

## **Foreign trade based on ownership principle and international movements of goods: Czech approach**

Prepared by the Czech Statistical Office

### ***Abstract***

1. The Czech Republic is a small open economy, significantly dependent on its export performance. Furthermore, the intensity of international cooperation grew rapidly after EU accession, mostly as a result of considerable FDI inflows at the beginning of the decade. In this context one significant problem for the Czech Republic, as well as for some other countries of the region appeared: the valuation of trade flows based solely on recording of cross-border movements of goods overestimates the country's trade balance in comparison with the value added created by residents (and with financial account in balance of payment).

2. This imbalance between movements of goods and economic performance by residents is caused by the trade declared by non-resident units in the international merchandise trade statistics (esp. Intrastat in the EU). These quasi-transit trade transactions are on one hand related to more and more common business activities carried out by non-residents in the internal market of each national economy in the EU and also by so-called 'basic quasi-transit', which takes place not only between EU and non-EU countries but also within the EU. This issue is exemplary in the Czech Republic because of its strategic geographical location, but as its fundamentals came from the single market of the EU, it affects all EU countries.

3. This paper describes some aspects of quasi-transit (resp. measuring of movements of goods across the borders with respect to the change of ownership) and the Czech approach to the estimation of exports and imports following the change of ownership principle required by the SNA 2008, ESA 2010 and BPM 6<sup>th</sup>.

### ***Keywords:***

Globalisation, Foreign trade statistics, Balance of Payments, Quasi-transit, Commodity flows

### ***JEL classification:***

F10, F15, F23,

## **A. IDENTIFICATION OF QUASI-TRANSIT IN THE CZECH REPUBLIC**

4. After the accession of the Czech Republic to the EU in 2004 a gradually increasing surplus of the balance of trade has been observed according to the international merchandise statistics (IMTS). This trend was, however, in contrast to the financial flows measured within the balance of payment. Besides, each year during the compilation of the supply and use tables a growing discrepancy between supply- and use-side of certain commodities indicated that the movements of goods across the borders, recorded in the IMTS as imports and exports, might significantly differ from real flows (often exports far exceeded output in these commodities). It seemed that in some commodities exports in the IMTS were overestimated and imports underestimated or in others both exports and imports in the IMTS far exceeded the real economic performance of residents. Discrepancies were registered usually in commodities affected by the foreign direct investments flown into the Czech Republic in the preceding years (e.g. toys, computers, cars).

5. Detailed analysis of the IMTS data revealed, consequently, that the alleged surplus of the IMTS trade balance consisted mainly of the value added generated by non-residents registered for value added tax (VAT) in the Czech Republic (so-called 'VAT-only'). And as such could not be included in the value added of the domestic economy. It was obvious that cross-border movements recorded by the IMTS in the Czech Republic can no longer be considered to be an acceptable proxy for the change of ownership between residents and non-residents without additional adjustment.

6. Therefore, a new national concept of foreign trade in the Czech Republic was defined and corresponding methodology of adjustment of IMTS data was developed in order to follow implicitly the change of ownership principle related to exports and imports in national accounts (NA) and balance of payment (BoP). The adjustment of 'primary input data' of the IMTS was the only sufficient solution as the impact of the issue is considerable in the Czech Republic.

