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Sustainability Business Index in Slovenia: Development, Verification and the Initial Empirical Findings



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About me

Prof. of Management, School of Economics and Business, University of Ljubljana, Slovenia

Past and present positions at the faculty: Head of Distance Education, Head of the Dept. of Management and Organization, Head of the Master Program in Sport Management

Past external positions: Member of the Management Board of the European Academy of Management (EURAM), President of the Slovenian Academy of Management (SAM)

Main research fields: firm competitive advantage, corporate social and environmental responsibility, sports management

Published 68 scientific articles in journals, incl. Organizational Research Methods

Personal: born in 1976 (Brežice), live in Domžale, Slovenian, married, father of two

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About Slovenia

Europe within a day...

- 20,273 km²
- 2.1 million
- capital: Ljubljana



Sustainability Business Index (SBI): What/Why?

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Findings at the level of **industries and economy** paint the overall picture of sustainable development in Slovenia, which is important for policy-makers

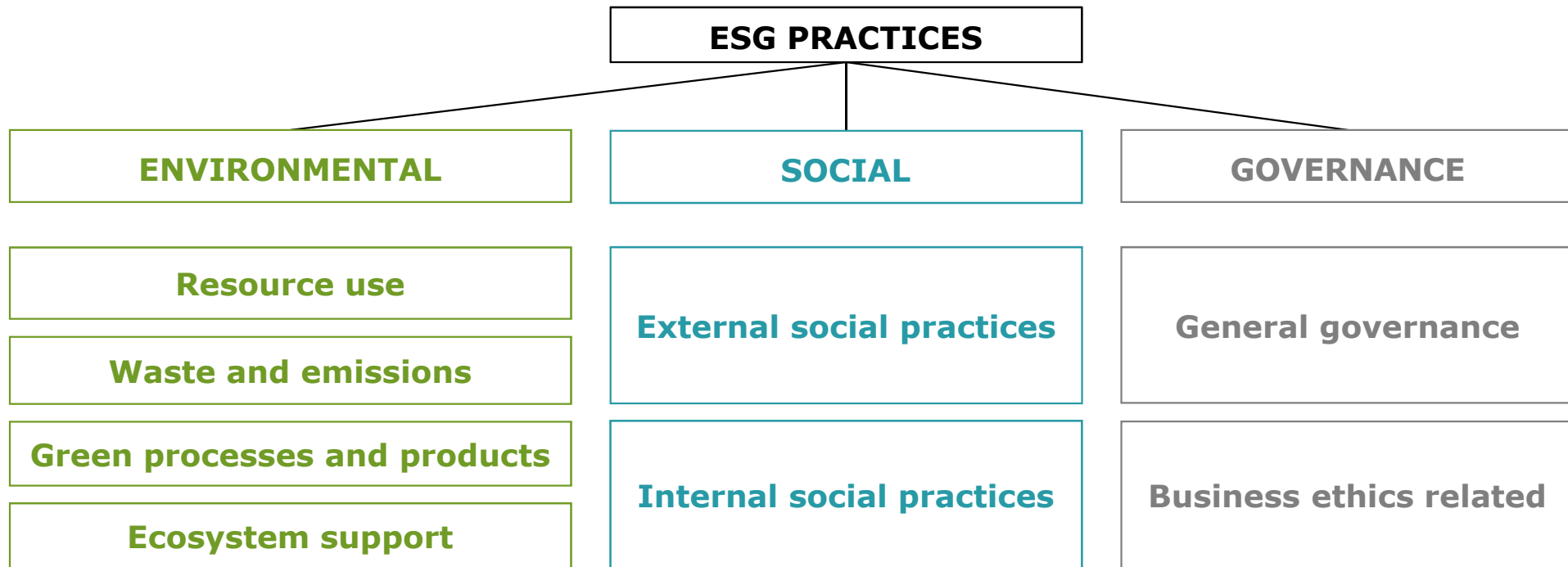
- static view, dynamic view (changes in the last 3 years)

Findings at the level of **individual companies** point to areas within the ESG (sub)dimensions where companies are doing well or they still have room for improvement

- static view, dynamic view (changes in the last 3 years)

It enables linking the ESG practices with the **motives** (moral, instrumental) and **results** (competitive advantage, non-financial performance, financial performance)

Sustainability Business Index (SBI) Model



Environmental (Ecological) Components of the Index (SBIE)

Resource use

- Restricting non-renewable resource use
- Managing renewable resource use: materials, energy, water

Waste and emissions

- Minimizing and proper waste management
- Minimizing emissions: air, water, soil and other (light, noise, vibrations)

Green processes and products

- Green process innovation
- Green product innovation, packaging, etc.

