


[Home](#) > [The Geneva Papers on Risk and Insurance - Issues and Practice](#) > [Article](#)

Government Intervention through an Implicit Federal Backstop: Is There a Link to Market Power?

Original Article | Published: 15 April 2015

Volume 40, pages 538–555, (2015) [Cite this article](#)

 [Save article](#)

[View saved research](#) >



[The Geneva Papers on Risk and Insurance - Issues and Practice](#)

[Aims and scope](#) →

[Submit manuscript](#) →

[David L Eckles](#)¹ & [James I Hilliard](#)²

 **190** Accesses  **2** Citations [Explore all metrics](#) →

Abstract

We estimate the impact of exogenous capital shocks, namely the Troubled Asset Relief Program (TARP), on prices in various property-casualty business lines. We hypothesise that these capital shocks may distort insurer incentives. Specifically, insurers may exploit the implicit governmental guaranty by taking additional pricing risks in order to gain market share. Our results do not support this hypothesis. We find no evidence of a company-specific, or industry-wide, moral hazard problem associated with the implicit (explicit, in some cases) federal backstop created by TARP funds.



This is a preview of subscription content, [log in via an institution](#) to check access.

Access this article

[Log in via an institution](#) →

Subscribe and save

Springer+

from €37.37 /Month

- Starting from 10 chapters or articles per month
- Access and download chapters and articles from more than 300k books and 2,500 journals
- Cancel anytime

[View plans](#) →

Buy Now

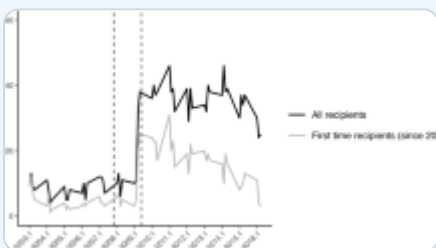
[Buy article PDF 39,95 €](#)

Price includes VAT (Poland)

Instant access to the full article PDF.

[Institutional subscriptions](#) →

Similar content being viewed by others

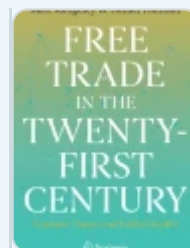


[Investment incentives attract foreign direct investment: evidence from the great recession](#)

Article | Open access



[The Permanent-Transitory Confusion: Implications for Tests of Market Efficiency and for Expected Inflation During...](#)



[Reflections from the Inside Out: What Libertopia Tells Us About the Nature of Markets in Trade](#)

Explore related subjects

Discover the latest articles, books and news in related subjects, suggested using machine learning.

[Capital Markets](#)[Economic Policy](#)[Fiscal Policy](#)[Fiscal Law](#)[Insurance](#)[Public Finance](#)[Housing Finance Dynamics and Market Behavior](#)

Notes

1. [Merton \(1977\)](#).
2. The federal government also selectively protected other financial institutions during this time period.
3. [Harrington \(2009\)](#); [Grace, \(2011\)](#).
4. [Harrington \(2009\)](#).
5. [Pleven and Reddy \(2009\)](#).
6. In light of the accusations levied against AIG, the Government Accountability Office (GAO) conducted an inquiry into AIG's potential underpricing and did not find evidence that the firm used its capital influx to engage in anti-competitive behaviour. Contrary to the claims made by competitors, the report found that AIG's price cuts, where they occurred, were in line with expectations, and suggested that AIG, in fact, lost business due to reputation issues ([Williams, 2009](#)). A similar study conducted by the insurance regulator in Pennsylvania also concluded that AIG's pricing "behaviors were not out of

line with the underwriting, pricing and price monitoring behaviors of their competitors". The GAO report did not indicate whether AIG's business losses were mitigated by pricing strategies.

