

Implementation of the Globally Harmonised System of Classification and Labeling of Chemicals (GHS) - explaining the implementation gap

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Agenda

- Short introduction to Stockholm Environment Institute
- Background and aim
- Methodology and theoretic framing
- Results
- Conclusions



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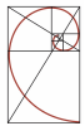
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Background, the GHS

- An international standard with flexible construction ("building block approach") on how to classify, label and inform about risks.
- Aim:
 - Increased chemical safety for all
 - Trade facilitation through harmonisation
- History:
 - Intention expressed already in Agenda 21 (1992).
 - World Summit on Sustainable Development (WSSD, 2002): Decision to implement globally by 2008.
 - GHS developed under ECOSOC Committee of Experts (resolution 1999/65).
 - First revision published in 2003. 7th revision now ready.
- The 2008 deadline has not been met.

Aim of the study

1. Map global GHS implementation
2. Discuss possible explanations for the implementation pattern
3. Identify possible strategies for increased implementation

Methodology and theoretic framing

Data collection for GHS mapping

1. Existing compilations

- UNSCGHS Secretariat list on the web site
- Cefic overview (2014)
- Information made available by companies

2. Internet search

- GHS + country name, chemicals + country name.

3. Interviews and information requests

- Country representatives, UNITAR, Cefic and Industry representatives.

Categories for GHS mapping

- **Full implementation:**
 - GHS implemented in three sectors (workplace, agriculture and consumers),
 - with legislation passed as of April 1st 2017,
 - irrespective of the GHS revision used.
- **Partial implementation:**
 - GHS implemented with legislation passed for at least one of the sectors workplace, agriculture or consumers.
- **No implementation:**
 - No GHS aligned legislation passed, to our knowledge.

Theoretic framing for explaining the implementation pattern

- Theories on why and how countries implement international rules and norms
- **Motivational factors** (*a country's self-interest overlapping with the norm*)
- **Capacity related factors** (*a country's ability to implement the norm*)

Explanatory factors and related indicators

Motivational factors

- Facilitation of trade (*WTO membership, trade open-ness index, membership in regional trade blocs*)
- Occupational health and safety (*ILO conventions*)
- Sound Management of Chemicals (*Chemical conventions and SAICM*)
- International collaboration (*KOF index of political globalization*)

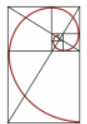
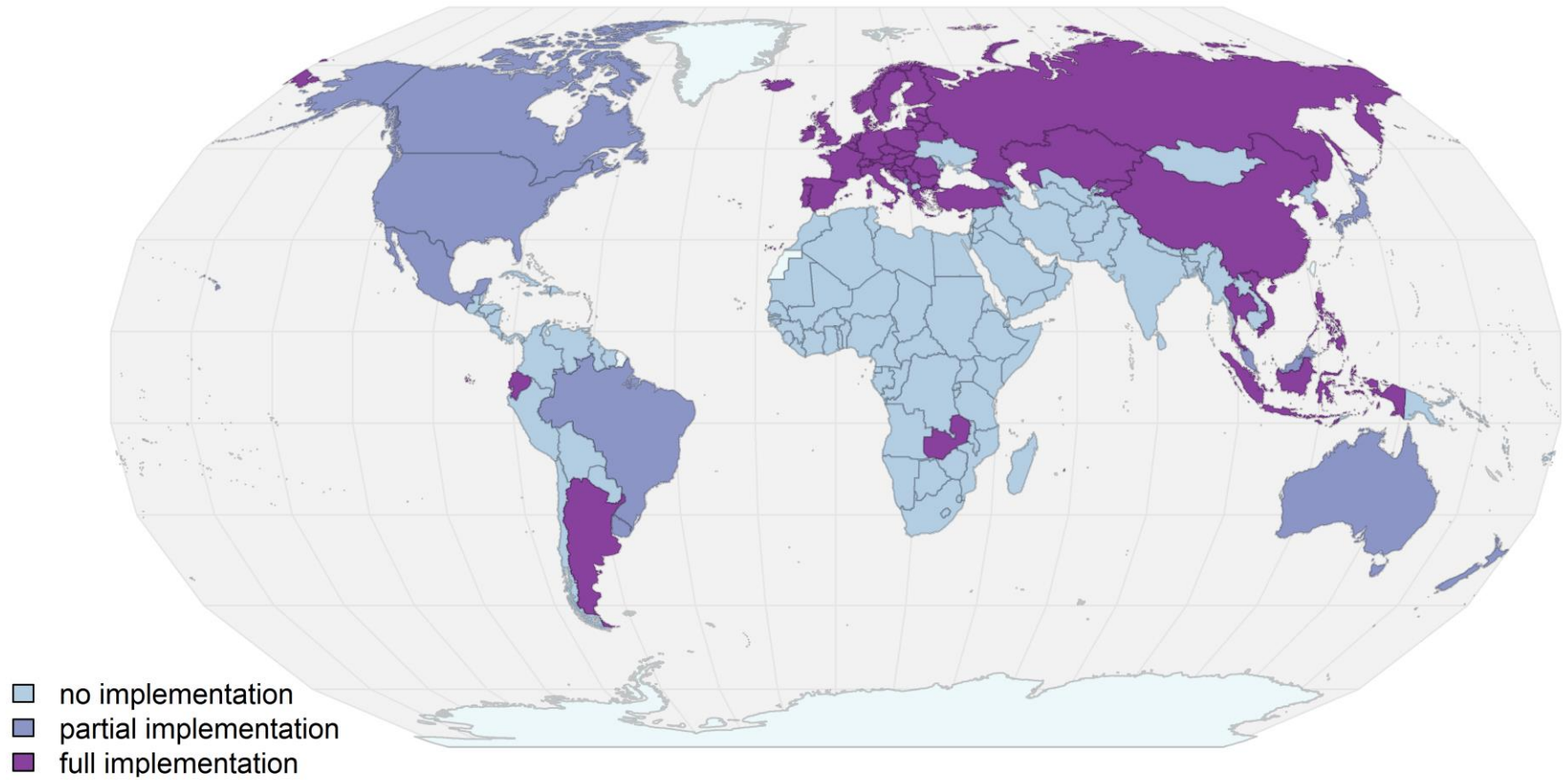
Capacity related factors

