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Nordic values, culture, and development of academic skills according to international large scale-assessment (ILSA)

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# AIM

- To describe and analyze the relationship between ILSA-results, National values/culture and Socioeconomics
- The approach is ***Causal analysis***
- Methodology is ***Comparison on national level.***

Discussion: 1) ILSA methods have had impact on Nordic Policymaking; developed in a non-Nordic setting.  
2) Relevance for measurement of the quality of Nordic education systems.

# Research Questions

What are the ***Causal relations*** between :

1. National Culture/Values and Economics?
  2. National academic performance (PISA) and Economics?
  3. National Culture/Values and academic performance (PISA)?
- Three clusters of countries: ***Nordic, Confucian*** and ***English speaking***.
  - The common perception vs. evidence.

# Definitions of concepts

- **Values** discovered thru surveys (representative, empirical)
- **Culture** collective values and believes in a country
- **Evidence** consist of three components
  1. Hypothesis, a convincing theoretical explanation/mechanism
  2. Statistical correlation
  3. Analysis of competing explanations.
- **Test, Measurement, Learning** - Psychometric approach

# Approach

***Causal analysis*** → two step process:

1. Data → Information (Objective)
2. Hypothesis → Interpretation (Subjective)

# Values and Culture

World Value Surveys (an Cross-cultural value study)

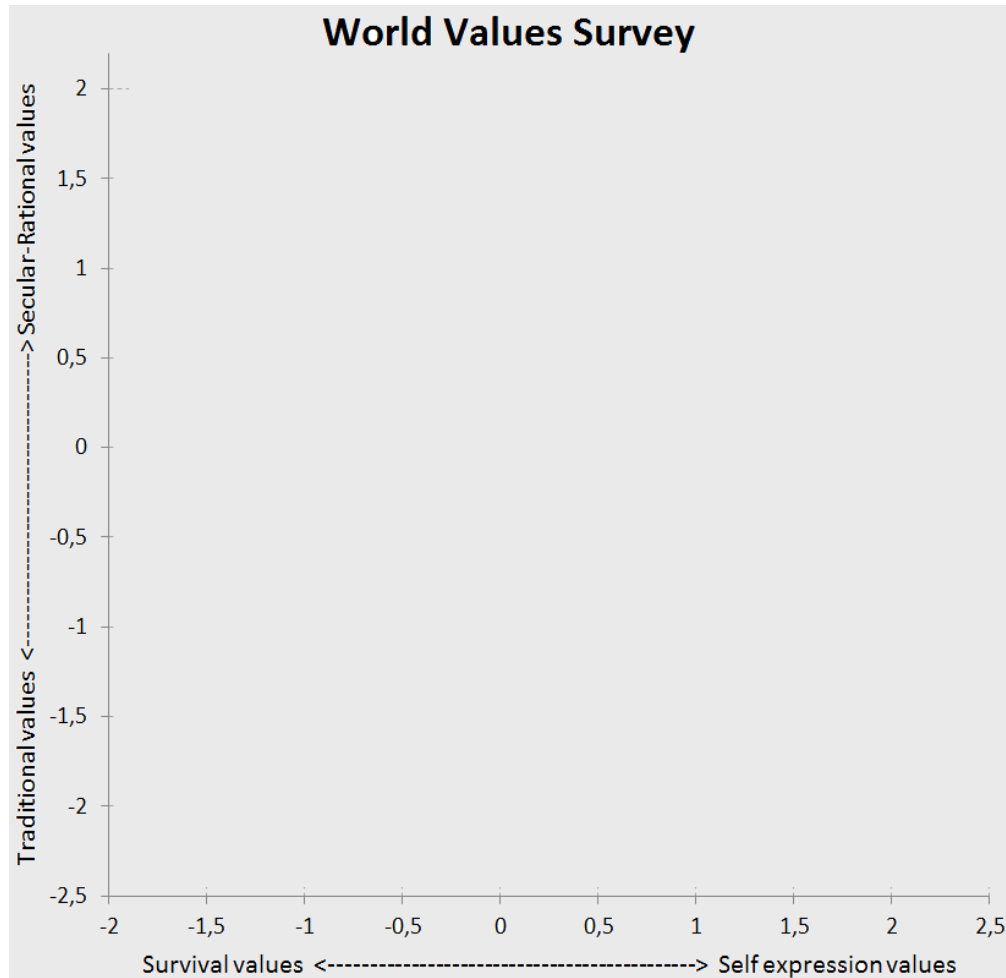
*(Ron Inglehart 1997)*

Surveys:

- 300-400 questions
- 30-70 countries
- +1.000 persons per country
- New survey every five years

Factor analysis → 2 scales, explain 70% variation

# Ingleharts 2 scales



Vertical: Traditional → Secular-rational values

Horizontal: Survival → Self-expression values

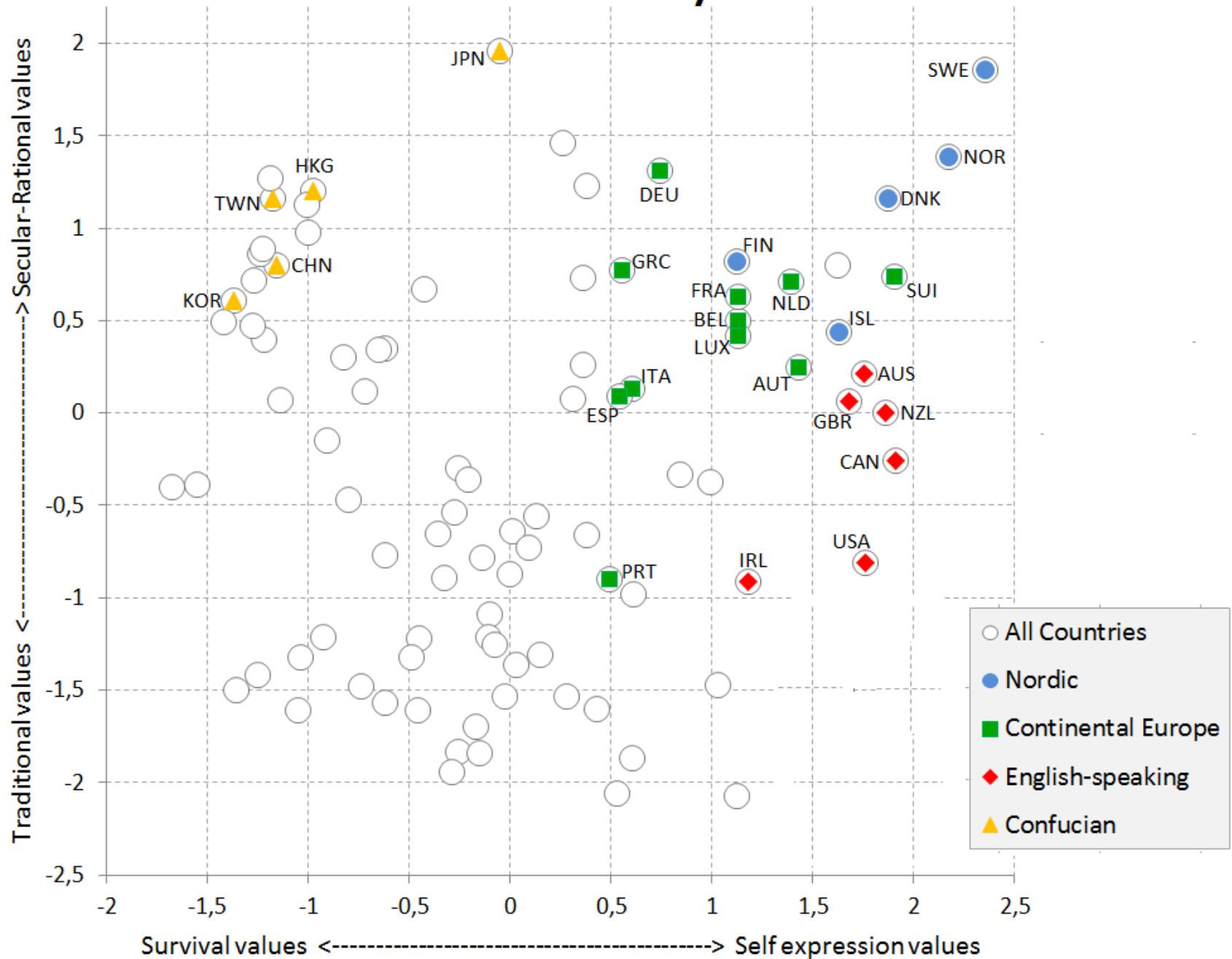
# Example : What should children learn?

