to east Europe)	Organizational / Cost reduction / Tax benefits
Active nobility - import / export, purchase processing services at home	Cost reduction
Mediation between residents - purchase by residents of the nobility sale to residents	Dominate the market/ Agreement between foreign companies

Rojček, M. (2013)

Models of trading

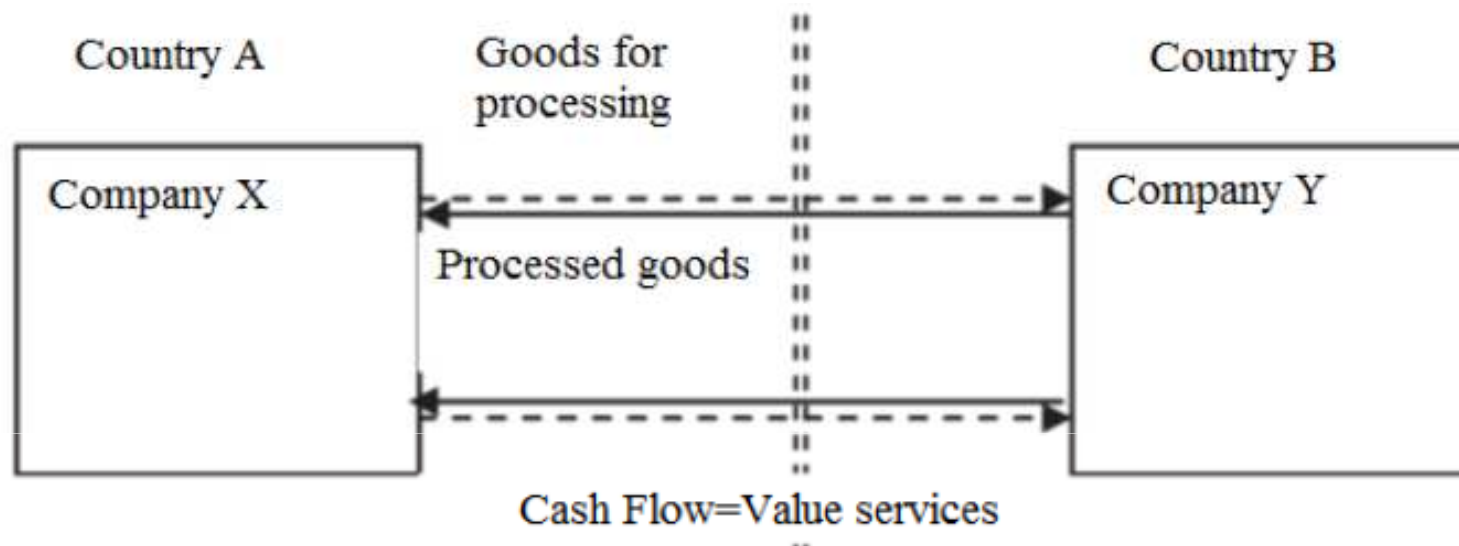


Traditional
with a
change of
ownership

Value of goods in exportation and importation is included in the overall value of E and I of A and B

Rojček, M. (2013)

