Online Appendix

This appendix presents the results of extensions and robustness checks that could not be included in the text due to space constraints.

Tables OA1 and OA2 present the results obtained when estimating specifications (1) and (2) in the text using *plan design* as the dependent variable (rather than as a control). The results indicate employers do not increase plan generosity following positive profit shocks, nor do they increase plan generosity relatively more in more concentrated markets. Table OA3 presents descriptive characteristics of the markets falling into each "number of carriers" category. Tables OA4 and OA5 present results using the sample of independently-negotiated contracts, described in the text.

In the interest of brevity, only one table is reported for each of the robustness checks that follow. This table corresponds to Table 3 (and equation 2) in the text. Table OA6 presents the results obtained when weighting each observation by the average number of employees in that plan (across all years). The point estimates are larger and more precisely-estimated than those obtained without weights, and the pattern of results is the same. Next, I performed two checks to explore the possible bias induced by dropping market-years in which there are fewer than 20 employers with at least one FI plan. The first check (Table OA7) drops data from 2004 and 2005, the years in which the number of markets in the sample declines substantially due to this restriction. All key patterns remain statistically significant, and the coefficient on lagged profits in the most concentrated market is larger than in the baseline specification. The second check (Table OA8) expands the estimation sample to include all markets and years with at least one fully-insured plan. This introduces error in the dummies for number of carriers, but mitigates possible concern about changes in the sample of markets included in each year. The coefficient estimates change very little and the precision improves.

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¹ These results notwithstanding, I do not use weights in the primary specifications for two reasons: (1) there is no reason to believe the precision of the data is greater for larger plans; (2) the estimate of the serial correlation parameter ρ is unstable in these models.

The next robustness issue concerns the product market definition. The main analysis sample includes observations for all plan types (i.e. HMO, POS, PPO, and Indemnity). Although there is no reason *a priori* to believe the pattern of interest will differ across plan types, and plans of different types are clearly substitutes, given that more than 90 percent of fully-insured plans are HMOs it seems prudent to confirm the results are not driven by a subsample of unrepresentative plans. Restricting the sample to HMOs yields similar coefficient estimates (Table OA9), with slight increases in the standard errors.

Table OA10 presents robustness checks pertaining to the calculation of profits (i.e. the after tax return on gross assets). Compustat provides 5 alternative formulas for this measure:

Definition 1

[Income Before Extraordinary Items *divided by* (Assets—Total/Liabilities and Stockholders' Equity—Total *plus* Depreciation, Depletion, and Amortization (Accumulated) (Balance Sheet)]

Definition 2

[Income Before Extraordinary Items *plus* Interest Expense) *divided by* (Assets—Total/Liabilities and Stockholders' Equity—Total *plus* Depreciation, Depletion, and Amortization (Accumulated) (Balance Sheet)]

Definition 3

[Income Before Extraordinary Items *plus* (Interest Expense *multiplied by* (1 *minus* (Income Taxes—Total *divided by* Pretax Income)))) *divided by* (Assets—Total/Liabilities and Stockholders' Equity—Total *plus* Depreciation, Depletion, and Amortization (Accumulated) (Balance Sheet)]

Definition 4

[Income Before Extraordinary Items *plus* Interest Expense *plus* Minority Interest (Income Account)) *divided by* (Assets—Total/Liabilities and Stockholders' Equity—Total *plus* Depreciation, Depletion, and Amortization (Accumulated) (Balance Sheet)]

Definition 5

[Income Before Extraordinary Items *plus* (Interest Expense *multiplied by* (1 *minus* (Income Taxes—Total *divided* by Pretax Income))) *plus* Minority Interest (Income Account)) *divided by* (Assets—Total/Liabilities and Stockholders' Equity—Total *plus* Depreciation, Depletion, and Amortization (Accumulated) (Balance Sheet)]

Source: "Chapter 3 – Financial Formulas" in the Compustat Data Manual (4/2001)

The original specification uses Fefinition 2, which most closely mirrors the definition for firm profitability used in a widely-cited article by Fama and French ("Disappearing dividends: changing firm characteristics or lower propensity to pay?" *Journal of Financial Economics* 2001). However, results obtained using all definitions are similar. In the interest of space, Table OA10 only reproduces the most stringent specification for each definition, namely that corresponding to column (4) in Table 2 from the paper.

