

### **Economic and Social Council**

Distr.: General 30 March 2010

English only

### **Economic Commission for Europe**

Conference of European Statisticians

### **Group of Experts on National Accounts**

**Tenth session** 

Geneva 26–29 April 2010 Item 6 of the provisional agenda Review of the first draft of the publication "Impact of Globalisation on National Accounts: Practical Guidance"

# Quasi transit trade in Europe: when value added does not belong to the reporting economy

### Note by the Statistical Office of the European Union

### **Summary**

Quasi transit trade is a little known phenomenon that causes problems to the accounts of the European Union. This paper provides clear definitions of quasi transit trade, explains its relevance, and describes the available data sources and the solutions proposed.

While this paper only aimed at providing a comprehensive analysis of quasi transit trade, other valuation problems similar to those created by quasi transit trade but affecting national data were detected during the analysis and are also described in this document.

Quasi transit trade and related phenomena are linked to the activity of traders or multinational enerprises that is not resident in the country where the goods are submitted to custom procedures and recorded in international merchandise trade statistics.

The emergence of global manufacturing arrangements can possibly increase the relevance of quasi transit trade and related phenomena in all countries.

### I. Introduction

- European regulations and guidelines require the transmission of Balance of Payments (BoP) and merchandise trade data to Eurostat and to the European Central Bank (ECB) compiled according to the "community principle", reflecting the need for external accounts for the European Union (EU) as an economic union and the euro area as a monetary union. This implies that part of what from a national perspective would be identified as "transit trade", and hence not be included in the national statistics on trade, has to be included in the data reported by national reporting agents to Eurostat and the ECB for the sake of the compilation of EU and euro area BoP aggregates. This part is called "quasi transit trade" and it has a disturbing feature. The declared value of the goods entering the EU and the declared value of the goods leaving for another EU member state is substantially different, even though no change of ownership or material change occurs in the nature of the goods as observed in the reporting country. This is problematic when compiling data for an economic or monetary union, as the difference in value needs to be accounted for, and poses problems also for national compilers, who have to address difficult issues of residency and change of ownership. The differences in valuation observed in quasi transit trade can be traced back to the two separate international merchandise trade statistics (IMTS) data collection systems in the EU, Intrastat, which measures trade between EU member states, and Extrastat, which measures trade of the EU with third countries.
- 2. While at the beginning of this analysis quasi transit trade was considered to be a problem mainly for the compilation of EU and euro area aggregates, subsequent discussions of the issue clarified that similar gaps in valuation can also emerge within a country. For example, a merchant imports goods in country A, which is not his country of residence; these imports are valued at the merchants' purchasers price. After some period of time the merchant sells these goods to a resident of country A. This transaction is valued at the selling price of the merchant. The gap between the value of imports and the value of the transaction in which the actual change in ownership takes place, is caused by the trade margins of the merchant. These margins are not recorded as import of services in country A, so there is an imbalance between demand and supply for the concerned commodity. Depending on the decisions in the balancing process, there is an effect on GDP. A very comprehensive description of how this phenomenon can affect national data is elaborated by the Hungarian Central Statistical Office and included in Annex III.

### II. Background

### A. Description of the phenomenon

- "Quasi transit trade" is a term introduced to distinguish a specific kind of transaction different from "simple transit" and "re-exports".
- 4. The EU has two separate statistical systems, Extrastat which is based on the customs declarations of goods entering and leaving the EU, and Intrastat, which is a statistical data collection on trade flows between countries within the EU. In the context of Intrastat, exports are called dispatches and imports are named arrivals. The quasi transit trade "problem" stems from the observation of large differences between the recording of the value of the import from third countries in Extrastat and the subsequent recording of the value of the corresponding dispatch to another member state.

- 5. When different valuations occur in Extrastat and Intrastat for the same consignment of goods, it seems to imply two, not one, exchange of ownership. However the real change of ownership occurs only between the original seller and the buyer in the country of final destination. It is not straightforward how to determine the ownership of the goods, since Customs procedures (Extrastat) and survey results (Intrastat) are often handled by fiscal or shipping agents.
- 6. In detailed analyses performed by several member states, it emerged that the valuation problem could be partly attributed to global manufacturing; i.e. goods produced in for instance Asia, imported into the EU and distributed by multinational enterprises (MNE). These MNEs have no or only small resident units in the country where the goods physically arrive and customs declarations are made. They value imports at the pure cost price of the goods and export later at their selling price, which also covers expenditures on research and development (R&D), overhead, etc. For specific enterprises it has proven possible to trace the value gap to business statistics in their country of residence.

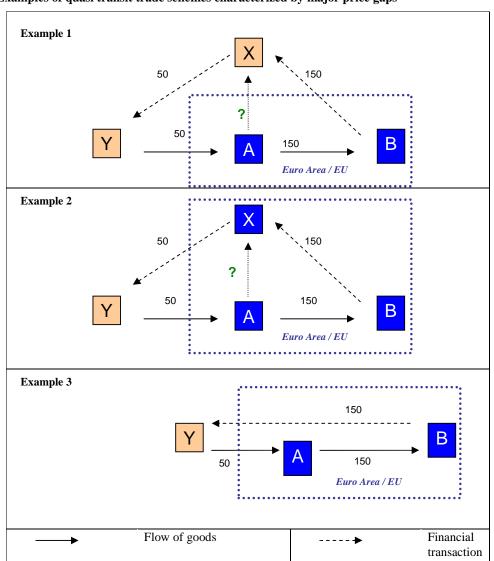
### B. Examples of quasi transit trade

- 7. Some examples might help to understand the issue. In these examples we will show the flows of goods and the corresponding flows of payments (which of course could follow even more complicated paths than those shown in our examples):
- (a) Country Y is the non-European country producing the goods and from which the goods enter the European Union;
- (b) Country X is the country where the importer of the goods X is located; country X may be located inside or outside the European Union;
  - (c) Country A is the member state where the goods enter the European Union;
- (d) Country B is the member state where the goods are finally delivered and consumed.
- (e) The importer of the goods X can be a pure trader or a MNE involved in global manufacturing.
- 8. In country A, the unit A which takes care of all the custom procedures and that pays import duties does not become the owner of the said goods. Unit A may be a local fiscal representative which is only in charge of the customs formalities; as such unit A is considered only as a provider of services to non-residents in the national accounts of country A.
- 9. Units in countries X and A may be independent (as it is generally the case in Netherlands) or related (as it is often the case in Belgium); unit X can be located in country B (and in such a case country B=country X).
- 10. Figure 1 shows three possible examples of transactions among Y, X, A and B.
- 11. In examples 1 and 2, the goods acquired by country X from country Y enter the euro area/EU through member state A. Goods are then dispatched to member state B, which provides a payment to country X that in turn pays Y.
- 12. In example 1 the importer X is a non resident in the economic union/monetary union and in example 2 the importer X is resident in economic union/monetary union.
- 13. A price gap is observed between the import value recorded in Extrastat when entering the EU, thus reported by A according to the 'origin principle' with counterpart Y, and the value recorded in Intrastat when goods are dispatched to country B; B according to

the 'consignment principle' will report "imports" from A (and not from Y). This community concept avoids a double counting of imports from Y at aggregated level.

