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Collateralization of international reinsurance liabilities in the U.S. insurance industry

Abstract

United States regulators and alien insurers are currently debating the appropriateness and efficacy of existing collateralization requirements. U.S. insurers are required to report the provision for reinsurance, which decreases statutory assets to reflect the possibility that a portion of reinsurance recoverables may be uncollectible. To avoid this penalty, unauthorized reinsurers must fully collateralize gross U.S. liabilities. Not only does this potentially alter the demand for certain types of reinsurance and the cost structure of international reinsurance transactions with U.S. firms, it also could affect the potential convergence of international solvency and accounting standards. This study informs the current regulatory debate by analyzing the decision to collateralize reinsurance recoverables under current regulations. We find that larger, older insurers with a higher reliance on reinsurance tend to have higher levels of the Provision for Unauthorized Reinsurance (PFUR). We also find higher levels of PFUR in firms using more international reinsurance as a portion of their total reinsurance. Finally, there is evidence of a negative relation between PFUR and capitalization. The results of this study are important as they provide some information regarding the types of insurers that utilize greater levels of uncollateralized reinsurance recoverables from unauthorized alien reinsurers. Given the NAIC's recent approval of the Reinsurance Regulatory Modernization Act and that credit for reinsurance laws provide an added barrier to the harmonization of U.S. and international insurance standards, the types of firms that would be affected by changes to or the repeal of credit for reinsurance laws is of great interest to consumers, insurers, and regulators alike.

Keywords: reinsurance, collateralization, solvency, insurance regulation.

Introduction

Monitoring insurer solvency is arguably the most important function of insurance regulators. Regulators must be convinced that insurers hold sufficient surplus[1] to pay claims if actual claim liabilities exceed premiums collected. Surplus is the difference between assets and liabilities; therefore, an insurer can increase surplus by increasing assets or decreasing liabilities. A common way for an insurer to decrease liabilities is to purchase reinsurance. In the reinsurance transaction, the primary insurance company transfers a portion of its liabilities to a reinsurer. Much like the primary insurance transaction, the reinsurer agrees to indemnify the primary insurer for claims covered under the contract in exchange for a premium.

Reinsurance recoverables represent more than half of U.S. insurance industry surplus (National Association of Insurance Commissioners, 2006). In addition to the importance of the role of reinsurance recoverables within primary insurers' capital structures, reinsurance markets are globally diversified, subjecting insurers to a variety of international accounting and legal systems. As a result, U.S. regulators are concerned with the financial strength of reinsurers. Credit for reinsurance laws are at the center of the current debate. These laws impose specific collateralization requirements on unauthorized reinsurers. In the U.S., a reinsurer is deemed "authorized" if it adequately subjects itself to the domiciliary state's jurisdiction[2]. Any reinsurer that does not meet this criterion is considered "unauthorized". While some U.S. reinsurers are unauthorized, the majority of unauthorized reinsurers are "alien" reinsurers, meaning they are licensed outside the U.S. This is relevant because some of the world's largest reinsurers are licensed outside the U.S., beyond the direct authority of U.S. regulators.

The purpose of credit for reinsurance laws is to ensure the solvency of reinsurers and prompt payment of reinsurance recoverables. Regulators impose this requirement indirectly by subjecting U.S. licensed insurers to credit for reinsurance laws. Under these laws, a primary insurer with recoverables from an unauthorized reinsurer must reduce its statutory assets by the amount recoverable that is not fully collateralized. This reduction in reported assets is a part of a balance sheet liability item called the provision for unauthorized reinsurance (PFUR). To avoid the PFUR charge, recoverables must be fully collateralized via letters of credit, trusts, or other means, thus creating transaction costs for reinsurers. Parties promoting change to credit for reinsurance laws, primarily unauthorized alien reinsurers, argue it is not necessary to apply these laws to reinsurers displaying financial strength and a history of prompt payment. Opponents of reforming these laws claim the collateralization requirements are necessary to the financial strength of domestic primary insurers given differences in accounting methods and enforceability of contracts in other countries. Csiszar (2005) provides a rich description of arguments on both sides of this issue.

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[1] Surplus is synonymous with capital in the insurance industry.

[2] Criteria for authorization are described in detail in section 2.