## **B. CROSS-BORDER FLOWS OF GOODS AND VIRTUAL CHANGE OF OWNERSHIP**

7. The phenomenon in the Czech Republic is associated with two different but complementary issues:

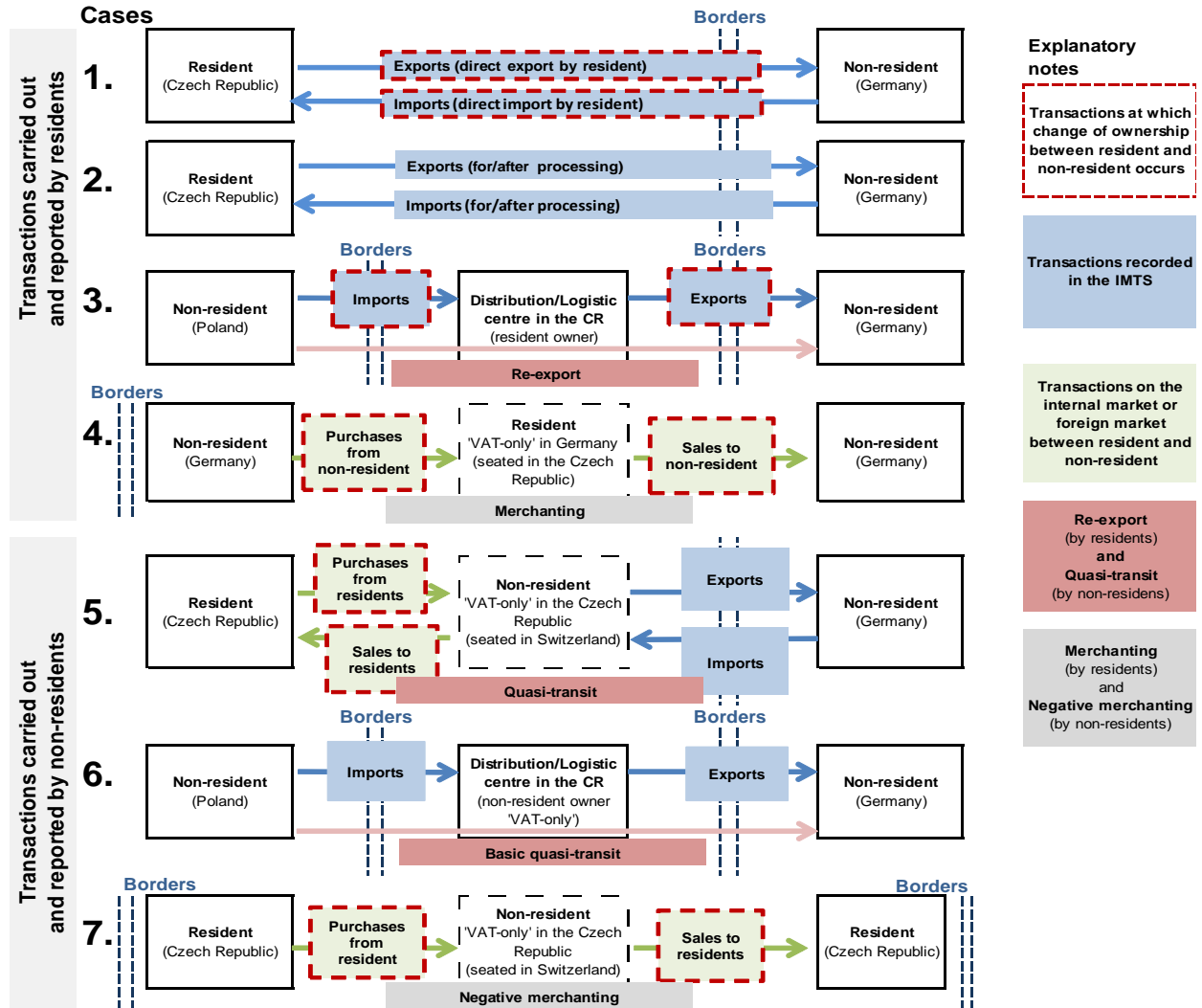
- (1) increasing non-residents' influence over the cross-border movements of goods which had been produced in the domestic economy or are to be used in the domestic economy (i.e. there are non-residents in the Czech internal market that sell goods which were previously transported into the country by non-resident or buy goods which are going to be subsequently transported across the borders from the country by non-resident),
- (2) increasing number of movements of goods across the national borders without any following change in ownership between resident and non-resident (such as so-called basic quasi-transit trade by non-residents); mainly due to the convenient location of the Czech Republic and sufficient storage facilities.

8. In order to approach the issue of external trade with methodological complexity we have defined:

- five case examples of transactions combining movements of goods across the borders (recorded in the IMTS) and relevant changes of ownership between residents and non-residents (see Figure 1, cases 1, 2, 3, 5 and 6),

- two case examples of transactions that are also considered as exports and imports of goods in the NA and BoP but without any movements of goods across the borders (see Figure 1, cases 4 and 7).

Figure 1 - Flows of goods and related changes in ownership



9. Figure 1: In cases (1) direct trade and (3) re-export the physical movements of goods are accompanied by the change in ownership, so the IMTS can be used as a proxy to the exports and imports in the NA and the BoP. The case (2) is a typical example of **processing** services, and thus the movements of goods for and after processing are not considered as export and import<sup>1</sup>. The case (4) is an example of **merchancing**, newly considered to be export of goods<sup>2</sup>.

