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COVID-19 and Human Capital Response

Findings from a nationwide survey



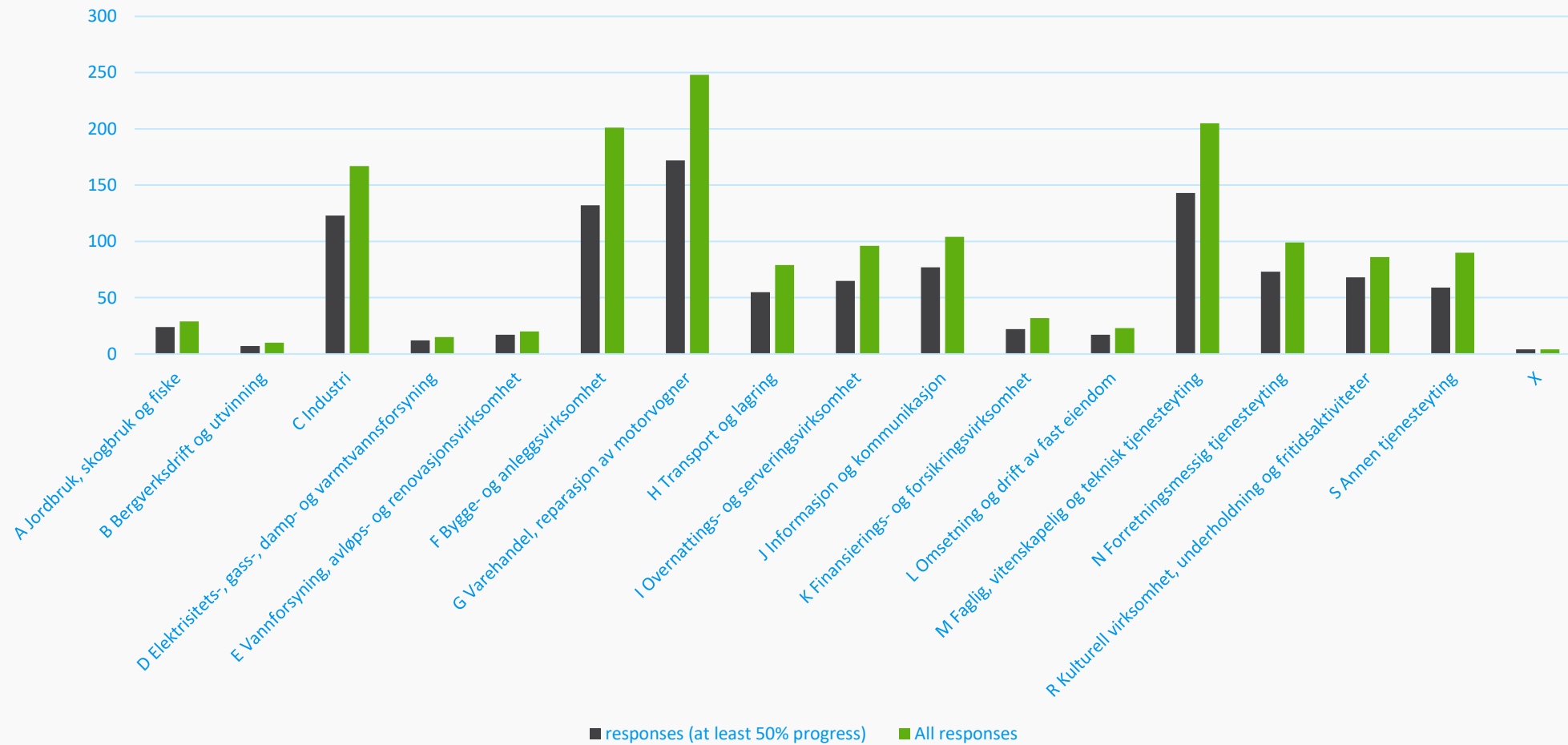
About the COVID-19 Survey

- Purpose
 - Ask CEOs about human capital responses to COVID-19, and their expectations about future employment
 - Main goal was explorative – What is going on?
 - Create a basis for future surveys
- Time period
 - May 13th – June 5th (Peaking infection rates, strict lockdown)
- Sampling
 - 1508 Responses of 25.000
 - Ca. 1000 fully completed
 - Survivor/activity bias *is* present in the data