- 14. Example 3 can be seen as a special case of example 2, where X and B are merged. In the example 3 the cash flows take place directly between country Y and country B, the country of final destination in the EU.
- 15. An important consideration is the relationship between the units in X, Y and B. Evidence available shows that these units may be independent parties and, in such cases, the price gap could be attributed to merchanting activity. However in the more significant cases and displaying the largest price gaps, the units are interrelated and belong to the same MNE.

Figure 1 Examples of quasi transit trade schemes characterized by major price gaps



### C. A related problem: VAT residents in Hungary

- 16. A problem similar in nature to the recording of quasi transit trade is described in a document presented by the Hungarian Central Statistical Office (HCSO) to the Conference of European Statisticians in June 2008<sup>1</sup> (see Annex III). HCSO discovered this valuation problem comparing the information related to trade in goods as available from the settlement system with the information available from merchandise trade data.
- 17. The problem described by HCSO is due to a group of special distributors called VAT residents of foreign enterprises. The export share of this distributors group, insignificant in 2004 the time of accession to the EU, had reached 10 per cent in 2007.
- 18. The problem noted by HSCO is explained in terms of exports and imports; however the similarities with the quasi transit trade problem are strongest in the case of an import, which is discussed below. The flows described below quite nicely correspond to examples 1 and 2 in figure 1. We therefore add references to the country codes from those examples.
- 19. For imports the scheme of transactions involves two scenarios.
- (a) A non-resident company (X) sells goods to a VAT-resident (A) in Hungary controlled by the parent company (Y); the foreign parent company (Y) effects the payment for the goods.
  - (b) Depending on the destination of the goods:
  - The VAT resident (A) sells the goods to a resident buyer; who effects the payment to the foreign parent company (Y);
  - (ii) The VAT resident sells the goods to a non-resident (B), who effects the payment to the foreign parent company (Y). Only this very last case corresponds to the quasi transit trade definition.
- 20. Hungary observes for case 2a differences in valuation between the settlement and the import as recorded in merchandise trade statistics. In case 2b Hungary observes a valuation difference between imports and re-exports in merchandise trade that is similar to our description of quasi transit trade. In all cases the money transactions pass Hungary by (they are recorded in the country of residence of the foreign parent).
- 21. Crucially, Hungary considers VAT-residents as resident units, recognises 2b. as trade and includes it in the national accounts and balance of payment estimations for the trade margin realised by foreigners. The import of trade margins seems to the authors the correct solution for filling the valuation gap while preserving the link between national accounts (change of ownership) and foreign trade statistics (crossing border).
- 22. The Hungarian example makes very clear that a problem similar to quasi transit trade may also exist within a country. In this case the problem is however hidden, unless different data sources are cross-checked for consistency.

### D. The size of "quasi transit trade" in the European countries

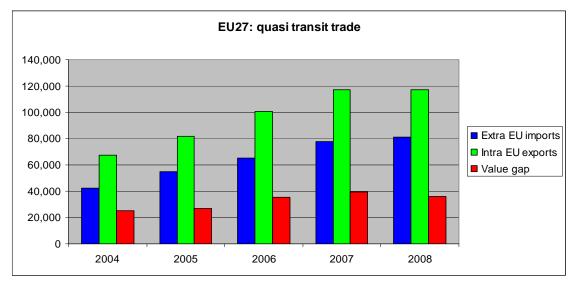
23. Currently transit trade is very significant in Belgium, Luxembourg and the Netherlands. Following several rounds of EU enlargements the transit trade phenomenon

Sandor Csizmazia, "About a valuation problem of transactions with the rest of the world, Conference of European Statisticians, 10-12 June 2008, ECE/CES/2008/37.

was discovered by other member states, particularly those with large borders and with a growing trade with Asian or sub-Mediterranean countries.

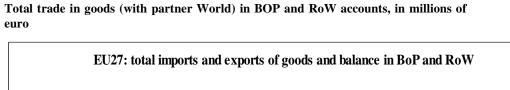
24. Figure 2 compares quasi transit trade Extra-EU imports with quasi transit Intra-EU exports and shows the gap between these two values. A gap that reached 40 billion euro in 2007 and decreased to 36 billion euro in 2008, due to a decrease in the gap recorded in Belgium and Netherlands. Probably this decrease is linked to the efforts made by these two countries to better deal with quasi transit trade transactions. The value is the sum of the gaps emerging from all the member states that declared problems of quasi transit trade in the reconciliation tables<sup>2</sup>: Austria (only 2004 and 2005), Belgium, Luxembourg, Netherlands, Hungary and Slovenia (only 2004-2007). Slovakia reported data related to quasi transit trade for 2007 and 2008, but no evidence of price gaps. The data related to quasi transit in some of these countries are shown in Annex I.

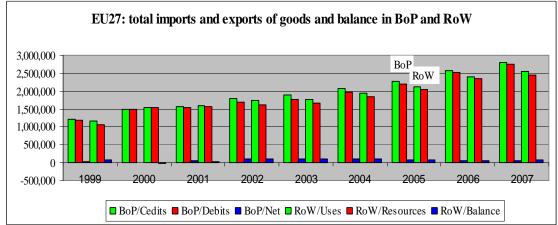
Figure 2 Quasi transit Extra EU imports and intra EU exports, in millions of euro



- 25. Figure 3 compares, for each year, the total value of imports (debits/resources) and exports (credits/uses) of goods and the balance as resulting from BOP (partner World) and from RoW. The data used for this figure are those reported to Eurostat by BOP and sector accounts compilers as used in the BOP/RoW survey run by Eurostat in February 2009.
- 26. As it is evident from Figure 3, a sizeable gap exists between the gross and also between the net value of imports and exports of goods recorded in BOP and in RoW accounts.
- 27. The BOP/RoW survey showed that the difference between the value of goods in BOP and RoW is mainly due to the quasi transit trade problem affecting the data of few countries: Austria, Belgium, Luxembourg and Netherlands. The comparison between the BOP and RoW data of Austria, Belgium, Luxembourg and Netherlands is available in Annex II.

The reconciliation tables show the transition from the value of goods published in merchandise trade and the corresponding value published in BoP. Reconciliation tables are compiled each year by EU Member States as part of Eurostat's BoP quality report. The data used for Figure 2 are those collected by Eurostat in December 2009 as part of BoP quality report.

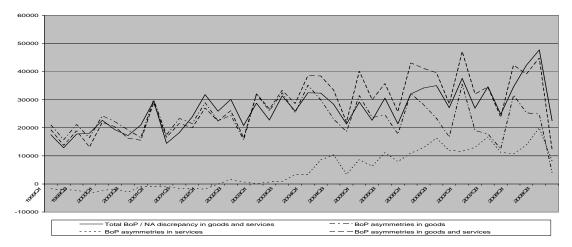




28. Intra-EU asymmetries in services that were almost nil until 2003 have significantly increased from 2004 onwards, almost reaching the size of the asymmetries in goods. This trend is shown in fgure 4. It would be interesting to investigate whether at least part of these asymmetries in services could be due to quasi transit trade being recorded (as merchanting) in the country of the parent company, but not in the member state where the goods are imported and dispatched in quasi transit.

