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# A Retrospective EVI: Methodological Aspects

by

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The aim of the note is, following the previous work of the Committee for Development Policy (CDP) (United Nations 1999, 2000, 2002, 2003, 2005, 2006) as well as my related papers and my forthcoming book on the Least Developped Countries (LDCs) (Guillaumont, 2004a, 2004b, 2006, 2007a, 2007b), to set up the methodological basis for a retrospective bank of data the Economic Vulnerability Index (EVI) designed by the CDP to be used for the identification of the LDCs. It gives also the opportunity to explain and develop some on going refinements in the calculation of EVI.

Such a data bank seems useful to enhance the acceptance, credibility and use of EVI among policy oriented international bodies (institutions, aid agencies, etc.),

as well as academic circles. A significant demand for this kind of data is already noticeable. The work includes two parts: a methodological note and a limited use of the methodology to specific periods and options.

The first part presents a methodological note for the measurement of a retrospective EVI. It considers how to treat in the same retrospective index different set of indicators, some of them related to only one year (or an average of two or three years), while some others are built from time series. It also examines how to make index component ordinarily calculated on one point of time meaningful and comparable overtime.

The second part includes a first tentative estimate of a retrospective EVI covering the three last decades and corresponding to the last definition agreed upon by the CDP in 2005.

EVI is calculated every ten years, then every five years over the past three decades, which means the index will be generated at least on six or seven points of time during the period of analysis (1970-2005). Data are made available for each country among LDCs, other low income countries, and lower middle income countries. Relevant averages and medians are presented and commented.



## 1- **Methodological aspects.**

We first consider the EVI as designed in March 2005 by the CDP with its seven component indices, corresponding to the following variables:
1- population, in log,
2- share of agriculture, forest and fisheries in GDP,
3- export concentration of merchandises (Hirschman coefficient as calculated by UNCTAD),
4- remoteness from the word markets, adjusted for landlockness,
5- instability of exports of goods and services,
6- instability of agricultural production,
7- homelessness due to natural disasters).

Indices 5 to 7 refer to the size of the past shocks, either external (5) or natural (6 and 7), and are measured over a serie of past years. Indices 1 to 4 refer to the exposure to the possible shocks and are measured on one given and recent year.

These components are arithmetically averaged according to the weights indicated in the CDP report: one half for the exposure, the other half for the size of the shocks, leading to two sub-indices, an exposure index and a shock index, with equal weight .

## 1. General issues

### 1.1. *One year versus multiyear indices: designing ex post and ex ante EVIs.*

The main problem to be solved is that EVI components include both four "one year exposure indicators" (population size, remoteness, share of agriculture etc., and export concentration) and three "multiyear shock indicators" (the two instabilities and homeless).

The primary data bank more or less easily includes annual time series of the four first components, but less easily for the last three others. Even for some one year data, difficulties were likely to emerge. For instance export concentration is available on a discontinuous basis, making necessary to interpolate between the years with available data. As for the share of agriculture in GDP, which is influenced by the relative prices of commodities, it can also be appropriate to measure it as a pluri-annual average to smooth the impact of the price variability. Anyway it appears appropriate to measure the component indicators of exposure to shocks, which is a structural feature, by a several year average.

As for the three multiyear indicators, there are two conceptual problems. The first one is how to choose the length of the period on which they are to be measured: it should be not too short, to reflect the probability of occurrence of shocks, and on the other hand not too long, to allow some possibility of change over time: a ten to twelve year period seems a good compromise. Second, it has to be decided whether the shocks indicators (which will be included into the vulnerability index) are measured as *ex post* or *ex ante* indicators: *ex post* means they will be aggregated in EVI with exposure indicators measured on the average or at the beginning of the period covered; *ex ante* means that they will be aggregated with exposure of the end of the period. *Ex post* EVI reflects the actual vulnerability faced by a country during a time period; *ex ante* EVI rather reflects the likelihood to be hurt by exogeneous shocks, i.e. a potential vulnerability.

For the reviews of LDC list, previous instabilities were aggregated with exposure indices of the most recent years, which means end of the period, then leading to *ex ante* vulnerability indices. But researchers wanting to use retrospective EVI may need to have *ex post* vulnerability indices (or they may wish to have both ex ante and ex post indices to test alternative hypotheses). Beside these conceptual problems, multi year shocks indices raise specific issues related to the availability of data, in particular for homelessness.