Ecosystem support

Ecosystem support means engaging in external activities for climate stabilization, water purification, soil remediation and biodiversity conservation

Social Components of the Index (SBIs)

External social practices

- Job creation
- Public health and welfare
- Local/regional development
- Supporting sports and culture
- Charity
- Fair product reporting
- Fair business practices

Internal social practices

- Investments in employee education
- Health and safety at work
- Adequate/fair compensation
- Work environment
- Equal opportunities
- Diversity management
- Privacy and data protection
- Employee participation in decision-making

Governance Components of the Index (SBIg)

General governance

- Stakeholder management
- Strategic management
- Risk management
- Control of management bodies
- Awards for management bodies
- The structure of the board and other management bodies

Business ethics related

- Codes of ethics
- Transparency
- Responsibility
- Integrity
- Independence
- The fight against corruption

Motives for and Results of Sustainability Practices (Not Part of the Index Score)

Motives

Instrumental motives

- ... to gain a competitive advantage
- ... to increase profitability
- ... to increase the customer base
- ... to avoid negative publicity
- ... to avoid high fines

Moral motives

- ... because we feel responsible for sustain.
- ... because of top management's belief
- ... because it is the right thing to do

Results

Competitive advantage

- ... a better competitive position on the market

Non-financial performance

- ... employee commitment and satisfaction
- ... customer loyalty and satisfaction
- ... brand value

Financial performance

- ... profitability
- ... revenues
- ... costs

Challenge: Complexity of Reporting

Usually (at least in larger companies) there is **no single person** who knows all the details related to environmental, internal social, external social and governance practices in the company => **multiple respondents** must be included in each company

**Environmental
(ecological)**
(head of
quality;
technologist)

**External
social**
(head of PR)

**Internal
social**
(head of HR)

Governance
(top
management)

Challenge: Subjective Self-reporting – Verification with the Kliping Score

Another, much bigger problem is the so-called **social desirability bias (SDB)**

Use of **Kliping Score** => indicating the frequency and valence of the company's appearance in articles about its sustainability practices in the country's major media over a one-year period

More than **90 keywords** (+derivatives)
related to environment (ecology),
social responsibility and
corporate governance

Content processing of posts

Weighting by media reach



Challenge: Subjective Self-reporting – Verification with the Study among Customers

Sampling => participants randomly assigned to evaluate one of 48 brands

- largest companies in Slovenia with at least 500 employees
- offering their products or services to end consumers

