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Intra-Industry Trade Dynamics in the East-West Relations

Comparison of Austrian, Dutch, German, Italian, and Swedish Trade with the CEEC

Jarko Fidrmuc, Daniela Grozea-Helmenstein, Andreas Wörgötter

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Abstract

We analyze the development of the Austrian, Dutch, German, Italian and Swedish trade structures (SITC two-digit levels) with Hungary, Poland, Romania, Slovakia, Slovenia, and the Czech Republic. We revealed that the increase of the intra-industry trade was a major feature of the trade development between 1989 and 1994. The structure of the trade between the EU and the CEEC approaches the structure of the intra-EU trade. The early leadership of Austria in relation with the CEEC was later replaced by Germany. The Netherlands showed a higher flexibility of total trade and of the trade with the CEEC than the other analyzed countries.

Zusammenfassung

Wir analysieren die Entwicklung der Struktur des deutschen, italienischen, niederländischen, österreichischen und schwedischen Außenhandels (SITC-Zweisteller) mit Polen, Rumänien, Slowenien, Tschechien, Ungarn und der Slowakei. Wir beobachten wichtige strukturelle Änderungen vor allem im Hinblick auf den intra-industriellen Handel. Die Struktur des Osthandels dieser Länder nähert sich damit der Sturktur des intra-EU Handels an. Die Vorreiterrolle Österreichs im Osthandel in den ersten Reformjahren wurde vom späteren Engagement Deutschlands eingeholt. Die Niederlande weisen sowohl höhere Anpassungen im Gesamthandels als auch im Handel mit den ostmitteleuropäischen Ländern aus.

Keywords

Intra-industry trade, product differentiation, structural changes, CEEC

Schlagworte

Intra-industrieller Handel, Produktdifferenzierung, strukturelle Änderungen, MOEL

JEL-Classifications

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1. Introduction

The opening of Eastern Europe brought fundamental changes in the orientation of the foreign trade of these countries. Before 1988 the USSR was the most important trade partner for all Central and Eastern European countries (CEEC) including the Czech Republic, Hungary, Poland, Slovakia, Slovenia and Romania. During the transition years, however, the European Union (EU) steadily gained market shares and became the most important trade partner for all CEEC. The unprecedented growth of the trade volume between the EU and the CEEC was associated with significant structural changes. Therefore, this paper explores the changes in the trade structure of some selected EU-countries (Austria, Germany, Italy, Sweden and the Netherlands) with the CEEC between 1989 and 1994.

At the beginning of the 1990s, Austria was in comparison with the other West European countries more successful in increasing its foreign trade with the CEEC. This was due to its comparative advantages which lay in the geographical proximity to the most important markets in Eastern Europe, the long experience in the foreign trade with these countries, the corresponding qualification of the Austrian enterprises (including knowledge of Eastern European languages), and the engagement of the Austrian banks in Eastern Europe (see Stankovsky and Wolfmayer-Schnitzer, 1996). However, the growth rates of the Austrian trade with the CEEC slowed down after 1992, and the Austrian market shares steadily declined in the most important CEEC markets. The primary causes for this development could be the slower liberalization of the foreign trade with the CEEC in the EFTA framework than in the EU, the exhausting of the short-term growth sources for the trade with Eastern Europe (excess demand for previously not available consumer goods) and the catching up of the other EU-countries in the later reform years. Moreover, the Austrian industrial structure is specialized on goods, which are currently less demanded in Eastern Europe. At the same time, Austrian products lie in the upper price range which makes them less attractive for the CEEC.

Germany is correspondingly to its economic power and geographical proximity the most important trade partner for the CEEC. However, a comparison of the German trade structure with that of the other EU countries and of the CEEC can be undertaken only for later years following the German re-unification, while a comparison between the German trade structures at earlier and later points is not possible. Italy is also an important trade partner for the CEEC due to its economic size. The Netherlands are (similarly to Austria) a small open country. Sweden was included in the analysis due to the opportunity to explore the consequences of EFTA-specific elements.

Austria is favored by its specific central position. Germany and Italy (and Sweden with a sea border to Poland) are located in the neighborhood of some CEEC. Compared to Austria the geographical location of Germany and Sweden offers better opportunities for an intensive

trade with Poland. On the other hand, Italy has more favorable conditions for the trade with Slovenia and partially (due to the Romanic language) with Romania. The Netherlands as the only reference country in our comparisons are located apart from the Central European region.

In Austria and Sweden the opening of Eastern Europe took place simultaneously with their integration into the EU. On the other hand, the EU enlargement with Finland, Austria and Sweden implied for the EU an intensification of its trade relations with the Eastern European countries.

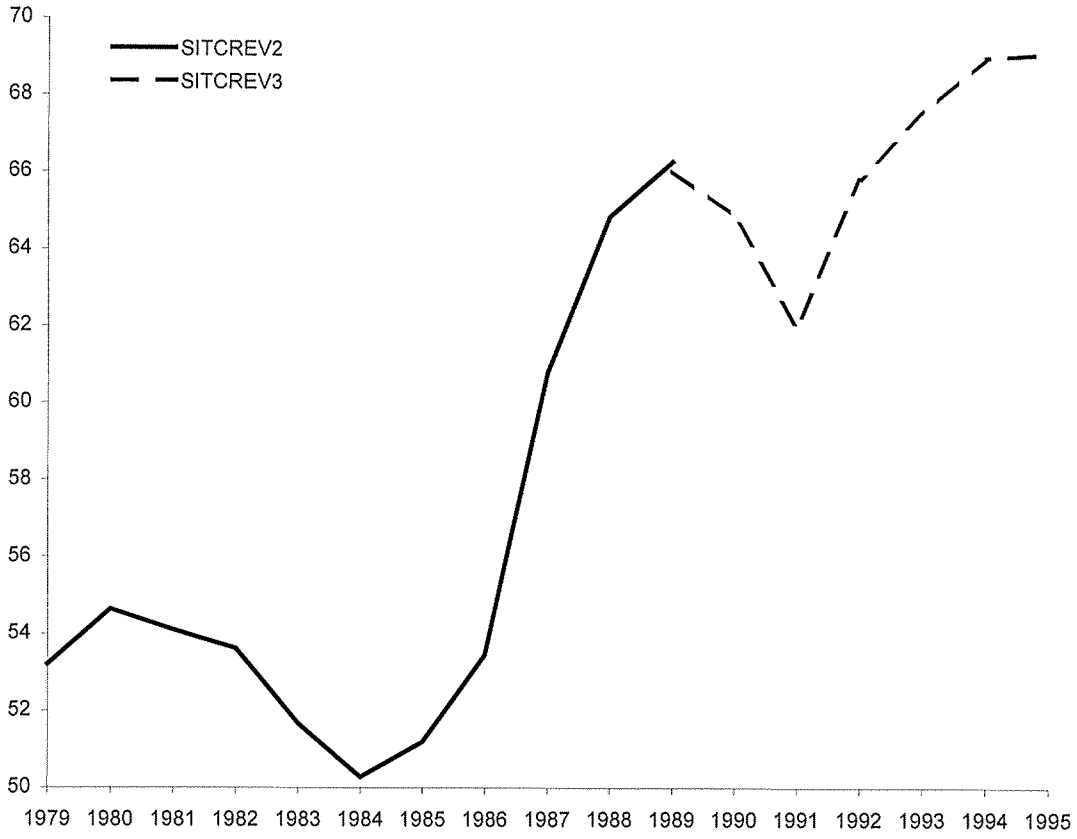
The paper is structured as follows. The next section adopts Krugman's (1980) model of trade with differentiated products and trade costs. We will show that integration leads to the growth of the intra-industry trade. In the third section we describe the development of trade between the EU and the CEEC. The fourth section addresses the rise of the intra-industry trade in the EU's trade with the CEEC. Section five, concludes the paper.

2. Model of Intra-Industry Trade with Differentiated Products and Integration

Increasing returns to scale, differentiated products and monopolistic competition are generally seen as the main sources of intra-industry trade. Greenaway and Milner (1987) and and Greenaway and Torstensson (1997) provide excellent literature surveys on intra-industry trade. Furhtermore, a higher share of intra-industry trade can be observed among the countries participating in common integration arrangements. In particular, intra-industry trade accounts for a large share of intra-EU trade. Moreover, a significant and fast growth of intra-industry trade can be seen in the countries' trade after their accession to the EU. Figure 1 shows the development of the intra-industry trade between Spain and France after Spain's accession to EU. The share of intra-industry trade in Spain's total trade turnover with France increased from slightly over 50% before accession to a relatively high level of nearly 70%.

Following the Dixit and Stiglitz (1977) work, Krugman introduced in 1980 a model with differentiated products and transport costs. Using this framework we analyze the effects of integration. In our approach, the integration of two countries is modeled as a reduction of transaction costs, including non-tariff trade barriers. The model is kept as simple as possible in order to present the main results. In particular, we assume only one factor (labor) and one sector producing a large number of potential differentiated goods. These goods are produced under increasing returns to scale with the same technology in both countries under Chamberlinian monopolistic competition. There are many firms with some monopoly power, but free entry drives monopoly profits to zero.

Figure 1: Intra-Industry Trade (Grubel- Lloyd Indices) between Spain and France



Note: See equation (20) for definition of IIT indices.
Source: Own calculations.

In this model the whole trade consists of intra-industry trade, as there is only one sector. Modeling integration as a reduction of transaction costs increases the volume of (intra-industry) trade. Moreover, the small country will have relatively lower wages than the larger country. Both features are compatible with the current East-West integration, but also with the previous enlargements of the EU.

There are only two countries. The foreign country is denoted by a star. Both domestic and foreign products enter symmetrically into consumers' demand. We assume identical preferences in both countries described by a CES utility function,

$$U = \left(\sum_{i}^{n+n^*} c_i^{\theta} \right)^{\frac{1}{\theta}},$$

where c_i denotes consumption of n domestic and n^* foreign products and θ is the elasticity of substitution. The differentiated products are good substitutes meaning that $\theta > 0$, but imperfect substitutes implying $\theta < 1$. These both restrictions imply $0 < \theta < 1$. The utility

function in the foreign country can be defined in the same way. The CES utility function can be simplified to

$$U = \sum_{i}^{n+n^*} c_i^{\theta} . \tag{1}$$

In the basic case with identical technology and preferences in both countries and zero transaction costs we get a symmetrical equilibrium with the same prices and quantities produced and consumed in both countries (see Krugman, 1980). However, the introduction of trade restrictions (tariffs and non-tariff barriers) and transaction costs changes the properties of the equilibrium.

In order to reflect the high share of non-tariff trade restrictions in the EU we model the barriers similarly as transport costs of the "iceberg" type. Only a fraction *g* of traded goods may be consumed in the importing country and 1-*g* is lost through transactions,

$$c_j = m_j - (1-g)\, m_j \text{ implying } \frac{m_j}{c_j} = \frac{1}{g}, \tag{2}$$

where m_i denotes the combined direct and indirect demand for imported goods. If the domestic consumer consumes one unit of the foreign product, his combined direct and indirect demand is 1/*g*.

Therefore, the price of foreign products in the home country, $\hat{p}$, is higher than the producer price abroad, p^*

$$p_i^* = \hat{p}_i - (1-g)\,\hat{p}_i, \text{ or } \hat{p}_i = \frac{p_i^*}{g}. \tag{3}$$

Because the price of domestic and foreign goods is not the same, the budget constraint of the consumer is

$$\sum_{i}^{n} p_i c_i + \sum_{j}^{n^*} \hat{p}_j c_j = w, \tag{4}$$

where *w* is the wage representing the only income of consumers, because profits are zero under assumed Chamberlinian monopolistic competition.

All goods *i* are produced with the same technology under increasing returns to scale with labor as the only factor of production,

$$l_i = \alpha + \beta x_i, \tag{5}$$

where α, $\beta > 0$ denote fixed and marginal costs and x_i is the output of the good. The average costs decline at diminishing rate at all levels of output. In equilibrium, production has to equal the demand in both countries, $x_i = L\, c_i + L^* m_i^*$. We also assume full employment, so that the labor force equals the labor used in production,

$$L = \sum_{i=1}^{n} \alpha + \beta x_i \,. \tag{6}$$

The maximization of (1) with respect to (4) gives us the quantities consumed in the home and foreign country

$$c_i = \left(\frac{\theta}{\lambda} p_i\right)^{\frac{1}{\theta-1}} \text{ and } c_i^* = \left(\frac{\theta}{\lambda} \hat{p}_i^*\right)^{\frac{1}{\theta-1}} \tag{7}$$

$$c_j = \left(\frac{\theta}{\lambda} \hat{p}_j\right)^{\frac{1}{\theta-1}} \text{ and } c_j^* = \left(\frac{\theta}{\lambda} p_j^*\right)^{\frac{1}{\theta-1}} \tag{8}$$

and the demand curves for domestic and imported products,

$$p_i = \frac{\theta}{\lambda}\left(\frac{x_i - m_i}{L}\right)^{\theta-1} \text{ and } \hat{p}_i^* = \frac{\theta}{\lambda}\left(L^* g m_i^*\right)^{\theta-1}, \tag{9}$$

$$\hat{p}_j = \frac{\theta}{\lambda}\left(L g m_j\right)^{\theta-1} \text{ and } p_j^* = \frac{\theta}{\lambda}\left(\frac{x_j^* - m_j^*}{L^*}\right)^{\theta-1}, \tag{10}$$

where λ is the shadow price on the budget constraint.

We can derive the relation of consumption of domestic and foreign goods from the first order conditions for maximization of (1) for domestic and foreign goods, (9) and (10),

$$\frac{c_i}{c_j} = \left(\frac{p_i}{\hat{p}_j}\right)^{\frac{1}{\theta-1}} = \left(\frac{p_i}{p_j^*}\right)^{\frac{1}{\theta-1}} g^{\frac{1}{1-\theta}}. \tag{11}$$

This relation shows that the consumption of the imported products negatively depends on trade barriers and transaction costs. On the other hand, the producer faces demand curves with the same elasticity on both markets,

$$\varepsilon_{p,c} = \varepsilon_{p,c}^* = \frac{1}{1-\theta}, \tag{12}$$

if there are many differentiated products implying that any one firm has only a negligible effect on the marginal utility of income. Then the profit maximizing price is given by the equality of marginal revenues (p_i+$\varepsilon_{p,c}$) and marginal costs (βw) leading to

$$p_i = \frac{\beta w}{\theta}. \tag{13}$$

This means that the firms charge the same price on both domestic and foreign markets given the same preferences in both countries. The profit of the firm producing good i,

$$\pi_i \equiv p_i\left(c_i + \frac{c_i^*}{g}\right) - \left[\alpha + \beta\left(c_i + \frac{c_i^*}{g}\right)\right] w_i \equiv 0, \tag{14}$$

equals zero in equilibrium, otherwise new firms will enter the market and drive the profits to zero. The total output of the representative firm is

$$c_i + \frac{c_i^*}{g} = \frac{\alpha}{\frac{p_i}{w} - \beta} = \frac{\alpha\theta}{\beta(1-\theta)} \quad \text{for all products } i=1,\ldots,n; \tag{15}$$

where the second right hand expression is derived by using (13) for the equilibrium price. Because all parameters of (15) are the same for all domestic firms, the output of all firms is the same. The production negatively depends on the size of transaction costs. The liberalization of foreign trade and the corresponding reduction of trade barriers leads to production growth in both countries.

The number of firms is given by the full employment condition (6). Using (15) we get

$$n = \frac{L}{c_i + \frac{c_i^*}{g}} = \frac{L(1-\theta)}{\alpha}. \tag{16}$$

That means that the number of firms is not influenced by trade barriers. The same set of equations can be presented for the foreign country.

Exports and imports can be expressed by the ratio between the total demand of domestic consumers and the demand for each domestic product, δ, that can be derived from (11),

$$\delta = \frac{1}{g}\frac{c_i}{c_j} = \left(\frac{p_i}{p_j^*}\right)^{\frac{1}{\theta-1}} g^{\frac{\theta}{1-\theta}}. \tag{17}$$

If there are no transaction costs and trade barriers, all consumers consume the same amount of both domestic and foreign products. The individual domestic consumption of the imported products shares then $n^*/(n+n^*)$. Krugman (1980) showed that wages equalize in both countries under free trade. However, the total demand for foreign products accounts for only δ of the consumption of domestic product under trade barriers. Trade balance of the home country, B, can be expressed as

$$B = L^* \frac{\delta^* n}{\delta^* n + n^*} p - L \frac{\delta n^*}{n + \delta n^*} p^* = 0. \tag{18}$$

This can be simplified by replacing n and n^* according to (16) to

$$\omega = \frac{\delta}{\delta^*}\frac{\delta^* L + L^*}{L + \delta L^*}, \tag{19}$$

where $\omega=p/p^*=w/w^*$. This equation reveals another interesting relationship between the size of home and foreign country and relative wages. Wage equalization, $\omega=1$, implies that the ratios of total demand for foreign products to the demand for domestic products is the same in both

countries, $\delta=\delta^{*}<1$. Inserting these relations into the equation (19), we get $L=L^{*}$. That means that the wages in both countries equalize if and only if both countries are of the same size. Otherwise the smaller country has relatively lower wages than the larger country. As we already mentioned, this feature of the model is compatible with the relative wage structure in the EU and the CEEC as well as in the earlier EU members and in the Iberian later entrants to the EU.

3. Dynamics of Trade with the CEEC in Selected EU Countries

There are big differences among the CEEC, due to the country-specific start up conditions and development factors. Therefore, Eastern Europe can not be considered as an uniform market. Within Eastern Europe can be identified at least four different regional groups, such as: the Central European countries (Poland, Slovakia, Czech Republic, Hungary, and Slovenia), the South Eastern European countries (Bulgaria and Romania), the Baltic countries, and the CIS. However, there are large differences even in the trade patterns between the EU countries and the individual countries from the same group within the Eastern European countries. Further Albania can not be assigned to anyone of these groups.

In 1994, the EU exports to the CEEC registered a fourfold increase (calculated in USD current prices) when compared to 1988. The EU imports from these countries developed somewhat slower, although a twofold increase of the 1988 level was recorded. Germany and Italy outstandingly contributed to the growth of the volume of trade. Austria shows despite high absolute values only below average growth rates which reflect also the relatively high starting level.

European Union registered on average a rise in its exports and imports with all the groups of countries explored. However, the trade with the other regions of Eastern Europe (mainly with the FSU) registered slower growth rates compared with the foreign trade with the CEEC.

3.1 Shares of Eastern European Countries in Foreign Trade of the EU

In 1994, 4.5% of total EU exports (including intra-EU trade) went to Eastern Europe. Over half of these exports (2.6% of total exports) went to the four Central European countries (Poland, Slovakia, Czech Republic, and Hungary), which concluded already in 1992 Association Agreements with the EU. The share of Eastern European countries in total EU imports is almost equally large (4.2%), of which 1.9% is assigned to Poland, Slovakia, Czech Republic, and Hungary.

The importance of the South-Eastern European countries, the Baltic States and the CIS (with the exception of Russia) for the EU exporters and importers remains low. The foreign trade

with the CIS reached 1.3% of European exports and 1.8% of imports in 1994. The exports and imports of the EU to/from the Baltic countries represented 0.2% of exports and imports in 1994. The shares of the South European countries (Bulgaria and Romania) remained modest (under 0.5%).

The importance of the East trade for the member countries of the EU varies strongly. The new EU members (Finland, Austria and Sweden) display an outstandingly high share of their trade with Eastern Europe. Austria has the highest market share in the Eastern European countries (12.5% of total Austrian exports according to the IMF data and 13.6% according to the Austrian data). This success is particularly due to the early engagement of the Austrian firms in the CEEC.

At the same time, Austria achieved in 1994 the second-highest (after Germany) trade surplus in the trade with Eastern Europe (USD 1.5 billion), which contributed to reducing the overall deficit of the trade balance. Correspondingly, the share of imports from Eastern Europe is below that of the exports from this region. In 1994, 7.6% of total Austrian imports came from Eastern Europe. This places Austria among the top EU importers from Eastern Europe. Only Finland records a higher share of imports from Eastern Europe (12.5% of Finnish total imports) which relies heavily on the trade with the CIS (9.1% of total Finnish imports - mainly raw materials - came from the CIS).

In its trade with Eastern Europe, Finland elaborates on the earlier mutual trade flows. In contrast to the other EU countries, the structural changes undergoing the Finnish economy are not determined by its imports (due to new imports from Eastern Europe) but by the export side, as Finland has to find new markets (similarly to the Eastern European countries) for a large part of the earlier exports to Eastern Europe, which during the transition years are no longer demanded. In the period 1988 to1994 the Finnish imports from the CEEC have only slightly increased while the imports from the FSU have fallen.

Italy and Germany are the most important partners for the Eastern European countries due to their economic importance and geographical proximity. The shares of exports and imports to/from Eastern Europe accounted each for about 7.4% of the German foreign trade in 1994. The Central European countries are, as expected, the most important trade partners for Germany in this region (4.3% and 4.5% respectively of total imports and exports), although their share remains relatively low. Similarly, Eastern Europe accounts for 6.0% and 5.1% of the Italian imports and exports, respectively. Furthermore, Italy has relatively high shares in its trade with the South Eastern European countries, as well as with the CIS. The imports from the CIS (3.5% of total imports) registered thereby the second-highest value (after Finland) for the EU-countries.

Although France and Great Britain belong (together with Germany, Italy, and Austria) to the five most important trade partners of Eastern Europe, they registered lower than average

shares of trade with Eastern Europe. The volume of trade recorded by these five countries with Eastern Europe represented in 1994 over three quarters of the total EU trade with Eastern Europe. Furthermore, the share of the CEEC in trade of these countries is even larger (over 80%).

3.2 Shares of EU-Countries in the CEEC Trade

As a result of the high growth rates registered by CEEC's imports from the EU[1] during the first transition years, the EU-countries' shares in the Eastern European markets have sharply risen (see Appendix). As far as Austria engaged in the new markets in Eastern Europe earlier than the other EU countries, a reduction of its market shares in the CEEC in the later years, balanced by a stronger engagement of the other West European countries was to be expected.

We used the foreign trade data available in the UNO database. However, the UNO database does not provide the trade data for the years 1990 and 1991 for some CEEC, presumably because of the shift of the SITC revision 2 to the SITC revision 3. Additionally, the division of Czechoslovakia had a similar negative impact upon the availability of the Czech and of the Slovak data for 1991 to 1993.

The highest Austrian market shares were already attained at the beginning of the 1990s, while in the subsequent years they started shrinking. The Austrian market shares in Poland have fallen from 6.0% in 1989 to 2.5% in 1994; in Hungary they fell from 14.4% in 1992 to below 12% in 1993 and 1994. A similar development can also be observed in the Czech Republic and Slovakia, but due to the division of Czechoslovakia and the missing data between 1991 and 1993 the size and dynamics of the market shares' losses can not be precisely quantified. Slovenia was the only Eastern European country where an increase in the Austrian market shares between 1992 and 1994 could be observed. Between 1993 and 1994 they also slightly recovered in the Czech Republic and Hungary.

During the same period, German and Italian market shares have significantly risen. However, since 1992 the German market shares growth stagnated in Hungary, while in the former Czechoslovakia, Poland and Slovenia they have slightly decreased in 1994 compared to 1993. In contrast, the Italian market shares show a continuous upward trend in the Czech Republic, Romania and Slovenia.

[1] In contrast to the other chapters we consider in this chapter the foreign trade from the point of view of the CEEC, which allows us to calculate the market shares of Austria and of the selected EU countries as well. The data concerning the imports of individual CEEC from Austria negligibly differ from the respective data on Austrian exports.

3.3 Similarity between Total Trade and the Trade with the CEEC

We compare the similarity between the two trade structures, namely the structure of the exports to Eastern Europe with the structure of the exports to the other regions (total exports less the exports to the selected CEEC), with the help of the correlation coefficients. The values of the correlation coefficients range between -1 and 1, whereby in our analysis the negative values appear only exceptionally. Values close to both extreme values show a large similarity (+1) or complementary (-1). If the correlation coefficient displays values around 0, the two statistical variables have no or very low similarity. Fidrmuc, Helmenstein and Huber (1998) and Havlik (1996) used this method for the analysis of the similarity of the foreign trade of the Central and Eastern European countries with Austria and with the EU, respectively.

The application of the non-weighted correlation coefficient in foreign trade overvalues the significance of the small commodity groups, which leads especially when using detailed data to an overvaluation of the correlation due to a high number of commodity groups with stable low shares (see Fidrmuc, Helmenstein and Huber, 1998). Therefore, we used weighted correlation coefficients in order to avoid this effect.

Table 1: Similarity of Exports to the CEEC and Exports to the Other Countries, 1989

(Correlation Coefficients of the Commodity Structure of EU-Countries' Exports to Selected CEEC and the Commodity Structure of EU-Countries' Exports to Other Countries[/1], Weighted with the Commodity Structure of Total Exports of the EU-Countries in 1989, SITC-Two Digit Commodity Groups)

	Czechoslovakia	Hungary	Poland	Romania
Austria	.4034	.6688	.5263	.4481
Germany	NA	NA	NA	NA
Italy	.4949	.6239	.6803	.2684
Netherlands	.2173	.1020	.1127	.4214
Sweden	.1254	.4466	.6881	-.0404

Note: [/1] Exports to the other countries: Total exports of EU-Countries less the exports to the former Czechoslovakia, Hungary, Poland and Romania.

Source: Own calculations.

Generally, the correlation of the neighboring countries' trade is relatively high, while the opposite is true for distant countries (see Table 1 and Table 2). This can be seen in the low correlation coefficients of the export structures of CEEC and the Netherlands. Moreover, the correlation of the Dutch export structure with that of the more advanced reform countries (Czech Republic and Hungary) is higher than with the other Eastern European countries. A comparison of both tables shows, that the similarity between the structure of exports to Eastern Europe and the structure of exports to the other regions of the world grew significantly since the opening of Eastern Europe.

The German trade data for 1989 are not available. However, these data would not be comparable with later years due to German reunification. Nevertheless, Table 2 shows that Germany displays in 1994 the largest similarity between the structure of exports to Eastern Europe and that of the exports to the other countries. German exports to Hungary show a

correlation coefficient of 0.95. The correlation of German exports to the Czech Republic, Poland and Slovakia displays values between 0.7 and of 0.9 higher than in the other EU-countries.

In 1989, the similarity between the Italian exports and exports to former Czechoslovakia was lower than that between the Italian exports and the exports to Hungary and Poland. At the same time, a rise of the similarity of the Italian exports and exports to the CEEC can be observed. On the other hand, Italy, Austria and Sweden (with the exception of the Swedish trade with its Poland) show lower similarities of their exports with the exports to Eastern Europe. However, Austrian export structure was more similar with the structure of the Austrian exports to Eastern Europe in the first transition years. Following 1989, the similarity between the Austrian exports to Poland and the Austrian exports to the other regions negligibly decreased, while it slightly increased for Hungary. The similarity of Austrian exports increased significantly only for the exports to the former Czechoslovakia between 1989 and 1994.

Table 2: Similarity of Exports to the CEEC and Exports to Other Countries, 1994

(Correlation Coefficients of the Commodity Structure of EU-Countries' Exports to Selected CEEC and the Commodity Structure of EU-Countries' Exports to Other Countries[/1], Weighted with the Commodity Structure of Total Exports of the EU-Countries in 1994, SITC-Two Digit Commodity Groups)

	Czech R.	Hungary	Poland	Slovakia	Romania
Austria	.7138	.7855	.5144	.6431	.5569
Germany	.8172	.9451	.6535	.8276	.2888
Italy	.8180	.9216	.7679	.7315	.5270
Netherlands	.6351	.2957	.3783	.2415	.2377
Sweden	.2933	.2662	.8031	.3020	.5407

Note: [/1] Exports to the other countries: Total exports less the exports to the Czech Republic, Hungary, Poland Slovakia, and Romania.

Source: Own calculations.

3.4 Structural Changes in East-West Trade

To assess the extent of the structural changes we have calculated the correlation coefficients (weighted with the total exports of the year 1994) between the structures of the selected EU countries' exports to the CEEC in the years 1989 and 1994. A high correlation coefficient (1) shows a high stability of the export structures with small structural changes. A low value (0) demonstrates a fundamental change in the export structure.

There is a high stability in the structure of total exports in the year 1994 compared to 1989 for all the surveyed countries (see the first column of Table 3). Compared to Italy and Sweden, Austria recorded larger structural changes in its total exports between 1989 and 1994. This can be explained through more intensive trade relations with the CEEC than the other selected countries. However, Dutch exports display a higher extent of structural changes, although the Netherlands were exposed to lower adjustment pressure from the opening of

Eastern Europe than Austria. This underlines the necessity of fast structural adjustments as a result of the changes taking place in the world economy.

The exports of the selected EU countries to the individual CEEC display much larger structural changes. However, the structure of the Austrian exports to Central Europe and of the Swedish exports to Poland show a larger stability than the trade relations of the other EU countries to the CEEC. The stable export structure can be explained on the one hand through the early changes that took place in the Austrian exports to the CEEC and in the Swedish exports to Poland. On the other hand, it may indicate that the Austrian and Swedish exports have adapted less to the changes that took place in the later transition years in Central and Eastern Europe. It is, therefore, less surprising that the Dutch exports to the CEEC show the highest degree of changes. As already mentioned, Dutch exports adapted faster to the new conditions.