Total BOP/RoW discrepancies in goods and asymmetries

Figure 3



# III. Statistical treatment recommended in international standards

### A. The definition of "quasi transit trade"

- 29. A clear definition of "quasi transit trade" as such is not immediately available from the various manuals. We will therefore propose our definitions and provide references to the definitions of the very same concepts available from the different manuals.
- 30. For the purpose of this chapter, we distinguish between the following distinct but related concepts:
  - "Simple transit trade" describes transactions in goods which simply cross a country on their way to their final destination and that are generally excluded from FTS, BOP and NA.
  - "Re-exports" describes transactions in goods which are imported in a country by a
    resident and then re-exported. Re-exports imply a change in ownership and are
    generally included in FTS, BOP and SNA.
  - "Merchanting" describes purchases of goods by a resident (of the reporting economy) from a non-resident combined with the subsequent resale of the same goods to another non-resident without the goods being present in the compiling economy. It is not included in FTS and is considered as an export of a service in BPM5, 93SNA and 95ESA, but will be part of exports of goods in BPM6, 2008SNA and 2010ESA.
  - "Quasi transit trade" describes transactions in goods which are imported in a
    country by an entity considered non resident by the reporting country and then reexported to a third country within the same economic union or customs area.
- 31. The boundary between re-exports and quasi transit trade is not always transparent. In the context of global manufacturing, MNEs transfer merchandise from one country to another, but it might be difficult to assess whether there has been a change in ownership or not. Ownership of the goods can be shifted from one country to another quite independently from the physical movements of the goods.
- 32. Simple **transit, quasi transit and re-exports have a common element**: in all three cases the domestic supply of goods in the compiling economy is not increased, even if the goods are physically present in the compiling economy.
- 33. Merchanting has a fundamental difference with Simple transit, quasi transit and re-exports: merchanted goods are not physically present in the compiling economy. Merchanting is however of interest in this discussion, as it potentially constitutes the logical counterpart of the observed quasi transit trade phenomenon.
- 34. In chapter 3.2-3.5 we will analyse further the definitions and concepts related to these issues provided by the international manuals.

# **B.** Simple transit - direct transit trade - transport transit trade - goods in simple circulation

35. **Simple transit trade** describes transactions in goods which simply cross a country on their way to their final destination and that are generally excluded from FTS, BoP and NA (93SNA and 95ESA). These kinds of transactions are also mentioned under different terms in the international manuals.

- 36. Intrastat Regulation n°638/2004 Article 2 (g) defines "goods that are in simple circulation between Member States" as "Community goods dispatched from one Member State to another, which, on the way to the Member State of destination, travel directly through another Member State or stop for reasons related only to the transport of the goods". These goods are excluded from EU FTS<sup>3</sup>.
- 37. The *International Merchandise Trade Statistics compilers manual* (IMTS §102.) defines the criteria for identification of "goods being simply transported through a country". "These are goods entering the compiling country for transportation purposes only. Transportation may involve simple handling operations and temporary storage. ... If the goods destination, at the time of crossing the compiling country's border, is another country, these goods are to be treated as being simply transported through the country and have to be excluded from trade statistics".
- 38. BPM5 (§209.) defines "direct transit trade" as "goods in transit through an economy" and specifies that these must be excluded from imports and exports.
- 39. BPM6 (§10.22.a) defines "transit trade" as "goods admitted under special customs procedures that allow the goods to pass through the territory " and specifies that these must be excluded from general merchandise because there is no international transaction.
- 40. ESA95 (3.136) specifies that imports and exports of goods exclude "Goods in transit through a country". 2008SNA (26.50) excludes goods that change location from one economy to another but do not change economic ownership from trade in goods.

### C. Re-exports and re-imports

- 41. **Re-exports** describe transactions in goods which are imported in a country by a resident trader and then re-exported. In this case a change of ownership from the non-resident to the resident enterprise occurs. Re-exports are considered as normal transactions in trade in goods and are included in both the national and the European concept.
- 42. The *International Merchandise Trade Statistics compilers manual* (§136.) defines **re-exports** as "foreign goods exported (or re-imported) ... in the same state as previously imported (or exported)." These goods must be included in total merchandise exports/imports.
- 43. BPM6 defines Re-exports (§10.37) and Re-imports (§10.40). "Re-exports are foreign goods (goods produced in other economies and previously imported) that are exported with no substantial transformation from the state in which they were previously imported. The price of the re-exported good may differ from its price at the time it was originally imported, due to factors such as transport costs, dealer's margins, and holding gains/losses. For goods to be included in re-exports for balance of payments statistics, a resident must acquire, then resell the goods with the goods passing through the territory" (BPM6, §10.37).

### D. Merchanting of goods

44. "Merchanting" is considered a service in BPM5 and defined as "the purchase of goods by a resident (of the compiling economy) from a non resident and the subsequent resale of the good to another non resident" where the goods do not enter or leave the territory of the compiling economy (BPM5 §262). The difference between the value of

<sup>&</sup>lt;sup>3</sup> Regulation n°638/2004, Article 3(2a) and (3b).

goods when acquired and the value when sold is recorded as the value of the merchanting service (BPM5 §262).

- 45. In 93SNA (\$14.60) merchanting is defined in conformity with BPM5 as the activity of merchants or commodity dealers who buy commodities or other goods from non-residents and then sell them again to non-residents within the same accounting period without the commodities actually entering the economy in which the merchants are resident. 93SNA treats the difference between the sales and purchases for resale of such dealers as the value of the services they provide. This is to be recorded under exports of services. If, however, the goods are not resold within the same accounting period, the purchases have to be recorded as imports of goods which are temporarily held in inventory. When they are sold abroad in a later period they should be treated as negative imports.
- 46. ESA95 does not explicitly mention the BPM5 treatment of merchanting as trade in services.
- 47. In BPM6 and 2008SNA "Merchanting" is included under "Other Goods Merchanting of Goods" (BPM6 10.41 to 10.49). Although merchanting arrangements are used in wholesaling and retailing, BPM6 notes that such arrangements may also be used in commodity dealing and for the management and financing of global manufacturing processes. In the latter case BPM6 notes (BPM6 10.42) that "an enterprise may contract the assembly of a good among one or more contractors, such that the goods are acquired by this enterprise and resold without passing through the territory of the owner." BPM6 then continues to state that: "In other cases where the form of the goods does not change, the goods are included under merchanting, with the selling price reflecting minor processing costs as well as wholesale margins. In cases where the merchant is the organizer of a global manufacturing process, the selling price may also cover elements such as providing planning, management, patents and other knowhow, marketing, and financing. Particularly for high-technology goods, these nonphysical contributions may be large in relation to the value of materials and assembly."
- 48. According to BPM6: "The treatment of merchanting is the following:
- (a) The acquisition of goods by merchants is shown under "Goods acquired under merchanting" as a negative export of the economy of the merchant.
- (b) The sale of goods is shown under "Goods sold under merchanting" as a positive export of the economy of the merchant" (BPM6 §10.44).
- (c) In the counterpart exporting and importing economies, export sales to merchants and import purchases from merchants are included under "general merchandise" (BPM6 §10.45)."
- 49. It follows that whereas merchanting as a service (or as a good) is by definition recorded asymmetrically, "gross" recording as trade in goods, encompassing both general merchandise and goods under merchanting, is symmetrical.
- 50. Goods under merchanting are out of the scope of merchandise trade statistics and must be collected with business surveys<sup>4</sup>.

<sup>&</sup>lt;sup>4</sup> United Nations Statistics Division (UNSD), "International Trade Statistics, concepts and definitions, 2010", draft of 29 July 2009, specifies that goods under merchanting are excluded from international merchandise trade statistics, (2010IMTS, §1.48).