Models of trading

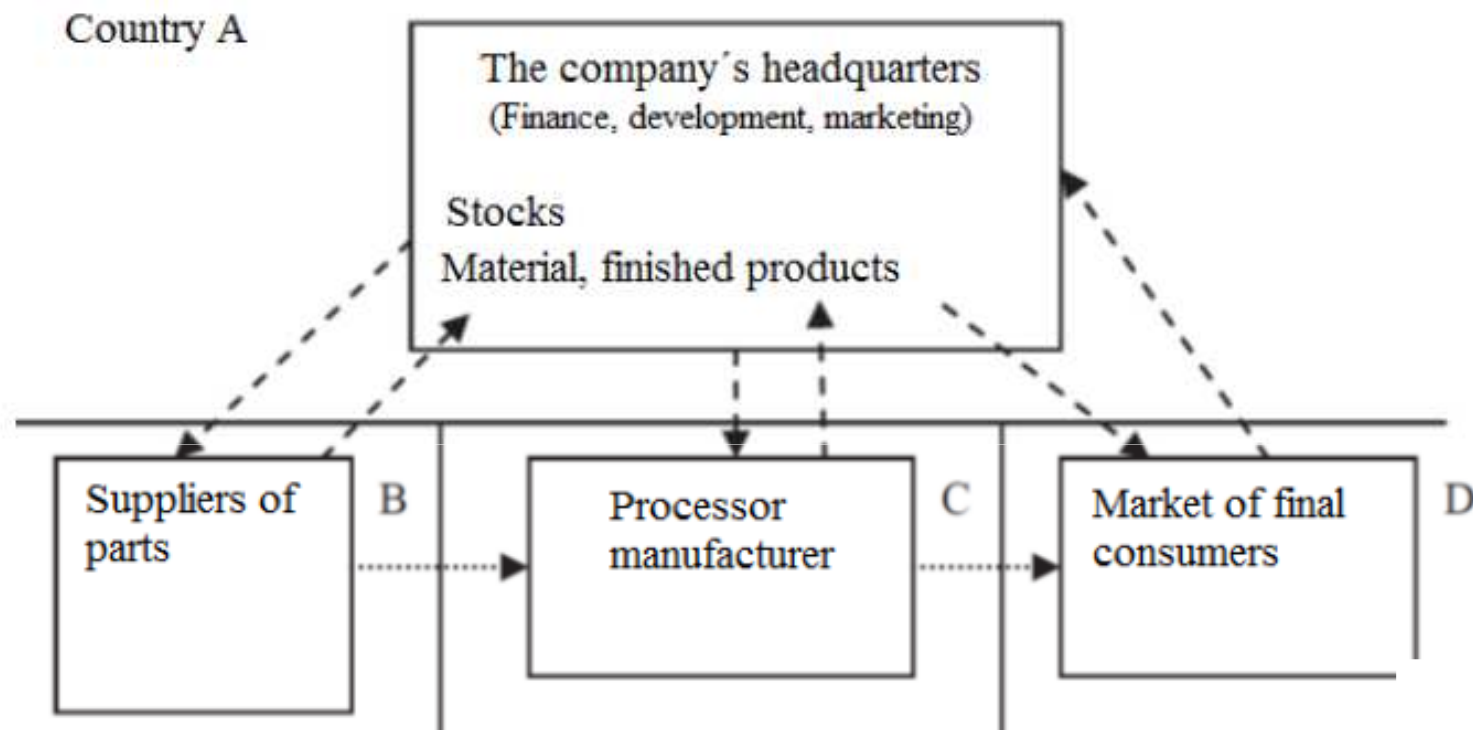


Without a change of ownership

Value of goods in exportation and importation should be excluded from the overall value of E and I of A and B for a correct assessment of the amount of exported and imported goods (for BoP, Current Account)

Rojček, M. (2013)