In light of the recent approval by the National Association of Insurance Comissioners (NAIC) of the Reinsurance Regulatory Modernization Act, we inform this debate by analyzing the relation between uncollateralized reinsurance recoverables from unauthorized alien reinsurers and the financial and operating characteristics of primary insurers in the United States. It is important to note that our analysis does not consider all of the details of current regulatory reform proposals[1]. Specifically, our goal is to determine likely responses to changes in collateralization requirements.

The results of the study provide information about the types of insurers and insurance consumers affected by credit for reinsurance laws. This is critical to assessing the potential risks and benefits associated with altering or removing the credit for reinsurance requirements, which might be necessary if the U.S. is to participate in the move towards more standardized global capital and solvency requirements. In addition to informing readers on a timely matter, this paper makes substantial contributions to the literature in the areas of international regulation of commerce, insurer solvency, and insurer capitalization. To our knowledge, this paper is the first empirical analysis of the provision for reinsurance in the academic literature.

1. Background

Purchasing reinsurance affects insurer solvency, because it is essentially a capital structure decision, with equity capital and reinsurance acting as substitutes (Berger, Cummins, and Tennyson, 1992; Garven and Lamm-Tennant, 2003). A primary insurer, known in this transaction as a cedent, may cede a portion of its liabilities to a reinsurer. The essence of this transaction is that, for a portion of the premium, the reinsurer pledges its capital to the cedent's liabilities. Therefore, insurance regulators must consider the quality of reinsurance purchased by U.S. insurers when assessing their financial strength. Cole and McCullough (2006) find that of the insurers utilizing foreign reinsurance, the average amount ceded to foreign reinsurers is about 19 percent, with about 16 percent of that ceded to firms not affiliated with the cedent. This presents a challenge when regulating the solvency of cedents because U.S. regulators have no direct authority to monitor or control alien reinsurers. Further, accounting rules and contract law of other jurisdictions differ from that of the U.S., creating potential uncertainty in the cedent's ability to collect amounts due from alien reinsurers. To mitigate potential adverse effects on domestic insurers' financial strength, U.S. regulators in every state enforce credit for reinsurance laws on domestic ceding insurers.

Credit for reinsurance laws state that U.S. insurers do not receive credit for reinsurance transactions with "unauthorized" reinsurers unless amounts recoverable are fully collateralized. In the U.S., an "authorized" reinsurer meets one of the three following criteria: 1) it is licensed in the ceding insurer's domiciliary state to write the type of insurance being ceded; 2) it is an accredited reinsurer in the ceding insurer's state of domicile; or 3) it is given regulatory equivalence by being licensed in a state with substantially similar reinsurance regulation as the ceding insurer's domicile (National Association of Insurance Commissioners, 2006). If a reinsurer does not meet at least one of these criteria, it is considered "unauthorized"[2]. While there is no regulation preventing a U.S. insurer from ceding reinsurance to any company anywhere in the world, a cedent must obtain full collateralization of the reinsurer's liabilities to receive credit for cessions to an unauthorized reinsurer in its statutory financial statement[3]. These liabilities, called reinsurance recoverables, include: 1) paid losses; 2) paid loss adjustment expenses (LAE); 3) estimated losses and loss adjustment expenses incurred, but not yet paid (known case loss and LAE reserves); 4) incurred but not reported (IBNR) loss and LAE reserves; 5) contingent commissions; and 6) unearned premium reserves[4].

Csiszar (2005) notes that there are both supporters of and opponents to collateralization requirements. Supporters argue that collateralization of recoverables provides domestic insurers and regulators a direct means of collecting amounts due from unau-

[1] See Karlinsky and Fidei (2010) for specific information on major provisions of the current proposal.

[2] The newly approved Act would create two types of reinsurers, national reinsurers and port of entry reinsurers, with each being supervised by either the home state (state in which the reinsurer is domiciled) or the port of entry state (state in which non-U.S. reinsurer is "certified in order to provide creditable reinsurance to ceding insurers") (National Association of Insurance Commissioners, 2009).

[3] Note that collateral may be posted in several acceptable forms. The most common methods of collateralization are letters of credit (LOC) and trusts. The LOC must be issued or confirmed by a qualified U.S. financial institution. Terms of the LOC make performance dependent only on the solvency of the issuing bank without regard to the financial condition or willingness to pay of the reinsurer. An unauthorized reinsurer also may establish a trust with individual or multiple beneficiaries, which accomplishes the same general outcome as a LOC.