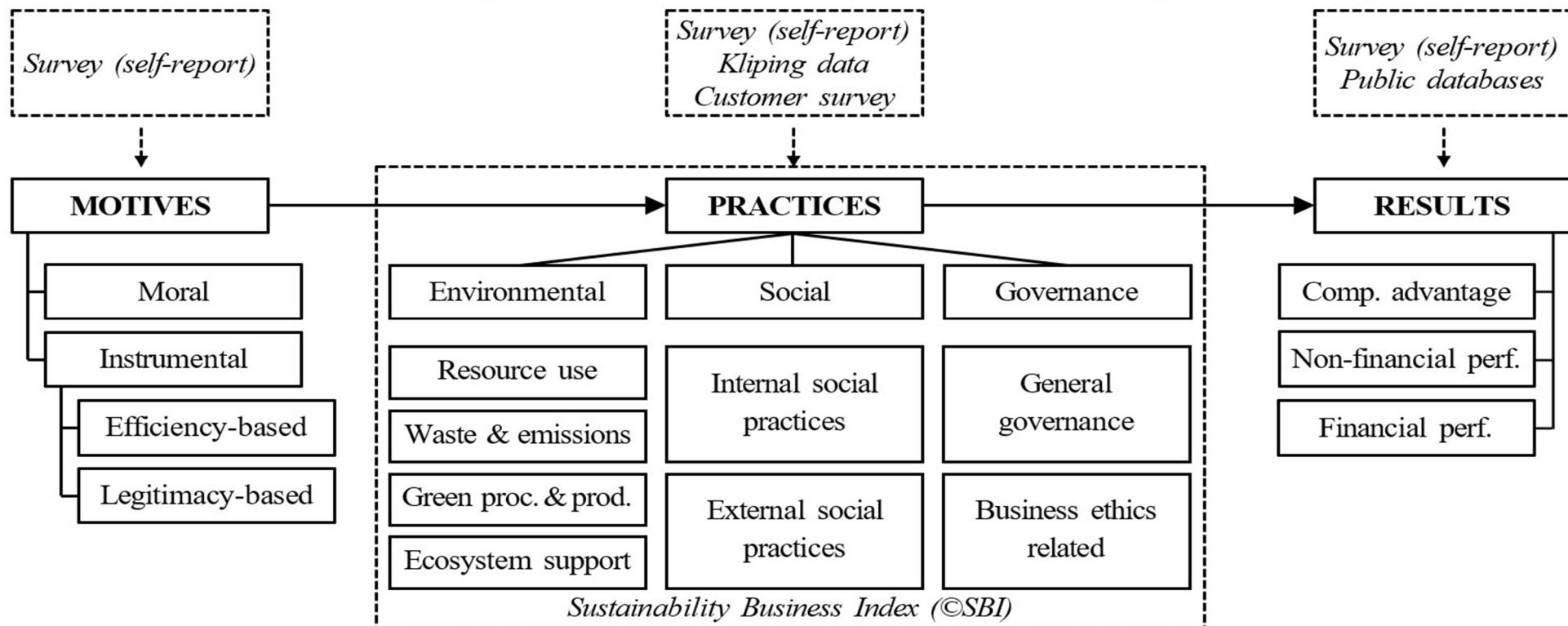
Sample size

- 2,278 (in 2020)
- 2,414 (in 2021)
- 2,547 (in 2022)

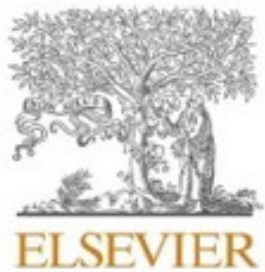
Sample characteristics

- all participants from Slovenia
- 52% women, 48% men
- aged between 18 and 65 (average age: 42 years)

Research Design Summary



Initial Empirical Findings – Article in JBR



Contents lists available at [ScienceDirect](#)

Journal of Business Research

journal homepage: www.elsevier.com/locate/jbusres

Drivers of corporate environmental and social responsibility practices: A comparison of two moderated mediation models

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Initial Empirical Findings – Motivation for the Study

A lack of clarity about **what drives** socially and environmentally responsible practices (Chen & Chen, 2019; Paulraj, Chen & Blome, 2017) => Do drivers differ between the environmental and social model?

New insights by focusing on the **mediation role** of environmental/social responsibility **strategy** in the "motives => environmental/social practices" relationship

The **moderating role of financial health** as an enabler in the environmental and the social model

Initial Empirical Findings – Methodological Background

Data:

- list of 1,478 large and medium-sized companies in Slovenia
- employees responsible for environmental (n = 242; 16.4% response rate) and social (n = 220; 14.9% response rate) issues
- data gathered in 2021

Sample characteristics: 28% large and 72% medium-sized firms

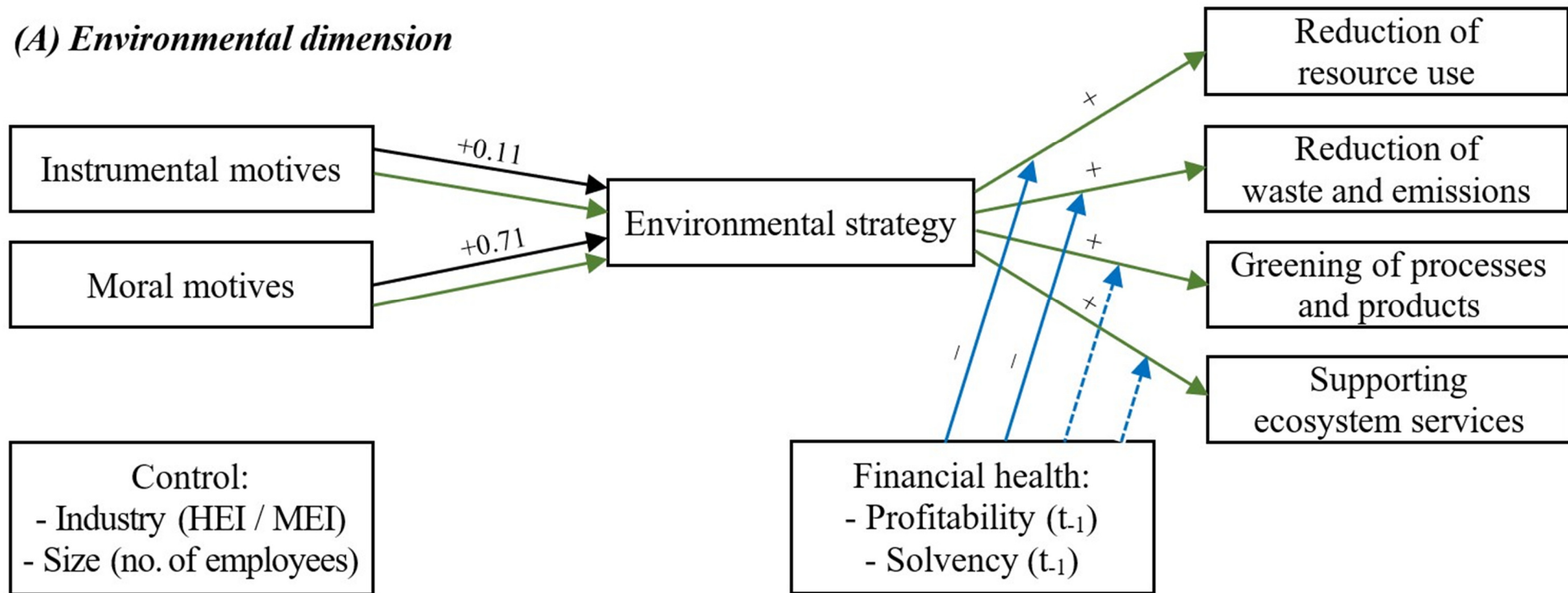
Control variables: firm size, industry environmental impact