Among the CEEC, the former Czechoslovakia and Hungary show a larger stability of their imports from the West European countries (from the point of view of these countries). On the other hand, Romania (with the exception of the imports from Italy) shows the largest structural changes between 1989 and 1994, explained by the transition from a regime of forced exports and repressed imports to free trade.

Table 3: Structural Changes in EU's Trade with the CEEC (1994 Compared to 1989)

(Correlation Coefficients of the Commodity Structure of EU-Countries' Exports to Selected CEEC in 1989 and 1994, Weighted with the Commodity Structure of Total Exports of the EU-Countries in 1994, SITC-Two Digit Commodity Groups)

	Total trade	former CSR	Hungary	Poland	Romania
Austria	.9109	.7952	.6451	.6387	.1482
Germany	NA	NA	NA	NA	NA
Italy	.9892	.6636	.6282	.5772	.6691
Netherlands	.8804	.3894	.6107	.4019	-.0069
Sweden	.9693	.6032	.0361	.8625	.3256

Source: Own calculations.

4. Intra-Industry Trade between EU Countries and the CEEC

The CEEC are abundant in agricultural land, some raw materials, energy as well as skilled and unskilled labor. On the other hand, the years of planned economy and autarchy resulted in outdated capital stock. While the workers' skills are well comparable with West Europe, the CEEC have a tremendous demand for R&D and modern technologies. In light of these initial differences, the first analyses (Begg et al., 1990, and Collins and Rodrik, 1991) envisaged the specialization of the Eastern European countries in labor, raw material and energy intensive commodities as well as agricultural products. Such specialization is known as inter-industry trade.

In contrast, the trade with similar or the same products (differentiate products) plays an increasingly important role in the trade among the developed countries and especially in the intra-EU trade. This pattern is referred to as intra-industry trade. The original factor endowment of the developed countries plays a less important a role in the determination of the trade patterns.

The pattern of the participation of the CEEC in the international division of labor has important economic consequences. The specialization of the CEEC on labor, energy and raw-material intensive sectors would imply a corresponding contraction of these sectors in the EU countries. On the other hand, capital intensive goods and R&D products may expand both in the EU as well as in CEEC. A fundamentally different development can be expected in the case of intra-industry trade. All sectors and often the same enterprises are facing similar competitive pressures and new market opportunities following the opening up of Eastern Europe and/or the EU Eastern enlargement.

We analyze two foreign trade indicators (Grubel-Lloyd indices and marginal intra-industry trade indices) of the intra-industry trade. We will show that the development of the trade between the EU and the CEEC has characteristics of both scenarios. Martín and Gual (1994), Dimelis and Gatsios (1994), EC (1994) and Petsche (1996) showed that especially at the beginning of transition labor and energy intensive products grew faster in the East-West trade. However, our analysis shows that the intra-industry trade plays, mainly in the more advanced countries that recently joined OECD (Hungary, Slovenia, Poland and the Czech Republic), an increasingly important role.

4.1 Intra-Industry Trade between the EU-Countries and the CEEC

To address the intra-industrial trade we use the Grubel-Lloyd index (Grubel and Lloyd, 1971) of intra-industry trade (IIT_{it}) which is defined as

$$IIT_{it} = 1 - \frac{|X_{it} - M_{it}|}{X_{it} + M_{it}}, \tag{20}$$

where X_i denotes the exports of industry i; M_i the imports of industry i; $|X_i-M_i|$ the absolute value of the trade balance of industry i, and (X_i+M_i) stands for the total trade volume of the industry i in period t. An index value of 0 shows that there is exclusively inter-industry trade, i.e. for each country a complete specialization on different products, while an index value of 1 shows the existence of a total intra-industry trade. The Grubel-Lloyd index is a static measure of the intra-industry trade at a specific point in time.

A high degree of intra-industry trade between two countries suggests an advanced economic integration of these countries and a high level of industrial development. While the inter-industry trade is in the long-term unfavorable for the CEEC, the intra-industry trade can generate new advantages for the CEEC.

The Grubel-Lloyd index shows that the Index of Revealed Comparative Advantage (RCA-indices), which were commonly used for the analyses of the foreign trade with Eastern Europe, considers also the changes in the intra-industry trade. Collins and Rodrik (1991), Dimelis and Gatsios (1994), Martín and Gual (1994) used the following index:

$$RCA_{il} = \frac{X_{il} - M_{il}}{X_{il} + M_{il}}. \tag{21}$$

The index value of 1 or -1 suggests a complete specialization in the bilateral foreign trade. A country has a comparative advantage in the trade with a certain commodity group, if the RCA - index for these goods has a high, positive value. On the other hand, the index value of 0 shows that the trade of the respective commodity group is balanced. We can conclude in this case that there is intra-industry trade. Earlier analyses of the RCA indices showed that as the countries progress on the path of economic reforms the pattern of comparative advantage of East and West European countries becomes less clear. This corresponds to a rise in the intra-industry trade as $IIT_i = 1-|RCA_i|$.

4.2 Intra-Industry Trade by Commodity Groups

In all selected EU countries, the commodity groups with a high share in the total trade record also high IIT-values. This underlines the importance of the intra-industry trade for the developed countries. With the convergence of the CEEC towards the income and the development level of the EU a similar rise in the intra-industry trade can be expected.

Large countries exhibit a lower share of intra-industry trade than small economies. This corresponds to a larger number of enterprises with close business relations in particular sectors in the large countries (see our model). Therefore, Germany shows negligibly lower values of intra-industry trade in total trade than the other selected EU-countries. This argument can be also applied for Italy. In contrast, the enterprises in small economies have often most of their business partners in other countries which implies high IIT-values. Therefore, a comparison of intra-industry trade should be undertaken among similarly large economies, such as Austria, Sweden, and the Netherlands. Such a comparison reveals that Austria has higher values of intra-industry trade in comparision to Sweden, but lower IIT-values than the Netherlands for the most important commodity groups. This corresponds to the better integration of the Netherlands in the EU and in the world economy and to Sweden's stronger concentration on sectors, which intensively use the natural resources of the country.

The intra-industry trade of all selected EU countries with the CEEC lies still under the values for the total trade of the selected EU countries. Austrian trade with the Czech Republic and Slovakia shows similarly high levels of intra-industry trade as the total Austrian trade. However, the trade with Hungary, Slovenia and Poland displays below average values of intra-industry trade.

A comparison between the bilateral trade relations in 1989 and 1994 reveals radical changes regarding the commodity groups registering high intra-industry trade values in the two years (e.g. in the trade relations between Poland and Austria the commodity group 52 - inorganic chemicals - was the only one which displayed in both years a high value of the IIT - index). This is a result of the changes in the product mix and the reorientation towards new markets and new product nisches during the first transition years of the CEEC.

Table 4: Intra-Industry Trade of EU Countries with the CEEC Compared with Total Trade

Weighted	Total		HU		CSR	CZ	SK	SLO	PL		RO	
Average	1989	1994	1989	1994	1989	1994	1994	1994	1989	1994	1989	1994
Austria	74.03	76.68	39.74	45.65	41.91	56.68	48.65	59.19	35.95	39.11	38.66	35.52
Germany	NA	72.63	NA	55.54	NA	61.68	53.52	51.79	NA	46.68	NA	34.15
Italy	62.53	63.74	42.05	42.75	38.71	46.15	37.37	59.61	36.01	43.12	36.52	38.38
Netherlands	78.25	82.53	34.74	48.29	49.28	46.35	36.14	38.86	46.44	38.47	36.47	31.38
Sweden	70.18	66.24	33.65	35.18	36.01	41.19	35.14	41.19	42.72	49.66	25.88	14.53

Note: The Grubel-Lloyd indices for two-digit SITC groups were weighted with the groups' shares in total trade turnover (total exports and imports). See Appendix for detailed Tables.

Source: Own calculations.

4.3 Intra-industry Trade of EU Countries with the CEEC

The rise in the intra-industry trade represents one of the most important characteristics of the period 1989 - 1994. The change in the pattern of the East-West trade from CEEC's specialization on products, where they have comparative advantage to intra-industry trade can be graphically illustrated with the help of histograms. They present the commodity groups' shares gathered in certain intervals according to the values of the Grubel - Lloyd - indices. While in 1989 the foreign trade of the CEEC concentrated on commodity groups with lower values of the intra-industry trade, trade in 1995 we observe an accumulation of the foreign on commodity groups in the upper area of the Grubel-Lloyd - indices (see Appendix).

The rise in the intra-industry trade represents one of the most important feature of the liberalization of East-West trade since 1989. The importance of the intra-industry trade existent at the level of the individual commodity groups for the cumulated foreign trade is presented in Table 4. We compare the averages of the IIT-indices by two-digit SITC groups weighted with the shares in the total trade turnover (export and imports)[2] between 1989 and 1994.

In both years, the average value of the intra-industry trade for Austria is higher than for all the other considered EU-countries with the exception of the Netherlands. On the other hand, Germany displays higher values of the intra-industry trade with Hungary, Czech Republic,

[2] We calculated the shares of commodity groups in the total trade turnover instead of bilateral trade, because the structure of the foreign trade with the CEEC has not yet adapted to the changed conditions.

Poland, and Slovakia than Austria. Moreover, Germany displays lower variance of the values of intra-industry trade with the CEEC than the other EU-countries. This confirms that Germany developed the industrial cooperation with the CEEC faster than the other West European countries.

The values of the Grubel-Lloyd index in the foreign trade with the CEEC have clearly risen (except for a few cases, such as the Dutch exports to Poland). However, the averages still lie in most of the cases under the values of the total trade.

Italy and Sweden display similar high values of the intra-industry trade in the foreign trade with their respective neighboring trade partners in Central and Eastern Europe (Slovenia and Poland). Only the Netherlands show lower values than Austria for all CEEC. Nevertheless, the high variance on SITC two-digit level suggests that a restructuring process is taking place in the Dutch foreign trade with the CEEC.

Table 5 explores the similarity between the intra-industry cooperation with the CEEC with the Grubel-Lloyd indices in the total trade. The Austrian, German and Swedish foreign trade with Hungary, the trade of all selected West European countries (with the exception of Sweden) with Slovenia, and the trade between Sweden and Poland show the largest similarity with the pattern of the intra-industry trade of these countries. This can be explained through the earlier begin of the economic reforms in Hungary and Slovenia, but also through the relatively higher similarity in the wage and cost levels in these countries. In contrast, the trade of all the West European countries with the Czech Republic, Poland (with the already mentioned exception of Sweden), Slovakia and Romania show only a minor similarity with the general pattern of the international division of labor. This suggests the larger role of the outward processing trade (OPT) in Poland, the former Czechoslovakia and Romania.

Burgsthaller and Landesmann (1997) and Landesmann (1996) found clear quality differences between the West and Eastern European products, which can be observed in the intra-industry trade. The Eastern European countries exhibit on one hand lower unit prices (value to quantity ratio) on the EU market (this corresponds to a higher competitiveness of the Eastern European producers) and on the other hand they focus on products with lower prices in the entire EU trade (including the intra-EU trade). This structure of the intra-industry trade corresponds to the so-called "vertical differentiation", in contrast to the "horizontal differentiation" (trade with the same products and/or the same quality), which prevails in the intra-EU trade. They found that the more successful reform countries, such as Slovenia, Hungary, Poland and the Czech Republic reached the quality and the price level of the EU, which corresponds to a rise of the intra-industry trade with horizontal differentiation of products. This observation is confirmed by the higher similarity of the intra-industry trade of Slovenia, Hungary, and to less extent in the Czech Republic and Poland.

Table 5: Similarity of EU's intra-industry trade with the CEEC and the total trade, 1994

(Correlation Coefficients of Grubel-Lloyd Indices in EU-Countries' Trade with Selected CEEC and Grubel-Lloyd Indices in EU-Countries' Total Trade, Weighted with the Commodity Structure of Total Exports and Imports of the EU-Countries by in 1994, SITC-Two Digit Commodity Groups)

	Hungary	Czech R.	Slovakia	Slovenia	Poland	Romania
Austria	.4075	.1964	.0859	.4390	.2745	-.0372
Germany	.4602	.0669	.0555	.3550	.1937	.2411
Italy	.1315	.1338	.0517	.4217	.3087	-.2304
Netherlands	.1186	.2741	.1587	.4251	.1620	.0305
Sweden	.4952	.2482	.0951	-.2184	.5256	.3196

Source: Own calculations.

4.4 Development of Indices of Marginal Intra-Industry Trade

The comparison of the Grubel-Lloyd indices in 1989 and 1994 shows that the rise of the intra-industry trade was an important feature of the development of the East-West trade. However, the Grubel-Lloyd indices may increase also if the growth of the inter-industry trade reduces the trade imbalances in a particular sector. That means that an increase of the inter-industry intrade could be interpreted as an increase of the intra-industry trade. Therefore, Brüllhart (1994) recommends the following index of marginal intra-industry trade ($MIIT_{it}$):

$$MIIT_{it} = 1 - \frac{\left|\Delta X_i - \Delta M_i\right|}{\left|\Delta X_i\right| + \left|\Delta M_i\right|}, \tag{22}$$

where the individual variables (X_i and M_i) have the same meaning as above and Δ denotes the difference operator.

Similarly like the Grubel-Lloyd index the values of the MIIT-index range between 0 (the change in the trade flows in the commodity group *i* can be completely attributed to the inter-industry trade) and 1 (the trade change is due to intra-industry trade). The MIIT-indices may be similarly analyzed as the Grubel-Lloyd-indices (aggregation through weighted averages).

The values of the MIIT-indices (see Table 6) confirm that the growth of trade of all selected EU countries with the CEEC was mainly due to the rise in the intra-industry trade. The averages for the Austrian trade with the former Czechoslovakia and Hungary are over the MIIT-values in the trade of the other West European countries with the CEEC. Austria records also the highest share of intra-industry trade in the growth of the total trade, followed by the Netherlands. The growth of the Swedish-Polish and of the Italian-Czechoslovak trade also shows a strong rise of the intra-industry trade. This is also valid (although to a smaller extent) for the bilateral trade flows between Italy and Poland and between the Netherlands and Hungary as well as the former Czechoslovakia.

Regarding the shares of the intra-industry trade in total trade growth the three CEEC countries show only slight differences. In contrast the growth of the Romanian foreign trade was characterized by the rise of the industrial specialization.

The averages of the MIIT-indices may seem low in a comparision to the Grubel-Lloyd indices, which often reach values over 40% in the trade with the CEEC. This suggests a high sensitivity of the MIIT-index. On the other hand, many commodity groups reach MIIT-values close to the maximum value (100%). The commodity specific patterns of the change show many differences in the bilateral trade relations. Partially, this can be attributed to the different industrial structures. In other cases it suggests that there is a potential for a future increase in the intra-industry trade in these commodity groups with those countries which record low shares. The MIIT-index of the Austrian trade with road vehicles (SITC 78) records 93% with the former Czechoslovakia, 84% with Romania, but only 8% with Hungary and 0 with Poland. The MIIT-index considering the trade flows between Italy and Poland for the same commodity group (SITC 78) reaches 87% and those between Sweden and Poland 86%.

Table 6: MIIT-Indices of Changes in Foreign Trade (in %)

Country	Total	Hungary	CSR	Poland	Romania
Austria	68.52	40.62	52.54	21.40	30.01
Germany	NA	NA	NA	NA	NA
Italy	39.25	29.77	38.00	35.13	22.16
Netherlands	59.95	31.04	34.68	26.91	22.35
Sweden	37.67	23.45	28.72	42.32	10.55

Note: The averages of the MIIT-indices for the changes in the trade with SITC - two digits between 1989 and 1994 were weighted with the shares of the trade turnover (total exports and imports). See Appendix for detailed tables.

Source: Own calculations.

5. Conclusions

Trade liberalization, integration and catching up with the developed countries are often associated with the increase of intra-industry trade. We showed in a simple model of with differentiated products, increasing returns to scale and trade costs following Krugman (1980) that the reduction of trade barriers allows for the growth of intra-industry trade. Morever, the wage gap between a large and a small country is narrowed with the progress in trade liberalization. These results contradict the often voiced fears from the integration of the CEEC into the European Union. Moreover, we showed that the trade development of Spain after its accession to the European Union confirmed the conclusions of the model. We currently observe that the trade of the selected EU countries with the CEEC follows this pattern as well.

We observe important structural changes in the foreign trade of the West European countries mainly with regard to the intra-industry trade. The CEEC's industry is up-dated and modernized through a strong engagement of the foreign investors. This creates a new division of labor in Europe. We found a significant growth of the intra-industry trade between the EU countries and the CEEC, although the reached level is still relatively low. Therefore, we expect further rise of the intra-industry trade in the East-West trade.

We identified two phases in the trade of the selected EU-countries with the CEEC. In the first years following the opening of Eastern Europe, the Austrian enterprises were comparably successful in Eastern Europe. In the second phase (since 1992), the Austrian exports to Eastern Europe have slowed down and Austria started to lose market shares. This trend is also observed in the Austrian foreign direct investment in Eastern Europe and other forms of business relations.

We have found several elements, which are responsible for this development. In the first place, a catching up of Germany, the USA and other OECD - countries was to be expected after the early engagement of Austria in Central and Eastern Europe. Secondly, the fast growth of the Austrian exports to Eastern Europe was favored by the short-term high demand. The exhausting of the short-term factors negatively influenced the growth rates in the following years. Third, the structure of the Austrian economy is less suitable to deliver the goods (consumer goods, investments) for which there is presently a high demand.

Moreover, the performance of the total Austrian exports in international comparison remained relatively modest. Compared to the Netherlands, Austrian industry is less integrated into the international division of labor. The extent of the structural changes in the Austrian total trade is (despite the consequences of the opening of Eastern Europe, the integration the CEEC in the EU through the Association Agreements, as well as the EWR accession of Austria) lower than in the Netherlands. This suggests a lower degree of adaptability of the Austrian economy.

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6. Appendix

Table 7: Shares of Selected EU-Countries in Imports of the CEEC, %

f. CSR	EU15	Austria	Germany	Italy	Netherlands	Sweden
1989	28.57	5.51	9.41	1.72	0.74	1.02
1990	35.16	9.71	13.49	2.28	0.98	1.30
1993 CR	52.92	7.88	25.66	4.76	1.13	2.84
1994 CR	55.59	8.07	25.39	5.14	1.36	2.92
1995 CR	61.08	6.91	31.68	5.31	2.63	1.24
1994 SR	33.47	5.77	13.43	4.38	0.65	1.67
Hungary	**EU15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1988	34.94	7.21	13.92	3.15	1.47	1.77
1989	39.74	8.59	16.09	3.38	1.32	2.05
1991	56.92	13.35	21.48	7.27	1.56	2.70
1992	60.01	14.38	23.55	6.31	1.85	2.97
1993	54.40	11.62	21.58	5.99	1.53	2.69
1994	61.06	11.99	23.36	6.97	2.09	3.04
1995	61.52	10.76	23.46	7.89	3.13	2.01
Poland	**EU15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1988	35.58	4.36	13.30	3.31	1.56	2.69
1989	42.58	5.97	16.09	4.14	1.73	2.99
1992	61.98	4.54	23.90	6.91	1.91	4.76
1993	64.77	3.26	28.07	7.80	2.24	4.65
1994	63.96	2.45	27.27	8.30	2.70	4.46
Romania	**EU15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1989	13.80	0.64	9.50	0.62	0.16	0.52
1990	21.54	1.65	11.42	1.19	0.21	1.45
1991	28.71	3.21	10.20	3.61	0.33	1.66
1992	41.27	3.04	13.20	7.78	0.90	2.42
1993	45.33	2.54	15.81	9.42	0.51	2.41
1994	47.71	2.70	17.70	11.84	0.55	2.47
1995	64.72	2.54	26.66	8.55	4.54	3.13
Slovenia	**EU15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	59.59	8.14	22.71	13.66	1.03	1.70
1993	65.62	8.51	25.01	16.17	1.01	1.88
1994	69.17	10.34	23.74	17.23	1.14	2.29
1995	68.81	9.68	23.24	16.98	2.18	1.06

Source: Own calculations.

Table 8: Shares of Selected EU-Countries in Imports of Food and Live Animals (SITC 0) of the CEEC, %

CSR	EU 15	Austria	Germany	Italy	Netherlands	Sweden
1989	21.61	1.75	3.77	1.62	1.48	0.04
1990	23.96	3.16	5.87	2.14	1.91	0.11
1993 CR	48.23	4.25	18.71	4.29	5.79	0.28
1994 CR	52.15	5.03	16.92	4.89	5.61	0.24
1994 SR	36.60	5.20	10.87	3.66	5.51	0.23
Hungary	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1991	35.14	9.68	8.64	2.48	4.18	0.57
1992	45.02	10.58	14.15	1.96	5.40	0.87
1993	51.88	9.78	15.41	2.25	6.24	0.69
1994	52.91	7.45	15.36	2.86	7.80	0.78
Poland	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	55.92	2.53	21.82	1.64	12.19	0.89
1993	55.57	2.03	22.19	2.01	9.76	0.94
1994	50.17	0.75	16.24	2.49	9.46	2.17
Romania	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	43.90	2.46	7.57	2.45	4.73	0.06
1993	48.81	1.57	4.39	2.14	3.61	0.11
1994	37.39	3.42	6.67	3.11	4.95	0.18
Slovenia	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	29.46	9.06	4.19	8.96	3.19	0.30
1993	45.30	12.33	6.87	14.23	5.02	0.09
1994	54.67	15.21	8.03	15.74	8.24	0.12

Source: Own calculations.

Table 9: Shares of Selected EU-Countries in Imports of Raw Materials (SITC 2) of the CEEC, %

CSR	EU 15	Austria	Germany	Italy	Netherlands	Sweden
1989	20.85	1.207	4.29	1.22	1.68	2.81
1990	24.46	1.93	6.55	1.21	1.97	2.10
1993 CR	27.46	3.05	12.45	2.03	3.45	0.96
1994 CR	29.31	3.25	12.68	1.42	3.67	1.34
1994 SR	15.74	2.69	4.71	1.63	2.60	0.26
Hungary	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1991	36.87	9.57	13.31	2.63	3.79	2.24
1992	42.77	10.66	12.92	2.15	6.46	2.33
1993	42.04	7.24	12.58	2.00	9.07	2.64
1994	39.59	7.34	11.98	2.53	7.41	2.05
Poland	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	32.63	1.89	11.89	1.83	6.03	1.96
1993	34.42	1.38	12.98	2.11	5.69	1.67
1994	33.29	1.14	12.25	1.82	5.25	2.58
Romania	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	28.25	6.73	3.88	3.00	1.56	0.02
1993	18.28	1.61	4.13	3.89	0.64	0.10
1994	21.32	1.68	4.01	4.38	0.96	0.21
Slovenia	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	50.55	12.80	11.09	13.13	2.20	5.17
1993	54.44	11.21	12.33	15.50	4.14	4.85
1994	48.39	11.51	10.55	13.39	3.60	4.03

Source: Own calculations.

Table 10: Shares of Selected EU-Countries in Imports of Fuels (SITC 3) of the CEEC, %

CSR	EU 15	Austria	Germany	Italy	Netherlands	Sweden
1989	0.62	0.44	0.11	0.00	0.04	0.00
1990	3.98	3.32	0.54	0.00	0.05	0.00
1993 CR	7.88	2.76	4.21	0.12	0.04	0.03
1994 CR	14.01	5.61	5.94	0.05	0.13	0.02
1994 SR	1.47	0.71	0.66	0.00	0.02	0.00
Hungary	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1991	3.48	1.49	1.66	0.03	0.01	0.00
1992	5.99	4.16	1.54	0.03	0.09	0.02
1993	7.13	5.72	1.06	0.03	0.05	0.03
1994	10.96	8.67	1.65	0.06	0.20	0.01
Poland	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	31.12	0.20	3.15	0.03	1.24	0.73
1993	26.93	0.22	2.82	0.03	1.18	2.64
1994	23.88	0.16	3.33	0.06	0.43	1.30
Romania	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	10.02	0.46	0.79	5.74	0.03	0.01
1993	6.70	0.10	0.88	2.62	0.44	0.01
1994	4.06	0.15	0.51	2.41	0.02	0.01
Slovenia	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	23.18	5.26	2.49	13.67	0.13	0.00
1993	22.67	3.99	2.09	8.39	0.11	0.00
1994	28.10	6.87	2.88	9.89	0.20	0.01

Source: Own calculations.

Table 11: Shares of Selected EU-Countries in Imports of Chemicals (SITC 5) of the CEEC, %

CSR	EU 15	Austria	Germany	Italy	Netherlands	Sweden
1989	54.33	12.92	19.13	3.45	3.74	0.91
1990	56.72	12.13	22.08	3.45	4.08	0.95
1993 CR	60.89	9.57	27.37	3.45	3.61	0.86
1994 CR	61.98	8.45	27.20	4.25	3.56	1.00
1994 SR	43.66	8.47	17.69	4.14	1.98	0.50
Hungary	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1991	64.77	12.05	24.35	5.81	5.41	1.04
1992	68.29	12.22	25.08	6.24	4.94	0.92
1993	65.34	11.21	22.67	6.07	4.76	0.97
1994	66.01	10.70	22.57	7.03	4.52	1.07
Poland	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	73.00	5.43	30.68	4.48	5.28	1.52
1993	73.38	3.68	30.58	6.29	6.83	1.51
1994	69.38	2.97	28.79	5.80	5.83	1.55
Romania	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	55.54	5.68	19.19	6.00	6.46	0.87
1993	54.71	4.96	16.62	6.42	5.27	0.62
1994	57.03	5.26	18.50	8.77	5.81	0.77
Slovenia	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	61.97	11.52	24.04	14.12	2.96	1.13
1993	68.82	13.09	24.70	15.61	3.61	0.80
1994	69.49	13.19	23.05	16.60	3.91	0.73

Source: Own calculations.

Table 12: Shares of Selected EU-Countries in Imports of Manufactured Products (SITC 6) of the CEEC, %

CSR	EU 15	Austria	Germany	Italy	Netherlands	Sweden
1989	27.51	5.48	8.52	1.56	0.60	0.62
1990	38.03	7.51	13.49	2.30	0.56	0.85
1993 CR	48.78	9.44	23.07	4.72	1.96	1.60
1994 CR	52.03	9.11	23.72	5.12	2.07	2.09
1994 SR	32.77	5.88	14.37	4.56	0.95	0.72
Hungary	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1991	71.21	16.17	27.25	12.92	2.26	1.93
1992	72.79	17.45	28.38	9.91	3.10	2.34
1993	72.28	16.23	28.82	10.06	3.21	1.79
1994	71.96	15.14	27.88	10.91	2.67	2.27
Poland	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	73.03	7.32	27.17	10.53	2.41	3.33
1993	82.33	4.18	43.47	8.81	4.29	3.24
1994	79.03	3.68	39.99	9.16	4.33	3.94
Romania	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	64.81	3.32	33.30	14.22	2.85	0.84
1993	71.31	3.33	32.77	19.75	2.91	0.82
1994	75.23	2.62	32.83	24.48	2.74	0.90
Slovenia	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	63.55	11.59	20.04	18.60	2.37	0.81
1993	72.11	12.89	22.81	22.33	2.29	1.12
1994	73.91	13.85	22.86	23.20	1.98	1.09

Source: Own calculations.

Table 13: Shares of Selected EU-Countries in Imports of Machinery and Transport Equipment (SITC 7) of the CEEC, %

CSR	EU 15	Austria	Germany	Italy	Netherlands	Sweden
1989	30.07	7.31	14.16	2.40	0.65	0.74
1990	45.56	14.59	19.66	3.35	0.99	1.37
1993 CR	67.52	8.90	35.63	6.35	2.76	1.54
1994 CR	69.29	9.45	34.31	6.55	2.66	1.76
1994 SR	51.38	8.29	21.83	7.67	1.66	1.19
Hungary	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1991	75.46	17.42	27.85	7.69	2.75	2.49
1992	73.51	17.34	31.29	6.65	2.70	3.16
1993	55.19	10.81	24.57	5.76	1.38	2.24
1994	70.52	12.36	29.61	6.60	2.26	3.50
Poland	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	75.04	5.35	33.13	12.51	4.06	2.47
1993	73.98	3.94	32.61	14.14	3.53	2.38
1994	74.57	2.75	32.02	14.60	3.42	3.18
Romania	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	67.08	4.74	21.24	10.19	3.17	3.48
1993	69.32	4.19	30.95	13.68	2.99	1.20
1994	69.52	4.02	29.62	13.75	2.97	0.94
Slovenia	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	73.34	5.60	26.78	11.45	0.82	0.95
1993	76.13	5.29	30.47	15.45	0.63	1.16
1994	79.08	7.75	28.81	14.50	0.94	1.45

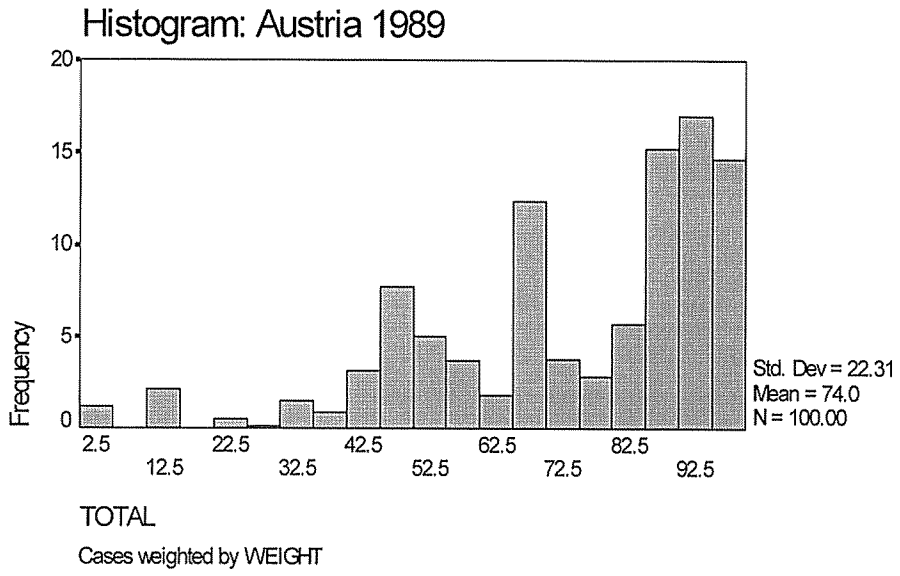
Source: Own calculations.