The next set of robustness checks addresses concerns about the measure of market concentration. First, I estimate models using the HHI to segment markets rather than the number of carriers. The rationale for using the number of carriers is that it is much less likely to suffer from measurement error given the LEHID is compiled from a non-random sample of employers. However, re-estimating the models using the HHI is a valuable robustness check. I calculate the HHI for every market and year, and I use the distribution of HHI to divide markets into quintiles, where quintile 1 corresponds to the lowest HHI and therefore the lowest degree of market concentration. The results are given in Table OA11. Although the pattern of coefficients is not strictly monotonic in the HHI quintile, in all but the first column (the model without plan fixed effects) the coefficient on the top quintile is significantly larger than the coefficient on the bottom quintile (p<=.05). Second, I address the issue of measurement error in the number of carriers. There are two sources of error in the counts of number of carriers: (1) error caused by using a sample rather than a census of employers; (2) error caused by counting all insurers that offer even a single plan in a market as "carriers" in that market. Carriers that do not have a presence in a given market sometimes "rent" the network of another carrier in order to win the business of a multisite employer seeking a single-carrier solution (or the same carrier-plantype across all sites). These carriers should not be counted as competitors in my model. Error from source (1) is

very unlikely, as the probability a carrier is not observed at all among a sample of 20 firms is low in all but the largest markets, and the key results derive from the smaller markets.²

To address error from overcounting, I used the following alternative definition: only carriers with 2+ clients in a given market-year are counted as carriers, unless they have 2+ clients in that market last year *and* next year (this is to eliminate erroneous "exits" due to sampling error). This definition yields a smaller number of carriers, thus shifting many more observations into the smaller "number of carrier" categories. I therefore use slightly different cutoffs for the number of carrier indicators (<=3, 4-5, 6-7, 8-9, 10+). The results are reported in Table OA12 below. They are qualitatively similar to the original results, although the pattern of coefficients is not strictly monotonic in the number of carriers.

Extension to Switching Analysis

The final supplemental analysis concerns the impact of switching on premiums. If profitable firms face higher premiums solely because of switching costs, then those that actually do switch should not face higher premiums. To explore this prediction, I begin with the original dataset of plan-year observations. I limit the sample to include in year t only departing plans, and in t+1 only new plans. I further restrict the sample to employer-markets that offer fully-insured plans in both t and t+1: this enables me to include employer-market fixed effects and enhances the comparability of the enrollee population pre and post-switch. Using this limited sample, I estimated the model that corresponds to equation 1 in the text (i.e., the model that includes all main effects and employer-market and plantype-year interactions). The results are reported in Table OA13. For the sake of comparison, I also estimated the same model on the complement of this sample (subject to the restriction of employer-markets being present in the data in adjacent years).

I find that profit shocks are associated with large premium *decreases* among employers who switch, and premium *increases* among employers who do not switch. It is important to note

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² Suppose there are 5 carriers serving a market-year, and each has equal market share. The probability that any one carrier is not observed in my sample of 20 is .8^20=.01. Of course this figure is understated given unequal market shares, but the ballpark estimate is informative.

that the switching decision cannot be assumed exogenous to the new premiums. That is, employers who switch probably do so in order to get attractive deals. The negative coefficient on lagged profits among switchers suggests profitable employers may insist on particularly attractive deals in order to switch.

Table OA1. The Relationship between Employer Profits and Plan Design

	Dep	Dependent variable=plan design; N=50,217					
	(1)	(2)	(3)	(4)			
Lagged Profits	-0.006 (0.003)	-0.022*** (0.003)	-0.022*** (0.003)	-0.002*** (0.003)			
Family Size	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)			
Plan Fixed Effects	N	Y	Y	Y			
Market-Year Covariates Unemployment Rate			0.058 (0.046)	N/A			
Ln(Average Medicare C	Costs)		-0.025*** (0.008)	N/A			
Market-Year Interactions			Y	Y			

^{*} p <0.10, ** p < 0.05, *** p < 0.01

Notes: Models are estimated using the LEHID FI-Compustat Sample. The unit of observation is the employer-market-carrier-plan type-year. Specifications are estimated by FGLS to account for serial correlation of errors among observations of the same employer-market-carrier-plan type (or "plan"). All specifications include fixed effects for employer, market, carrier, plan type, year, plan type-year, and employer-market.

