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Jalaleddin Jalali\*

## Valuation of East-South Trade Data

*Trade between the developing countries and Eastern Europe has been less subjected to analytical scrutiny than trade among other regions.<sup>1</sup> This is partly because the share of this trade in world trade is relatively small, but also because economic information and data on this trade are scarce, incomplete and of uncertain reliability. The objective of this article is to place East-South trade in perspective, review the available databases bearing on this trade, and examine the main analytical problems involved in the use of such data.*

For the purpose of this paper the world has been divided into three groups of countries:

- *West*: the OECD countries except Portugal, Greece, and Turkey;<sup>2</sup>
- *East*: the European members of the Council for Mutual Economic Assistance (CMEA), namely, Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland and Romania, plus the Soviet Union, also referred to as Eastern European countries;
- *South*: all other countries, also referred to as developing countries or less developed countries (LDCs).

World trade in 1985 amounted to about \$1,922 billion in fob prices, distributed among the six major categories of trade as shown in Table 1.<sup>3</sup>

The UN World Trade Matrix also indicates that in 1985 the South had \$843 billion in merchandise trade compared to \$223 billion for the East. In other words, the value of the LDC's total trade in 1985 was about four times that of the Eastern European countries.<sup>4</sup>

The data on the size and share of East-South trade in world trade crucially depend on the definitions of the East and the South. Certain aggregate data have been compiled by others but they are generally tailor-made for specific uses. For example GATT, in its 1986-87 edition of *International Trade*, has a brief discussion of the size and evolution of East-South trade, but its country groupings are very different from ours. Specifically, it includes China in the East rather than the South, and also excludes Greece, Turkey, South Africa, Portugal

and Yugoslavia from the South. Many would include countries like China, Yugoslavia, North Korea, Vietnam, Albania, Cuba and Mongolia in the East rather than the South. If China and Yugoslavia were reclassified in this way, East-South trade in 1985 would increase from \$54 billion to \$68 billion, or 3.5% of world trade according to the UN's trade matrix.

Regarding the trend of East-South trade over time, UNCTAD has published trade matrices for selected years from 1970 to 1986 but it has its own country classifications.<sup>5</sup> By utilizing the UN Statistical Office's COMTRADE database and making adjustments for the conversion of cif/fob prices,<sup>6</sup> one comes up with the data on East-South trade corresponding to our classifications shown in Table 2.

<sup>1</sup> Developing countries' trade with Eastern European countries has been examined by, inter alia, Marie Lavigne: Soviet Trade with LDCs, in: East European Economies, Joint Economic Committee, Congress of the United States, 1988; Padma Desai: CMEA and Less Developed Countries: Trade Patterns and Prospects, Discussion Paper No. 264, Columbia University, International Economic Research Center, New York, October 1984; S. Schulz and H. Machowski: CMEA Relations with the Third World, in: INTERECONOMICS, Vol. 21 (1986), No. 4, pp. 194-202; Elisabeth Kridl Valkenier: The Soviet Union and the Third World, Praeger, New York, 1983; Istvan Dobozi and Andras Inotai: Prospects of Economic Cooperation between CMEA Countries and Developing Countries, in: Christopher T. Saunders (ed.): East-West-South, Economic Interactions between Three Worlds, MacMillan Press, London, 1981; Marian Paszynski: The Economic Interest of the CMEA Countries in Relations with Developing Countries, in: Christopher T. Saunders (ed.), op. cit. By and large, they have addressed issues in the political economy of this trade.

<sup>2</sup> This definition of the West corresponds to the World Bank's definition of "Developed Market Economies".

<sup>3</sup> The UN's World Trade Matrix seems to be the only publicly available database from which the regional distribution of world trade according to the above country groupings could be obtained. Presently, 1985 is the last year for which this matrix has been constructed.

<sup>4</sup> Total trade of a region is defined as the value of all merchandise in whose trade that region is involved, without any double-counting.

<sup>5</sup> UNCTAD includes Greece, Portugal, Israel, South Africa and Gibraltar in the group of industrial countries while in our classification they belong to the South.

<sup>6</sup> Cif prices are assumed to be 10% above fob prices.

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Accordingly, the adjusted UNCTAD value for East-South trade in 1985 is \$63.5 billion, 18% larger than indicated by the UN matrix, and accounting for 3.3% of world trade. From 1970 to 1983 the value of East-South trade grew at about the same rate as, or slightly faster than, world trade, and the share of East-South trade in world trade increased by over 20%. From 1983 to 1986 the value of East-South trade fell, causing its share in world trade to drop to slightly below its 1975 share. Imports into Eastern Europe from LDCs declined in a period in which Eastern European countries were suffering from balance of payments difficulties, while LDC's imports from the East remained stagnant. Another explanation for the declining share of East-South trade in world trade in recent years is its concentration pattern in the South, whereby the fast-growing developing countries such as Korea, Hong-Kong, Taiwan and Singapore have been only marginally involved in it.

Even though East-South trade is only about one-thirtieth of world trade, it constitutes a significant part of the trade for the parties involved, especially for the East. As Table 3 shows, it accounted for about 16-18% of East's trade and 5-6% of South's trade in 1985. Time-series data indicate that the South has accounted for about one-sixth of the East's imports and one-fifth of the East's exports during 1970-86. On the other hand, the East has been far less important for the South.

Within each group the countries are quite different and the significance of East-South trade varies among them. From the Eastern European countries' point of view,

LDCs as trade partners are most important to Romania and least important to the German Democratic Republic and Bulgaria. The significance of East-South trade for the Eastern European countries goes beyond the high shares that the developing countries occupy in their trade. Since trade imbalances in East-South trade are more likely to be settled in hard currency than in East-East trade, individual Eastern European countries should be more interested in running trade surpluses with the South than with other Eastern European countries.

Of the developing countries, East-South trade is by far most important to Yugoslavia. In the 1980s about half of Yugoslavia's exports have been to the CMEA countries and about one-third of its imports have originated from these countries. East-South trade has also been quite important to Argentina, especially in the first half of the 1980s, when between one-fifth and one-third of its exports were to the East. Next to Yugoslavia and Argentina, trade with the East has accounted for significant portions of the trade of India, Egypt, Turkey, Morocco, Ethiopia, Brazil, Uruguay and China. The share is probably fairly high for some Middle Eastern countries such as Iraq, Libya, Syria and Iran, as well as for small socialist countries like Cuba, Vietnam, North Korea and post-revolutionary Nicaragua.

While more than half of developing countries' trade with the East is with the USSR, East-South trade is also quite concentrated on the South side. According to the UN trade matrix, Yugoslavia and China accounted for 13% and 8.4% respectively in 1985. An examination of

**Table 1**  
**Regional Distribution of World Trade in 1985**

|              | Total   | WWT   | WST   | SST   | EET  | EWT  | EST  |
|--------------|---------|-------|-------|-------|------|------|------|
| Value (\$bn) | 1,921.7 | 909.4 | 621.3 | 168.1 | 91.6 | 77.5 | 53.8 |
| Share (%)    | 100.0   | 47.3  | 32.3  | 8.7   | 4.8  | 4.1  | 2.8  |

Note: WWT stands for West-West trade, EST for East-South trade, etc.  
Source: UN World Trade Matrix.