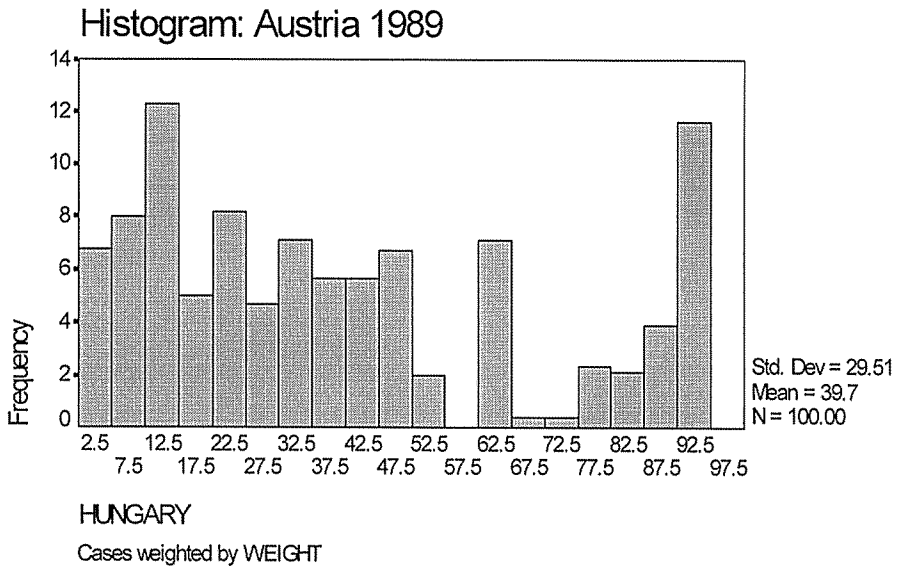
Table 14: Shares of Selected EU-Countries in Imports of Manufactured Articles (SITC 8) of the CEEC, %

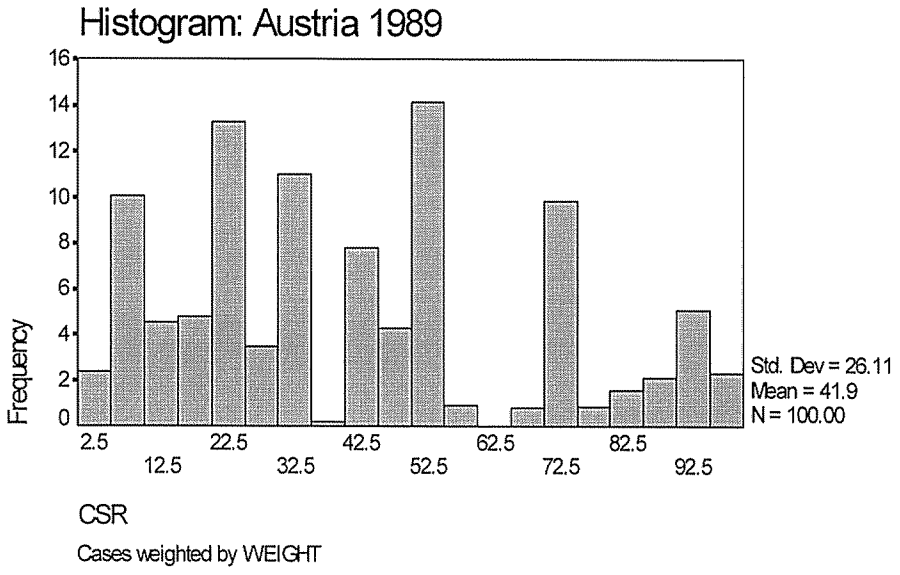
CSR	EU 15	Austria	Germany	Italy	Netherlands	Sweden
1989	30.62	10.48	10.91	1.52	1.47	0.33
1990	36.24	12.41	13.47	1.44	1.42	0.49
1993 CR	61.87	10.27	28.17	7.31	3.39	1.10
1994 CR	62.45	8.85	28.04	8.30	3.59	1.36
1994 SR	42.65	7.53	15.05	6.33	2.31	1.09
Hungary	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1991	72.81	18.41	27.79	12.41	2.63	1.16
1992	75.93	19.83	29.90	10.56	2.84	1.41
1993	72.09	16.31	29.24	10.09	3.82	1.24
1994	72.26	14.25	28.82	12.05	3.48	1.39
Poland	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	63.88	6.91	25.02	8.48	5.25	1.88
1993	69.76	5.23	30.79	8.76	5.28	2.00
1994	66.69	3.18	29.03	9.96	4.37	2.62
Romania	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	66.94	4.52	28.07	14.22	2.01	0.63
1993	66.27	4.39	18.58	19.68	2.54	0.53
1994	71.51	3.61	19.51	23.78	2.87	0.38
Slovenia	**EU 15**	**Austria**	**Germany**	**Italy**	**Netherlands**	**Sweden**
1992	67.96	6.48	32.93	18.02	1.33	0.76
1993	74.22	8.03	33.86	22.35	1.30	0.71
1994	74.87	9.12	26.42	27.58	1.56	0.91

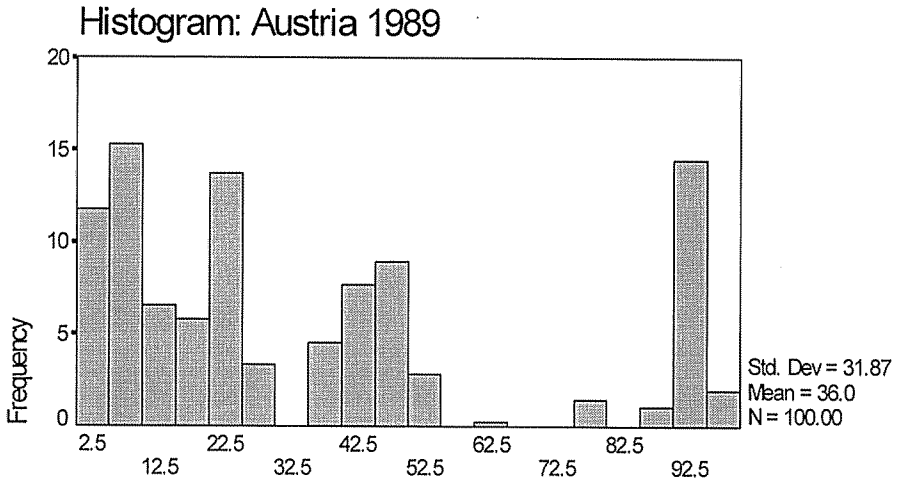
Source: Own calculations.

Distribution of IIT-Indices (Two-Digit Groups) for Selected Countries, 1989





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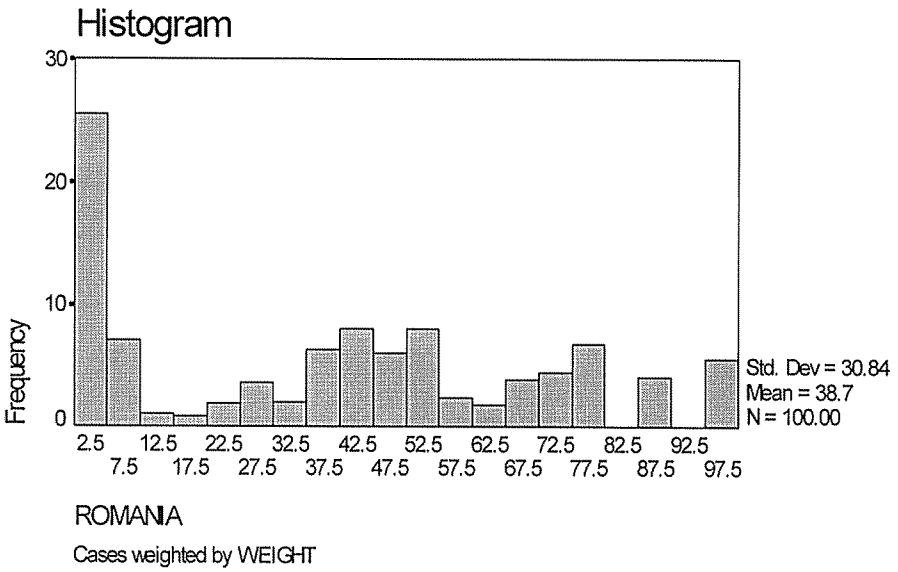
N = 100.00
POLAND
Cases weighted by WEIGHT


Histogram
Frequency
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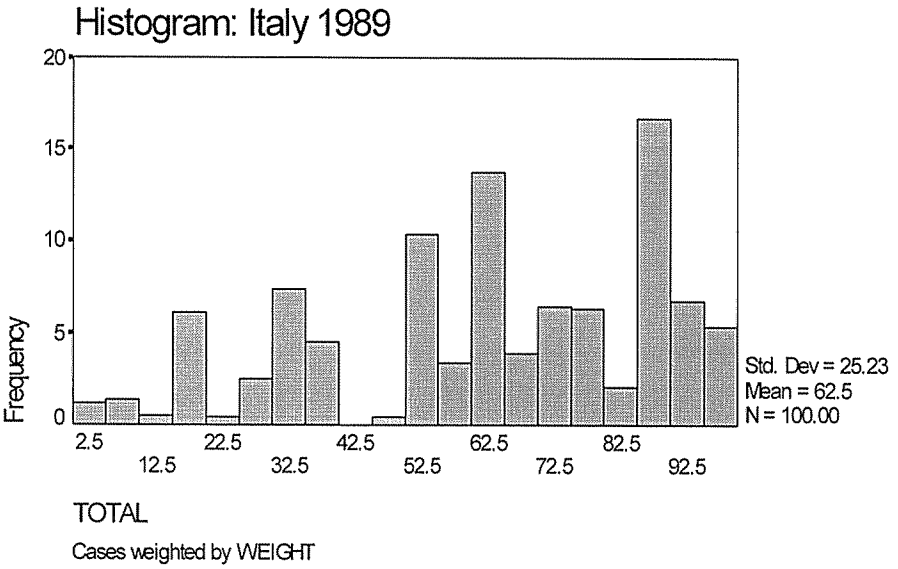
ROMANIA
Cases weighted by WEIGHT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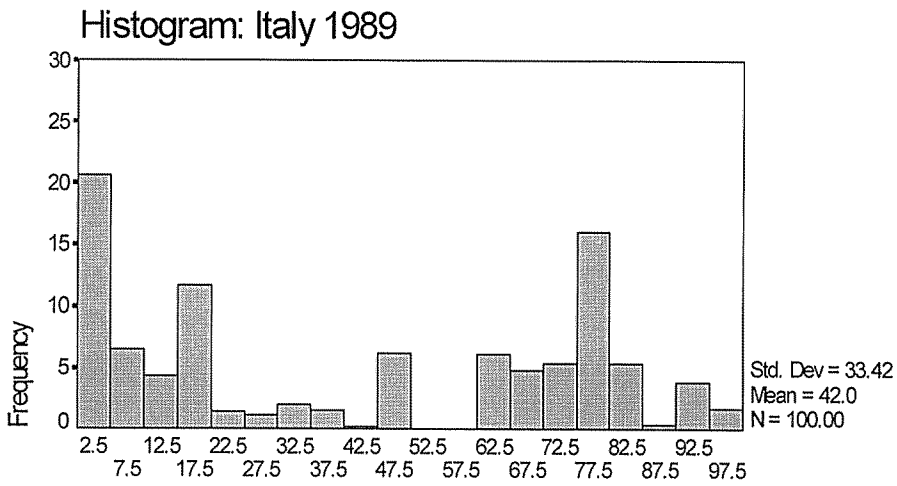
N = 100.00
TOTAL
Cases weighted by WEIGHT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Frequency
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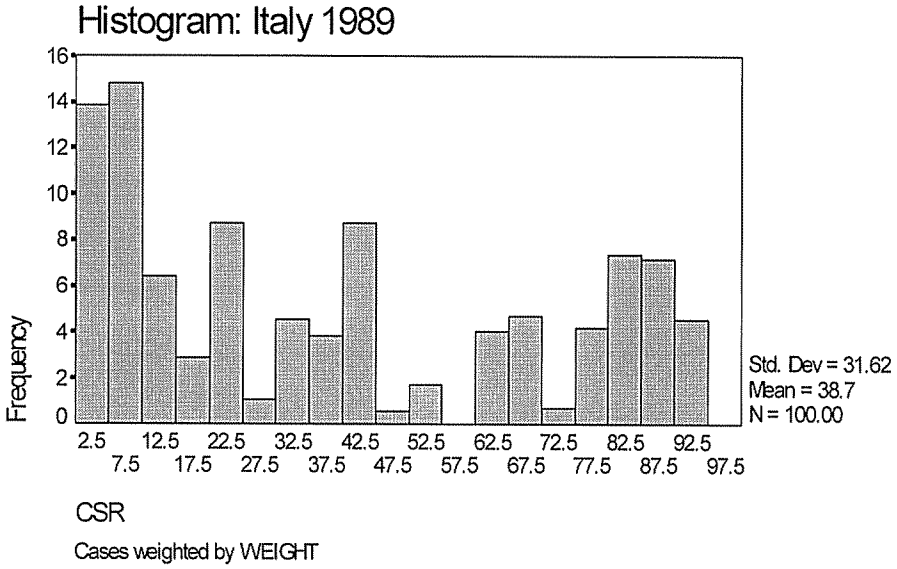
Mean = 42.0
N = 100.00
HUNGARY
Cases weighted by WEIGHT


Histogram: Italy 1989
Frequency
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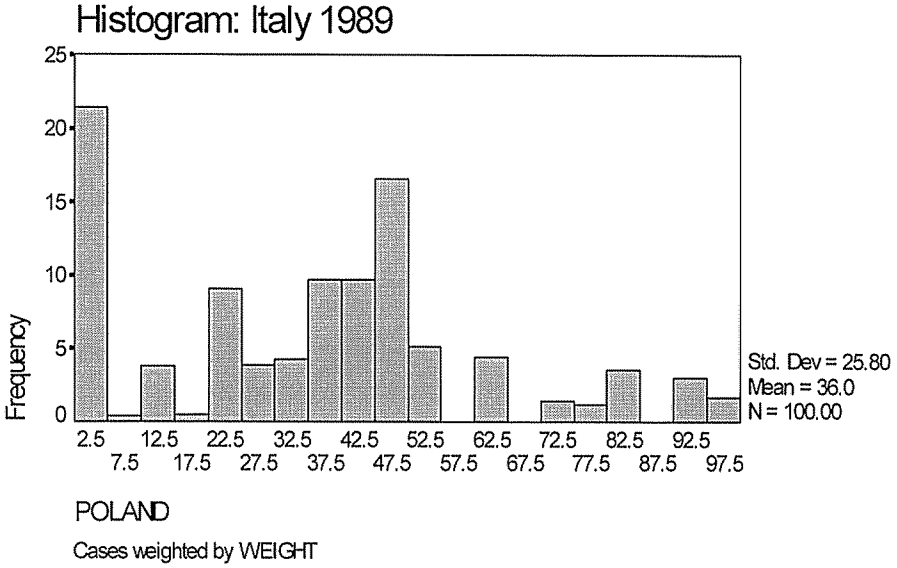
Mean = 38.7
N = 100.00
CSR
Cases weighted by WEIGHT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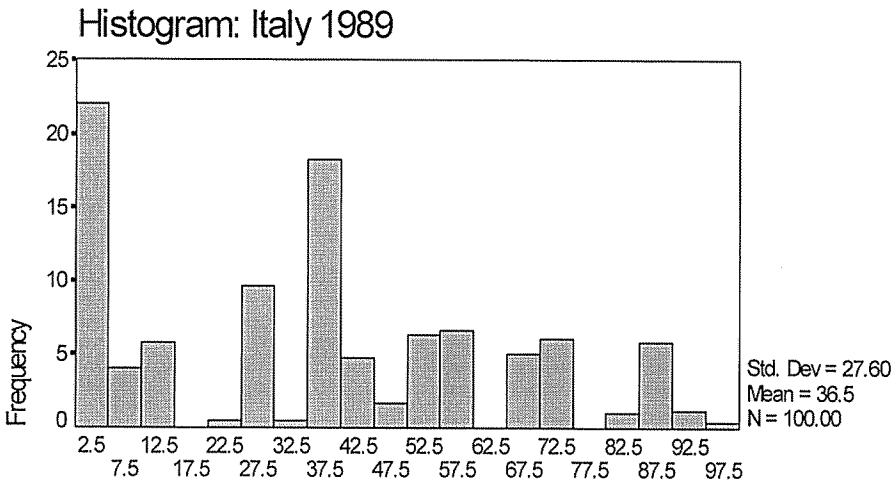
Mean = 36.0
N = 100.00
POLAND
Cases weighted by WEIGHT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15
10
5
0
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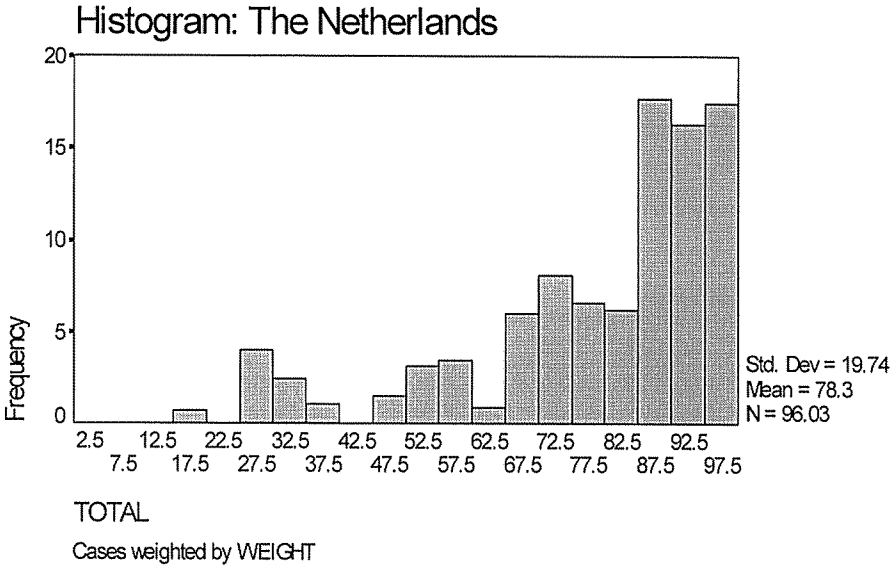
Std. Dev = 27.60
Mean = 36.5
N = 100.00
ROMANIA
Cases weighted by WEIGHT


Histogram: The Netherlands
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10
5
0
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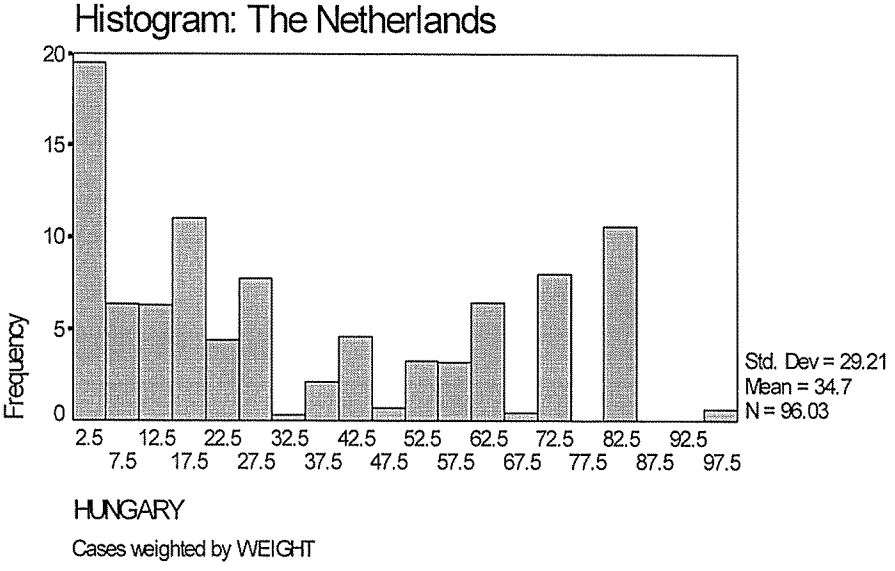
Mean = 78.3
N = 96.03
TOTAL
Cases weighted by WEIGHT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Frequency
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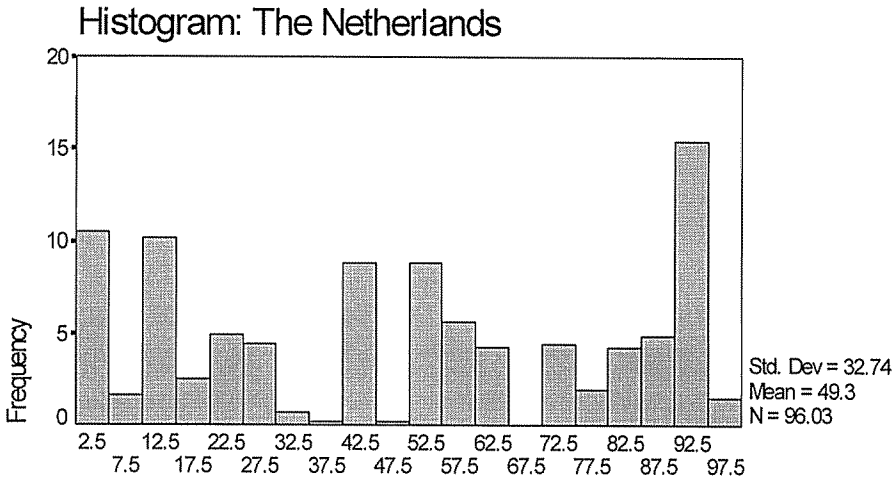
15
10
5
0
2.5 7.5 12.5 17.5 22.5 27.5 32.5 37.5 42.5 47.5 52.5 57.5 62.5 67.5 72.5 77.5 82.5 87.5 92.5 97.5
Std. Dev = 29.21
Mean = 34.7
N = 96.03
HUNGARY
Cases weighted by WEIGHT


Histogram: The Netherlands
Frequency
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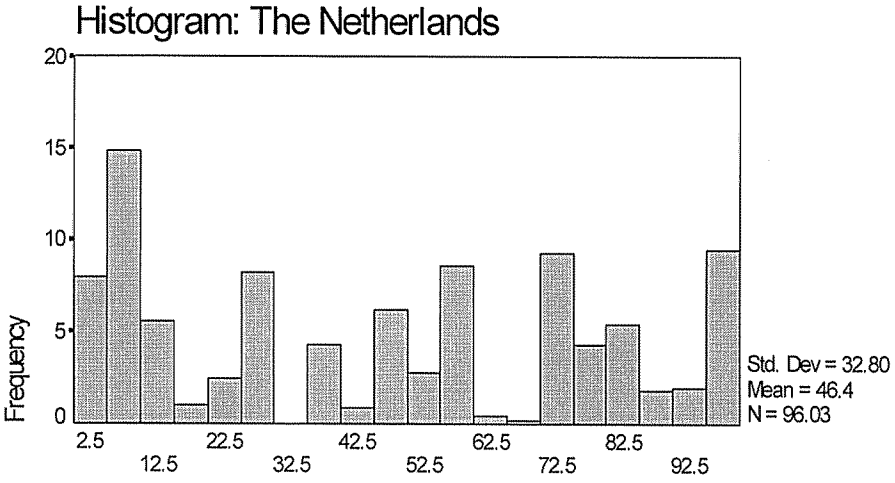
15
10
5
0
2.5 12.5 22.5 32.5 42.5 52.5 62.5 72.5 82.5 92.5
7.5 17.5 27.5 37.5 47.5 57.5 67.5 77.5 87.5 97.5
Std. Dev = 32.74
Mean = 49.3
N = 96.03
CSR
Cases weighted by WEIGHT


Histogram: The Netherlands
Frequency
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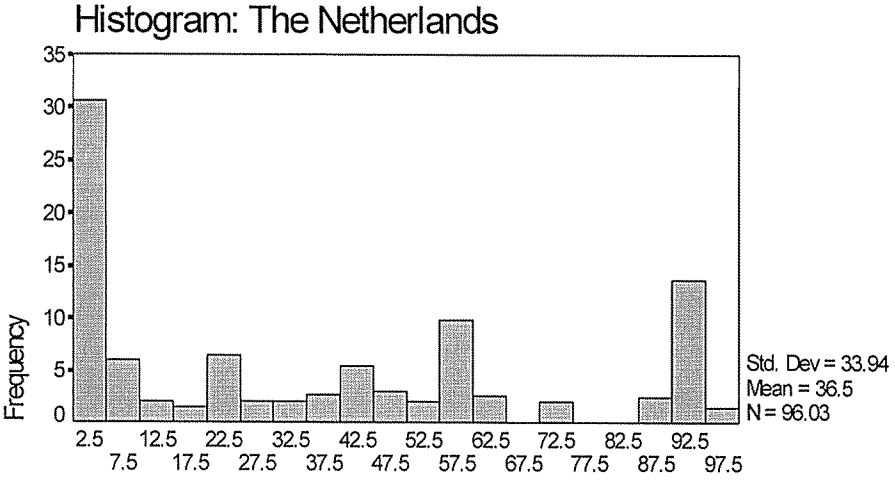
15
10
5
0
2.5 12.5 22.5 32.5 42.5 52.5 62.5 72.5 82.5 92.5
Std. Dev = 32.80
Mean = 46.4
N = 96.03
POLAND
Cases weighted by WEIGHT


