

2009

The Devil Made Me Do It: The Corporate Purchase of Insurance

Victor P. Goldberg
Columbia Law School, vpg@law.columbia.edu

Follow this and additional works at: https://scholarship.law.columbia.edu/faculty_scholarship

Part of the [Business Organizations Law Commons](#), and the [Contracts Commons](#)

Recommended Citation

Victor P. Goldberg, *The Devil Made Me Do It: The Corporate Purchase of Insurance*, COLUMBIA LAW AND ECONOMICS WORKING PAPER No. 346 (2009).

Available at: https://scholarship.law.columbia.edu/faculty_scholarship/1571

This Working Paper is brought to you for free and open access by the Faculty Publications at Scholarship Archive. It has been accepted for inclusion in Faculty Scholarship by an authorized administrator of Scholarship Archive. For more information, please contact donnely@law.columbia.edu.

**The Center for Law and Economic Studies
Columbia University School of Law
435 West 116th Street
New York, NY 10027-7201**

(212) 854-3739

**The Devil Made Me Do It:
The Corporate Purchase of Insurance**

Victor P. Goldberg

Working Paper No. 346

February 2009

Do not quote or cite without author's permission.

*An index to the working papers in the Columbia Law
School Working Paper Series is located at
<http://www.law.columbia.edu/lawec/>*

The Devil Made Me Do It: The Corporate Purchase of Insurance

Victor P. Goldberg

For decades I have argued against invoking risk aversion when analyzing the behavior of large, sophisticated firms. (Goldberg (1980 and 1990)) One response to my position has been: how, then, can you explain the widespread purchase of insurance? That question can be turned on its head: since public corporations ought to be risk neutral, and since they do buy lots of insurance, the reason must be something other than risk aversion.¹ To this, hard-core *aversionistas* have conceded that the corporation might be risk neutral, but the decision-makers, those pesky managers, are risk averse.² That hypothesis could salvage the risk aversion assumption and allow analysts to ignore other reasons for corporate insurance purchases. I want to suggest one fact that would be hard to square with the risk-averse manager hypothesis. Counterparties insist upon it. That is, the decision to maintain the insurance does not necessarily reside with the firm (or its managers) itself; it is often a condition imposed on the firm by a contractual counterparty.

Hard, but not impossible. Managers and counterparties might both prefer policies that reduce the variance of the firm's cash flows; they could agree on an insurance clause that would benefit both at the expense of the shareholders' interests. If the interests of the two coincide, however, then there would be no reason for the counterparty to require the insurance—the managers would purchase it anyway. If shareholders were gullible, managers might rationalize their insurance purchase to their shareholders by claiming that it was foisted on them by the counterparty. If we are not prepared to invoke gullibility, then the question is: in what circumstances would the counterparty require insurance when the firm (and its managers) would prefer not to insure?

To be sure, one cannot rule out the possibility that at least some insurance purchases are motivated by managerial risk preferences. My point is that if we want to explain why firms purchase insurance, risk attitudes would not be the most fruitful place to look. Instead, the focus should be on why insurance (or, more precisely, the package of services provided by insurance companies) might create value, regardless of the risk preferences of managers, shareholders, or other corporate stakeholders.

There are a number of reasons why the purchase of insurance might create value for a firm, and these are independent of the counterparty's (typically a buyer, landlord, or lender) concerns. In Part 1, I review these reasons. The counterparty requirement is a fairly widespread practice, and Part 2 provides illustrations. In Part 3, I propose an explanation for the requirement. In the final section, I relate this to a methodological matter: the role of risk preferences in general, and risk aversion in particular, in analyzing transactions involving sophisticated business firms. To anticipate, that role should be the explanation-of-last-resort.

1. Why Insure?

¹As Mayers and Smith (1982, p. 282) noted, "the purchase of insurance by firms at actuarially unfair rates would represent a negative net present value project, reducing stockholder wealth."

² Cite.