Table OA2. The Relationship between Employer Profits and Plan Design, By Market **Structure of the Insurance Sector**

	Dependen	t variable=plan	design; N=50,21	7
	(1)	(2)	(3)	(4)
Lagged Profits*				
<=4 carriers	-0.048	-0.053***	-0.053***	-0.029
	(0.031)	(0.018)	(0.018)	(0.019)
5-6 carriers	0.010*	-0.006	-0.007	-0.007
	(0.006)	(0.010)	(0.010)	(0.011)
7-8 carriers	-0.008	-0.023***	-0.023***	-0.024***
	(0.005)	(0.005)	(0.005)	(0.005)
9-10 carriers	-0.006	-0.013***	-0.012***	-0.012**
	(0.005)	(0.005)	(0.005)	(0.005)
>10 carriers	-0.001	-0.033***	-0.033***	-0.032***
	(0.005)	(0.006)	(0.006)	(0.006)
Demographic Factor	-0.000	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Plan Fixed Effects	N	Y	Y	Y
Market-Year Covariates				
Unemployment Rate			0.064	N/A
			(0.047)	
Average Medicare Costs			-0.025***	N/A
			(0.008)	
Market-Year Interactions		N	N	Y
p-values from $H_0: \gamma_{1,1} \ge \gamma_{1,5} H_1: \gamma_{1,1} < \gamma_{1,5}$.93	.86	.85	.43

* p <0.10, ** p < 0.05, *** p < 0.01 Notes: Models are estimated using the LEHID FI-Compustat Sample. The unit of observation is the employer-market-carrier-plan type-year. Specifications are estimated by FGLS to account for serial correlation of errors among observations of the same employer-market-carrier-plan type (or "plan"). All specifications include fixed effects for employer, market, carrier, plan type, year, number of carrier category, plan type-year, and employer-market.

Table OA3. Market Characteristics, by Market Structure

#	N	% HMO	% Urban	% Black	%College	Pop	Inc/cap 2000	Inc/cap 1990	Growth in
carriers	11	(1998)	70 C10an	70 Black	, aconege	ТОР	me/cap 2000	mercup 1990	inc/cap
<=4	34	12.5%	69.9%	9.7%	14.3%	1159937	\$25,034	\$16,080	55.7%
5-6	128	11.2%	79.8%	5.8%	14.4%	1274923	\$26,751	\$17,181	55.7%
7-8	261	10.3%	82.0%	9.2%	15.0%	1715873	\$28,354	\$17,883	58.6%
9-10	193	10.8%	84.6%	8.7%	15.6%	2614131	\$28,354	\$18,144	56.3%
>10	201	11.5%	82.3%	8.3%	15.5%	2397528	\$28,150	\$17,957	56.8%
p-values i	from two	o-sided Pear.	son chi-squai	red test of eq	quality of medi	fans for <=4	and >10 carries	rs:	
I			1						
		0.65	0.02	0.44	0.04	0.00	0.04	0.04	0.00
Mean cha		0.65	_		0.04 %College	0.00 Pop	0.04 Inc/cap 2000	0.04 Inc/cap 1990	
Mean ch	aracter	0.65 istics % HMO	0.02	0.44					Growth in
Mean ch	aracter N	0.65 istics % HMO (1998)	0.02 % Urban	0.44 % Black	%College	Pop	Inc/cap 2000	Inc/cap 1990	Growth in inc/cap
Mean cha	aracter N 34	0.65 istics % HMO (1998) 15.5%	0.02 % Urban 69.3%	0.44 % Black 16.1%	%College	Pop 1158232	Inc/cap 2000 \$26,143	Inc/cap 1990 \$16,791	Growth in inc/cap
# carriers <=4 5-6	N 34 128	0.65 istics % HMO (1998) 15.5% 14.7%	0.02 % Urban 69.3% 74.6%	0.44 % Black 16.1% 11.8%	%College 14.6% 15.0%	Pop 1158232 1503733	Inc/cap 2000 \$26,143 \$27,173	Inc/cap 1990 \$16,791 \$17,339	Growth in inc/cap 55.7% 56.7%