## E Quasi transit trade - disguised transit trade - indirect trade - quasi trade

- 51. According to merchandise trade terminology, "quasi transit trade" describes transactions where goods enter an economic union through a member state, are cleared for free circulation within that economic union (with custom duties paid) and are finally dispatched to another member state. The same kind of trade is also known as "disguised transit trade", to be distinguished from goods in "simple transit", where no administrative clearance takes place.
- 52. Quasi transit trade concerns mainly imports, but also exports may be affected, to a smaller extent<sup>5</sup>.
- 53. National Accounts manuals (95ESA, 93SNA and 2008SNA) do not make any reference to quasi transit trade.
- 54. 95ESA (§3.132) states that "Imports and exports of goods occur when there are changes of ownership of goods between residents and non-residents". 93SNA (14.88) defines exports of goods as "sales, barter, gifts, or grants" from residents to non residents.
- 55. 93SNA (14.59) and 95ESA (3.132 and 3.133) allow for an exception to the change in ownership rule in case of delivery of goods between affiliated enterprises (branch or subsidiary, or foreign affiliate): "a change of ownership is to be imputed whenever goods are delivered between affiliated enterprises".
- 56. This exception has been removed from 2008SNA, which together with BPM6 now strictly follows the change of ownership principle (2008SNA, para 26.20-26.21).
- 57. According to this national accounts' terminology, quasi transit trade can be defined as goods that are imported in a country and then re-exported by an entity which does not acquire the ownership of the concerned goods.
- 58. Alternatively, quasi transit trade can be described as re-exports of goods where the owner of the goods is not a resident in the reporting economy.
- 59. In the country where the goods enter the EU and are cleared for free circulation, the entity which is handling the import of the goods may be a logistics service provider, a fiscal agent or a tax representative. It is also possible that there is only a VAT-number with no staff employed, required to comply with the necessary customs declarations of importing the goods into the EU as well as with the necessary Intrastat declarations. In this case all declarations are done by the non resident merchant or manufacturer, possibly using the services of a fiscal agent.

### 4. Measurement problems

- 60. The following chapters 4.1-4.2 provide a detailed explanation of the way merchandise trade data are collected in the EU and explain from what peculiarity of the collection system the quasi transit trade problem occurs.
- 61. A more general issue is however worth mentioning. The measurement problem behind quasi transit trade and behind the similar phenomena affecting national data is

<sup>&</sup>lt;sup>5</sup> E.g. some Baltic EU member states, according to their Extrastat data, export goods which clearly cannot have origin in these member states, like French wine. But the Intrastat arrival declaration from another EU member state is missing.

caused by the differences in the way international merchandise trade data are recorded and collected (crossing border) and the definition in the SNA (change of ownership).

- 62. International merchandise trade records the value of the goods at the moment of crossing the border, which is generally considered a good proxy for the change of ownership. However goods increasingly move across borders quite independently from the way the ownership moves.
- 63. The moment of crossing the border does not necessary reflect the moment of change of ownership, and the value declared when crossing the borders does not necessarily correspond to a transaction between a resident and a non resident.

### A. Collection of data on merchandise trade in the European Union

- 64. The European Union (EU) is an economic union with a common customs territory. The customs union entered into force on 1 July 1968 and since then the EU member states apply a common tariff to extra-EU imports. There are no customs duties on intra-EU trade.
- 65. Customs duties are due when the goods are released for free circulation within the EU<sup>6</sup>. Other duties (such as alcohol or tobacco excises or VAT, which are not harmonised across the EU countries) are due when the goods are released for consumption. Release for consumption (i.e. payment of VAT and excise duties) is virtually always done in the country of destination.
- 66. The internal market was largely completed as of 1 January 1993, when all border controls within the EU were abandoned. Since then two different procedures are in place for collecting data on trade in goods among EU member states and with other countries: the Intrastat and the Extrastat system.
- 67. The Intrastat system has been created for collecting data on trade in goods between EU member states, is linked to the value added tax system, based on enterprise surveys and collects data according to the country of consignment (in case of arrivals) and destination (in case of dispatches)<sup>7</sup>.
- 68. The Extrastat system is based on customs data and collects data according to the country of origin/final destination.

# B. Goods entering the EU in a member state and then moving to other member states: the Rotterdam effect

69. When the goods enter the customs territory of the Community, they are subject to customs supervision in the country where the goods are located until their custom status is changed (art 91 EC 450/2008). If customs clearance takes place in a member state which is not the country of final destination (but a member state located at the external frontier of the European Union such as the Netherlands or Belgium) movement of goods between a

<sup>&</sup>lt;sup>6</sup> Since 1975 (for coal and steel since 1988) the revenue from these customs duties (incl. agricultural levies) has been an EU own resource. Member states keep a collection fee of 10% (25% since 2001). The fiscal representatives may pay the import duties. The GNP Committee has examined the problem of import duties paid by non-residents in relation to the eventual need to adjust (=reduce) the national figures of import duties, "Import duties paid by non-residents, the Rotterdam effect and the accession effect", 42nd meeting of GNP Committee, 3-4 July, Eurostat/B1/CPNB/342.

Eurostat, "Guidelines for the Implementation of the Intrastat Legislation", MET 956 rev1, January 2008, pages 28-29.

non-Member country and a member state will be divided into two trade flows: one reported within Extrastat, the other reported for Intrastat.

- 70. According to Extrastat, an import or export has to be declared in the member state where the goods are cleared by customs for free circulation (i.e. submitted to custom duties and released for import, export or processing in all the territory of the EU) even if the final destination of these goods is another EU member state. When these goods are dispatched to the member state of final destination, an Intrastat dispatch declaration has also to be filled.
- 71. Community statistics require the application of this double reporting to assure that export and import data from non-EU countries at aggregate level are as accurate as possible and not affected by double counting or omissions. When the goods enter the territory of the European Union the statistics closely reflect customs` records. Extrastat statistics are in fact based on a copy of customs` records, the customs` single administrative document (SAD)<sup>9</sup> declaration. The statistical recording of successive movements of these goods across Europe produced via the Intrastat survey system is inherently not so accurate. Moreover, in Intrastat the information related to the country of origin is not obligatory, the reporting agent in the country of final destination may therefore not be aware of the non-EU country of origin of the goods and have only the information related to the country of consignment.
- 72. The phenomenon of "quasi transit trade" is generally attributed in Europe to the interface between the Intrastat and Extrastat trade data collection systems and has traditionally been described by the experts in merchandise trade as 'Rotterdam effect', from the name of one of the main ports where goods enter the EU.
- 73. However, experts believe<sup>10</sup> that the Rotterdam effect is not confined to trade between EU member states, but can affect trade between any pair of countries where goods are transported via the territory of one or more other countries before reaching the country of final destination. In all these cases problems of asymmetries may exist between the data on exports reported by the country of origin and the data on imports reported by the country of final destination that may not know where the goods are originating from.
- 74. As the Hungarian case in Annex III shows, phenomena similar to quasi transit trade can arise whenever a merchant (or a MNEl involved in global manufacturing) imports goods in a country which is not his country of residence.
- 75. It is worth mentioning that the possibility to clear the goods for free circulation in an EU country which is not the country of final destination may crucially depend on the means of transport. "As a general rule, for non-community goods that enter the EU via road the transit procedures (the TIR or the common transit procedure) are used, i.e. the goods are not treated by customs at the EU frontier, but in the country of destination. Similar considerations apply to rail. For air transport there will be no effect to the extent that airfreight will tend to arrive in an airport of the country of destination (an effect could however be imagined for airports with significant cargo volumes that are close to another member state's border (Luxembourg is an example of this case). For goods arriving via the sea (maritime transport), the likelihood that the goods are treated by customs in the country

The reference for this point is: Eurostat, "Guidelines for the Implementation of the Intrastat Legislation", MET 956 rev1, January 2008, pages 66-68.