Models of trading



Intra-
company
trade

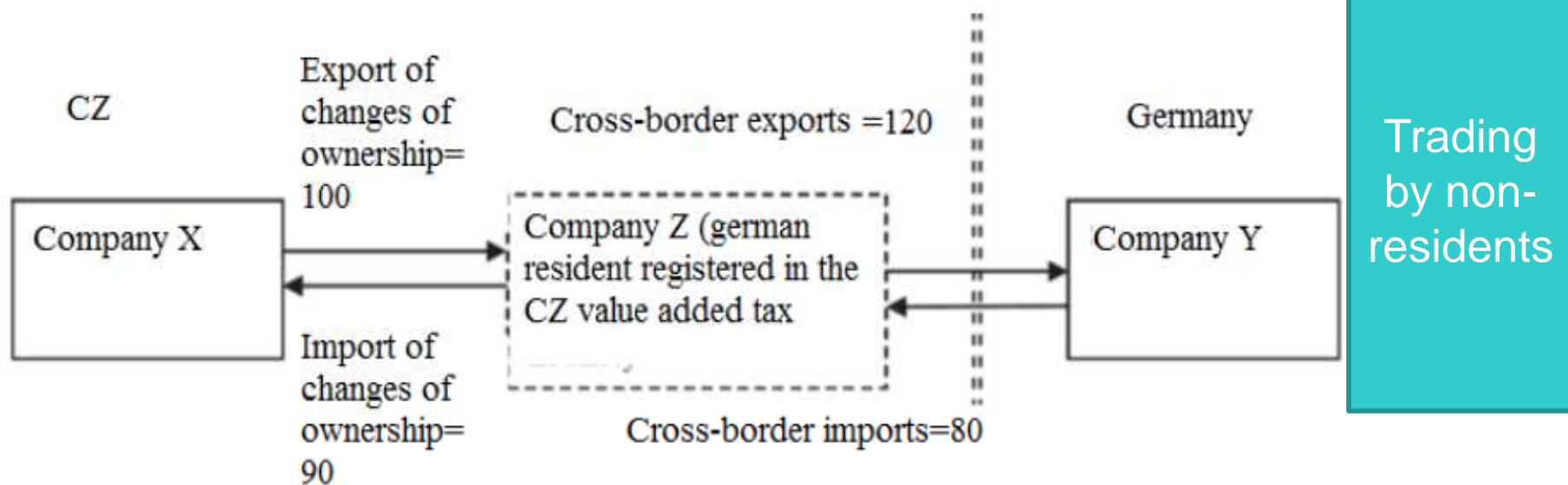
Rojček, M. (2013)

Value of goods in exportation and importation should be excluded from the overall value of E and I of all countries (for a correct assessment of the amount of exported and imported goods in BoP)

Intra-company trade (across borders)

- Movement of goods is multiplied because of fragmentation of production
- Movement of services is multiplied because of off-shoring and tax optimization (related to transfer pricing)
- Value of goods in exportation and importation of individual countries increases more than the value of finalized products

Models of trading



Rojíček, M. (2013)

Huge impact on trade balance of CZ, non consistency of international trade value (E 120, I 80) and value added in CZ (E 100, I 90)

International Trade Theories overcomes and problems

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Quazi-tranzit trade definition

- realization of trade by a non-EU resident
- important price gap between the price of importation and price of exportation
- clearance for free circulation in the economic union
- absence in change of economic ownership of the goods

Quazi-tranzit trade

- Problem in statistics of foreign trade and trade balances namely of EU countries
- It leads to overestimation of foreign trade of an EU member country which serves as a port of entry to the EU
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International Trade Statistics

- Movement of goods accross borders does not correspond in all cases with the changes in ownership: Cross boarder statistics

or

- National concept based on change in ownership (reflects the real performance of a country more accurately)