Notes: There are 817 market-years; each is classified into the appropriate category based on the number of carriers in that year. Characteristics are obtained from the Area Resource File and pertain to the year 2000 unless otherwise listed. For example, if market 23 appears in the "5-6" category for 1998-2002, and then in the "<=4" category for 2003-2005, its 2000 population accounts for 5 observations in the "5-6" category and 3 observations in the <=4 category.

Table OA4. The Relationship between Employer Profits and Health Insurance Premiums

Sample Limited to Independently-Negotiated Contracts

			Depend	ent variable=lr	(annual premi	um); N=25,84	14	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lagged Profits	0.013	0.013	0.077***	0.088***	0.075***	0.087***	0.047*	0.060**
	(0.015)	(0.015)	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)
Family Size	0.314***	0.314***	0.293***	0.293***	0.293***	0.293***	0.289***	0.289***
·	(0.004)	(0.004)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Plan Design		0.460***		0.355***		0.359***		0.357***
C		(0.038)		(0.055)		(0.055)		(0.032)
Plan Fixed Effects	N	N	Y	Y	Y	Y	Y	Y
Market-Year Covariates								
Unemployment Rate					0.280	0.332	N/A	N/A
					(0.333)	(0.331)		
Ln(Average Medicare C	Costs)				0.072	0.081	N/A	N/A
	•				(0.055)	(0.055)		
Market-Year Interactions	N	N	N	N	N	N	Y	Y

^{*} p <0.10, ** p < 0.05, *** p < 0.01

Notes: The unit of observation is the employer-market-carrier-plan type-year. Specifications correspond to equation (1) in the text, and are estimated by FGLS to account for serial correlation of errors among observations of the same employer-market-carrier-plan type (or "plan"). All specifications include fixed effects for employer, market, carrier, plan type, year, plan type-year, and employer-market.

Table OA5. The Relationship between Employer Profits and Health Insurance Premiums, By Market Structure of the Insurance Sector Sample Limited to Independently-Negotiated Contracts

	Dependent	variable=plan	design; N=25,8	44
	(1)	(2)	(3)	(4)
Lagged Profits*				
<=4 carriers	0.130	0.209*	0.202	0.321**
	(0.083)	(0.125)	(0.125)	(0.146)
5-6 carriers	0.020	0.191**	0.186**	0.129
	(0.045)	(0.080)	(0.080)	(0.086)
7-8 carriers	0.035	0.130***	0.129***	0.108***
	(0.022)	(0.038)	(0.038)	(0.038)
9-10 carriers	-0.004	0.086**	0.085**	0.048
	(0.023)	(0.036)	(0.036)	(0.036)
>10 carriers	-0.002	0.016	0.016	-0.009
	(0.023)	(0.039)	(0.039)	(0.039)
Demographic Factor	0.314***	0.294***	0.294***	0.290***
	(0.004)	(0.008)	(0.008)	(0.008)
Plan Design	0.464***	0.355***	0.358***	0.354***
-	(0.038)	(0.055)	(0.055)	(0.057)
Plan Fixed Effects	N	Y	Y	Y
Market-Year Covariates				
Unemployment Rate			0.243	N/A
			(0.334)	
Average Medicare Costs			0.076	N/A
-			(0.055)	
Market-Year Interactions	N	N	N	Y

^{*} p <0.10, ** p < 0.05, *** p < 0.01

Notes: The unit of observation is the employer-market-carrier-plan type-year. Specifications correspond to equation (2) in the text, and are estimated by FGLS to account for serial correlation of errors among observations of the same employer-market-carrier-plan type (or "plan"). All specifications include fixed effects for employer, market, carrier, plan type, year, number of carrier category, plan type-year, and employer-market.