1.2. *Period coverage*

Because of the structural character of the EVI, it is not necessary (at least at this stage) to have annual series of the EVI itself. We have chosen to set up two series:

1) decade series, corresponding respectively to the seventies, the eighties and the nineties: ex post EVIs combine the shock indicators of each decade with exposure indicators of the beginning or the average of the decade, while ex ante EVIs will combine the shock indicators of each decade with the exposure indicators of the end of the decade;

2) five year series, corresponding respectively to each of the five year periods , from 1970 to 2005 (or 2006, year of the last review): shock indicators for each of these periods ( eventually a little extended, as explained below) are combined with exposure indicators respectively of the beginning and the end of the period for the ex post and the ex ante indicators.

1.3. *Calibration of indices: using constant bounds.*

Since indices are to be compared not only between countries, but also over time, they must be calculated with regard to the same maximum and mininimum values. Calculating an index for each period according to the usual max-min procedure would not allow to compare the indices over time since either the maximum or the minimum values may change. Using the maximum and mini mum values over all the periods may artificially compress the values when ther are outliers. For that reason it is convenient to choose reasonable or normal max and min, indeed arbitrary, but avoiding the possible high impact of any outlier on any year or period. A set of such normal bounds has been proposed and used in various simulations and finally retained for the 2006 review of the list (see Annex 1 and Guillaumont 2007).

## 2- Steps of measurement

We first choose to set up a retrospective EVI corresponding to the definition adopted by the CDP in March 2005, with the decomposition in shock and exposure indices, and the seven component indices. These indices have been calculated from 1970 every ten years (1970, 1990, 2000, and latest data), then every five years, both ex ante and ex post, what means for the following periods: 1970-1975, 1974-1979, 1980-1984, 1985-1989, 1990-1994, 1995-1999, 2000-2004 or latest.

### 2.1. *First step: time series for the gross indicators corresponding to the component indices ( for the years 1970 to 2005).*

We choose at this stage of the project not to built annual time series, but to limit to every ten or five year estimations of EVI. However data might be missing, so that needed is to fill the gaps, what is the case mainly for the coefficient of export concentration and homeless data. Data rebuilt or interpolated are presented in a coloured space specific to the way by which they have been supplemented in the data bank. Let us briefly review the data availability and needs for the seven component indicators.

- For population size, there is no real issue (source: UN Population data base)

- Interpolation has been hardly needed for the share of agriculture, forestry, fisheries (source: UN, available on an annual basis)

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- Remoteness from world markets: the inter-country distances do not change, and are available, but the weights (shares of partners in world trade) do change: measures of remoteness (adjusted for landlockness) have been provided by CERDI for every five years (between which it would be easy to interpolate if needed): the concept of remoteness retained is (in logs) the minimum distance to reach one third of the world market, adjusted upwards by 15% for landlocked countries (see Annex 2 for the measurement of remoteness).

- Export concentration coefficients are taken from UNCTAD Statistical Handbook (data base on line). They are available for many years, but not on a continuous basis, so that it has been needed to interpolate when data are missing for a required year. For the small number of countries where required data were

not available, we used a regression of export concentration coefficient on the share of the three main exports in total exports, as done previously for the review of the list of LDCs, in order to obtain an export concentration coefficient from the available data on the three main exports (collection of data from UNCTAD *Handbooks* has been done at CERDI, gap filling done at DESA)

- Homelessness is the component raising the most acute difficulties with regard to data availability over a long period of time. Fortunately it is also a component with a low weight in the present EVI (0.125). It is a proxy of natural shocks occurring not regularly, but due to factors not changing significantly over time and differing across countries. So it has appeared legitimate to use the longer series available for each country and when data are not available to assume the index to be equal to its average level for the periods where it is available (as a first approximation, which will need to be replaced by real long time series as soon as possible). For countries without data the level of the indicator has been assumed equal to that of the most relevant neighbour(s). (see Annex 3)

- For the two instabilities (agricultural production and exports of goods and services), measures are needed on a rolling basis, which have been provided by CERDI. For each year five series were first set up:
1) gross data of exports (source WDI for current exports and UN for the import price of developing countries used as a deflator) or agricultural production indices (source FAO)
2) trend value "A", obtained from a "mixed trend" (both determinist and stochastic, as done for the reviews), estimated over the whole period for which data are available ( the longest period being 1962-2004);
3) trend value "B", obtained from a mixed trend, estimated over the 12 previous years;
4) deviation (%) from trend "A";
5) deviation (%) from trend "B".