- Human capacity (*Human Development Index*)
- Financial capacity (*Total GDP and GDP per capita*)
- Regulatory capacity (*No indicator*)

Results, GHS mapping

- Full implementation: 53 countries
 - Partial implementation: 12 countries
 - No implementation: 128 countries
-
- 34% of the UN member countries have implemented the GHS as of 1 April 2017.

GHS implementation



Exploring the explanatory factors

Motivational factor: Facilitation of trade

Indicator: WTO membership

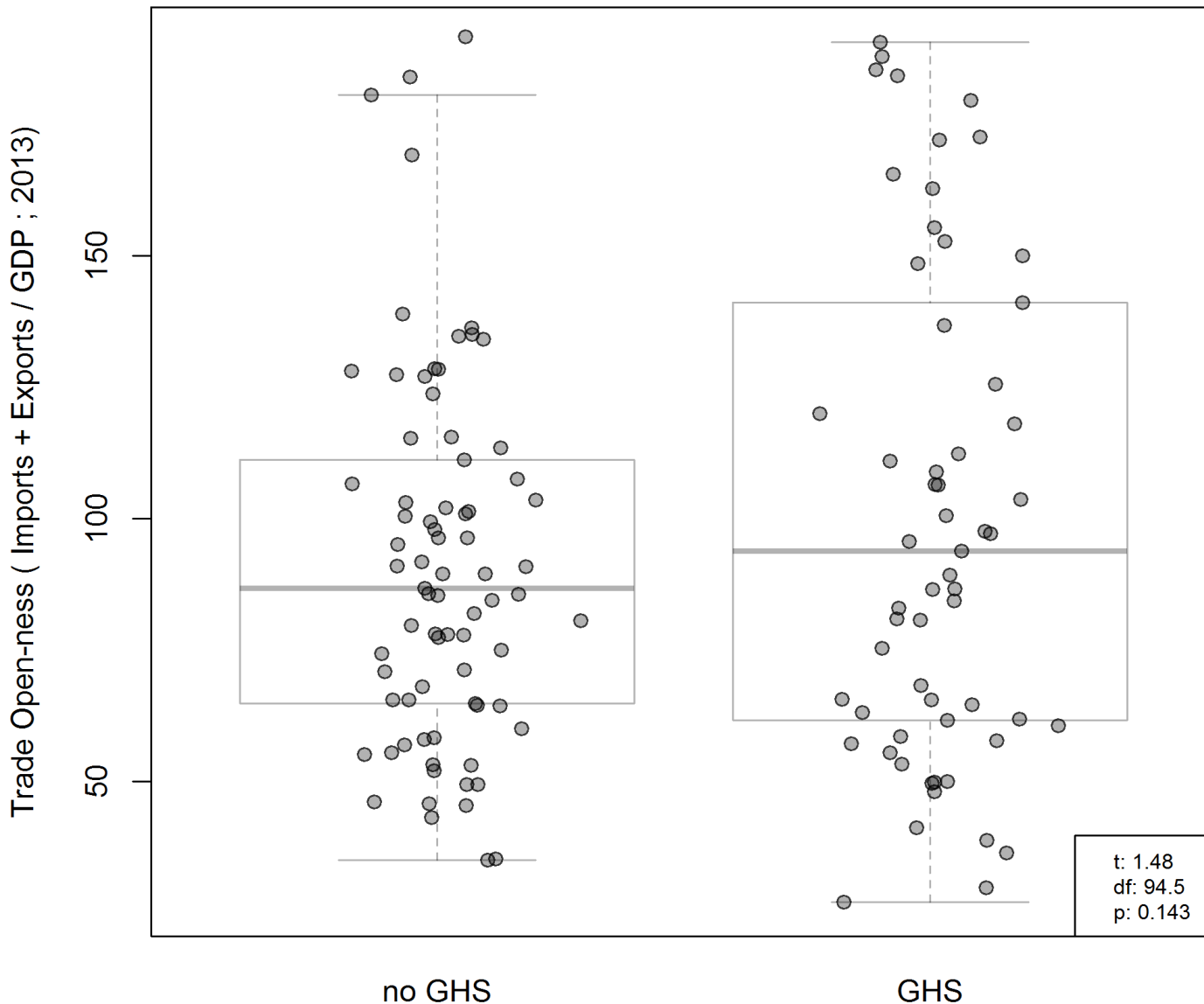
Results:

- GHS has been implemented in 38% of the WTO member states and in 15% of the non WTO members.
- Only 5 countries that are not WTO members have implemented the GHS (of these 3 are in accession to the WTO).

Conclusion:

- **WTO membership** is more common among GHS implementing countries, but still not strong as explanatory factor since 62% of WTO members did not yet implement GHS.

Trade open-ness index (imports+exports as share of GDP)
(UNCTAD data for 2013)



Motivational factor:

Facilitation of trade

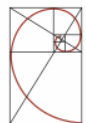
Indicator:

Trade open-ness index

Conclusion:

Differences in **Trade open-ness** index is not explaining the GHS impl. pattern.

Motivational factor: Reduction of trade barriers Indicator: Membership in a regional trade bloc	Joint GHS legislation passed	Intention to implement GHS jointly expressed	Similar approach taken, or work undergoing to harmonize
	<ul style="list-style-type: none"> • European Union (EU) (2009) • Eurasian Economic Union (EAEU) (2017) 	<ul style="list-style-type: none"> • South African Development Community (SADC) • Mercosur • Commonwealth of Independent States (CIS) 	<ul style="list-style-type: none"> • North American Free Trade Agreement (Nafta) • Asia-Pacific Economic Cooperation (APEC) • Organisation for Economic Co-operation and Development (OECD)



Motivational factor: Facilitation of trade

Indicator: Membership in a regional trade bloc

Conclusion:

- Membership in a **regional trade bloc** can be a strong motivational factor:
 - Political aspiration to join a community (e.g. for EU candidate countries, and OECD candidate countries)
 - Joint push for GHS among current member states.

Motivational factor:

Commitment to occupational health and safety

Indicator:

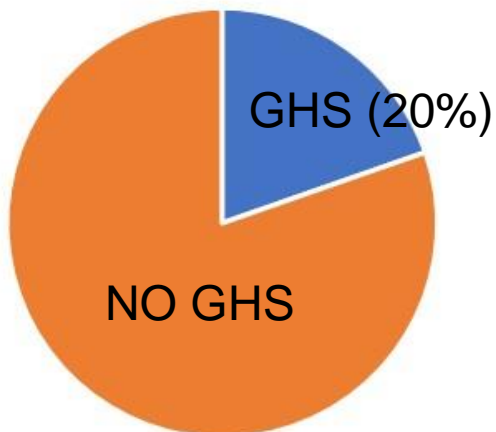
Ratification of chemicals related ILO conventions

- ILO convention 155 on Occupational health and safety (1981)
- ILO convention 170 on Chemicals (1990)
- ILO convention 174 on the Prevention of major industrial accidents (1993)