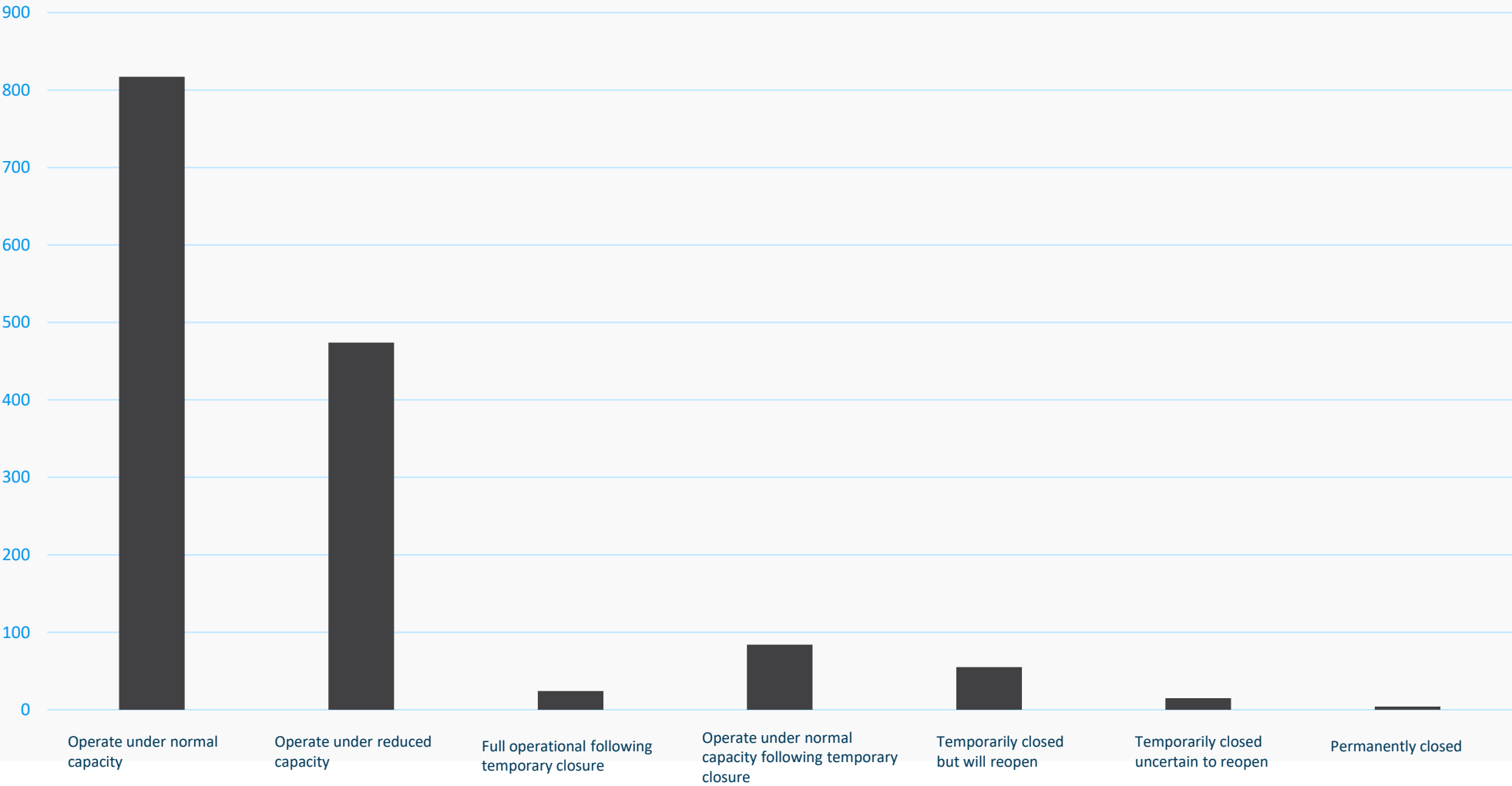
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Respondents by Industry



