



**Prospects of Least Developed Countries graduation  
Fitting Structural Transformation?**

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## **I Introduction: a double issue:**

What are the prospects of graduation?  
Do they fit structural transformation?

Paper focused on the first question,  
with the second in mind,  
And for the following reasons



## From structural transformation to graduation

- LDCs are designed as poor countries facing structural handicaps to development
- Graduation involves a capacity to overcome these structural handicaps, assessed through specific criteria
- This needs a structural transformation, likely to lead to a sustainable development
- With IPoA, graduation has become an agreed goal, instead of being seen mainly as a risk
- Meeting graduation criteria is expected to reflect a structural change and it so as far as the indicators reflect structural handicaps to development



## **Enhancing human assets, reducing vulnerability: a double possible impact on graduation**

- Eligibility to graduation is assessed through the criteria of income pc, human capital and structural vulnerability (GNIpc, HAI, EVI) used for inclusion into the category
- Improvement of EVI, and HAI as well, first makes corresponding graduation criteria more likely to be met
- It is also a major factor of a more rapid growth, making the GNIpc criterion too more likely to be met
- But not all the structural changes leading to a reduction of structural handicaps result in a change of EVI (and HAI)

## **Structural reduction of vulnerability may operate through or besides the EVI components**

- *Through a* long term action on components:
  - exposure components, by diversification of exports, increase of the share of value added from industry and services,...
  - shock components: by changing the pattern of exports to make them more stable, adopting more resistant seeds to make the agricultural production less unstable, early warning systems resilience to minimize the number of people affected by natural disasters ,...
- *Besides* the components:
  - by regional integration, infrastructure improvement, ...
  - and all the measures contributing increase structural resilience ...



**II**

## **Historical and conceptual framework**



## What did it mean to be an LDC?

- LDCS have been designed as low income countries suffering the most from structural handicaps to economic growth
- They are identified from three criteria, GNIpc, and two indicators of structural handicaps, low human capital (HAI) and high vulnerability (EVI), three criteria *complementary* for inclusion
- Countries facing these 2 kinds of handicaps jointly are supposed to be «caught in a trap»



## How the graduation rules had been set up. Their asymmetry

- Graduation not even considered during the twenty first years of the category: Introduced in 1991, with cautious rules to be applied before an LDC be recommended for graduation:
  - not only one, but two criteria should no longer be met (asymmetry)
  - with margins between inclusion and graduation thresholds (since 2005, GNIpc with a broader margin may be the only one criterion)
  - at 2 consecutive triennial reviews (first applied in 1994 )
  - and, since 2004, the graduation being effective only 3 more years after the GA has « taken note » of the CDP recommendation





## Implementation of the rules before Istanbul

- One graduation effective after the 1991 reform: Botswana (1994), with no other decision taken during next ten years: resistance to graduation from countries eligible
- Only 3 decisions taken by the GA before Istanbul: Cape Verde (2004), Maldives (2004) and Samoa (2007), two of which followed by an additional and « exceptional » 3 year postponement (MLD, SA)
- 2 effective at the time of IPoA : Cape Verde(2007) and Maldives (January 2011)
- While Equatorial Guinea recommended by CDP (2009) , but decision not yet taken in 2011



## Changing landscape with Istanbul

- Following the occurrence of new graduations occurring, already more positive attitudes
- IPoA important new goal: « enabling by half the number of LDCs to meet the criteria for graduation by 2000 », which does not mean reducing by half the number of LDCs by 2000
- A time frame issue: according to present rules, only countries found a first time eligible in 2012, and a second time in 2015 and then recommended by the CDP could be graduated before 2020, whereas only countries found eligible a second time in 2018 can « meet the criteria for graduation by 2000 »
- A higher number may *meet the criteria* in 2021...
- Ambiguous wish of some LDCs to voluntarily accelerate their graduation<sup>10</sup>



## Implementation since Istanbul

- Samoa graduated in Jan.2014
- Decision taken by GA in 2014 for Eq. Guinea and Vanuatu, after pending a long time, to be effective in 2017 for Eq.G. and for Vanuatu in 2020, after exceptional (additional) postponement
- CDP in 2012 recommended the graduation of Tuvalu, but examination still pending at ECOSOC (TU)
- And it found Angola and Kiribati eligible « a first time »
- Found them again eligible in 2015, but recommended only Angola, postponing a recommendation for Kiribati (and Tuvalu as well)
- And found 5 other countries eligible « a first time »: Bhutan, Nepal, Sao Tome & Principe, Solomon Islands, Timor Leste



## From accelerated graduation to smooth transition

- « Smooth transition » born with the principle of graduation in 1991: «with a view to avoiding disruption of their development plans, programmes and projects»
- But with an initial meaning different from the present one: referred to « transitional period » between 1st and 2d finding of eligibility
- Concern about « smooth transition » reiterated by ECOSOC in 2000 and considered of «paramount importance» by CDP in 2002
- Clarified by the GA resolution of 2004
- And even more by the report of the Ad hoc special Group and following 2012 (October) GA resolution
- Proposing measures to make transition effectively smooth



## Present situation with regard to the IPoA goal

- In 2020 there could be a maximum of 10 out of the 48 Istanbul LDCs having met the graduation criteria (6 of which likely to have graduated), ie  $\frac{1}{4}$  instead of  $\frac{1}{2}$  in the Ipoa goal, and possibly less
- (3 would be eligible according to income-only rule, 3 according to the Two criteria rule, 4 according both rules)
- At the same time (2015 review), 31 out of the 48 LDCs under examination were no longer meeting the 3 complementary inclusion criteria, what means that without asymmetry in the rules of inclusion and graduation, nearly  $\frac{3}{4}$  of LDCs would have met the graduation criteria...



## Graduation prospects as depending on graduation rules

- The meaning of the goal of accelerated graduation has to be examined with regard to the rationale of the category: from which factors can accelerated graduation occur?
- We make the assumption that criteria remain unchanged: two criteria to be met or the income pc only criterion at a higher level
- But an important difference between GNIpc and EVI / HAI criteria has been reduced
  - GNIpc, absolute threshold in constant dollars for GNIpc
  - EVI and HAI, were until 20123 relative thresholds, designed by the quartile value of a reference group, and have become in 2015 thresholds fixed on their value of 2012
- with significant eligibility implications



### III

## **Prospects according to the income-only criterion**



## Recalling the rule and its implications

- Let us recall the rule : eligibility possible when a LDC country reaches twice the ordinary income graduation threshold, what means 240% the inclusion threshold (the low income constant threshold)
- Possible to identify which countries are likely to reach such a level before 2020, ie in 2018, or any other date, depending on the hypotheses done about GDP/GNI growth rates
- However, according to the present rules, a country reaching this level only in 2020, so found eligible in 2021, possibly again in 2024, and then recommended, will not be actually graduated before 2027...





## Method applied

- 1) Estimation of the rate of growth of the GDPpc/GNIpc from 2001 to 2014 and extrapolation (Source of data WDI): identifying 7 not yet graduated LDCs reaching 2,4 times the low income threshold in 2018, 8 in 2024...and 14 LDCs reaching it in 2030.
- 2) With a growth rate increased by 1% for all, they are the same number 7 in 2018, 17 in 2030.
- 3) With a growth rate of 7% (IPoA goal), they are still 7 in 2018, 18 in 2030
- 4) with a growth rate of GDP per capita of 7%: 7 in 2018, 24 in 2030...reaching the IPoA goal of graduation!
- Alternative approach: number of years needed to reach the threshold, according to the present level of income pc and the hypothetical rate of growth.



## IV

**Prospects according to the two criteria rule**



## ing the rule before 2015 and its implications

- Let us first recall the rule: crossing the graduation threshold of two criteria, a threshold beyond 10% of the inclusion threshold for HAI and EVI, higher than 10% of GNIpc low income threshold
- Meant until 2012 that at least one of the criteria should be a « relative »  
The likelihood of meeting a relative graduation criterion seemed lower than that of reaching the absolute income criterion, depending on the size of reference group and the location of the inclusion threshold.
- Reference group has traditionally included all LDCs and other LICs and the inclusion threshold put at the (better) quartile
- Not logical that the reference group be reduced to the only group of LDCs (not consistent with the concept of LDCs as countries suffering the most of structural handicaps)
- So at the last review (2012) the CDP has extended the design of the group, including all developing countries with a GNIpc lower than the only income graduation criterion, and leading to include 9 additional countries without which the reference group would have fallen to 51.....and making the attainment less easy