Then instabilities were calculated as the average squared deviation from each of the two trend values on a given set of years, namely:
1) the 6 previous years;
2) the 12 previous years.

All these series, sorted by alphabetical order, are referred to as "series GIR" (gross indicators)[2],

[2] Namely, GIR/ POP and log POP, GIR/ AGR, GIR/ REM, GIR/ XCO, GIR/ INX (4 series), GIR/ INA (4 series), GIR/ HOM

*2.2. Second step: time (discontinuous) series of component indices*

Gross data are converted in indices by a max-min calculation, the max and min being the normal bounds as indicated above. Values beyond the max and min are compressed to these bounds. For population size, after transformation in logs, the index is 100 minus the max – min index.

Indices could then be calculated for one year, as for the reviews, or on several year averages, depending on the user interest. As explained above, we have chosen to only calculate decade and five year series, both as an *ex post* measure (from t to t+n , with n=9 or n=4) and as an *ex ante* measure (in t). Depending on the case, following indices are needed.

Exposure indices:

Ex post: average value from t to t+n
Ex ante: value in t

Shock indices:

Instability indices:
- *decade indices* (from t to t+9):
ex post indices: instability measured from trend "A" and over 12 years, from t-2 to t+9
ex ante indices: instability measured from trend "B" and over 12 years, from t-11 to t
- *five year indices* (from t to t+4):
ex post indices: instability measured from trend "A" and over 6 years, from t-1 to t+4
ex ante indices: instability measured from trend "B" and over 6 years, from t-5 to t

Homelessness indices (we remember that series are available only on a ten year base):
-*decade indices* :
ex post indices: the index of the corresponding decade
ex ante indices: the index of the previous decade
-*five year indices* (we can only have rough proxies):
ex post indices: when t=1976-80, 1986-90 or 1996-2000, we take the index of the decade ending respectively in 1980, 1990, 2000; when t= 1971-75, 1981-85, 1991-95, we take a weighted average of the previous (2/3) and present (1/3) decades

ex ante indices: when t=1980, 1990 or 2000, we take the value of the previous decade; when t= 1975 we take the value of the present decade (seventies); when t= 1985 or 1995, we take a weighted average of the previous decade (2/3) and of the present one (1/3).[3]

We then obtain four *tables of component indices*, with countries sorted by alphabetical order, namely[4]

- EVI ex post component indices, 5-year series,
- EVI ex ante component indices, 5-year series,
- EVI ex post component indices, 10-year series,
- EVI ex ante component indices, 10-year series.

At the bottom of each table, following the list of country data, the average, the median and standard deviation are given for the whole set of countries as well as for several groupings (low income, middle income, LDCs, SIDS, Sub Saharan Africa, Other developing , …) .

*2.3. Third step: aggregation of component indices in synthetic indices*

The series presented below rely on an arithmetic averaging of the present seven components, with the weighting coefficients retained by the CDP in 2005-06:
-for the exposure indices: 1/4 for log population, 1/8 for remoteness, 1/16 for the share of agriculture, fisheries and forestry, 1/16 for export concentration;
-for the shock indices: 1/4 for export instability, 1/8 for agricultural production instability and 1/8 for homelessness.

Beside the synthetic EVI, a shock index and an exposure index can be calculated, EVI being the simple average of the two.

Other methods of aggregation are possible. Among them, we propose to later estimate the "semi –geometric ", what means 100 minus the geometric average of the complement to 100 of 1) the shock index and 2) the exposure index.

[3] To be noted, for some measurements of EVI other than the present one we can also need series of the log indices (cf Guillaumont 2007). They will be considered separately and in a future step of the work. Here we only consider the indices as they have been defined for the last review and the corresponding series.

[4] series referred to as "CIN" (component indices), CIN/ log POP, CIN/ AGR, CIN/ REM, CIN/ XCO, CIN/ INX/10/EP and CIN/ INX/5/EP, CIN/ INX/10/EA and CIN/ INX/5/EA, CIN/ INA/10/EP and CIN/ INA/5/EP, CIN/ INA/10/EA and CIN/ INA/5/EA, CIN/ HOM/10/EP and CIN/ HOM/5/EP.
CIN/ HOM/10/EA and CIN/HOM/5/EA

Another variant would be an aggregation relying on the simple averaging of log indices (see Guillaumont 2007).