<sup>&</sup>lt;sup>9</sup> The SAD is the form that the EU companies involved in trade with third countries have to fill and to present to the Customs. See

http://ec.europa.eu/taxation\_customs/customs/procedural\_aspects/general/sad/index\_en.htm

HM Revenue and Customs, 'Analysis of asymmetries in intra-community trade statistics with particular regard to the impact of the Rotterdam and Antwerp effects', Edicom report 200453202017, December 2005, page 4.

(harbour) of first entry is much higher than for the other means of transport. Therefore, it can be assumed that island states with their own access to the sea are unlikely to face a significant ... (quasi transit trade) effect. Countries with large harbours – such as Rotterdam or Antwerp - serving as an entry point for hinterland countries without access to the sea will tend to show a significant positive ... (quasi transit trade) effect. The hinterland countries will show a negative effect" 11.

- 76. While merchandise trade data (and BOP data) transmitted to Eurostat have to include quasi transit trade, member states are free to produce and publish national merchandise trade data compiled according to other criteria.
- 77. Only a few EU member states are able to identify and exclude correctly this type of trade from their national statistics<sup>12</sup>. The statisticians of most EU member states have no means to establish if what is imported by a non-resident does remain in their country or not, so they assume that whatever is cleared for free circulation in their country is also imported (and consumed) in the country or re-exported.
- 78. Extrastat legal provisions have been recently revised to adapt statistics on trade with non-member states to the Modernised Custom Code introduced with the Regulation n° 450/2008 (OJ n° L145, 4/06/2008). Article 106 of the Modernised Customs Code introduces the possibility of "Centralised Clearance". The 'Centralised Customs Clearance' procedure allows companies to lodge the customs declaration in any member state and not necessarily in the member state where the goods enter the European Union and are submitted to customs controls<sup>13</sup>. Under this new procedure, the lodging of the customs declaration may therefore be dissociated both from the place of entry or exit of the goods in the EU and from the place of final destination.
- 79. It is not clear, yet, what consequences the new system shall have on "quasi transit trade" in the short term. In the long term, when data exchange systems between member states will be established, it is possible that the "quasi transit trade" problem could disappear, because the compilers in the country of final destination would be able to allocate correctly these kinds of imports to the country of origin.
- 80. We however doubt that the traders and the MNEs that are currently availing themselves of the possibility of reflecting higher prices for goods after the goods are cleared for free circulation in the European Union (and the import duties are paid) and before the goods are finally delivered to the member state where the goods will be consumed, might have an interest in applying the 'Centralised Customs Clearance' procedure.

"Import duties paid by non-residents, the Rotterdam effect and the accession effect", 42nd meeting of GNP Committee, 3-4 July 2003, Eurostat/B1/CPNB/342, page 4.

The Centralised Customs Clearence and the Single European Authorisation will enable economic operators to centralise the accounting and payment of custom duties for all transactions in the authorising member state (which should be the one where the economic operator has the main accounts, documentations and records) although the movement of goods may take place in another Member State.

For Extrastat, quasi-transit can be considered to coincide with transactions where the declarant use customs procedures that exempt him from payment of the VAT in the EU member state of entry of the goods (identified by procedure codes 42 and 63). Linking the Extrastat import with the subsequent Intrastat movement is more difficult. Netherlands is able to distinguish between quasi transit and normal trade because in its Intrastat forms it requires an additional field for the Special Procedure code. The method used by NL to identify quasi-transit trade is decribed in: "EU study on the Rotterdam effect", Edicom contract n°741100020, page 7-10. See also: HM Revenue and Customs, 'Analysis of asymmetries in intra-community trade statistics with particular regard to the impact of the Rotterdam and Antwerp effects', Edicom report 200453202017, December 2005, page 8.

81. It should also be considered that in many cases at the time of import the merchant (or the MNE) does not necessarily know the final destination of the imported goods. The lodging of the custom declaration will be done by his fiscal agent that will still be in Rotterdam or Antwerp; the fiscal agent, not knowing the final destination of the goods, will still report Netherland (or Belgium) as country of destination. As long as there is a time lag between the physical imports of the good and actual selling (change in ownership) the transit trade problem will probably exist.

### V. Proposals for operational treatment in the accounts

# A. The analysis and conclusions of Task Force on the Rest of the World Account

- 82. In June 2007 Eurostat and the ECB started publishing quarterly sector accounts for the EU (and the euro area) seen as a single entity<sup>14</sup>. These accounts also show interactions between the EU (or the euro-area) and the rest of the world. To produce EU and euro-area sector aggregates, intra EU (and intra euro-area) transactions had to be removed from the Rest of the World account<sup>15</sup>. Since quarterly RoW data produced by the member states have no geographical breakdown, BOP was identified as the source of the information related to the breakdown between intra and extra EU transactions.
- 83. Eurostat/ECB Task Force on the Rest of the World Account (the TF RoW) was setup to investigate the problems that should be addressed to make BOP more respondent to the needs of sector accounts compilers. In a first round of work, TF RoW recommended the regular reporting of the detailed BoP transactions related to income and transfers that allow for a better match with the corresponding transactions complied in sector accounts<sup>16</sup>. In a second round of work TF RoW analysed the reasons of the discrepancies between BOP and RoW and produced recommendations for increasing consistency between the two data sets<sup>17</sup>.
- 84. In relation to the item "Goods", the largest contributor to differences between BOP and RoW identified by the TF was "Quasi transit trade".
- 85. "Quasi transit trade" data are included in the national contributions from BOP and merchandise trade statistics reported to Eurostat, but not in the RoW data of some member states.
- 86. This causes large differences in the gross values of exports and imports resulting from BOP and RoW, but also large gaps between the balances of the goods account measured in the two frameworks. The values of quasi transit exports are in fact substantially higher than the value of the quasi transit imports, and the gap is much larger than what can be expected to result from storage, tax, transport and insurance fees.

For details on the European sector accounts see http://epp.eurostat.ec.europa.eu/portal/page?\_pageid=2553,64638007,2553\_64938511&\_dad=portal& cohome=POPTAI

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See the draft Chapter 19, "European accounts", of ESA2010, § 19.35-19.37.

<sup>&</sup>lt;sup>16</sup> "Task Force on the Rest of the World account, final report", 23 December 2003, CMFB 04/01/B4.

<sup>17 &</sup>quot;TF RoW: Consolidated reports", BP/07/31, 4 October 2007. TF RoW2 reports were presented to the CMFB in January and June 2007; the consolidated version of the varoious reports has been circulated as document BP/07/31.