## Change in the design of the thresholds in 2015

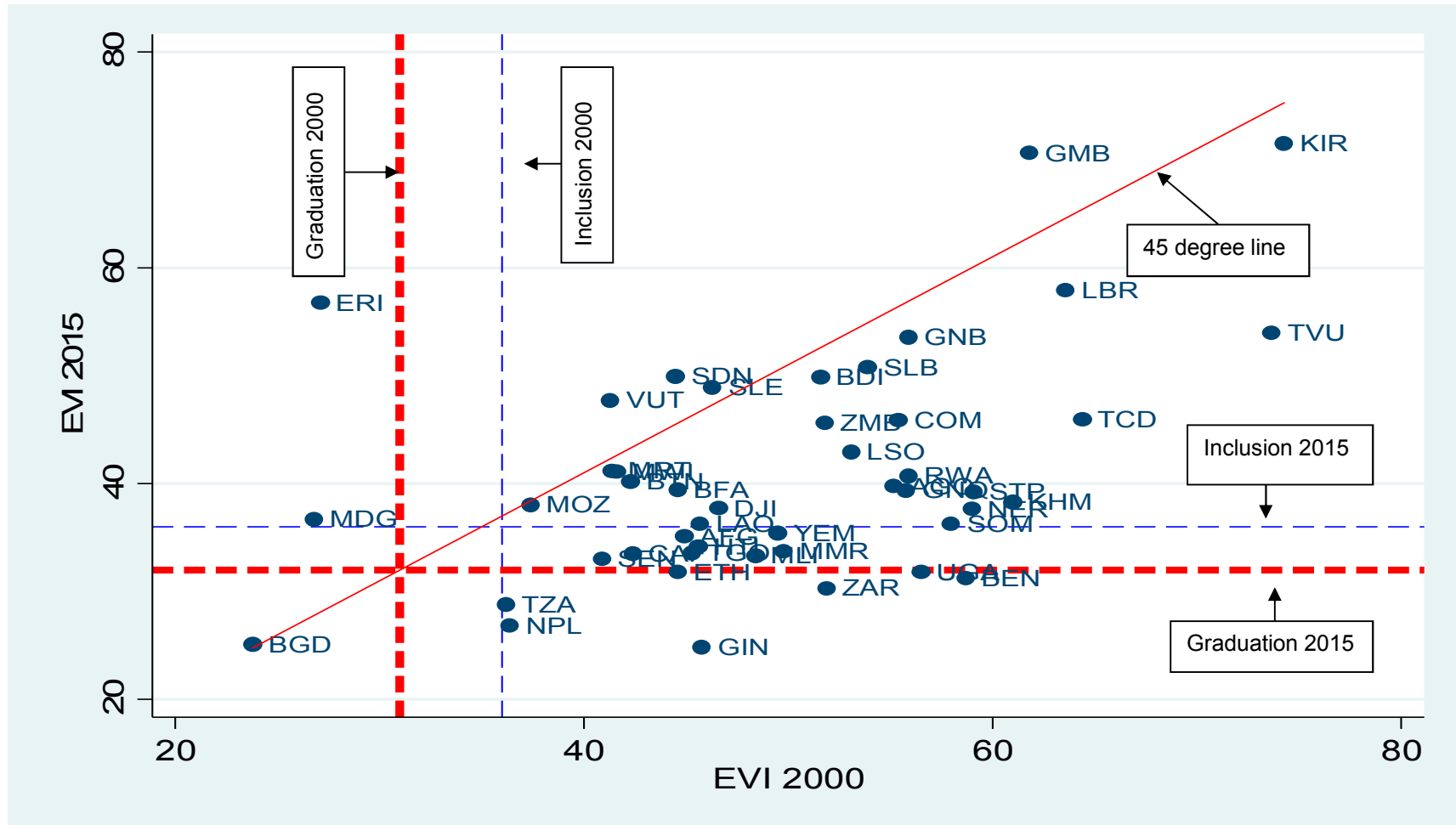
- Change brought by the CDP in 2015: thresholds for HAI and EVI, set at their level of the 2012 review and fixed
- Makes easier to meet the criterion if the absolute value of the indices improves (supposing a constant definition)
- Indeed 3 countries meeting the HAI graduation criterion, what would not have been the case with the previous rule of a quartile: Bhutan, Nepal and Solomon Islands



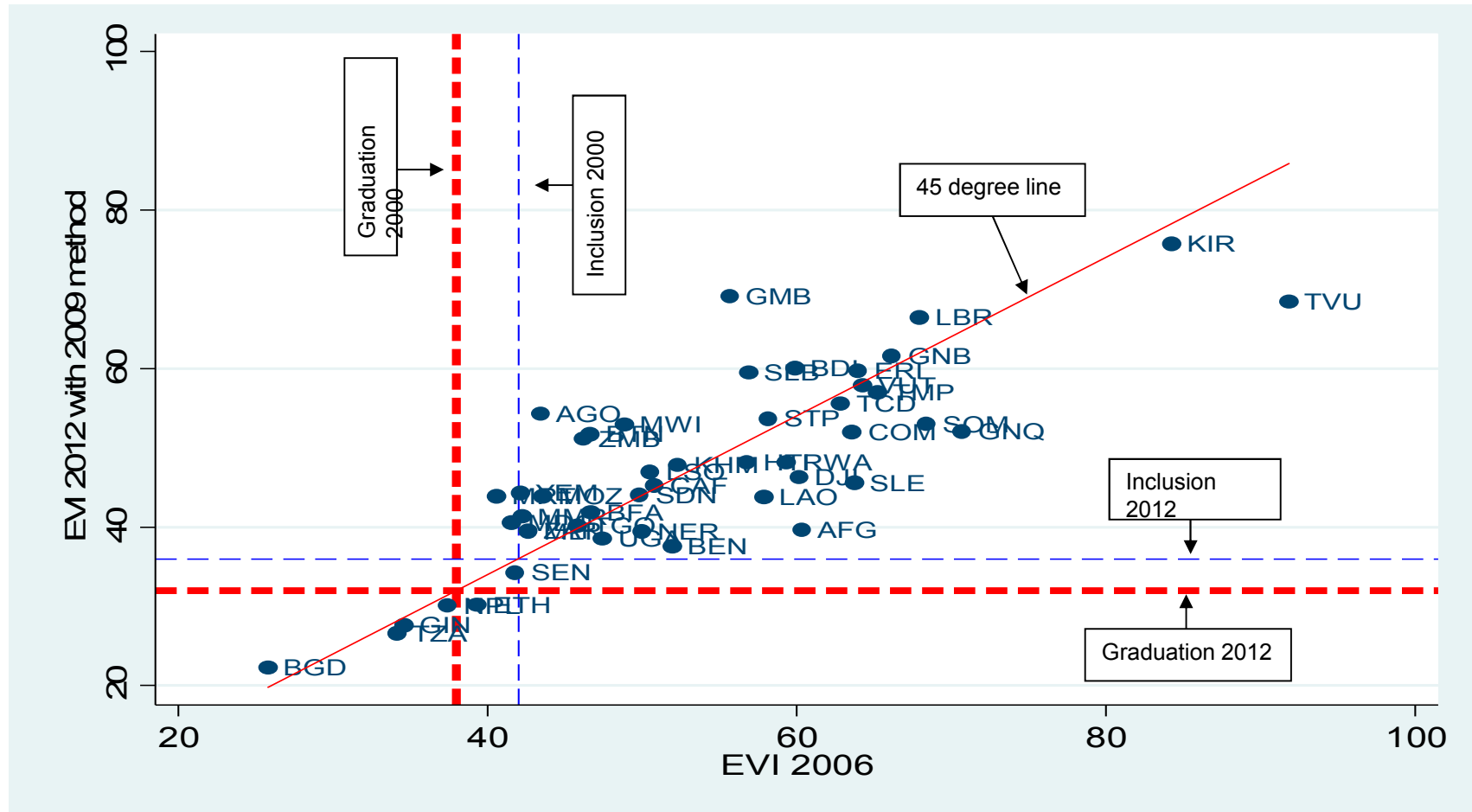
## Empirical exercises: (1) global view for each criterion

- Comparison of the position of the whole set of LDCs with respect to graduation thresholds for each criterion:
  - EVI: slight *relative* progress towards graduation threshold between 2000 and 2015 (but definition modified), 7 (different)LDCs reaching the threshold, but better (virtual) picture when 2006 is compared to 2012 using for 2012 the 2006-09 unchanged definition (1 more LDC)
  - HAI: a larger and increasing number of countries reaching the threshold (3 in 2000, 9 in 2015)
  - GNI pc (absolute threshold), as expected number higher 5 in 2000, 15 in 2012
  - as a result , all graduation eligibilities obtained from GNIpc and HAI