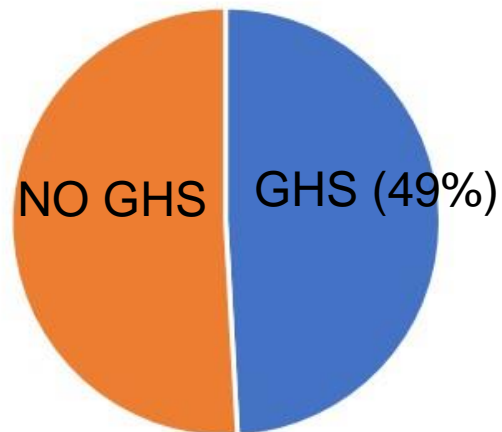
Result:

- Most countries did not ratify any of the 3 conventions
- Only 5 countries ratified all 3 conventions
- Strong correlation with GHS implementation

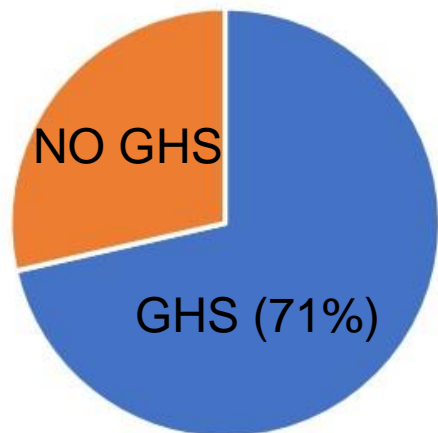
ILO conventions ratified=0



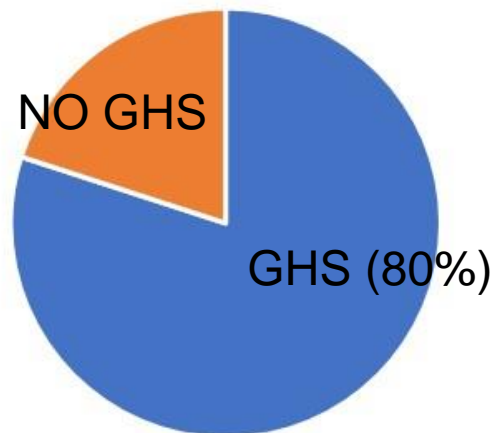
ILO conventions ratified=1



ILO conventions ratified =2



ILO conventions ratified=3



Motivational factor: Commitment to sound chemicals management (SMC)

Indicator: Ratification of Rotterdam, Stockholm and Basel + SAICM focal point nominated

- A high general support for SMC with 147 countries ratifying all 3 conventions and nominating a national SAICM focal point.
- No significant difference in GHS implementation among countries with different ratification score