Insurance would seem to have two negative effects on the corporate purchaser. First, since the insurer must be paid, the insurance product is actuarially unfair; the expected return to insurance purchasers would be negative. Second, since insurance weakens the incentives of the insureds to take care (that is, there is moral hazard) the expected magnitude of the damages, (and the price of the insurance) would increase, making the insurance an even worse bargain. And yet they buy.

Rather than being value reducing, the insurance can be value enhancing. Insurers provide more than pure insurance; they provide risk management services, the most obvious being inspection and loss reduction.³ In some lines the amount of resources going towards inspection and prevention is substantial. For example, more than twenty percent of the premium dollar for steam boiler insurance goes toward inspection. Indeed, the Hartford Steam Boiler Insurance and [Inspection](#) Company began as an inspection company. (Goldberg (1980)) If an accident were to occur after an inspection there would be a causation question: did the accident occur despite the fact that the inspector did a workmanlike job? One way of avoiding that question is to share responsibility for the damages by using the same tools insurers do—deductibles, co-payments, and liability limitations.⁴

Firms are willing to pay for services that decrease the likelihood of accidents and the financial consequences if an accident were to occur. Whether the services are provided internally or by purchase from outsiders, is a standard make-versus-buy question. For many, the specialized outsider will be the most cost effective provider, and that provider will be an insurance company. The insurance company need not even be the direct provider; it might play the role of the general contractor, putting together the risk management services more effectively than the corporation could on its own. Thus, even though insurance does create the potential for moral hazard and, therefore, the increased incidence and costs of accidents, the purchase of risk management services from an insurer could have the opposite effect, reducing the net costs of accidents.

For a vivid example of the insurer's role, consider the role of the "cast insurer" in the making of a movie. Because Nicole Kidman's knee problem had resulted in claims on a prior film,

Kidman's acting career was in limbo. When she was proposed as the star of Miramax's *Cold Mountain*, Lloyd's of London effectively turned her down by asking a 20 percent premium, which no movie could afford. . . . She agreed to wear a support bandage on her knee during the preproduction and filming of *Cold Mountain* For their part, the

³ Others have recognized the role of the insurer as service provider; see, for example Mayers and Smith (1982) and Doherty and Smith (1993).

⁴ I do not mean to suggest that all corporate insurance provides inspection services; indeed, steam boiler insurance is an outlier, the share of the premium dollar going toward inspection being much lower for most lines of insurance.

producers agreed to substitute a double for any activity, even bending down, that might stress her knee. . . .

Insurers may require periodic medical examinations during shooting, including testing for illegal drugs, or even continuous medical treatment for some actors. (Kidman, for example, was required to take daily doses of medicine for her thyroid gland.) They also place stringent restrictions on what actors can do off the set--no motorcycles, surfing, or flying planes. As for what happens on set, the insurer analyzes every shot in the script for potential risks. Once the production starts, they also station hawk-eyed agents, called loss-control reps, on location to make sure that the stars are not put in harm's way. If a shot presents the slightest danger of causing an injury that might delay shooting, the reps bar actors from participating in them. Either a stunt person substitutes for the actor or the shot is changed to eliminate the danger. (Epstein (2005).

Insurers have other ways besides inspection for altering risks. Simply by offering discounts to firms that choose to install certain equipment, the insurer can reduce the accident costs. The decision on the cost effectiveness of the equipment would be decentralized with the client determining whether the cost of the equipment is justified by the premium reduction. Moreover, the insurer's risk management is not confined to the pre-accident period. If an accident were to occur, the insurer's incentive would be to contain the post-accident losses (for example, legal services, claims processing and rehabilitation). Again, if an insurer could do this more effectively than the corporation or other third party providers, the rational firm would purchase the service from the insurer. The insurance package can be unbundled so that the clients might, for example, provide their own inspection services and legal defense, but purchase claims management and rehabilitation services from insurers.