Histogram: The Netherlands
Frequency
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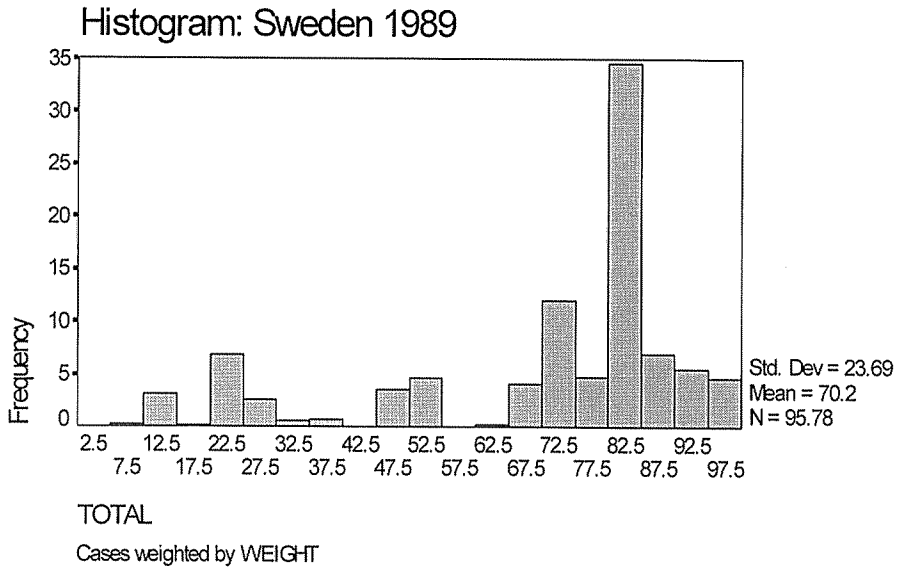
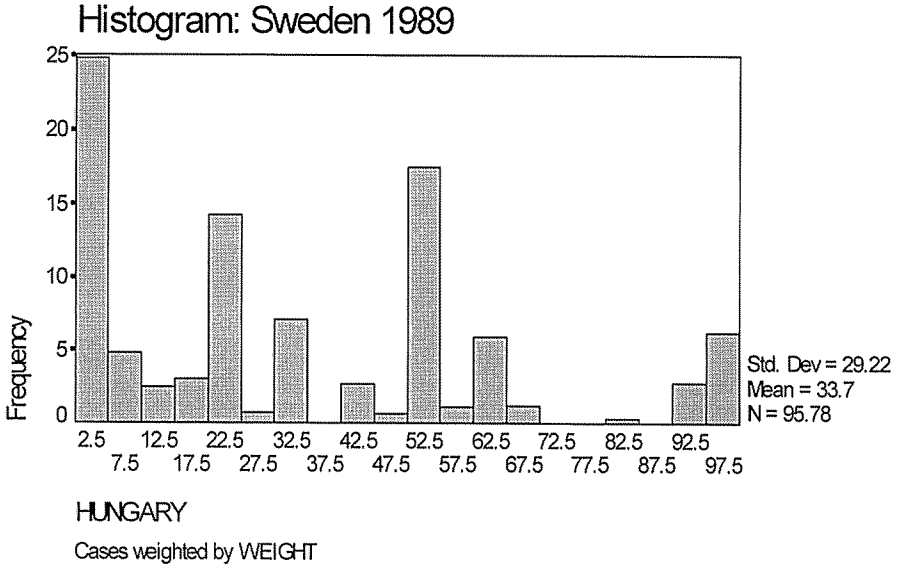
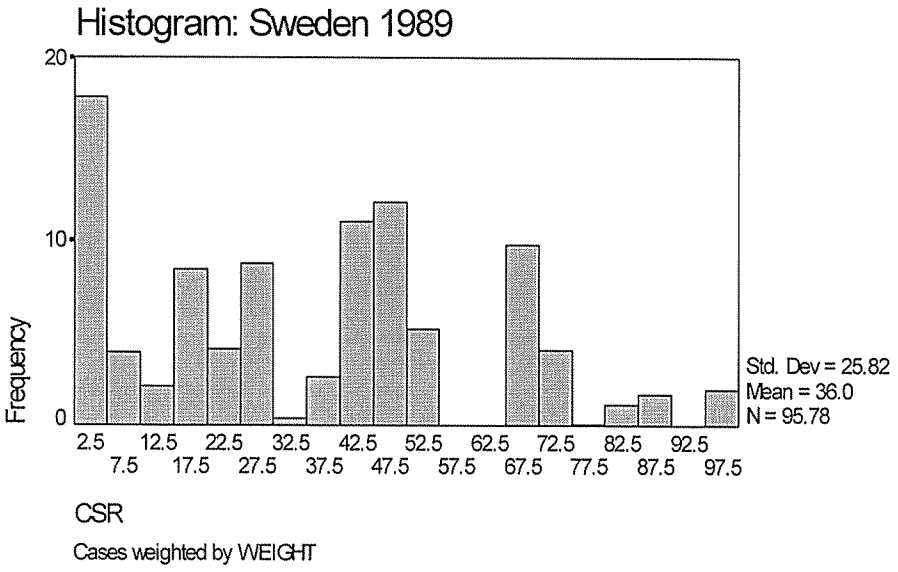
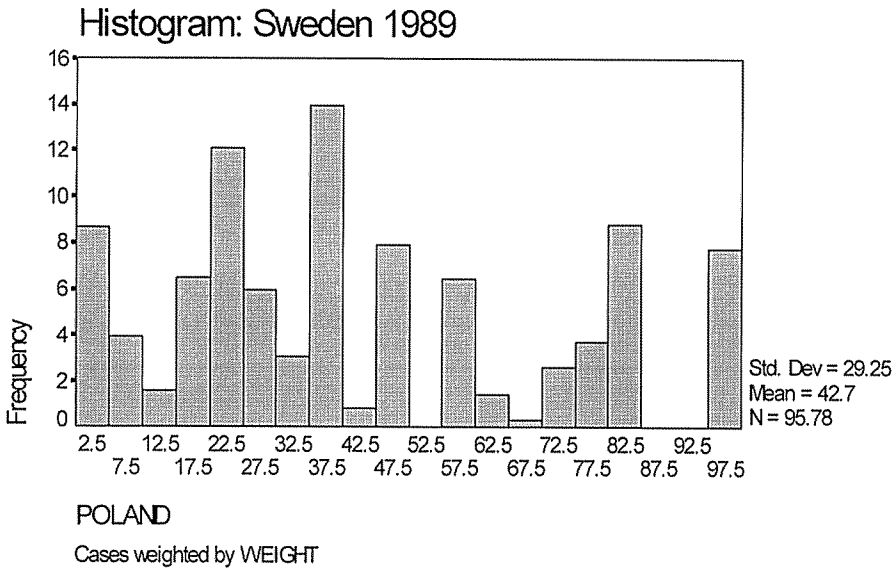
25
20
15
10
5
0
2.5 12.5 22.5 32.5 42.5 52.5 62.5 72.5 82.5 92.5
7.5 17.5 27.5 37.5 47.5 57.5 67.5 77.5 87.5 97.5
Std. Dev = 33.94
Mean = 36.5
N = 96.03
ROMANIA
Cases weighted by WEIGHT


Histogram: Sweden 1989
Frequency
Std. Dev = 23.69
Mean = 70.2
N = 95.78
TOTAL
Cases weighted by WEIGHT


Histogram: Sweden 1989
Frequency
Std. Dev = 29.22
Mean = 33.7
N = 95.78
HUNGARY
Cases weighted by WEIGHT


Histogram: Sweden 1989
Frequency
Std. Dev = 25.82
Mean = 36.0
N = 95.78
CSR
Cases weighted by WEIGHT


Histogram: Sweden 1989
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10
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6
4
2
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2.5
7.5
12.5
17.5
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27.5
32.5
37.5
42.5
47.5
52.5
57.5
62.5
67.5
72.5
77.5
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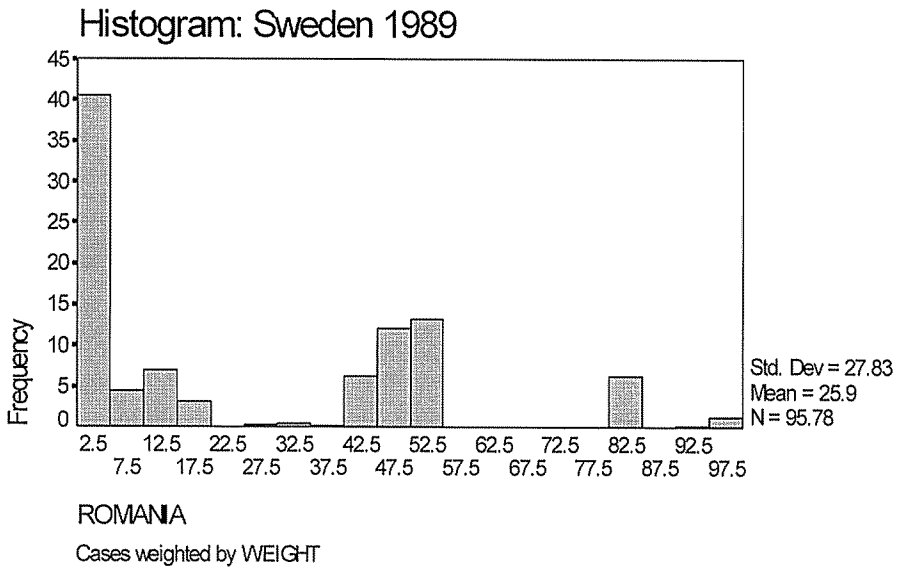
92.5
97.5
Std. Dev = 29.25
Mean = 42.7
N = 95.78
POLAND
Cases weighted by WEIGHT


Histogram: Sweden 1989
Frequency
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7.5
12.5
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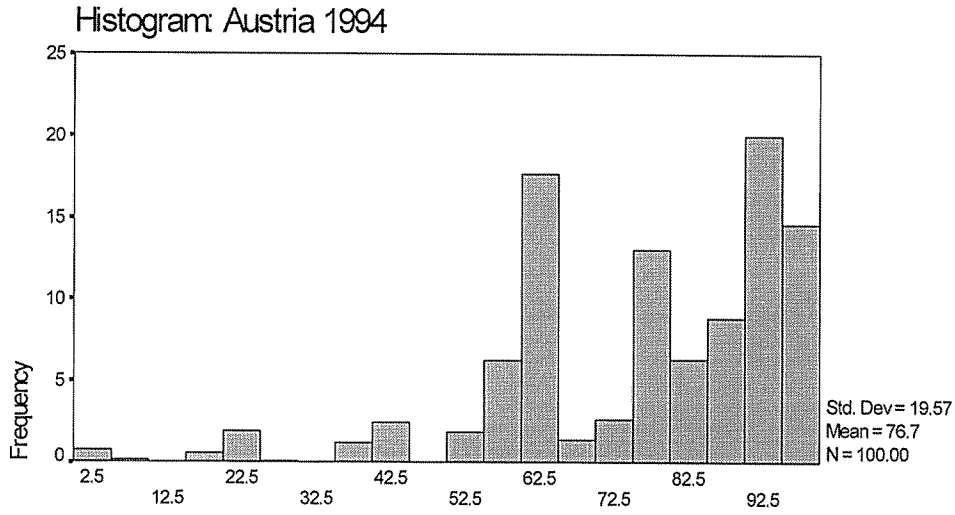
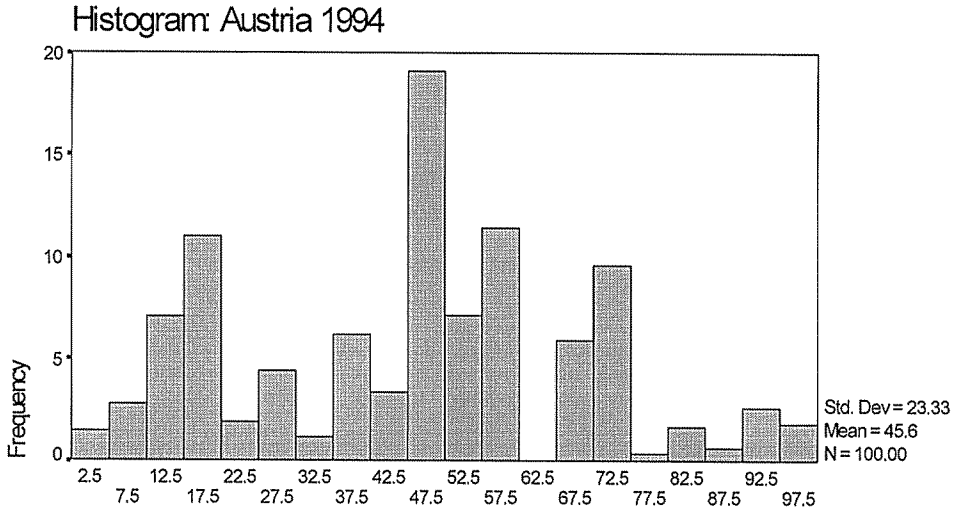
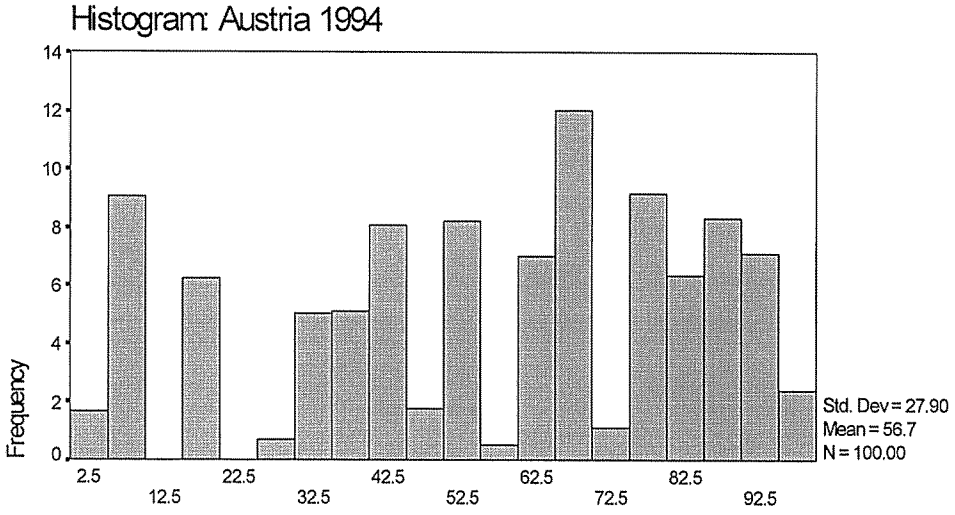
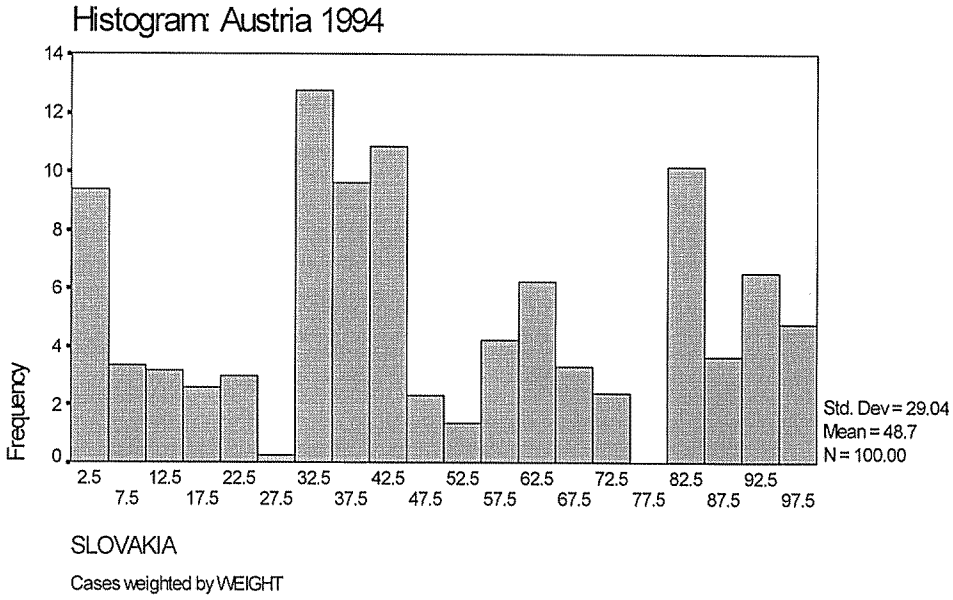
62.5
67.5
72.5
77.5
82.5
87.5
92.5
97.5
Std. Dev = 27.83
Mean = 25.9
N = 95.78
ROMANIA
Cases weighted by WEIGHT

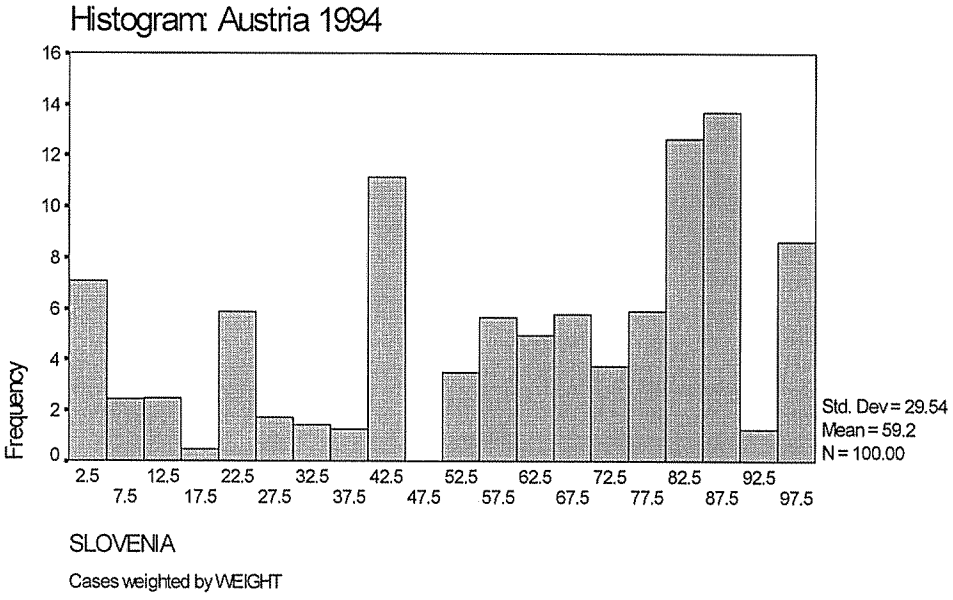
Distribution of IIT-Indices (Two-Digit Groups) for Selected Countries, 1994

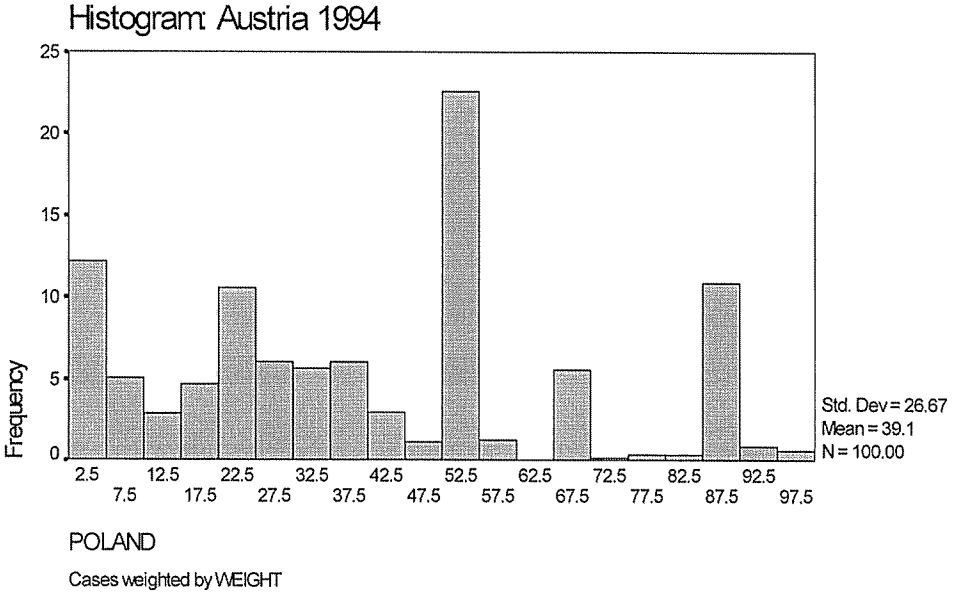


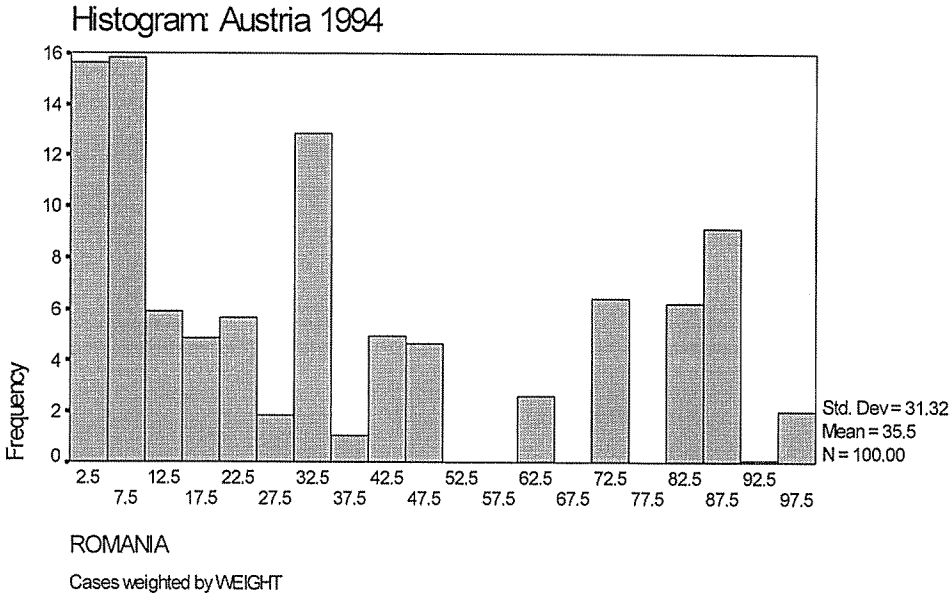


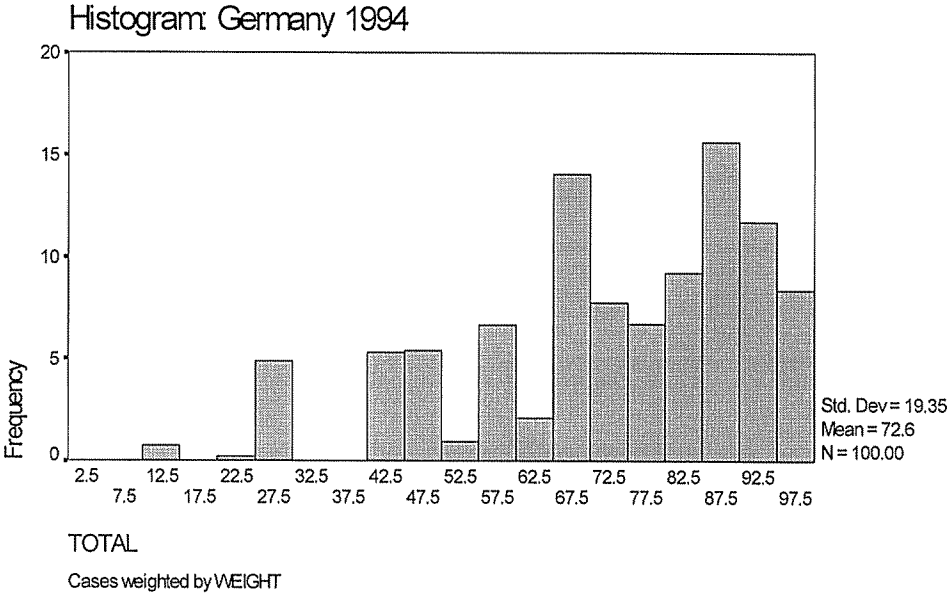


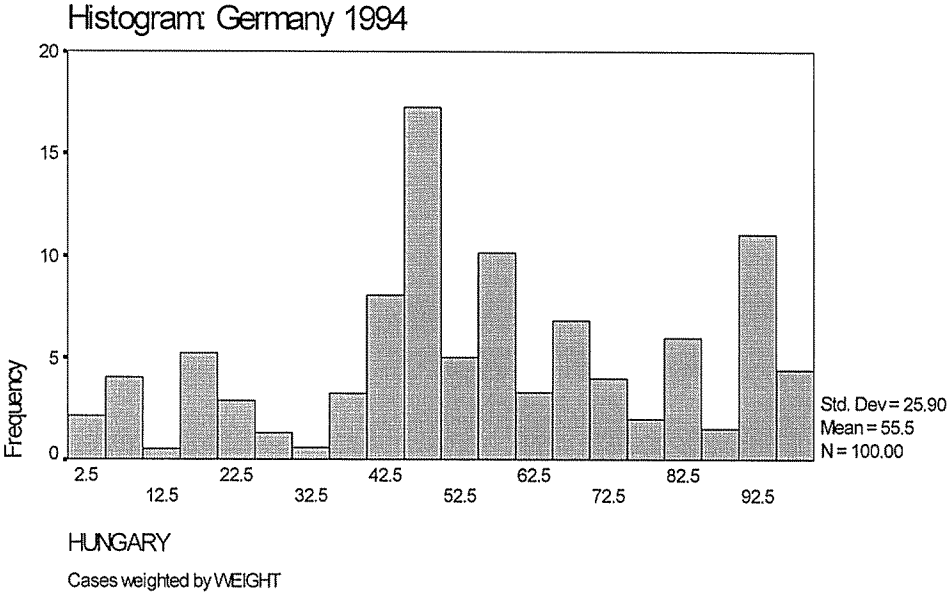

Histogram: Austria 1994
Frequency
Std. Dev = 29.04
Mean = 48.7
N = 100.00
SLOVAKIA
Cases weighted by WEIGHT

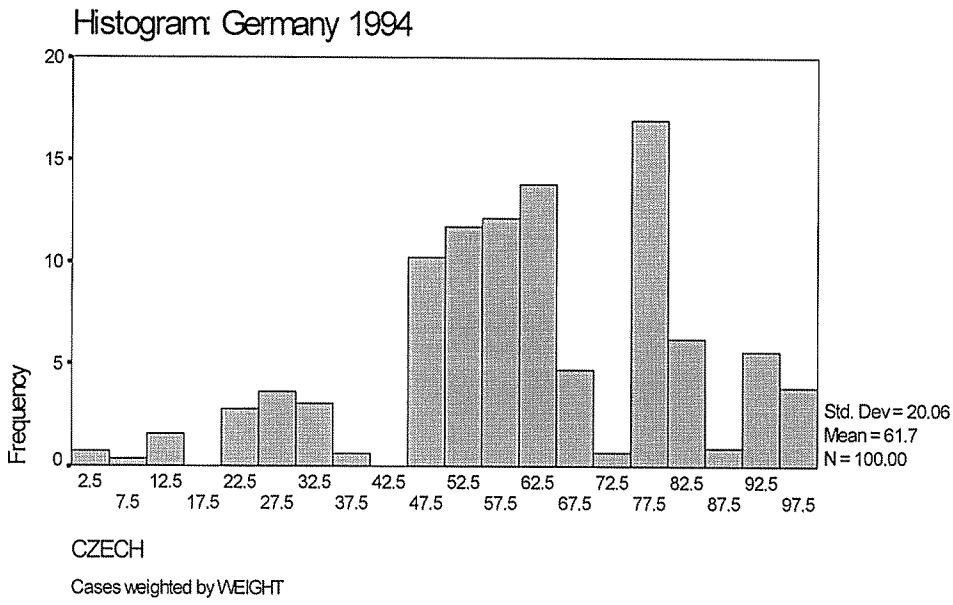

Histogram: Austria 1994
Frequency
Std. Dev = 29.54
Mean = 59.2
N = 100.00
SLOVENIA
Cases weighted by WEIGHT

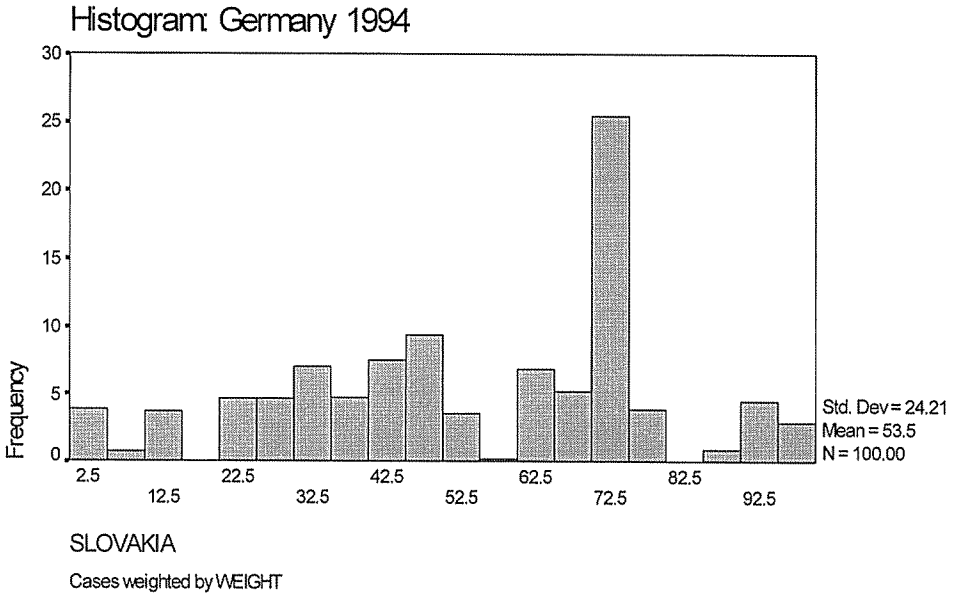

Histogram: Austria 1994
Frequency
Std. Dev = 26.67
Mean = 39.1
N = 100.00
POLAND
Cases weighted by WEIGHT

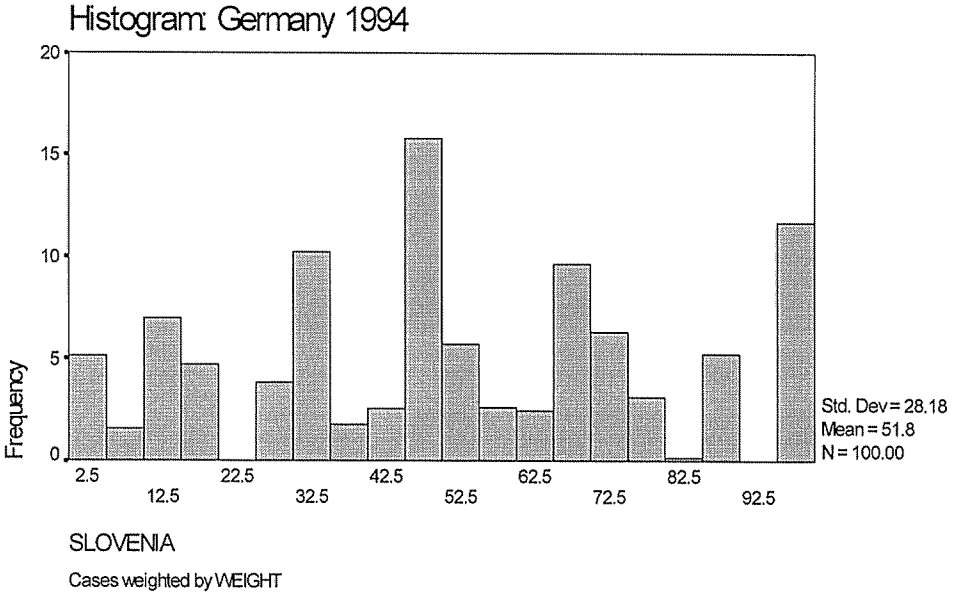

Histogram: Austria 1994
Frequency
Std. Dev = 31.32
Mean = 35.5
N = 100.00
ROMANIA
Cases weighted by WEIGHT