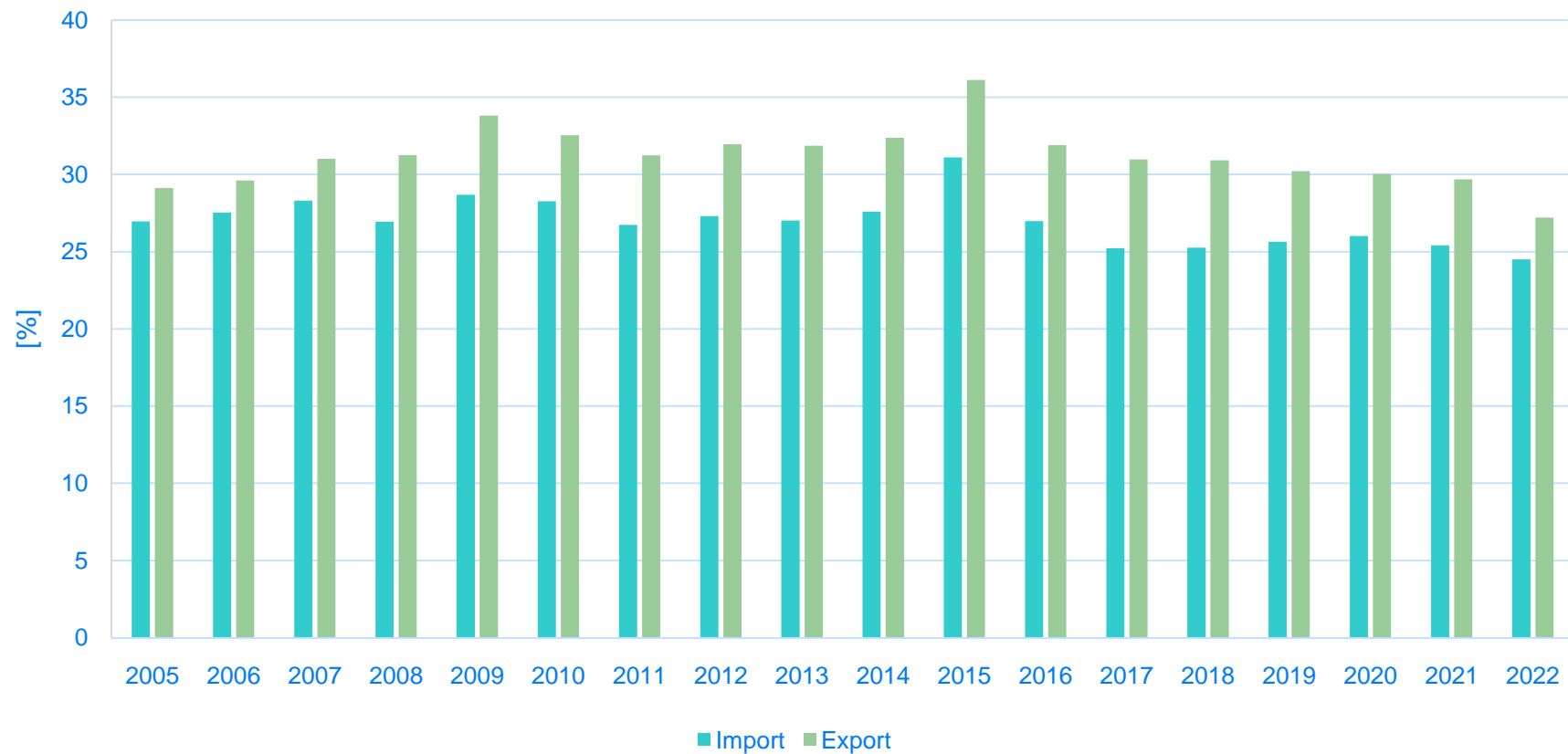
- BUT: quantification of quasi-tranzit trade ? How to „purify“ international trade from quazi-tranzit trade?