Which qualities, if any, do you consider to be especially important that children are encouraged to learn at home (max 5)

	Denmark	US	Korea
INDEPENDENCE	81%	61%	77%
HARD WORK	<b><u>2%</u></b>	61%	<b><u>72%</u></b>
FEELING OF RESPONSIBILITY	81%	72%	92%
IMAGINATION	37%	30%	33%
TOLERANCE & RESPECT FOR OTHER PEOPLE	87%	79%	65%
THRIFT SAVING MONEY AND THINGS	10%	23%	68%
DETERMINATION & PERSEVERANCE	32%	45%	42%
RELIGIOUS FAITH	8%	52%	21%
UNSELFISHNESS	<b><u>56%</u></b>	39%	<b><u>15%</u></b>
OBEDIENCE	<b><u>14%</u></b>	<b><u>32%</u></b>	13%

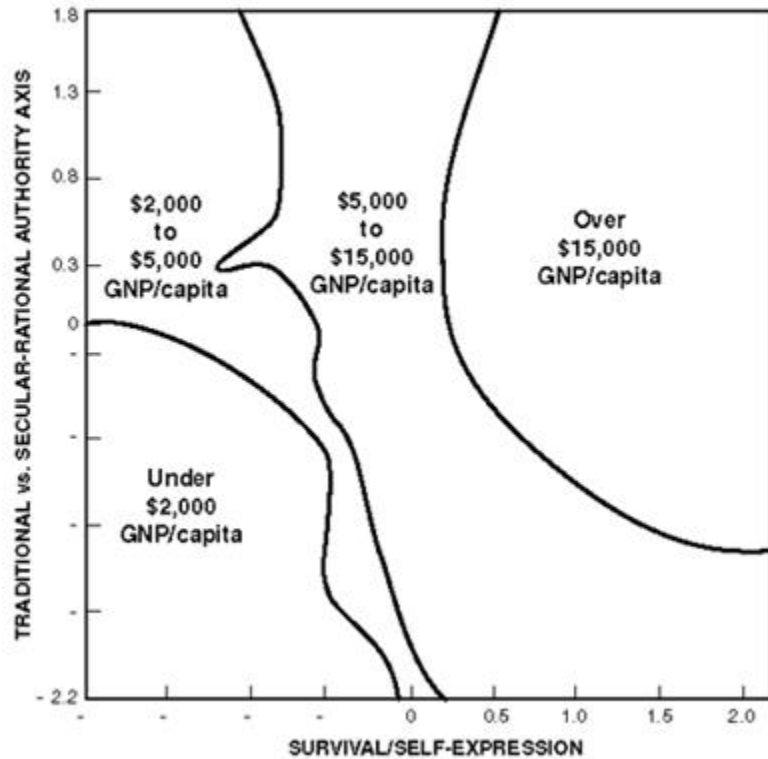


# World Values Survey

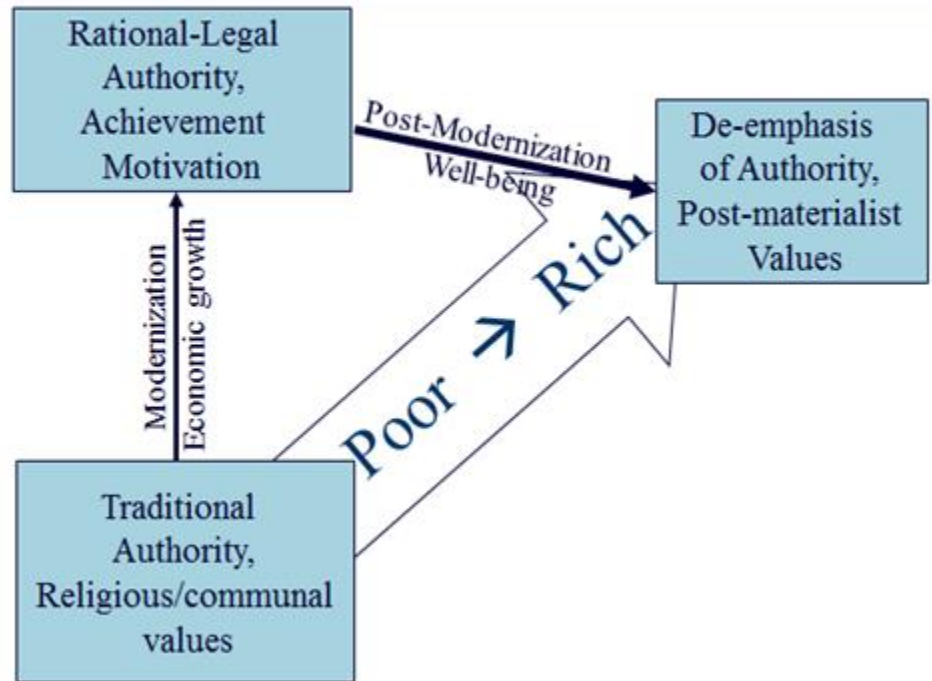


Source: Inglehart 1997 & Data from <http://www.worldvaluessurvey.org> (the latest data, wave 4 or 5)