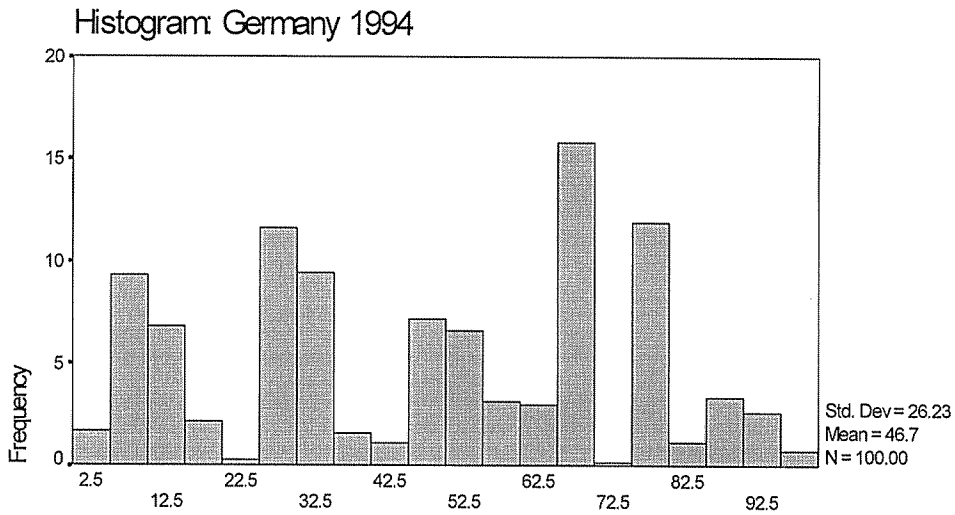

Histogram: Germany 1994
Frequency
Std. Dev = 19.35
Mean = 72.6
N = 100.00
TOTAL
Cases weighted by WEIGHT

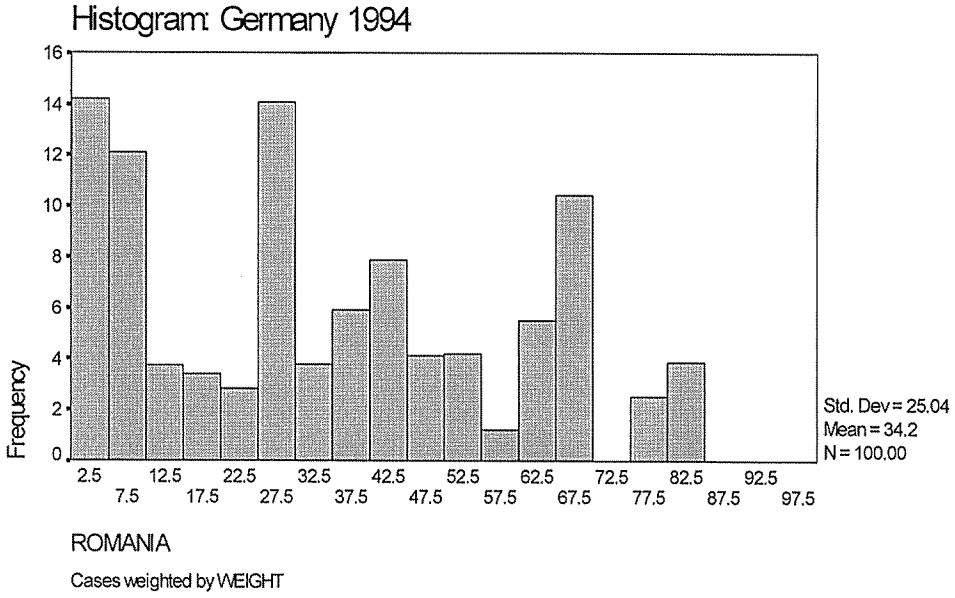

Histogram: Germany 1994
Frequency
Std. Dev = 25.90
Mean = 55.5
N = 100.00
HUNGARY
Cases weighted by WEIGHT

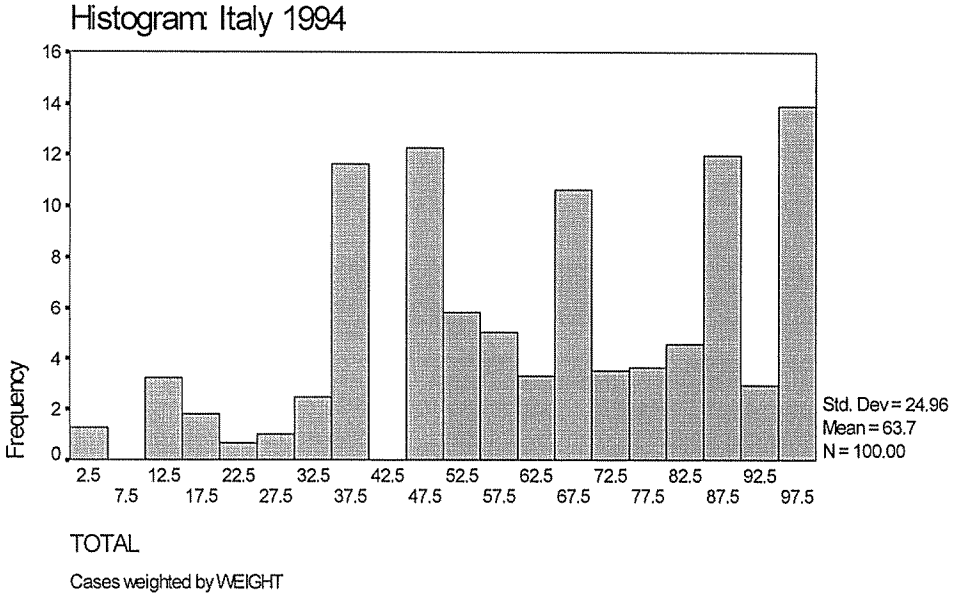

Histogram: Germany 1994
Frequency
Std. Dev = 20.06
Mean = 61.7
N = 100.00
CZECH
Cases weighted by WEIGHT

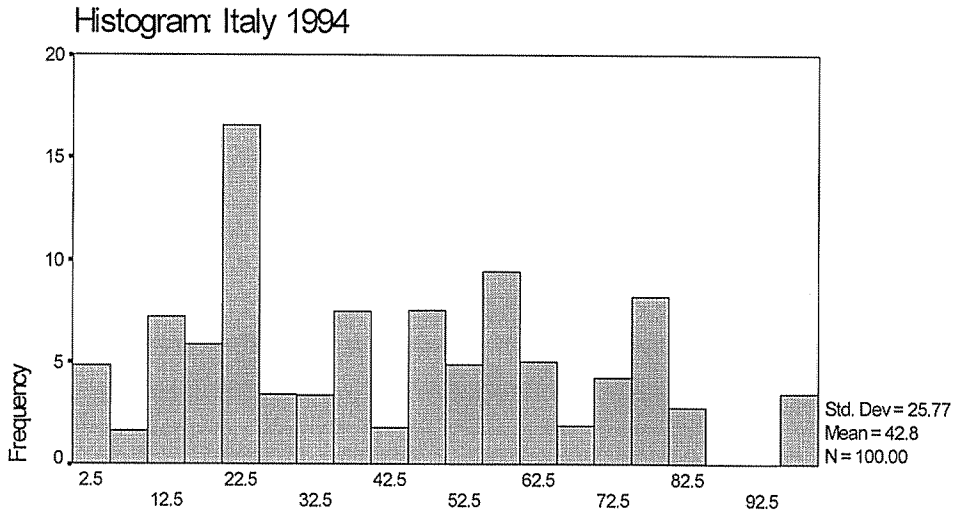

Histogram: Germany 1994
Frequency
Std. Dev = 24.21
Mean = 53.5
N = 100.00
SLOVAKIA
Cases weighted by WEIGHT


Histogram: Germany 1994
Frequency
Std. Dev = 28.18
Mean = 51.8
N = 100.00
SLOVENIA
Cases weighted by WEIGHT


Histogram: Germany 1994
Frequency
Std. Dev = 26.23
Mean = 46.7
N = 100.00
POLAND
Cases weighted by WEIGHT

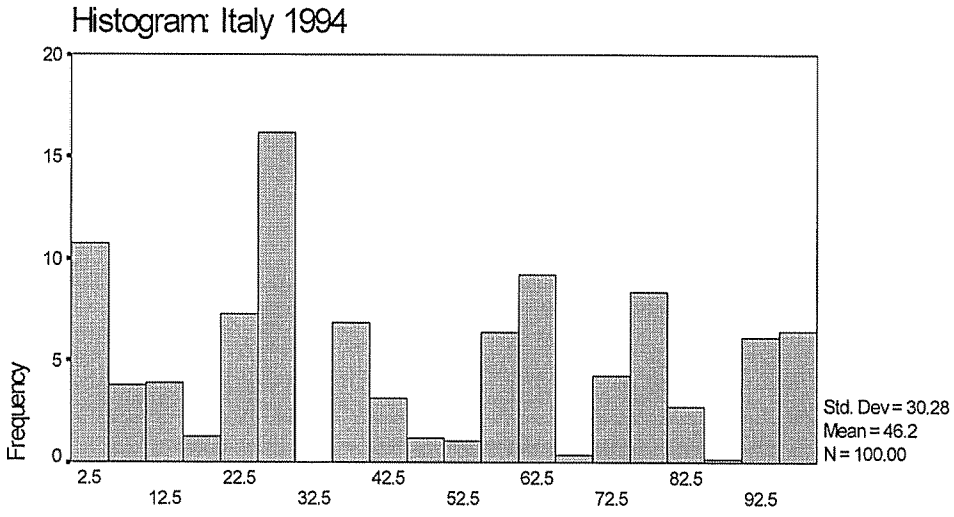

Histogram: Germany 1994
Frequency
Std. Dev = 25.04
Mean = 34.2
N = 100.00
ROMANIA
Cases weighted by WEIGHT


Histogram: Italy 1994
Frequency
Std. Dev = 24.96
Mean = 63.7
N = 100.00
TOTAL
Cases weighted by WEIGHT



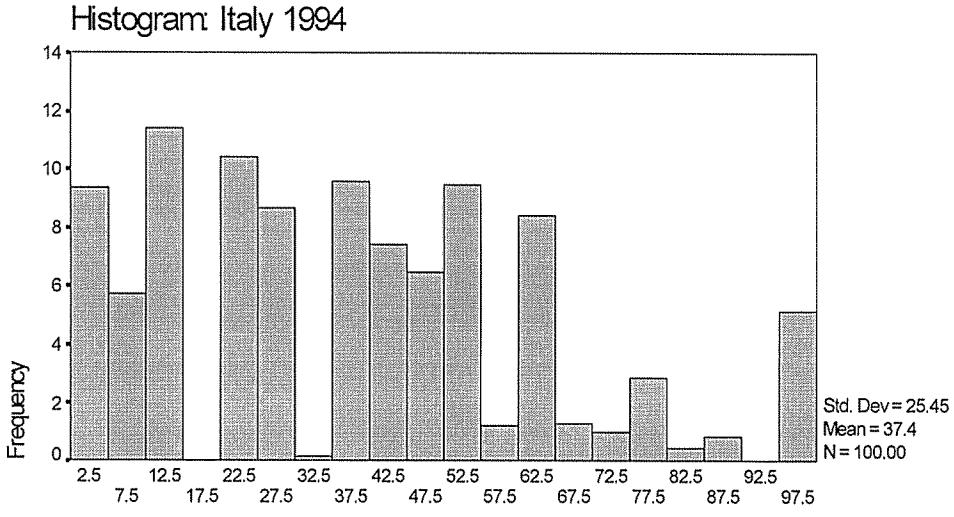
HUNGARY

Cases weighted by WEIGHT



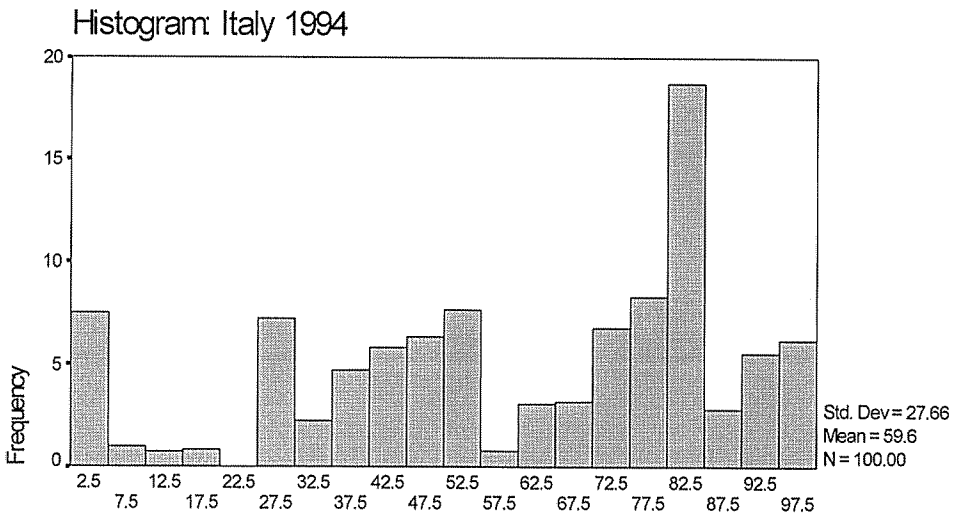
CZECH

Cases weighted by WEIGHT



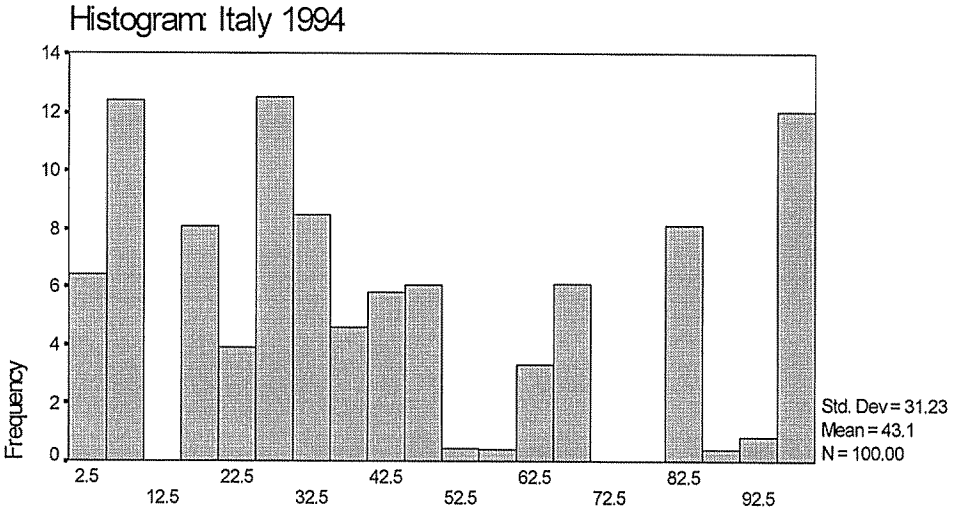
SLOVAKIA

Cases weighted by WEIGHT



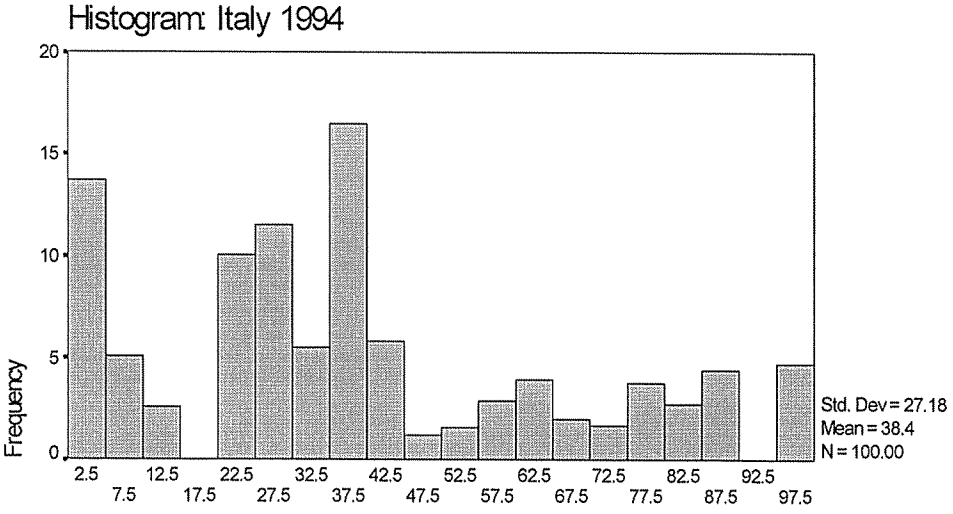
SLOVENIA

Cases weighted by WEIGHT



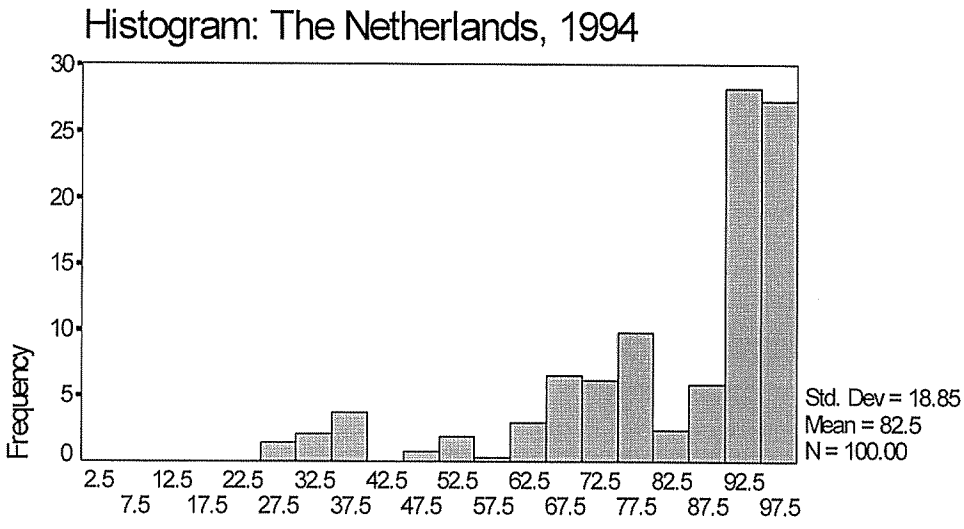
POLAND

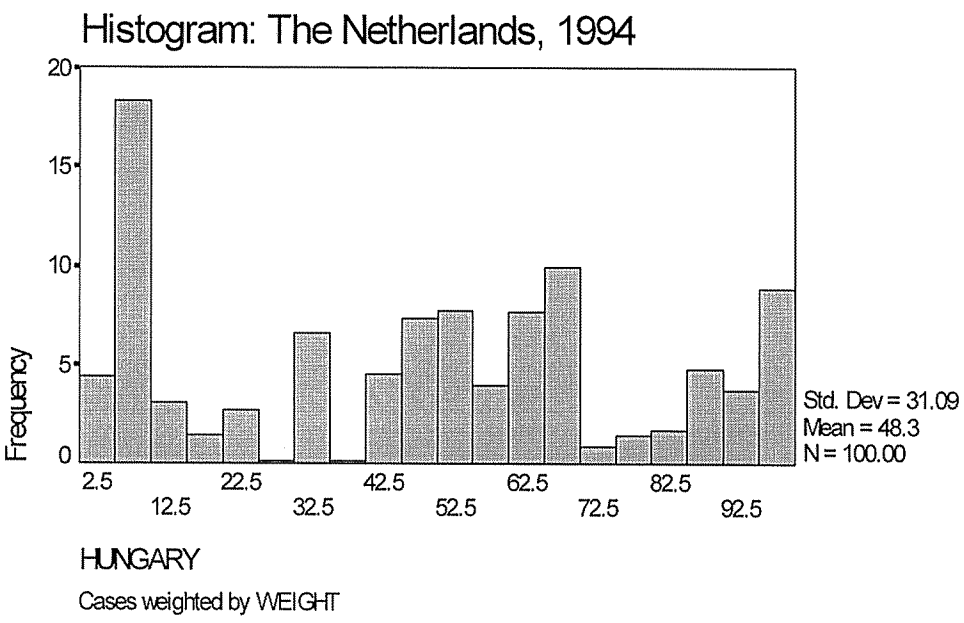
Cases weighted by WEIGHT

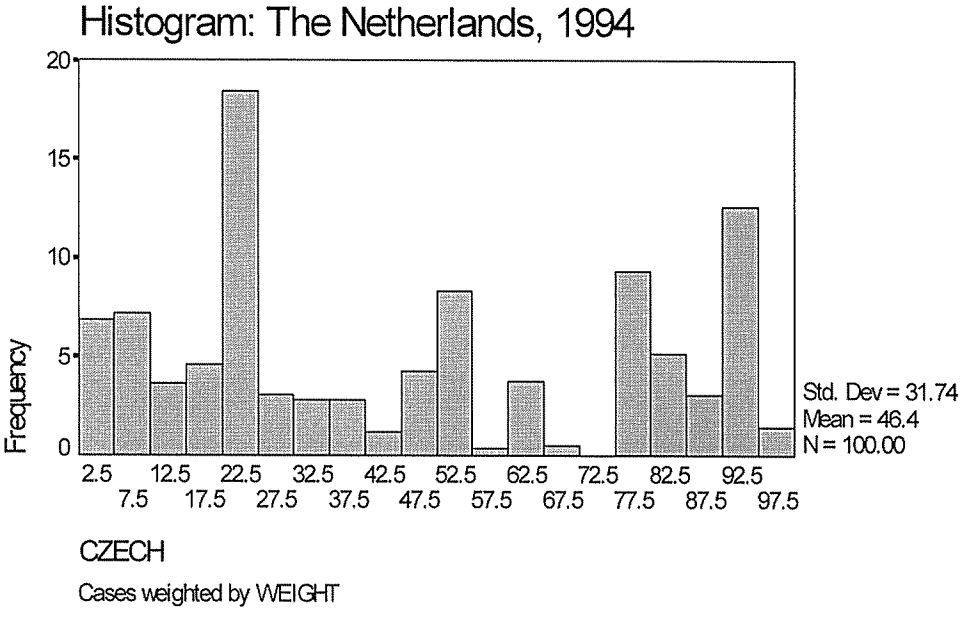


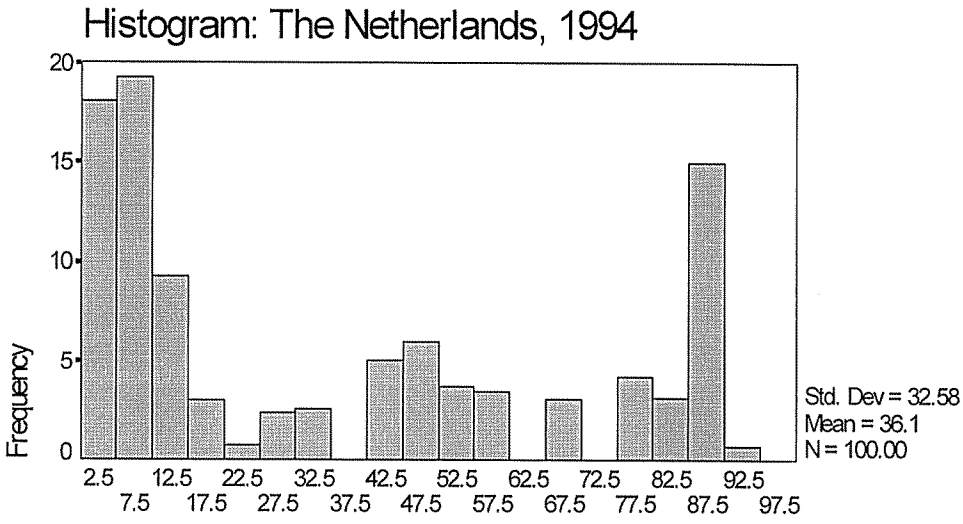
ROMANIA

Cases weighted by WEIGHT


Histogram: The Netherlands, 1994
Frequency
30
25
20
15
10
5
0
2.5 7.5 12.5 17.5 22.5 27.5 32.5 37.5 42.5 47.5 52.5 57.5 62.5 67.5 72.5 77.5 82.5 87.5 92.5 97.5
Std. Dev = 18.85
Mean = 82.5
N = 100.00
TOTAL
Cases weighted by WEIGHT

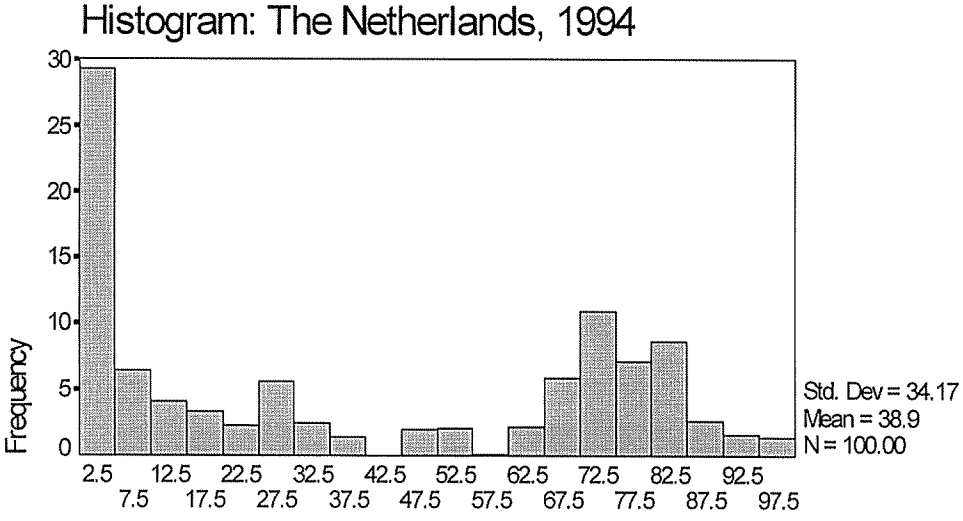

Histogram: The Netherlands, 1994
Frequency
20
15
10
5
0
2.5 12.5 22.5 32.5 42.5 52.5 62.5 72.5 82.5 92.5
Std. Dev = 31.09
Mean = 48.3
N = 100.00
HUNGARY
Cases weighted by WEIGHT


Histogram: The Netherlands, 1994
Frequency
20
15
10
5
0
2.5 7.5 12.5 17.5 22.5 27.5 32.5 37.5 42.5 47.5 52.5 57.5 62.5 67.5 72.5 77.5 82.5 87.5 92.5 97.5
Std. Dev = 31.74
Mean = 46.4
N = 100.00
CZECH
Cases weighted by WEIGHT