Even if the insurer provided none of the services alluded to above, it could still add value in other ways. Incentivizing managers and evaluating their performance is hampered in a noisy environment. Distinguishing bad performance from bad luck can be difficult. If the insurance were to make management's performance more transparent by isolating matters beyond the manager's control, a more effective incentive structure could enhance value. (Gilson & Whitehead (2008))

Insurance can be viewed as an element in the corporation's capital structure. Absent insurance, the occurrence of an otherwise insurable event could significantly alter the firm's leverage; indeed, it could push the firm into bankruptcy. By insuring, the firm could reduce the likelihood of bankruptcy and the costs that would entail.⁵ Short of bankruptcy, as the firm approaches the "zone of insolvency" the interests of shareholders and bondholders diverge. On the one hand, the firm has an incentive to take on risky negative net present value projects since shareholders get the upside and debt the downside. (See footnote 55 of *Credit Lyonnais*) On the other, if the cost of capital were to rise because of the adverse event, the firm might fail to undertake positive present

⁵ Cite on the costs of bankruptcy.

value projects. (Froot, Scharfstein, and Stein.(1994) Generally, liquidity is costly and insurance is one way of assuring it. (Holmström and Tirole (2000) A firm with liability insurance can carry a smaller inventory of cash or other relatively liquid assets. In part, insurance is a substitute for a line of credit. In fact, it is also a complement, since line of credit agreements routinely require that the borrower carry insurance.⁶

It is, I think, unnecessary to go further to demonstrate that the package of services provided by insurance companies can add value regardless of the attitudes toward risk of any of the employees, managers, or owners of the client firm.⁷ The last example hints at where we shall go next: why does the bank extending the line of credit require the borrower to acquire (and maintain) insurance? Regardless of whether a corporation wants to carry insurance for its own purposes, its counterparty in some (perhaps many) of its transactions will insist upon it. In the next section I provide some examples of this widespread practice. In the following section I propose an explanation.

2. Counterparty Demands

Sellers, tenants, and borrowers are often required to provide proof that they carry adequate insurance. Contract data bases (for example, onecle.com) have numerous examples of insurance clauses. Let us first consider the restrictions imposed by buyers. A good place to start is General Motors' standard purchasing agreement form, which included this insurance requirement:⁸

17. INSURANCE: Seller shall maintain insurance coverage in amounts not less than the following: (a) Workers' Compensation - Statutory Limits for the state or

⁶ For example:

5.4 Insurance: Maintain insurance, at all times throughout the term of this Agreement, on its property with responsible insurance carriers having a rating by A.M. Bests of A or better acceptable to the Bank licensed to do business in the State of New York and in each jurisdiction in which the Company conducts business against such risks, loss, damage and liability (including liability to third parties) and in such amounts as is customarily maintained by similar businesses, including, without limitation, public liability and workers' compensation insurance, each such policy which shall name the Bank as additional insured and loss payee as its interests may appear and which shall require thirty (30) days prior notice to the Bank of cancellation or termination thereof and will file with the Bank within ten (10) days after request therefor a detailed list of such insurance then in effect, stating the names of the carriers thereof, the policy numbers, the insureds thereunder, the amounts of insurance, dates of expiration thereof and the property and risks covered thereby, together with a certificate of a duly authorized officer of the Company certifying that in the opinion of the management of the Company such insurance is adequate in nature and amount, complies with the obligations of the Company under this Section, and is in full force and effect.
(Revolving Credit And Term Loan Agreement Between Netsmart Technologies and Fleet National Bank, June 1, 2001)

⁷ A number of authors note that insurance could provide tax advantages as well. See Mayer and Smith (1982, 1990), Main (1983), and Chen and PonAral (1989). Some insurance coverages are mandated by law.