[4] On September 23, 2009, the NAIC Government Relations Leadership council approved the submission of the Reinsurance Regulatory Modernizition Act of 2009 to the United States Congress. Even prior to this, some states have taken action related to these issues. For example, in fall of 2008, Florida adopted a regulation authorizing the insurance commissioner to establish lower collateral requirements for reinsurance ceded by Florida domestic property and liability insurers meeting certain requirements (FLA. STAT. § 623.610; FLA. ADMIN. CODE ANN. R. 690-144.007 (2009).

thorized reinsurers regardless of accounting rules and contract law governing the reinsurer's licensing jurisdiction. In addition, supporters note the significant presence of alien reinsurers in the U.S. marketplace, either directly or through an affiliate licensed in the U.S., as evidence that these requirements do not serve as a barrier to entry. However, as organizations such as the International Association of Insurance Supervisors and the International Actuarial Association work to develop more uniform accounting and solvency standards, one could argue that these collateralization requirements will act as a barrier to entry in the future[1].

Opponents of collateralization requirements contend that these requirements are unnecessary for many reinsurers and subject unauthorized reinsurers to transaction costs not imposed on authorized reinsurers. Estimates of these transaction costs range from fifteen to sixty basis points, and estimates of the sum of these costs for all unauthorized reinsurers are between $200 million and $500 million per year (National Association of Insurance Commissioners, 2006). Proponents of reforming credit for reinsurance laws claim the current regulation gives authorized reinsurers an unfair advantage in the market for U.S. cessions and propose an alternative regulatory paradigm that dynamically assigns collateralization requirements to unauthorized reinsurers based on financial strength and history of integrity. The proposed system would issue financial strength ratings to unauthorized reinsurers. Those with stronger ratings would have reduced collateralization requirements[2]. Some U.S. insurance regulators and primary insurers argue collateralization requirements are important to domestic insurer solvency[3]. They claim that current proposals only address credit default risk of alien reinsurers, while ignoring willingness or ability to pay based on concerns other than solvency.

2. Empirical approach

Our empirical approach relies on the observation that, although collateralization is not mandatory, domestic insurers currently obtain collateral for almost all funds recoverable from unauthorized reinsurers. At the same time, very few domestic insurers face binding regulatory capital constraints based on their risk-based capital levels[4]. Insurers with adequate regulatory capital could choose to forego collateralization of a portion of recoverables without having a material effect on regulatory compliance or financial strength. Therefore, observed collateralization is likely the result of negotiations surrounding reinsurance transactions.

If regulators decrease collateralization requirements, primary insurers will likely decrease the proportion of reinsurance recoverables for which they require collateral. However, we have no reason to expect the decision-making process affecting collateralization decisions to change. Therefore, the primary objective of our analysis is to determine which variables significantly affect primary insurers' decisions to require collateral under current laws.

In this general framework, available data yield several testable hypotheses. They are related to cedents' expertise and market power in foreign reinsurance transactions, capital requirements, consumer protection, and financial strength. The hypotheses and specific variables used in the study are presented in the following section.

3. Variables and hypotheses development[5]

Cedents that develop expertise in international reinsurance markets are likely to understand the purpose of collateralization and to negotiate optimal contract terms. If such insurers display a propensity to report PFUR, it should signal to regulators that the decision to forego collateralization is measured and consistent with policyholder welfare. We use three variables to proxy for expertise. These include dependence on reinsurance (reinsurance recoverables to liabilities), international reinsurance activity (foreign reinsurance ceded to total reinsurance ceded), and experience (years in business). Positive relations between these variables and PFUR should instill confidence in regulators regarding reduced collateralization requirements.

We also contend that the variables we use to proxy expertise, with the addition of firm size (direct premiums written) are suitable proxies for market power. Buyers representing larger shares of the reinsurance market and who have developed substantial information efficiencies (i.e. working relationships) with foreign reinsurers should be able to negotiate effectively in the reinsurance transaction (Jean-Baptiste and Santemaro, 2000).

Some lines and classifications of primary insurance require substantially more capital than other lines given the shape of the associated loss distribution.

[1] See Esson (2007) for specific information on convergence of accounting and solvency standards.

[2] For additional information on the current proposal, see NAIC (2007).

[3] See, for example, public comment letters to the NAIC Reinsurance Committee from entities including AIG, the National Association of Mutual Insurance Companies (NAMIC), the American Insurance Association (AIA), and the American Council of Line Insurers (ACLI).