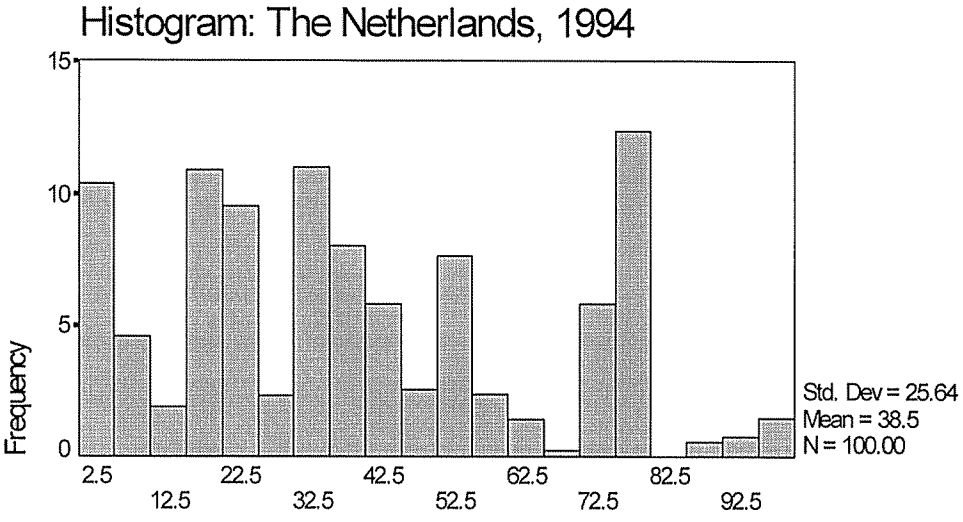
SLOVAKIA

Cases weighted by WEIGHT



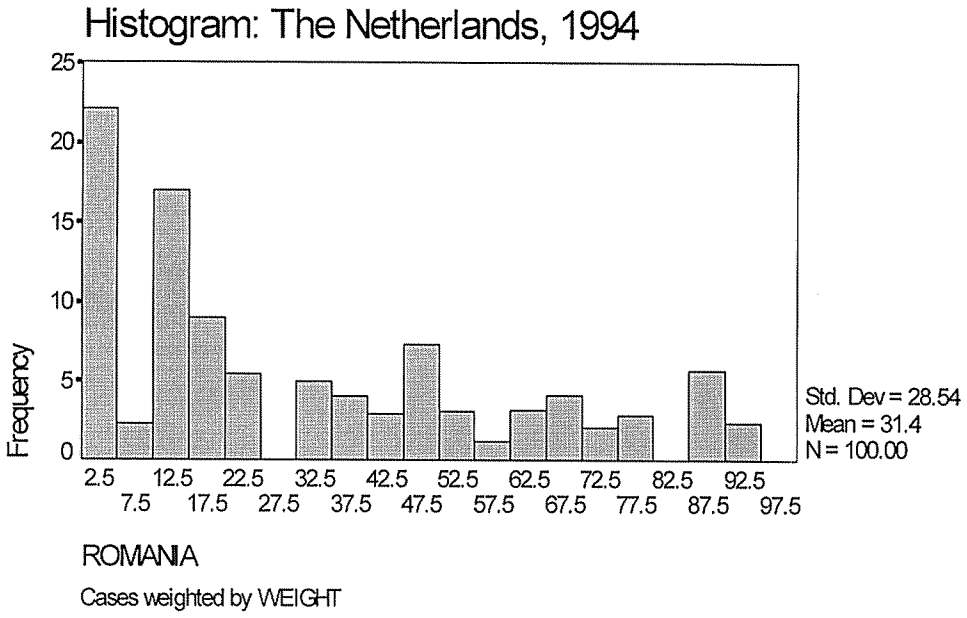
SLOVENIA

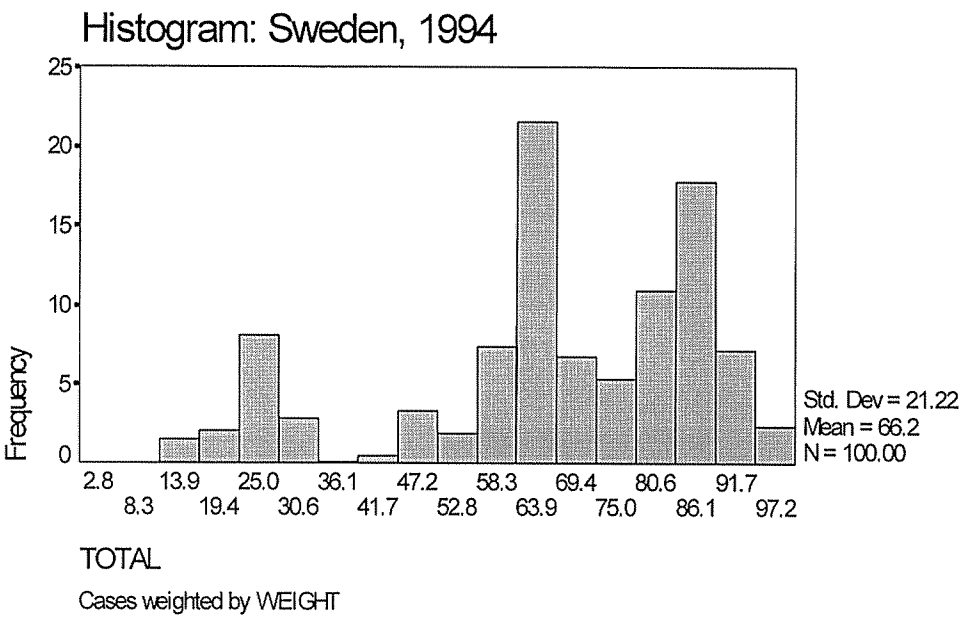
Cases weighted by WEIGHT

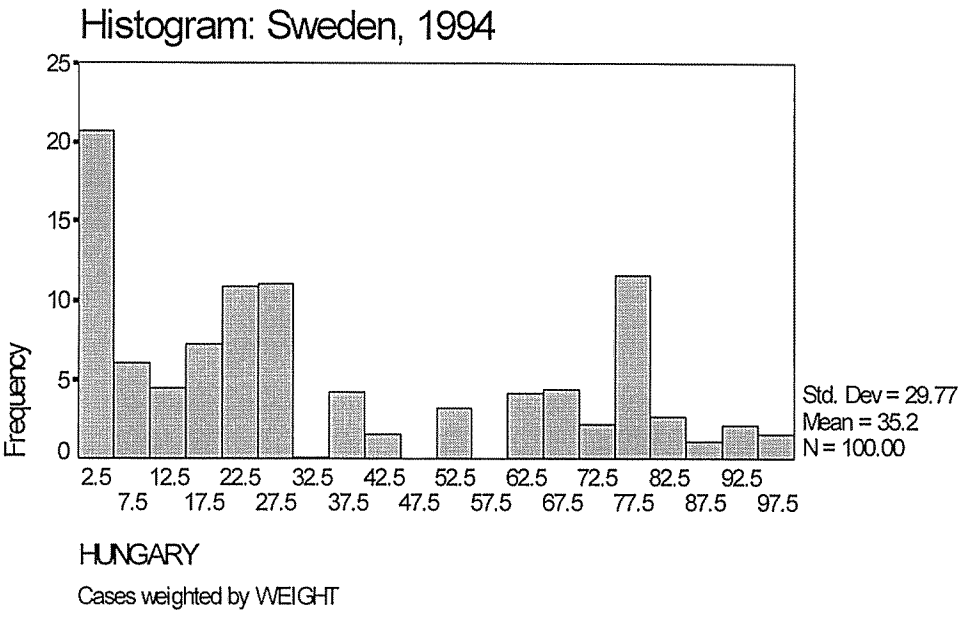


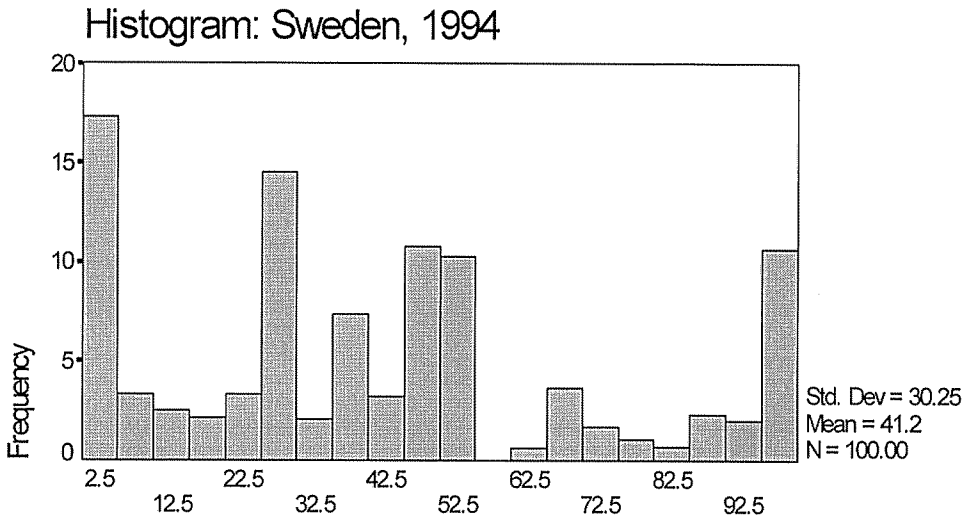
POLAND

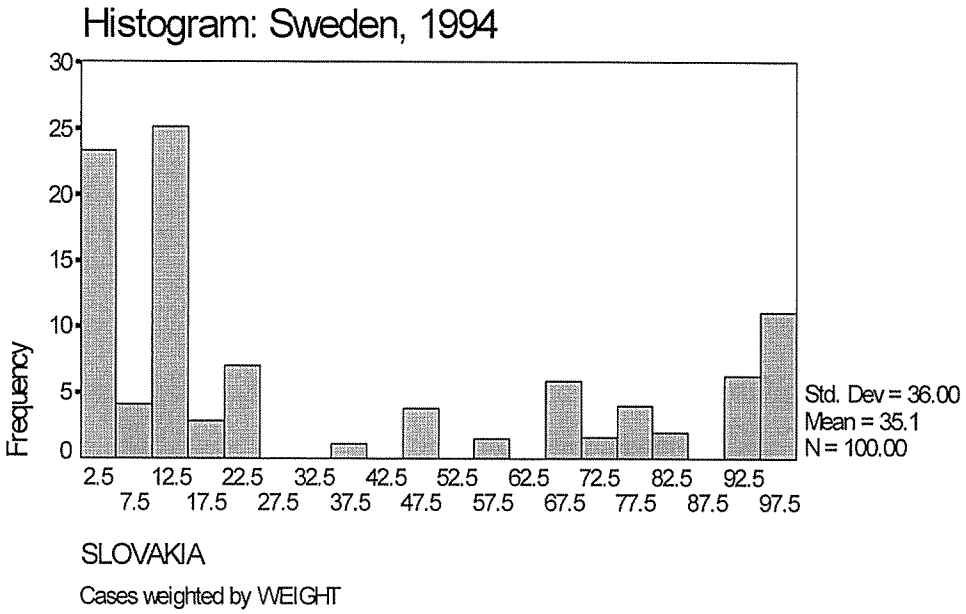
Cases weighted by WEIGHT

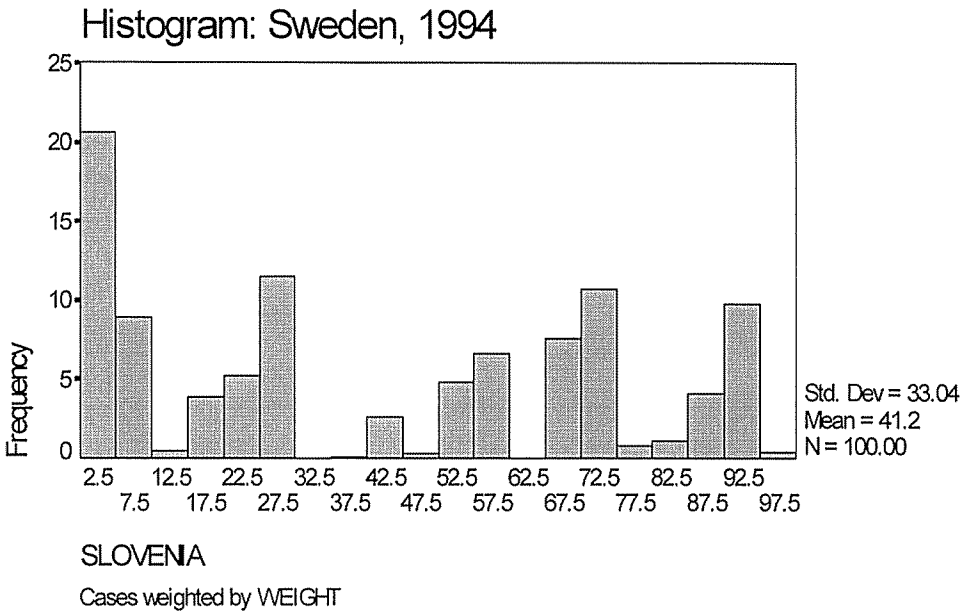

Histogram: The Netherlands, 1994
Frequency
25
20
15
10
5
0
2.5 12.5 22.5 32.5 42.5 52.5 62.5 72.5 82.5 92.5
7.5 17.5 27.5 37.5 47.5 57.5 67.5 77.5 87.5 97.5
Std. Dev = 28.54
Mean = 31.4
N = 100.00
ROMANIA
Cases weighted by WEIGHT

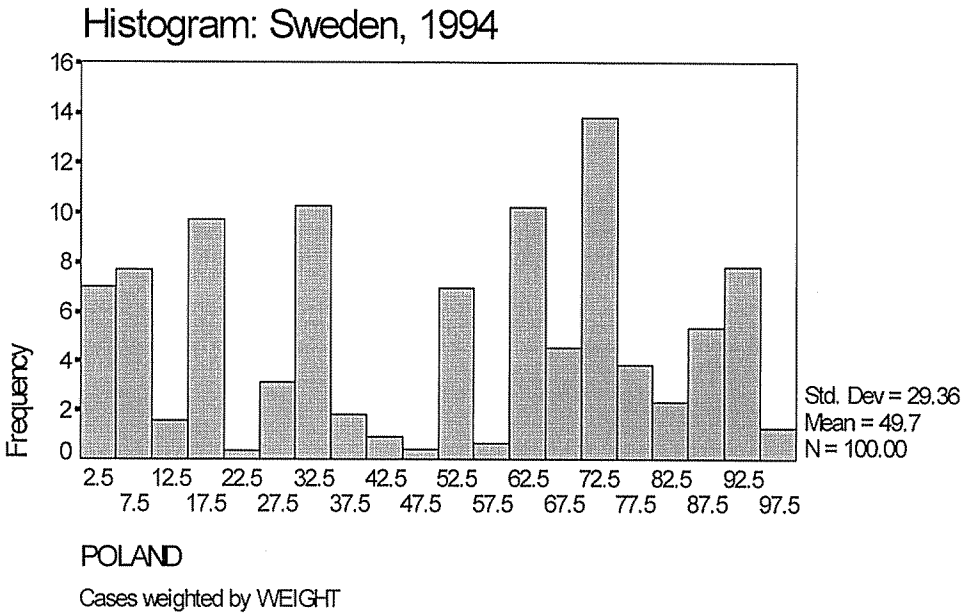

Histogram: Sweden, 1994
Frequency
25
20
15
10
5
0
2.8 13.9 25.0 36.1 47.2 58.3 69.4 80.6 91.7
8.3 19.4 30.6 41.7 52.8 63.9 75.0 86.1 97.2
Std. Dev = 21.22
Mean = 66.2
N = 100.00
TOTAL
Cases weighted by WEIGHT

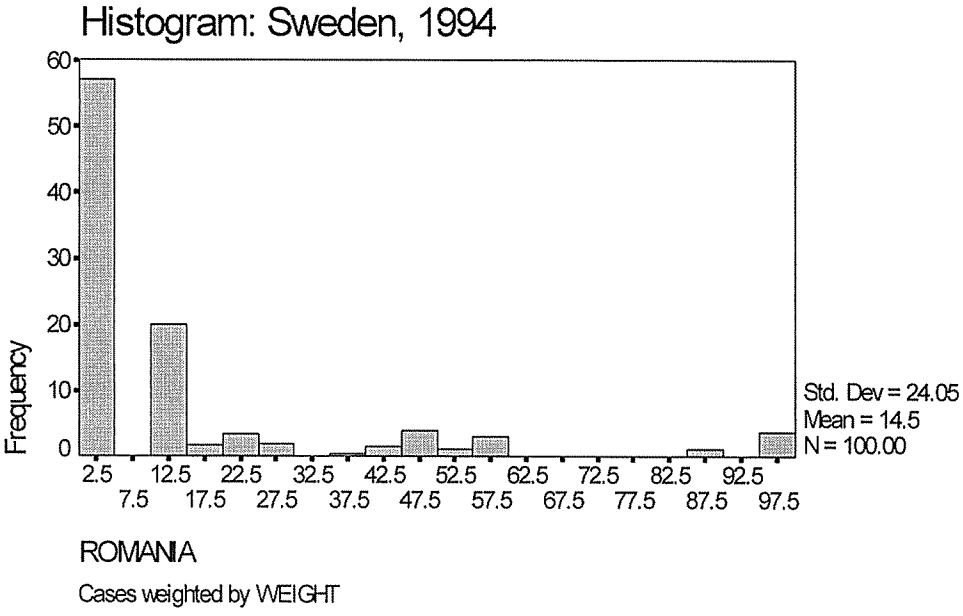

Histogram: Sweden, 1994
Frequency
25
20
15
10
5
0
2.5 12.5 22.5 32.5 42.5 52.5 62.5 72.5 82.5 92.5
7.5 17.5 27.5 37.5 47.5 57.5 67.5 77.5 87.5 97.5
Std. Dev = 29.77
Mean = 35.2
N = 100.00
HUNGARY
Cases weighted by WEIGHT


Histogram: Sweden, 1994
Frequency
20
15
10
5
0
2.5
12.5
22.5
32.5
42.5
52.5
62.5
72.5
82.5
92.5
Std. Dev = 30.25
Mean = 41.2
N = 100.00
CZECH
Cases weighted by WEIGHT


Histogram: Sweden, 1994
Frequency
30
25
20
15
10
5
0
2.5
7.5
12.5
17.5
22.5
27.5
32.5
37.5
42.5
47.5
52.5
57.5
62.5
67.5
72.5
77.5
82.5
87.5
92.5
97.5
Std. Dev = 36.00
Mean = 35.1
N = 100.00
SLOVAKIA
Cases weighted by WEIGHT


Histogram: Sweden, 1994
Frequency
25
20
15
10
5
0
2.5
7.5
12.5
17.5
22.5
27.5
32.5
37.5
42.5
47.5
52.5
57.5
62.5
67.5
72.5
77.5
82.5
87.5
92.5
97.5
Std. Dev = 33.04
Mean = 41.2
N = 100.00
SLOVENIA
Cases weighted by WEIGHT


Histogram: Sweden, 1994
Frequency
16
14
12
10
8
6
4
2
0
2.5
7.5
12.5
17.5
22.5
27.5
32.5
37.5
42.5
47.5
52.5
57.5
62.5
67.5
72.5
77.5
82.5
87.5
92.5
97.5
Std. Dev = 29.36
Mean = 49.7
N = 100.00
POLAND
Cases weighted by WEIGHT


Histogram: Sweden, 1994
Frequency
60
50
40
30
20
10
0
2.5
7.5
12.5
17.5
22.5
27.5
32.5
37.5
42.5
47.5
52.5
57.5
62.5
67.5
72.5
77.5
82.5
87.5
92.5
97.5
Std. Dev = 24.05
Mean = 14.5
N = 100.00
ROMANIA
Cases weighted by WEIGHT

Intra-industry Trade (Grubel-Lloyd Indices) for Austria, 1989

SITC	Description	Weight	Total	former CSR	Hungary	Poland	Romania
00	Living animals	0,14	24,95	28,64	3,05	1,94	26,32
01	Meat	0,42	78,19	1,44	0,28	11,56	22,93
02	Dairy products	0,39	72,88	17,65	94,03	20,87	40,00
03	Fish	0,15	4,72	72,38	55,21	6,99	0,00
04	Cerals	0,52	70,92	54,72	57,26	0,47	3,82
05	Vegetables and fruit	1,09	31,42	5,83	8,91	7,81	0,93
06	Sugars, sugar preparations	0,14	67,02	8,24	7,01	1,13	2,54
07	Coffee, tea, etc.	0,71	43,61	52,46	47,74	5,85	0,14
08	Feeding stuff	0,30	30,96	9,35	67,03	4,08	ND
09	Miscellaneous products	0,22	58,84	ND	35,22	ND	ND
11	Beverages	0,28	99,40	74,72	17,06	21,54	9,92
12	Tobacco	0,08	48,91	28,80	80,92	94,24	0,00
21	Hides, skins	0,12	92,05	ND	41,52	ND	ND
22	Oil seeds and fruits	0,07	74,49	0,00	90,67	6,95	0,00
23	Crude rubber	0,16	25,52	85,92	93,70	0,47	0,00
24	Cork and wood	1,88	64,73	0,02	54,98	4,85	61,37
25	Pulp and waste paper	0,80	68,53	5,69	5,48	17,02	ND
26	Textile fibres	0,64	75,83	9,22	19,68	1,56	48,35
27	Crude fertilizers	0,50	83,94	35,18	68,14	75,89	0,00
28	Metalliferous ores	0,92	37,56	21,89	9,80	22,28	ND
29	Crude animal and vegetable mat.	0,35	20,13	27,06	34,39	25,27	0,33
32	Coal, coke	0,50	0,80	0,00	ND	0,02	ND
33	Petroleum products	2,15	13,98	13,82	9,54	39,88	3,80
34	Gas	0,45	0,12	0,14	9,53	ND	0,00
35	Electric current	0,57	50,69	ND	ND	ND	ND
41	Animal oils and fets	0,02	39,07	9,03	75,63	0,00	ND
42	Fixed vegetable fats and oils	0,09	4,71	2,23	1,01	1,50	ND
43	Fats and oils processed	0,04	23,30	9,56	5,79	ND	0,00
51	Organic chemicals	1,50	89,84	77,49	50,98	52,73	23,32
52	Inorganic chemicals	0,78	86,41	52,95	91,72	99,75	9,13
53	Deying, tanning, etc.	0,67	70,16	34,77	1,50	0,76	0,00
54	Medicinal and pharm. prod.	1,66	84,17	24,53	50,18	0,49	38,36
55	Essential oils	0,58	51,04	5,88	20,92	22,46	0,00
56	Ferilizers	0,27	75,11	38,54	55,71	62,79	0,00
57	Plastics (primary forms)	2,11	93,22	83,25	85,27	94,20	7,84
58	Plastics (non-primary forms)	1,17	90,91	12,34	48,40	2,38	0,00
59	Other chemicals	0,99	66,37	39,32	8,99	79,91	0,00
61	Leather	0,40	88,34	65,75	95,93	13,36	47,37
62	Rubber manufactures	1,19	92,38	34,33	34,73	8,60	33,56
63	Wood manufactures	1,10	72,78	10,49	24,72	89,32	9,22
64	Paper	3,90	54,92	35,26	18,35	6,78	65,97
65	Textile yarn	4,48	97,09	42,14	72,46	94,23	70,33
66	Non-metalic minerals	2,40	84,07	90,48	48,27	39,91	57,83
67	Iron and steel	5,24	68,38	31,44	72,32	47,26	75,15
68	Non-ferrous metals	2,81	90,54	9,04	32,31	94,80	7,16
69	Manufactures of metal	4,12	92,81	29,82	50,86	20,75	88,78
71	Power generating mach.	3,51	57,80	16,19	28,33	93,87	26,60
72	Specialized machinery	4,70	91,53	14,56	20,31	6,46	36,01
73	Metal working machinery	1,36	99,91	61,88	24,75	52,91	54,78
74	Other machinery	5,58	96,92	20,63	23,92	10,57	96,21
75	Office machines	2,45	41,66	1,33	7,55	0,98	4,28
76	Telecommunications	2,99	95,80	10,09	14,09	29,08	1,24
77	Electrical machinery	6,71	88,51	45,77	34,66	24,59	51,62
78	Road vehicles	7,71	47,07	91,29	42,60	44,00	42,79
79	Other transport equipment	0,87	85,25	79,49	78,74	8,46	34,15
81	Prefabricated buildings	0,76	93,85	62,07	98,56	23,49	18,38
82	Furniture	1,51	68,31	94,10	82,51	90,03	0,38
83	Travel goods	0,17	30,00	12,90	72,31	11,13	15,85
84	Apparel	3,71	69,49	88,97	91,80	48,64	1,22
85	Footwear	1,19	84,36	43,25	96,86	97,31	4,58
87	Professional instruments	1,56	77,66	9,80	12,55	8,80	79,55
88	Photographic equipment	1,08	73,74	19,32	5,60	5,34	10,53
89	Miscellanous manufactures	5,00	86,05	60,15	50,23	16,62	47,28

Intra-industry Trade (Grubel-Lloyd Indices) for Italy, 1989

SITC	Description	Weight	Total	former CSR	Hungary	Poland	Romania
00	Living animals	0,71	1,68	0,00	0,01	0,02	0,00
01	Meat	1,49	26,60	1,58	0,94	0,28	2,33
02	Dairy products	1,08	29,77	1,67	0,26	46,18	9,14
03	Fish	0,74	18,62	0,00	3,89	0,41	0,00
04	Cerals	1,28	82,00	4,29	31,54	20,28	4,91
05	Vegetables and fruit	1,76	72,07	19,60	51,19	46,43	13,38
06	Sugars, sugar preparations	0,15	76,47	81,34	16,49	29,79	8,84
07	Coffee, tea, etc.	0,46	47,86	5,41	43,12	25,95	0,00
08	Feeding stuff	0,41	16,80	2,12	5,54	9,88	0,00
09	Miscellaneous products	0,19	98,82	43,85	34,55	ND	0,00
11	Beverages	0,73	58,63	66,83	73,33	25,37	0,00
12	Tobacco	0,38	21,46	ND	ND	72,50	ND
21	Hides, skins	0,52	11,39	29,68	81,71	32,28	0,41
22	Oil seeds and fruits	0,12	3,66	18,75	0,95	ND	0,00
23	Crude rubber	0,20	32,77	48,36	13,57	84,99	47,62
24	Cork and wood	0,76	9,23	0,10	0,40	0,00	0,27
25	Pulp and waste paper	0,62	5,44	0,00	12,30	1,12	ND
26	Textile fibres	1,22	34,38	80,55	40,51	78,27	1,48
27	Crude fertilizers	0,48	54,72	13,10	86,48	26,33	0,30
28	Metalliferous ores	1,07	17,57	0,08	18,58	0,00	0,00
29	Crude animal and vegetable mat.	0,39	70,70	87,65	7,47	35,21	2,90
32	Coal, coke	0,43	4,81	ND	ND	0,00	2,68
33	Petroleum products	5,58	34,34	2,50	11,71	21,81	0,01
34	Gas	0,11	23,46	2,13	ND	ND	ND
35	Electric current	0,00	ND	ND	ND	ND	ND
41	Animal oils and fets	0,03	97,59	0,00	ND	69,70	ND
42	Fixed vegetable fats and oils	0,41	68,12	ND	6,78	ND	0,00
43	Fats and oils processed	0,04	97,10	ND	ND	ND	ND
51	Organic chemicals	2,44	63,41	67,21	43,69	94,45	50,87
52	Inorganic chemicals	0,53	66,87	69,92	90,75	16,54	20,55
53	Deying, tanning, etc.	0,64	64,01	28,98	0,36	49,77	37,86
54	Medicinal and pharm. prod.	1,19	73,10	70,95	43,22	3,29	94,94
55	Essential oils	0,53	77,09	1,14	1,03	0,28	33,86
56	Ferilizers	0,23	68,77	0,00	2,18	ND	0,00
57	Plastics (primary forms)	2,06	71,65	34,23	86,50	26,24	27,14
58	Plastics (non-primary forms)	0,82	80,23	5,38	69,98	1,41	28,53
59	Other chemicals	1,06	71,86	61,70	26,56	71,02	83,80
61	Leather	1,20	85,76	67,70	34,94	33,89	39,15
62	Rubber manufactures	0,91	85,01	76,61	23,15	14,73	27,92
63	Wood manufactures	0,40	92,14	70,43	30,29	11,67	3,35
64	Paper	1,47	86,85	24,71	31,97	14,64	58,35
65	Textile yarn	4,60	79,76	75,75	89,64	43,87	86,15
66	Non-metalic minerals	2,59	52,74	18,81	60,35	31,36	40,93
67	Iron and steel	4,20	88,63	5,59	77,94	46,04	27,66
68	Non-ferrous metals	2,23	51,06	11,12	66,77	23,92	8,25
69	Manufactures of metal	2,69	58,46	93,02	23,54	36,30	38,47
71	Power generating mach.	1,64	92,78	10,29	66,81	83,59	25,65
72	Specialized machinery	5,05	52,64	15,56	4,06	4,85	72,47
73	Metal working machinery	1,25	66,60	91,64	42,17	42,63	88,75
74	Other machinery	5,10	62,72	48,06	22,76	37,11	66,07
75	Office machines	3,18	90,55	1,98	6,08	0,10	38,22
76	Telecommunications	1,69	60,58	78,23	15,60	99,40	36,79
77	Electrical machinery	5,14	98,36	62,67	80,13	51,62	59,03
78	Road vehicles	8,91	86,93	78,56	7,59	49,66	38,02
79	Other transport equipment	1,53	94,88	3,07	4,61	0,00	0,00
81	Prefabricated buildings	0,56	38,07	45,91	48,83	91,01	8,85
82	Furniture	1,72	15,90	99,77	84,46	83,83	4,97
83	Travel goods	0,41	32,61	49,87	61,25	60,42	96,80
84	Apparel	4,02	35,35	83,02	91,01	60,24	12,23
85	Footwear	2,18	18,31	16,09	43,91	1,10	43,65
87	Professional instruments	1,52	66,70	39,30	5,53	36,79	47,09
88	Photographic equipment	1,03	76,18	8,45	62,09	13,26	70,14
89	Miscellanous manufactures	3,87	61,12	70,60	38,59	42,85	54,43

Intra-industry Trade (Grubel-Lloyd Indices) for the Netherlands, 1989

SITC	Description	Weight	Total	former CSR	Hungary	Poland	Romania
00	Living animals	0,53	57,94	21,69	20,86	6,62	28,41
01	Meat	2,42	26,37	42,76	2,36	5,75	4,47
02	Dairy products	3,08	66,49	4,61	92,15	49,92	1,06
03	Fish	0,70	69,18	0,00	ND	98,69	0,00
04	Cerals	1,00	68,35	10,73	5,28	0,61	0,00
05	Vegetables and fruit	3,15	76,86	72,16	54,62	14,63	22,97
06	Sugars, sugar preparations	0,37	83,68	31,87	1,43	4,49	1,84
07	Coffee, tea, etc.	1,14	98,92	39,83	63,48	84,70	7,99
08	Feeding stuff	1,27	97,70	0,00	25,08	20,55	0,00
09	Miscellaneous products	0,59	49,88	2,91	99,54	4,12	0,00
11	Beverages	0,73	92,17	49,30	97,45	6,34	20,16
12	Tobacco	0,92	63,05	ND	41,37	43,35	0,00
21	Hides, skins	0,24	70,73	1,03	49,23	60,36	0,00
22	Oil seeds and fruits	0,67	16,77	95,85	8,40	1,00	ND
23	Crude rubber	0,22	55,33	42,42	97,44	64,58	5,32
24	Cork and wood	0,59	37,94	0,00	1,70	0,59	9,12
25	Pulp and waste paper	0,32	29,37	ND	ND	ND	ND
26	Textile fibres	0,23	98,44	35,67	12,80	65,38	10,32
27	Crude fertilizers	0,49	72,11	13,54	91,96	56,17	0,00
28	Metalliferous ores	1,22	97,71	ND	91,65	22,87	0,00
29	Crude animal and vegetable mat.	2,00	30,58	41,17	77,71	94,45	70,97
32	Coal, coke	0,49	33,32	ND	ND	ND	ND
33	Petroleum products	8,07	86,47	84,15	92,17	57,37	92,54
34	Gas	1,33	29,24	ND	ND	ND	ND
35	Electric current	0,00	ND	ND	ND	ND	ND
41	Animal oils and fets	0,06	18,04	ND	ND	ND	ND
42	Fixed vegetable fats and oils	0,11	69,28	59,04	1,42	0,54	ND
43	Fats and oils processed	0,43	86,95	ND	21,10	ND	0,00
51	Organic chemicals	0,17	58,45	ND	ND	0,54	ND
52	Inorganic chemicals	3,91	82,63	72,79	57,72	73,96	92,52
53	Deying, tanning, etc.	0,98	98,65	62,18	74,28	6,10	93,53
54	Medicinal and pharm. prod.	0,79	87,74	36,75	3,69	77,30	92,23
55	Essential oils	1,07	97,29	1,57	12,11	8,11	52,72
56	Ferilizers	0,71	99,09	12,52	34,73	8,81	26,67
57	Plastics (primary forms)	0,50	38,22	0,00	ND	37,54	ND
58	Plastics (non-primary forms)	3,15	54,90	59,84	61,18	29,83	9,72
59	Other chemicals	1,07	98,62	29,50	74,81	89,85	0,46
61	Leather	1,68	75,05	22,32	84,82	99,78	4,59
62	Rubber manufactures	0,21	96,95	22,73	35,63	53,28	4,21
63	Wood manufactures	0,79	86,37	51,81	50,55	87,08	26,15
64	Paper	0,48	49,62	27,80	0,91	9,50	8,87
65	Textile yarn	2,60	89,61	12,21	40,63	50,71	61,45
66	Non-metalic minerals	2,54	90,29	83,10	20,11	28,82	24,54
67	Iron and steel	1,52	80,25	13,36	91,46	38,16	19,38
68	Non-ferrous metals	3,07	92,83	6,34	51,45	78,33	47,76
69	Manufactures of metal	1,86	92,26	28,55	54,53	35,57	2,10
71	Power generating mach.	2,64	91,85	29,50	80,88	98,26	38,96
72	Specialized machinery	1,79	75,33	7,43	56,79	81,70	13,02
73	Metal working machinery	2,49	99,27	50,23	12,51	9,19	88,21
74	Other machinery	0,44	82,90	67,81	73,64	36,36	0,00
75	Office machines	3,09	88,80	19,33	27,01	49,82	4,87
76	Telecommunications	5,49	91,17	4,28	10,02	9,46	41,51
77	Electrical machinery	2,01	71,32	20,96	74,26	82,80	30,41
78	Road vehicles	4,42	96,10	62,31	88,24	96,87	56,11
79	Other transport equipment	5,39	72,67	18,92	42,15	74,71	56,07
81	Prefabricated buildings	1,71	95,35	25,27	ND	4,52	0,00
82	Furniture	0,45	89,87	2,43	1,72	76,00	8,93
83	Travel goods	1,04	69,66	60,24	92,64	18,77	2,11
84	Apparel	0,12	69,13	0,49	27,16	1,44	0,00
85	Footwear	2,54	59,63	17,70	16,42	27,15	2,56
87	Professional instruments	0,50	48,97	1,17	89,10	80,21	1,24
88	Photographic equipment	1,51	85,98	6,48	23,66	12,33	99,48
89	Miscellanous manufactures	0,93	95,42	73,21	12,40	10,12	51,02

