

CONCORDi 2021

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University endurance in the United Nations Global Compact Sustainability reporting programme

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Motivation

- Carbon footprint of universities is low (NO: GHG<0.1%, decrease by 30% 2016-20)
- Sustainability reporting of universities is increasingly used for disclosing environmental progress (Lozano et al., 2013; Alonso-Almeida et al., 2015)
- One of the best-known attempts at sustainability reporting is the GRI
- In 2000, the United Nations introduced the UN Global Compact Programme

 Based on 10 principles in the field of labour, human rights,

Motivation

- Principle 7: Businesses should support a precautionary approach to environmental challenges
- Principle 8: undertake initiatives to promote greater environmental responsibility
- Principle 9: encourage the development and diffusion of environmentally friendly technologies
- Between 2015–2020 38 per cent of the universities left the programme

Motivation

- Purpose: To examine the determinants of the UN Global Compact reporting status
- Factors include company-specific factors (size and quality) and country-specific factors (indicators on Co2 emissions, air pollution, political environment, control of corruption)
- Contribution: Work builds on Rasche et al. (2020)
- Method: Cox proportional hazard model
- Data: UNGC linked with the Yale Environmental performance

Conceptual background

- Stakeholders exert influence on universities
- Participation and duration in the sustainability programme are not independent of the external environment
- Firms and Organisations in countries with a stronger political commitment to green policies and a successful decoupling of emissions from GDP growth are more likely to stay in the programme
- Anti-corruption is one pillar of the UN global compact

Hypotheses

- Hypothesis 1. Internal factors such as size and reputation determine the endurance of universities in the sustainability programme
- Hypothesis 2. External factors such as environmental progress and quality of institutions in the country determine the endurance of universities in the sustainability programme

