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Human Assets Index Retrospective series : 2013 update*

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Human capital, a broad concept including education and health, plays a central role in economic development and human well-being. As a consequence, low human capital became one of the three criteria used by the United Nations Committee for Development Policy (UN-CDP) for identifying Least Developed Countries (LDCs). Since 1991, the UN-CDP has used a composite index to measure human capital at the country level. In 2003 this index was reshaped and was renamed the Human Assets Index (HAI) (see UN-CDP webpage on LDCs, and Guillaumont, 2009).

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* In the case you use the companion database: please quote the reference paper: Closset M., Feindouno S. and Goujon M. (2014), Human Assets Index Retrospective series: 2013 update, Ferdi Working Paper n°I20, Data available on the Ferdi website: www.ferdi.fr

• • • /• • • The HAI is a composite indicator which aggregates two indicators for the health dimension (Percentage of the population undernourished, Mortality rate for children aged five years or under) and two indicators for the education dimension (Gross secondary school enrolment ratio, Adult literacy rate).

The four basic indicators are normalized using a usual min-max procedure to get four indices lying within [0-100]. The HAI is then the simple arithmetic average of the four indices, and consequently is also lying within the range 0 to 100:

- Undernourishment index (U)
- Under five mortality index (U5M)
- Adult literacy index (LR)
- Secondary Enrolment index (SE)

$$HAI = \frac{U + U5M + LR + SE}{4}$$

The overall methodology and the four components of the HAI have remained unchanged since 2006. However, the bounds used in the max-min procedure were readjusted in 2009 and 2012 by the UN-CDP, following changes in the extreme values observed.

Table 1. Bounds used in the min-max procedure

	2009 Review		2012 Review	
Components	Min	Max	Min	Max
Undernourishment Index	2.5	65	5	65
Under Five Mortality Index	10	240	10	175
Secondary School Enrolment	5.7	100	10	100
Literacy Index	15	100	25	100

Source: UN-CDP

Even if these methodological changes remain marginal, the analysis of long term trends in human capital levels requires the calculation of retrospective series with a constant definition over time, as was done three years ago by the Ferdi after the 2009 Review (Korachais, 2011). The construction of retrospective series faces various challenges. The main one is historical data availability, which is especially weak for some developing countries. Following Korachais (2011) we use econometric tools to consistently impute missing data into the incomplete historical series.

Two sets of HAI retrospective series are released. The first called "HAI FOS" (From Official Sources) uses official but uncompleted statistics (sometimes completed with simple interpolations). The second called "HAI WFG" (With Filled Gaps) extends the country-year coverage using econometric tools to generate missing data. Poor data availability at the beginning and at the end of the period for Adult literacy and Secondary enrolment results in a low sample size for the HAI FOS series. In contrast the HAI WFG covers more than 130 developing countries over the entire period.

The associated Ferdi Working Paper presents the data sources, the data-generating methods in details, the results for the four components, and the HAI series in an annual database covering the period 1970-2011. It also provides descriptive statistics on the series (relative trends in the averages values and densities for LDCs and non-LDCs).
Regarding the comparison between LDCs and the other developing countries, Figure 2 shows a continuous improvement in the average HAI in recent decades, particularly for LDCs, but a large gap remains between the averages of the two groups of countries.
Group averages may mask considerable variation within each group however. Improvements in the HAI scores are higher in the MENA and Asia regions, than in Sub-Saharan Africa where the majority of LDCs are situated.