7. Even though AIG's difficulties stemmed from operations in the AIG Financial Products division, the apparent perception by some competitors was that the bailout would provide capital relief company-wide, as noted by Mr. Kelly.
8. [Keeley \(1990\)](#).
9. Much of the money AIG received was used to offset losses from their Financial Products division. However, the moral hazard problem created by the TARP funds is independent of funds deployment. That is, it is the existence of the potential capital infusion that creates the moral hazard problem for insurers, not the range of investment options.
10. [Cummins and Danzon \(1997\)](#).
11. [Phillips et al. \(1998\)](#).
12. [Bain \(1951\)](#).
13. [Stigler \(1964\)](#).
14. [Choi and Weiss \(2005\)](#) and [Weiss and Choi \(2008\)](#) show that more efficient insurers do in fact earn higher profits by aggressively competing along the price dimension.
15. E.g. federal deposit insurance as in [Keeley \(1990\)](#).

16. [Shrieves and Dahl \(1992\)](#).
17. [Cummins and Sommer \(1996\)](#).
18. [Baranoff and Sager \(2002\)](#).
19. [Lin et al. \(2014\)](#).
20. [Cheng and Weiss \(2013\)](#).
21. [Samuelson and Zeckhauser \(1988\)](#).
22. [Pope and Ma \(2008\)](#).
23. When market shares are expressed in percentage terms, HHI takes a value between 0 and 10,000, with 10,000 representing a monopoly market.
24. Other measures of concentration, in particular, the n -firm concentration ratio, tend to underestimate the impact of the fringe firms, and are rarely used by economists.
25. As an example, in some lines, rates must be approved by regulators at the state level for purposes of consumer protection and capital adequacy.
26. [Choi and Weiss \(2005\)](#).
27. [Weiss and Choi \(2008\)](#).
28. E.g. [Stigler \(1964\)](#).

29. [Cummins \(2002\)](#).
30. [Cummins and Weiss \(1991\)](#).
31. These data are obtained from the Federal Reserve Economic Database housed at the St. Louis Federal Reserve Bank.
32. [Cotterill \(1986\)](#).
33. The inverse HHI does not give the exact number of firms in the market, but rather is the number of firms that would be in the market if each firm had the same market share.
34. Since we are concerned with pricing changes that may be short term in nature, we would ideally be able to observe our variables on a more regular basis than annually. Using annual data certainly seems to bias us *against* finding support for our hypothesis.
35. *Data source:* National Association of Insurance Commissioners, by permission. The NAIC does not endorse any analysis or conclusions based upon the use of its data.
36. www.iii.org/issue_updates/regulation-modernization.html.
37. Only AIG (\$182bn) and Hartford (\$3.4bn) actually received TARP funds. Since AIG was the largest recipient, we also conduct the analysis with AIG separately.
38. We tested for differences in coefficients between all TARP-eligible firms and

AIG for each line of business. We identified only a few differences in pricing behaviour related to market concentration during the bailout period, but we also found significant differences between models between the two subsamples for most of the business lines. The differences between models suggest that AIG's pricing behaviour differs from that of other carriers over time, but there is no systematic evidence that AIG took advantage of its bailout funding to increase its market share in competitive markets. Results of these tests are available from the authors upon request.

References

Bain, J.S. (1951) 'Relation of profit rate to industry concentration: American manufacturing, 1936-1940' *The Quarterly Journal of Economics* 65 (3): 293-324.

Baranoff, E.G. and Sager, T.W. (2002) 'The relations among asset risk, product risk, and capital in the life insurance industry', *Journal of Banking & Finance* 26 (6): 1181-1197.

Cheng, J. and Weiss, M.A. (2013) 'Risk-based capital and firm risk taking in property-liability insurance', *The Geneva Papers on Risk and Insurance—Issues and Practice* 38 (2): 274-307.

Choi, B.P. and Weiss, M.A. (2005) 'An empirical investigation of market structure, efficiency, and performance in property-liability insurance', *The Journal of Risk and Insurance* 72 (4): 635-673.

Cotterill, R.W. (1986) 'Market power in the retail food industry: Evidence from Vermont', *The Review of Economics and Statistics* 68 (3): 379-386.

Cummins, J.D. (ed.) (2002) *Deregulating Property-Liability Insurance: Restoring Competition and Increasing Market Efficiency*, Washington, DC: AEI-Brookings

Cummins, J.D. and Danzon, P.M. (1997) 'Price, financial quality, and capital flows in insurance markets', *Journal of Financial Intermediation* 6 (1): 3-38.