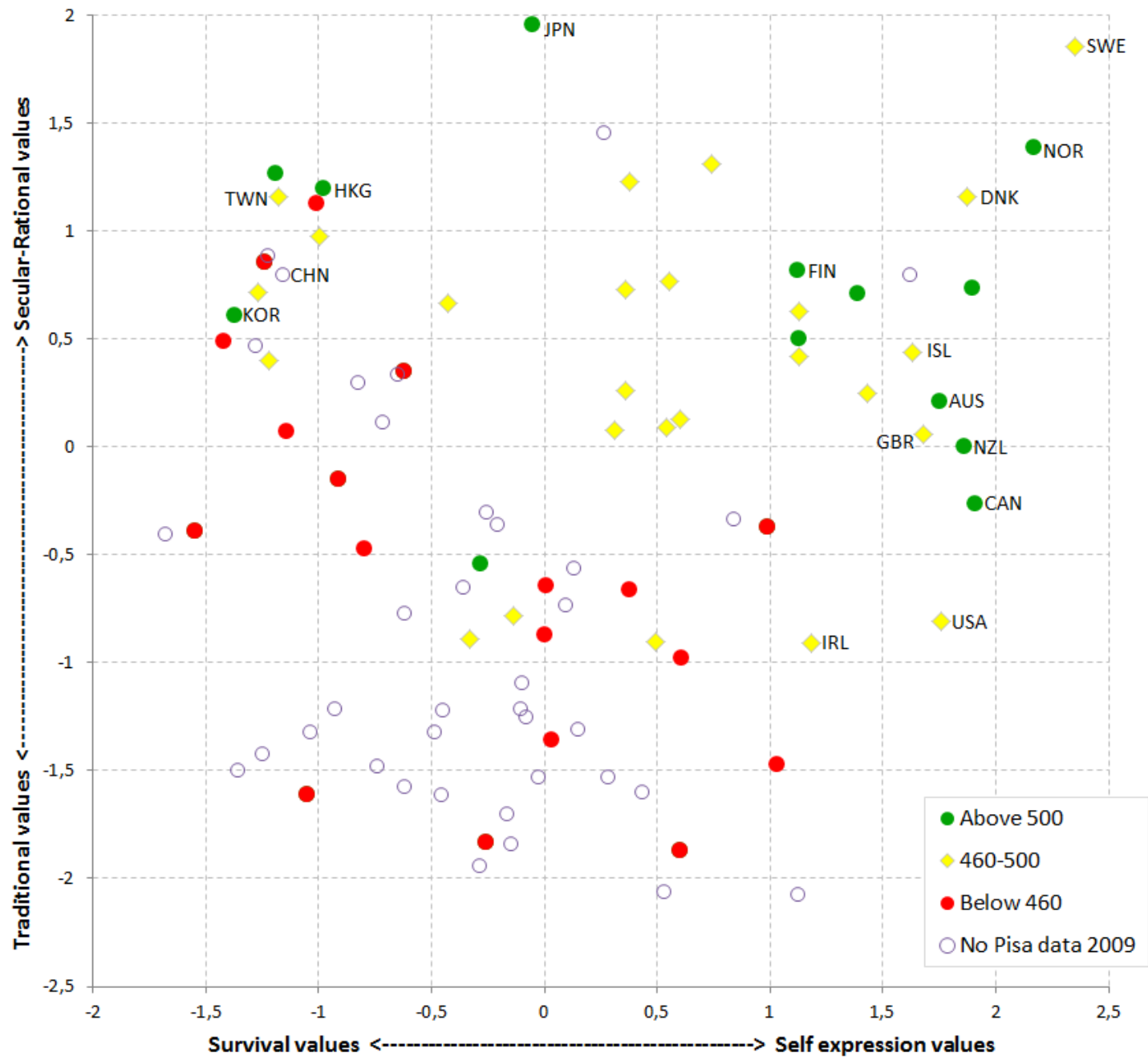
# Economy & Culture



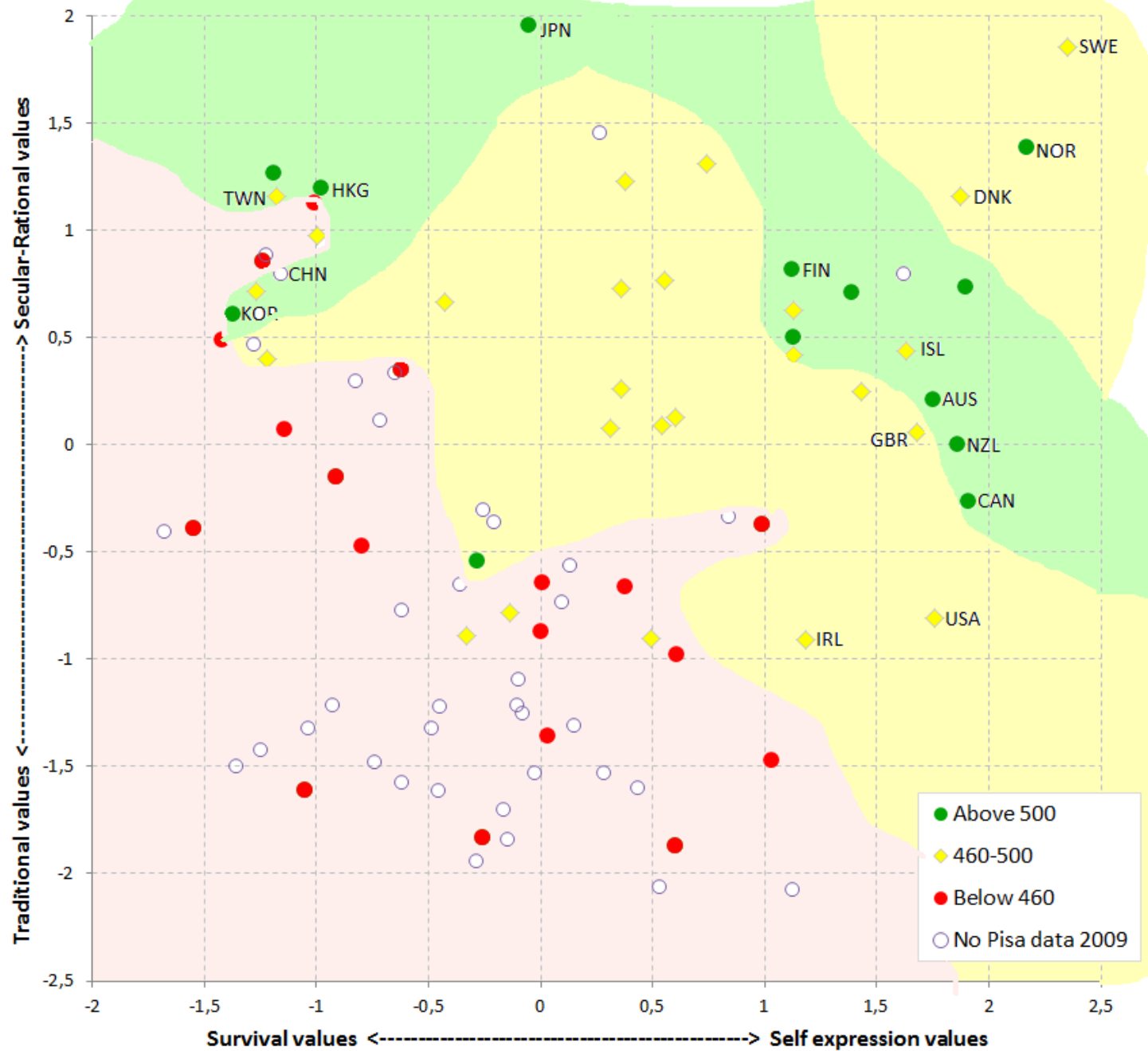
Cultural Shifts  $\leftrightarrow$  Socioeconomic development



# PISA-scores in 2009 (reading)



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# Students' values

- challenges of the teachers

<b>Secular-rational</b>	<b>Confucian</b> hard work, thrift imagination,	<b>Nordic</b> imagination, tolerance Independence
<b>Tradi-tional</b>		<b>Anglo-American</b> Obedience, determination, perseverance
	<b>Survival</b>	<b>Self-expression</b>

# Research Questions: *Answers*

What are the *Causal relations* between:

1. Culture/Values and Economics?

- Strong, long term: Economy → Values

2. Academic performance (PISA) and Economics?

- No causal structure (but correlation)

3. Culture/Values and academic performance PISA?

- Strong, non-linear: Values → Performance