Method

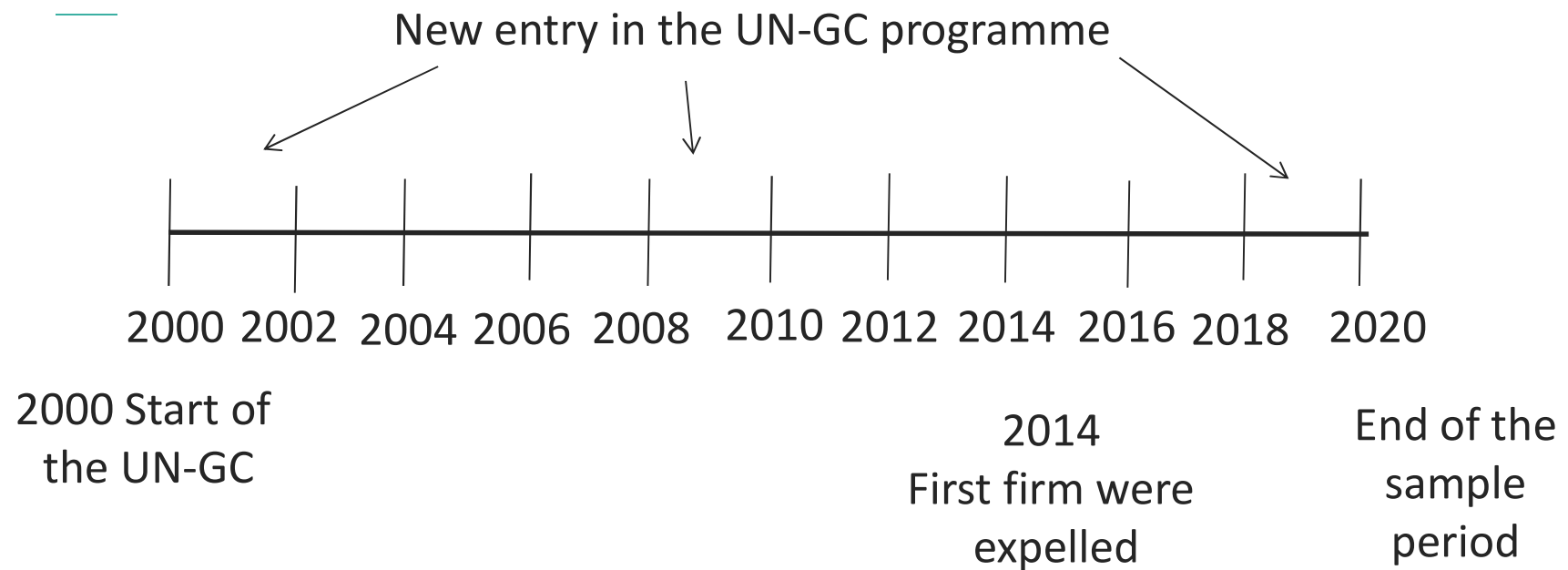
The Cox proportional hazard model

$$h(t) = h_0(t) \cdot \exp(\beta_1 x_1 + \beta_2 x_2 + \dots + \beta_p x_p)$$

- $h(t)$ is the hazard function
- $h_0(t)$ is the baseline hazard
- Coefficients measure the effect size of the covariates (x_1, x_2, \dots, x_p)
- Use of cluster adjusted standard errors at the country level (to account for the inclusion of aggregate indicators)

Data

- Calculation of the programme duration (0 to 6 years)



Explanatory variables

Air quality (PM2.5 exposure): Number of age-standardized disability-adjusted life-years lost per 100,000 persons (DALY rate) due to exposure to fine air particulate matter smaller than 2.5 micrometers (PM2.5). A score of 100 indicates a country has among the lowest DALY rates in the world (=1st-percentile)

Adjusted emission growth rate for carbon dioxide:

A score of 100 indicates a country is cutting emissions by =7.59% per year

Other variables

Rule of Law, regulatory quality, political stability and absence of violence, control of corruption and GDP per capita

Firm specific factors: Firm size, quality of the university (TOP 100

Data

- United Nations Global Compact database
- Environmental Performance Index (EPI) database (Wending et al., 2020; <https://epi.yale.edu/>) 2000-2020
- Sample is limited to universities
- Sample size: 700 companies
- First reported exit (non-activity) in 2016
- About 280 exits from the programme, representing an exit rate of 40%.
- Exit rates vary according to characteristics