question for a further research

Example of influence of Rotterdam effect on Trade

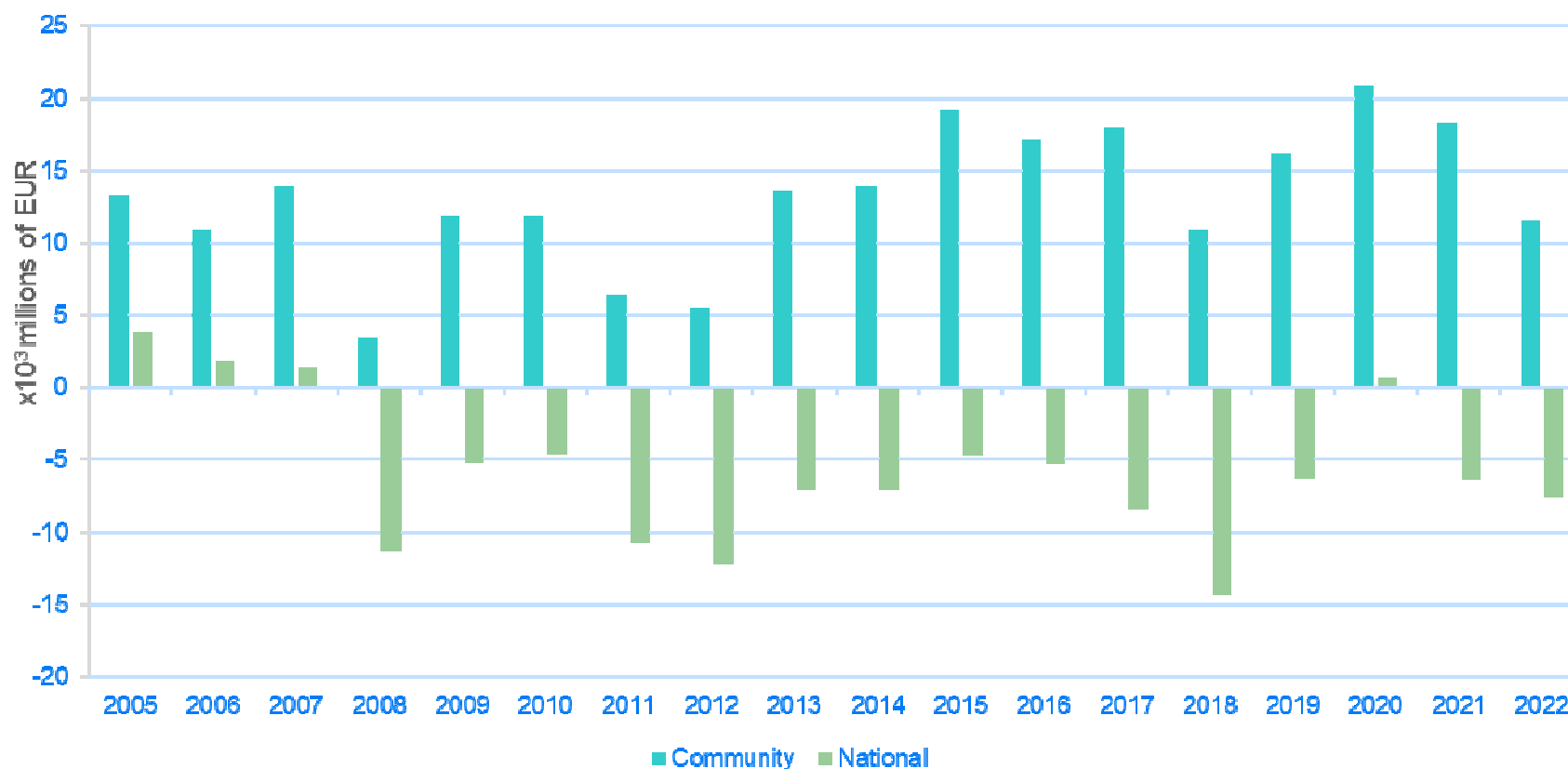
Share of Belgium's Quasi-transit Trade on Community Imports and Exports (2005 – 2022)



De Castro, 2023

Trade Balance of Belgium – Community (=cross boarder) vs. National Concept (mil. EUR, 2005–2022)