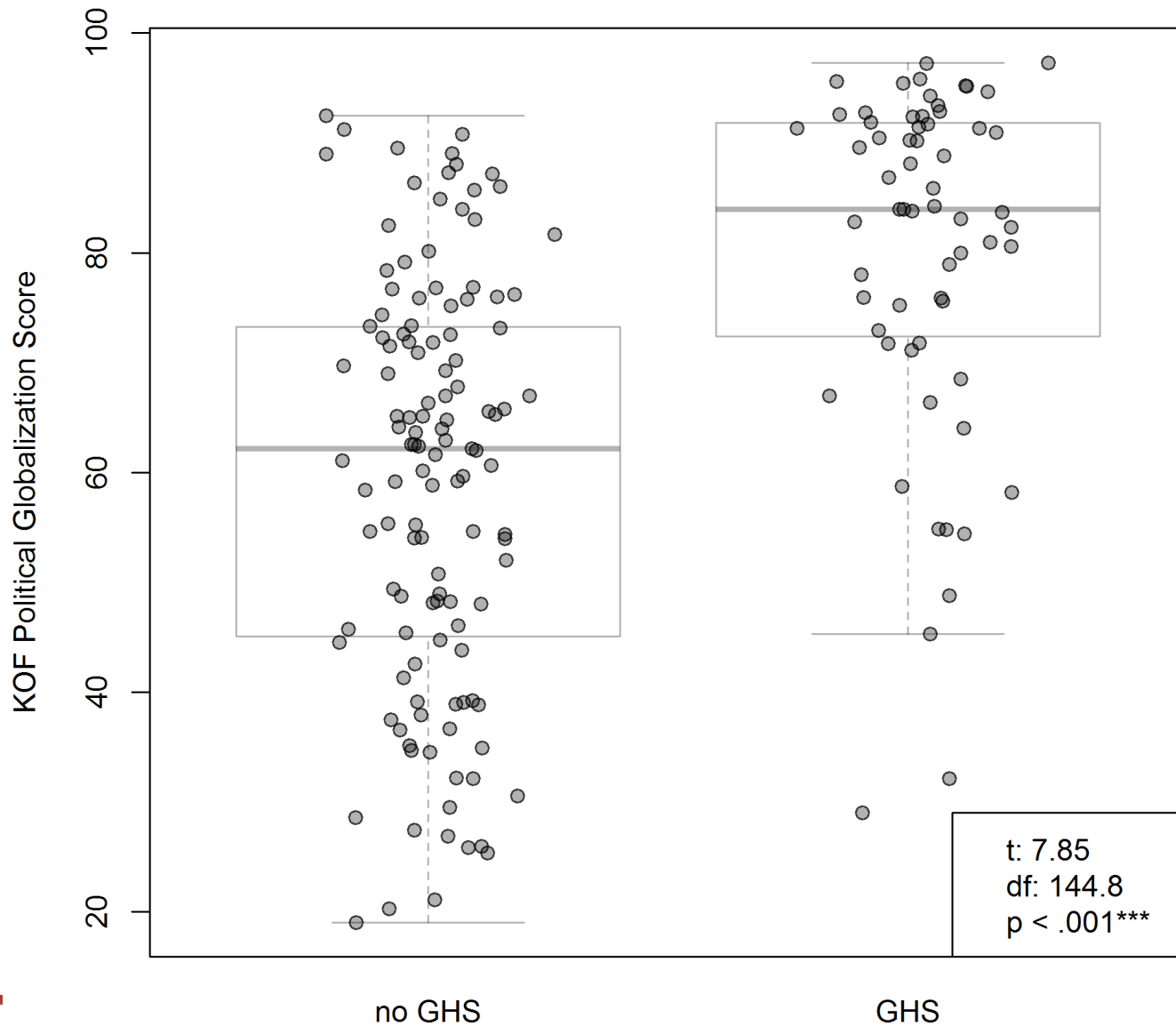
Conclusion: Low commitment to SMC does not seem to be a major factor behind non-implementation of GHS.

Motivational factor: Commitment to International Collaboration

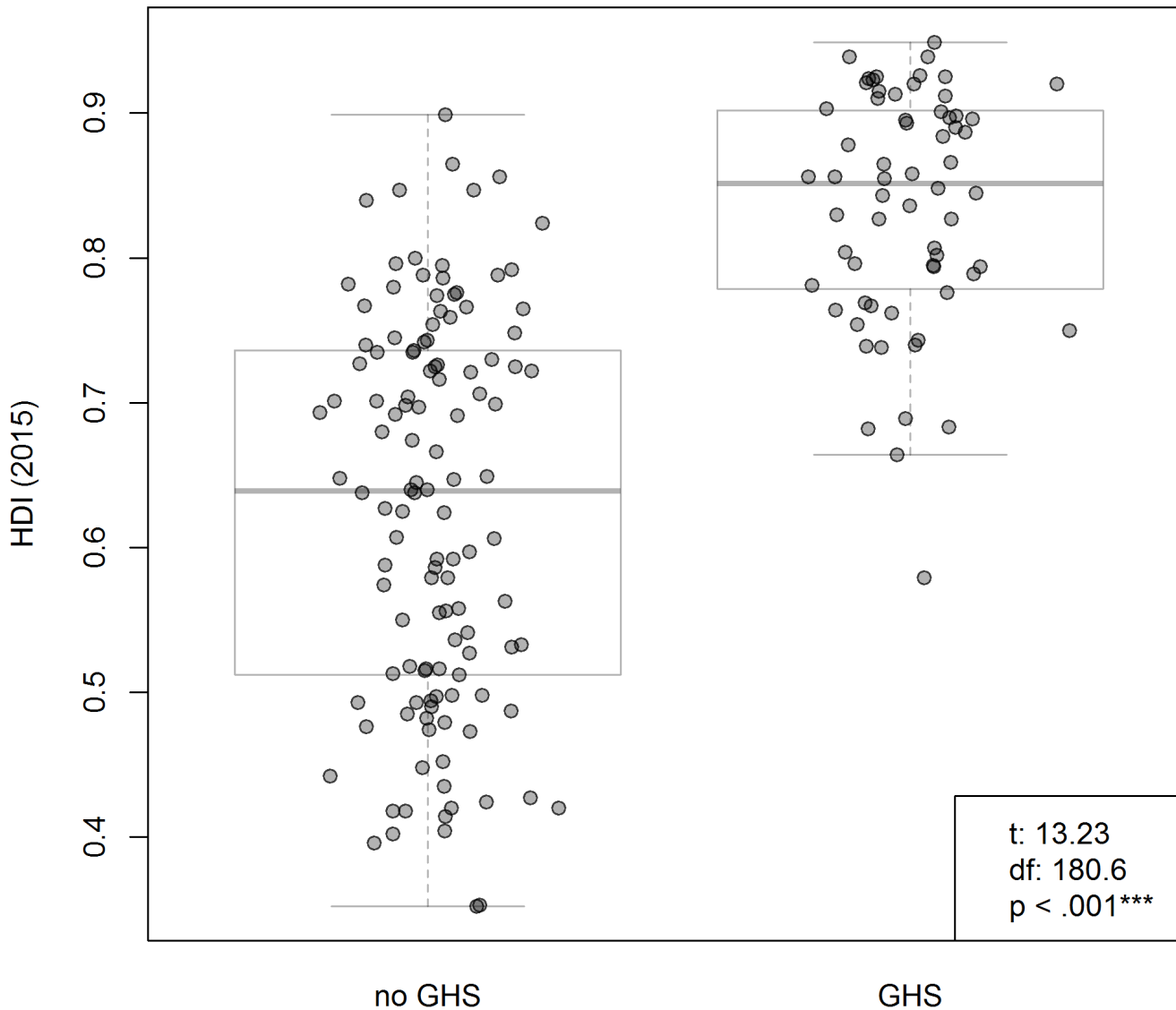
Indicator: KOF index of political globalization