Data

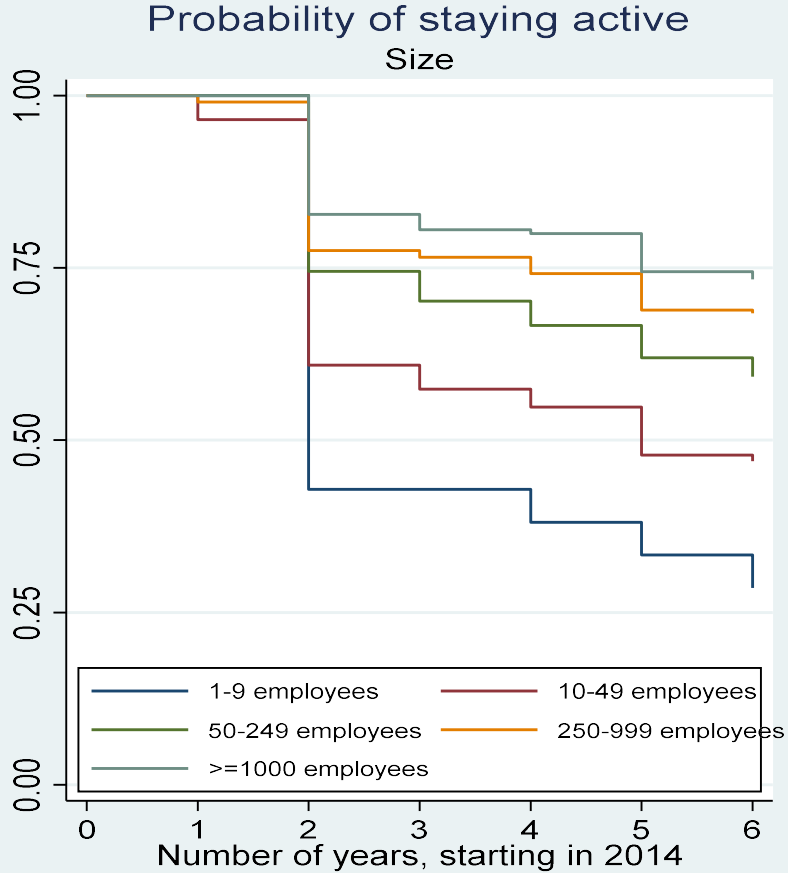
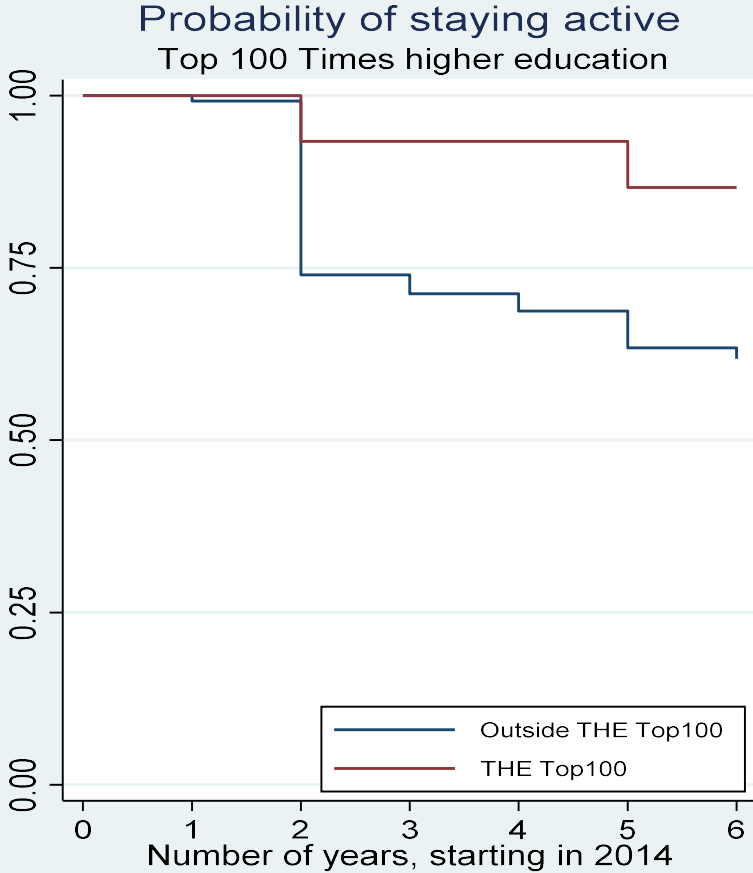
“Submitting an annual Communication on Progress (**CoP**) is at the heart of your company’s commitment to the **UN Global Compact** and provides valuable information to your stakeholders. The overall format of a **CoP** is flexible and **CoPs** can be prepared in any language as long as they meet the minimum requirements below”

