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Which firms purchase private health insurance? Evidence from Norway ten years after the first boom

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Objectives of the study

Analyze....

- what type of firms that purchase private health insurance?
- which factors influence the firms' decision to insure their employees?
- to what degree they use health insurance?
- how these trends in demand and utilization have changed over time?

Methodology: Population

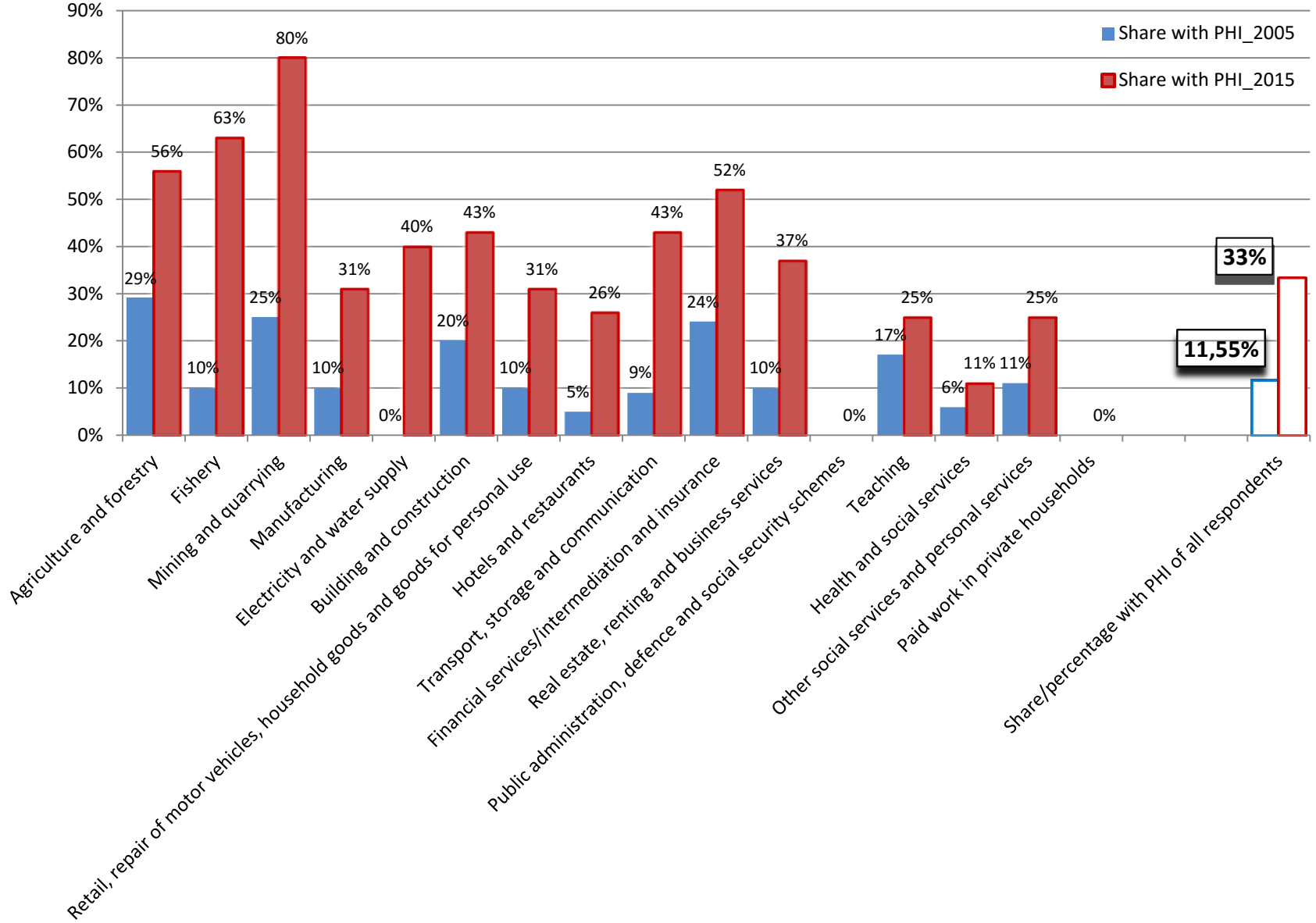
Population

- A representative sample of firms and organizations with 2 or more employees randomly drawn from the Norwegian company register (Brønnøysundregistrene)
- The random sample consisted of 4000 units drawn from the 94 139 firms supplemented by 546 firms that have responded to the earlier survey conducted by Seim in 2005
- After further adjustments (i.e. invalid postal addresses, newly established companies, closures of some firms or lack of employees) the total net sample constituted around 4400 firms

Main results: descriptive

- Response rate - 28%
- 33% of the firms participating in the survey have stated that they had a private health insurance, compared with 11% in 2005.
- About 70% of these respondents indicate that they have collective policies where all employees in the firm are insured (39% in 2005)
- Around 60% report that they have used their insurance (compared with 22% in 2005) and in general are satisfied or very satisfied with the medical services provided

**Share of the firms with private health insurance (PHI) within represented industries in the survey and the total share with PHI of all respondents
2005 vs 2015 year**



Descriptive statistics:

Independent variables	Mean	Std Dev	N	Mean	Std Dev	N
Background characteristics of the firm	Firms with PHI			Firms without PHI		
Firms profit per employee (in NOK 1000)	227.38	11164.62	398	106.79	3856.98	779
Proportion of employees ≥ 55 years old	0.23	0.22	407	0.27	0.27	800
Proportion of employees < 30 years old	0.17	0.20	408	0.17	0.22	799
Proportion of women employees	0.30	0.25	408	0.39	0.33	800
Proportion of employees with higher education	0.38	0.33	404	0.34	0.49	789
Number of employees in the firm	23.65	75.12	409	24.92	116.47	824
Development in the public health system	Firms with PHI			Firms without PHI		
*Managements degree of knowledge of health policies	3.86	0.95	404	3.84	1.00	809
(*score ranges from 0 to 6 as the highest degree of knowledge)						

Descriptive statistics:

Independent variables	Mean	Std Dev	N	Mean	Std Dev	N
Central rationale in the consideration of private health insurance	Firms with PHI			Firms without PHI		
Firm has incurred substantial financial losses	0.33	0.47	406	0.17	0.37	815
Employees have expressed preferences for PHI	0.41	0.49	391	0.12	0.33	814
PHI ...						
...reduces the firm's expenses associated with employee's sickness absence *	4.16	0.93	406	3.20	1.18	805
...contributes to that the firm appears modern and responsible with an attractive profile*	4.09	0.87	406	3.42	1.17	805
...contributes to that the firm can compete, recruit and hold on the most attractive workforce*	3.87	0.94	406	3.26	1.15	805
...contributes to that the firm avoids unnecessary sick leaves among the key employees*	4.31	0.88	406	3.49	1.17	805
...is unnecessary because health services are public responsibilities*	2.16	1.13	406	3.11	1.18	805
...not relevant/not applicable, because the firm doesn't have necessary knowledge about such insurance arrangements*	1.84	1.07	402	2.66	1.07	804

*= Score ranges from 1 –completely disagree to 5- as completely agree

Results from the logistic regression analyses

Odds Ratio for having private health insurance (confidence interval)

Independent variables	A (R2-0.15)	B (R2-0.31)	C (R2-0.18)	D (R2-0.34)
Firms size (number of employees)				
Category 1 (lowest: 0-3)	0.32 (0.21-0.49)***	0.47 (0.29-0.76)***	0.31 (0.20-0.47)***	0.45 (0.28-0.74)***
Category 2 (middle: 4-7)	0.54 (0.38-0.78)	0.80 (0.53-1.22)	0.54 (0.37-0.79)	0.81 (0.52-1.25)
Category 3 (high: 8-17)	0.69 (0.48-0.99)	1.01 (0.68-1.52)**	0.69 (0.48-1.00)	1.03 (0.67-1.56)**
Category 4: Highest (>=18) and serves as a reference				
Firms profit per employee (in NOK 1000)				
Category 1 (lowest: <0)	0.58 (0.39-0.87)*	0.64 (0.41-1.01)	0.57 (0.38-0.87)*	0.63 (0.39-1.00)
Category 2 (middle: 0-55)	0.59 (0.40-0.86)*	0.67 (0.44-1.03)	0.58 (0.39-0.85)*	0.66 (0.42-1.02)
Category 3 (high: >55 - <=230)	0.82 (0.57-1.19)	0.95 (0.63-1.43)	0.79 (0.54-1.15)	0.89 (0.58-1.36)
Category 4: Highest (>230) and serves as a reference				
Proportion of employees>=55 years	0.66 (0.37-1.17)	0.73 (0.39-1.39)	0.77 (0.43-1.38)	0.81 (0.42-1.55)
Proportion of employees<30 years	0.64 (0.32-1.26)	0.73 (0.34-1.58)	0.62 (0.30-1.26)	0.71 (0.32-1.60)
Proportion of women employees	0.43 (0.27-0.70) ***	0.46 (0.27-0.78)***	0.55 (0.33-0.94)**	0.59 (0.33-1.07)*
Proportion of employees with a higher education	1.54 (1.06-2.24)**	1.39 (0.96-2.01)*	1.39 (0.97-1.99)*	1.29 (0.91-1.82)
Agriculture, forestry and fishery dummy	4.91 (1.44-16.77)***	8.00 (2.11-30.38)***		
Mining and quarrying dummy	5.48 (0.48-62.10)	4.11 (0.29-59.07)		
Building and construction dummy	1.49 (0.98-2.27)*	1.38 (0.87-2.20)		
Finance and insurance dummy	1.49 (0.59-3.74)	0.75 (0.26-2.13)		
Knowledge of health policies		0.97 (0.83-1.13)		1.00 (0.85-1.17)
Financial losses due to sickness absences		1.73 (1.21-2.47)***		1.75 (1.21-2.52)***
Employees preferences/pressure		3.94 (2.74-5.67)***		4.00 (2.75-5.80)***
Effective recruitment strategy		1.55 (1.34-1.80)***		1.54 (1.32-1.79)***
Geographic location dummies	✓ Yes	✓ Yes	✓ Yes	✓ Yes
Type of Industry dummies			✓ Yes	✓ Yes
<i>*/**/**=0.1/0.05/0.01 significance level (p)</i>				