10. Quasi-transit trade transactions<sup>3</sup> can be considered to be both (5) **non-residents' transactions in the internal market** and (6) **basic quasi-transit** (latter with no relation to the domestic economy at all). These two cases are the main reason why the physical movements of goods across the borders

<sup>1</sup> E.g. SNA2008 par. 2.48, 14.37 and ESA 2010 par. 3.166, 9.48e

<sup>2</sup> E.g. SNA 2008 par. 14.73, ESA 2010 par. 1.5f

<sup>3</sup> Impact of globalization on national accounts, UNECE, 2011, par 9.32

recorded in the IMTS can no longer be a sufficient proxy to the change of ownership between residents and non-residents in the Czech Republic; and so the main cause for the adjustment of the IMTS data in order to obtain exports and imports following ownership principle (see below).

11. The presence of so-called **(6) negative merchandising** in the Czech Republic was discovered along with the adjustment of the IMTS for quasi-transit by applying data from non-residents' VAT declarations. It occurred when non-residents buy and sell goods within the internal market of the Czech Republic without any cross-border transactions. The margin achieved by these non-residents is methodologically reciprocal to the classical residents' merchandising and therefore recorded in negative form<sup>4</sup> as export of goods.

### C. IDENTIFICATION OF QUASI-TRANSIT TRADE IN THE IMTS DATA

12. Basic quasi-transit trade (case 6 in Figure 1) is in the EU usually considered to be related to the trade with non-EU countries. However, this issue has to be extended also to the trade between the EU countries as the single market enables any unit to trade in all EU member countries and to move its goods from one country to another. Hence the system of collecting data on cross-border movements of goods within the EU instructs not only residents but also non-residents to report their transactions to Intrastat<sup>5</sup>. And it results in inclusion of non-resident transactions in exports and imports of goods in any national economy according to the compilation rules of the IMTS.

13. **Basic quasi-transit with non-EU countries (case 6)** is in most countries identified by a specific custom procedure (that allows goods to pass through the territory without VAT paid at custom clearance). However, in the Czech Republic this procedure is not usually used since it is more convenient for non-residents to register for VAT in the Czech Republic<sup>6</sup>, declare imports under free-circulation custom procedure and subsequently export goods via Intrastat into other EU member state. Therefore it is impossible in the Czech Republic to identify directly this quasi-transit with non-EU countries.

14. Likewise, neither **basic quasi-transit trade with the EU countries (also case 6)** can be identified directly, because there is no specific nature of transaction in Intrastat for 'acquisition for subsequent dispatch'. Besides, the owners of goods often cannot specify at the moment of acquisition, whether the goods will be sold in the domestic market or dispatched to other country (especially in case of stocking up distribution and logistics warehouses set up for European single market in one country).

15. For the same reason, it is not possible to distinguish directly **goods intended for (or originated from) the internal market (5)** from above-mentioned non-residents' transactions in the IMTS; i.e. goods recorded mostly at different prices at the borders than traded in the internal market, but at least really previously or consequently traded with residents.

16. Nonetheless, the estimation of quasi-transit in IMTS data is not the principal issue for the estimation of exports and imports in the ownership principle. In fact, non-residents' transactions in the IMTS are of no importance to the domestic economy. By contrast, only non-resident' transactions in

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<sup>4</sup> By convention, acquisition of goods by non-resident intended for resale is recorded as export by residents and sales of goods by non-residents are recorded as [negative] export by residents.

<sup>5</sup> According to the common system of VAT there is an obligation for any legal person to register for VAT in any member state in which they carry out transactions such as acquisition/dispatch of goods or selling/buying goods. The unit is not physically present in the country. Theoretically any legal person can be registered for VAT in all 27 member states at a time (and not even be seated in any of them). And any unit registered for VAT, with cross-border transactions above a threshold, is obliged to report these transactions to Intrastat.

<sup>6</sup> If registered for VAT in the Czech Republic, they do not have to pay VAT at custom clearance.

the internal market (purchases and sales – case 5) can be considered as exports and imports by residents (via non-resident's units). And these transactions, at aggregate level, are recorded in the VAT declarations submitted by non-residents.