Table OA6. The Relationship between Employer Profits and Health Insurance Premiums, By Market Structure of the Insurance Sector Weighted Estimates

	Dependent	variable=ln(ann	nual premium)	; N=50,217
	(1)	(2)	(3)	(4)
Lagged Profits*				
<=4 carriers	0.339***	0.428***	0.430***	0.295***
	(0.008)	(0.007)	(0.007)	(0.008)
5-6 carriers	0.098***	0.246***	0.246***	0.032***
	(0.002)	(0.004)	(0.004)	(0.003)
7-8 carriers	0.048***	0.092***	0.091***	0.023***
	(0.001)	(0.002)	(0.002)	(0.002)
9-10 carriers	0.022***	0.043***	0.043***	0.047***
	(0.001)	(0.002)	(0.002)	(0.001)
>10 carriers	-0.005***	-0.006***	-0.007***	-0.038***
	(0.001)	(0.002)	(0.002)	(0.002)
Demographic Factor	0.321***	0.292***	0.292***	0.280***
	(0.000)	(0.000)	(0.000)	(0.000)
Plan Design	0.426***	0.544***	0.546***	0.672***
	(0.002)	(0.002)	(0.002)	(0.002)
Plan Fixed Effects	N	Y	Y	Y
Market-Year Covariates				
Unemployment Rate			-0.095***	N/A
			(0.010)	
Average Medicare Costs			0.035***	N/A
N. 1 . W	3. 7	3.7	(0.002)	*7
Market-Year Interactions	N	N	N	<u>Y</u>
p-values from H ₀ : $\gamma_{1, 1} = \gamma_{1, 5}$ H ₁ : $\gamma_{1, 1} > \gamma_{1, 5}$.00	.00	.00	.00

^{*} p <0.10, ** p < 0.05, *** p < 0.01

Notes: Models are estimated using the LEHID FI-Compustat Sample. The unit of observation is the employer-market-carrier-plan type-year. Specifications correspond to equation (2) in the text, and are estimated by FGLS to account for serial correlation of errors among observations of the same employer-market-carrier-plan type (or "plan"). All specifications include fixed effects for employer, market, carrier, plan type, year, number of carrier category, plan type-year, and employer-market.

Table OA7. The Relationship between Employer Profits and Health Insurance Premiums, By Market Structure of the Insurance Sector Excludes Data for 2004 and 2005

	Dependent	variable=ln(ar	nual premium); N=42,577
	(1)	(2)	(3)	(4)
Lagged Profits*				
<=4 carriers	0.197**	0.242**	0.238**	0.303***
	(0.079)	(0.109)	(0.109)	(0.117)
5-6 carriers	0.030	0.086	0.086	0.068
	(0.041)	(0.054)	(0.054)	(0.056)
7-8 carriers	0.022	0.058**	0.057**	0.052**
	(0.015)	(0.024)	(0.024)	(0.025)
9-10 carriers	-0.016	0.015	0.013	0.015
	(0.017)	(0.027)	(0.027)	(0.027)
>10 carriers	-0.029	0.006	0.005	-0.009
	(0.018)	(0.027)	(0.027)	(0.027)
Demographic Factor	0.322***	0.303***	0.303***	0.306***
	(0.003)	(0.005)	(0.005)	(0.005)
Plan Design	0.419***	0.586***	0.588***	0.631***
	(0.030)	(0.043)	(0.043)	(0.043)
Plan Fixed Effects	N	Y	Y	Y
Market-Year Covariates				
Unemployment Rate			0.167	N/A
			(0.202)	
Average Medicare Costs			0.096**	N/A
			(0.038)	
Market-Year Interactions	N	N	N	Y
p-values from H_0 : $\gamma_{1, 1} = \gamma_{1, 5} H_1$: $\gamma_{1, 1} > \gamma_{1, 5}$.00	.01	.02	.00

* p <0.10, ** p < 0.05, *** p < 0.01 Notes: The unit of observation is the employer-market-carrier-plan type-year. Specifications correspond to equation (2) in the text, and are estimated by FGLS to account for serial correlation of errors among observations of the same employer-market-carrier-plan type (or "plan"). All specifications include fixed effects for employer, market, carrier, plan type, year, number of carrier category, plan type-year, and employer-market.