From the aggregation of component indices through simple averaging, two tables have been drawn, respectively for ex post and ex ante indices, each one giving both exposure indices and shock indices with countries sorted by alphabetical order, followed by relevant groupings, namely

- One *ex post exposure and shock indices table* grouping 3 decade exposure indices and 7 five-year indices as well as 3 decade shock indices and 5 five-year exposure indices (insufficient data for 10970-1974 and 2000-2004)
. 2 tables each grouping the 3 ten year shock indices, one for ex post indices, the other for ex ante indices: SKT/10/EP/t and SKT/10/EA/t for t=1971-1980, 1981-1990, 1991-2000
. 2 tables each grouping the 3 shock five year indices, ex post and ex ante: SKT/5/EP/t and SKT/5/EA/ t for t=1965-70, 1971-75,…2001-05

-EVI retrospective tables related to all the ten year, then to all the five year periods, and giving for each country its value and its rank, what means
. one table for the ten year ex post EVI: EVI/10/ EP
. one table for the ten year ex ante EVI: EVI/10/EA
. one table for the five year ex post EVI: EVI/5/EP
. one table for the five year ex ante EVI: RVI/5/EA

It could be also useful to make EVI individual country tables available on line, giving for each country both the evolution of its component indices (and respective ranks) and the evolution of its EVI (and corresponding rank), according to the two EVI designs (ex post and ex ante).

### *2.4. Fourth step / brief comparison of results obtained*

Few main comments are briefly presented, relying on average measures for three groups of countries: LDCs, low income countries, middle income countries.

1) The general trend of EVI evidences a rough stability of EVI (ex post and ex ante) for low income countries, as well as, at a higher level of EVI, for LDCs, while EVI significantly declines in middle income countries.

2) The divergence of evolution between LICs and MICs is essentially due to the evolution of the shock index, rising in low income countries, and LDCs as well,

at a higher level of this index, while the exposure index is declining in the three groups, an expected result from the weight of one half given to the (growing) population in the exposure index[5].

3) Within the exposure index not only the population component is declining in all groups, but also the remoteness index[6] and the share of agriculture are doing so as well, although staying at a higher level in LDCs; export concentration, rapidly declining in middle countries, hardly declines in low-income countries as well as in LDCs, where it stands at a quite higher level than in other groups.

4) Within shock indices, it appears that agricultural instability has been increasing in all groups, whereas export instability has been decreasing, but faster in middle income countries than in low income ones, and even more than in LDCs where it is significantly the higher; homelessness index, stable in middle income countries, has also been increasing in low income countries and LDCs, where again it is the highest. Thus the rise in the level of the shock index of LDCs is due to natural shock index, but the rise in the gap between the shock indices of LDCs and other developing countries is due both to natural and external shocks[7].



[5] It could be examined what would be the consequence to retain the share of the world population instead of the absolute size of population, increasing nearly everywhere and contributing to an overall decline of the index. However the rationale of such a change would be weak.
[6] Due to the change in the location of the main markets.
[7] Other comparisons (between Sub-Saharan Africa and other developing countries or between SIDS and LDCs) can be found in Guillaumont 2007d and Guillaumont 2007c.

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**Annex 1 Choosing bounds**

We keep in mind that we try to have bounds applicable not only to one review, but also to the previous ones ("retrospective EVI") and possibly to the next. Bounds are chosen with major reference to the new sets of data available in 2006,but also with previous data in mind.

Population Size: Max, 100 Millions:
Min, 150000, about the median of the 5 LDCs with smallest population
Remark: If we look at the whole distribution, there seems to be a "natural " bound at 100 millions between Vietnam and Mexico, where the difference of log values is high (0.24), higher than any other difference between rather large countries below or above these two ones, except of course between Indonesia and India. Moreover using symmetrically the same threshold for the lowest values lead to put the minimum bound between St Vincent and Sao Tome (exception made for Tuvalu and St Kitts), which is 150000, and is also the median of the five LDCs with the smallest population. Another solution is to consider that there are two super outliers on both sides (China, India, and Tuvalu , St Kitts) and to take as bounds 70000 and 200 million, but it compresses the differences on the rest of the distribution without any benefit for the work of identification, what leads to prefer the bounds of 150000/100million.