#### **D. CZECH APPROACH: ADJUSTMENT OF IMTS DATA FOR NON-RESIDENTS' TRANSACTIONS (BASED ON VAT DECLARATIONS)**

17. In general, the adjustment of IMTS data is based on the exclusion of non-residents' transactions from the IMTS data sets and their replacement by non-residents' purchases (or sales) in the Czech Republic according to the VAT declarations. This procedure solves both the adjustment of price difference between value in the internal market and value reported at the borders (for case 5) and also the elimination of basic quasi-transit (for case 6).

18. Since non-residents identify themselves differently in each data source (in Intrastat and VAT-declarations under VAT ID, in Extrastat under EORI number) and there is no full-scale convertor, the adjustment is computed in total instead of approaching each non-resident individually.

19. The **purchases by non-residents** in the Czech Republic are in fact **exports by residents via non-residents**, so the total exports of residents are direct export (case 1) plus indirect export via non-residents (case 5). Vice-versa, the **sales by non-residents** are **imports by residents via non-residents** and therefore the total imports of residents consists of direct imports by residents (case 1) and indirect imports via non-residents (case 5). Hence, the balance of trade can be defined as the residents' balance in direct trade plus residents' balance in the internal market with non-residents.

20. There are two issues concerning VAT data that should be mentioned separately since they affect the overall procedure of the estimate.

- a) There is no information on commodity and territorial breakdown of non-residents' transactions in the internal market. For this reason the computation is conducted over the IMTS non-residents' data, separately for each 3-digit CPA commodity level.
- b) Non-residents can also trade with one another in the internal market, so a part of non-residents' sales and purchases is not traded with residents (and thus cannot be view as transactions related to the domestic economy). Unfortunately, these re-sales between non-residents cannot be identified directly from their VAT declarations. Hence the re-sales in the internal market are excluded implicitly in the course of the computation (see below). Besides, re-sales have no effect on the estimation of the balance of trade in the internal market, as they affect both total sales and total purchases of non-residents equally (sales for one non-resident are purchases for another).

#### ***The estimation procedure***

21. Commodities at 3-digit CPA level are divided into three groups:

- **Individual commodities**

Commodities where the relation between cross-border flows of goods reported by non-residents and their transactions in the internal market is strong and stable: mostly commodities traded between resident producer and foreign parent company (e.g. toys, cars, tobacco, detergents).

- **Average commodities**

Commodities where non-residents' trade is not significant or where is not sufficient information on the relations between cross-borders flows of goods and the transactions in the internal market (most commodities).

- **Derived commodities**

Commodities affected considerably both by non-residents' transactions in the internal market and by basic quasi-transit, so there is very weak link between cross-border flows and non-residents' sales or purchases in the internal market (e.g. computers and its components, i.e. commodities where the basic quasi-transit is concentrated predominantly).

The estimation of exports and imports is conducted differently for each commodity group:

- **Individual commodities**

Exports and imports are estimated by application of individual coefficients on cross-border flows (IMTS data) in order to exclude the margin created by non-residents. The individual coefficients are set according to the previous development between cross-border flows and internal-market transactions for each commodity.

- **Average commodities**

Exports and imports are estimated by application of average coefficients on cross-border flows (IMTS data) in order to exclude the margin created by non-residents (e.g. 0,8 for exports and 1,05 for imports).