Intra-industry Trade (Grubel-Lloyd Indices) for Sweden, 1989

SITC	Description	Weight	Total	former CSR	Hungary	Poland	Romania
00	Living animals	0,05	27,50	66,56	94,03	16,81	ND
01	Meat	0,22	72,17	2,25	0,01	0,13	0,82
02	Dairy products	0,15	92,53	0,02	0,05	80,76	94,58
03	Fish	0,50	47,31	ND	9,19	28,25	ND
04	Cerals	0,35	85,63	ND	11,16	1,86	0,00
05	Vegetables and fruit	0,92	13,73	0,03	1,33	6,09	0,00
06	Sugars, sugar preparations	0,16	91,19	ND	8,29	9,24	0,00
07	Coffee, tea, etc.	0,53	45,46	1,21	12,71	13,94	ND
08	Feeding stuff	0,21	18,76	55,33	ND	26,04	ND
09	Miscellaneous products	0,22	73,30	4,14	53,66	0,00	0,00
11	Beverages	0,31	30,92	10,43	1,98	65,02	0,00
12	Tobacco	0,11	4,16	ND	76,54	12,89	0,00
21	Hides, skins	0,27	68,54	ND	ND	ND	ND
22	Oil seeds and fruits	0,03	49,55	ND	0,00	ND	ND
23	Crude rubber	0,10	54,64	ND	16,05	ND	0,00
24	Cork and wood	2,22	47,58	3,18	50,67	0,43	0,64
25	Pulp and waste paper	2,21	11,82	54,79	0,00	0,02	ND
26	Textile fibres	0,09	73,27	ND	31,63	9,92	11,84
27	Crude fertilizers	0,33	47,69	1,22	53,49	0,98	ND
28	Metalliferous ores	1,42	96,25	0,04	1,32	9,49	ND
29	Crude animal and vegetable mat.	0,32	30,95	81,91	31,67	10,21	26,67
32	Coal, coke	0,27	9,80	ND	ND	0,00	ND
33	Petroleum products	4,53	54,42	0,90	69,36	81,70	0,00
34	Gas	0,15	21,49	ND	ND	ND	ND
35	Electric current	0,00	ND	ND	ND	ND	ND
41	Animal oils and fets	0,25	64,96	ND	ND	ND	ND
42	Fixed vegetable fats and oils	0,01	76,13	ND	ND	ND	ND
43	Fats and oils processed	0,11	68,40	ND	3,08	0,00	ND
51	Organic chemicals	0,07	66,91	4,41	0,00	37,01	0,00
52	Inorganic chemicals	1,19	83,13	66,96	80,44	59,65	0,00
53	Deying, tanning, etc.	0,92	78,56	20,08	41,06	38,98	0,00
54	Medicinal and pharm. prod.	0,50	69,05	30,37	0,38	60,37	0,00
55	Essential oils	1,69	76,06	90,76	22,97	0,74	2,94
56	Ferilizers	0,51	68,26	2,84	12,69	10,37	0,00
57	Plastics (primary forms)	0,23	74,51	ND	ND	0,03	0,11
58	Plastics (non-primary forms)	1,65	89,49	22,29	50,57	45,65	0,00
59	Other chemicals	0,82	73,23	62,08	51,28	42,19	0,00
61	Leather	0,93	80,59	58,79	74,91	64,02	0,31
62	Rubber manufactures	0,16	94,67	ND	68,13	38,06	36,64
63	Wood manufactures	0,93	69,64	5,74	8,08	73,55	19,58
64	Paper	0,76	82,74	28,04	14,83	29,02	12,03
65	Textile yarn	6,21	20,92	96,72	4,75	38,76	13,08
66	Non-metalic minerals	1,70	65,52	19,72	89,78	72,44	52,51
67	Iron and steel	1,30	73,58	15,86	96,65	33,32	98,10
68	Non-ferrous metals	5,26	70,15	23,07	44,58	59,57	81,81
69	Manufactures of metal	2,31	87,93	1,20	29,89	28,10	15,26
71	Power generating mach.	3,20	93,27	50,38	73,53	78,92	2,82
72	Specialized machinery	2,67	88,74	43,34	38,70	99,21	42,08
73	Metal working machinery	4,46	81,24	33,07	18,20	38,68	9,59
74	Other machinery	1,10	98,52	93,66	24,48	30,89	81,81
75	Office machines	6,45	84,20	24,16	28,50	16,95	52,33
76	Telecommunications	3,88	73,20	9,92	15,13	45,96	1,24
77	Electrical machinery	3,69	80,02	0,73	1,24	81,16	42,97
78	Road vehicles	5,09	81,73	63,63	67,30	98,34	51,66
79	Other transport equipment	12,09	84,56	52,55	46,98	20,92	49,89
81	Prefabricated buildings	2,18	77,17	31,50	42,88	29,78	0,00
82	Furniture	0,55	91,48	0,76	43,07	75,23	33,44
83	Travel goods	1,39	90,51	4,83	22,15	7,34	1,32
84	Apparel	0,13	28,84	0,34	0,23	10,44	0,01
85	Footwear	2,41	27,34	4,76	9,01	45,36	2,23
87	Professional instruments	0,48	22,01	0,36	ND	82,96	0,00
88	Photographic equipment	2,15	97,78	10,82	41,38	38,69	2,45
89	Miscellanous manufactures	0,70	38,21	45,41	96,68	30,73	0,00

Intra-Industry Trade (Grubel-Lloyd Indices) for Austria, 1994

SITC	Description	Weight	Total	Hungary	Czech R.	Slovakia	Slovenia	Poland	Romania
00	Living animals	0,10	25,59	6,97	84,82	15,28	5,31	17,19	91,02
01	Meat	0,30	75,73	7,68	83,48	5,03	12,65	65,48	99,55
02	Dairy products	0,36	98,25	86,07	7,43	12,35	91,96	80,13	23,04
03	Fish	0,19	5,74	39,46	46,19	2,80	30,42	12,89	0,00
04	Cerals	0,51	90,74	52,46	70,78	5,20	0,77	3,84	28,81
05	Vegetables and fruit	1,19	38,62	56,96	62,98	66,53	88,82	9,59	25,27
06	Sugars, sugar preparations	0,17	75,25	82,49	84,06	50,50	22,29	74,75	35,69
07	Coffee, tea, etc.	0,61	57,01	73,04	9,76	7,12	8,49	15,86	5,72
08	Feeding stuff	0,26	56,14	87,64	51,24	27,27	1,82	52,09	0,00
09	Miscellaneous products	0,28	58,39	11,08	44,76	3,19	4,59	0,11	0,00
11	Beverages	0,41	69,67	5,87	35,08	2,69	10,29	15,13	0,05
12	Tobacco	0,11	73,00	ND	ND	ND	0,00	0,00	0,00
21	Hides, skins	0,09	83,85	11,69	90,45	52,06	1,94	9,18	0,00
22	Oil seeds and fruits	0,06	98,95	95,51	84,85	83,89	4,08	34,90	23,93
23	Crude rubber	0,11	16,18	19,77	36,06	ND	8,92	4,49	0,90
24	Cork and wood	1,70	76,85	57,07	5,63	3,86	50,74	0,99	81,49
25	Pulp and waste paper	0,48	56,50	10,44	5,36	12,28	3,11	15,02	0,00
26	Textile fibres	0,46	72,81	72,32	52,48	55,29	15,63	4,69	84,45
27	Crude fertilizers	0,41	91,52	76,98	62,08	39,00	6,94	15,37	11,91
28	Metalliferous ores	0,58	51,66	0,95	6,98	6,15	85,10	0,15	0,00
29	Crude animal and vegetable mat.	0,36	18,81	52,53	57,17	68,78	22,77	75,22	16,31
32	Coal, coke	0,28	0,82	0,84	0,00	0,20	0,00	0,00	ND
33	Petroleum products	1,77	24,35	52,00	44,69	32,93	0,36	66,07	64,18
34	Gas	0,47	0,95	5,64	62,13	8,31	7,41	0,00	ND
35	Electric current	0,50	53,79	ND	ND	ND	0,00	0,00	ND
41	Animal oils and fets	0,01	76,43	62,63	ND	ND	0,00	0,00	10,32
42	Fixed vegetable fats and oils	0,07	15,95	41,05	49,41	58,42	0,42	0,00	40,69
43	Fats and oils processed	0,05	73,03	87,04	5,61	ND	5,84	0,65	49,41
51	Organic chemicals	1,10	95,75	66,24	69,14	54,67	59,46	65,33	43,30
52	Inorganic chemicals	0,59	87,24	84,74	74,96	12,02	80,04	95,89	98,88
53	Deying, tanning, etc.	0,71	62,63	5,03	25,27	0,88	7,29	0,73	0,03
54	Medicinal and pharm. prod.	2,39	88,01	41,88	33,79	0,10	21,62	2,06	1,88
55	Essential oils	0,77	50,42	7,76	3,14	38,65	51,46	15,88	15,87
56	Ferilizers	0,18	73,18	92,28	57,45	2,80	0,78	0,00	0,00
57	Plastics (primary forms)	1,77	79,76	97,31	88,77	67,04	14,54	52,61	14,50
58	Plastics (non-primary forms)	1,30	94,07	48,32	7,29	18,69	37,17	0,73	0,00
59	Other chemicals	1,01	68,73	23,82	8,17	45,77	52,72	32,25	23,39
61	Leather	0,34	84,61	27,69	49,34	64,90	32,92	59,34	73,34
62	Rubber manufactures	1,18	94,16	31,04	48,15	18,57	84,61	47,94	22,33
63	Wood manufactures	1,31	81,29	69,74	66,31	48,07	63,40	39,17	22,56
64	Paper	3,77	62,32	12,34	16,14	94,27	70,62	5,43	15,85
65	Textile yarn	3,64	98,94	50,87	92,98	85,29	60,82	39,05	74,00
66	Non-metalic minerals	2,46	94,38	91,72	93,34	42,92	84,71	87,16	70,05
67	Iron and steel	3,80	75,57	58,62	86,05	42,23	69,24	87,92	44,50
68	Non-ferrous metals	2,42	77,43	67,85	98,72	70,97	82,82	67,53	8,48
69	Manufactures of metal	4,61	95,24	57,69	83,74	97,31	86,76	86,28	45,26
71	Power generating mach.	4,07	64,95	25,97	61,28	30,91	96,36	53,78	81,39
72	Specialized machinery	4,59	82,88	48,29	38,74	42,47	96,58	33,20	7,10
73	Metal working machinery	0,93	99,49	43,36	90,74	82,21	92,46	21,89	33,24
74	Other machinery	6,03	92,61	36,31	40,31	34,84	80,06	28,32	34,13
75	Office machines	2,47	40,46	13,66	17,92	4,46	2,76	3,72	0,83
76	Telecommunications	2,99	96,69	72,10	8,06	22,39	20,11	43,82	0,11
77	Electrical machinery	7,33	93,89	47,60	53,94	37,14	87,21	50,20	7,47
78	Road vehicles	9,16	62,36	16,62	78,27	80,89	40,19	50,05	89,92
79	Other transport equipment	0,87	92,45	52,10	64,44	5,76	55,57	93,78	62,55
81	Prefabricated buildings	0,92	98,12	84,52	88,11	90,50	31,24	57,45	39,05
82	Furniture	1,84	71,17	73,20	87,74	94,30	41,39	12,87	4,85
83	Travel goods	0,16	21,14	58,60	51,79	95,58	43,56	19,17	28,39
84	Apparel	3,72	57,07	71,77	67,70	58,87	58,58	20,04	14,65
85	Footwear	1,12	76,45	66,83	84,52	35,07	69,43	35,35	98,21

Intra-Industry Trade (Grubel-Lloyd Indices) for Italy, 1994

SITC	Description	Weight	Total	Hungary	Czech R.	Slovakia	Slovenia	Poland	Romania
00	Living animals	0,45	4,83	0,33	43,83	0,58	59,13	0,02	0,63
01	Meat	1,26	37,99	7,98	17,16	0,22	53,70	27,78	71,86
02	Dairy products	1,06	45,25	74,14	51,21	ND	77,46	29,90	0,79
03	Fish	0,71	22,97	26,55	93,97	4,05	5,91	96,54	81,69
04	Cerals	1,05	86,73	36,83	0,54	8,84	4,45	7,05	2,78
05	Vegetables and fruit	1,90	73,61	69,46	1,19	6,63	30,78	84,16	32,41
06	Sugars, sugar preparations	0,16	69,80	62,77	87,12	34,26	1,66	43,78	0,00
07	Coffee, tea, etc.	0,49	65,96	27,33	2,50	ND	2,05	2,96	0,00
08	Feeding stuff	0,38	29,53	55,79	3,44	85,06	55,60	6,51	3,82
09	Miscellaneous products	0,29	96,97	18,71	82,35	ND	5,68	1,10	0,87
11	Beverages	0,86	46,72	1,00	55,87	ND	79,48	22,68	0,26
12	Tobacco	0,36	25,57	2,92	ND	ND	0,00	0,00	0,00
21	Hides, skins	0,44	10,78	34,43	80,20	84,69	17,82	7,70	57,29
22	Oil seeds and fruits	0,13	3,27	5,18	ND	ND	0,00	27,86	7,49
23	Crude rubber	0,16	29,08	24,39	8,92	36,11	3,68	43,66	7,62
24	Cork and wood	0,78	16,63	0,92	0,42	2,84	27,44	1,70	0,23
25	Pulp and waste paper	0,43	2,57	26,63	ND	3,90	81,53	0,07	0,00
26	Textile fibres	0,88	19,81	71,42	38,92	21,50	45,47	92,69	33,65
27	Crude fertilizers	0,41	56,07	12,14	67,98	99,45	19,22	55,21	31,22
28	Metalliferous ores	0,74	13,05	2,77	0,17	0,11	64,20	2,55	12,45
29	Crude animal and vegetable mat.	0,39	81,53	55,26	22,33	75,24	34,58	40,35	22,89
32	Coal, coke	0,26	4,99	8,79	ND	ND	0,00	0,00	0,00
33	Petroleum products	4,42	38,18	39,15	35,52	46,78	0,48	42,59	85,02
34	Gas	0,11	26,04	1,19	ND	ND	54,72	ND	0,00
35	Electric current	0,00	ND	ND	ND	ND	ND	ND	ND
41	Animal oils and fets	0,03	81,45	1,22	ND	89,94	48,52	0,00	0,00
42	Fixed vegetable fats and oils	0,51	62,07	27,73	ND	ND	0,00	0,00	67,52
43	Fats and oils processed	0,05	71,18	ND	ND	ND	38,56	0,00	13,94
51	Organic chemicals	2,33	65,24	72,04	13,24	25,42	79,26	61,35	30,16
52	Inorganic chemicals	0,42	56,34	37,70	20,48	53,67	62,18	85,10	72,96
53	Deying, tanning, etc.	0,70	75,14	3,10	92,56	2,68	36,37	43,50	0,55
54	Medicinal and pharm. prod.	1,73	91,64	24,38	44,89	8,14	38,29	7,01	75,45
55	Essential oils	0,76	93,04	1,27	2,23	11,32	14,80	4,66	2,38
56	Ferilizers	0,17	15,37	52,90	6,59	ND	25,26	0,54	0,91
57	Plastics (primary forms)	1,95	67,94	33,04	55,02	39,02	60,87	28,19	97,24
58	Plastics (non-primary forms)	1,00	66,48	31,17	43,64	70,75	52,99	2,33	0,65
59	Other chemicals	1,24	81,74	61,98	45,70	58,80	48,00	15,40	48,86
61	Leather	1,30	77,29	28,62	98,52	65,33	90,90	98,02	24,51
62	Rubber manufactures	1,00	85,62	98,56	83,13	26,94	94,04	64,74	82,93
63	Wood manufactures	0,45	94,38	46,91	90,60	39,96	66,07	28,70	28,14
64	Paper	1,61	96,01	36,67	37,22	43,51	92,32	99,77	50,46
65	Textile yarn	4,74	68,17	54,42	63,44	95,72	96,55	30,92	27,37
66	Non-metalic minerals	2,79	46,42	57,70	90,29	36,78	65,03	37,57	95,31
67	Iron and steel	3,62	96,53	63,64	58,31	25,94	78,21	65,89	26,30
68	Non-ferrous metals	1,79	61,88	43,25	71,26	23,90	50,32	37,52	12,37
69	Manufactures of metal	2,83	48,00	16,58	64,79	52,08	89,21	27,90	62,04
71	Power generating mach.	1,68	76,60	58,37	60,02	23,80	90,23	33,91	29,70
72	Specialized machinery	4,83	38,78	22,47	27,89	13,25	28,92	28,19	9,51
73	Metal working machinery	1,03	61,71	11,32	81,62	29,67	53,33	17,00	83,38
74	Other machinery	5,82	52,67	10,48	22,33	43,53	44,62	19,87	42,33
75	Office machines	2,80	89,64	80,12	4,98	13,42	82,79	6,55	3,73
76	Telecommunications	1,59	70,66	78,93	11,01	12,39	36,12	20,10	4,61
77	Electrical machinery	6,07	89,69	49,87	26,18	23,33	81,97	45,72	36,39
78	Road vehicles	8,41	98,05	20,18	76,86	63,26	82,32	99,73	20,97
79	Other transport equipment	1,48	82,65	76,15	93,47	52,63	26,43	81,71	66,93
81	Prefabricated buildings	0,70	35,51	17,29	24,73	27,71	38,87	7,40	64,13
82	Furniture	2,04	14,13	16,23	9,95	45,94	71,71	31,90	79,86
83	Travel goods	0,45	39,64	75,42	97,37	88,82	76,85	51,74	63,74
84	Apparel	4,74	48,11	78,66	98,57	52,32	70,52	83,64	37,22
85	Footwear	2,48	33,94	98,70	71,37	77,00	53,18	68,98	58,38

Intra-Industry Trade (Grubel-Lloyd Indices) for the Netherlands, 1994

SITC	Description	Weight	Total	Hungary	Czech R.	Slovakia	Slovenia	Poland	Romania
00	Living animals	0,51	79,47	91,02	65,79	65,91	0,00	20,94	3,63
01	Meat	2,33	37,25	49,96	1,38	3,37	0,00	2,22	51,66
02	Dairy products	2,39	65,11	43,75	90,69	28,86	4,70	55,83	90,70
03	Fish	0,78	75,10	1,77	32,55	21,49	94,20	90,69	0,00
04	Cerals	1,10	76,18	58,55	51,44	80,02	0,87	13,25	0,00
05	Vegetables and fruit	3,98	75,62	98,94	9,65	45,92	7,53	77,15	17,36
06	Sugars, sugar preparations	0,38	83,93	51,01	13,44	ND	91,63	64,17	1,71
07	Coffee, tea, etc.	1,23	94,52	80,03	14,95	0,76	0,52	1,26	0,75
08	Feeding stuff	1,44	94,58	23,31	6,89	0,06	76,73	4,16	1,91
09	Miscellaneous products	0,74	53,35	3,83	31,58	3,57	6,39	0,11	1,87
11	Beverages	0,91	79,81	97,76	19,97	12,47	22,75	20,83	37,32
12	Tobacco	1,19	54,69	85,65	ND	ND	0,83	16,26	0,00
21	Hides, skins	0,18	67,89	39,72	1,02	77,54	0,00	53,05	52,01
22	Oil seeds and fruits	0,88	39,12	21,79	23,38	84,73	29,18	37,42	3,50
23	Crude rubber	0,15	87,51	93,40	45,88	33,37	62,26	33,08	0,90
24	Cork and wood	0,53	36,67	4,87	1,00	0,92	17,52	7,80	0,72
25	Pulp and waste paper	0,28	57,02	91,94	61,56	69,15	0,00	74,16	0,00
26	Textile fibres	0,16	96,75	6,85	48,36	58,10	56,26	26,47	2,19
27	Crude fertilizers	0,41	78,12	23,67	56,02	0,47	0,00	47,78	14,36
28	Metalliferous ores	0,88	95,28	97,64	51,37	57,13	0,00	44,30	30,12
29	Crude animal and vegetable mat.	2,16	30,67	33,06	18,88	3,83	3,17	29,11	88,82
32	Coal, coke	0,43	48,12	ND	ND	ND	0,00	0,01	0,00
33	Petroleum products	6,08	90,31	50,50	21,13	9,12	0,00	75,67	0,03
34	Gas	1,46	29,35	ND	ND	ND	ND	0,00	ND
35	Electric current	0,09	7,95	ND	ND	ND	ND	ND	ND
41	Animal oils and fets	0,09	64,36	85,64	ND	ND	27,97	43,30	0,00
42	Fixed vegetable fats and oils	0,57	91,37	53,30	ND	ND	0,00	0,07	51,24
43	Fats and oils processed	0,25	76,83	77,80	60,79	11,12	10,68	68,14	35,03
51	Organic chemicals	3,56	93,31	86,33	78,78	79,03	28,78	44,43	89,01
52	Inorganic chemicals	0,72	92,14	52,96	79,51	94,25	49,80	30,27	62,32
53	Deying, tanning, etc.	0,81	83,85	9,07	85,26	12,16	21,30	10,04	4,48
54	Medicinal and pharm. prod.	2,08	99,56	5,89	13,82	2,07	69,06	6,32	40,35
55	Essential oils	0,96	95,87	11,62	19,42	9,72	13,57	9,74	0,55
56	Ferilizers	0,41	46,19	ND	63,67	ND	0,00	50,25	0,00
57	Plastics (primary forms)	2,90	62,57	63,96	83,27	44,10	12,19	32,18	39,28
58	Plastics (non-primary forms)	1,05	91,05	93,95	26,26	84,94	33,80	21,07	34,09
59	Other chemicals	1,77	76,00	91,42	5,52	7,27	5,60	32,87	31,51
61	Leather	0,16	98,17	34,01	80,69	16,00	91,65	62,98	8,68
62	Rubber manufactures	0,90	90,58	69,70	36,71	13,88	25,64	64,49	41,68
63	Wood manufactures	0,59	68,28	47,09	19,97	54,69	30,48	4,32	11,84
64	Paper	2,47	94,20	64,07	48,91	32,62	74,29	25,00	16,22
65	Textile yarn	2,13	93,87	14,53	79,91	57,55	86,44	15,47	21,09
66	Non-metalic minerals	1,25	82,61	79,44	40,93	52,38	68,00	52,17	55,61
67	Iron and steel	2,56	98,45	99,62	21,49	14,37	69,48	30,97	18,35
68	Non-ferrous metals	1,49	99,70	32,01	95,93	11,16	96,21	99,79	3,72
69	Manufactures of metal	2,33	99,02	63,78	85,25	66,82	83,43	77,09	64,47
71	Power generating mach.	1,30	87,28	5,07	24,26	53,78	48,98	43,47	33,77
72	Specialized machinery	2,14	86,11	42,77	81,79	44,96	52,61	46,32	6,21
73	Metal working machinery	0,31	87,57	49,06	31,82	55,35	92,09	20,44	49,21
74	Other machinery	2,90	97,14	58,76	79,39	19,85	74,51	37,27	78,83
75	Office machines	7,62	98,93	7,90	21,33	8,42	2,96	15,98	14,34
76	Telecommunications	2,05	87,00	65,16	29,81	47,84	62,79	31,69	74,59
77	Electrical machinery	5,54	93,99	67,97	94,89	85,69	72,86	70,76	48,88
78	Road vehicles	5,31	70,07	8,21	53,86	85,44	80,17	52,61	11,01
79	Other transport equipment	1,50	93,34	67,09	48,82	ND	75,42	4,22	11,27
81	Prefabricated buildings	0,51	99,67	83,85	37,56	77,70	89,03	52,83	21,65
82	Furniture	0,89	70,11	74,96	54,26	13,41	30,46	31,52	4,90
83	Travel goods	0,14	77,31	28,58	50,47	82,33	25,27	36,73	64,38
84	Apparel	2,84	68,58	33,33	60,77	7,75	18,78	22,86	20,91
85	Footwear	0,57	65,19	98,77	94,60	50,26	20,74	86,50	12,71

