Method Used in Constructing the Indices on KA and CA Restrictions for the 26 Transition Countries

The main source of data used in constructing the indices came from the qualitative descriptions found in *Exchange Arrangements and Exchange Restrictions*, Annual Reports (Source IMF). Since the transition countries joined the IMF at different years, the period covered is not the same for all the countries. East European countries such as Poland begin coverage in the 1991 Report, while the majority become available in the 1993 Report. It is also very important to note that (overall) the Reports describe the state of the economies for the previous calender year. Therefore the latest 1997 Report only gives us information about the year 1996. I was also aided by the *Transition Reports*, published by the European Bank for Reconstruction and Development.

The subcategories described in the *Exchange Arrangements and Exchange Restrictions* Annual Reports are Exchange Arrangement, Administration of Control, Prescription of Currency, Nonresident and Resident Accounts, Current Account (imports, exports, and invisibles), Capital Account, and Gold.

Most relevant in constructing the indices was the information contained in the Current Account and Capital Account Restrictions. The information on Capital was however very limited in most cases to only a short paragraph. The 1997 Annual Report differed in format from the previous editions, and its main area of extensive addition was the Capital Section that included more detailed information about Portfolio Investment, Credits, and Specific Provisions to Commercial Banks.

I began by extracting the main topics that most of the countries provided some sort of answer to. The Capital subsection was divided into 3 main issues: Credits, Portfolio Investment, and Direct Investment. Credits concern commercial and financial credits extended by nonresidents to residents as well as by residents to nonresidents. If there were restrictions on amounts or types or direction etc., that information was provided.

PORTFOLIO INVESTMENT

The next issue was Portfolio Investment. Unfortunately, this received hardly any mention in the Reports prior to 1997. Therefore the Index on Portfolio Investment is really a cross-section for all the 26 countries in the year 1996. Here the focus was on capital market securities and money market instruments. (Information is also provided on derivatives etc. but it is limited to few countries.) The index concerns both inward (by foreigners) and outward (by residents) portfolio investment. Unfortunately there is little variation in the numerical outcome from constructing this index because of the little information provided. The index concerns restrictions on portfolio investment in each of the two directions. Please refer to the table for information. A value of 0 for the index means that there are no restrictions and no governmental approval is required to engage in such investment. The upper value of the index is 2 which means that portfolio investment is prohibited in both directions. To arrive at this index, four divisions were used: 0 (no approval required), 0.5 (only registration required), 1 (approval is required), and 2 (prohibited). The overall index gave more weight on inward investment by combining the two categories as follows: 0.25*outward + 0.75*inward.

DIRECT INVESTMENT

Direct Investment can also be divided into outward and inward (FDI). Outward direct investment mainly answers the question of whether approval is required or if there are any other restrictions imposed, such as registration.

Inward direct investment is more detailed. In addition to the 'approval' category, there are three other categories: preferential treatment, transfer of profits, and liquidation of capital. If no approval is required for FDI and there are no restrictions then this category was assigned a 0. If only registration is required, 0.5 was assigned. If FDI was not allowed in certain sectors (for example financial), or if it was subject to limits (such as approval required if FDI > $1million) then this category was assigned a 1. Finally, if prior approval was required for all FDI, it was assigned a 2.

The second category concerns preferential treatment of FDI. This is in fact a subsidy given to foreign investors. Therefore we assigned a negative value to the indicator if preferential treatment was given to the activities of foreigners. It was assigned a smaller weight than the other indicators: -0.2 in the presence of preferential treatment and 0 if no preferential treatment was discussed. The reasoning behind the smaller weight is because it is not as important as approval or transfer of profits might be in influencing the activities of foreigners. Furthermore, since the indicator was assigned an equal value in the presence of any form of import/export/profit tax incentive, then it would result in greater bias in the overall indicator to give two countries a large and equal number if they differed considerably in the treatment of, say, profit tax exemptions.

The third category is the important issue of the transfer of profits. The main distinction is whether profits can be freely repatriated (0) or whether there are restrictions in place that do not allow for the free transfer of profits (2). The large weight given to restrictions reflects our belief that this is a very relevant issue to foreign investors. Restrictions on profit transfer usually refer to extra taxes (more than the usual profit tax) that are applied when profits are transferred abroad. Restrictions can also refer to a requirement that prior approval is obtained before profits can be transferred.

Finally the fourth category concerns the liquidation of foreign invested capital and its transfer abroad. If there are no restrictions on the liquidation of FDI, then the indicator was assigned a value of 0. If there are controls on FDI or taxes, then it was given a value of 1.

The overall index of restriction on direct investment was obtained by summing the five categories discussed: outward direct investment, FDI approval, FDI preferential treatment, FDI transfer of profits, and FDI liquidation. Because preferential treatment is treated as a subsidy and thus assigned a negative value, the resulting overall index can range in value from -0.2 to 6, where 6 reflects the most restricted environment for direct investment.

WEAKNESSES

1. The main weakness in constructing the indices is the lack of information provided in some cases, and the ambiguity of it in others. This led to substantial interpretation as well as supplementing the information provided in the Exchange Reports by the EBRD Transition Reports. For example, information is provided in the EBRD about transfer of profit as well as some discussion of governmental approval.[1]

[1]Where ambiguity in the qualitative data is present (or such data is missing), such data was inputted in a red font, and explanations were provided in most cases as to why a particular value was assigned. (Refer to the detailed file: FDIindex.xls).