Cummins, J.D. and Sommer, D.W. (1996) 'Capital and risk in property-liability insurance markets', *Journal of Banking & Finance* 20 (6): 1069-1092.

Cummins, J.D. and Weiss, M.A. (1991) 'The Structure, Conduct, and Regulation of the Property-Liability Insurance', in R.W. Kopcke and R.E. Randall (eds) *The Financial Condition and Regulation of Insurance Companies: Proceedings of a Conference Held at Harwich Port, Massachusetts, June 1991*, Boston, MA: Federal Reserve Bank, pp. 117-154.

Grace, M. (2011) *The Insurance Industry and Systemic Risk: Evidence and Discussion*, working paper, Atlanta, GA: Georgia State University.

Harrington, S.E. (2009) 'The financial crisis, systemic risk, and the future of insurance regulation', *The Journal of Risk and Insurance* 76 (4): 785-819.

Keeley, M.C. (1990) 'Deposit insurance, risk, and market power in banking', *The American Economic Review* 80 (5): 1183-1200.

Lin, W.-C., Lai, Y.-H. and Powers, M.R. (2014) 'The relationship between regulatory pressure and insurer risk taking', *The Journal of Risk and Insurance* 81 (2): 271-301.

Merton, R.C. (1977) 'An analytic derivation of the cost of deposit insurance and loan guarantees An application of modern option pricing theory', *Journal of Banking & Finance* 1 (1): 3-11.

Phillips, R.D., Cummins, J.D. and Allen, F. (1998) 'Financial pricing of insurance in the multiple-line insurance company', *The Journal of Risk and Insurance* 65 (4): 597-636.

Pleven, L. and Reddy, S. (2009) 'AIG's Rivals Blame Bailout For Tilting Insurance Game', *Wall Street Journal* 23 March.

Pope, N. and Ma, Y.-L. (2008) 'The market structure-performance relationship in the international insurance sector', *The Journal of Risk and Insurance* 75 (4): 947-966.

Samuelson, W. and Zeckhauser, R. (1988) 'Status quo bias in decision making', *Journal of Risk and Uncertainty* 1 (1): 7-59.

Shrieves, R.E. and Dahl, D. (1992) 'The relationship between risk and capital in commercial banks', *Journal of Banking & Finance* 16 (2): 439-457.

Stigler, G.J. (1964) 'A theory of oligopoly', *The Journal of Political Economy* 72 (1): 44-61.

Weiss, M.A. and Choi, B.P. (2008) 'State regulation and the structure, conduct, efficiency and performance of US auto insurers', *Journal of Banking & Finance* 32 (1): 134-156.

Williams, O.M. (2009) 'Federal Financial Assistance: Preliminary Observations on Assistance Provided to AIG', Testimony before the Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises, House Committee on Financial Services, GAO-09-490T, Washington, DC: U.S. Government Accountability Office.

Author information

Authors and Affiliations

Insurance, Legal Studies and Real Estate, University of Georgia, 206 Brooks Hall, Athens, 30602, GA, U.S.A.

David L Eckles

W.A. Franke College of Business, Northern Arizona University, 20 W. McConnell Dr. Flagstaff, 86005, AZ, U.S.A.

James I Hilliard

Rights and permissions

[Reprints and permissions](#)

About this article

Cite this article

Eckles, D., Hilliard, J. Government Intervention through an Implicit Federal Backstop: Is There a Link to Market Power?. *Geneva Pap Risk Insur Issues Pract* **40**, 538–555 (2015).

<https://doi.org/10.1057/gpp.2015.5>

Received

10 June 2014

Accepted

02 February 2015

Published

15 April 2015

Issue date

01 July 2015

DOI

<https://doi.org/10.1057/gpp.2015.5>

Keywords

[moral hazard](#)

[financial crisis](#)

[insurer pricing](#)

[insurer competition](#)

Search

Search by keyword or author



Navigation

[Find a journal](#)

[Publish with us](#)

[Track your research](#)