**Table 2**  
**World and East-South Trade, 1970-86**

|                                 | 1970    | 1975    | 1983    | 1984  | 1985  | 1986    |
|---------------------------------|---------|---------|---------|-------|-------|---------|
| (1) World Trade (\$bn)          | 312     | 872     | 1,802   | 1,902 | 1,930 | 2,112   |
| (2) East-South trade (\$bn)     | 9.2     | 25.3    | 64.7    | 65.1  | 63.5  | 57.6    |
| (3) (2) as % of (1)             | 3.0     | 2.9     | 3.6     | 3.4   | 3.3   | 2.7     |
| Average Annual Growth Rates (%) |         |         |         |       |       |         |
|                                 | 1970-86 | 1975-86 | 1975-83 |       |       | 1983-86 |
| (4) World Trade                 | 12.7    | 8.4     | 9.5     |       |       | 5.4     |
| (5) East-South trade            | 12.1    | 7.8     | 12.5    |       |       | -3.8    |

Source: Computations based on data from UNCTAD and COMTRADE.

the trade of Poland, Hungary and Czechoslovakia<sup>7</sup> in 1986 reveals that China and Yugoslavia accounted for as much as 48% of the trade with the South for Poland and 34% of the trade with the South for each of Hungary and Czechoslovakia. While not enough information is readily available for China, Yugoslavia's trade data indicate that it has had a trade turnover of about \$10 billion a year with the East – with a trade surplus of \$0.1 to \$1.4 billion for Yugoslavia – from 1981 to 1987. Other developing countries with large values in East-South trade are India, Egypt, Argentina, Brazil, Greece, Turkey and the three oil exporting countries of Iran, Iraq and Libya.

The volatile nature of East-South trade coupled with the sporadic data reporting of the two sides makes it difficult to rank these LDCs. A good example of this volatility is Argentina's trade with the East, which is essentially exports of grain to the USSR. This trade has been much affected by the US grain embargo to the USSR as well as the harvest/weather conditions in the USSR. From \$1.8 billion in 1980, Argentina's exports to the East jumped to \$3.1 billion in 1981 but again fell to \$1.7 in 1982 and then gradually declined to a level of only \$0.5 billion in 1986. Based on incomplete information for the 1980s, it can be surmised that Argentina and Brazil are among the major developing country exporters to the East while Greece and Turkey are among the main importers. India and Egypt are the other major developing country trade partners of the Eastern European countries; India had a small surplus in the early 1980s while Egypt had a small deficit. Regarding Iran, Iraq and Libya, the UN trade matrix indicates that they had trade turnovers of \$1.5, \$1.5, and \$1.2 billion respectively with the Eastern European countries in 1985.

### Commodity Composition

Unlike trade among the developed market economies which is characterized by intra-industry trade, East-South trade mainly consists of inter-industry trade. Developing countries' exports to the East are mainly commodities. As Figure 1 shows, food and agricultural raw materials have accounted for about half of the exports of the South to the East since 1975, with the share somewhat declining in recent years. The other main exports have been fuels (14-17%) and manufactures (20-26%).

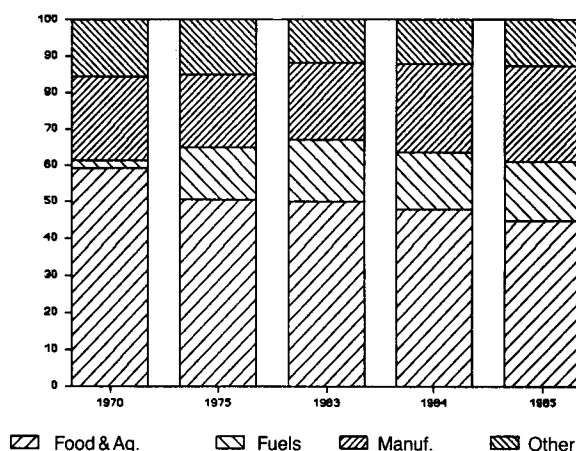
Figure 2 shows that since 1975 fuels also figured prominently in the exports of the East (mainly the USSR) to the South, ranging from a low of 9% in 1975 to about 20% in 1984-85. The share of manufactures, mainly

**Table 3**  
**East-South Trade in 1985**

| Importing Area | Exporting Area | Value (\$bn)   | % Share in Total Trade of |                |
|----------------|----------------|----------------|---------------------------|----------------|
|                |                |                | Importer                  | Exporter       |
| South South    | East World     | 24.5<br>511.7  | 4.8<br>100.0              | 16.1<br>26.6   |
| East East      | South World    | 29.3<br>162.6  | 18.0<br>100.0             | 5.9<br>8.5     |
| World World    | East South     | 151.9<br>499.6 | 7.9<br>26.0               | 100.0<br>100.0 |

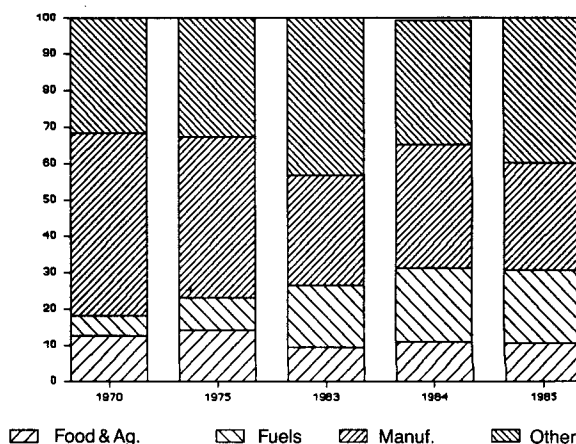
Source: UN World Trade Matrix.

**Figure 1**  
**Exports of South to East**  
(percentage shares, 1970-85)



Source: UNCTAD: Handbook of International Trade and Development Statistics, 1987 Supplement, Tables A1-A11.

**Figure 2**  
**Exports of East to South**  
(percentage shares, 1970-85)



Source: see Figure 1.

<sup>7</sup> These are the only Eastern European countries that have reported their trade data to the UN Statistical Office in recent years.

machinery and transport equipment, declined from 50% in 1970 to 30% in 1985. Another 10% was accounted for by food and agricultural raw materials. As much as one-fifth to one-third of the East's annual exports to the South have not been classified by commodity in every year since 1970; they are likely to consist of military equipments.

### Availability of Trade Data

Data on East-South trade according to the Standard International Trade Classifications (SITC) from either the East or the South are scarce. While in the developing countries data scarcity is often due to the relatively unsophisticated nature of the data-gathering apparatus, in the East secrecy appears to be the cause. Indeed, since the Eastern European countries are all centrally planned economies they ought to have much more detailed data than other countries at comparable stages of development, but they do not publish them.<sup>8</sup> One cannot seriously doubt that a country such as the German Democratic Republic has elaborate detailed data on its foreign trade, yet for the most part only gross turnover data are published in official sources. Poland, Hungary, Czechoslovakia and Romania seem more open in this regard than Bulgaria, the German Democratic Republic and the USSR.

Only a few national sources of trade data are widely available. The latest statistical yearbooks in English, when available, are usually several years old and contain a commodity breakdown of trade only in terms of broad categories. The data are in local currencies and at times the categories are not explicitly defined. Differences in the presentation and classification of commodities and countries also pose problems. One may safely assume that most of the publicly available trade data is also available in various databases of those international agencies that study trade issues or collect trade data of member countries.

As UN members, the Eastern European countries are expected to report regularly their trade data to the UN Statistical Office. Yet, the USSR, the German Democratic Republic, Bulgaria and Romania have never complied.<sup>9</sup> Hungary, Czechoslovakia and Poland

do report but their reports leave a lot to be desired. Hungary's trade data from 1964 to 1986 are available in COMTRADE, the database of the UN Statistical Office, but only at the 2-digit SITC level. Czechoslovakia has been reporting since 1974 at the 3-digit level of disaggregation but the data for 1979 and 1981-84 do not add up; its 1985 data are not reported while 1986 data seem to be internally inconsistent.<sup>10</sup> Poland's trade data are available only for 1980-86 at 4-digit (and occasionally 5-digit) level, which makes it the most detailed Eastern European country's trade data in COMTRADE. However, the data for 1980-84 are internally inconsistent.<sup>11</sup> To sum up, COMTRADE has some trade data for only three of the seven Eastern European countries, but even these few data are often not of good quality, in the sense that they are neither detailed enough nor internally consistent.