[4] In our sample, less than two percent of U.S. insurers are at or below action levels of regulatory Risk Based Capital ratios (RBC ≤ 200%). The median observed RBC ratio is approximately 700%.

[5] The variables are defined throughout this section. In addition, a complete variable list and variable definitions are provided in Table 1.

Those lines with "fat-tailed" distributions, often caused by the potential for very large individual losses (e.g. aircraft liability and products liability) or by the potential to experience positive correlation in losses (e.g. coastal property and earthquake losses), require increased capital to make insurers' and reinsurers' promises to pay credible. Because capital is costly and collateralization increases the cost of capital in the reinsurance transaction, firms offering coverage for such lines of business may logically reach the conclusion to forego collateralization to secure increased capacity.

We measure increased capital requirements by including in the model three general measures of concentration and exposure, as well as the percentage of direct premium written in each line of insurance[1]. The first captures catastrophe exposure, measured as the sum of premiums written for property coverage in southeastern coastal states and earthquake coverage divided by total premiums written. The other two general measures are Herfindahl indices estimating concentration in lines of business and geographic areas.

We test the implications of decreased collateralization on consumer protection by observing the lines of business related to PFUR. We assume that optimal decisions to report PFUR should be positively correlated with lines of insurance purchased by the consumers with the best information and understanding of insurance markets. Therefore, higher levels of PFUR should be associated with complex commercial lines coverage rather than personal lines coverage.

Finally, we test the relation between financial strength and PFUR. All else equal, firms with stronger balance sheets should be better able to absorb the potential risk of defaulting reinsurers than other firms. Following the insurance insolvency literature, we include measures of firm size (direct premiums written), capitalization (surplus to assets) and the risk-based capital (RBC) ratio.

To approach an "all else equal" interpretation of our primary results, we also control for several other insurer characteristics, specifically group membership and organizational structure. The majority of insurance companies are members of insurer groups or holding companies. For example, in 2006, 1,063 of the 1,604, or nearly two-thirds, of the U.S. property-liability insurers in our sample were members of insurer groups. Powell and Sommer (2008) show that reinsurance transacted among affiliates is significantly different from other reinsurance transactions. A binary variable equal to one if a firm is affiliated with other insurers and zero otherwise is included in the model to control for differences in reinsurance markets within groups compared to external reinsurance markets.

Given that insurers that are members of groups have access both to reinsurance from affiliated firms and unaffiliated reinsurers, they may rely less heavily on unauthorized reinsurance. However, group firms may be better able to diversify the risk more effectively across the firm. For this reason, we may see higher PFUR levels for group members. Our sample includes insurers organized in a variety of organizational forms. A large body of literature investigates organizational form, finding significant differences as it relates to operations. Specifically, agency theory suggests stock companies will participate in more complex and riskier activities than mutual companies (Lamm-Tennant and Starks, 1993). To control for these differences we include a series of binary variable to represent mutual, reciprocal, and Lloyd's organizational forms. The omitted category relates to stock firms[2]. We also control for changes in the economic environment and market cycles not otherwise capture in the model through a series of time controls. Definitions of the variables used in our empirical tests appear in Table 1.

4. Data and methodology

4.1. Data description. We use data from the *National Association of Insurance Commissioners Property-Casualty Database* for the years 1997 through 2006. As is common in the literature, we apply a series of data filters limiting our sample to insurers of critical mass that appear to operate as going concerns[3]. As such, we exclude small firms (less than US$1MM in premium written or surplus) and those that appear to be in extended start-up or run-off activities. We also exclude companies with non-logical values such as non-positive values for assets, liabilities, surplus, or losses. Finally, we exclude firms that become insolvent or do not report persistently throughout the sample period. The final sample of firms contains 8,720 observations with 870 unique firms.

[1] One line, commercial multi-peril, is omitted from the model to avoid singularity in the regression matrix. Therefore, coefficient estimates may loosely be considered comparisons relative to commercial multi-peril coverage. The omitted line is chosen arbitrarily.

[2] Based on potential concerns related to the relation between the line of business controls and organizational form, robustness tests are run removing the organizational form variables. Results are statistically unchanged.

[3] Note that the results are generally consistent when some of these filters are relaxed.

