



The Impact of Offshore Affiliate Reinsurance Tax Proposals on the U.S. Insurance Market

An Excerpt on Border Adjustment Tax

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The following is an excerpt of a report titled “The Impact of Offshore Affiliate Reinsurance Tax Proposals on the U.S. Insurance Market,” originally published on January 23, 2017. This excerpt is focused the economic impact of the border adjustment provision contained in the Republican’s Blueprint tax reform proposal. For completeness, the full report is available at: <http://brattle.com/news-and-knowledge/news/brattle-report-highlights-the-economic-impact-of-the-offshore-affiliate-reinsurance-tax>.

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Economic Analysis of Border Adjustment Taxes

In their Tax Reform Task Force Blueprint, House Republicans proposed in June 2016 a number of far reaching changes in the U.S tax system such as a move from a worldwide to a territorial tax system, and a corporate tax cut from the current 35 percent to 20 percent.¹ A key provision is the implementation of border adjustment taxes (“BAT”), where a tax is rebated when a product is exported to a foreign country and is imposed when a product is imported from a foreign country.

While value-added tax systems in other developed economies excluded reinsurance,² reinsurance ceded abroad could be deemed, under the BAT, as a service that is imported. In that case, 20 percent of import taxes on ceded reinsurance would be equivalent to a denial of the U.S. insurer’s deduction of premiums paid to the foreign reinsurer. Because of the heavy reliance by U.S. insurers on foreign reinsurance, roughly 50 percent, to diversify the low-frequency but high-severity natural catastrophes and legal liabilities,³ BAT would lead to a sharp drop in the use of reinsurance, and the supply of primary insurance in the U.S. BAT’s economic impact, which would affect all offshore reinsurance, will be more severe than that of the Warner/Neal Bill,⁴ which targets primarily on affiliated offshore reinsurance with a long time lag between the reinsurance premium payments and recoverables.

Because BAT would place the insurance industry in uncharted territory, we provide a range of potential impacts, viewed independently from other components of the Blueprint, through a statistical analysis of the National Association of Insurance Commissioners (“NAIC”) financial data over the 1995 to 2015 period. The analysis and assumptions were based on the regression methodology developed in Appendix A in the full report.⁵ To illustrate, assume

¹ House Republicans, “A Better Way: Our Vision for a Confident America,” June 24, 2016, available at http://abetterway.speaker.gov/_assets/pdf/ABetterWay-Tax-PolicyPaper.pdf. (“The Blueprint.”)

² Ernst & Young, “VAT and CST: Tax Treatment of Insurance in Developed Countries”, January 18, 2017. Developed economies deem reinsurance to be an export of risk, non-territorial in nature.

³ See Section II of the full report.

⁴ Press Release, “Sen. Warner, Rep. Neal Introduce Legislation to Close Foreign Reinsurance Tax Loophole — Legislation would remove incentives for foreign insurance groups to move capital to tax havens abroad,” September 28, 2016, available at: http://www.warner.senate.gov/public/index.cfm/pressreleases?ContentRecord_id=03D45963-9516-48EE-841A-142049D8FA4A.

⁵ We first estimate the amount by which offshore affiliate and non-affiliate reinsurance would drop. We then combine regression analysis with a simulation of the U.S. insurance market to estimate the effect of the BAT on the supply and the price of primary insurance.

that the border adjustment would cause a 50 percent drop in offshore affiliate and non-affiliate reinsurance (Column [4] in Table 1), which amounts to a total drop of \$69.9 billion.⁶

Table 1. Impact of Border Adjustments on U.S. P&C Industry (\$ Millions)