It is worth noting that most LDCs report their data regularly and in more detail than the Eastern European countries. As an example, if one wants to use COMTRADE data to analyze the commodity structure of Brazil's 1985-86 imports from Poland (the best Eastern European reporter in recent years), there are 100 observations from the Brazilian side but only 45 from the Polish side.<sup>12</sup> For 1984, at the level of total trade (i.e. with world as its partner) Hungary reported 89, Czechoslovakia 516, and Poland 439 observations.<sup>13</sup> These may be compared to 1,650 for Brazil and 980 for Honduras, both reporting at 5-digit SITC level.

### Other Statistical Publications

Apart from the UN Statistical Office, other UN agencies such as the ECE and UNCTAD have their respective statistical publications that contain some data on the Eastern European countries' trade. The UN office in New York also maintains a trade matrix in conjunction with the project LINK.<sup>14</sup> Other international agencies such as the World Bank, GATT and the IMF also publish some trade statistics for Eastern Europe. The IMF's *Direction of Trade* publishes trade data for all

<sup>8</sup> This may be partially due to the fact that the main trade classification of the Eastern European countries is the CTN (CMEA Trade Nomenclature) rather than the SITC.

<sup>9</sup> To be precise, Romania and Bulgaria reported the data on the value of their aggregate exports and imports in 1980, i.e. each provided only two statistics to the COMTRADE.

<sup>10</sup> In more recent years Czechoslovakia has provided some 4-digit SITC data too. The quality of its 1981 data appear to be the worst. The problem seems to be with imports data from all regions and exports data to the South and the West; only the sub-set of data on exports to the East seem to be internally consistent.

<sup>11</sup> For example, the value of Poland's manufactures and primaries exports to the South amount to about 150% of its total exports in every year from 1981 to 1984! A quick check of the data for 1985 and 1986 revealed no internal inconsistencies.

<sup>12</sup> The values as reported by the two sides are quite different but it is difficult to judge which report is more accurate. There are also issues such as lags in reporting, fob/cif price differences, and classification ambiguities that may cause inconsistencies in the two sides' reports.

<sup>13</sup> These numbers refer to the number of lines in the 2,338 lines of the SITC categories at all levels for which the country has reported a datum. Admittedly, this is a somewhat arbitrary measure of how good a reporter they are.

<sup>14</sup> These matrices contain trade flows in four major products among 79 countries, including all of the CMEA countries.