- 87. To ensure that the balance of trade in goods shown by EU BOP and EU RoW are comparable, TF RoW recommended that an adjustment under services should be introduced to explain the gap in the value of quasi transit trade imports and exports.
- 88. TF RoW also considered the possibility that problems of transfer pricing could be an underlying reason behind the "quasi transit trade" phenomenon.
- 89. Intra-group transactions in goods and services can be valued by MNEs at artificially high/low prices when they enter the EU, with the purpose of realising profits in one country rather than another for fiscal reasons or for minimising custom duties.
- 90. The TF concluded that it would not be appropriate to revise (upwards) the value of intra-group transactions related to goods imported from non-EU countries, because of the effect this would have on value indexes. Furthermore the companies involved in this quasi transit trade, if questioned about the reasons for this increase of the prices, would reply that the observed price gap constitutes a trade margin that covers outlays made for research, planning, marketing and advertising services provided by the parent company.
- 91. It should also be considered that transfer pricing is generally attributed to a resident unit which generates value added and profits and pays taxes. In case of quasi transit trade no resident unit is involved, therefore transfer pricing seems out of scope.
- 92. In relation to quasi transit trade, the following definitions and guidelines are included in the "Balance of Payments Vademecum", the reference document for the transmission of member states' data to Eurostat.

### BOP Vademecum, Eurostat, November 2009

BOP item 201, Current account, Services, Branding, Quasi-transit adjustment shall be used by the member states affected by the phenomenon of "Quasi-transit trade" to report the gap between the value declared when the goods are initially imported from a non-EU country and their value when dispatched to another EU member state.

"Quasi transit trade is a term used to define goods which enter the European Union in member state A, are cleared for free circulation (and submitted to import duties) in member state A, are then dispatched to the EU member state B.

In member state A, a company with little or no staff employed (but with a VAT number) might be managing the customs procedures related to these goods. In case member state A treats this company as non-resident for national account purposes, the transactions concerned would not be included in the goods compiled according to the national concept. However, they are included in the community concept followed in merchandise trade and BOP. Theoretically, "quasi transit trade" should have no impact in net terms. In practice the value of the goods re-exported can be much higher than the value of the goods which entered member state A. This creates significant differences between the net value of trade in goods recorded in BOP and in RoW.

The gap between imports and dispatches (excluding changes in price due to storage, tax and insurance) should be recognised in BOP as "Service", at least when reporting data to Eurostat and the ECB.

For practical reasons, (i.e. regardless of whether this is an intra-group transaction or transaction between independent parties), Eurostat and the ECB prefer the imputation to be made under "Branding", BOP item 201. The geographical breakdown should be compiled on the basis of the country of residence of the parent enterprise controlling the company that manages the customs procedure related to these goods in the reporting economy. Consultations with the counterpart countries (which should record a corresponding export of services) are encouraged in order to reduce intra EU asymmetries.

### B. Implications of the TF ROW recommendations.

- 93. In terms of national accounts, the treatment agreed implies that the value added generated by the trade margin (corresponding to the price difference between quasi transit trade imports and subsequent dispatches), is attributed to the country of residence of the importer, 'X'.
- 94. Table 1 shows the way the quasi transit trade transactions and the connected services imputation could be recorded in the national accounts of the countries involved: Y, the exporting country, A (the point of entry in the economic union, and hence the country compiling the FTS import data in Extrastat and recording the Intrastat dispatch), B (the country of final destination(s) in the economic union), and X (the country of residence of the importer). The consolidated external account for the economic union is also shown. Table 1 shows the recording when country X does not belong to the economic union, Table 2 when country X does belong to the economic union.

Table 1
Treatment of quasi transit trade according TF ROW recommendations
Country X outside the economic union

External accounts Country Y		Economic union Country A		Country B		Economic union		Country X		
	Uses	Res	Uses	Res	Uses	-	Uses	Res	Uses	Res
Exports/Imports of goods	50		150	50		150		50		
Exports/Imports of services				100				100	100	
Trade balance		50		0		-150		-150		100
Financial accounts										
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	50				-150		-150		150	50

 $\begin{tabular}{ll} Table 2\\ Treatment of quasi transit trade according TF ROW recommendations\\ Country X part of economic union \end{tabular}$ 

External accounts	Country Y		Economic union Country A		Country B		Country X		Economic union	
	Uses	Res	Uses	Res	Uses	Res	Uses	Res	Uses	Res
Exports/Imports of goods	50		150	50		150				50
Exports/Imports of services				100			100			
Trade balance		50		0		-150		100		-50
Financial accounts					_		_			
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	50					100	100			50

- 95. It is noted that, whereas this solves the discrepancies occurring in the recording of the quasi transit trade in the country of consignment (country 'A'), it puts additional burdens on the statistical reporters of country 'A' that have to identify the geographical breakdown of the margins recorded.
- 96. As regards country 'X', there are doubts if it is equipped to record the value added that it obtains from purchasing or manufacturing goods in country Y and re-selling these goods at a significant margin in country B. The BOP and hence the RoW of that country

may not record the merchanting or branding margins, as it might simply be unaware of these. Business statistics will probably provide the accurate information, but business statistics might not be able to attribute the trade margin to the RoW, because business statistics generally do not provide a geographical breakdown for purchase of goods and services and for the value added.

- 97. If the real owner of the goods, located in country X is a merchant, the transactions might be recorded and captured via the survey on merchanting. But if a MNE is involved in global manufacturing, it is very unlikely that the company will be part of a survey on merchanting, the value added will therefore escape external trade statistics. The transactions of MNEs will be captured by business statistics, but business statistics might be challenged to attribute the trade margin to the RoW and will not provide any geographical breakdown.
- 98. Obviously, if the accounts of the importer (located in 'X') reflect the value of the goods imported as 50 and the cost of goods sold as 150, there is no reason for the accounts of this enterprise not to reflect the 100 trade margin. Hence the value added, as measured by the production approach or income approach will be measured correctly. However the national accounts compilers will need to identify the correct expenditure components to reconcile the expenditure approach. Here the compilers in country 'X' are faced with difficulties in identifying either the export of merchanting or branding services as the correct expenditure category, and might incorrectly assign these to domestic uses.

# C. The impact of the new manuals (BPM6 and 2008SNA) on the proposed treatment

- 99. As noted in section 1.3, the BPM6 and the 2008SNA take a firm view on the application of the change in ownership as being the only criterion in determining imports and exports. In the 2008SNA para 26.21 it is explicitly stated that there are no exceptions on this point.
- 100. How will the treatment proposed by TF RoW be affected by the introduction of the new manuals?
- 101. It is possible that, under the provisions of the new manuals, by adhering to the change of economic ownership criterion and following the new treatment of merchanting, the treatment of 'quasi transit trade' might be conceptually simplified as regards the national point of view.
- 102. The recording based on the new manuals is described below. In table 3 country X does not belong to the economic union? In table 4 country X is part of the economic union.
- 103. Country 'A' would not to report any trade. Even as goods cross into the national boundaries, no change of ownership occurs, and the 'simple transit trade' treatment would follow. Country B as before would record the import of the goods at the full value of 150. Country X would record under merchanting a negative export of 50, as a counterpart entry to the export value of country X, assumed to be outside the economic union, and would record a positive export of 150, as the counterpart entry to the imports of country B. In the case that country X does not belong to the economic union, the accounts of the economic union would show the value of external trade as 150, i.e. the value of the goods as they arrive in country B. In the case that country X would form a part of the economic union, the accounts of the economic union would reflect imports from country Y to the value of 50. Note that country 'B' should record the goods as imported from country 'X'. This would require that merchandise trade data fully follow the change of ownership and not the movement of goods.

