Avoiding the Premium on the Premium? Self-funded Health Benefit Plans and Corporate Financial Decisions

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RESEARCH OBJECTIVE

This paper documents that firms choose to adopt self-funded health benefit plans as an optimal corporate financial policy in response to the rising Employer Sponsored Health Insurance (ESI) costs in the United States. Under self-insurance, employers avoid the high premiums charged by insurance carriers but assume greater financial risk associated with medical claims. I argue that this shift is driven by increasing insurer market concentration, which renders external insurance coverage increasingly costly for employers. Exploiting large national health insurer mergers and acquisitions (M&A) as a source of exogenous variation in insurer markups, I establish a causal relationship that increases in local health insurance premiums significantly raise the likelihood that firms adopt self-insured plans. Compared to fully insured f irms, self-insured firms are better able to preserve shareholder value amid escalating health insurance costs. However, in response to higher expected medical claims, these firms experience reduced cash flows and adjust financial policy by cutting capital expenditures.

PRINCIPAL FINDINGS

First, The probability of firms self-funding their health benefit plans significantly increases with a rise in market-level fully insured premiums, driven by increased insurance market concentration. A one-standard deviation increase from the average premium is associated with a 6.1% increase in the share of employers who change to funding their health benefit plans internally.

Second, firms who purchase an insurance contract from an insurance company experience a sharp decline in their market valuation after an increase in insurer market concentration.

Third, I document a spillover effect by which higher expected medical claims reduce corporate investment among self-insured employers.

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STUDY DESIGN

I use national health insurer mergers and acquisitions as a source of exogenous variation in insurer profit margins to examine how increasing insurer market power affects firms' decisions to self-insure. The primary merger during the sample period is the Aetna–Coventry merger, which was completed in 2013. To identify the effect, I implement a difference-in-differences (DiD) specification, comparing firms located in treated states—where both Aetna and Coventry operated prior to the merger—to those in unaffected states. The main specification is estimated as follow:

$$SelfInsure_{it} = \beta_0 + \beta_1 Treat_s \times Post_t + \beta_2 log(\#PlanEnrollees)_{it} + \beta_3 X_{ct-1} + \tau_t + \delta_i + \gamma_s + \epsilon_{it}$$