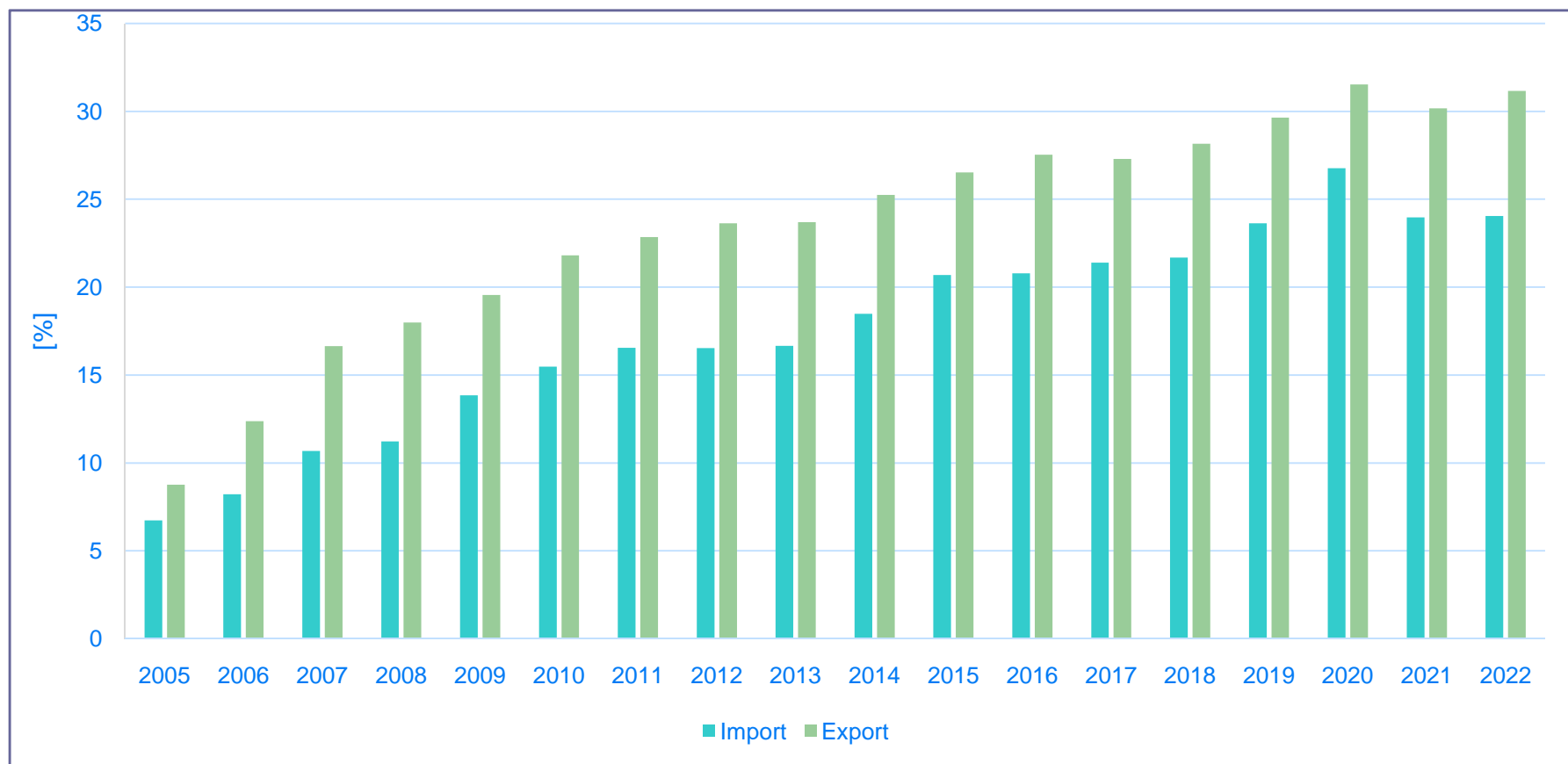
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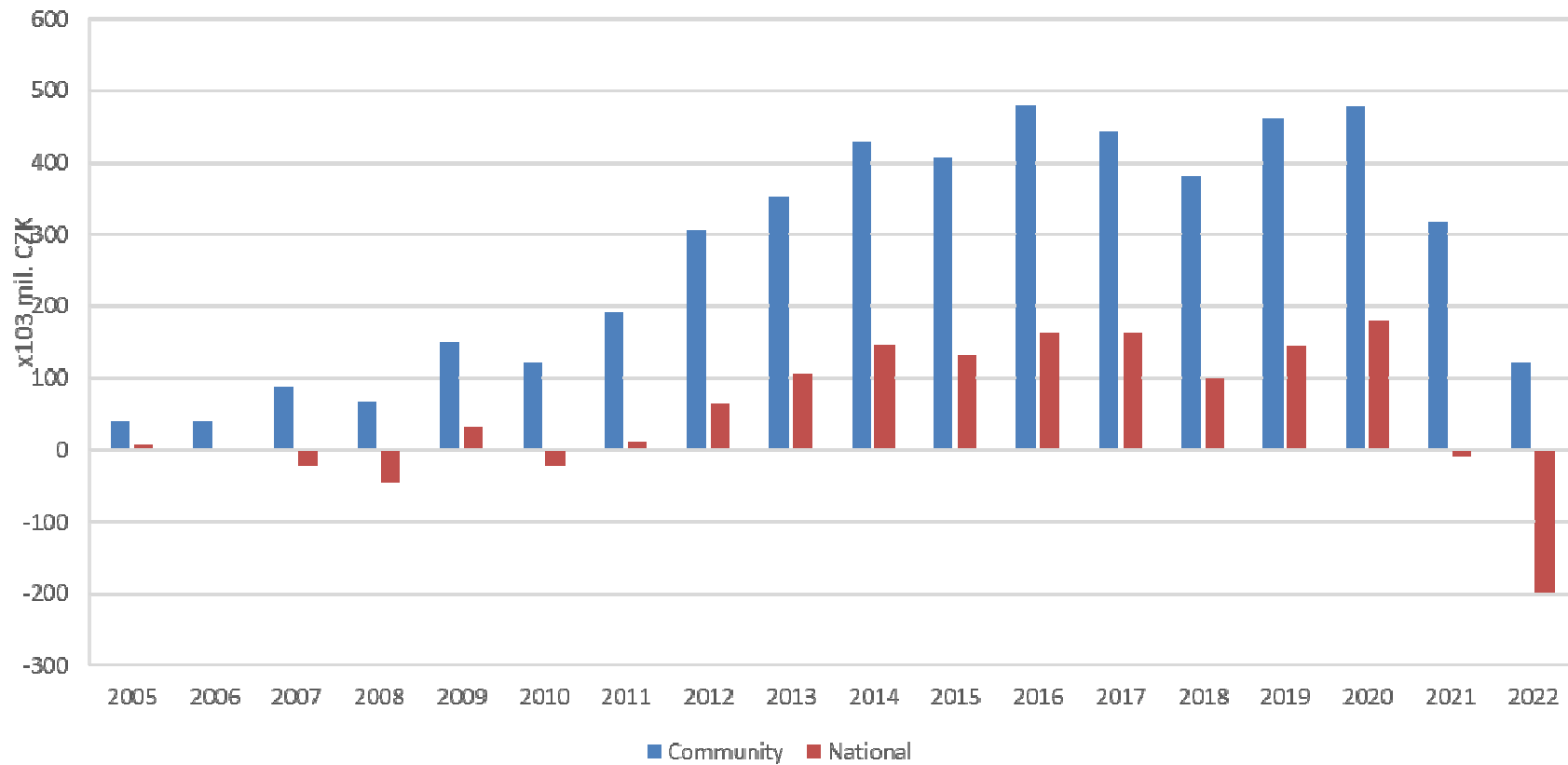
Share of Czechia's Quasi-transit Trade on Community Imports and Exports (2005 – 2022)