# INTERNATIONAL TRADE

**Table 4**  
**East European Trade Data according to Various Databases**  
(in \$ million)

| Source / Country      | Exports |        |        |        |        |        |        | Imports |        |        |        |        |        |        |
|-----------------------|---------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|
|                       | 1980    | 1981   | 1982   | 1983   | 1984   | 1985   | 1986   | 1980    | 1981   | 1982   | 1983   | 1984   | 1985   | 1986   |
| <b>Bulgaria</b>       |         |        |        |        |        |        |        |         |        |        |        |        |        |        |
| UNCTAD                | 10,372  | 10,689 | 11,428 | 12,130 | 12,850 | 13,348 | 14,126 | 9,650   | 10,801 | 11,527 | 12,283 | 12,714 | 13,656 | 14,934 |
| UNITSY                | 10,372  | 10,685 | 11,428 | 12,129 | 12,850 | NA     | NA     | 9,650   | 10,799 | 11,526 | 12,283 | 12,714 | NA     | NA     |
| ECE                   | 10,389  | 10,695 | 11,439 | 12,137 | 12,864 | 13,313 | 14,126 | NA      | NA     | NA     | NA     | NA     | NA     | NA     |
| GATT                  | 10,400  | 10,700 | 11,400 | 12,100 | 12,900 | 13,300 | 14,000 | 9,600   | 10,800 | 11,500 | 12,300 | 12,700 | 13,600 | 14,800 |
| DOT                   | 2,497   | 2,229  | 2,070  | 1,971  | 1,895  | 1,978  | 2,033  | 3,055   | 3,439  | 3,001  | 3,111  | 3,006  | 3,460  | 3,731  |
| UN, NY                | NA      | NA     | NA     | NA     | 11,586 | 12,808 | NA     | NA      | NA     | NA     | NA     | 11,284 | 12,089 | NA     |
| <b>Czechoslovakia</b> |         |        |        |        |        |        |        |         |        |        |        |        |        |        |
| UNCTAD                | 14,891  | 14,876 | 15,597 | 16,477 | 17,196 | 17,541 | 20,456 | 15,148  | 14,658 | 15,397 | 16,324 | 17,080 | 17,627 | 21,055 |
| UNITSY                | 14,891  | 14,782 | 15,694 | 16,477 | 17,153 | 17,554 | NA     | 15,148  | 14,634 | 15,592 | 16,324 | 17,078 | 17,642 | NA     |
| ECE                   | 14,926  | 14,908 | 15,640 | 16,500 | 17,202 | 17,474 | 20,296 | NA      | NA     | NA     | NA     | NA     | NA     | NA     |
| COMTRADE              | 14,891  | 14,782 | 15,694 | 16,477 | 17,153 | NA     | 20,457 | 15,148  | 14,634 | 15,492 | 16,324 | 17,078 | NA     | 21,089 |
| GATT                  | 15,000  | 14,900 | 15,700 | 16,500 | 17,200 | 17,500 | 20,300 | 15,300  | 14,700 | 15,500 | 16,400 | 17,100 | 17,500 | 20,900 |
| DOT                   | 6,446   | 5,851  | 5,538  | 5,409  | 5,299  | 5,288  | 5,821  | 6,718   | 5,656  | 5,141  | 4,980  | 4,845  | 5,304  | 6,013  |
| UN, NY                | NA      | NA     | NA     | NA     | 16,890 | 17,266 | NA     | NA      | NA     | NA     | NA     | 16,382 | 16,757 | NA     |
| <b>GDR</b>            |         |        |        |        |        |        |        |         |        |        |        |        |        |        |
| UNCTAD                | 17,312  | 19,858 | 21,743 | 23,793 | 24,836 | 25,268 | 27,729 | 19,082  | 20,181 | 20,196 | 21,524 | 22,940 | 23,433 | 27,414 |
| UNITSY                | 17,312  | 19,856 | 21,743 | 23,793 | 24,838 | 23,433 | NA     | 19,082  | 20,181 | 20,196 | 21,525 | 22,940 | 25,268 | NA     |
| ECE                   | 31,430  | 29,171 | 31,003 | 32,988 | 31,765 | 31,756 | 42,149 | NA      | NA     | NA     | NA     | NA     | NA     | NA     |
| GATT                  | 17,300  | 19,900 | 21,800 | 23,800 | 24,800 | 24,900 | 25,500 | 19,100  | 20,200 | 20,200 | 21,500 | 22,900 | 23,100 | 25,200 |
| DOT                   | 5,455   | 5,349  | 5,068  | 5,193  | 4,903  | 4,870  | 5,297  | 6,573   | 6,154  | 4,667  | 5,039  | 4,844  | 4,534  | 5,168  |
| UN, NY                | NA      | NA     | NA     | NA     | 22,962 | 25,187 | NA     | NA      | NA     | NA     | NA     | 18,266 | 18,709 | NA     |
| <b>Hungary</b>        |         |        |        |        |        |        |        |         |        |        |        |        |        |        |
| UNCTAD                | 8,677   | 8,712  | 8,767  | 8,696  | 8,563  | 8,542  | 9,183  | 9,235   | 9,128  | 8,814  | 8,503  | 8,091  | 8,228  | 9,613  |
| UNITSY                | 8,677   | 8,712  | 8,799  | 8,722  | 8,371  | 8,542  | NA     | 9,212   | 9,123  | 8,836  | 8,481  | 7,901  | 8,228  | NA     |
| ECE                   | 8,609   | 8,725  | 8,858  | 8,768  | 8,617  | 8,472  | 9,171  | NA      | NA     | NA     | NA     | NA     | NA     | NA     |
| COMTRADE              | 8,677   | 8,712  | 8,799  | 8,722  | 8,560  | 8,555  | 9,157  | 9,212   | 9,123  | 8,836  | 8,481  | 8,084  | 8,143  | 9,583  |
| GATT                  | 11,700  | 11,500 | 12,200 | 12,900 | 12,600 | 13,100 | 14,800 | 12,300  | 11,900 | 12,300 | 12,600 | 12,100 | 12,500 | 15,300 |
| IFS YB, CUS. BASIS    | 8,671   | 8,707  | 8,773  | 8,702  | 8,563  | 8,538  | 9,165  | 9,245   | 9,139  | 8,819  | 8,509  | 8,091  | 8,224  | 9,599  |
| IFS, BOP BASIS        | 8,877   | 8,894  | 9,057  | 8,881  | 8,836  | 8,935  | 9,140  | 9,020   | 8,855  | 8,579  | 8,453  | 8,024  | 8,324  | 9,668  |
| DOT                   | 8,648   | 8,717  | 8,791  | 8,702  | 8,565  | 8,543  | 9,158  | 9,229   | 9,146  | 8,831  | 8,508  | 8,091  | 8,228  | 9,596  |
| UN, NY                | NA      | NA     | NA     | NA     | 8,075  | 8,334  | NA     | NA      | NA     | NA     | NA     | 13,187 | 13,169 | NA     |
| <b>Poland</b>         |         |        |        |        |        |        |        |         |        |        |        |        |        |        |
| UNCTAD                | 16,997  | 13,182 | 11,174 | 10,951 | 11,649 | 11,447 | 11,884 | 19,089  | 15,224 | 10,204 | 9,995  | 10,548 | 10,761 | 11,107 |
| UNITSY                | 16,997  | 13,249 | 11,214 | 11,572 | 11,750 | 9,286  | NA     | 19,089  | 15,476 | 10,244 | 10,590 | 10,638 | 8,792  | NA     |
| ECE                   | 17,022  | 13,295 | 11,215 | 11,578 | 11,759 | 11,490 | 12,070 | NA      | NA     | NA     | NA     | NA     | NA     | NA     |
| COMTRADE              | 16,997  | 13,249 | 11,214 | 11,572 | 11,647 | 11,489 | 12,074 | 19,089  | 15,476 | 10,244 | 10,590 | 10,547 | 10,836 | 11,208 |
| GATT                  | 17,000  | 13,300 | 11,200 | 11,700 | 11,800 | 11,200 | 11,700 | 19,100  | 15,500 | 10,300 | 10,700 | 10,600 | 10,500 | 10,900 |
| IFS YB, CUS. BASIS    | 14,191  | 10,675 | 11,213 | 11,572 | 11,750 | 11,489 | 12,074 | 16,690  | 12,792 | 10,648 | 10,927 | 10,985 | 11,855 | 11,535 |
| IFS, BOP BASIS        | 14,043  | 10,542 | 11,547 | 11,615 | 11,654 | 10,945 | 11,926 | 15,819  | 12,723 | 11,631 | 11,312 | 10,995 | 10,598 | 11,459 |
| DOT                   | 16,997  | 13,249 | 11,214 | 11,572 | 11,346 | 11,229 | 11,950 | 19,834  | 16,079 | 10,643 | 11,003 | 10,650 | 11,236 | 12,029 |
| UN, NY                | NA      | NA     | NA     | NA     | 10,147 | 10,054 | NA     | NA      | NA     | NA     | NA     | 15,205 | 15,362 | NA     |
| <b>Romania</b>        |         |        |        |        |        |        |        |         |        |        |        |        |        |        |
| UNCTAD                | 11,401  | 11,180 | 10,123 | 10,163 | 10,720 | 10,988 | 11,740 | 13,201  | 10,978 | 8,323  | 7,644  | 7,557  | 8,478  | 9,189  |
| UNITSY                | 11,400  | 12,610 | 11,713 | 11,666 | 10,754 | NA     | NA     | 13,200  | 12,448 | 9,836  | 9,733  | 7,581  | NA     | NA     |
| ECE                   | 11,401  | 11,180 | 10,122 | 10,163 | 10,720 | 11,218 | 11,922 | NA      | NA     | NA     | NA     | NA     | NA     | NA     |
| GATT                  | 11,400  | 12,200 | 11,700 | 11,400 | 12,200 | 12,300 | 11,800 | 13,200  | 12,000 | 9,800  | 9,200  | 9,900  | 10,500 | 10,800 |
| IFS YB, CUS. BASIS    | 11,209  | 12,610 | 11,559 | 11,512 | 12,646 | 12,167 | 12,543 | 13,843  | 13,454 | 10,525 | 10,414 | 11,161 | 11,267 | 11,437 |
| IFS, BOP BASIS        | 11,024  | 12,367 | 11,559 | 11,512 | 12,646 | 12,167 | 12,543 | 12,685  | 12,264 | 9,745  | 9,643  | 10,334 | 10,432 | 10,590 |
| DOT                   | 12,056  | 11,180 | 10,123 | 10,090 | 10,720 | 11,218 | 10,705 | 14,257  | 11,856 | 8,989  | 8,155  | 8,162  | 9,348  | 9,315  |
| UN, NY                | NA      | NA     | NA     | NA     | 10,427 | 10,067 | NA     | NA      | NA     | NA     | NA     | 7,687  | 7,456  | NA     |
| <b>USSR</b>           |         |        |        |        |        |        |        |         |        |        |        |        |        |        |
| UNCTAD                | 76,449  | 79,003 | 86,912 | 91,343 | 91,652 | 87,041 | 97,330 | 68,522  | 72,960 | 77,752 | 80,412 | 80,680 | 82,748 | 88,873 |
| UNITSY                | 76,450  | 79,004 | 86,912 | 91,330 | 91,649 | 87,201 | NA     | 68,522  | 72,960 | 77,792 | 80,267 | 80,624 | 82,578 | NA     |
| ECE                   | 76,503  | 79,383 | 86,968 | 91,386 | 91,159 | 86,815 | 97,078 | NA      | NA     | NA     | NA     | NA     | NA     | NA     |
| GATT                  | 76,600  | 79,100 | 87,000 | 91,600 | 91,300 | 87,300 | 97,300 | 68,600  | 72,900 | 77,700 | 80,400 | 80,500 | 83,000 | 88,900 |
| DOT                   | 38,567  | 39,537 | 37,765 | 36,887 | 37,200 | 35,278 | 33,696 | 44,639  | 47,324 | 44,562 | 43,881 | 42,429 | 43,773 | 42,807 |
| UN, NY                | NA      | NA     | NA     | NA     | 82,479 | 78,901 | NA     | NA      | NA     | NA     | NA     | 67,523 | 68,404 | NA     |

Sources: UNCTAD: Handbook Supplement 1987, tables 1.1 & 1.2. UNITSY: UN International Trade Statistics Yearbook of 1985 (published in 1987), special table L. All data except for imports of Hungary are in fob prices. ECE: ECE files from Geneva accessed via ICC. Original data are in local currencies, converted at exchange rates indicated by the ECE. COMTRADE: UN Statistical Office database in Geneva accessed via ICC. GATT: International trade, 86-87, table A10. IFS: 1987 Yearbook, pp. 118-123 (lines 70). IFS: May 1988, lines 77 in country pages. All data are in fob prices. DOT: Direction of Trade of 1987, tables B. UN, NY: Trade Matrix in conjunction with project link.

countries on customs basis and its *International Financial Statistics* reports another set of customs-based and a set of balance of payments-based trade data of member countries. These are the most widely used sources by global analysts for empirical research on trade. In the case of the CMEA, however, these data are often incomplete and lacking in details.