Figure 1: Positive Correlation between Insurance Premium and Self-insured Plans

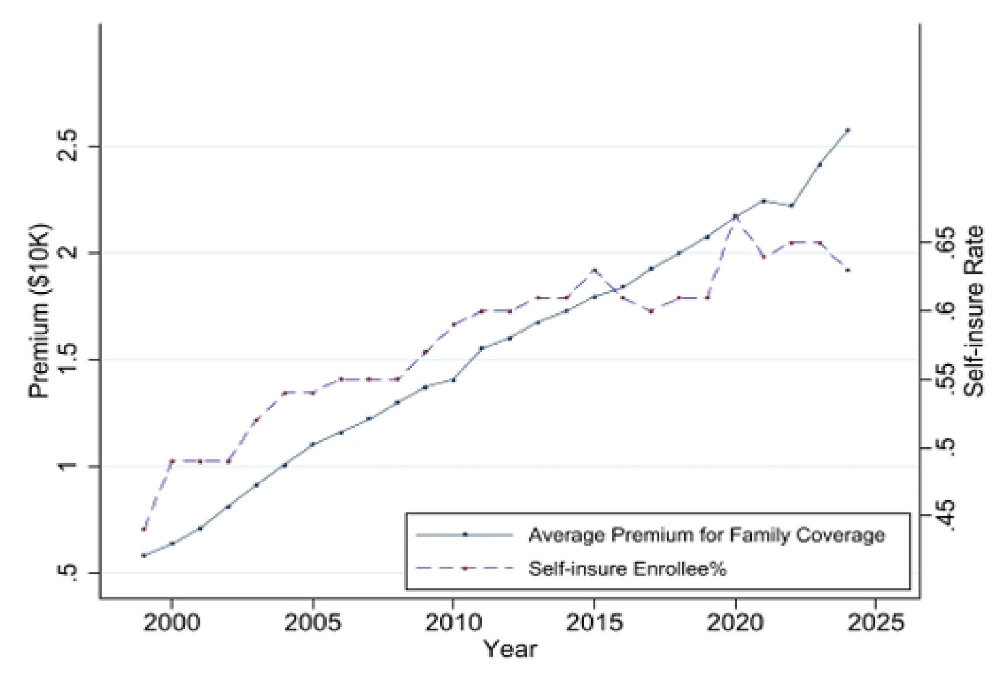
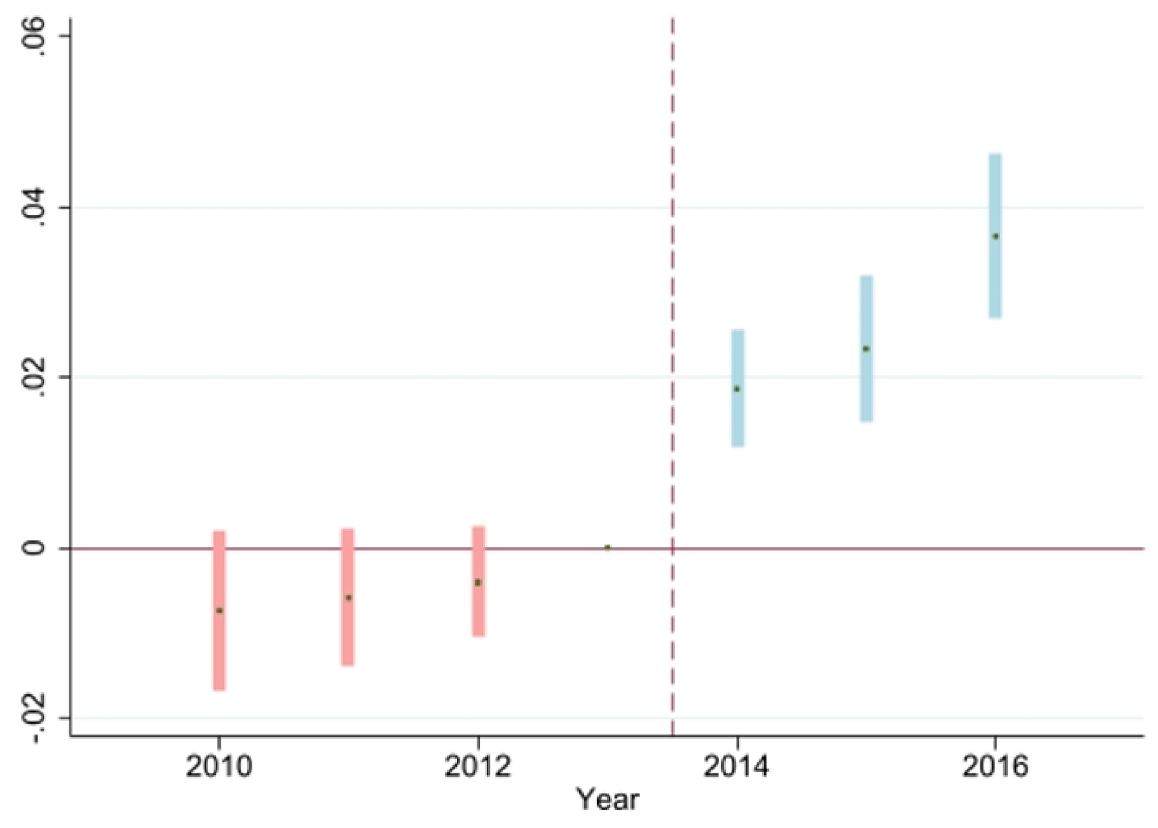


Table 1: Self-insured Decision and Local Insurance Premium

	OLS		IV-2SLS	
	SelfInsure	SelfInsure	log(Premium)	SelfInsure
	(1))	(2)	(3)	(4)
$Treat_s \times Post_t$	0.0295***	0.0286***	0.0460***	
	(7.95)	(7.62)	(25.74)	
$log(Premium)_{ct}$				0.621***
				(7.62)
$log(Plan\ Enrollee)_{it}$	0.0987***	0.0988***	-0.00665***	0.103***
	(24.74)	(24.79)	(-4.83)	(25.63)
N	171736	171736	171736	171736
R^2	0.8413	0.8414	0.7681	0.8414
Firm FE	Y	Y	Y	Y
State FE	Y	Y	Y	Y
Year FE	Y	Y	Y	Y
County Controls		Y	Y	Y