	2015		Change					
	Gross Premium Written (GPW)	Total Reins Ceded	Change in Total Reins GPW	Change in Total Reins Ceded	% Change in GPW	% Drop in GPW	% Increase in Price	% Drop in Coverage
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Fire	15,884	6,026	14,243	(3,013.2)	(1,641.3)	-10.33%	5.58%	-15.07%
Allied lines	29,825	16,507	25,657	(8,253.7)	(4,168.6)	-13.98%	7.55%	-20.01%
Farmowners multiple peril	4,198	638	3,994	(319.1)	(204.7)	-4.88%	2.63%	-7.32%
Homeowners multiple peril	94,218	13,296	89,890	(6,648.0)	(4,328.4)	-4.59%	2.48%	-6.90%
Commercial multiple peril	42,541	7,806	40,125	(3,903.2)	(2,416.6)	-5.68%	3.07%	-8.49%
Mortgage guaranty	4,988	323	4,860	(161.7)	(127.9)	-2.56%	1.38%	-3.90%
Ocean marine	4,309	2,021	3,781	(1,010.6)	(528.5)	-12.26%	6.62%	-17.71%
Inland marine	24,125	12,971	20,828	(6,485.3)	(3,296.3)	-13.66%	7.38%	-19.60%
Financial guaranty	559	139	518	(69.6)	(40.8)	-7.30%	3.94%	-10.82%
Medical professional liability - occurrence	2,547	277	2,451	(138.5)	(95.4)	-3.74%	2.02%	-5.65%
Medical professional liability - claims made	7,809	1,583	7,328	(791.3)	(481.2)	-6.16%	3.33%	-9.18%
Earthquake	2,676	1,036	2,395	(517.9)	(281.0)	-10.50%	5.67%	-15.30%
Group accident and health	5,359	1,436	4,943	(718.1)	(415.9)	-7.76%	4.19%	-11.47%
Credit accident and health (group and indiv.)	172	157	138	(78.4)	(34.7)	-20.14%	10.88%	-27.98%
Other accident and health	3,316	477	3,162	(238.7)	(154.8)	-4.67%	2.52%	-7.01%
Workers' compensation	60,995	14,472	56,714	(7,236.2)	(4,280.4)	-7.02%	3.79%	-10.41%
Other liability - occurrence	44,467	17,215	39,796	(8,607.6)	(4,671.0)	-10.50%	5.67%	-15.31%
Other liability - claims made	24,766	7,374	22,669	(3,686.8)	(2,096.8)	-8.47%	4.57%	-12.47%
Excess workers' compensation	1,352	425	1,233	(212.6)	(119.8)	-8.85%	4.78%	-13.01%
Products liability - occurrence	3,291	1,370	2,924	(685.0)	(366.7)	-11.14%	6.02%	-16.19%
Products liability - claims made	525	238	463	(118.9)	(62.6)	-11.92%	6.44%	-17.24%
Private passenger auto liability	124,674	7,797	121,555	(3,898.3)	(3,119.8)	-2.50%	1.35%	-3.80%
Commercial auto liability	25,327	4,541	23,915	(2,270.6)	(1,411.8)	-5.57%	3.01%	-8.33%
Auto physical damage	90,976	7,675	88,162	(3,837.6)	(2,814.3)	-3.09%	1.67%	-4.69%
Aircraft (all perils)	1,911	1,106	1,634	(552.8)	(276.4)	-14.47%	7.81%	-20.67%
Fidelity	1,325	209	1,258	(104.7)	(66.7)	-5.03%	2.72%	-7.54%
Surety	6,223	1,239	5,846	(619.4)	(377.9)	-6.07%	3.28%	-9.05%
Burglary and theft	305	77	282	(38.6)	(22.6)	-7.41%	4.00%	-10.97%
Boiler and machinery	3,230	1,682	2,800	(841.0)	(430.4)	-13.33%	7.20%	-19.14%
Credit	2,083	1,128	1,797	(564.2)	(286.3)	-13.74%	7.42%	-19.70%
International	139	68	121	(34.0)	(17.6)	-12.69%	6.85%	-18.29%
Warranty	3,268	2,384	2,705	(1,191.9)	(563.0)	-17.23%	9.30%	-24.27%
Rein: Non-prop. assumed property	10,149	4,100	9,046	(2,049.9)	(1,103.6)	-10.87%	5.87%	-15.82%
Rein: Non-prop. assumed liability	5,489	1,503	5,055	(751.7)	(433.8)	-7.90%	4.27%	-11.67%
Rein: Non-prop. assm financial lines	201	52	186	(25.9)	(15.1)	-7.50%	4.05%	-11.10%
Write-ins for other lines of business	1,479	412	1,361	(206.2)	(118.6)	-8.02%	4.33%	-11.83%
Total	654,705	139,762	613,834	(69,881.1)	(40,871.3)	-6.24%	3.37%	-9.30%
Capital	726,140		689,069					