The coverage of these databases is limited and they differ in their presentations, degree of details, disaggregation, and geographical and commodity break-downs. Invariably the source of primary data in all of these are, directly or indirectly, "official national sources". Occasionally they use trade partners' data to estimate certain gaps but make no adjustments to the underlying data. Therefore one would expect that, at least at the most aggregate level of total trade, the reported data should match. But at times they do not. Table 4 presents trade data on each of the seven Eastern European countries from the above databases and Table 5 highlights their divergence by showing the deviations from the data reported by UNCTAD.<sup>15</sup>

## Reasons for Inconsistencies

A close examination of the databases reveals that the apparent inconsistencies, as shown in Tables 4 and 5, are not an Eastern European countries' aberration and are mainly caused by differences in definitions, the multiplicity of official national sources, and data revisions.<sup>16</sup> We shall examine these in turn.

Some of the above-mentioned databases do not explicitly define their terminology. Hence, at times seemingly identical entities in fact mean different things in different databases. Definition-related issues fall into three categories: geographical coverage, commodity coverage and price basis.

The most outstanding example of apparent data inconsistencies stemming from ambiguous geographical definitions is the *Direction of Trade* data on the overall trade of the Eastern European countries. As Table 4 shows, those data grossly understate the trade volumes of the German Democratic Republic, Bulgaria, Czechoslovakia and the USSR. As these countries are not members of the IMF and so do not report their data, the Fund uses their partners' reports. However, since much of these four countries' trade takes place among themselves (the relative values are more significant for the smaller countries than for the USSR), the under-statements are significant. For example, *Direction of Trade* quotes Bulgaria's exports in 1986 at only \$2 billion compared to a value of over \$14 billion reported by other sources. Another important

instance of geographical coverage ambiguities occurs in the case of the German Democratic Republic, that treats its trade with the Federal Republic of Germany as internal trade, thereby understating the value of its foreign trade. From Table 4 it seems that only the ECE has been mindful of this issue, and used the Federal Republic of Germany's trade data to estimate the total trade of the German Democratic Republic.

There are also apparent data inconsistencies stemming from differences between customs based and balance of payments based reports; this lies in the time of recording of the transactions. Customs officials record the transfer of the merchandise when it crosses the border while the balance of payments approach takes note of it when trade payments are effected. Thus, some re-exports and their associated imports that cross the country's borders may be reflected in the customs basis data but not in the balance of payments basis ones. This difference in definitions explains some of the apparent data inconsistencies, for example, between the two data series in *International Financial Statistics*.

Another source of inconsistency, particularly in the case of data on Hungary's imports, stems from different price bases. In trade matrices all data are presented on the same price basis (usually in fob prices) while this is usually not the case in other presentations. Most countries report their import values in cif and export values in fob prices. Of the Eastern European countries, however, only Hungary adheres to this convention, all others reporting their trade data in fob prices.

A country's Government Statistical Office, National Bank, Customs Office, Foreign Trade Ministry, etc., may publish different trade statistics, and then every one of them may periodically revise its data. Consequently, the published data are very much functions of which official national source has been used at what time. This may explain some of the inconsistencies in international agencies' reports. For example, the *International Financial Statistics Yearbook* for 1987 has published trade data for Romania for 1981-1984 which are 12-37% greater than comparable data in its 1986 issue.

## Valuation Issues

It is usually presumed that Eastern European trade with the developing countries is valued differently to

<sup>15</sup> UNCTAD is the only source in Table 4 that has data for all of the Eastern European countries in 1980-86.

<sup>16</sup> Since some databases do not provide the information necessary to trace the source of inconsistencies, this list may not be exhaustive. In particular it is not clear why GATT's data on Hungary's trade are so different from those reported by other sources (see Tables 4 and 5).