At Normal Operating Capacity



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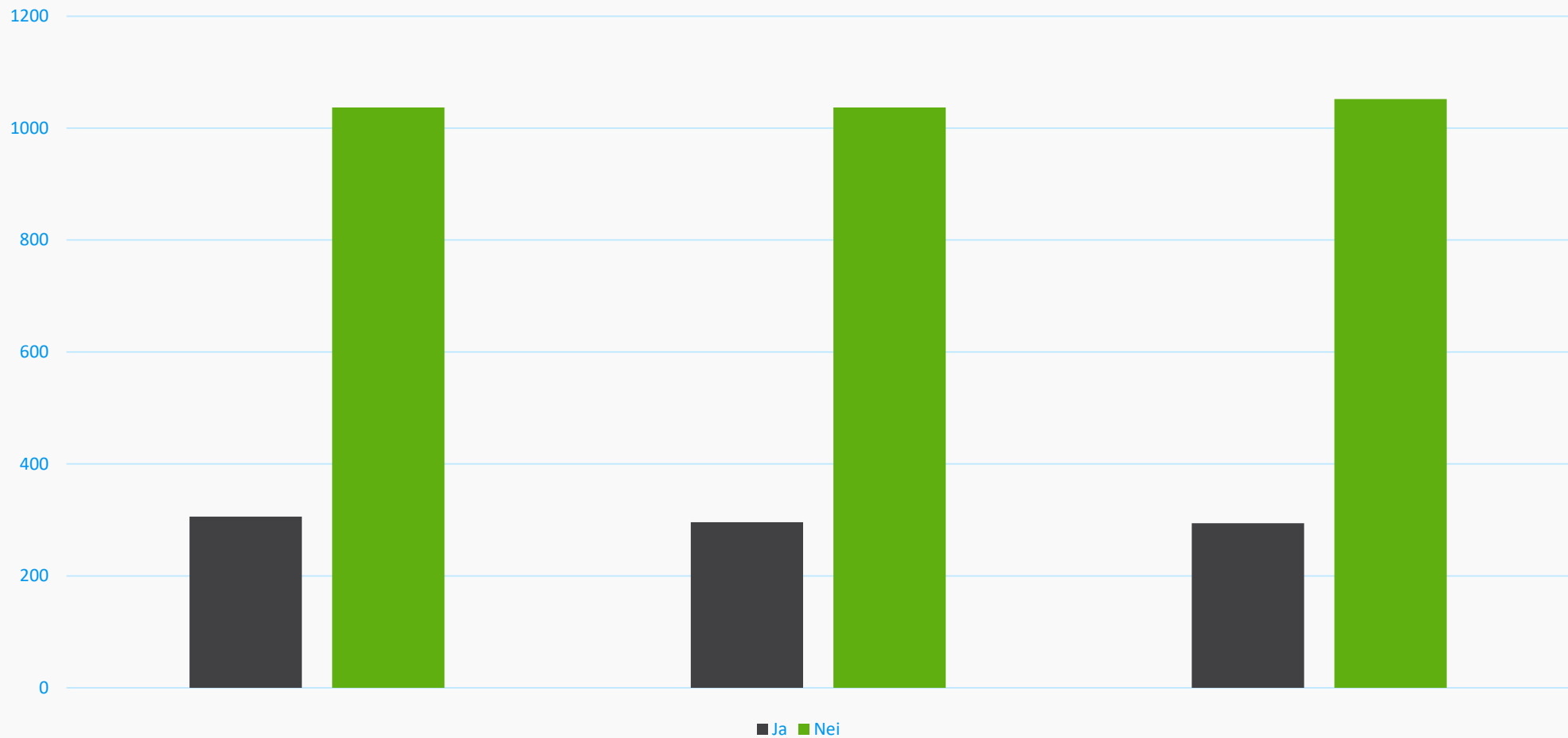


Innovation

Some claim that innovative activity has gone up as a result of COVID-19. Is this the case and if so how can we classify this innovative activity?



Did the firms innovate in response to Covid-19?



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Did the firm respond with any of these?

Normal Capacity Utilization	-0.831*** (0.147)
Employees (log)	0.190** (0.073)
Family firm	-0.097 (0.158)
Firm Age	-0.004 (0.003)
Female CEO	0.212 (0.182)

Regression also include controls for Fylke

N= 1010

Pseudo r^2 = 0,100

Agriculture, forestry and fishing	-1.980+ (1.129)
Mining and quarrying	0.228 (0.865)
Manufacturing	
Water supply; sewerage; waste management and remediation activities	-0.227 (0.616)
Construction	0.185 (0.269)
Wholesale and retail trade; repair of motor vehicles and motorcycles	0.511+ (0.266)
Transporting and storage	0.073 (0.396)
Accommodation and food service activities	1.281*** (0.366)
Information and communication	0.703* (0.314)
Financial and insurance activities	0.822+ (0.491)
Real estate activities	0.481 (0.559)
Professional, scientific and technical activities	0.756** (0.274)
Administrative and support service activities	1.079** (0.347)
Arts, entertainment and recreation	1.344** (0.469)
Other services activities	1.551*** (0.423)

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Did the firm develop new products?