Export instability: Max 35: above this level long tail, large spaces between the 6 countries concerned, which are typically outliers
Min 3: no country below (next one India 3.8)

Agricultural instability: Max 20 seems reasonable (no country above except Iraq and UAE) and it is the average of the other following two (Tuvalu 21.1 and Eritrea 18.9)
Min 1.5: no country below (next one PNG 1.6)

Share of Agriculture: it could be M=60% (the 3 LDCs above appear as outliers with quite higher values, the 2 following countries being very close) and m=0 or 3 (lowest value of an LDC or LIC)

Export concentration: Max 0.95 seems reasonable (if we except Nigeria and Iraq, it is the average of the two highest LDCs (Tuvalu 0.98 and Sao Tome 0.92)
Min 0.1 = China (following six are not lower than 0.084)

Homelessness: here we have a problem: the figures are so different from the previous ones, sometimes explainable (tsunami), sometimes clearly not due to "natural disaster" but to civil war (Côte d'Ivoire); moreover the max values were quite higher 3 years ago. We need to consider these uncertain data on a long period to smooth the impact of events, then to choose the bounds, previously put at …

Remoteness: here we can provisionally stay with the 96/0 boundswith thprevious measure of remoteness, but with a new set of indicators, which seems to me more relevant , and relying on log values and amore appropriate adjustment for landlockness (see other note), better to choose M=9O, m=10.

## ANNEX 2 Measuring remoteness as a component of the EVI[8]

Already in 1991, the CDP noted geographical isolation as one possible natural handicap leading to a structural weakness and as such to be considered in the identification of LDCs (§233). But only in the 2003 report (and again in 2004), the CDP suggested to add remoteness from the main world markets to the components of EVI. Its inclusion was agreed upon in 2005.

Remoteness involves high transport costs and relative isolation. It is a structural obstacle to trade and growth and a possible source of vulnerability when shocks occur. It reflects a specific handicap of numerous SIDS, the vulnerability of which has been several times referred to by ECOSOC. It may also be adjusted upward for landlocked countries, because landlockedness increases transport costs and the risk of isolation. Even in the present wave of globalization, distance remains a critical impediment to trade. Several recent papers have evidenced its persistent influence on trade, an influence even increasing for low income countries (see Brun et alii, 1999, 2002, Carrère and Shiff 2004,…). And it fits well in the new interest on the geographic determinants of growth (see for instance Bloom and Sachs 1998, Bloom, Canning and Sevila 2003). Remoteness or related notions have been considered as a possible component of an index of vulnerability in several earlier attempts by researchers[9]. There are other several meanings of "remoteness" in the literature, for instance in the gravity models of trade[10].

For the purpose of LDCs identification remoteness could be designed as (an index of) a weighted average of the distance to the main world markets. Which weights are to be used? Two possible weights have first been considered, but left aside:
- One is the relative shares of the different importers (exporters) in each country exports (imports), which gives for each country an *actual average trade distance*. However this distance is endogenous: a far and isolated country may trade relatively little with largest markets precisely because they are far[11].
- Another one would be the relative shares in world trade of the main world importers, what gives a *potential average distance to the world market*. However it involves to use identical weights for all exporter countries. A limitation of this uniform weighting is that it does not allow one to differentiate between a country neighbour of one of the largest market but far from the other large markets (e.g. Mexico) and a country at the midway of two or several large markets (e.g. Togo), although the latter is clearly more remote than the former.

So we need other weights, both exogeneous and differing among countries, so that the better reflect the remoteness faced by a country aiming to have access to a significant part of the world market. This why has been retained the minimum average distance to a

[8] Taken from Guillaumont, 2007a

[9] For instance, Briguglio (1995, 1997) retains "remoteness" or "peripherality" proxied by the ratio of the cost of insurance and freight to the import value as a component of his vulnerability index, as also done by Crowards (2000). Easter (1999), following Atkins et alii (1998) considers this measurement, without retaining it in the final calculation. Limao and Venables (2001) also use this measure, but as a proxy of some transport costs, so not exactly for remoteness. The reliability and coverage of this proxy of remoteness is actually debated.

[10] See for instance Anderson and van Wincoop (2003): in gravity models "remoteness" means "multilateral resistance to trade" and as such is a *positive* factor of the bilateral trade (when introduced with the absolute bilateral distance between partners (which is of course a negative factor).