Figure 1. Country coverage, HAI WFG and HAI FOS, number of countries

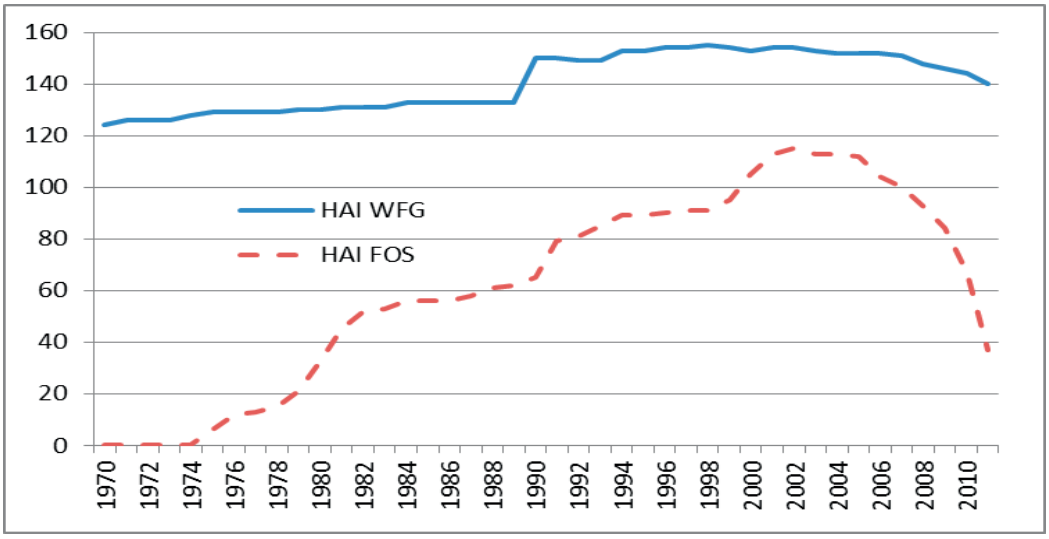


Figure 2. Changes in HAI FOS and WFG averages for LDCs and Non-LDCs

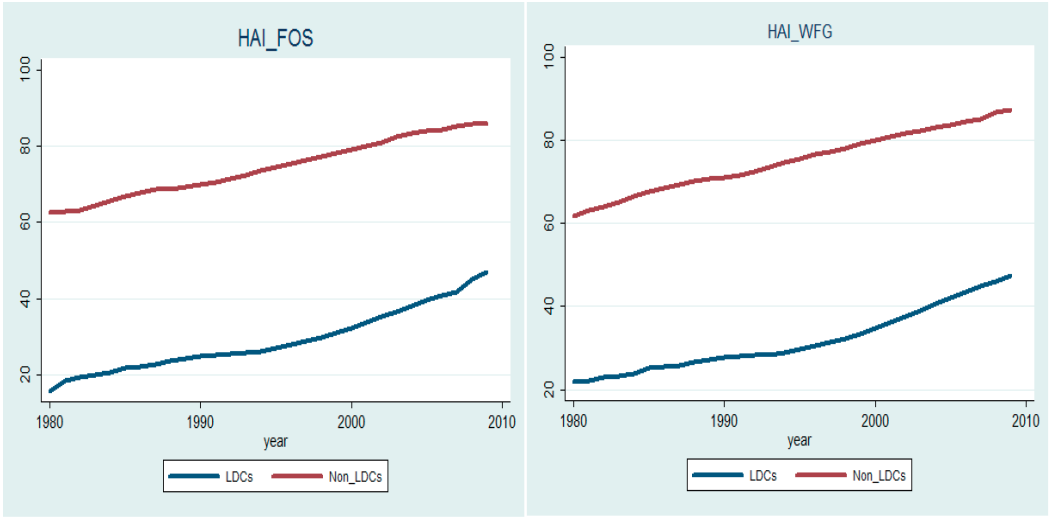
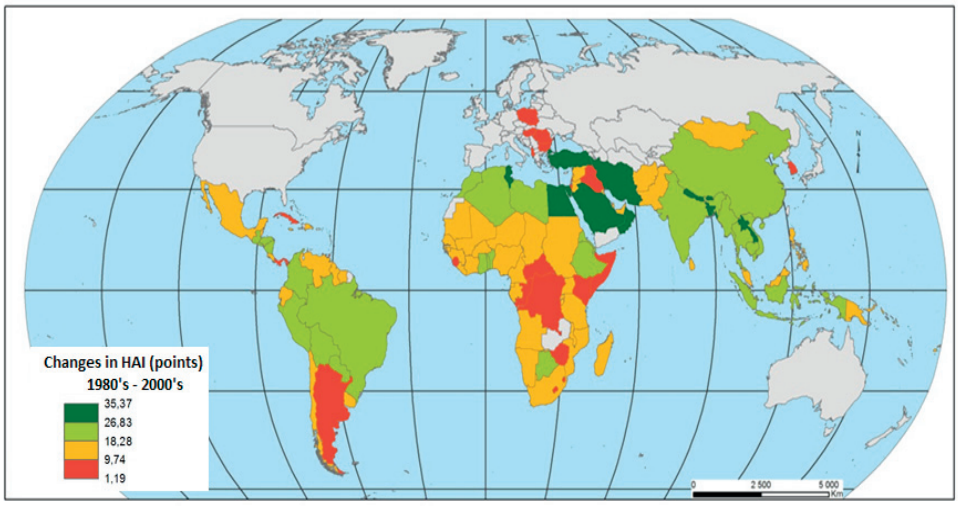


Figure 3. Changes in the HAI WFG by country, 1980s-2000s



Références

- **Guillaumont, P.** (2009) "Caught in a trap: identifying the least developed countries". Economica
- **Korachais C.** (2011) "Human Assets index: computing retrospective series from 1970 to 2008", Ferdi Working Paper 10, July 2011.
- UN-CDP webpage on LDCs: http://www.un.org/en/development/desa/policy/cdp/ldc/ldc_criteria.shtml

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juillet 2014
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