Normal Capacity Utilization	-0.578**
	(0.182)
Employees (log)	-0.027
	(0.091)
Family firm	-0.016
	(0.204)
Firm Age	-0.006
	(0.004)
Female CEO	-0.018
	(0.210)

Regression also include controls for Fylke
 N= 963
 Pseudo $r^2 = 0,138$

Agriculture, forestry and fishing	-0.940
	(1.106)
Mining and quarrying	1.297
	(0.916)
Manufacturing	
Water supply; sewerage; waste management and remediation activities	-0.835
	(1.088)
Construction	-0.065
	(0.361)
Wholesale and retail trade; repair of motor vehicles and motorcycles	0.593+
	(0.340)
Transporting and storage	0.233
	(0.502)
Accommodation and food service activities	1.041*
	(0.416)
Information and communication	1.076**
	(0.367)
Financial and insurance activities	0.021
	(0.698)
Real estate activities	0.912
	(0.640)
Professional, scientific and technical activities	0.540
	(0.344)
Administrative and support service activities	1.011*
	(0.401)
Arts, entertainment and recreation	0.751
	(0.522)
Other services activities	0.652
	(0.525)

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Did the firm target new customers?

Normal Capacity Utilization	-0.831*** (0.178)
Employees (log)	0.117 (0.090)
Family firm	-0.218 (0.194)
Firm Age	-0.012* (0.006)
Female CEO	-0.363+ (0.215)

Regression also include controls for Fylke
 N= 979
 Pseudo $r^2 = 0,090$

Agriculture, forestry and fishing	-1.052 (1.052)
Mining and quarrying	
Manufacturing	
Water supply; sewerage; waste management and remediation activities	
Construction	-1.517** (0.498)
Wholesale and retail trade; repair of motor vehicles and motorcycles	0.074 (0.329)
Transporting and storage	-0.512 (0.552)
Accommodation and food service activities	1.320*** (0.384)
Information and communication	0.433 (0.380)
Financial and insurance activities	0.417 (0.628)
Real estate activities	-0.394 (0.886)
Professional, scientific and technical activities	0.649+ (0.335)
Administrative and support service activities	1.031** (0.372)
Arts, entertainment and recreation	1.396** (0.473)
Other services activities	1.767*** (0.445)

Did the firm innovate its logistics?

Normal Capacity Utilization	-0.547**
	(0.181)
Employees (log)	0.202*
	(0.082)
Family firm	0.029
	(0.195)
Firm Age	-0.001
	(0.004)
Female CEO	0.598**
	(0.201)

Regression also include controls for Fylke

N= 987

Pseudo $r^2 = 0,092$

Agriculture, forestry and fishing	-1.143
	(1.205)
Mining and quarrying	0.318
	(1.201)
Manufacturing	
Water supply; sewerage; waste managment and remediation activities	0.723
	(0.646)
Construction	0.251
	(0.349)
Wholesale and retail trade; repair of motor vehicles and motorcycles	0.350
	(0.344)
Transporting and storage	0.126
	(0.492)
Accommodation and food service activities	1.364***
	(0.404)
Information and communication	0.111
	(0.424)
Financial and insurance activities	0.667
	(0.609)
Real estate activities	0.406
	(0.696)
Professional, scientific and technical activities	0.203
	(0.360)
Administrative and support service activities	0.532
	(0.422)
Arts, entertainment and recreation	1.046*
	(0.495)
Other services activities	1.960***
	(0.467)