# INTERNATIONAL TRADE

**Table 5**  
**Deviations from UNCTAD's Data**  
(in \$ million)

| Source / Country      | Exports |         |         |         |         |         |         | Imports |         |         |         |         |         |         |
|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                       | 1980    | 1981    | 1982    | 1983    | 1984    | 1985    | 1986    | 1980    | 1981    | 1982    | 1983    | 1984    | 1985    | 1986    |
| <b>Bulgaria</b>       |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| UNITSY                | 0       | -4      | 0       | -1      | 0       | NA      | NA      | 0       | -2      | -1      | 0       | 0       | NA      | NA      |
| ECE                   | 17      | 6       | 11      | 7       | 14      | -35     | 0       | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
| GATT                  | 28      | 11      | -28     | -30     | 50      | -48     | -126    | -50     | -1      | -27     | 17      | -14     | -56     | -134    |
| DOT                   | -7,875  | -8,460  | -9,358  | -10,159 | -10,955 | -11,370 | -12,093 | -6,595  | -7,362  | -8,526  | -9,172  | -9,708  | -10,196 | -11,203 |
| UN, NY                | NA      | NA      | NA      | NA      | -1264   | -540    | NA      | NA      | NA      | NA      | NA      | -1,430  | -1,567  | NA      |
| <b>Czechoslovakia</b> |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| UNITSY                | 0       | -94     | 97      | 0       | -43     | 13      | NA      | 0       | -24     | 195     | 0       | -2      | 15      | NA      |
| ECE                   | 35      | 32      | 43      | 23      | 6       | -67     | -160    | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
| COMTRADE              | 0       | -94     | 97      | -0      | -43     | NA      | 1       | 0       | -24     | 95      | 0       | -2      | NA      | 34      |
| GATT                  | 109     | 24      | 103     | 23      | 4       | -41     | -156    | 152     | 42      | 103     | 76      | 20      | -127    | -155    |
| DOT                   | -8,445  | -9,025  | -10,059 | -11,068 | -11,897 | -12,253 | -14,635 | -8,430  | -9,002  | -10,256 | -11,344 | -12,235 | -12,323 | 15,042  |
| UN, NY                | NA      | NA      | NA      | NA      | -306    | -275    | NA      | NA      | NA      | NA      | NA      | -698    | -870    | NA      |
| <b>GDR</b>            |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| UNITSY                | 0       | -2      | 0       | 0       | 2       | -1835   | NA      | 0       | 0       | 0       | 1       | 0       | 1,835   | NA      |
| ECE                   | 14,118  | 9,313   | 9,260   | 9,195   | 6,929   | 6,488   | 14,420  | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
| GATT                  | -12     | 42      | 57      | 7       | -36     | -368    | -2,229  | 18      | 19      | 4       | -24     | -40     | -333    | -2,214  |
| DOT                   | -11,857 | -14,509 | -16,675 | -18,600 | -19,933 | -20,398 | -22,432 | -12,509 | -14,027 | -15,529 | -16,485 | -18,096 | -18,899 | -22,246 |
| UN, NY                | NA      | NA      | NA      | NA      | -1874   | -81     | NA      | NA      | NA      | NA      | NA      | -4674   | -4724   | NA      |
| <b>Hungary</b>        |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| UNITSY                | 0       | 0       | 32      | 26      | -192    | 0       | NA      | -23     | -5      | 22      | -22     | -190    | 0       | NA      |
| ECE                   | -68     | 13      | 91      | 72      | 54      | -70     | -12     | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
| COMTRADE              | 0       | 0       | 32      | 26      | -3      | 13      | -26     | -23     | -5      | 22      | -22     | -7      | -85     | -30     |
| GATT                  | 3,023   | 2,788   | 3,433   | 4,204   | 4,037   | 4,558   | 5,617   | 3,065   | 2,772   | 3,486   | 4,097   | 4,009   | 4,272   | 5,687   |
| IFS YB, CUS. BASIS    | -6      | -5      | 6       | 6       | 0       | -4      | -18     | 10      | 11      | 5       | 6       | 0       | -4      | -14     |
| IFS, BOP BASIS        | 200     | 182     | 290     | 185     | 273     | 393     | -43     | -215    | -273    | -235    | -50     | -67     | 96      | 55      |
| DOT                   | -29     | 5       | 24      | 6       | 2       | 1       | -25     | -6      | 18      | 17      | 5       | 0       | 0       | -17     |
| UN, NY                | NA      | NA      | NA      | NA      | -488    | -208    | NA      | NA      | NA      | NA      | NA      | 5,096   | 4,941   | NA      |
| <b>Poland</b>         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| UNITSY                | 0       | 67      | 40      | 621     | 101     | -2161   | NA      | 0       | 252     | 40      | 595     | 90      | -1969   | NA      |
| ECE                   | 25      | 113     | 41      | 627     | 110     | 43      | 186     | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
| COMTRADE              | 0       | 67      | 40      | 621     | -2      | 42      | 190     | 0       | 252     | 40      | 595     | -1      | 75      | 101     |
| GATT                  | 3       | 118     | 26      | 749     | 151     | -247    | -184    | 11      | 276     | 96      | 705     | 52      | -261    | -207    |
| IFS YB, CUS. BASIS    | -2,806  | -2,507  | 39      | 621     | 101     | 42      | 190     | -2,399  | -2,432  | 444     | 932     | 437     | 1,094   | 428     |
| IFS, BOP BASIS        | -2,954  | -2,640  | 373     | 664     | 5       | -502    | 42      | -3,270  | -2,501  | 1,427   | 1,317   | 447     | -163    | 352     |
| DOT                   | 0       | 67      | 40      | 621     | -303    | -218    | 66      | 745     | 855     | 439     | 1,008   | 102     | 475     | 922     |
| UN, NY                | NA      | NA      | NA      | NA      | -1,502  | -1,393  | NA      | NA      | NA      | NA      | NA      | 4,657   | 4,601   | NA      |
| <b>Romania</b>        |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| UNITSY                | -1      | 1,430   | 1,590   | 1,503   | 34      | NA      | NA      | -1      | 1,470   | 1,513   | 2,089   | 24      | NA      | NA      |
| ECE                   | 0       | 0       | -1      | 0       | 0       | 230     | 182     | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
| GATT                  | -1      | 1,020   | 1,577   | 1,237   | 1,480   | 1,312   | 60      | -1      | 1,022   | 1,477   | 1,556   | 2,343   | 2,022   | 1,611   |
| IFS YB, CUS. BASIS    | -192    | 1,430   | 1,436   | 1,349   | 1,926   | 1,179   | 803     | 642     | 2,476   | 2,202   | 2,770   | 3,604   | 2,789   | 2,248   |
| IFS, BOP BASIS        | -377    | 1,187   | 1,436   | 1,349   | 1,926   | 1,179   | 803     | -516    | 1,286   | 1,422   | 1,999   | 2,777   | 1,954   | 1,401   |
| DOT                   | 655     | 0       | 0       | -73     | 0       | 230     | -1035   | 1,056   | 878     | 666     | 511     | 605     | 870     | 126     |
| UN, NY                | NA      | NA      | NA      | NA      | -293    | -921    | NA      | NA      | NA      | NA      | NA      | 130     | -1022   | NA      |
| <b>USSR</b>           |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| UNITSY                | 1       | 1       | 0       | -13     | -3      | 160     | NA      | 0       | 0       | 40      | -145    | -56     | -170    | NA      |
| ECE                   | 54      | 380     | 56      | 43      | -493    | -226    | -252    | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
| GATT                  | 151     | 97      | 88      | 257     | -352    | 259     | -30     | 78      | -60     | -52     | -12     | -180    | 252     | 27      |
| DOT                   | -37,882 | -39,466 | -49,147 | -54,456 | -54,452 | -51,763 | -63,634 | -23,883 | -25,636 | -33,190 | -36,531 | -38,251 | -38,975 | -46,066 |
| UN, NY                | NA      | NA      | NA      | NA      | -9,173  | -8,140  | NA      | NA      | NA      | NA      | NA      | -13,157 | -13,344 | NA      |

Source: Table 4.



trade among market economies.<sup>17</sup> The main reasons for such presumptions are the greater prevalence in East-South trade of countertrade, bilateral payments and bilateral clearing agreements, state trading and economic aid concealed as trade, and overvalued currencies. We shall examine these in turn.

"Countertrade" refers to any kind of trade where transaction includes, at least in part, some form of barter. At present pure barter, i.e. trade transactions involving the exchange of goods with no accompanying financial settlements whatsoever, is very rare. A wide variety of devices has been developed to bring about the matching of the values of goods or services exchanged on each side, but there is no consensus on the terminology.<sup>18</sup>

In the presence of fairly well organized cash markets, market-oriented economies may resort to countertrade for two main reasons: in order to economize in the holding of foreign exchange reserves; and as a face-saving formula for offering discounts on their commodity exports while appearing to be in compliance with multilaterally agreed prices. As such, there is no reason to believe that countertrade will occur at relative prices which systematically diverge from the equilibrium prices in world markets. Nominal prices under such transactions, however, may diverge from equilibrium cash market prices. For instance, a large part of LDCs' exports to Eastern Europe under countertrade consists of commodities such as oil, natural gas, coffee and sugar. The multilaterally agreed prices of such commodities frequently exceed their free-market world prices. Under countertrade agreements, the exporting LDCs on paper charge the multilaterally agreed prices and the Eastern European countries in exchange export mainly their "soft goods", i.e. inferior quality manufactures, etc. that cannot easily be marketed for hard currencies. The countertrade transactions in East-South trade, therefore, enable the trading partners to charge equally inflated prices for their exports and raise

the nominal value of their trade. Hence, *ceteris paribus*, the greater the extent of countertrade transactions, the greater is the nominal value of trade.

There is a paucity of data regarding the value and volume of countertrade transactions in East-South trade.<sup>19</sup> One source guesstimates that at most 30% of East-South trade in 1983 may have occurred under countertrade arrangements.<sup>20</sup> Some experts have speculated that countertrade transactions, both in terms of their number and share, may have increased in recent years due to increased financial constraints faced by the LDCs, the weakening of commodity prices, etc.<sup>21</sup> Nevertheless, the scarcity of information on countertrade transactions precludes judgement regarding the size of biases that they have introduced in time-series or cross-section data bearing on East-South trade.

### Bilateral Agreements

Bilateral clearing agreements are agreements between two governments to exchange a number of products over a specified period of usually one to five years. The common characteristic of these bilateral agreements is the mutual extension of trade credits by the parties to the agreement for this period. The agreement specifies the type and volume of products and may additionally list commodities which each side has the option to export to the other for the total agreed value.<sup>22</sup> Bilateral clearing agreements usually include an expression of the wish that the volume of bilateral trade under the agreement will be balanced, but they specify procedures for periodic settlement of their mutual trade balance. They are normally expected to be renewed unless one party gives an advance notice of usually about three months. Bank accounts, called clearing accounts, are then opened in designated local

<sup>17</sup> Several studies have shown that such presumptions regarding intra-CMEA trade have solid bases. Intra-CMEA trade takes place in a variety of forms, at a previously agreed-upon set of prices in terms of transferable rubles – an accounting unit administered by the IBEC in Moscow. These price ratios are quite different from those of the world market prices ("hard goods" are usually underpriced in comparison to "soft goods") and when converted to hard currencies at the official exchange rates, these prices are inflated. Cf. Marvin R. Jackson: *When is a Price a Price? The Level and Patterns of Prices in the CMEA*, in: Joseph Brada and Marvin R. Jackson (eds.): *The Financial Aspects of Foreign Trade*, M. E. Sharpe, Inc., New York, 1986, pp. 100-112; Josef M. van Brabant: *Relationship between World and Socialist Trade Prices: Some Empirical Evidence*, in: *Journal of Comparative Economics*, Vol. 9, pp. 233-51, September 1985; Michael Marrese and Jan Vanous: *Soviet Subsidization of Trade with Eastern Europe*, Institute of International Studies, University of California, Berkeley 1983; Edward A. Hewett: *Foreign Trade Prices in the Council for Mutual Economic Assistance*, Cambridge University Press, New York, 1974.