Table 1. Variable list

Variable	Definition
Provision for unauthorized reinsurance	Amount of reinsurance recoverables not fully collateralized divided by surplus plus the amount of reinsurance recoverables not fully collateralized
Size	Natural logarithm of direct premiums written
Usage of foreign reinsurance	Reinsurance ceded to firms outside of the U.S. by total reinsurance ceded
Capitalization	Ratio of surplus to total assets
Reinsurance recoverables	Reinsurance recoverables by liabilities
RBC ratio	Natural logarithm of the RBC ratio
Affiliation indicator	Dummy variable equal to one if the firm is affiliated and zero otherwise
Mutual indicator	A dummy variable equal to one if the firm is organized as a mutual company and zero otherwise
Reciprocal indicator	A dummy variable equal to one if the firm is organized as a reciprocal company and zero otherwise
Lloyds indicator	A dummy variable equal to one if the firm is organized as a Lloyds and zero otherwise
Age	Natural logarithm of the age of the firm
Catastrophe exposure	Ratio of premium written for property insurance in eastern costal states to total premiums written
Line-of-business concentration	Herfindahl index of net premiums written by line of business
Geographic concentration	Herfindahl index of net premiums written by state

Just over 27 percent of firms in our sample report PFUR greater than zero. Table 2 provides a summary of the average PFUR for each year for both the total sample and the subset of firms reporting a PFUR. While the average percentage of insurers reporting this charge remains fairly stable during the sample period, the average PFUR fluctuates considerably.

Table 2. PFUR by year

Panel A: Full sample	
Year	Mean
1997	$1,353,548
1998	$988,173
1999	$1,306,491
2000	$1,290,716
2001	$1,623,296
2002	$1,566,353
2003	$1,538,201
2004	$1,423,755
2005	$1,591,068
2006	$1,124,929
Panel B: Firms reporting positive PFUR	
Year	Mean
1997	$5,389,470
1998	$3,881,473
1999	$4,910,603
2000	$4,936,421
2002	$6,097,589
2003	$5,474,739
2004	$5,151,510
2005	$5,549,644
2006	$3,633,104

4.2. Methodology. Given that a large portion of insurers do not report a provision for unauthorized reinsurance, it is important to control for this in the model. For this reason, we utilize a Tobit model, which controls for the large portion of the sample, that has zero values for total PFUR. Following Tobin (1958), we estimate the following model, correcting for left-censored observations of the dependent variable, by the method of maximum likelihood.

$$PFUR_{i(t)} = \alpha + \beta_1 \log(dpw)_{i(t)} + \beta_2 \log(age) + \beta_3 \log(RBC)_{i(t)} + \beta_4 Capital_{i(t)} + \beta_5 Foreign\ Reinsurance_{i(t)} + \beta_6 Reinsurance\ Recoverable\ to\ Liabilities_{i(t)} + \beta_7 Catastrophe\ Exposure_{i(t)} + \beta_8 Line\ Concentration_{i(t)} + \beta_9 Geographic\ Concentration_{i(t)} + \beta_{10} Group_{i(t)} + \beta_{10} Mutual_{i(t)} + \beta_{10} Reciprocal_{i(t)} + \beta_{10} Lloyds_{i(t)} + \sum \beta_j Lines_{i(t)} + \varepsilon_{i(t)}, \quad (1)$$

where firm and year are indexed with i and t, respectively and ε is the error term.

The dependent variable in our model, PFUR, is the provision for unauthorized reinsurance scaled by surplus plus the amount of reinsurance recoverables not fully collateralized. As indicated earlier, all of the explanatory variables are defined in Table 1. Table 3 provides summary statistics for the variables included in the model. Note that to maintain the assumption of normally-distributed errors, we use the natural logarithm of direct premium written, age, and RBC.

Table 3. Summary statistics

Variable	Mean	Std Dev	Minimum	Maximum
Provision for unauthorized reinsurance	0.0028	0.0189	0.0000	0.5702
Size	17.9968	1.6358	13.8848	24.1135
RBC ratio	1.9985	0.6072	-0.5776	5.6608
Age	3.3416	1.0744	0.0000	5.3706
Affiliation indicator	0.7292	0.4444	0.0000	1.0000
Line-of-business concentration	0.4357	0.2563	0.0897	1.0000
Geographic concentration	0.4703	0.3768	0.0081	1.0000
Catastrophe exposure	0.0204	0.1018	0.0000	1.0000
Usage of foreign reinsurance	0.1003	0.1870	0.0000	1.0000
Reinsurance recoverables	0.0419	0.1940	0.0000	7.1520
Mutual indicator	0.2619	0.4397	0.0000	1.0000
Reciprocal indicator	0.0302	0.1710	0.0000	1.0000
Lloyds indicator	0.0046	0.0676	0.0000	1.0000

5. Results

We present results of the regression model in Table 4. The age variable is positive and significant indicating higher levels of PFUR for older firms. This suggests more established insurers may have reduced levels of asymmetric information in the reinsurance marketplace, thus they may be better able to deal with the issue of uncollateralized reinsurance compared to newer firms.