⁸ The form was used in the previous century; it does not reflect GM's woes of 2008-9.

states in which this order is to be performed (or evidence of authority to self-insure); (b) Employer's Liability - \$250,000; (c) Comprehensive General Liability (including Products/Completed Operations and Blanket Contractual Liability) - \$1,000,000 per person, \$1,000,000 per occurrence Personal Injury, and \$1,000,000 per occurrence Property Damage, or \$1,000,000 per occurrence Personal Injury and Property Damage combined single limit; and (d) Automobile Liability (including owned, non-owned and hired vehicles) - \$1,000,000 per person, \$1,000,000 per occurrence Personal Injury and \$1,000,000 per occurrence Property Damage, or \$1,000,000 per occurrence Personal Injury and Property Damage combined single limit. At Buyer's request, Seller shall furnish to Buyer certificates of insurance setting forth the amount(s) of coverage, policy number(s) and date(s) of expiration for insurance maintained by Seller and, if further requested by Buyer, such certificates will provide that Buyer shall receive thirty (30) days' prior written notification from the insurer of any termination or reduction in the amount of scope of coverages. Seller's purchase of appropriate insurance coverage or the furnishing of certificates of insurance shall not release Seller of its obligations or liabilities under this order. In the event of Seller's breach of this provision, Buyer shall have the right to cancel the undelivered portion of any goods or services covered by this order and shall not be required to make further payments except for conforming goods delivered or services rendered prior to cancellation.⁹

There is no clear relationship between performance of a particular contract and the types of insurance that are to be maintained. Failure to maintain automobile liability insurance would be grounds for termination, even if the seller would not use an automobile to perform the contract. While the independence of the insurance coverage and the performance is common, in some instances a relationship exists. For example Boeing only required a supplier carry automobile insurance "if licensed vehicles will be used in connection with the performance of the work."¹⁰

Insurance companies vary in quality and some contracts take that into account. General Motors' seven-year, exclusive supply contract with American Axle & Manufacturing (AAM) had a loosely defined restriction of the supplier's decision—it had to be "underwritten by insurance companies reasonably satisfactory to GM."¹¹ Some restraints were looser, requiring only "nationally recognized companies,"¹² and some were tighter, specifying certain characteristics, for example "with a current A.M. Best's rating of A- with a financial size of no less than Class VIII."¹³

⁹ Attachment to General Motors- American Axle & Manufacturing, Supply Agreement. The agreement overrode this standard clause, imposing greater policy minimums and requiring the naming of GM as an "additional insured" for all but the automobile coverages.

¹⁰ Boeing-Spirit Contract, clause 26.3. Mercedes-Benz USA (MBUSA) had a more specific requirement in its agreement with ATX: "Professional Liability (Errors and Omissions, Multimedia Liability including Intellectual Property) Insurance on claims made or occurrence basis covering all services provided to MBUSA hereunder for \$5,000,000 each occurrence." (Telematics Services Agreement, March 31, 2003).

¹¹ GM-AAM agreement, clause 10.

¹² Intel-Phoenix agreement, date, clause.

¹³ John Deere-Stanadyne Agreement, date, clause.

While the insurance requirement is typically imposed only on the seller, in some instances the requirement is symmetrical:

Each party to this Agreement will maintain insurance to protect itself from claims (i) by the party's employees, agents and subcontractors under Worker's Compensation and Disability Acts, (ii) for damages because of injury to or destruction of tangible property resulting out of any negligent act, omission or willful misconduct of the party or the party's employees or subcontractors, (iii) for damages because of bodily injury, sickness, disease or death of its employees or any other person arising out of any negligent act, omission, or willful misconduct of the party or the party's employees, agents or subcontractors.¹⁴

Insurance requirements are common in commercial leases as well. One function, not the primary focus here, is coordination of the coverage of landlord and tenant, allocating responsibility between them to avoid overlapping insurance or coverage gaps. Some leases require that the tenant name the landlord (and sometimes the landlord's lender as well) an "additional insured" for some policies,¹⁵ so those requirements would be an element of the landlord's coverage. But, in addition, the leases typically require that the tenants carry insurance on their own account. For example,

Tenant's Fire and Casualty Insurance. Tenant at its cost shall maintain on all of Tenant's merchandise, inventory, furniture, fixtures, equipment and improvements in, on, or about the Premises, a fire and other perils insurance policy (special form, open peril) to the extent of their full replacement value. The proceeds from this policy shall be used by Tenant for the replacement of the property and the restoration of Tenant's improvements or alterations.¹⁶

Insurance requirements are common in commercial loans as well, the requirement in the line-of-credit agreement, noted above, providing one example. The American Bar Foundation Commentaries on the Model Debenture Indenture Provisions provides a number of sample insurance clauses. (American Bar Foundation (1971, pp. 341-348)) Herein, a simple example of such a clause:

[The borrower will carry] insurance on all [its] respective properties in at least such amounts and against at least such risks (and with such risk

¹⁴ Manufacturing Agreement, Solectron California Corp. and Brocade Communications Systems Inc. July 30, 1999.