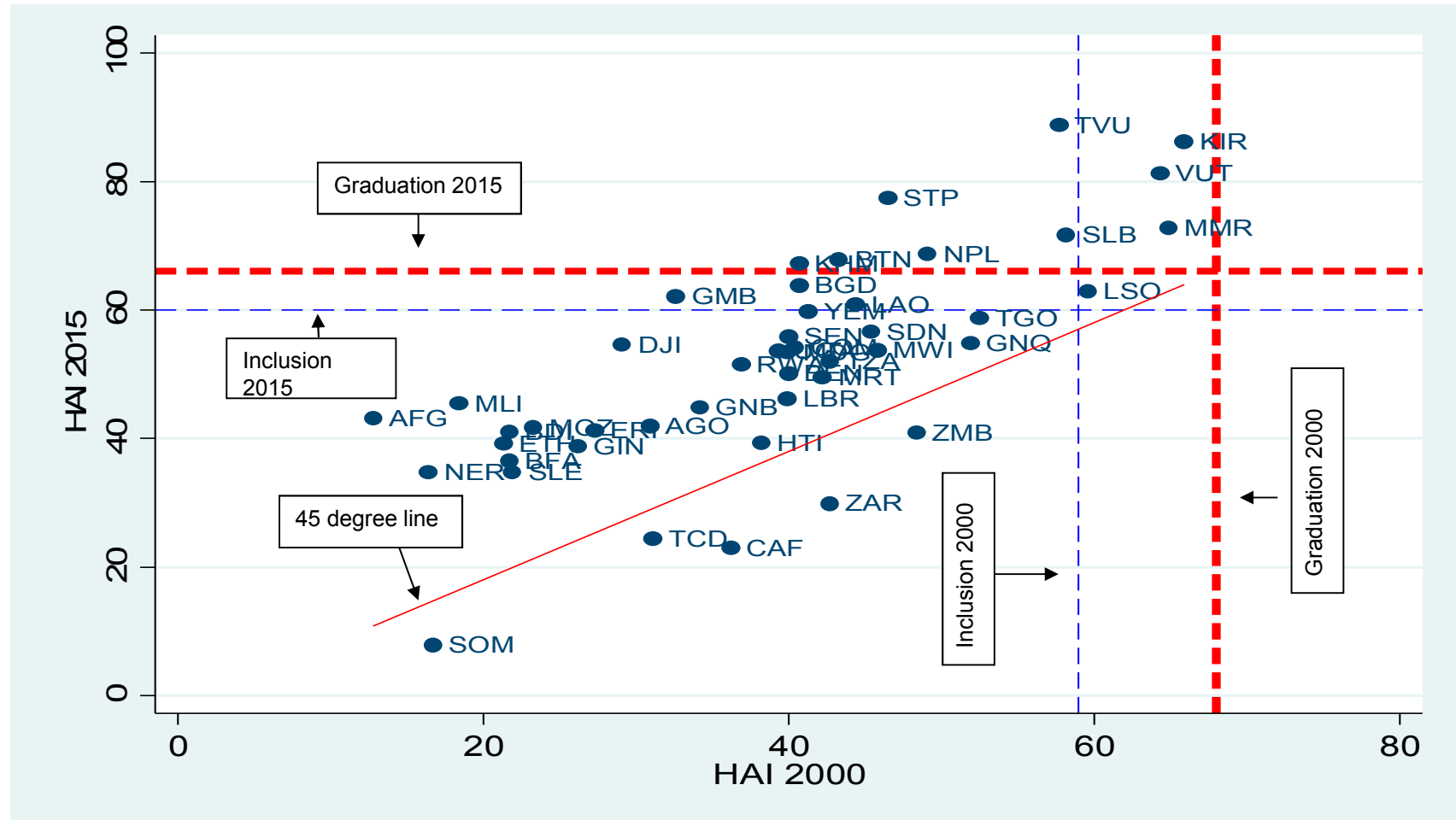
# Positions of LDCs with regard to EVI 2015 and EVI 2000



# Positions of LDCs with regard to EVI 2012 with 2009 method and EVI 2006

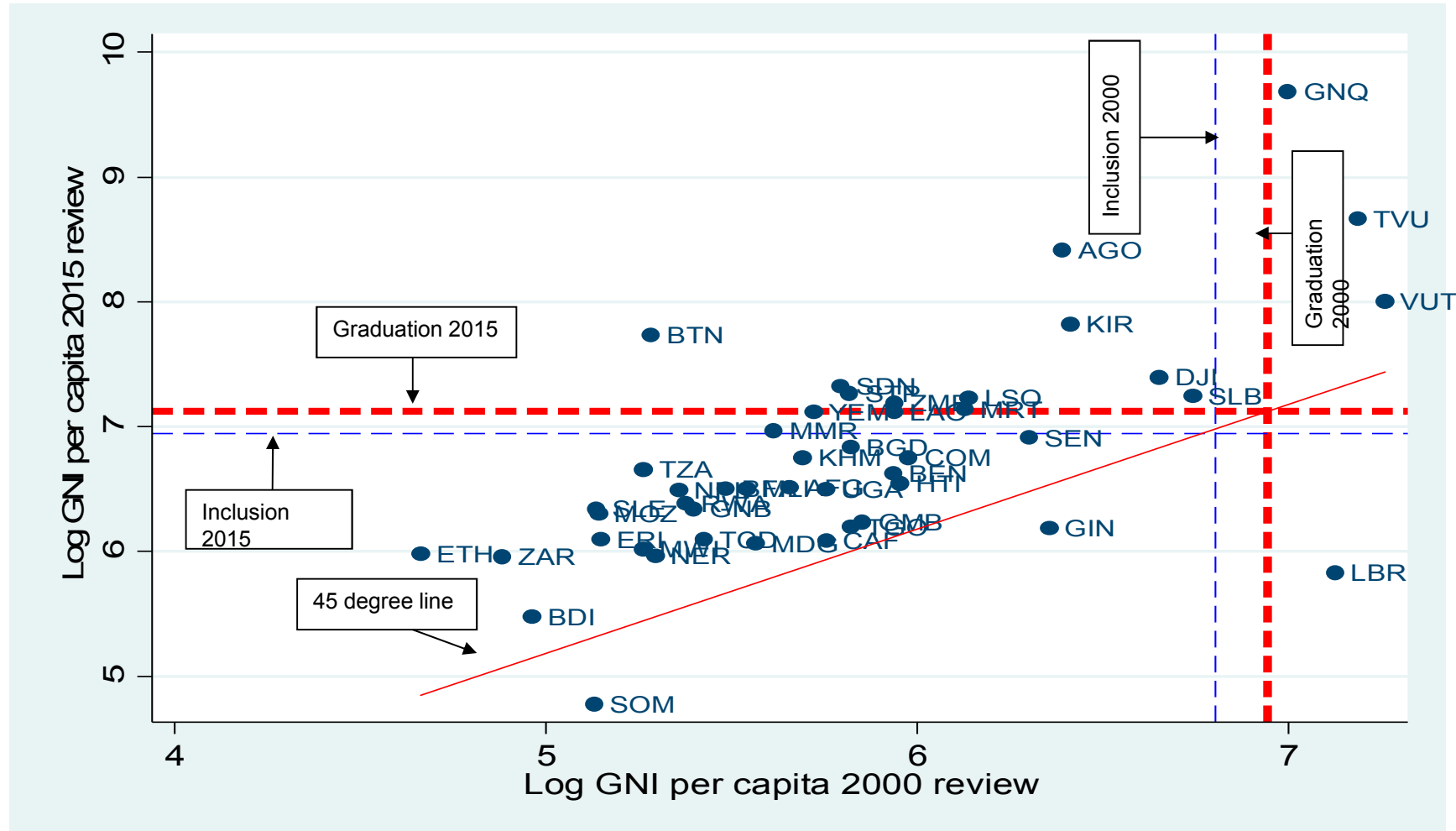


# Positions of LDCs with regard to graduation thresholds of HAI (APQLI) in 2000 and 2015





# Positions of LDCs with regard to log of GNI 2015 and log of GNI 2000 reviews





## Empirical exercises: (2) country trends

- Comparison country by country of the evolution of the position with respect to the thresholds over the last seven triennial reviews (see graphs by country: all inclusion thresholds located on a horizontal line scaled at zero)
- Evolution affected for EVI by the changes in the index composition (cf Bangladesh)
- Not a measurement of structural change, as it can only be done by the « retrospective EVI », as calculated at Ferdi over a long period
- But shows to what extent a country is becoming closer of the current graduation criteria