Table 3 **Treatment 2008SNA, Country X outside economic union** 

External accounts  Country Y		Econon Countr	nic union v A	Countr	Country B		Economic union		Country X	
	Uses	Res	Uses	Res	Uses	Res	Uses	Res	Uses	Res
Exports/Imports of goods	50					150		150	-50	
Exports/Imports of services									150	
Trade balance		50				-150		-150		100
Financial accounts					-					
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	50				-150				100	

Table 4
Treatment 2008SNA, Country X inside economic union

External accounts			Econon	nic union							
	Country Y			Country A		Country B		Country X		Economic union	
	Uses	Res	Uses	Res	Uses	Res	Uses	Res	Uses	Res	
Exports/Imports of goods	50					150	-50			50	
Exports/Imports of services							150				
Trade balance		50				-150		100		-50	
Financial accounts					-		_				
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	
	50					100	100			50	

- 104. According to the provisions of the manuals and under the assumption that the data sources will adapt to the new definitions of change of ownership, the quasi transit trade problem should cease to exist.
- 105. However, if merchandise trade data continue to follow the movement of goods, as is to be expected, country 'B' would continue to record the goods as imported from country 'A', and "adjustments" will still be necessary in the data of country 'A', to assure a correct value and geographical specification for the data of the economic union.
- 106. Inasmuch as the new manuals require country X to record these transactions under goods (as merchanting of goods), the current proposed treatment of recording the counterpart under services (branding) might need to be re-evaluated, to avoid introducing asymmetries.

### VI. Recommended future work on the issue

- 107. Quasi transit trade was analysed in a very comprehensive way in this paper. The following issues would however need further investigation.
- (a) To further investigate the relationship between merchanting and quasi transit trade
  - (i) Investigate the available geographical detail of the observed quasi transit trade. Individual countries will have severe problems to identify country 'X', the

country of residence of the merchant. Inasmuch as the merchant is resident within the EU, mirror statistics from BoP surveys on merchanting may be of assistance.

- (ii) Investigate the recording of the transactions in country 'X' (the residence of the merchant or global manufacturer). Country 'X' is where the value added corresponding to the price gap should be recorded and where in principle a "merchanting" transaction corresponding to the value of the price gap should be recorded.
- (b) Analyse the effect on quasi transit trade of the 'Centralised Custom Clearance' procedures.
- 108. This paper also highlighted problems similar to those created by quasi transit trade that affect national data, and this issue would also deserve further research.
- (a) Analyse this type of problems within a country, in a similar way as the Hungarian Central Statistical Office has done (see Annex III)

### VII. References

Eurostat, "TF RoW: Consolidated reports", BP/07/31, 4 October 2007.

Eurostat, "Guidelines for the Implementation of the Intrastat Legislation", MET 956 rev1, January 2008.

Eurostat, European System of Accounts, 1995 ESA and 2010 ESA (draft).

EU, IMF, OECD, UN, WB, System of National Accounts, 1993 SNA and 2008 SNA.

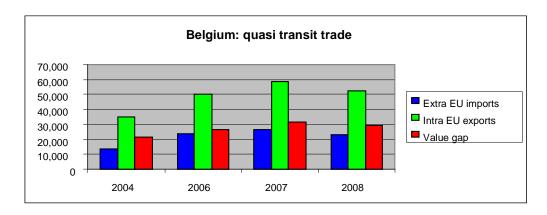
IMF, Balance of payments and International Investment Position Manual, 5th and 6th edition. Eurostat (BPM5 and BPM6).

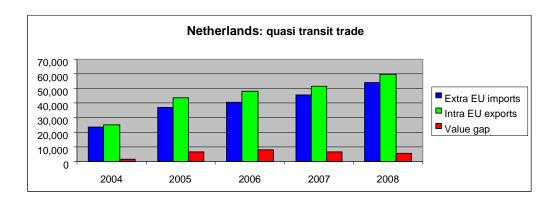
Sandor Csizmazia, "About a valuation problem of transactions with the rest of the world in Hungary", Conference of European Statisticians, 10-12 June 2008, ECE/CES/2008/37.

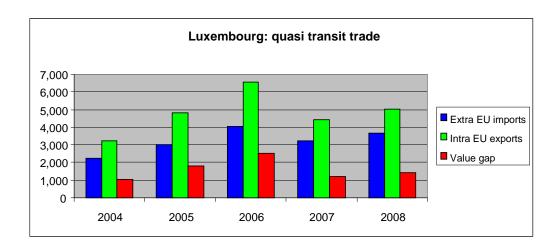
United Nations Statistics Division (UNSD), "International Trade Statistics, concepts and definitions", (IMTS, rev2 and IMTS2010).

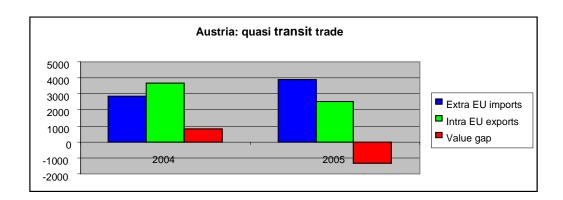
Annex 1

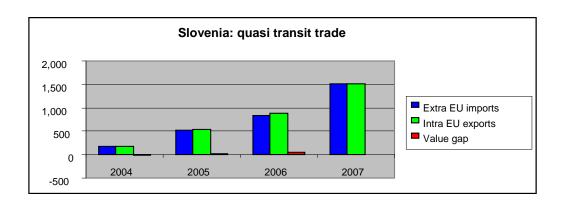
# Quasi transit values in some European countries, in millions euro





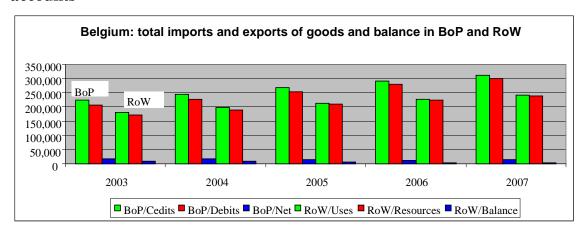


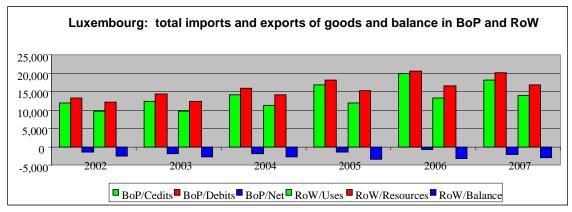


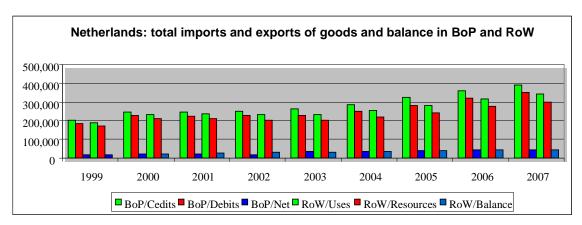


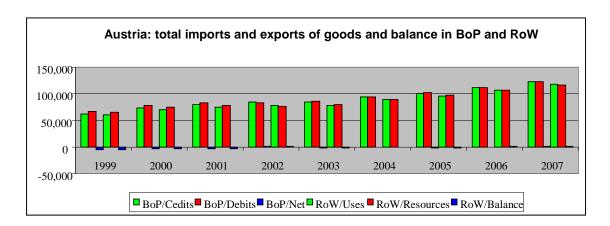
Total trade in goods (with partner world) in BoP and RoW accounts

Annex 2









### Annex 3

# Valuation problem of transactions with the rest of the world: case study by the Hungarian Central Statistical Office<sup>18</sup>

### A. Summary

- 1. The balance of external merchandise trade of Hungary has been improving since accession to the European Union. The former negative balance has significantly decreased by 2007. A key role in the improvement of the balance is played by both a group of special distributors and as revealed by our analysis the related valuation problem.
- 2. To analyse the role of the special distributors' group, cash data of the line "goods" in the balance of international payments for the period 2003–2006 were used in addition to statistics on external merchandise trade. The analysis of comparable data covered detailed enterprise level data too.