Common method bias: Podsakoff, MacKenzie & Podsakoff, 2012; marker variable test

Methods of data analysis: Little's MCAR test; ML estimation in MPlus 8.5; PROCESS 4.1 (Hayes, 2022)

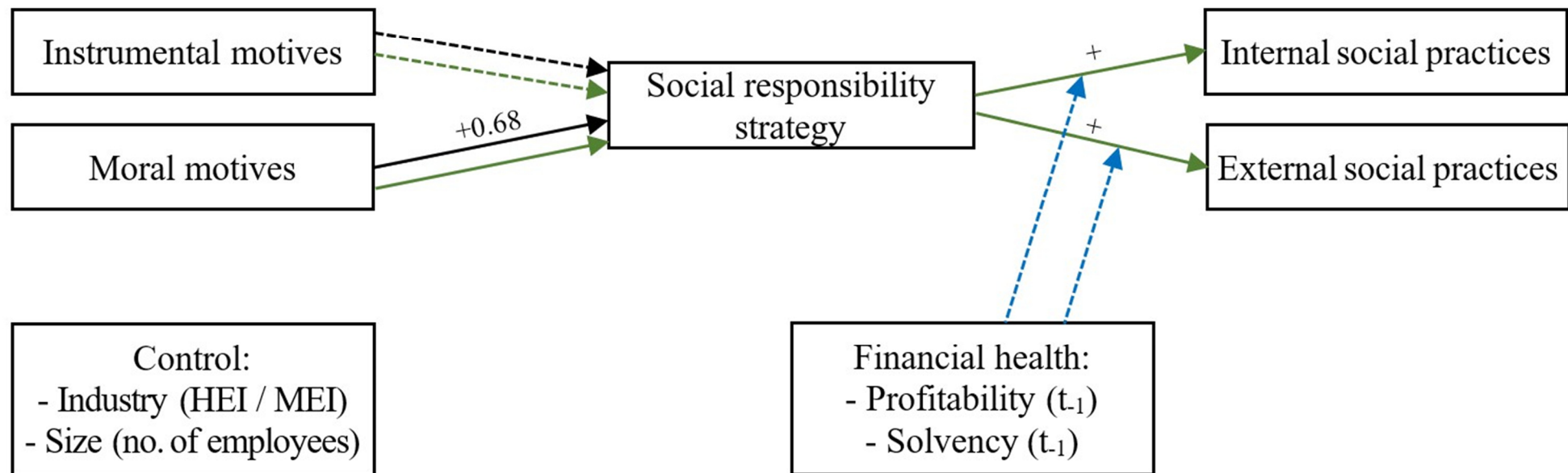
Initial Empirical Findings – the Environmental Dimension

(A) Environmental dimension



Initial Empirical Findings – the Social Dimension

(B) Social dimension



Findings and Recommendations

Among the motives driving corporate environmental and social responsibility, **moral motives** ("doing the right thing") outperform instrumental motives

Strategy is an important **mediator** for translating motives into specific environmental/social practices

Financial health negatively **moderates** (some of) the strategy–practices relationship in the environmental model, while its moderation role is not significant in the social model => sustainability practices are not necessarily limited to financially healthy firms

So far: large companies, the E & S practices, relationship with motives

Findings and Recommendations

Future: also small and medium-sized companies, also the G practices, also relationship with results (paper for JBE)

Additional **verification and corrections** in TPI scores through

- the media (Kliping Score)
- the research among customers

A **holistic view** of corporate sustainability: country wide, industry comparison, individual companies, year-over-year comparison

Recommendations for further sustainable development for companies and policy-makers