Unobtrusive psychological profiling for risk analysis

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06.06.2018

Main objectives

- Capture motivational profile of individuals
- By relying only on publicly available information
- Detection of selection bias:
  - Sources of bias:
    - Personal motivation: position with high power, prestige and money.
    - Requirements of the role: material and concrete goals, and requires one to lead, convince or manipulate others in order to achieve desired organizational and financial goals

- Use the results for development of CIRA

Focus on CEOs

- Availabilty (public representatives of organizations)

- High-impact decision makers (safety and security of organizations and information systems spanning across the entire range of the corporate hierarchy)

- Related to Principal-agent problem (the agent's and the principal's desires and goals are in conflict, and it is difficult or expensive for the principal to verify what the agent is actually doing i.e. it is difficult to verify that the agent's behavior is appropriate). Board's vs CEO's goals.

Research questions

1. Is it feasible to derive motivational characteristics of CEOs using unobtrusive measures?

2. Is there a significant difference between the basic human value structure of CEOs in comparison to the general population?

3. Is there any significant difference between the value profiles of CEOs associated with moral hazard and the profiles who have no association with it?

Method
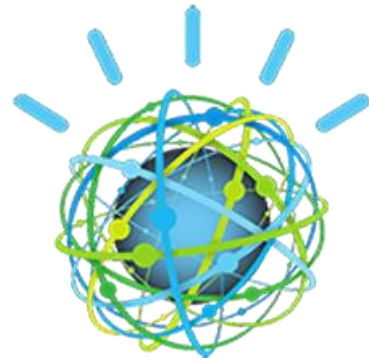
Data collection 1. - interviews:
- aim for spontaneous and reflective content (to avoid prepared talks)
- 20-30 minutes of talk/subject
- keep utterances only from subject

Data collection 2. - profiles:
- Submit at least 3000 words/subject
- 5 basic human values derived
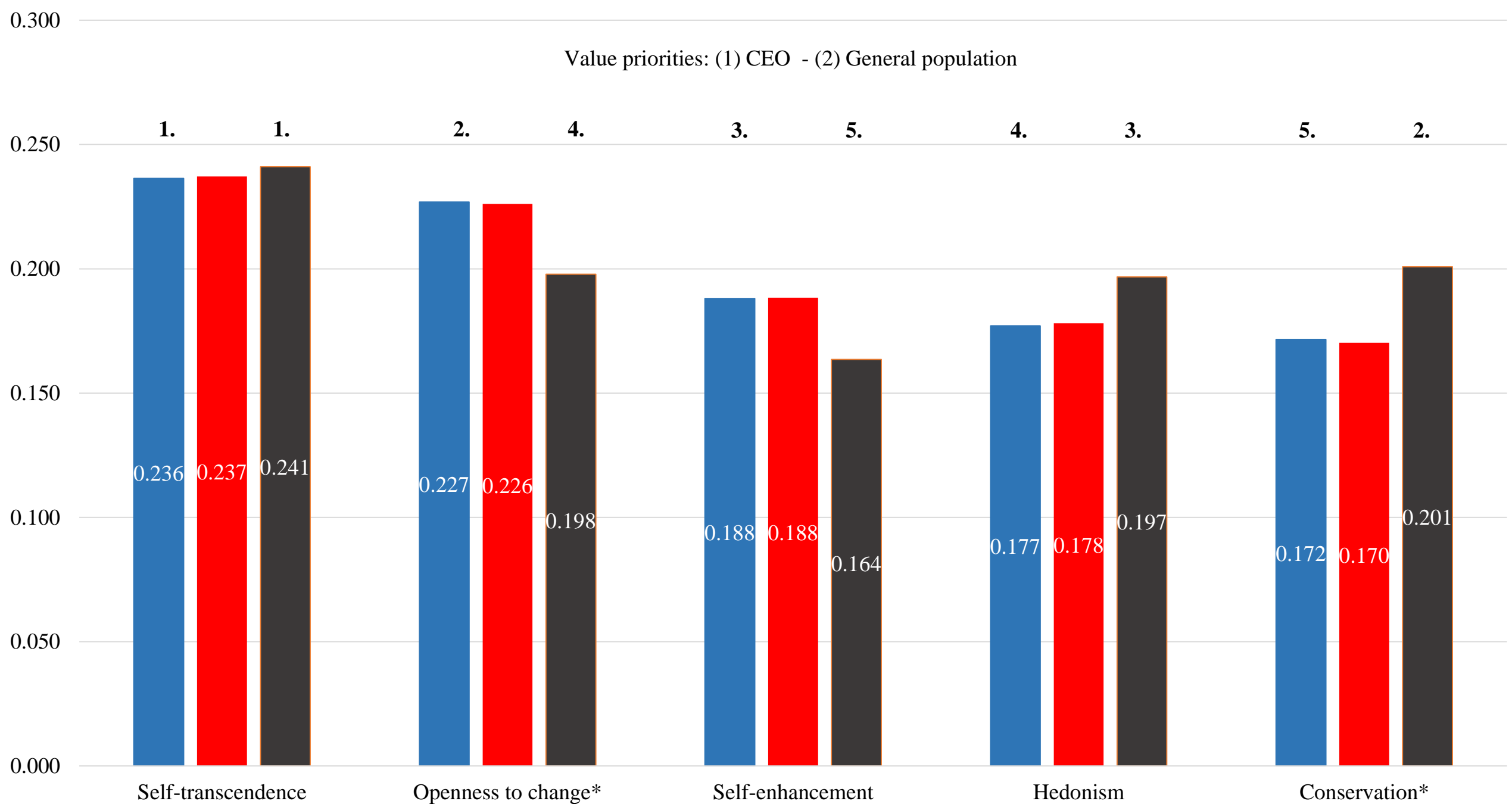- percentiles vs raw scores