<sup>18</sup> See, for example, Stephen F. Jones: *North/South Countertrade: Barter and Reciprocal Trade with Developing Countries*, Economist Intelligence Unit, London 1984; Pompiliu Verzario: *Countertrade, Barter, and Offsets – New Strategies for Profit in International Trade*, McGraw-Hill, 1985. Terminology includes counterpurchase, commercial compensation, industrial compensation, offset, linked deals, co-operation, buy-back agreement, triangular agreement, parallel deals, switch trading, reciprocal deals, bilateral deals, pre-compensation, framework agreements and clearing agreements.

<sup>19</sup> Because of the lack of hard statistics, it is impossible either to confirm or refute the figures put on the share of countertrade transactions in international trade. The press has situated the share between 20% and 40%. Considerably lower figures are put forward by the IMF, OECD, and GATT: 1%, 4.8% (excluding intra-CMEA trade), and at most 8%, respectively. (See OECD: *Countertrade, Developing Country Practices*, Paris, 1985, pp. 11-12.) Information on countertrade transactions in West-South trade are relatively more available.

<sup>20</sup> Robert V. Roosa: *Countertrade in the World Economy*, in: *Countertrade in the World Economy*, Group of Thirty, New York, 1985, pp. 4-5.

<sup>21</sup> See, for instance, OECD, *op. cit.*

<sup>22</sup> The inclusion of such lists is meant to provide stability for planning.

banks in each country. Exporters and importers debit and credit these accounts in their respective countries in a clearing currency that can only be used for trade under the bilateral clearing agreement. The value of the goods to be traded under the agreement is denominated in a clearing accounting unit expressed in a particular currency, e.g. US dollars, Swiss francs, rupees, or rials. The agreement often requires that all exchanges stop beyond a maximum specified trade imbalance (usually at about 30% of the value of annual trade) and not be resumed until the country with the trade deficit reduces the imbalance to below the specified level. Such an imbalance, until removed, represents an interest-free credit to the country with the deficit. The trade imbalance at the end of the agreement period has to be settled with the specified currency. In cases where the debtor country is unable to settle in cash, there are a number of devices to transfer the unsettled claim to a third party at a discount from the face value.<sup>23</sup>

In the 1950s and early 1960s many bilateral clearing agreements were convened between the Eastern European countries and LDCs and served as the main vehicle for the expansion of East-South trade. Since the late 1960s, when LDCs in UNCTAD demanded that bilateral clearing agreements be abolished, they have been increasingly replaced by bilateral payments agreements<sup>24</sup> where the settlements are stipulated to take place in hard currencies.

### Inflated Prices

Mutually extended trade credits for bilateral trade may enable the parties to economize in their holdings of foreign exchange reserves. As such, merchandise trade under bilateral payments or clearing agreements need not be conducted at prices different from those prevailing in the world market. Nevertheless, it is generally believed that nominal prices of merchandise traded under such agreements are inflated.<sup>25</sup> The fact that, contrary to their usual stipulations, imbalances under the agreements are almost never settled in hard

currencies (except, probably, at termination) gives credence to this view. The refusal to settle in hard currencies is presumably because the parties are aware that the trade has taken place at inflated nominal prices and that the "insistence" on hard currency settlement of the balance would not be "fair" to the debtor party. It must be partly for this reason, but also because trade surpluses under bilateral payments agreements will not be available for the settlement of international obligations, that the IMF excludes such trade from the Eastern European countries' convertible balance of payments accounts.

It is important to bear in mind that although, as argued above, there is no a priori reason to expect the overall terms of trade in a bilateral clearing agreement to be different from those in the world market, the terms of trade in individual transactions within the package need not be as in the world market. For example, if a bilateral clearing agreement includes transactions T1 and T2, terms of trade in T1 may be unfavourable to one party while terms of trade in T2 may be more favourable to that same party, such that the terms of trade as a whole are as in the world market.

At present the number of bilateral clearing agreements between the Eastern European countries and the LDCs is believed to be small.<sup>26</sup> Concrete information regarding the extent of East-South trade conducted under bilateral payments or clearing agreements is not available. One source estimates that in 1983 the number of agreements between the East and the LDCs was about 500.<sup>27</sup> Others have speculated that the number of such agreements in East-South trade and the share of trade under such agreements in total East-South trade may have increased over time, especially in the 1980s.<sup>28</sup> Therefore, it is likely that the upward bias in the nominal value of the East's trade with the LDCs has risen in recent years.

### Individual Countries

Although detailed information regarding bilateral clearing and payments agreements in East-South trade is scarce, it is known that:

□ *Hungary* has bilateral payments agreements with China, Colombia, Ecuador and Iran; Brazil was also in that list until 1984. It also has trade arrangements with bilateral payments features for certain commodities with Afghanistan, Bangladesh and Pakistan.<sup>29</sup> Hungary's only bilateral clearing agreements are with Albania, Laos PDR, Kampuchea PDR and Korea PDR (which are in the CMEA). Settlements in bilateral payments agreements take place in convertible US dollars and, in

<sup>23</sup> See, for instance, Dick Francis: *The Countertrade Handbook*, Quorum Books, Westport, Connecticut 1987.

<sup>24</sup> The terminology is not standard.

<sup>25</sup> Although UNCTAD: *Manual on Trading with the Socialist Countries of Eastern Europe*, New York, 1987, states that such trade transactions are generally based on world market prices.

<sup>26</sup> OECD, op. cit.; UNCTAD, op. cit.

<sup>27</sup> UNCTAD, op. cit.

<sup>28</sup> See, for instance, OECD, op. cit.

<sup>29</sup> IMF: *Hungary – Recent Economic Developments*, March 14, 1988; UNCTAD: *Handbook of International Trade and Development Statistics*, 1986 Supplements, 1987.

the case of the People's Republic of China only, Swiss francs.<sup>30</sup> Hungary's trade with these countries accounts for about 14% of Hungary's exports to, and 28% of its imports from, LDCs or about 20% of its turnover with the LDCs. These ratios hence represent the upper limit to the share of Hungary's trade with LDCs under bilateral payments agreements.

□ The *USSR* has bilateral payments and/or clearing agreements with Afghanistan, Iran, India, Pakistan, Syria and Egypt; Bangladesh, Morocco and Guinea were also in that list until 1983.<sup>31</sup> Soviet trade with LDCs is very difficult to unravel. In 1981, only 59% of the Soviet exports to LDCs was identified by destination, much of it without commodity breakdowns.<sup>32</sup> In that year, of the identifiable part about 61% was with the LDCs with which the USSR had bilateral agreements but the share of this trade under such agreements is not known. The picture is slightly better on the imports side, where 98% of the Soviet imports from LDCs were identified by origin and of those, 40% came from LDCs with which bilateral agreements existed.<sup>33</sup>

□ *Poland* had 55 bilateral agreements with developing countries in 1984 with clearing agreements accounting for about 7% of the total.<sup>34</sup> In 1986, trade under bilateral agreements constituted about 14% of Poland's non-convertible merchandise trade or 7% of total trade turnover.<sup>35</sup>

□ *Romania*: only about 10% of trade with non-socialist countries is cleared under bilateral payments agreements.<sup>36</sup>

### State Trading and Aid Concealed as Trade

Whenever states – as opposed to profit-seeking firms – are involved in trade, there might be incentives for under- or over-valuation of the trade. The motives are often political, e.g. to exaggerate solidarity and co-operation among friendly nations and to transfer aid concealed as trade payments. Moreover, when states conduct trade, they may also use it as an instrument of foreign policy. Although the extent of such “political trade” is difficult to ascertain, its existence is certain and this interjects another source of distortion in the trade data of the Eastern European countries. A good example is USSR-Cuba trade relations, in which the

USSR has used the prices of oil and sugar (and to a lesser extent, of nickel) as political tools. In 1960 a bilateral trade agreement was concluded between the two countries whose main elements were the exchange of Cuban sugar for Soviet oil and petroleum products. The USSR imported about half of the Cuban sugar at the (equivalent of) world market prices. Later in the 1960s as Cuba de-emphasized the production of sugar, the Soviets held back exports of petroleum and pressured Cuba to embark on re-emphasizing sugar production.