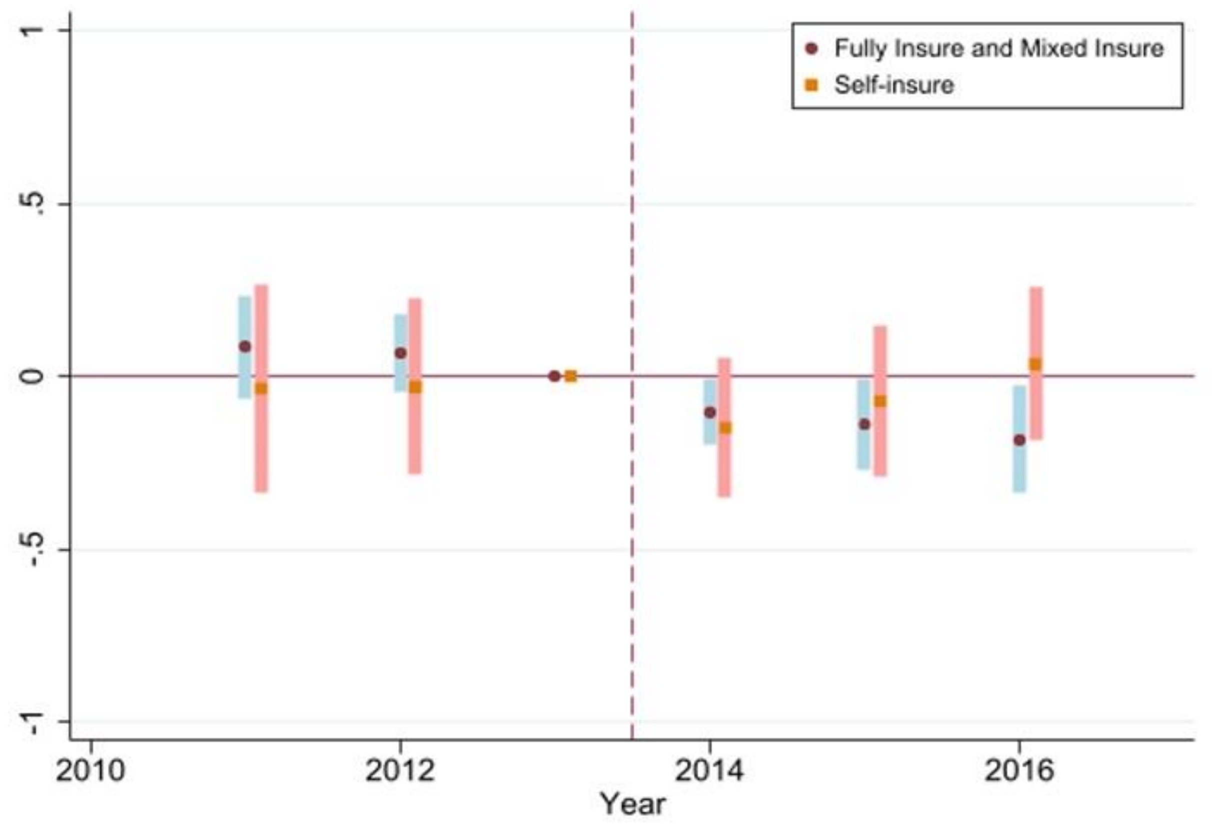
Figure 2: Parallel Trend of Aetna-Coventry Merger



A state is classified as "treated" if both insurers were active there in 2012, resulting in 21 treated states. Prior to the merger, Aetna ranked among the top five insurers by market share in 60% of the treated states, while Coventry held a top five position in 50%. Following the merger, Aetna's market share increased significantly in the treated states, providing a sharp change in local market concentration that serves as the basis for the identification strategy. Firms located in states affected by the Aetna–Coventry merger exhibit a 3-percentage point higher likelihood of switching to self-insurance (Table 1).

Impact on Market Valuation

$$TobinQ_{it} = \beta_0 + \beta_1 \sum_{\substack{j=2011 \\ j\neq 2013}}^{2016} Treat_s \times Year_j + \beta_2 X_{it-1} + \tau_t + \delta_i + \epsilon_{it}$$



Spillover Effect of Self-insured Medical Claims on Corporate Investment

With a self-insured contract, firms This table presents the results examining the impact increased expected medical claims on firms' investment decisions. The independent variable is a dummy equals to one if the firm is exposed to an exogenous increase in expected medical claims induced by state-level minimum stop-loss insurance deductible regulation. I document a 9% decrease in capital expenditure among self-insured firms that are affected by the minimum stop-loss deductible regulation.

	Investment			
	(1)	(2)	(3)	(4)
$Exposure_{cit-1}$	-0.0983***	-0.0970***	-0.0959***	-0.0959***
	(-4.36)	(-4.24)	(-4.22)	(-4.17)
N	3587	3331	2358	2203
Firm Controls	N	Y	N	Y
Include Mixed-insured Firm	N	N	Y	Y