Conclusion: Commitment to international collaboration in general (measured as the KOF index of political globalization) correlates well with GHS implementation.

KOF index of political globalization (ETH, Zurich)
(Number of embassies in the country, membership in international organisations, participation in UN Security council missions and in international treaties.)



Indicator:
KOF index of
political
globalization



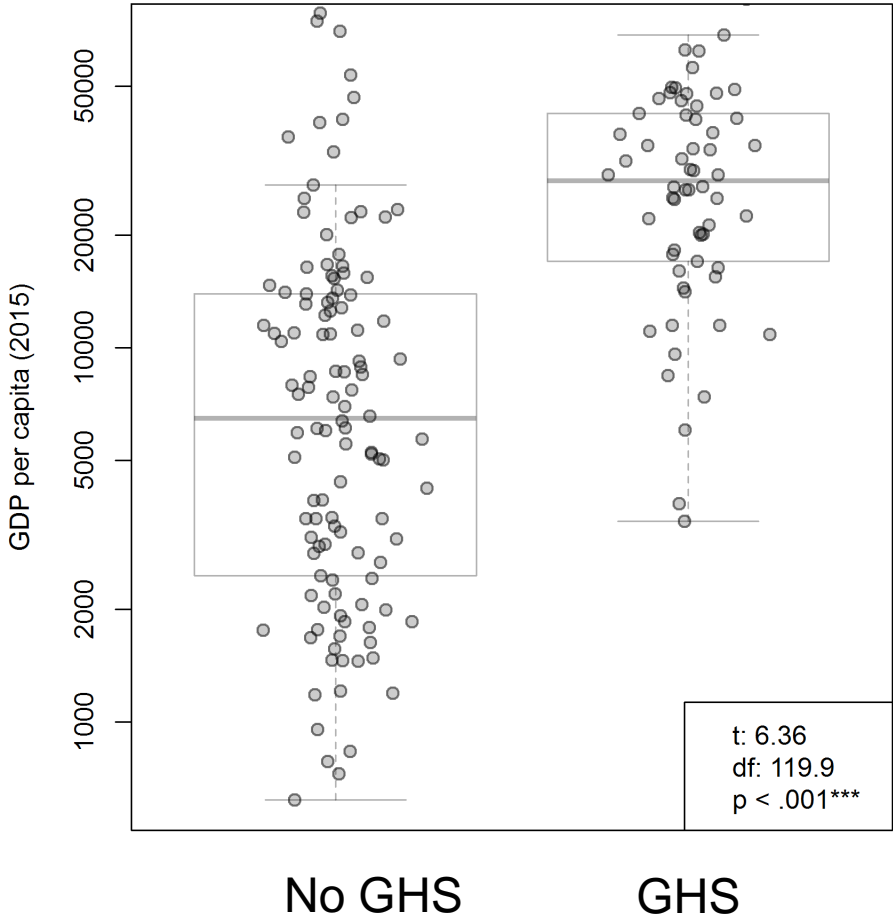
**Capacity
related factor:**
Human capacity