In 1972 Cuba joined the CMEA and with that some economic aid followed. In 1975 the Soviets switched from direct aid and loans to indirect subsidies through the payment of higher prices for Cuban exports: 12 cents/lb for sugar compared to 7.4 cents/lb in the world market, and \$5,540/ton for nickel compared to \$3,500/ton in the world market. These subsidies were instrumental in turning Cuba's trade deficit with Eastern Europe into a surplus. Then during 1976-80 the price of Cuban exports to the USSR was linked to the price of the Soviet exports, in effect keeping the terms of trade between sugar and oil – Cuba's main exports and imports respectively – constant. This was another important assistance to Cuba at a time when oil prices were rising fast.

The other Eastern European countries, too, are currently paying higher prices than those on the world market for Cuban sugar – 22 cents/lb – but in soft currencies.<sup>37</sup> On the other hand, there are indications that Cuba, among other socialist LDCs, pays a higher price for imports of some Soviet manufactures than the USSR charges other purchasers. Given the problems with estimating the “real” value (or even the dollar exchange rate) of soft currencies and since little is known about the prices of the Eastern European countries' trade with Cuba, it is hard to gauge the size of possible Eastern European aid to Cuba concealed in trade payments.

While Cuba is the main beneficiary of favourable pricing arrangements, other smaller CMEA members such as Mongolia and Vietnam are also said to have

<sup>30</sup> IMF, *ibid.*

<sup>31</sup> Thomas Wolf: An Empirical Analysis of Soviet Economic Relations with Developing Countries, in: *Soviet Economy*, 1985, 1, 3, pp. 232-260.

<sup>32</sup> See, for example, Jolanta Zieba: CMEA Trade with Developing Countries in 1986, in: *WIIW – Mitgliederinformation*, No. 5/1987, The Vienna Institute for Comparative Economic Studies, Vienna 1987, p. 28.

<sup>33</sup> Thomas Wolf, *op. cit.*

<sup>34</sup> UNCTAD, 1987, *op. cit.* It is not clear if the 7% refers to the number of clearing agreements as a percent of all bilateral agreements or the share of trade under bilateral clearing agreements in total trade under such agreements.

<sup>35</sup> IMF: Poland – Staff Report for the 1987 Article IV Consultation, August 18, 1987.

<sup>36</sup> IMF: Romania – Recent Economic Developments, August 7, 1987.

<sup>37</sup> Cf. Lawrence Theriot and JeNelle Matheson: Soviet Economic Relations with the non-European CMEA: Cuba, Vietnam, and Mongolia, in: *Soviet and Eastern European Foreign Trade*, Vol. 21, 1985, pp. 144-203; Andrew Zimbalist: Cuba's External Economy: Reflections on Export Dependence, Soviet Aid and Foreign Debt, in: *Comparative Economic Studies*, Vol. 30, Summer 1988, pp. 21-47.

benefitted from Soviet oil imports at below world market prices. There is some evidence of such price support schemes outside the CMEA. Afghanistan, for example, may have received up to \$30 million from the USSR as a result of importing Soviet oil at concessional prices; and Laos may have benefitted from commodity price support from the USSR.<sup>38</sup> But without further information it is impossible to correctly assess the extent of such price supports and the distortions they cause in trade statistics.

Having said this, it should be noted that socialist LDCs account for a minor share of the Eastern European countries' trade,<sup>39</sup> and that the overall distortions caused by such pricing arrangements should not be exaggerated.<sup>40</sup> The main trading partners of the East in the South are, as mentioned before, countries like Yugoslavia, China, Argentina, Brazil, Turkey and Greece for which there is no evidence of price favouritism.

### Overvalued Currencies

The currencies of the Eastern European countries are generally believed to be overvalued. If true, transactions that take place in these currencies would have upward biases when converted to hard currencies at official exchange rates. In the case of Poland, for example, the real effective exchange rate in 1983-4 was about 50% higher than in 1980. Devaluations since 1984 have progressively brought it down to the extent that in 1987 the real effective exchange rate was 38% lower than its 1980 value.<sup>41</sup> The real effective exchange rate is a relative measure and in the presence of trade restrictions and government control it is difficult to establish its equilibrium value. But if we assume that the 1987 exchange rate was at equilibrium, it would follow that in 1983-84 the Polish currency had been overvalued by as much as 100%. Hungary, too, has depreciated its real effective exchange rate since 1982. Assuming that the 1987 exchange rate was the equilibrium rate, it would follow that in 1982 the Hungarian currency had been overvalued by 53%.<sup>42</sup>

To the extent that a greater proportion of the East's trade with the South is conducted with soft currencies, it is likely that the Eastern European countries' data on

East-South are more inflated than on East-West trade. Short of detailed information on individual trade transactions it is difficult to reasonably estimate the extent of the upward bias in the value of the Eastern European countries' trade caused by their over-valued currencies. Nevertheless, given the recent real effective exchange rate depreciations in some Eastern European countries the extent of such upward biases is likely to have decreased.

### Concluding Remarks

To regain their growth momentum and creditworthiness, the developing countries need to explore all potential export markets. The OECD countries represent by far the largest market for the developing countries' exports but the growth potential of that market is constrained by rising protectionist sentiments and the slow pace of economic growth. One alternative outlet for the developing countries' exports is the Eastern European countries. From this perspective, analyses of East-South trade and its prospects are desirable. The main obstacle in the way of such undertakings is the small quantity and poor quality of the relevant data. The Eastern European countries do not disclose information bearing on their external trade according to the recognized international classifications and standards in sufficient detail and with regular frequency. This may not be a hindrance in empirical analyses of East-West trade because the Western trade partners do provide the required information. However, it creates problems in the analyses of East-South trade since the developing countries, lacking sufficient information-gathering apparatus, do not provide all the necessary data either. The East-South trade data published by the international agencies are, on occasion, inconsistent and suffer from inaccuracies and biases. This paper has identified the main problems associated with the publicly available data on East-South trade. It reviewed such trade practices as countertrade, bilateral clearing agreements, and state trading, which affect trade valuations and are more prevalent in East-South trade than the trade among market economies. The extent of valuation biases introduced by these practices varies over time and across countries and commodities. Nevertheless, being aware of the sources of valuation biases, a careful researcher should be able to design his empirical work in such a way as to draw useful and valid inferences from the available statistics on East-South trade.

<sup>38</sup> Foreign and Commonwealth Office: Soviet, East European and Western Development Aid, 1976-82, Foreign Policy Document No. 85, London, 1983, paras. 33 and 35.

<sup>39</sup> Except in the case of the Soviet Union; trade with the socialist LDCs accounts for less than 1% of Hungary's trade.

<sup>40</sup> Besides, socialist LDCs such as Cuba, Mongolia and Vietnam, are actually members of the CMEA and so their trade relations with the Eastern European countries should be analyzed in the context of intra-CMEA rather than East-South trade.

<sup>41</sup> World Bank: Country Briefs, Vol. 1, May 16, 1988.

<sup>42</sup> Ibid.