## **6 cases of favourable trends likely to lead to eligibility**

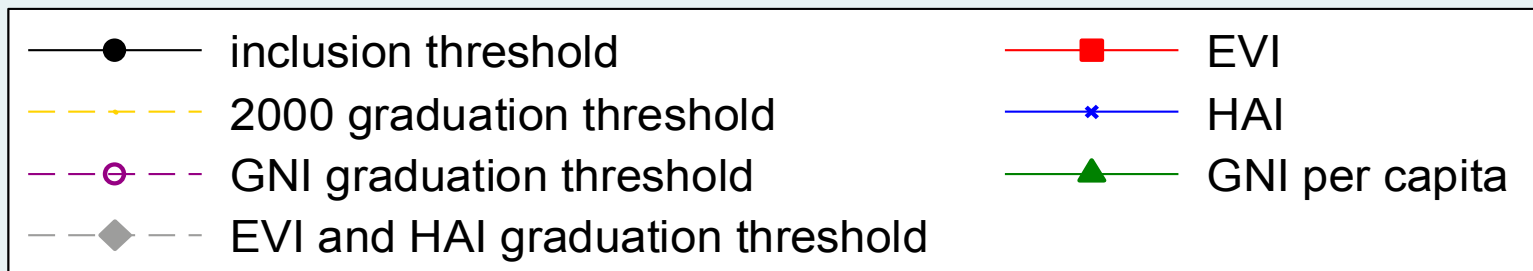
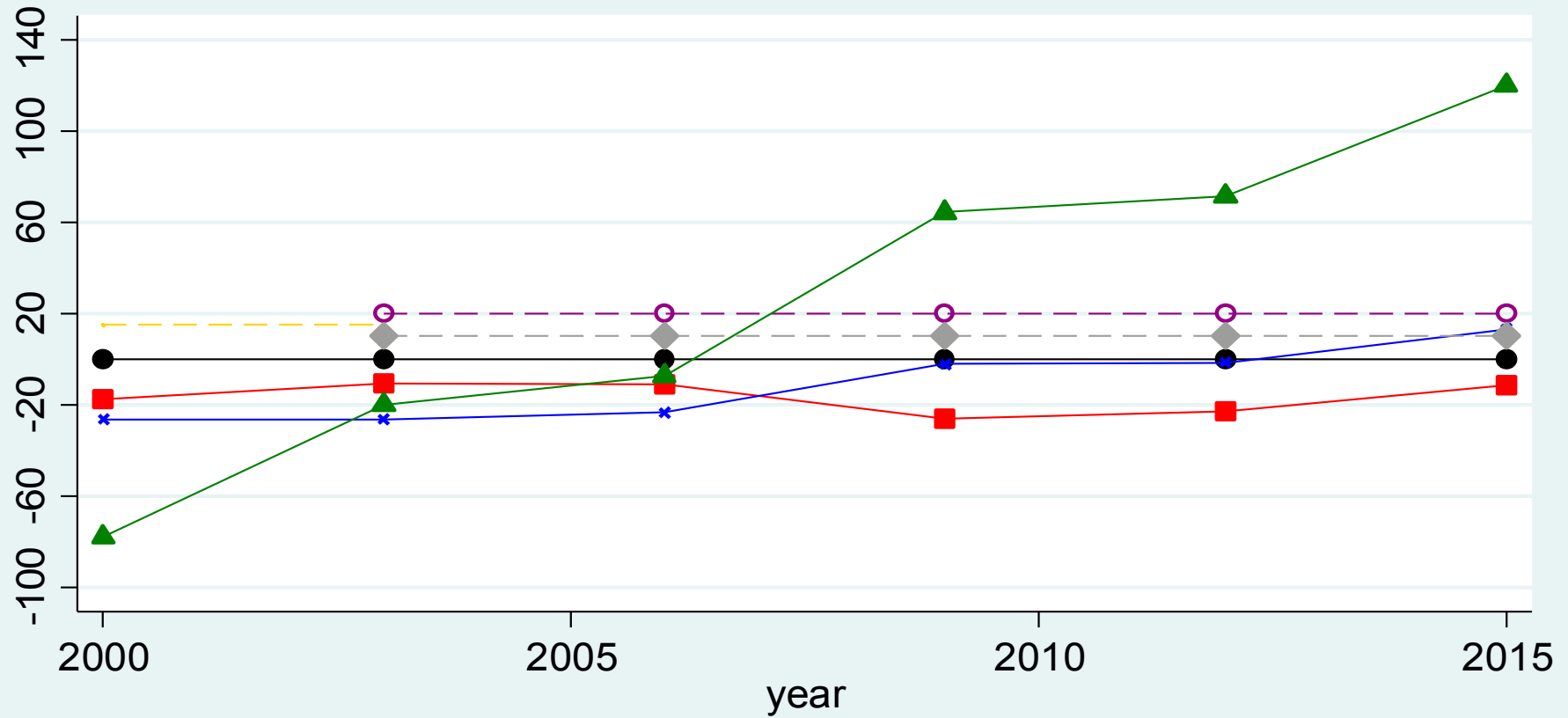
*Having already led to eligibility (8 cases)*

- trend for GNIpc and HAI or EVI (6 cases), ex: Kiribati
- trend of GNIpc only (2 cases), ex: Angola

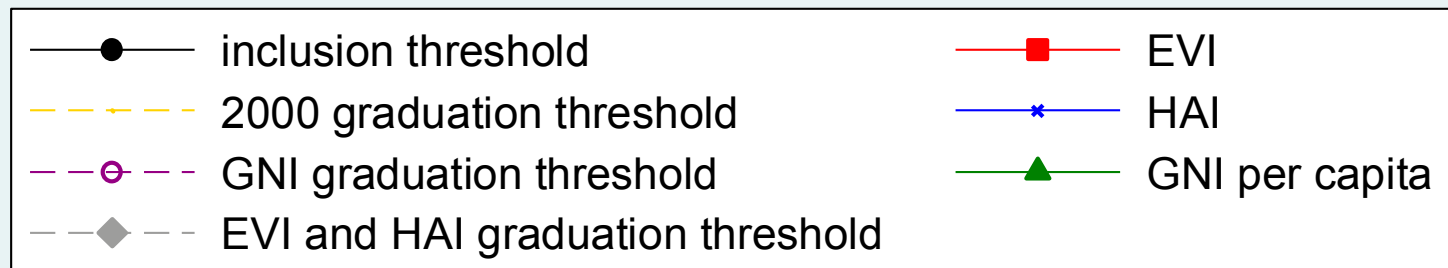
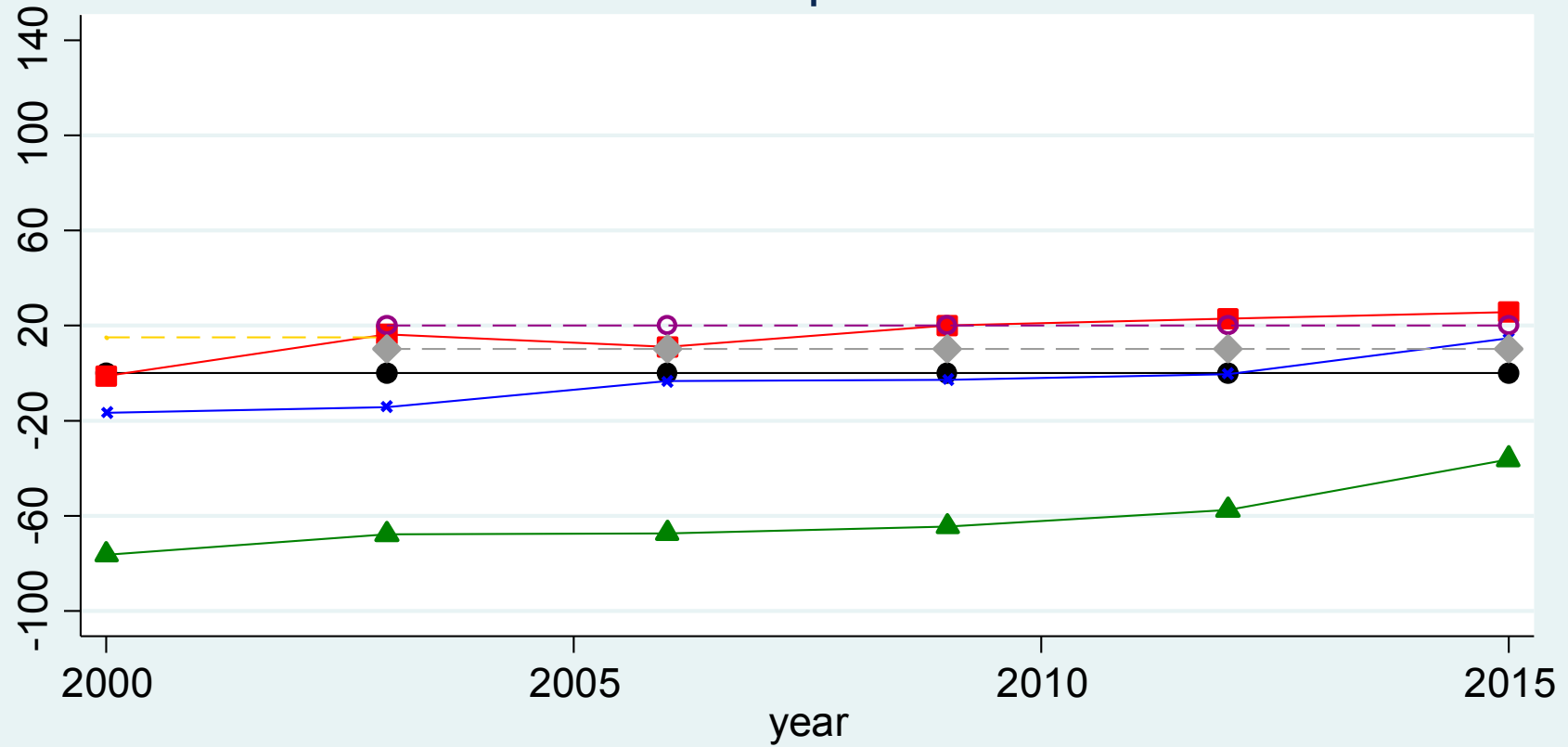
*Not having yet led to eligibility (10 cases)*

- trend of GNIpc and HAI (5), ex: Cambodia
- trend of GNIpc and EVI (1), ex Benin
- Trend of HAI and (2), ex: Bangladesh
- Trend of GNIpc, HAI and (2), ex: Laos