Table 4. Model results

Variable	Estimate	SE	Pr > ChiSq
Intercept	-0.1229	0.0104	<.0001
Size	0.0059	0.0005	<.0001
Age	0.0048	0.0008	<.0001
Capitalization	-0.0202	0.006	0.0007
RBC ratio	-0.0072	0.0014	<.0001
Line-of-business concentration	0.0015	0.003	0.6262
Geographic concentration	-0.0127	0.0022	<.0001
Catastrophe exposure	0.0309	0.0065	<.0001
Usage of foreign reinsurance	0.0366	0.0032	<.0001
Reinsurance recoverables	0.0141	0.0025	<.0001
Affliation indicator	0.0117	0.0017	<.0001
Mutual indicator	-0.0035	0.0017	0.0378
Reciprical indicator	0.0109	0.0031	0.0005
Lloyds indicator	-0.0119	0.0112	0.2890

Similarly, larger firms, firms that cede more reinsurance to foreign reinsurers, and firms with higher recoverables to liabilities ratios also report higher PFUR. This may be explained by the asymmetric information argument presented above. These results are also consistent with firms exhibiting increased bargaining power in the reinsurance transaction, taking a deliberate and measured approach to foregoing collateralization.

Two of the three solvency measures indicate that weaker firms have higher levels of PFUR relative to stronger firms. Capitalization and RBC display negative relations to PFUR. This presents potential public policy concerns, as these already risky firms may, on average, be exposed to increased probability of financial distress. However, we should note that many of the firms reporting positive PFUR are above the median level of capitalization and RBC, suggesting that solvency concerns related to PFUR may not be material in many cases. Further research should look closely at capitalization.

Perhaps among the most interesting results are those related to business mix. The personal lines variables were negatively associated with PFUR. This suggests that in lines, where the need for consumer protection is the strongest, insurers are less likely to use uncollateralized reinsurance. Following this theme, and supporting the capital capacity argument, lines such as ocean marine, occurrence-based products liability, and aircraft exhibit positive and significant relation to PFUR. Also, consistent with the latter hypothesis, the coefficient estimate for the catastrophic property exposure variable is positive and significant.

On balance, these results suggest that primary insurers make rational choices concerning collateralization of reinsurance recoverables. With the possible exception of two basic solvency measures, the results of our analysis suggest regulators may be correct in altering current collateralization rules.

Conclusions

Regulation of reinsurance recoverables via credit for reinsurance laws has drawn renewed criticism from unauthorized alien reinsurers in recent years. Proponents of reform contend that regulatory collateralization requirements are a form of protectionism favoring U.S. domiciled reinsurers. However, U.S. regulators and insurance industry advocates argue that collateralization of reinsurance recoverables from unauthorized reinsurers is an important tool for mitigating domestic insurer insolvency.

We find that larger, older insurers with a higher reliance on reinsurance tend to have higher levels of PFUR. We also find higher levels of PFUR in firms using more international reinsurance as a portion of their total reinsurance. While higher levels of personal lines business are associated with lower levels of PFUR, perhaps for consumer protection reasons, catastrophic business and business in lines such as ocean marine, occurrence-based products liability, and aircraft insurance carry higher levels of PFUR. Evidence of a negative relation between PFUR and capitalization merits further study and may be a cause for regulatory concern.

The results of this study are important as they provide some evidence of the types of insurers that utilize greater levels of uncollateralized reinsurance recoverables from unauthorized alien reinsurers. Given that the credit for reinsurance laws provide an added barrier to the harmonization of U.S. and international insurance standards, the types of firms that would be impacted by reforming or removing credit for reinsurance laws is of great interest. With the advent of Solvency II as well as other efforts to increase conformity in international insurance markets, this will continue to be a major issue for the U.S. and world insurance markets.

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