Table OA8. The Relationship between Employer Profits and Health Insurance Premiums, By Market Structure of the Insurance Sector *Including all Market-Years*

	Dependent	variable=ln(ar	nual premium); N=52,971
	(1)	(2)	(3)	(4)
Lagged Profits*				
<=4 carriers	0.154***	0.146**	0.143**	0.167**
	(0.052)	(0.059)	(0.059)	(0.065)
5-6 carriers	0.064**	0.118***	0.119***	0.076*
	(0.025)	(0.037)	(0.037)	(0.039)
7-8 carriers	0.039***	0.065***	0.064***	0.050***
	(0.011)	(0.018)	(0.018)	(0.018)
9-10 carriers	0.016	0.047**	0.046**	0.036*
	(0.013)	(0.019)	(0.019)	(0.019)
>10 carriers	0.028**	0.038	0.038	0.030
	(0.014)	(0.024)	(0.024)	(0.024)
Demographic Factor	0.294***	0.297***	0.297***	0.299***
	(0.003)	(0.004)	(0.004)	(0.004)
Plan Design	0.330***	0.391***	0.393***	0.427***
C	(0.023)	(0.030)	(0.030)	(0.030)
Plan Fixed Effects	N	Y	Y	Y
Market-Year Covariates				
Unemployment Rate			-0.148	N/A
			(0.177)	
Average Medicare Costs			0.098**	N/A
			(0.031)	
Market-Year Interactions	N	N	N	Y
p-values from H_0 : $\gamma_{1, 1} = \gamma_{1, 5} H_1$: $\gamma_{1, 1} > \gamma_{1, 5}$.01	.04	.05	.02

^{*} p <0.10, ** p < 0.05, *** p < 0.01

Notes: The unit of observation is the employer-market-carrier-plan type-year. Specifications correspond to equation (2) in the text, and are estimated by FGLS to account for serial correlation of errors among observations of the same employer-market-carrier-plan type (or "plan"). All specifications include fixed effects for employer, market, carrier, plan type, year, number of carrier category, plan type-year, and employer-market.

Table OA9. The Relationship between Employer Profits and Health Insurance Premiums, By Market Structure of the Insurance Sector Sample Limited to HMOs

	Dependent	variable=ln(ar	nual premium); N=45,996
	(1)	(2)	(3)	(4)
Lagged Profits*				
<=4 carriers	0.133**	0.146**	0.144**	0.154**
	(0.059)	(0.073)	(0.073)	(0.077)
5-6 carriers	0.063**	0.106**	0.107**	0.065
	(0.027)	(0.042)	(0.042)	(0.044)
7-8 carriers	0.037***	0.057***	0.056***	0.039**
	(0.013)	(0.019)	(0.019)	(0.019)
9-10 carriers	0.015	0.042**	0.042**	0.031
	(0.014)	(0.020)	(0.020)	(0.020)
>10 carriers	0.023	0.039	0.039	0.031
	(0.015)	(0.024)	(0.024)	(0.024)
Demographic Factor	0.308***	0.296***	0.296***	0.297***
.	(0.003)	(0.005)	(0.005)	(0.005)
Plan Design	0.355***	0.407***	0.409***	0.449***
•	(0.025)	(0.032)	(0.032)	(0.032)
Plan Fixed Effects	N	Y	Y	Y
Market-Year Covariates				
Unemployment Rate			197	N/A
			(0.189)	
Average Medicare Costs			0.077**	N/A
			(0.033)	
Market-Year Interactions	N	N	N	Y
p-values from H_0 : $\gamma_{1, 1} = \gamma_{1, 5} H_1$: $\gamma_{1, 1} > \gamma_{1, 5}$.04	.08	.08	.06

* p <0.10, ** p < 0.05, *** p < 0.01 Notes: The unit of observation is the employer-market-carrier-plan type-year. Specifications correspond to equation (2) in the text, and are estimated by FGLS to account for serial correlation of errors among observations of the same employer-market-carrier-plan type (or "plan"). All specifications include fixed effects for employer, market, carrier, plan type, year, number of carrier category, plan type-year, and employer-market.