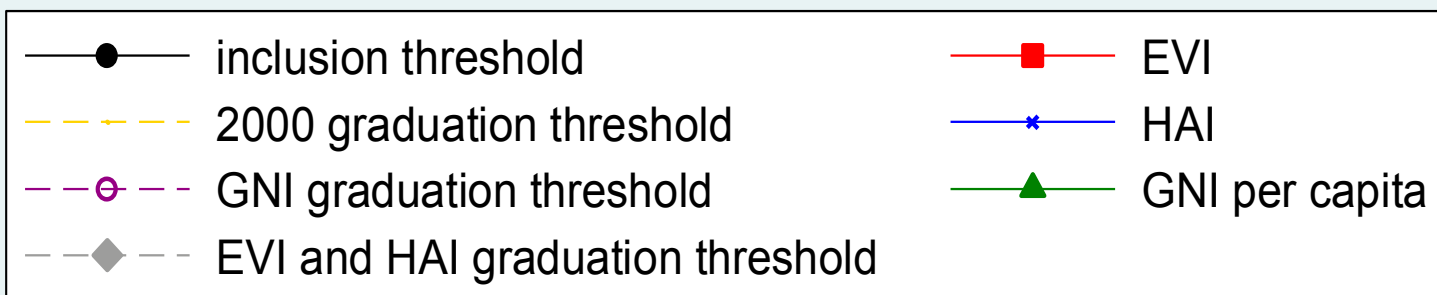
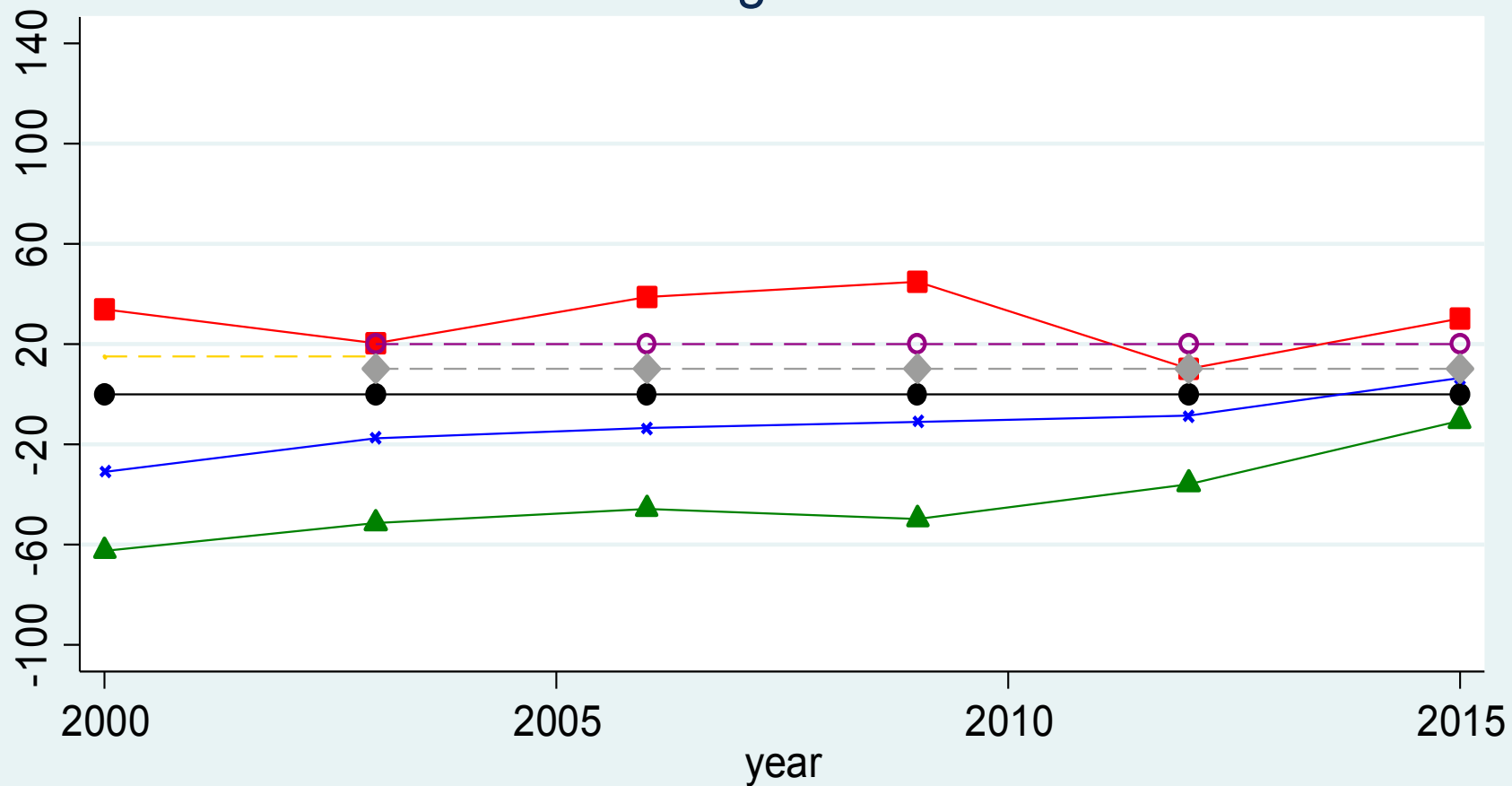
# Bhutan



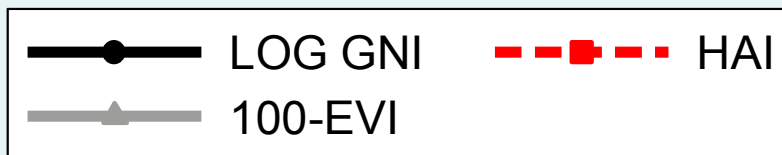
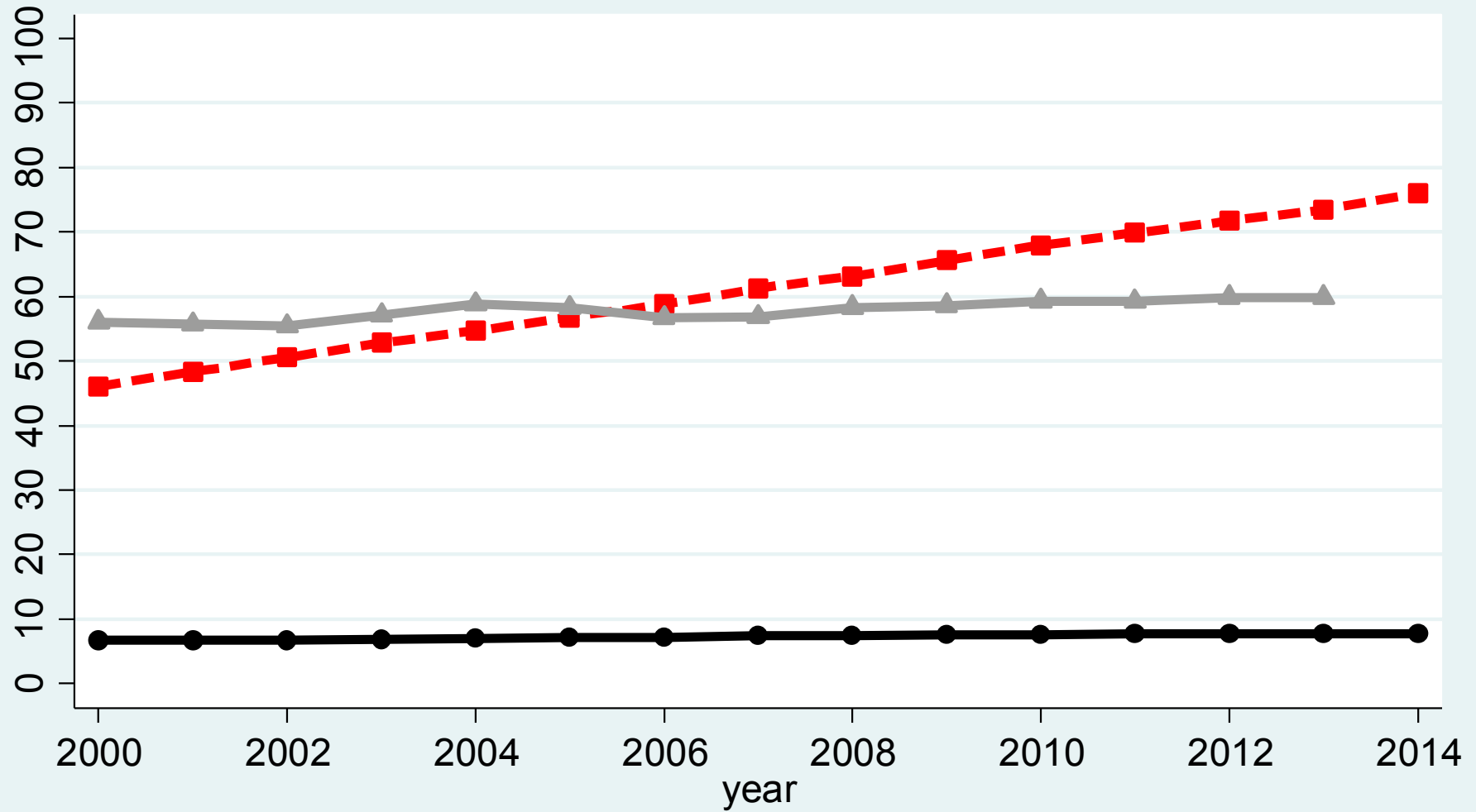
# Nepal