¹⁵ "The insurance referred to in Paragraph 16(a)(ii) shall name Landlord as additional insured. In addition, the insurance referred to in Paragraph 16(a)(i), (ii), (iv) and (v) shall also name each Lender as an additional insured." (Lease between Anchor Court (Landlord) and Collins & Aikman (Tenant), June 29, 2001)

¹⁶ Lease between Three Fifteen Bourbon Street, L.L.C. ("Landlord") and RCI Entertainment Louisiana, Inc. ("Tenant"). February, 1996

retentions) as are usually insured against in the same general area by companies of established repute engaged in the same or a similar business; and will furnish to the Lenders, upon written request from the Administrative Agent, information presented in reasonable detail as to the insurance so carried. [The borrower] reasonably believes, at the time the relevant coverage is placed or renewed, [that the insurance companies] are financially sound and responsible.¹⁷

3. Why insist?

Why should a buyer, landlord, or lender care? (For expositional ease, I will hereafter refer to the buyer and supplier.) It is reasonable to presume that they are not just busy-bodies, gratuitously meddling in the affairs of others. Nor is it reasonable to presume that supplier's owners are systematically fooled by managers acting in cahoots with the buyers.¹⁸ Leaving aside the meshing of coverages--avoiding gaps and redundant coverage--how might requiring the supplier to carry certain insurance create value?

For reasons stated above, the supplier has a strong motive to buy insurance, regardless of this particular contract. Why then would the buyer impose an additional condition? I can suggest two non-exclusive sets of explanations.

One set depends on the insurer being a better judge of the supplier's ability to perform in the future. The key concern is that over time circumstances can change. Suppose that at the formation stage the supplier carried the requisite insurance, but that the coverage was subsequently terminated. What could the buyer reasonably infer from that? First, if the insurance company canceled the policy because the supplier had failed to adopt policies that the insurer believed would adequately contain accident costs, and if such a failure put the supplier's future ability to perform in doubt, the buyer could find the cancellation a valuable early warning. In effect, the buyer free rides on the insurer's monitoring effort. Second, even if the supplier wanted to continue to purchase insurance, its precarious fiscal situation could have altered its incentives.¹⁹ Protection from the risks covered by insurance would be of little value to the firm if its survival was at risk from basic market forces. If the firm were in the zone of insolvency, it might plausibly choose to spend the insurance premia on investments that have a negative net present value, but, because of leverage, would have a positive expected value for the equity holders. Put another way, the value of the limited guarantee provided by the insurer to the supplier decreases the greater the risk of failure from other causes. And, conversely, that is when that guarantee would be more valuable to the buyer.²⁰

¹⁷ \$600,000,000 Bridge Loan Agreement Between Aramark Services and JPMorgan Chase Bank (November 30, 2001).

¹⁸ The fact that insurance clauses are typically asymmetric with only sellers, tenants, and borrowers promising to maintain insurance, makes the fooling explanation even less plausible.

¹⁹ Since some coverage (like workers' compensation) is required by law, a failure to maintain it would send an ominous signal.