Employment Relationships

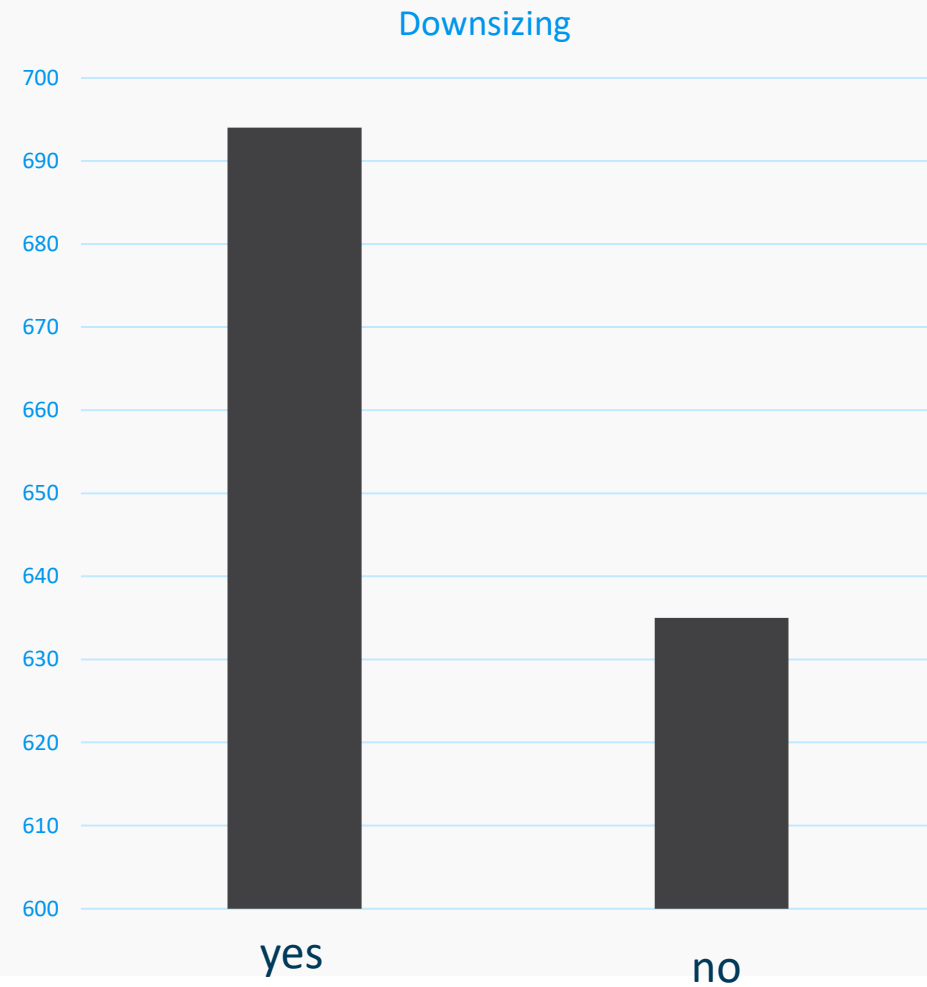
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Employment Changes

Average employment

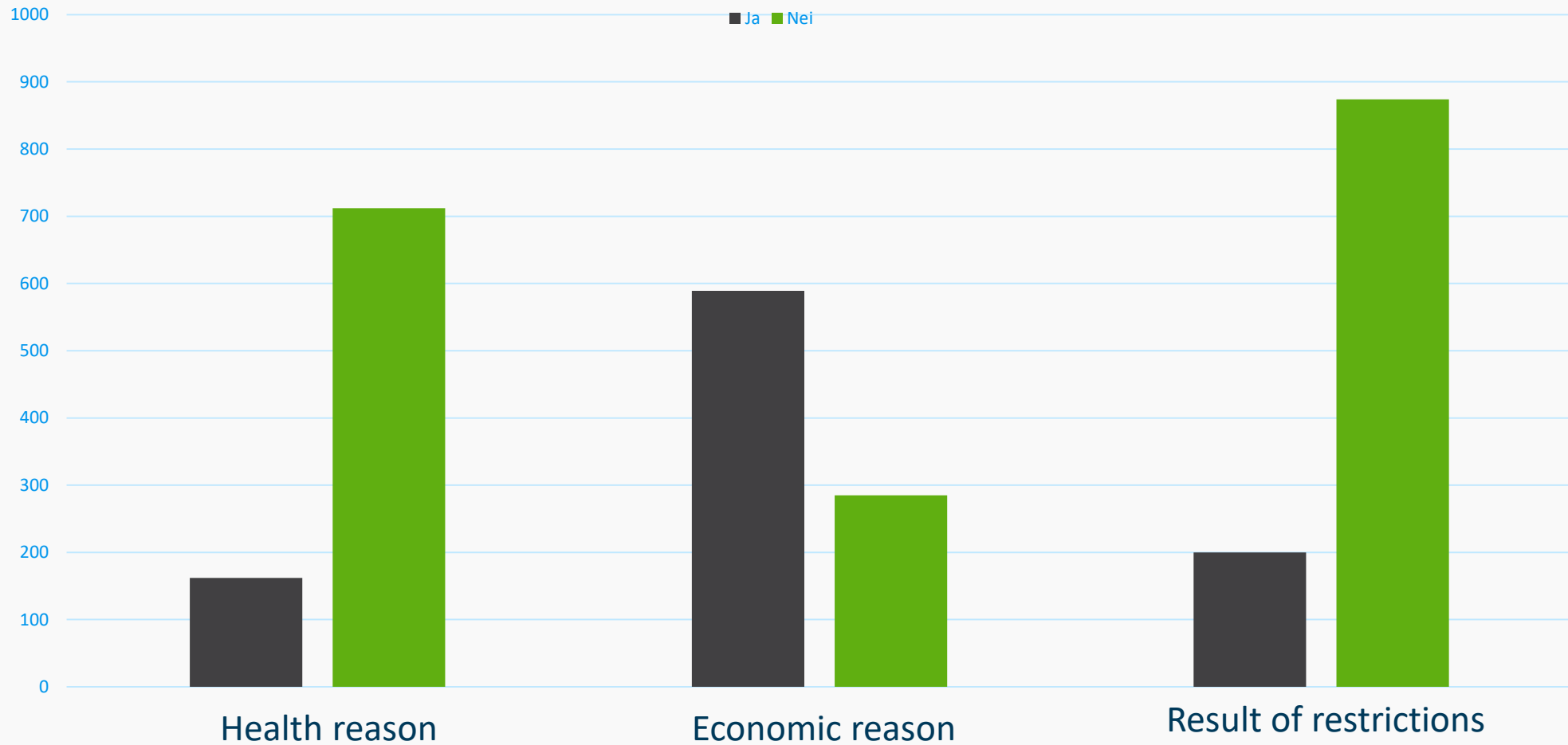
	January	May/June
Fixed employees (mean)	41.35	39.94
Temporary employees (mean)	14.51	12.37
Total (mean)	55.86	52.31