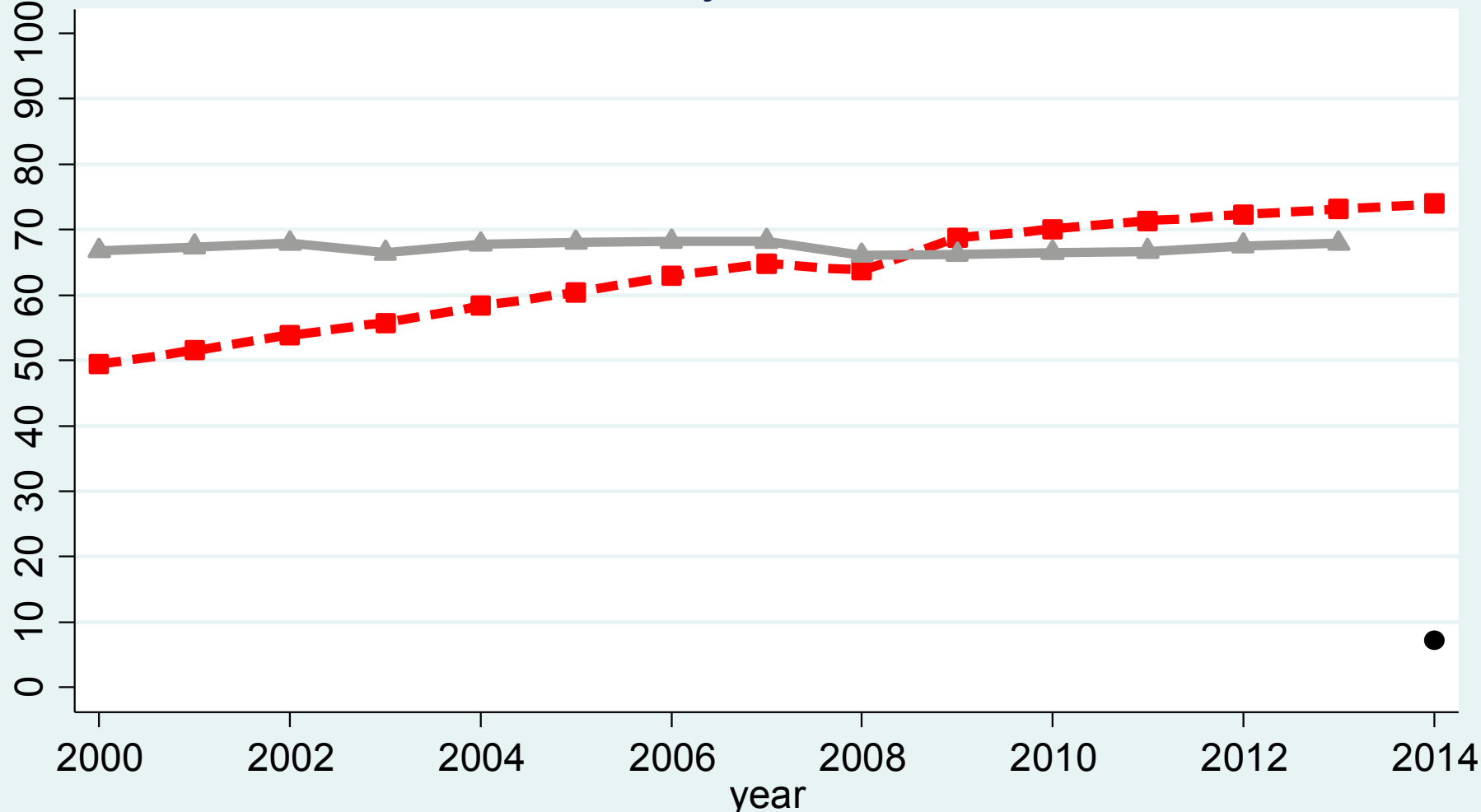
# Bangladesh



# Bhutan

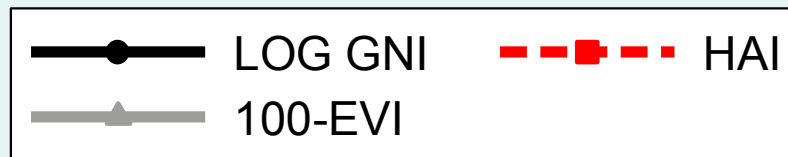
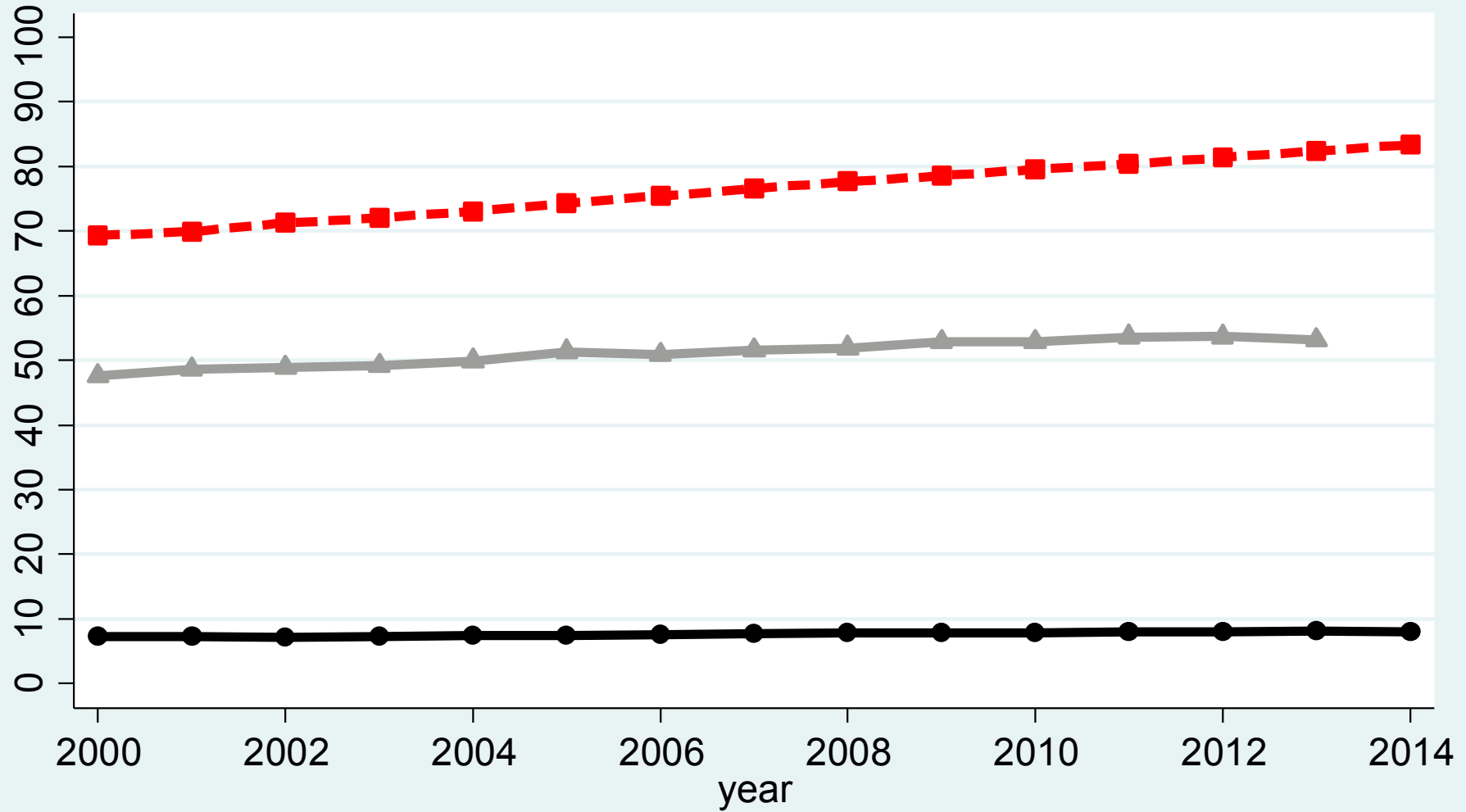