Intra-Industry Trade (Grubel-Lloyd Indices) for Sweden, 1994

SITC	Description	Weight	Total	Hungary	Czech R.	Slovakia	Slovenia	Poland	Romania
00	Living animals	0,02	80,26	15,55	51,56	ND	ND	8,69	ND
01	Meat	0,22	49,78	14,27	7,11	10,77	47,12	37,09	10,88
02	Dairy products	0,19	79,63	16,02	93,46	73,04	ND	90,63	0,00
03	Fish	0,50	43,07	ND	94,19	84,98	10,28	85,01	22,11
04	Cerals	0,38	89,91	91,50	16,17	7,70	9,38	22,71	0,00
05	Vegetables and fruit	1,02	13,17	2,62	1,74	9,87	52,39	1,80	2,34
06	Sugars, sugar preparations	0,17	52,57	21,96	84,02	15,78	47,95	3,93	32,48
07	Coffee, tea, etc.	0,66	52,17	41,51	63,50	ND	68,50	25,18	0,00
08	Feeding stuff	0,25	15,20	ND	22,46	ND	0,00	1,96	ND
09	Miscellaneous products	0,37	88,48	12,76	0,07	0,75	6,06	0,56	0,00
11	Beverages	0,63	61,33	27,00	32,09	5,63	0,00	30,64	0,38
12	Tobacco	0,14	31,88	ND	ND	ND	0,00	15,14	ND
21	Hides, skins	0,10	54,93	ND	ND	ND	0,00	1,88	ND
22	Oil seeds and fruits	0,04	13,64	0,12	1,30	ND	0,00	27,76	ND
23	Crude rubber	0,08	29,20	ND	2,91	ND	ND	1,29	ND
24	Cork and wood	2,64	30,98	54,69	53,05	14,29	85,63	7,17	2,19
25	Pulp and waste paper	1,34	21,00	ND	92,46	ND	0,00	0,67	0,00
26	Textile fibres	0,09	90,14	65,16	ND	ND	0,00	72,78	0,00
27	Crude fertilizers	0,28	50,49	0,53	12,96	12,66	96,43	88,15	51,44
28	Metalliferous ores	1,08	83,97	0,40	0,29	8,43	ND	66,47	0,00
29	Crude animal and vegetable mat.	0,30	20,25	66,64	9,96	100,00	44,63	94,98	0,00
32	Coal, coke	0,21	12,73	ND	ND	ND	ND	0,00	ND
33	Petroleum products	4,23	57,57	62,96	0,68	12,36	2,83	9,75	0,00
34	Gas	0,14	37,38	ND	ND	ND	ND	33,55	0,00
35	Electric current	0,20	80,86	ND	ND	ND	ND	ND	ND
41	Animal oils and fets	0,02	99,57	ND	ND	ND	ND	42,09	ND
42	Fixed vegetable fats and oils	0,11	56,56	27,95	ND	ND	ND	0,00	0,00
43	Fats and oils processed	0,10	67,47	33,69	25,33	ND	ND	27,55	5,45
51	Organic chemicals	1,49	74,09	79,05	34,91	4,69	0,00	86,68	14,94
52	Inorganic chemicals	0,70	71,06	26,53	65,21	15,92	0,00	56,84	0,00
53	Deying, tanning, etc.	0,61	84,77	1,01	53,82	0,75	25,36	17,44	0,00
54	Medicinal and pharm. prod.	3,09	57,86	2,67	2,64	ND	0,00	0,03	57,14
55	Essential oils	0,66	62,97	51,21	1,13	ND	0,00	63,66	0,00
56	Ferilizers	0,11	85,55	ND	ND	ND	ND	0,76	ND
57	Plastics (primary forms)	1,58	91,51	97,44	89,59	57,08	0,00	12,61	0,00
58	Plastics (non-primary forms)	0,83	85,87	7,12	73,48	ND	76,01	7,69	0,00
59	Other chemicals	1,10	84,93	90,89	77,54	ND	3,40	91,48	0,00
61	Leather	0,12	93,78	92,97	98,58	0,61	96,73	36,74	52,33
62	Rubber manufactures	0,99	81,69	65,95	44,59	8,09	4,55	54,57	47,89
63	Wood manufactures	0,77	68,27	81,79	89,87	73,20	67,29	51,96	53,74
64	Paper	5,90	24,03	1,08	29,15	66,78	94,61	19,49	0,03
65	Textile yarn	1,52	72,58	81,69	40,47	84,75	89,85	66,99	40,45
66	Non-metalic minerals	1,17	86,10	86,44	36,74	39,97	81,11	95,07	85,05
67	Iron and steel	5,20	69,50	16,49	97,10	10,83	24,94	50,79	4,59
68	Non-ferrous metals	1,94	90,83	35,55	27,38	3,07	27,52	65,49	25,91
69	Manufactures of metal	3,08	89,87	65,52	51,82	76,79	67,01	87,66	47,04
71	Power generating mach.	2,97	78,06	28,18	66,25	11,66	16,07	70,53	23,61
72	Specialized machinery	3,90	63,65	13,04	50,65	10,86	91,51	61,28	0,07
73	Metal working machinery	0,93	87,32	42,18	73,06	78,66	16,56	44,57	10,31
74	Other machinery	6,61	78,75	26,71	27,76	22,53	58,27	34,26	10,53
75	Office machines	3,09	47,84	8,70	22,89	1,30	65,82	16,64	0,04
76	Telecommunications	5,65	63,33	4,99	4,23	10,78	6,44	64,92	0,00
77	Electrical machinery	6,24	85,09	76,54	38,02	90,81	25,19	92,44	0,33
78	Road vehicles	10,76	66,57	23,41	45,83	96,50	72,65	70,42	12,93
79	Other transport equipment	1,79	75,77	17,71	16,67	ND	9,25	83,37	17,99
81	Prefabricated buildings	0,55	74,08	93,57	82,43	16,86	27,80	80,95	36,21
82	Furniture	1,49	84,83	72,14	95,45	16,92	3,76	39,50	2,64
83	Travel goods	0,10	24,04	18,67	11,40	0,89	39,47	97,21	0,26
84	Apparel	2,17	26,81	6,18	12,73	2,55	25,50	31,28	4,30
85	Footwear	0,45	21,88	84,00	5,80	23,90	0,67	47,90	2,34

Intra-Industry Trade (Grubel-Lloyd Indices) for Germany, 1994

SITC	Description	Weight	Total	Hungary	Czech R.	Slovakia	Slovenia	Poland	Romania
00	Living animals	0,14	80,48	24,72	26,62	66,43	50,44	40,00	54,14
01	Meat	0,93	55,65	21,09	54,38	86,15	54,72	27,30	21,63
02	Dairy products	0,98	89,81	9,37	52,81	47,22	30,26	47,68	ND
03	Fish	0,36	43,82	86,18	84,33	6,63	43,61	34,40	43,47
04	Cerals	0,62	87,34	99,98	50,55	27,16	5,95	10,96	82,00
05	Vegetables and fruit	1,65	27,86	15,05	67,93	76,37	38,48	30,93	20,14
06	Sugars, sugar preparations	0,25	85,95	73,11	73,88	65,25	44,38	45,80	33,98
07	Coffee, tea, etc.	0,79	74,72	60,97	22,30	0,32	31,86	6,06	6,82
08	Feeding stuff	0,38	91,29	13,03	72,85	61,83	26,84	16,70	0,48
09	Miscellaneous products	0,38	90,40	32,90	8,48	0,88	2,59	0,72	16,91
11	Beverages	0,59	80,65	70,21	51,65	21,89	70,82	75,78	57,50
12	Tobacco	0,34	93,31	54,09	2,07	0,68	4,61	19,79	ND
21	Hides, skins	0,07	81,54	35,97	52,86	47,36	86,43	37,57	66,98
22	Oil seeds and fruits	0,21	24,77	3,94	29,01	60,47	41,80	76,14	1,53
23	Crude rubber	0,17	84,44	13,34	94,36	62,42	1,69	99,15	3,31
24	Cork and wood	0,41	56,50	68,27	12,07	8,86	74,08	11,12	15,43
25	Pulp and waste paper	0,35	27,23	26,28	10,09	70,75	71,71	42,99	ND
26	Textile fibres	0,41	96,17	48,29	55,25	54,42	10,30	37,85	82,22
27	Crude fertilizers	0,30	84,27	81,27	54,69	28,61	15,40	23,44	19,29
28	Metalliferous ores	0,81	67,58	6,44	46,21	29,23	63,55	18,31	17,62
29	Crude animal and vegetable mat.	0,49	46,49	45,18	59,63	30,97	50,68	87,47	61,92
32	Coal, coke	0,22	74,27	85,99	0,16	ND	0,00	0,14	0,00
33	Petroleum products	2,89	29,04	47,32	96,42	99,66	0,09	85,21	67,03
34	Gas	0,76	13,58	5,26	86,53	ND	0,00	ND	ND
35	Electric current	0,16	76,20	ND	86,90	65,75	ND	ND	ND
41	Animal oils and fets	0,03	88,01	44,83	6,20	67,96	18,79	5,25	ND
42	Fixed vegetable fats and oils	0,18	96,04	39,89	1,39	ND	36,41	3,21	ND
43	Fats and oils processed	0,09	92,14	58,17	72,20	95,25	77,53	61,77	40,53
51	Organic chemicals	2,54	81,18	84,10	79,44	42,54	48,68	66,29	77,65
52	Inorganic chemicals	0,74	85,13	94,86	75,62	93,06	73,20	75,53	30,43
53	Deying, tanning, etc.	0,97	47,11	1,04	24,88	1,16	9,12	5,80	1,42
54	Medicinal and pharm. prod.	1,81	75,94	21,50	29,04	47,07	14,13	5,54	52,70
55	Essential oils	0,81	80,50	3,19	12,60	21,61	42,33	13,10	4,42
56	Ferilizers	0,23	87,01	45,45	34,81	0,46	0,00	52,67	4,77
57	Plastics (primary forms)	2,11	79,52	97,34	80,10	63,29	28,94	46,20	41,34
58	Plastics (non-primary forms)	1,02	72,44	53,96	23,02	79,69	32,74	6,99	2,09
59	Other chemicals	1,50	62,80	8,47	26,53	73,09	30,50	25,28	19,67
61	Leather	0,23	98,51	31,72	31,16	75,56	76,53	84,75	21,67
62	Rubber manufactures	0,95	98,00	85,17	97,19	75,28	40,42	82,78	47,73
63	Wood manufactures	0,63	60,68	55,51	36,98	48,81	17,27	17,59	59,26
64	Paper	2,15	88,31	44,49	69,76	37,52	69,13	47,14	36,92
65	Textile yarn	3,03	92,88	35,67	77,67	61,80	33,58	25,39	8,46
66	Non-metalic minerals	1,70	96,84	97,22	53,39	32,03	63,98	49,15	54,58
67	Iron and steel	3,17	89,37	80,80	55,70	51,69	86,45	58,22	47,84
68	Non-ferrous metals	2,03	90,73	76,93	76,58	65,72	89,19	28,15	8,26
69	Manufactures of metal	2,84	83,12	90,66	90,31	72,16	75,52	79,04	83,43
71	Power generating mach.	2,62	79,20	68,20	92,57	68,35	57,92	94,71	33,42
72	Specialized machinery	4,14	44,81	59,74	59,26	41,37	53,75	29,45	6,12
73	Metal working machinery	0,96	50,09	26,57	67,95	64,52	74,36	39,56	64,92
74	Other machinery	5,33	58,87	55,19	53,06	49,09	97,48	32,48	41,05
75	Office machines	3,60	70,80	16,03	47,45	30,42	11,75	6,24	1,82
76	Telecommunications	2,60	90,45	74,85	33,00	39,01	99,52	50,16	2,19
77	Electrical machinery	7,50	86,91	93,93	76,99	71,79	68,20	77,13	69,60
78	Road vehicles	13,29	67,13	45,71	63,56	70,08	48,25	65,53	26,61
79	Other transport equipment	2,91	91,65	51,63	47,14	28,61	34,03	61,42	62,07
81	Prefabricated buildings	0,58	82,93	71,30	61,20	46,95	29,55	97,30	51,17
82	Furniture	1,21	82,45	63,02	52,81	31,85	11,18	12,18	4,80
83	Travel goods	0,18	49,54	60,23	56,99	59,34	81,41	72,40	30,47
84	Apparel	3,77	45,40	40,59	55,89	14,41	19,45	13,97	11,64
85	Footwear	0,80	42,80	52,27	47,34	42,36	27,31	40,68	26,50

MIIT-Indices for Austria, 1989 to 1994

SITC	Description	Weights	Total	Hungary	former CSR	Poland	Romania
00	Living animals	0,10	83,03	74,51	0,00	0,00	4,95
01	Meat	0,30	0,00	10,71	0,00	0,00	0,00
02	Dairy products	0,36	0,00	0,00	0,00	10,90	22,76
03	Fish	0,19	7,13	0,00	0,00	15,03	0,00
04	Cerals	0,51	0,00	52,18	63,18	0,35	41,71
05	Vegetables and fruit	1,19	52,02	65,34	0,00	12,22	94,44
06	Sugars, sugar preparations	0,17	86,57	37,76	0,00	0,00	0,00
07	Coffee, tea, etc.	0,61	79,78	73,44	0,00	0,00	7,07
08	Feeding stuff	0,26	29,73	92,08	0,00	65,58	0,00
09	Miscellaneous products	0,28	57,82	11,08	35,52	0,11	0,00
11	Beverages	0,41	41,63	0,00	37,63	4,48	0,00
12	Tobacco	0,11	99,74	28,80	80,92	94,08	0,00
21	Hides, skins	0,09	0,00	11,69	96,21	9,18	0,00
22	Oil seeds and fruits	0,06	27,35	94,29	94,86	13,75	0,00
23	Crude rubber	0,11	87,90	55,12	20,30	0,00	0,00
24	Cork and wood	1,70	79,12	0,00	0,00	0,00	77,90
25	Pulp and waste paper	0,48	63,58	0,41	0,00	0,00	0,00
26	Textile fibres	0,46	0,00	42,16	0,00	0,66	32,43
27	Crude fertilizers	0,41	57,37	0,00	0,00	0,00	12,98
28	Metalliferous ores	0,58	0,00	0,00	1,03	34,11	0,00
29	Crude animal and vegetable mat.	0,36	15,85	59,34	0,00	0,00	41,53
32	Coal, coke	0,28	0,74	0,00	0,01	0,06	ND
33	Petroleum products	1,77	91,41	85,71	0,00	7,91	0,00
34	Gas	0,47	2,73	26,48	0,00	0,00	0,00
35	Electric current	0,50	67,28	ND	ND	0,00	ND
41	Animal oils and fets	0,01	0,00	35,99	75,63	0,00	10,32
42	Fixed vegetable fats and oils	0,07	0,00	0,00	0,00	0,00	40,69
43	Fats and oils processed	0,05	68,96	91,81	0,00	0,65	51,64
51	Organic chemicals	1,10	0,00	98,43	41,86	38,45	0,00
52	Inorganic chemicals	0,59	99,80	0,00	0,00	51,35	0,00
53	Deying, tanning, etc.	0,71	47,28	0,00	30,71	0,69	0,05
54	Medicinal and pharm. prod.	2,39	91,78	42,74	24,03	5,02	0,00
55	Essential oils	0,77	49,71	8,19	16,65	15,00	20,56
56	Ferilizers	0,18	91,90	0,00	94,83	0,00	0,00
57	Plastics (primary forms)	1,77	4,41	34,09	58,34	0,00	0,00
58	Plastics (non-primary forms)	1,30	99,72	54,94	0,84	0,00	0,00
59	Other chemicals	1,01	74,11	6,77	29,10	0,00	34,93
61	Leather	0,34	64,33	27,47	0,00	63,14	74,33
62	Rubber manufactures	1,18	59,17	30,58	54,37	60,87	0,00
63	Wood manufactures	1,31	93,96	78,21	73,64	4,59	37,02
64	Paper	3,77	82,93	10,01	62,96	4,95	0,00
65	Textile yarn	3,64	88,20	22,24	78,17	0,00	75,85
66	Non-metalic minerals	2,46	82,37	92,21	47,06	0,00	0,00
67	Iron and steel	3,80	0,00	0,00	74,39	0,00	97,86
68	Non-ferrous metals	2,42	15,28	59,88	39,94	7,72	9,18
69	Manufactures of metal	4,61	99,45	62,50	93,44	30,33	29,57
71	Power generating mach.	4,07	76,28	26,86	75,28	0,00	87,30
72	Specialized machinery	4,59	59,70	87,19	52,91	58,13	6,83
73	Metal working machinery	0,93	88,12	0,00	0,00	0,00	0,00
74	Other machinery	6,03	84,32	45,03	51,94	75,77	27,93
75	Office machines	2,47	37,57	24,07	15,36	6,61	0,67
76	Telecommunications	2,99	98,88	68,64	3,86	49,57	0,05
77	Electrical machinery	7,33	96,09	47,86	56,35	75,58	4,06
78	Road vehicles	9,16	85,08	8,13	93,13	0,00	83,91
79	Other transport equipment	0,87	37,85	3,12	49,78	0,00	76,20
81	Prefabricated buildings	0,92	86,59	87,84	85,37	48,02	40,55
82	Furniture	1,84	75,21	67,51	90,72	0,00	9,36
83	Travel goods	0,16	0,00	67,70	58,18	21,91	30,55
84	Apparel	3,72	26,66	69,96	53,85	0,00	15,55
85	Footwear	1,12	51,92	60,13	63,63	0,00	84,00

MIIT-Indices for Italy, 1989 to 1994

SITC	Description	Weights	Total	Hungary	former CSR	Poland	Romania
00	Living animals	0,45	0,00	0,38	0,00	0,00	0,78
01	Meat	1,26	0,00	10,99	0,63	0,00	0,00
02	Dairy products	1,06	72,48	0,00	0,00	0,00	0,00
03	Fish	0,71	50,03	34,06	18,79	0,00	64,83
04	Cerals	1,05	0,00	26,27	0,00	5,68	0,00
05	Vegetables and fruit	1,90	78,41	0,00	0,00	0,00	39,42
06	Sugars, sugar preparations	0,16	48,56	54,74	0,00	39,28	0,00
07	Coffee, tea, etc.	0,49	73,04	30,04	0,00	2,18	0,00
08	Feeding stuff	0,38	64,42	50,78	0,00	0,00	2,79
09	Miscellaneous products	0,29	94,79	0,00	83,93	1,10	0,88
11	Beverages	0,86	19,76	0,00	12,10	2,25	0,29
12	Tobacco	0,36	51,11	2,92	ND	0,00	0,00
21	Hides, skins	0,44	0,00	0,00	49,71	0,00	0,00
22	Oil seeds and fruits	0,13	1,97	5,11	0,95	27,86	11,62
23	Crude rubber	0,16	98,14	63,74	11,41	8,29	0,00
24	Cork and wood	0,78	46,73	1,65	4,06	2,55	0,20
25	Pulp and waste paper	0,43	19,98	0,00	3,58	0,00	0,00
26	Textile fibres	0,88	64,28	69,77	30,84	0,00	60,79
27	Crude fertilizers	0,41	88,86	0,00	67,81	0,00	0,00
28	Metalliferous ores	0,74	42,82	3,49	0,00	0,00	76,24
29	Crude animal and vegetable mat.	0,39	63,24	45,24	0,00	0,00	45,76
32	Coal, coke	0,26	4,28	8,79	ND	0,00	0,00
33	Petroleum products	4,42	0,00	63,57	0,00	0,00	0,00
34	Gas	0,11	39,06	1,09	ND	ND	0,00
35	Electric current	0,00	ND	ND	ND	ND	ND
41	Animal oils and fets	0,03	26,87	1,78	89,94	0,00	0,00
42	Fixed vegetable fats and oils	0,51	50,82	27,73	6,78	0,00	0,00
43	Fats and oils processed	0,05	19,33	ND	ND	0,00	13,94
51	Organic chemicals	2,33	76,59	78,21	0,00	0,00	0,00
52	Inorganic chemicals	0,42	0,00	0,00	0,00	0,00	20,17
53	Deying, tanning, etc.	0,70	92,59	0,00	80,97	40,08	0,00
54	Medicinal and pharm. prod.	1,73	84,44	19,23	35,04	8,44	64,29
55	Essential oils	0,76	86,13	1,29	4,65	5,26	1,85
56	Ferilizers	0,17	0,00	0,00	0,00	0,54	1,18
57	Plastics (primary forms)	1,95	43,31	3,42	35,24	32,12	0,00
58	Plastics (non-primary forms)	1,00	38,18	42,46	43,97	2,45	0,00
59	Other chemicals	1,24	95,10	62,14	61,44	0,00	17,58
61	Leather	1,30	50,56	27,14	79,04	90,55	24,40
62	Rubber manufactures	1,00	87,45	96,45	3,93	78,01	99,43
63	Wood manufactures	0,45	99,56	8,91	93,84	32,43	0,00
64	Paper	1,61	77,00	39,45	16,16	93,47	22,55
65	Textile yarn	4,74	22,96	35,93	59,53	24,89	15,10
66	Non-metalic minerals	2,79	26,10	0,00	91,38	38,32	93,20
67	Iron and steel	3,62	0,00	0,00	0,00	82,22	25,80
68	Non-ferrous metals	1,79	0,00	30,22	98,08	43,48	15,40
69	Manufactures of metal	2,83	10,83	0,00	75,38	25,11	35,41
71	Power generating mach.	1,68	11,79	0,00	49,09	29,17	58,25
72	Specialized machinery	4,83	0,00	21,24	38,18	55,49	3,44
73	Metal working machinery	1,03	0,00	0,00	78,88	0,00	68,27
74	Other machinery	5,82	26,96	0,00	30,29	12,92	39,88
75	Office machines	2,80	77,25	73,80	6,09	8,29	2,35
76	Telecommunications	1,59	59,24	61,56	9,60	15,41	1,66
77	Electrical machinery	6,07	70,00	47,74	13,62	45,19	0,00
78	Road vehicles	8,41	28,28	2,65	91,92	87,08	0,00
79	Other transport equipment	1,48	13,28	79,54	0,00	83,68	67,02
81	Prefabricated buildings	0,70	30,56	1,02	23,47	0,04	54,51
82	Furniture	2,04	10,18	11,08	17,54	27,64	0,00
83	Travel goods	0,45	61,19	76,04	92,20	45,19	56,28
84	Apparel	4,74	77,22	78,31	76,55	95,84	48,74
85	Footwear	2,48	74,57	93,79	99,85	79,01	57,88

MIIT-Indices for the Netherlands, 1989 to 1994

SITC	Description	Weights	Total	Hungary	former CSR	Poland	Romania
00	Living animals	0,51	33,30	0,00	63,31	0,00	1,96
01	Meat	2,33	80,23	43,85	0,00	1,66	2,33
02	Dairy products	2,39	0,00	0,00	73,51	47,88	0,00
03	Fish	0,78	88,68	0,00	30,45	72,79	0,00
04	Cerals	1,10	94,36	0,00	65,50	0,00	0,00
05	Vegetables and fruit	3,98	73,69	95,33	0,00	14,46	2,61
06	Sugars, sugar preparations	0,38	84,68	91,74	0,00	0,00	0,00
07	Coffee, tea, etc.	1,23	78,51	86,38	0,00	0,00	0,49
08	Feeding stuff	1,44	78,13	23,25	0,35	0,00	1,95
09	Miscellaneous products	0,74	58,81	4,01	11,22	0,00	1,89
11	Beverages	0,91	60,08	87,70	8,63	76,59	14,91
12	Tobacco	1,19	42,27	85,65	41,37	74,48	0,00
21	Hides, skins	0,18	35,39	0,00	0,00	48,80	0,00
22	Oil seeds and fruits	0,88	71,17	16,95	0,00	0,00	3,50
23	Crude rubber	0,15	0,00	41,84	0,00	0,00	12,85
24	Cork and wood	0,53	29,19	0,00	0,96	11,17	0,00
25	Pulp and waste paper	0,28	0,00	91,94	73,31	74,16	0,00
26	Textile fibres	0,16	19,61	2,88	0,00	0,00	0,00
27	Crude fertilizers	0,41	57,08	0,00	82,58	0,00	0,00
28	Metalliferous ores	0,88	66,36	97,64	0,00	0,00	0,00
29	Crude animal and vegetable mat.	2,16	30,89	32,21	0,00	0,00	78,72
32	Coal, coke	0,43	53,13	ND	ND	0,01	0,00
33	Petroleum products	6,08	0,00	0,00	0,00	46,21	95,20
34	Gas	1,46	29,62	ND	ND	0,00	ND
35	Electric current	0,09	0,00	ND	ND	ND	ND
41	Animal oils and fets	0,09	0,00	47,97	1,42	0,00	0,00
42	Fixed vegetable fats and oils	0,57	97,41	53,30	21,10	0,07	50,54
43	Fats and oils processed	0,25	98,26	77,80	91,67	90,81	35,03
51	Organic chemicals	3,56	48,11	0,00	35,70	7,44	66,93
52	Inorganic chemicals	0,72	0,00	74,33	82,13	0,00	53,22
53	Deying, tanning, etc.	0,81	71,89	83,17	47,61	0,00	0,00
54	Medicinal and pharm. prod.	2,08	98,95	6,36	13,53	5,81	32,02
55	Essential oils	0,96	91,59	11,09	7,68	9,88	0,00
56	Ferilizers	0,41	6,64	0,00	63,67	50,50	0,00
57	Plastics (primary forms)	2,90	98,30	89,20	0,00	36,45	57,35
58	Plastics (non-primary forms)	1,05	52,65	21,77	47,63	5,55	66,40
59	Other chemicals	1,77	78,59	78,23	0,00	0,00	0,00
61	Leather	0,16	0,00	34,96	59,68	66,37	8,77
62	Rubber manufactures	0,90	99,31	95,14	0,00	0,00	0,00
63	Wood manufactures	0,59	99,64	68,98	43,95	2,66	0,00
64	Paper	2,47	86,25	0,00	41,34	0,00	0,00
65	Textile yarn	2,13	66,63	0,00	55,61	11,46	0,00
66	Non-metalic minerals	1,25	83,58	0,00	35,11	54,90	75,48
67	Iron and steel	2,56	35,64	0,00	0,00	0,00	16,82
68	Non-ferrous metals	1,49	0,00	28,89	72,98	46,66	23,32
69	Manufactures of metal	2,33	51,14	23,14	82,84	71,02	78,31
71	Power generating mach.	1,30	0,00	0,00	0,00	0,00	37,50
72	Specialized machinery	2,14	0,00	12,45	0,00	78,77	0,00
73	Metal working machinery	0,31	41,66	49,50	34,62	0,00	0,00
74	Other machinery	2,90	65,05	99,87	98,31	29,97	0,00
75	Office machines	7,62	91,40	16,13	21,16	18,01	8,85
76	Telecommunications	2,05	64,50	49,14	7,64	16,13	69,75
77	Electrical machinery	5,54	78,20	70,46	95,72	67,35	13,70
78	Road vehicles	5,31	60,72	0,00	63,31	44,98	9,21
79	Other transport equipment	1,50	13,19	49,18	48,82	3,87	12,38
81	Prefabricated buildings	0,51	79,81	92,78	53,03	48,88	0,00
82	Furniture	0,89	74,27	0,00	41,62	33,96	0,00
83	Travel goods	0,14	92,80	0,00	51,17	0,00	65,23
84	Apparel	2,84	88,44	39,16	42,76	21,92	0,00
85	Footwear	0,57	98,06	61,16	74,53	94,91	15,20

MIIT-Indices for Sweden, 1989 to 1994

SITC	Description	Weights	Total	Hungary	former CSR	Poland	Romania
00	Living animals	0,02	0,00	92,66	32,86	18,27	ND
01	Meat	0,22	0,00	15,50	0,00	96,53	0,00
02	Dairy products	0,19	19,86	9,14	0,00	90,77	0,00
03	Fish	0,50	9,52	ND	83,76	13,01	22,11
04	Cerals	0,38	0,00	91,50	17,67	0,00	0,00
05	Vegetables and fruit	1,02	10,95	2,67	1,28	0,00	13,71
06	Sugars, sugar preparations	0,17	0,00	21,96	0,00	0,14	48,11
07	Coffee, tea, etc.	0,66	68,74	0,00	0,00	0,00	0,00
08	Feeding stuff	0,25	3,74	55,33	22,46	0,09	ND
09	Miscellaneous products	0,37	93,99	9,38	0,00	0,56	0,00
11	Beverages	0,63	84,97	44,05	70,89	0,00	0,00
12	Tobacco	0,14	90,95	ND	76,54	7,02	0,00
21	Hides, skins	0,10	78,22	ND	ND	1,88	ND
22	Oil seeds and fruits	0,04	0,00	0,12	0,00	27,76	ND
23	Crude rubber	0,08	0,00	ND	2,82	1,29	0,00
24	Cork and wood	2,64	0,00	61,96	59,92	0,00	0,00
25	Pulp and waste paper	1,34	0,00	54,79	0,00	2,70	0,00
26	Textile fibres	0,09	0,00	65,16	31,63	41,24	0,00
27	Crude fertilizers	0,28	0,00	0,00	14,82	39,21	51,44
28	Metalliferous ores	1,08	29,14	0,00	1,45	0,00	0,00
29	Crude animal and vegetable mat.	0,30	0,00	63,95	32,22	0,00	28,57
32	Coal, coke	0,21	0,00	ND	ND	0,00	ND
33	Petroleum products	4,23	82,91	0,00	0,00	0,00	0,00
34	Gas	0,14	0,00	ND	ND	33,55	0,00
35	Electric current	0,20	0,00	ND	ND	ND	ND
41	Animal oils and fets	0,02	39,54	ND	ND	42,09	ND
42	Fixed vegetable fats and oils	0,11	0,00	27,95	3,08	0,00	0,00
43	Fats and oils processed	0,10	68,42	0,00	0,00	0,00	5,08
51	Organic chemicals	1,49	52,49	65,14	0,00	0,00	0,00
52	Inorganic chemicals	0,70	75,39	0,00	2,51	0,00	0,00
53	Deying, tanning, etc.	0,61	71,75	70,20	58,80	0,00	0,00
54	Medicinal and pharm. prod.	3,09	40,59	0,73	0,00	0,00	0,00
55	Essential oils	0,66	51,42	68,33	0,00	98,48	0,00
56	Ferilizers	0,11	60,08	ND	ND	3,25	0,11
57	Plastics (primary forms)	1,58	83,45	0,00	90,76	0,00	0,00
58	Plastics (non-primary forms)	0,83	20,26	0,00	96,94	0,00	0,00
59	Other chemicals	1,10	98,03	59,43	0,00	21,64	0,00
61	Leather	0,12	99,42	92,97	0,00	35,36	0,00
62	Rubber manufactures	0,99	60,69	32,03	43,77	52,82	0,00
63	Wood manufactures	0,77	0,00	0,00	53,69	62,77	0,00
64	Paper	5,90	68,75	0,00	64,24	15,56	0,00
65	Textile yarn	1,52	0,00	0,00	32,39	47,80	0,90
66	Non-metalic minerals	1,17	0,00	0,00	6,91	42,41	51,32
67	Iron and steel	5,20	63,70	0,00	65,88	11,08	61,99
68	Non-ferrous metals	1,94	36,89	28,22	2,82	83,92	0,00
69	Manufactures of metal	3,08	49,50	79,37	87,81	91,88	0,00
71	Power generating mach.	2,97	35,44	7,96	19,44	3,06	0,00
72	Specialized machinery	3,90	0,00	61,99	0,00	99,56	74,71
73	Metal working machinery	0,93	0,00	75,55	98,89	12,48	0,00
74	Other machinery	6,61	43,36	33,12	21,48	51,47	8,83
75	Office machines	3,09	0,00	8,28	20,84	13,83	0,00
76	Telecommunications	5,65	40,33	5,09	7,14	59,06	0,00
77	Electrical machinery	6,24	93,90	79,96	7,47	86,78	0,00
78	Road vehicles	10,76	0,00	3,02	26,71	85,77	6,11
79	Other transport equipment	1,79	0,00	0,73	1,55	47,24	0,00
81	Prefabricated buildings	0,55	0,00	0,00	88,30	87,16	13,44
82	Furniture	1,49	57,35	0,00	58,67	87,83	0,00
83	Travel goods	0,10	55,38	0,00	28,05	0,00	0,00
84	Apparel	2,17	0,00	7,30	10,49	26,85	7,40
85	Footwear	0,45	19,17	0,00	10,05	24,57	3,25