²⁰ If the supplier's solvency were not a serious concern, there would be less reason to rely on a third-party insurer. So, for example, DuPont could substitute self-insurance for third-party insurance. "DuPont represents that it is sufficiently self-insured and will continue to remain self insured at or above for the

Obviously, it would not always be true that the insurer would be a better judge of viability than the buyer, but so long as it is sometimes true, the insurance mandate could provide value on this score. Even if that were not the case, it could still be of value to the buyer. That brings us to the second set of explanations, which depends on the vagaries of litigation. In effect, the insurance mandate gives the buyer a rationale for terminating when it becomes concerned about the supplier's ability to perform. Suppose that the buyer had good reason to be concerned about the seller's viability, but that proof might be difficult. If however, it terminated the contract a court might find that reason unpersuasive and would find that the buyer was the breacher. The supplier (or the supplier's trustee in bankruptcy) could argue that the termination was a breach of the contract. As Goetz and Scott (1983, p. 983) note, determining who breached has consequences: "there is only one breacher and he frequently loses the entire benefit of his bargain." To anticipate this problem, the buyer would include contractual devices that would increase the likelihood that if it terminated, a court would find the termination valid, and, ideally, it would prevail at summary judgment. It might, for example, include an acceleration clause or "adequate assurance" clause.²¹

Because the failure to maintain insurance is an easily verifiable fact, the insurance clause can also perform this function. The legal process is not perfect. One cannot be certain that any of these devices would succeed. If the probability of success is not perfectly correlated, the contract might include a number of such devices, increasing the likelihood that at least one will protect the buyer. Some courts might allow the question of the buyer's material breach of the insurance clause to get past summary judgment. They might hold, for example, that the buyer had waived the right or that the breach was only partial, not total. My point is only that the supplier's failure to maintain insurance would increase the buyer's confidence that it could terminate, have the supplier identified as the breacher, and obtain summary judgment.

One virtue of the insurance clause is that it is cheap. The supplier would, in general, want to maintain insurance coverage. It only gives up the flexibility to drop the insurance coverage when things are going poorly. By binding its hands, the seller provides assurance to the buyer of its continued ability to perform. The more valuable that assurance, the more the buyer would be willing to pay. Ex post the supplier might want out, but ex ante, the supplier would be willing to condition the contract on its maintaining insurance coverage.

Concluding Remarks

Insurance companies sell more than pure insurance. They provide a panoply of services that are expected to be value enhancing, regardless of the risk attitudes of a corporation or its shareholders, managers, and employees. While parties have good reasons to buy these

following levels and types of risk throughout the term of this Agreement..." (Five-year Sales Agreement between E. I. DuPont de Nemours and Company and Morgan Trailer Mfg. Co., October 1, 2004)

²¹ See Scott & Triantis (2006). Even absent an adequate assurance clause, UCC §2-609 would allow the buyer to insist upon assurance in some circumstances.

services for themselves, they often condition agreements with their counterparty (supplier, tenant, borrower) on that party maintaining insurance coverage. A party's failure to maintain its coverage because it cannot physically or fiscally comply with the insurer's conditions, lets the counterparty know that there has been an adverse change which might justify its terminating the agreement, and provides a verifiable bright line that courts would likely accept.

The broader point is that when analyzing commercial dealings, risk aversion should be invoked only as a last resort. The first question should be: why would the observed behavior be value-enhancing? The corporate insurance decision (the purchase and the counterparty condition) provide a vivid example, but there are many others. Some moral hazard models, for example, require risk aversion; see, for example, Milgrom & Roberts (1992, ch. 6-7). If, however, the moral hazard is double-sided—that is, both parties influence the outcomes—risk aversion can be dispensed with. Likewise, price adjustment in long-term contracts (for example, indexing) is often viewed as protection against the risk of fluctuations.²² It is not clear how the relative risk attitudes of the two corporations would apportion price fluctuation risks, especially if the firms are large, public corporations and the contract is a small part of each firm's portfolio of contracts. That inquiry would, I contend, be fruitless and would divert attention from the crucial question: how might the price adjustment mechanism add value, regardless of the specific tastes toward risk?²³

²² For example, Joskow (1977, p. 173) asked: "Why would somebody buy a long-term fixed price contract other than to insure against fluctuations in the price of uranium?"

²³ For some reasons for including a price adjustment mechanism in a long-term contract, see Goldberg (2006, ch. 18).

BIBLIOGRAPHY

Formatted: Font: 12 pt

American Bar Foundation. 1971. *Commentaries on Model Debenture Indenture Provisions*. Chicago: American Bar Foundation.