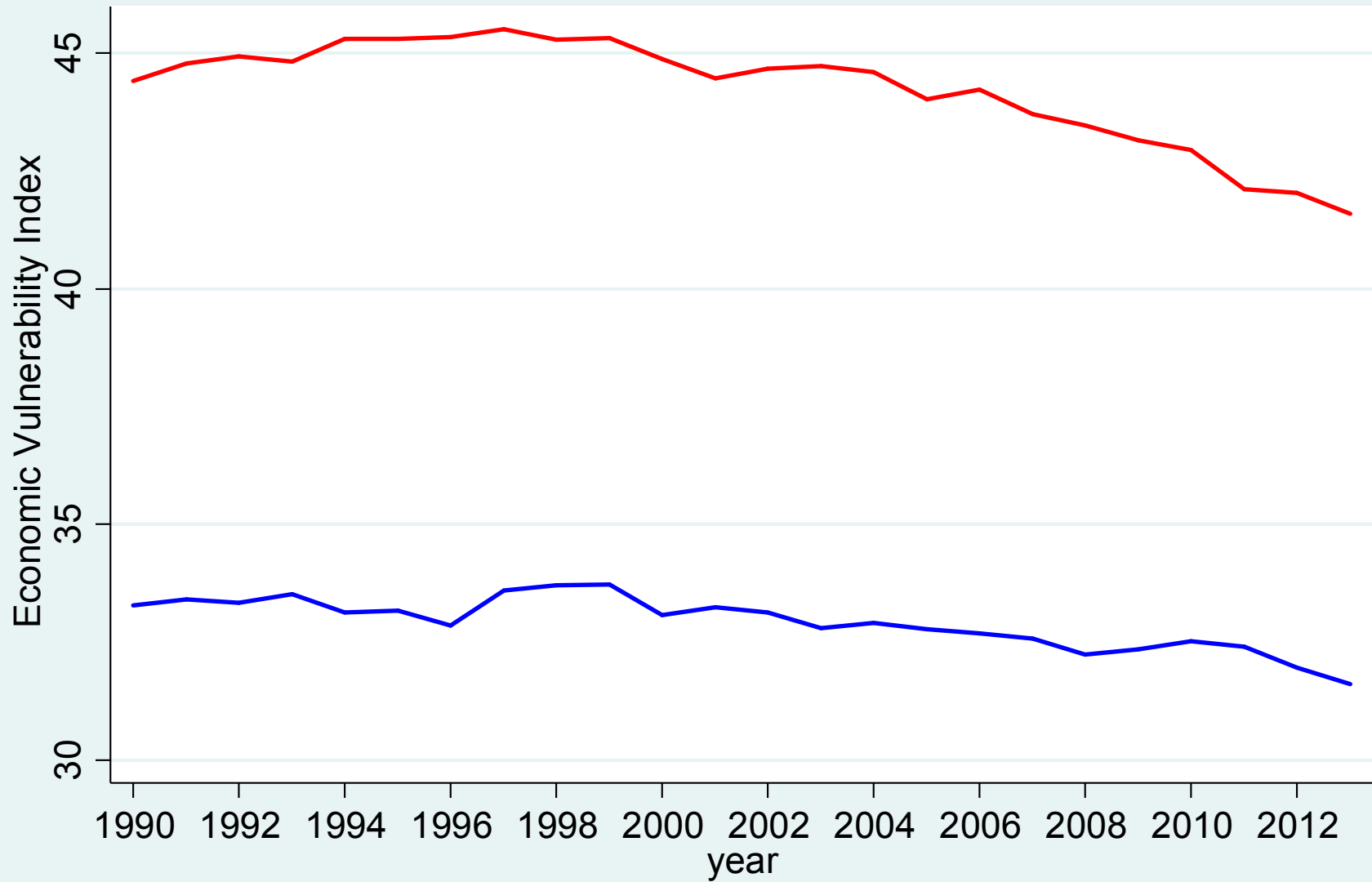
# Myanmar



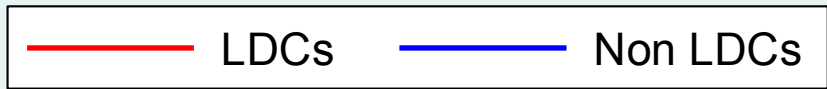
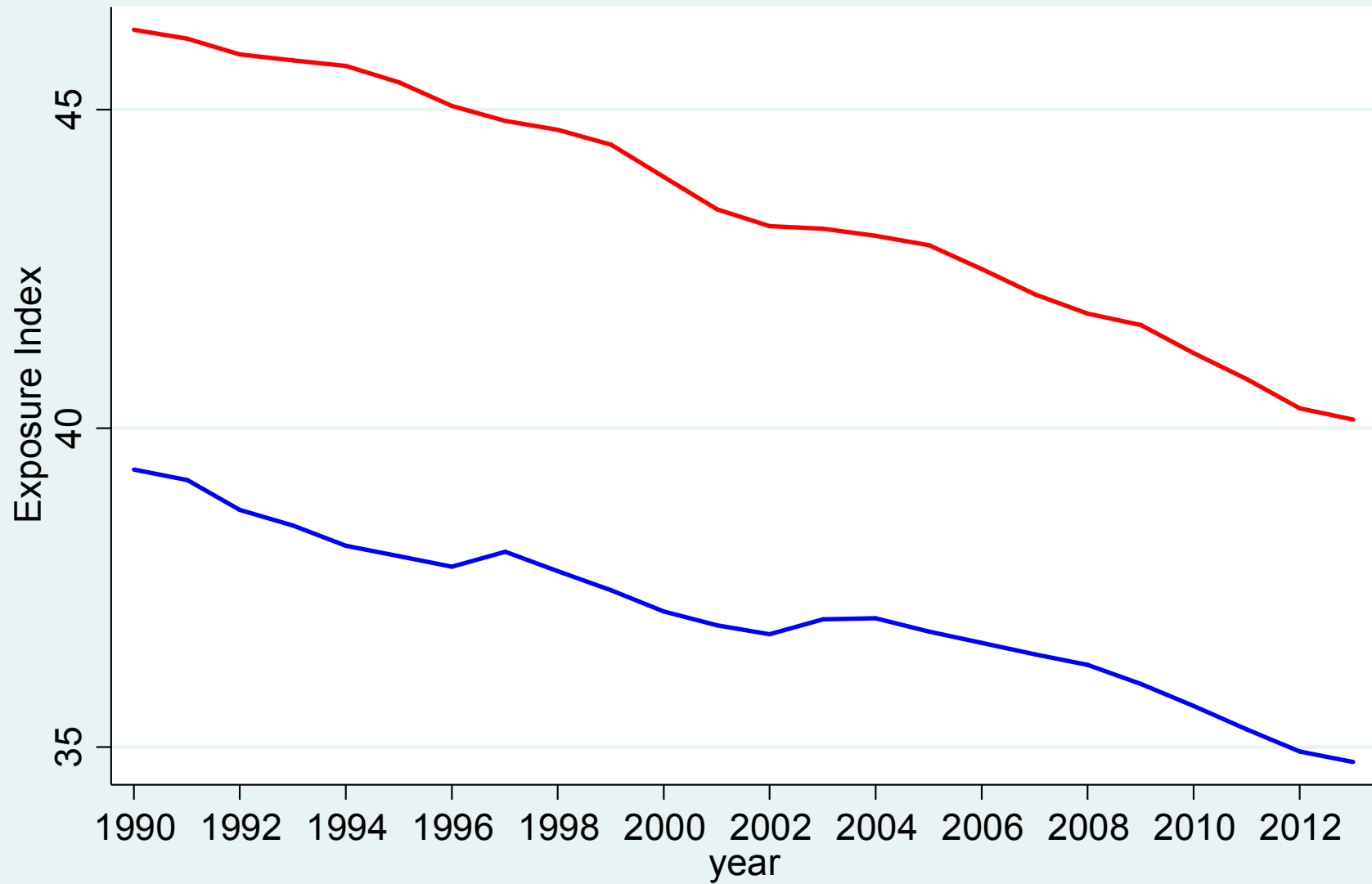