- **Derived commodities**

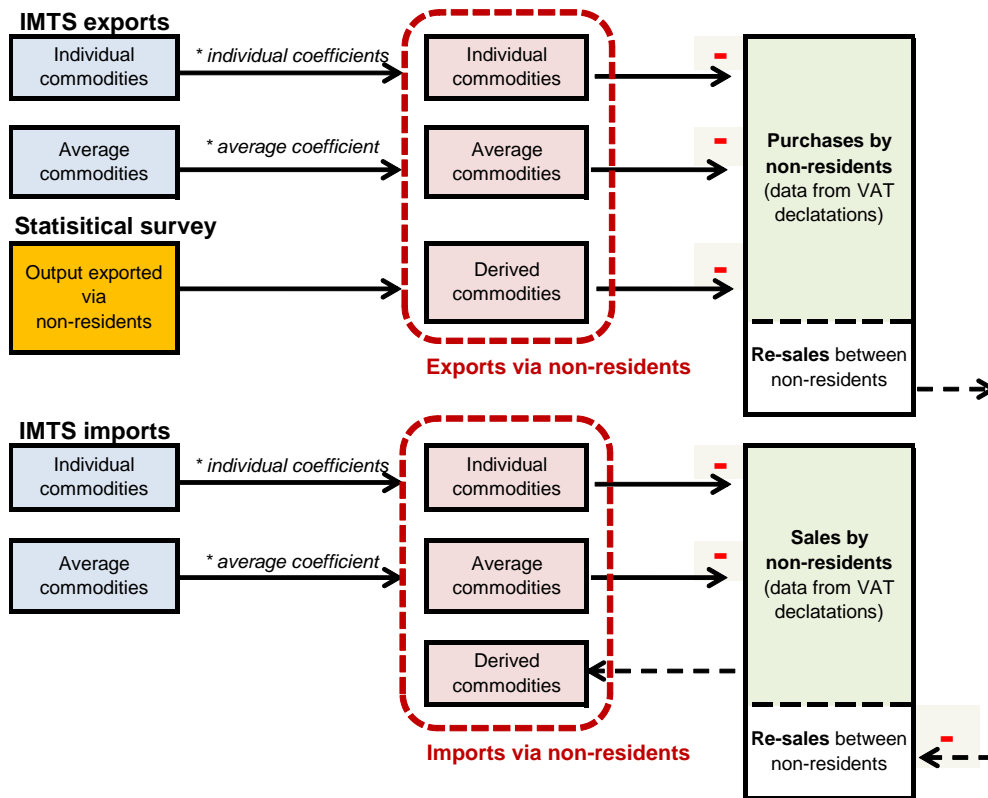
Exports are set to be a residents' output traded via non-residents (surveyed by industrial statistical surveys). Imports are estimated implicitly in order to maintain the balance of trade in the internal market (indicated by VAT declarations).

The procedure is as follows (see figure 2):

1. Estimation of exports and imports of individual and average commodities by applying specific coefficients
2. Estimation of exports of derived commodities by the residents' output of the commodities. Thus, the total export via non-residents in the internal market is estimated.
3. Estimation of re-sales between non-residents in the internal market (as a difference between non-residents' purchases declared in their VAT declarations and total exports via non-residents).
4. Estimation of imports of derived commodities (as a difference between non-residents' sales adjusted for re-sales and imports of individual and average commodities).

Consequently, the balance of trade in the internal market (exports minus imports via non-residents) is equal to the difference between purchases and sales declared by non-residents in their VAT declarations.

**Figure 2 Estimation of exports and imports via non-residents (adjustment of IMTS data by VAT declarations)**



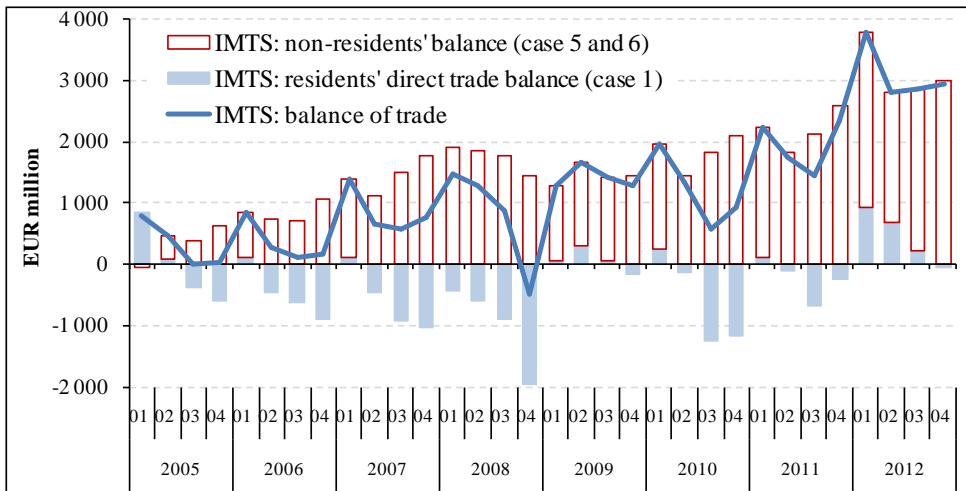
## E. THE IMPACT OF ADJUSTMENT IN THE CZECH REPUBLIC

22. Since 2005, when data is available, non-residents' transactions in the Czech Republic has significantly influenced the IMTS. Transactions declared by non-residents in the IMTS exceeded 23% in exports and 16% in imports (in 2012). Most of the surpluses in the balance of trade (according to the IMTS) were created by non-residents (see figure 3).