Indicator:
Human
Development
Index (UNDP,
2015)

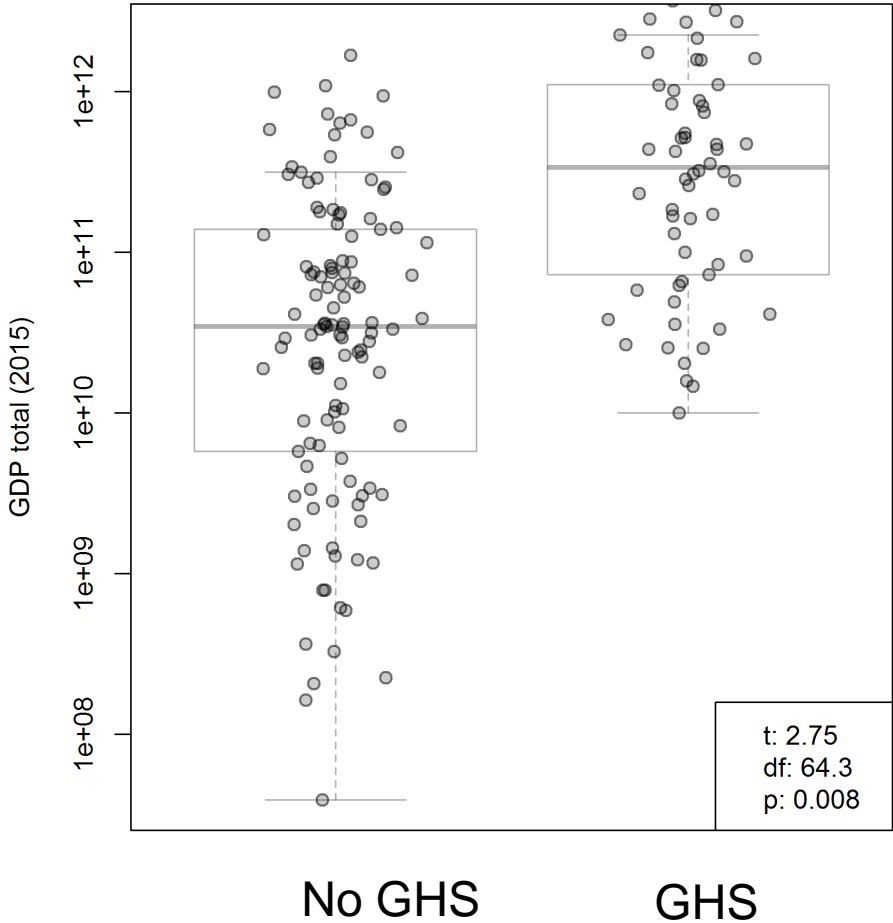
Capacity related factor: Financial capacity