Table OA10. The Relationship between Employer Profits and Health **Insurance Premiums, By Market Structure of the Insurance Sector** Alternative Definitions for Firm Profits

		Dependent v	variable=ln(ar	nnual premiu	m)
	(Def 1)	(Def 2)	(Def 3)	(Def 4)	(Def 5)
Lagged Profits*					
<=4 carriers	0.152**	0.168**	0.143*	0.177**	0.149**
	(0.073)	(0.075)	(0.075)	(0.075)	(0.075)
5-6 carriers	0.032	0.060	0.039	0.046	0.041
	(0.041)	(0.043)	(0.043)	(0.042)	(0.042)
7-8 carriers	0.042**	0.042**	0.042**	0.040**	0.042**
	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
9-10 carriers	0.032*	0.034*	0.032*	0.033*	0.032*
	(0.019)	(0.019)	(0.019)	(0.019)	(0.019)
>10 carriers	0.028	0.027	0.030	0.030	0.031
	(0.023)	(0.024)	(0.024)	(0.024)	(0.024)
Demographic Factor	0.298***	0.298***	0.298***	0.297***	0.298***
	(0.004)	(0.005)	(0.005)	(0.004)	(0.004)
Plan Design	0.442***	0.451***	0.436***	0.431***	0.442***
-	(0.032)	(0.032)	(0.032)	(0.032)	(0.032)
Plan Fixed Effects	Y	Y	Y	Y	Y
Market-Year Covariates					
Unemployment Rate	N/A	N/A	N/A	N/A	N/A
Average Medicare Costs	N/A	N/A	N/A	N/A	N/A
Market-Year Interactions	Y	Y	Y	Y	Y
p-values from H_0 : $\gamma_{1,1} = \gamma_{1,5} H_1$: $\gamma_{1,1} > \gamma_{1,5}$.05	.03	.07	.03	.07
N	49,908	50,217	49,971	49,896	49,824

* p <0.10, ** p < 0.05, *** p < 0.01 Notes: Models are estimated using the LEHID FI-Compustat Sample. The unit of observation is the employer-market-carrier-plan type-year. Specifications correspond to equation (2) in the text, and are estimated by FGLS to account for serial correlation of errors among observations of the same employer-market-carrier-plan type (or "plan"). All specifications include fixed effects for employer, market, carrier, plan type, year, number of carrier category, plan type-year, and employermarket.

Table OA11. The Relationship between Employer Profits and Health Insurance Premiums, By Market Structure of the Insurance Sector

Market Structure is Defined by Quintile of HHI

	Dependent	variable=ln(ar	nnual premium);	N=50,217
	(1)	(2)	(3)	(4)
Lagged Profits*				
Quintile 1 of HHI	0.009	0.029	0.029	0.028
	(0.017)	(0.026)	(0.026)	(0.026)
Quintile 2 of HHI	0.018	0.057**	0.056**	0.038
	(0.016)	(0.026)	(0.026)	(0.026)
Quintile 3 of HHI	0.026**	0.025	0.024	0.019
	(0.012)	(0.021)	(0.021)	(0.021)
Quintile 4 of HHI	0.040**	0.053**	0.052**	0.041*
	(0.016)	(0.022)	(0.022)	(0.022)
Quintile 5 of HHI	0.036	0.123***	0.122***	0.092***
	(0.025)	(0.028)	(0.028)	(0.028)
Demographic Factor	0.317***	0.297***	0.297***	0.298***
	(0.003)	(0.005)	(0.005)	(0.005)
Plan Design	0.362***	0.410***	0.412***	0.449***
	(0.024)	(0.032)	(0.032)	(0.032)
Plan Fixed Effects	N	Y	Y	Y
Market-Year Covariates				
Unemployment Rate			-0.026	N/A
			(0.184)	
Average Medicare Costs			0.086***	N/A
			(0.032)	
Market-Year Interactions	N	N	N	Y
p-values from H ₀ : $\gamma_{1, 1} = \gamma_{1, 5}$ H ₁ : $\gamma_{1, 1} < \gamma_{1, 5}$.17	.01	.01	.05

^{*} p <0.10, ** p < 0.05, *** p < 0.01

Notes: Models are estimated using the LEHID FI-Compustat Sample. The unit of observation is the employer-market-carrier-plan type-year. Specifications correspond to equation (2) in the text, and are estimated by FGLS to account for serial correlation of errors among observations of the same employer-market-carrier-plan type (or "plan"). All specifications include fixed effects for employer, market, carrier, plan type, year, number of carrier category, plan type-year, and employer-market.