CURRENT ACCOUNT RESTRICTIONS INDICES:

This accounts for the vast part of the information provided in the Exchange Arrangements and Restrictions Annual Reports. The main categories are imports, exports, and invisibles:

1. Imports

1.1. Licenses/Quotas

The values assigned below were further given a weight of 0.5 in the overall index.

1.1.1. No

This category was assigned a 0.

This refers to the case when there are generally no licensing or quota requirements in place. However, it does allow for such restrictions for health/security reasons as well as for 'strategic' goods.

1.1.2. Limited

This category was assigned a 1.

This refers to the case when licenses/quotas are applied, however to a limited number of goods. The distinction between limited and extensive was based on an arbitrary value of 10 product groups. Thus if there are licenses/quotas imposed on less than 10 goods, the country was classified as limited.[2]

1.1.3. Extensive

This category was assigned a 2.

Refer to discussion 1.1.2. Also included in this category was countries whose import (and usually export) trade was dominated by a state trade agreements.

1.2. Tariffs

This is the most problematic category because of the lack of consistency in the Annual Reports in reporting a comparable figure across the different countries. Ideally, we would have liked to have the weighted average tariff rate reported for each country. In practice, we encountered a wide range of data actually provided. Some countries did list the weighted average. Others listed the range of the tariff rates (which can exceed 100% because of high rates on certain goods like agricultural products), and still others did not provide rates for some years. Therefore our solution to the tariff problem was to take the average rate provided by the range given. So for example, if a country provided that tariff rates range between 0 and 50%, then we decided the rate was 25%. Also included to the tariff rate was additional surcharges or VAT if applicable. So for example, if some countries had an average tariff rate of 25% but also imposed a surcharge of 10% on all imports, then the rate calculated would be 35%. Finally, such rates as customs fees which tended to be less than 2% were not included. In order to include in the overall index on current account restrictions, the tariff rate was presented in the format 0.25 if the rate was 25% and then summed to the license/quota number to get the index on import restrictions. Most of the tariff rates were less than 50%, so problems with the tariff rate calculations should not bias our overall index in a very significant way.

[2]In all of the cases concerned, no problem was encountered in distinguishing between limited and extensive licensing/quotas. In general, countries had either licensing/quotas on less than 10 product groups or imposed such restrictions on most of their imports.

2. Exports

The overall export index was formed by summing the following four components:

2.1. Licenses/Quotas

Refer to 1.1. for explanation of the terms below. The licenses/quota index for exports was given a weight of 0.25 in the overall index.

2.1.1. No

Assigned 0.

2.1.2. Limited

Assigned 1.

2.1.3. Extensive

Assigned 2.

2.2. Tariffs

Refer to 1.1. for explanation of the terms below. The tariffs index for exports was given a weight of 0.25 in the overall index.

2.2.1. No

Assigned 0.

2.2.2. Limited

Assigned 1.

2.2.3. Extensive

Assigned 2.

2.3. Repatriation

This index concerns whether the government authorities require exporters to repatriate foreign exchange earnings (usually in convertible currencies) to the home country. This index was given a weight of 0.25 in the overall index.

2.3.1. No

Assigned 0. This means that repatriation of foreign exchange earnings is not required.

2.3.2. Yes

Assigned 1.

2.4. Surrender

This index is an important index since it deals with whether the government authorities require exporters to convert their repatriated foreign exchange earnings (see 2.3) into domestic currency. If they require that all such earnings be converted, that is considered Full 100%. This category was given a weight of 0.25 in the overall index.

2.4.1. No

Assigned 0.

2.4.2. < 50%

Assigned 1.

2.4.3. > 50%

Assigned 2.

2.4.4. Full 100%

Assigned 3.

3. Invisibles

This category refers to transactions in invisibles such as tourism, study, medical costs, repatriation of wage earnings etc. It is divided into two categories: restrictions on payments for invisibles and restrictions on proceeds from invisibles. It was assigned a weight of 0.5 in the overall index computation.

3.1. Payments

3.1.1. No restrictions

This refers to the case when no approval or limits are imposed on payments for invisibles. Assigned a 0.

3.1.2. Some restrictions

This refers to the case when approval or limits are imposed on certain invisible payments such as travel etc. Assigned a 1.

3.1.3. Very restricted

This refers to the case when approval and limits are required for all invisible payments. Assigned a 2.

3.2. Proceeds

Refer to discussion on export repatriation and surrender requirements.

3.2.1. Repatriation

3.2.1.1. No

Assigned a 0.

3.2.1.2. Yes

Assigned a 1.

3.2.2. Surrender

3.2.2.1. No

Assigned a 0.

3.2.2.2. Yes

Assigned a 1.

We constructed from the above information three indicies: an import index, an export index, and an overall current account index that included import, export and invisibles restrictions that summed the three components.

Also provided in the appendix tables to the Annual Reports is information on whether each country had accepted Article 8 or not (full current account convertibility). Also provided is information on current account payment restrictions (also a yes or no category). This information was not included in forming our index, however it can be incorporated if so desired.

It is also worth mentioning that there was a high degree of correlation between the import and the export index. The correlation was 0.66.