De Castro, 2023

Example of influence of Rotterdam effect on Trade

Trade Balance of Czechia: Community (=cross boarder) vs. National Concept (mil. CZK, 2005–2022)



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Reasons for quazi-tranzit trade

- Belgium – port country
- Czechia
 - ❖ central geographical location
 - ❖ MNCs have set up branches and warehouses to distribute their goods throughout Europe

Literature research on quazi-tranzit trade

- UN Economic Commission on Europe recommends unified approach to quazi-tranzit trade in statistics
- Hungarian Central Statistical Office
- European System of Accounts (ESA) by Eurostat
- Ferreira, P. M. (2018). QDR Methodology: Understanding Trade Flows in the EU
- Gerencser, A. (2013, August 25–30, 2013). *International Merchandise Trade Statistics – Is there a Need for Paradigmatic Shift?*
- Egger, P. H., & Wolfmayr, Y. (2018). International Trade Data and Empirical Patterns
- Lauro, B., & Tilley, T. (2013, August 25–30, 2013). *The Effects of Transit Trade on Measuring Real Effective Exchange Rates*
- Linders, G.-J. M., Odekerken-Smeets, M. E. P., & de Groot, H. L. F. (2006, August 30–September 3, 2006). *Linking Trade and Transport Statistics: the Dutch Case*
- Mellens, M. C., Noordman, H. G. A., & Verbruggen, J. P. (2007). *Re-exports: International Comparison and Implications for Performance Indicators*

Conclusion

- *Non traditional forms of international trade has developed as a consequence and together with globalization*
- *Intra-company trade, trade with intermediate goods and global value chains increase statistics on cross boarder trade flows*
- *Quazi-tranzit trade (and re-exports) should be excluded using the same approach from the trade statistics worldwide, but the methodology is not yet developed and internationally agreed*



Thank you for your attention!

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