Table OA12. The Relationship between Employer Profits and Health Insurance Premiums, By Market Structure of the Insurance Sector Restricted Definition for Carriers and New Cutoffs

	Dependent	variable=ln(ar	nnual premium);	N=50,217
	(1)	(2)	(3)	(4)
Lagged Profits*				
<=3 carriers	0.206***	0.293***	0.288***	0.150
	(0.074)	(0.093)	(0.093)	(0.097)
4-5 carriers	0.035**	0.054**	0.054**	0.038*
	(0.014)	(0.022)	(0.022)	(0.023)
6-7 carriers	0.012	0.042**	0.040**	0.035*
	(0.012)	(0.018)	(0.018)	(0.018)
8-9 carriers	0.037**	0.051**	0.050*	0.034
	(0.015)	(0.026)	(0.026)	(0.026)
<u>10+ carriers</u>	0.012	0.073*	0.073*	0.071
	(0.028)	(0.044)	(0.044)	(0.044)
Demographic Factor	0.317***	0.297***	0.297***	0.298***
	(0.003)	(0.005)	(0.005)	(0.005)
Plan Design	0.362***	0.410***	0.412***	0.450***
-	(0.024)	(0.032)	(0.032)	(0.032)
Plan Fixed Effects	N	Y	Y	Y
Market-Year Covariates				
Unemployment Rate			-0.026	N/A
			(0.184)	
Average Medicare Costs			0.101***	N/A
			(0.033)	
Market-Year Interactions	N	N	N	Y
p-values from H_0 : $\gamma_{1,1} = \gamma_{1,5} H_1$: $\gamma_{1,1} > \gamma_{1,5}$.01	.02	.02	.23

^{*} p <0.10, ** p < 0.05, *** p < 0.01

Notes: Models are estimated using the LEHID FI-Compustat Sample. The unit of observation is the employer-market-carrier-plan type-year. Specifications correspond to equation (2) in the text, and are estimated by FGLS to account for serial correlation of errors among observations of the same employer-market-carrier-plan type (or "plan"). All specifications include fixed effects for employer, market, carrier, plan type, year, number of carrier category, plan type-year, and employer-market.

Table OA13. The Relationship between Employer Profits and Health Insurance Premiums

Comparison of Results by Sample

	_	m)				
	Entering and Exiting Plans			All Other Plans		
Lagged Profits	-0.157***	-0.159***		0.034***	0.036***	
	(0.056)	(0.055)		(0.009)	(0.009)	
Lagged Profits*						
<=4 carriers			0.024			0.169***
			(0.226)			(0.060)
5-6 carriers			-0.210			0.072***
			(0.207)			(0.026)
7-8 carriers			-0.145*			0.039***
			(0.077)			(0.012)
9-10 carriers			-0.101			0.019
			(0.082)			(0.015)
>10 carriers			-0.222***			0.026
			(0.063)			(0.016)
Demographic Factor	0.351***	0.352***	,	0.313***	0.313***	0.169***
	(0.007)	(0.007)		(0.003)	(0.003)	(0.060)
Plan Design	()	0.429***		()	0.347***	0.072***
		(0.078)			(0.026)	(0.026)
p-values from H_0 : $\gamma_{1,1} = \gamma_{1,5} H_1$: $\gamma_{1,1} > \gamma_{1,5}$		()	.15		(111 = 0)	.01
N	8,855	8,855	8,855	38,203	38,203	38,203

^{*} p <0.10, ** p < 0.05, *** p < 0.01

Notes: The unit of observation is the employer-market-carrier-plan type-year. Specifications correspond to equations (1) and (2) in the text, and are estimated by FGLS to account for serial correlation of errors among observations of the same employer-market-carrier-plan type (or "plan"). All specifications include fixed effects for employer, market, carrier, plan type, year, plan type-year, and employer-market. Columns (3) and (6) include fixed effects for the number of carrier categories.