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Motives for downsizing



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Employment Changes and pre-crisis strategy

The effect on Δ employment

Marketing focused strategy	-0.021 (0.022)
Innovation focused strategy	0.037 [†] (0.022)
Cost focused strategy	-0.091 ^{**} (0.032)

- OLS regression including a range of control variables
- $r^2 = 0,39$

The effect on the odds of furloughing or layoffs (1/0)

Marketing focused strategy	0.314 ^{**} (0.099)
Innovation focused strategy	-0.138 (0.098)
Cost focused strategy	0.094 (0.120)

- Logistic regression including a range of control variables
- $r^2 = 0,162$

Investments during Crisis

What happens during investment behavior of firms during crisis.



Changes in investment (likert)

Physical capital	-1,97	3,53
Competences and learning	-0,67	3,10
Marketing and Branding	-0,58	3,26
Innovation	-0,51	3,12
Organizationl Development	-0,13	3,13



Investment Changes and pre-crisis strategy

	Physical capital	Human Capital	Brand Capital	Innovation	Organizational Capital
Marketing focused strategy	-0.457** (0.151)	-0.202 (0.139)	-0.230 (0.142)	-0.128 (0.135)	-0.143 (0.145)
Innovation focused strategy	0.347** (0.133)	0.232* (0.114)	0.298* (0.133)	0.380** (0.128)	0.393** (0.136)
Cost focused strategy	-0.276 (0.197)	-0.351† (0.191)	-0.188 (0.193)	-0.294 (0.188)	-0.271 (0.210)
Constant	-5.718*** (1.283)	-3.323** (1.232)	-2.976* (1.217)	-2.284† (1.209)	-3.842** (1.260)
r ²	0.204	0.144	0.106	0.121	0.147

- OLS-regression including a range of control variables

Expectations for Recovery

What about expectations on when business return to “normal”



VARIABLES	Logit Coeff. Normal 2020	Logit Coeff. Normal 2020 Strategi
Marketing focussed strategy		-0.226* (0.097)
Innovation focussed strategy		-0.004 (0.093)
Cost focus strategy		0.159 (0.130)
Normal capacity	0.066 (0.156)	-0.067 (0.269)
# employees (log)	-0.189* (0.074)	-0.107 (0.125)
Family firm	0.113 (0.159)	0.493+ (0.277)
Firms age	-0.007+ (0.004)	-0.007 (0.007)
Female CEO	-0.594** (0.194)	-0.521 (0.353)
Observations	870	325
ll	-572.5	-204.5
r ² p	0.0396	0.0891

Do we get back to normal before 2021?

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- Logit regression including a range of control variables

Changes in employment following mai

	Jan	Mai	Jul	Dec
Short term	45.90 (168.71)	43.04 (167.57)	46.02 (183.10)	
Long term*	46.32 (135.62)	42.18 (131.62)		43.31 (144.84)

*one excluded observation stated to have 5000 employees but expected to have only 8 in december

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