Indicators: GDP per capita and total GDP

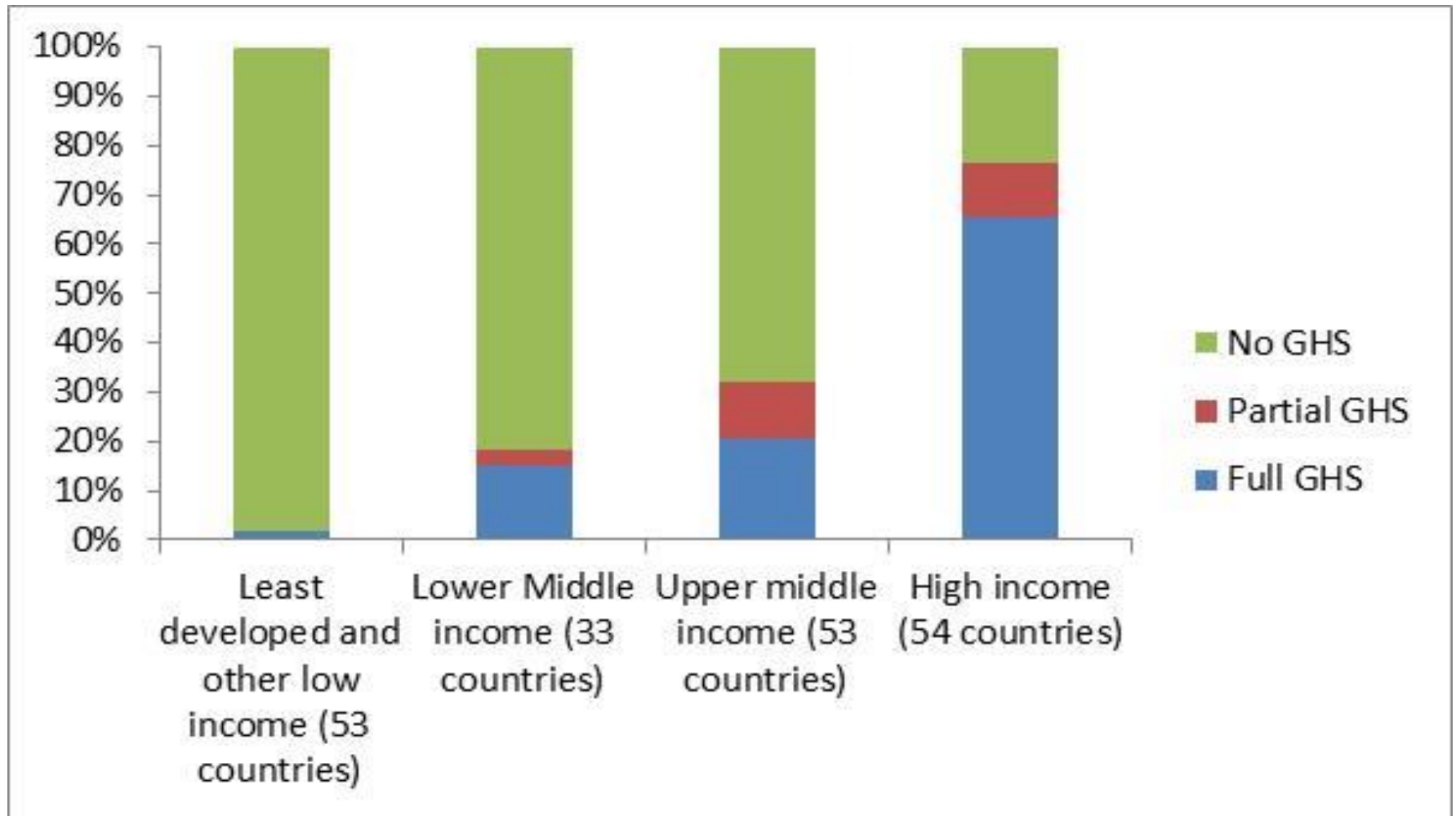
GDP per capita (2015)



Total GDP (2015)



GHS implementation by income category



Capacity related factors: Regulatory capacity (*no indicator*)

- Regulatory capacity = ability to translate GHS into national legislation.
- Low-income countries that have implemented GHS:
 - Several of them have had a long-term collaboration with a donor country including regulatory capacity building.
 - Interviews have suggested that this collaboration has been significant for the GHS implementation.

Summary of conclusions

Motivational factors

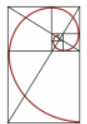
- GHS implementation of trading partners can be a strong motivational factor.
- A history of commitment to occupational health and safety agenda correlates to GHS implementation.
- A commitment to international collaboration in general can also motivate GHS implementation.
- Trade dependency, WTO membership and commitment to SMC did not appear to be important motivational factors.

Capacity related factors

- Lower human and financial capacity correlates clearly to non-implementation of GHS.
- However, some low-income countries have implemented GHS. Long-term donor engagement and capacity building seems to have been important in some of these cases.

Possible strategies for improved implementation coverage of GHS

- For low-income countries:
 - More focus on long-term engagement in capacity building
 - More support to regional collaboration and implementation
 - An in-depth study of which capacity building components that were crucial for low-income countries with GHS would help guide further efforts.
- Setting in place of a system for monitoring global progress on GHS implementation could be considered.
 - Would serve the purpose of enabling continuous analysis of the global GHS coverage and allow stakeholders to identify reinforced strategies for increased implementation



Thank you for your attention!

Any questions or other feedback is warmly welcome:

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Extra slides

Table: WTO membership and the GHS implementation

	WTO members	Non WTO members
Countries implementing GHS (fully or partially)	60	5
Countries not implementing GHS	99	29
Total number of countries	159	34
Share of countries implementing GHS	38%	15%
Share of countries not implementing GHS	62%	85%

Motivational factor: Commitment to sound chemicals management (SMC)

Indicator: Ratification of Rotterdam, Stockholm and Basel + SAICM focal point nominated (1 point for each)

	Total number of countries	Share implementing GHS
Score 4	147	37%
Score 3	30	30%
Score 2	8	0%
Score 1	5	40%
Score 0	3	0%
All countries	193	34%

Explanatory factors: Conclusions

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