Analysis:
Searching for a selection bias

N_{total}= 116 CEOs

Results

1. Comparison with Watson Personality Insights Samples (based on percentile scores)

2. Comparison with Cross-National Representative Samples (raw scores adjusted to match the scoring used in publication used as reference)

3. Further classification of CEOs into two groups (by calculating the relative importance of values):

   - Existing evidence of misconduct (bribery of public officials, tax evasion, accounting fraud, insider deals, ethical misconduct) -> harmful impact on organization's reputation (N = 31 CEOs, 26.7% of the sample)
   - No previous history of misconduct

Value priorities: (1) CEO - (2) General population

|	Self-transcendence	Openness to change*	Self-enhancement	Hedonism	Conservation*
CEOs not associated with moral hazard	1. 0.236	2. 0.227	3. 0.188	4. 0.177	5. 0.172
CEOs associated with moral hazard	1. 0.237	2. 0.226	3. 0.188	4. 0.178	5. 0.170
Cross cultural group	1. 0.241	4. 0.198	5. 0.164	3. 0.197	2. 0.201

* significant difference between the two CEO groups

■ CEOs not associated with moral hazard   ■ CEOs associated with moral hazard   ■ Cross cultural group

Discussion

- Identified a meaningful selection bias, that manifests in differences among the universally established value structures in the general population and the sample of CEOs.

- **Self-transcendence** (i.e. care for the welfare of closely related others, as well as care for all the people and for nature) 1-1
- **Openness to change** (i.e. self-direction, independence, creating, stimulation and seeking out challenges) 2-4
- **Self-enhancement** (i.e. expression of competence, achievement of status and control over others) 3-5
- **Conservation** (i.e. security, safety of self and of society, restraint of actions likely to harm others, respect for customs) 5-2

- Furthermore a slight, but significantly lower relative importance attributed to Openness to change and Conservation values was associated with various undesirable behaviors that can be detrimental to the reputation of the organization lead by the particular CEOs.

Feedback needed
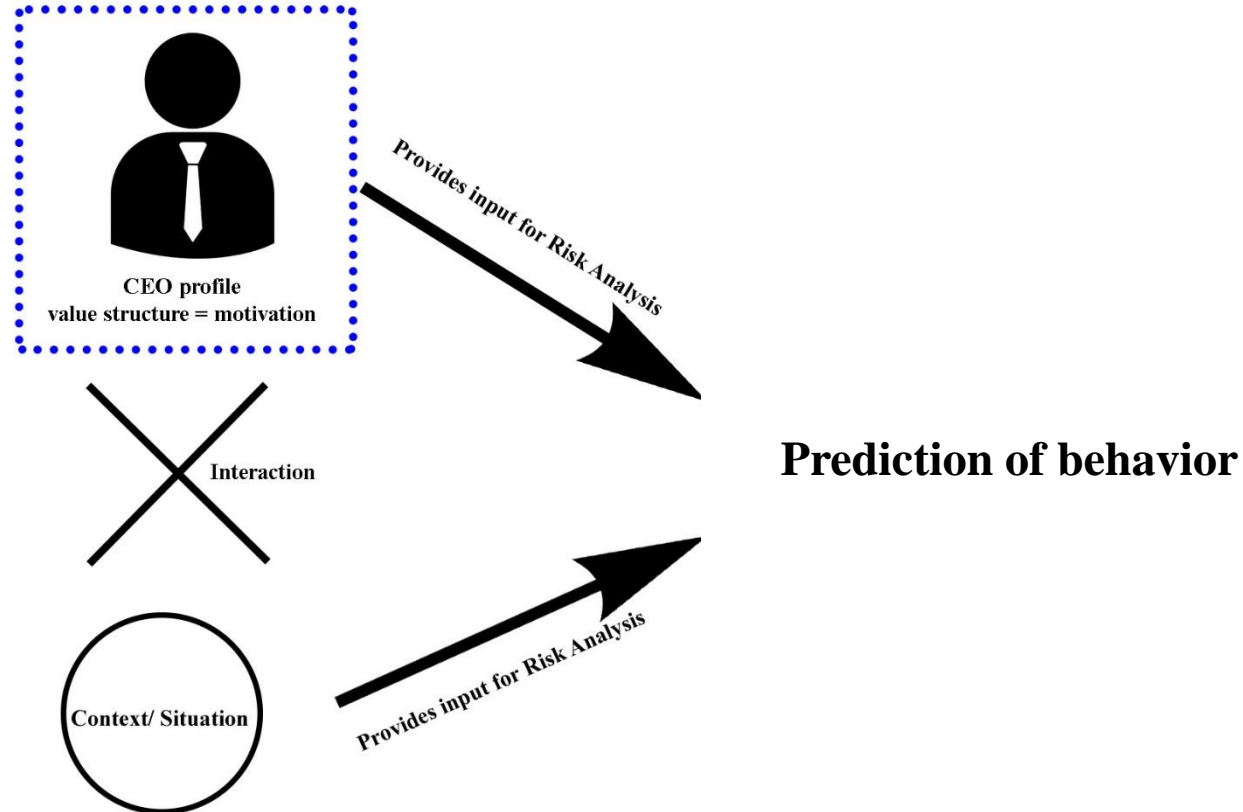
- Ways to define relevant business contexts, where the profile can be utilized