Formatted: Font: Italic

Chen, Chang Yi and Richard PonArul. 1989. On the Tax Incentive for Corporate Insurance Purchase. *Journal of Risk and Insurance* 56: 307-311.

Formatted: Underline

Credit Lyonnais Bank Nederland v. Pathe Communications Corp., 1991 WL 277613 (Del. Ch. 1991).

Formatted: Font: 12 pt, Underline

Formatted: No underline

Formatted: No underline

Formatted: No underline

Doherty, Neil A. and Clifford W. Smith, Jr. 1993. Corporate Insurance Strategy: the Case of British Petroleum. *Journal of Applied Corporate Finance*, 6, no. 3 (Fall): 4-15.

Formatted: Font: Not Italic, No underline

Epstein, Edward Jay. 2005. "Nicole Kidman's Knee: Or, How the Insurance Business Runs Hollywood." *Slate*, May 23. <http://www.slate.com/id/2119328/> (accessed November 30, 2008).

Formatted: Font: Not Italic, No underline

Formatted: Underline

Formatted: Font: 12 pt

Froot, K. A., David S. Scharfstein, and J. Stein. 1994 "A Framework for Risk Management." *Harvard Business Review* 72, no. 6 (November-December 1994): 59-71.

Formatted: Underline

Gilson, Ronald J. and Charles Whitehead. 2008. Deconstructing Equity: Public Ownership, Agency Costs, and Complete Capital Markets. *Columbia Law Review* 108: 231-264.

Formatted: Underline

Goetz, Charles J. and Robert E. Scott. 1983. The Mitigation Principle: Toward a General Theory of Contractual Obligation. *Virginia Law Review* 69: 967-1024.

Formatted: Font: 12 pt, Underline

Goldberg, Victor P. 1990. Aversion to Risk Aversion in the New Institutional Economics. *Journal of Institutional and Theoretical Economics* 146: 216-222.

Formatted: Font: Not Italic

Goldberg, Victor P. 1980. Tort Liability for Negligent Inspection by Insurers. *Research in Law and Economics* 2: 65-81.

Formatted: Underline

Goldberg, Victor P. 2006. *Framing Contract Law: an Economic Perspective*. Cambridge, Mass.: Harvard University Press.

Formatted: Font: Italic

Hartford Steam Boiler Inspection and Insurance Co. *About HSB*. <http://www.hsb.com/about.asp?id=50> (accessed November 30, 2008).

Formatted: Underline

Formatted: Font: Not Italic

Formatted: No underline

Holmstrom, Bengt and Jean Tirole. 2000. Liquidity and Risk Management. *Journal of Money, Credit and Banking* 32, no. 3 (August): 295-319.

Formatted: Underline

Joskow, Paul. 1977. Commercial Impossibility, the Uranium Market and the Westinghouse Case. *Journal of Legal Studies* 6, no. 1 (January): 119-176.

▲ Main, Brian G.M. 1983. Corporate Insurance Purchases and Taxes. *The Journal of Risk and Insurance* 50, no. 2 (June): 197–223

Formatted: Underline

▲ Mayers, David and Clifford W. Smith, Jr. 1990. On the Corporate Demand for Insurance: Evidence from the Reinsurance Market. *The Journal of Business* 63, no. 1 (January): 19–40.

Formatted: Underline

▲ Mayers, David and Clifford W. Smith, Jr. 1982. On the Corporate Demand for Insurance. *The Journal of Business*, 55, no. 2 (April): 281–296.

Formatted: Underline

Formatted: Font: Not Italic

▲ Milgrom, Paul and John Roberts. 1992. *Economics, Organization, & Management*. Englewood Cliffs, N.J.: Prentice-Hall.

Formatted: Underline

Formatted: Font: Italic

Scott, Robert E. and George Triantis. 2006. Anticipating Litigation in Contract Design. *Yale Law Journal* 115: 814–879.

Deleted: ¶
¶

Formatted: Underline