Source: www.unglobalcompact.org/participation/report/cop

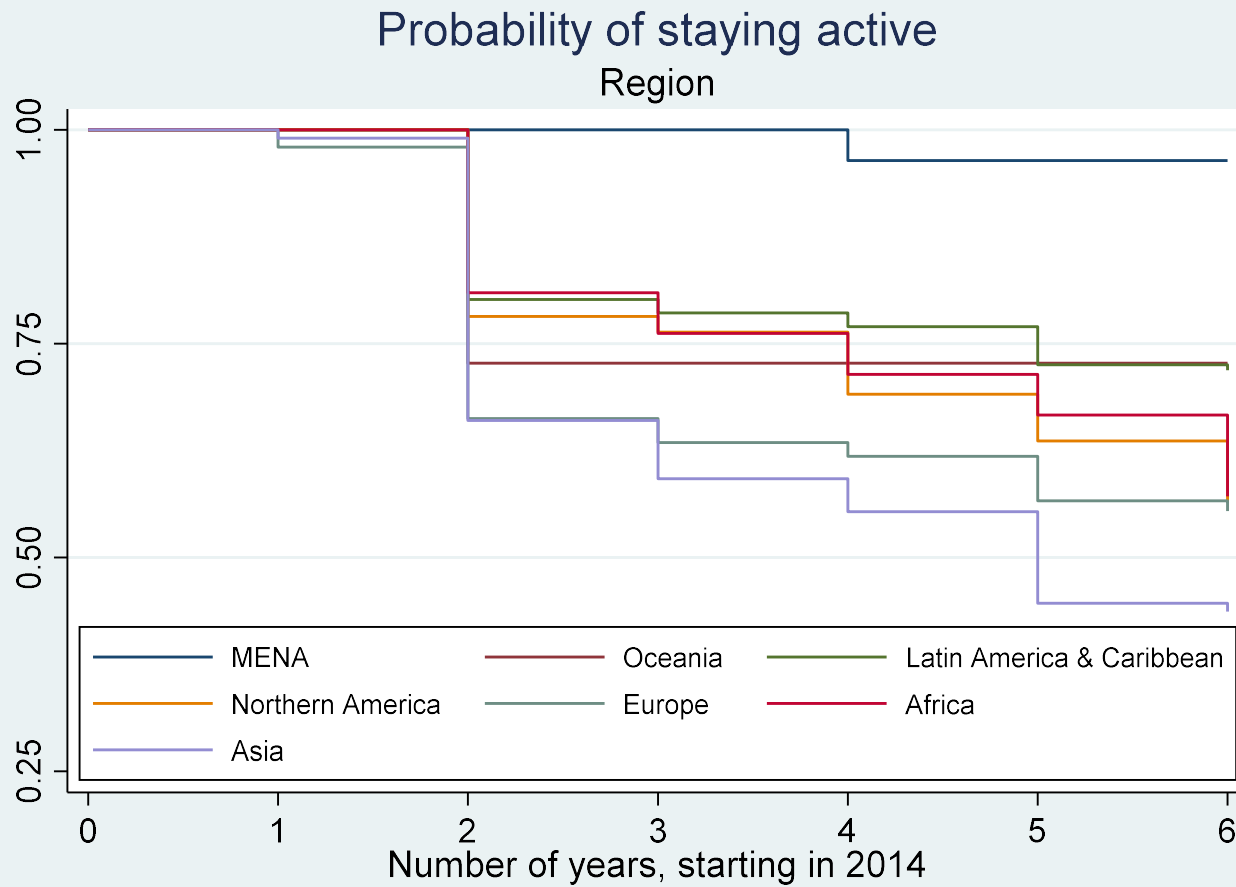
- Includes a CEO statement of continued support for the UN Global Compact and its ten principles
- Description of actions or relevant policies related to Human Rights, Labour, Environment, Anti-Corruption

 Includes a measurement of outcomes

Descriptive statistics: Kaplan-Meier plots



Descriptive statistics : Kaplan-Meier plots



Cox proportional hazard model on active UNGC

Status

	HR	z-stat
Greenhouse gas intensity growth rate	0.99	-1.75
PM2.5 exposure	1.00	0.02
Ln GDP per capita	1.10	0.53
Regulatory Quality	0.63	-2.91
10-49 employees (ref cat. 1-9 employees)	0.61	-1.94
50-249 employees	0.50	-3.24
250-999 employees	0.37	-4.03
>=1000 employees	0.34	-4.32
Africa (Ref cat. Europe)	0.53	-1.49
Asia	0.91	-0.38
Latin America and the Caribbean	0.39	-3.90
MENA	0.05	-3.33
Northern America	1.23	1.50
Oceania	1.34	1.41
Times higher education ranking Top 100	0.33	-2.05
Number of observations (universities)	2831	780
Number of universities non-enduring	294	

Asteriks: ***, ** and * denote significance at the 1, 5 and 10 percent level

Cox proportional hazard model on the UN-Global compact status

Rate of losing the active UN global compact status depends on:

- Regulatory quality of government
- Environmental progress at the country level (weakly significant)
- Size
 - Universities or departments with 50-249 employees have a 50 per cent lower hazard rate of being not enduring the programme than those with fewer than 10
 - Corresponding effects those with 250-1000 and 1000+: 63 and 66

Cox proportional hazard model on the UN-Global compact status

Rate of losing the active UN global compact status depends on:

- Quality of the university: University included in Times Higher Education Top 100 list are 67 per cent less likely to leave the programme than those that are not
- Region: Universities in Latin America, the Caribbean as well as in the MENA region are significantly less likely to leave the UN Global Compact programme
- Regulatory quality of the government as well as internal factors are **more relevant** than improvements in environmental performance

Conclusions

- Participation of universities in the UN sustainability reporting programme is low
- One out of three of the participants are no longer participating in the UN global compact programme
- Quality and size are important as well as regulatory quality of the government
- A reduction in reporting requirements or a lower application or subscription fee could possibly facilitate for this group
- Prestigious universities are more likely to stay in the programme

 University of South-Eastern Norway 17/3/2021
Environmental progress is of minor relevance