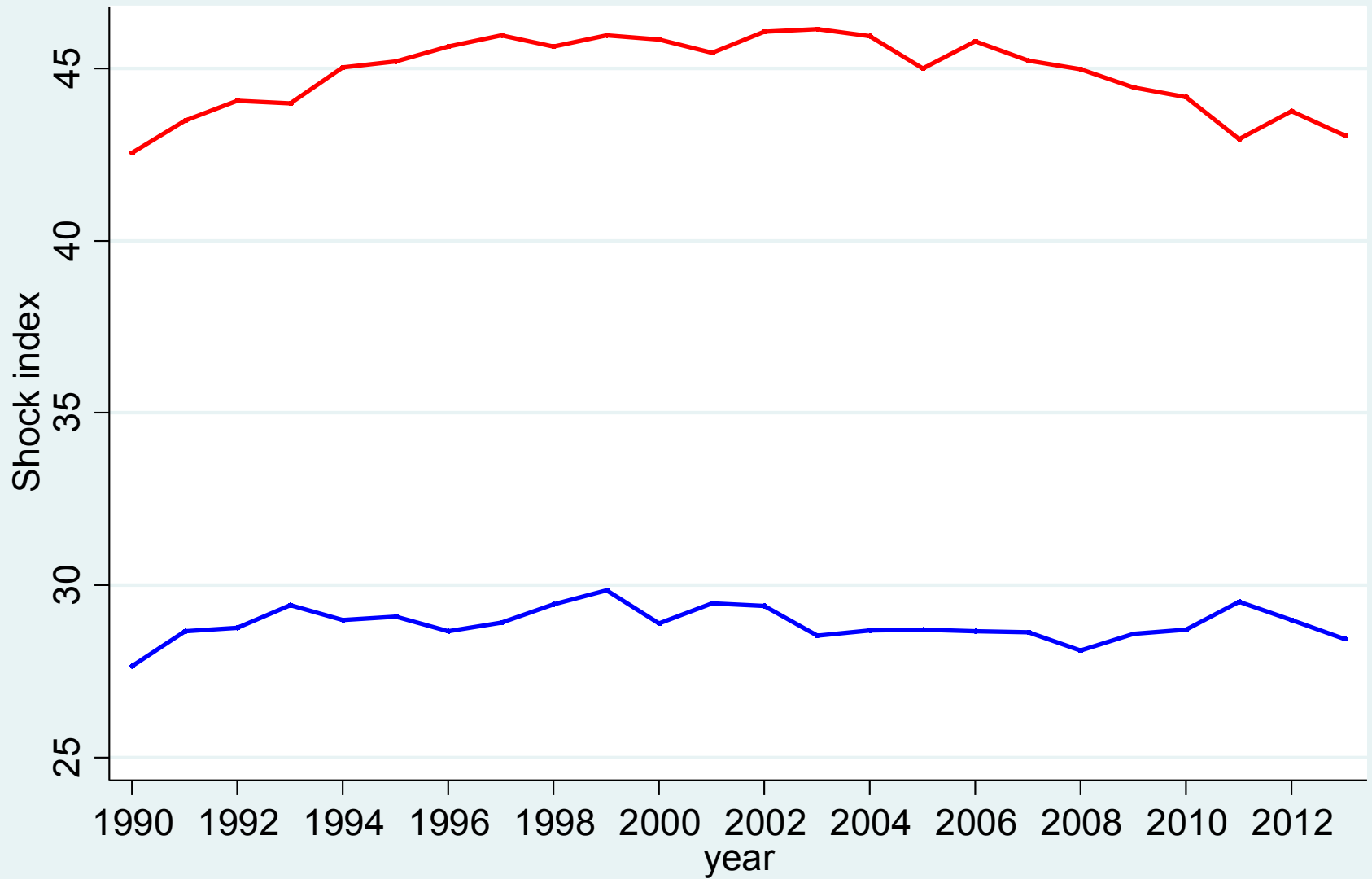
# Vanuatu





LDCs Non LDCs





— LDCs — Non LDCs



## Which prospects according to the present rule of two criteria?

- Little more than from the income only rule of twice the graduation threshold
- Due to the inertia of the *relative position* of the LDCs with respect to the HAI and EVI criteria
- Does not mean that HAI and EVI are not important for graduation: the *progress in their absolute level* is the key of the income growth.... except in case of rapid oil export growth
- And it should be monitored as such (usefulness of retrospective Ferdi indices, HAI and EVI, measured on a continuous basis)
- Need of an integrated approach to the graduation prospects



**V**

**Prospects from revised rules or criteria:  
back to the rationale of the category**



## Recalling the rationale

- The rationale of the category: LDCs, as LICs suffering from structural handicaps to growth, are the countries the most likely to stay poor
- Their « least development » can be expressed in a synthetic measure, the « least likely to develop index », that is an index of a « natural expected income », obtained from a combination of the indices corresponding to the three criteria: the initial income per capita and the indices of structural handicap to growth



## Method

- As used in *CIT*, growth regression on past data:  
$$g(y) = f[\log y_0, \log \text{EVI}, \log(100 - \text{HAI})]$$
- log specification to capture interaction between the two handicaps, as assumed by the identification through complementary criteria (mutual reinforcement of handicaps)
- Projection of a virtual future (« natural ») income from the last levels of the 3 variables (present income and handicaps) and the estimated coefficients (assumed unchanged)
- In *CIT* cross section estimation of the coefficients on 1970-2000, and projection by a recurrent way to 2025
- Rankings obtained consistent with on-going graduations





## New exploratory calculations

- New estimations of the impact of the structural handicaps (and convergence factor) on GDPpc growth, with same specification
- GMM estimations on a panel of five year periods over 1975-2010
- Then simulations of the GNIpc in 2020 and 2030, starting from the level of the criteria variables used at the 2015 review
- (Results close to those of CIT, except for *oil exporters*): besides Samoa, graduated, the 10 countries most likely to graduate include 3 graduating (*Eq Guinea*, Tuvalu and Vanuatu), and also *Angola*, *Timor Leste*, Kiribati, Bhutan, Djibouti, *Sudan*, and Sao Tome & Principe
- Close to the simple extrapolation of the first section



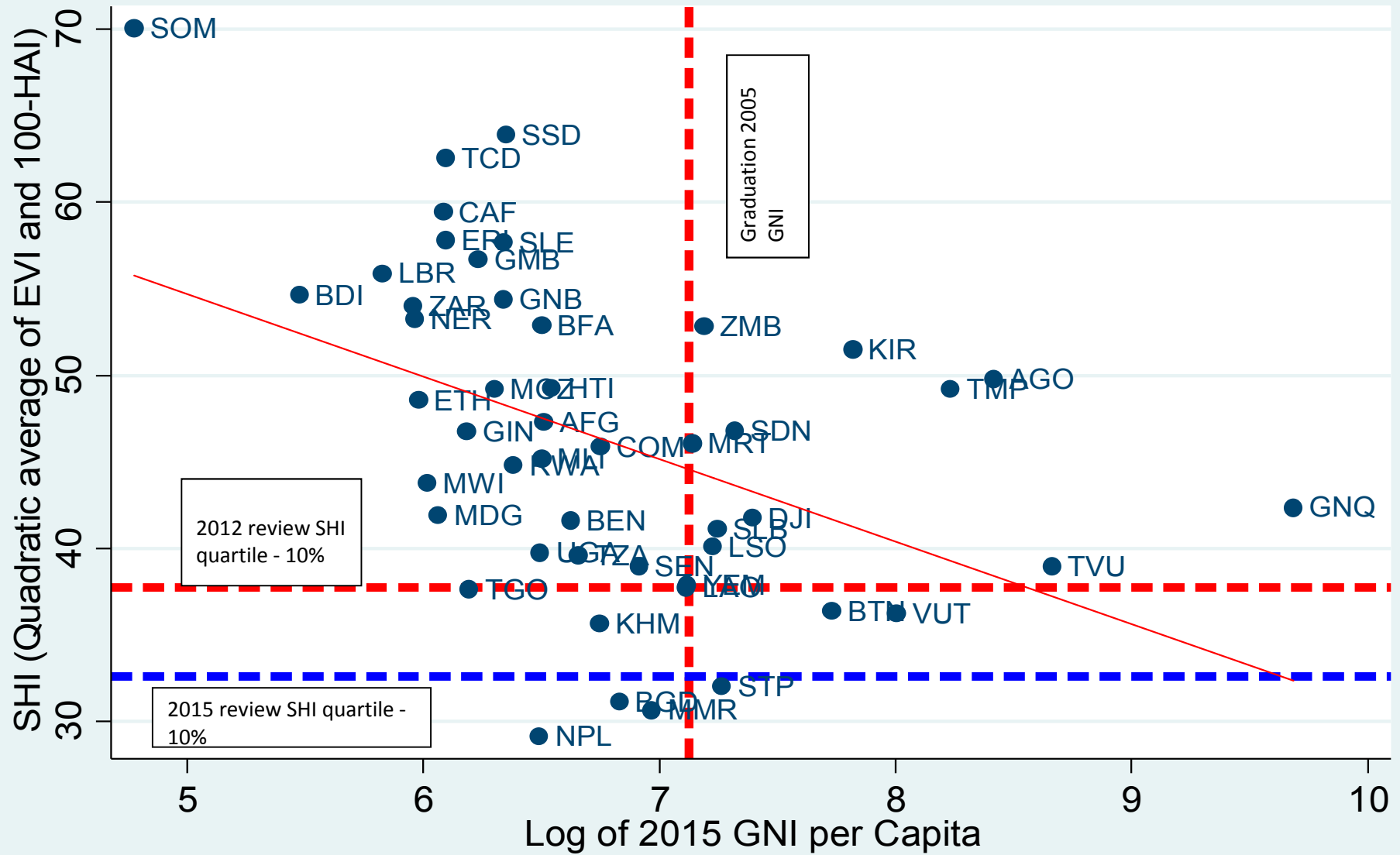
## (Possible refinements)

- Variant with additional control variables for exogeneous factors (oil rent, terms of trade, aid/GDP ratio), leading to a higher impact of vulnerability
- Other simulations prepared assuming an international policy more consistent with IPoA, in particular for ODA
- Possibility to measure the impact of an aid volume closer to the agreed target
- And of a geographical allocation of aid more equitable and efficient, helping to overcome structural handicaps, by using LDC identification criteria as allocation criteria...
- ..as we have often suggested, and has been recently retained in the December GA resolution on smooth transition



## Other options I: relying on a SHI criterion

- Would be a new « two criteria rule »: GNIpc and SHI
- SHI Graduation threshold set up, either by the quartile of a reference group in 2015 or by the level of this quartile in 2012
- Impact on graduation: (using quadr average) among countries meeting the GNIpc graduation criterion, only Sao Tome meets the SHI criterion with the 2015 quartile rule, plus Vanuatu and Bhutan with the 2012 quartile level
- Several presently eligible countries are no longer so: Solomon Islands (for SHI), Nepal (for GNIpc), neither Tuvalu, nor Angola, however eligible with regards to the income-only rule
- Illustrative graph





## Other options (II); revising the measurement of EVI

- Several refinements possible to make EVI a more relevant criterion of structural handicap, and a better index for the monitoring of structural change,
- Taking into account the share of drylands by the same way as low elevated zones
- Other ones well illustrated by the case of Nepal (eligible without enough structural transformation)
- Including other sources of flooding risks than sea level rise
- Considering geographical concentration of export
- Considering other sources of external instability than exports (remittances)
- ...



## Conclusion

- Graduation prospects substantial, but far from the IPoA goal for 2020; no more than 10 countries out of 48
- Uncertain beyond 2020
- Less likely to mainly come from the growth of the GNIpc than it was 3 years ago, due to the change in the design of the graduation thresholds, no longer relative to a current reference group (less inertia of HAI and EVI position with respect to thresholds, depending on the size of reference group)
- Exogenous and unpredictable factors of growth (commodity prices, mineral exports, level and allocation of ODA ...) and uncertain impact of the improvement of domestic policies
- Graduation criteria may be refined to better fit structural transformation and correspond to the structural handicaps to sustainable development