[11] For the same reason, independently of its low reliability and frequent inconsistency, the average ratio of the gap between the f.o.b. value of export and the c.i.f. value of the corresponding imports, is not an appropriate measure of "remoteness".

significant fraction of the world market and chosen the threshold of one third. Let us call it *minimum average distance to reach a given size of the world markets*: it is an exogeneous measure, as the potential average distance to the world markets, but with weights differing for each country, as they are for the actual average trade distance. For the 2006 review of the list of LDCs a threshold of one half of the world market was chosen. Finally for the calculation of this retrospective EVI, after comparing the level of the indices, a minimum threshold of one third of the world market has been retained.

Whatever the weights retained, it is appropriate to express in logs the average distance before calculating a max-min index of remoteness, assuming that the transport costs or obstacles to trade increase less than proportionally with distance.

On the other hand landlocked countries face higher difficulties to trade, with higher transportation costs for a given distance (cf. Limao and Venables, 2001, see also Faye et alii, 2004). It justifies an upward adjustment of the remoteness measure for landlocked countries. To what extent? An adjustment coefficient could be looked for by estimating the relative impact on the trade/GDP ratio of the 2 following (among other) variables: lD, the (unadjusted) remoteness index (in logs) and L, landlockness (a dummy variable). If a and b are the respective coefficients found for these two variables, an "adjusted remoteness" is given by the index of D' = (alD + bL)/(a + b). Using the average distance to main markets as (unadjusted) remoteness index, we found (b/a) to be about 10%. Other papers, using an other concept of distance, evidenced a higher ratio of 38% (Combes et al.2000). Faye et al. (2004) when measuring the ratio of freight and insurance to value of exports (but not controlling for the distance) similarly evidence on a regional basis a higher difference between the averages of landlocked and maritime countries[12]. If we refer to a recent estimation of gravity models of international trade (Carrère, 2004), we find it reveals an even higher ratio through the coefficients of the (log of) bilateral distance and of the dummy "landlocked" (0.43/0.95=45%). To be noted, expressing the average distance in logs is to some extent assuming that the effect of landockness is all the more important that the average distance is higher.

Finally, considering that a noticeable part of trade in landlocked countries is often done "informally", we have chosen to apply a rather cautious adjustment, as follows:

D' = index of [ 0.85 log D + 0.15 L ]

In that formulation 0.15 (15%) corresponds to the relative increase in the measure of distance due to landlockness.

We can explicit the kind of calculation needed to measure the remoteness index, according to the previous method, taking as an example the case of Papua New Guinea (PNG), which was found eligible for addition to the list, but finally refused to be added.

For PNG, we had the following measures, corresponding to the period 1995 (from 2002 Comtrade data, calculations done between Oct 2005 and Febr. 2006 for the 2006 review):

a) minimum average distance to one half of the world market (in Kms): 3317…

[12] 0.20 versus 0.13 in Southern Africa
0.33 versus 0.17 in Western Africa
0.36 versus 0.20 in Eastern Africa
0.12 versus 0.07 in South and Southeast Asia
0.19 versus 0.10 in Latin America…
Note that these average refer to samples not covering the full set of countries (due to lack of data, cf. supra).

b) log of a):8.11…
c) max-min of b): 6.86…
d) (0.85 x c) + (0.15 x L), with L=0 for PNG: 0.73
e) max-min of d): without bounds 0.71 (70.80%)
f) max-min of d): with bounds 0.76 (75.99%)
g) rank of decreasing remoteness; 42/152
…

Alternative and more recent measures done for the "Retrospective EVI" in Oct 2006, related to the period 2002-03, using more recent trade data (from the World BankWDI):

a) minimum average distance to one third of the world market: 5734 kms
b) 8.65
c) 0.86
d) 0.73
e) 0.68 (68.4%)
f) 0.73 (73%)
g) rank: 44

As it appears for that country, result do not differ significantly.[13]

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[13] The measurement done for the retrospective EVI differs from that done for the review with respect to the period of observation and the choice of X ( 50% and 33% respectively), but also for two other minor reasons:
- the weights given to the distances (to markets representing at least half of of the world markets) had been rescheduled to have their sum equal to one for the retrospective EVI, but not for the index of the 2006 review; it is a very minor choice, without impact on the ranking;
- the size of the markets is measured by the imports (exports) of goods of each country (Comtrade data) in the 2006 review measurement, by the imports (exports) of goods and services (World Bank data) in the retrospective EVI.