### B. Discussion

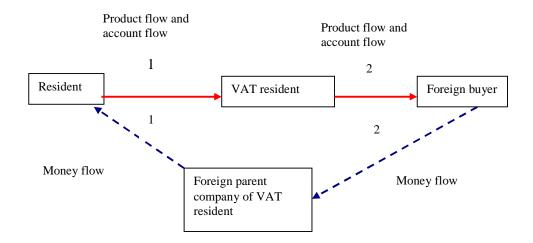
- 3. The valuation problem refers to a group of special distributors, the **VAT residents** of foreign enterprises in Hungary. In accordance with the legal rules in effect, a foreign firm in Hungary similarly to other countries, for the purpose of performing commercial activity –, is allowed to claim to come within the provisions of Act on value added tax, and to apply for a tax number without being required to set up a business, have a local unit or employ a person. The distributor is obliged to submit a value added tax return but is not obliged to make a corporate tax return.
- 4. To compile external merchandise trade statistics, export and import data are collected directly from the distributor group or obtained from customs records. Although export share of the distributor group was insignificant at the time of accession to the European Union, it is more than 10 per cent today, and they have an even more important role in influencing the balance of external trade.
- 5. Based on the analysis, the different valuations and differing measurements applied by external merchandise trade statistics and settlement statistics can be illustrated by the following basic transactions:

#### 1. Exports

(a) Transactions: a Hungarian resident sells products to a VAT resident in Hungary, and then the VAT resident sells the products abroad. The transaction can be illustrated in the following manner (Figure 1):

This paper was prepared by Sándor Csizmazia, Hungary Central Statistical Office, and presented to the Conference of European Statisticians, 10-12 June 2008, Seminar on "Strategic issues related to measuring international transactions", Paris, 10-12 June, 2008, document ECE/CES/2008/37.

Figure 1 **Exports** 

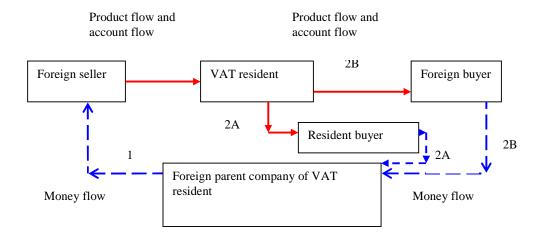


- (b) Product flow and account flow: between the resident and the VAT resident in Hungary (1), and from Hungary abroad (2).
- (c) Money flow: transfer from the account of the parent company of the VAT resident to the resident company (1), and from the foreign company buying the product to the account of the parent company (2). By involving the VAT resident, the transaction (and thus the value) measured in external merchandise trade statistics and balance of payments statistics is different.
- 6. Comments: the transaction between the resident and the VAT resident is a domestic transaction from the point of view of the VAT system, the resident makes out the invoice to the name of the VAT resident, and it is included in the value added tax return of both of them, but the product becomes the property and is recorded in the books of the parent company of the VAT resident. From the angle of settlement statistics the export transaction takes place already between the resident and the VAT resident. In external merchandise trade statistics the value of the transaction between the VAT resident (essentially its parent company) and the foreign buyer is measured.

### 2. Imports

(a) Transactions: the VAT resident imports the product, after which in case A sells it to the resident, or in case B sells it abroad.

Figure 2 **Imports** 



#### Case A:

- (a) Product flow and account flow in case A: in stage one from abroad to Hungary (1), i.e. between the foreign company selling the product and the VAT resident, while in stage two in Hungary, between the VAT resident and the resident company (2A).
- (b) Money flow: from the Hungarian resident to the foreign parent company of the VAT resident (2A), and between the parent company and the foreign seller (1).
- 7. Comments: from the point of view of external trade statistics imports take place in stage one, whereas in settlement statistics the second transaction is measured, the value of which is different from that of the first transaction.

### Case B:

- (a) Product flow and account flow in case B: compared to case A in stage two, the product is exported (2B) after import (re-export transaction).
  - (b) Money flow: between foreign companies (2B), residents are not involved.
- 8. Comments: Both transactions are measured in external trade statistics, but none of them in balance of payments statistics.
- 9. In the first case the value of exports measured by external trade statistics is higher than exports measured in settlement statistics, while in part A of the second example the value of imports is lower than imports registered in settlement statistics. Purchasers' price and sales price measured in external merchandise trade statistics may be different in case 2B as well, while the total turnover and the possible balance are excluded from settlement statistics. The difference between the two types of statistics is realized in both cases in the books of non-resident enterprises.
- 10. In practice, in addition to the above basic cases several variations of external trade transactions may take place with the help of VAT residents, if, for example, the transaction is realized with the involvement of a VAT warehouse, or combined with re-export following processing under contract.
- 11. In macro statistics (national accounts and balance of payments statistics) the above-mentioned distributors can be regarded as "notional units", or as in the Hungarian case -

non-residents. External merchandise trade data are used in the two statistics in their own data systems, therefore, to ensure consistency, it is necessary to valuate transactions identically at national level, and make estimations of the trade margin realized by foreigners.

12. Three methods were analysed to estimate the differing measurements of external merchandise trade statistics and settlement statistics, i.e. revenues realized abroad:

#### (a) Balance difference method

13. HCSO managed to delimit a group of resident enterprises to which VAT residents with significant turnover can be assigned as transactors. Turnovers, i.e. invoice value, "corresponding" to balance of payments transactions, were estimated for residents and VAT residents thus defined. The export and import balance of residents is overestimated in external trade statistics by the difference between the estimated merchandise trade balance and the cash balance.

#### (b) Estimation using VAT data of VAT residents

14. VAT residents distribute products, their value added tax returns contain relatively simple transactions. Using VAT data a simplified balance of revenues (the sum of export and domestic sales) and expenditure (the sum of import and domestic purchases) and, based on this, the sales surplus and its proportion to total sales can be compiled. Assuming that prices are identical in each export direction, and multiplying exports of the abovementioned distributor group by the proportion of the sales surplus equals the sales surplus realized by foreign enterprises.

#### (c) Imputed trade margin method

- 15. The surplus realized on imports and exports is calculated by imputing the percentage trade margin specific for international business practice, assuming that total imports are sold in Hungary and total exports derive from the Hungarian market.
- 16. In the first two cases the difference can be divided between exports and imports according to their proportion to each other, while in case of the third method the division is given. The order of magnitude of the results received by the three methods was identical.

#### C. Conclusion

- 17. The balance of goods measured in external merchandise trade statistics contains a component that is related to foreign enterprises, is recorded in their books and cannot be deduced from residents' transactions. Accounting for the correction concerning foreign enterprises may be the following in macro statistics:
- (a) Adjusting external trade prices to domestic prices, i.e. valuating imports at domestic sales prices and exports at domestic purchasers' prices. Price adjustment requires the division of the difference between exports and imports.
- (b) Accounting for the revenue surplus of foreign enterprises as services imports or income.