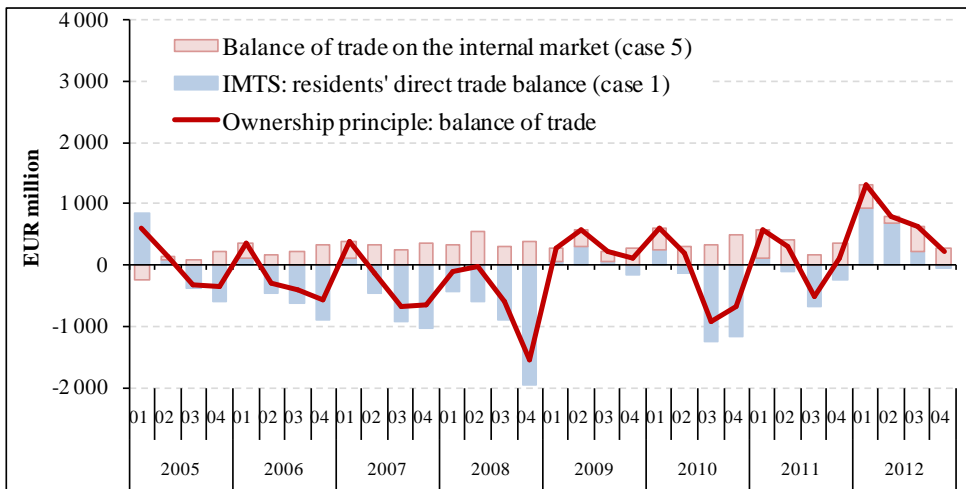
23. Therefore, the impact of adjustment on the balance of trade is about EUR -9 400 million in 2012 resulting in balance of EUR 3 000 million according to the change of ownership principle instead of surplus EUR 12 400 million in the IMTS (see figures 4 and 5).

24. The total amount of quasi-transit can be estimated as a difference between cross-border flows of goods and exports or imports following the ownership principle. In the year 2012 the difference amounted to 16% of the exports of goods (EUR 19 200 million) and 9% on the import side (EUR 9 800 million).

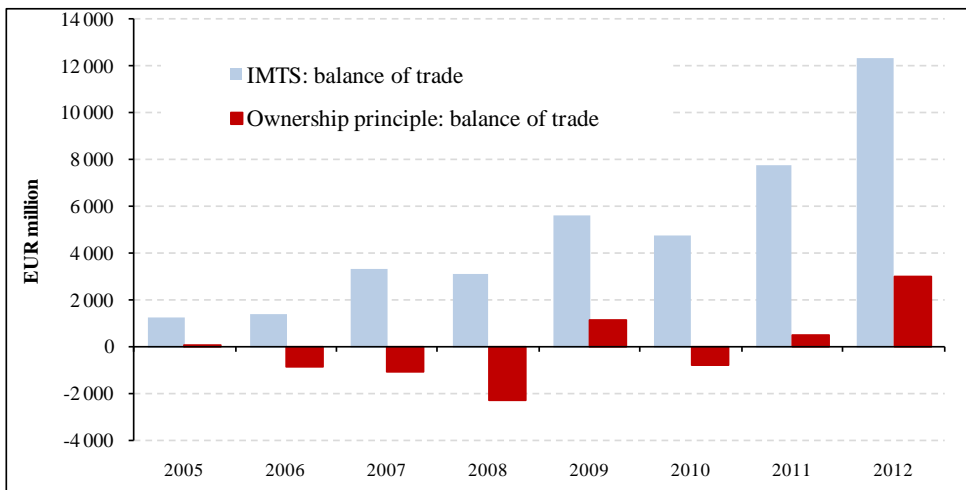
**Figure 3 - Balance of trade by residents and non-residents according to the IMTS (CIF/FOB)**



**Figure 4 - Balance of trade according to the change of ownership principle (CIF/FOB)**



**Figure 5 - Annual balance of trade (CIF/FOB)**





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