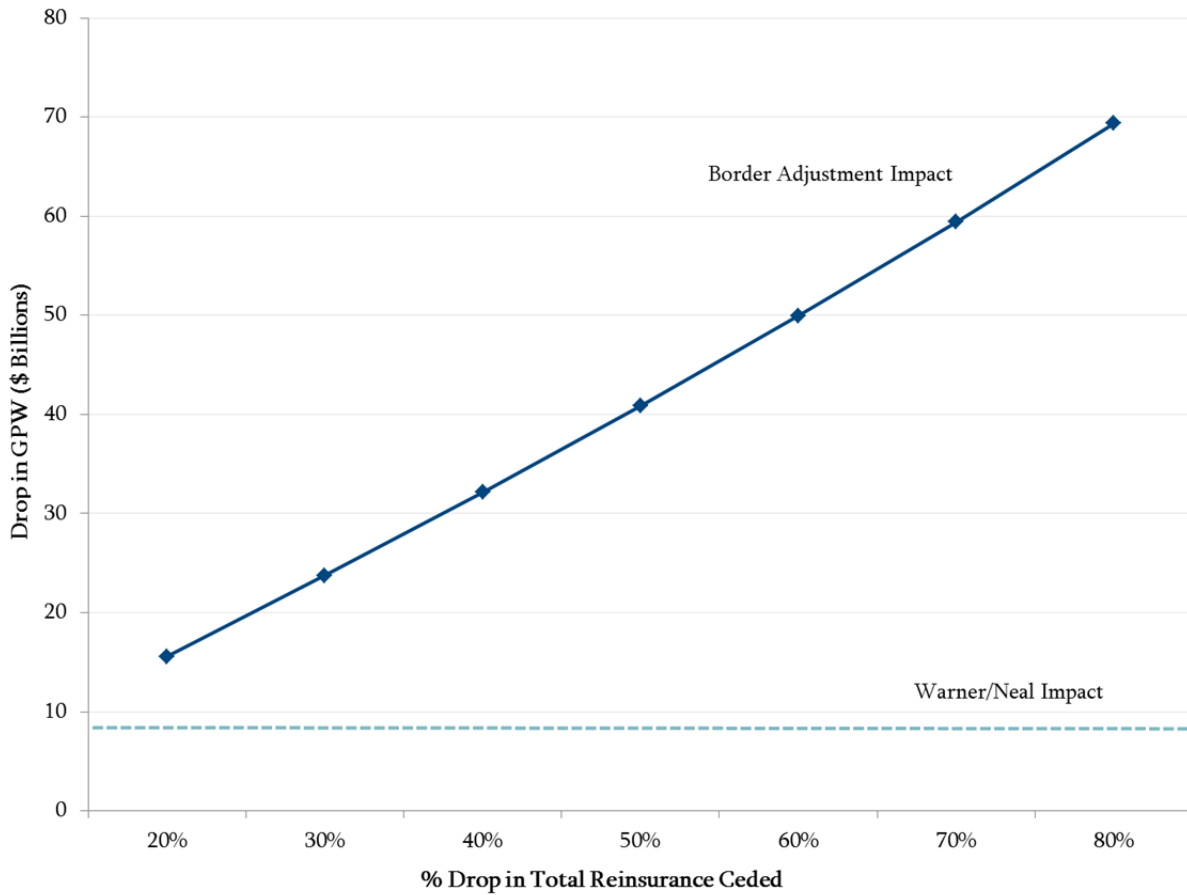
Source: Table 8 of the full report.

Because BAT affects both forms of reinsurance, we do not allow for a substitution between non-affiliate and affiliate reinsurance. Based on these parameters, the resulting impact would be a drop of gross premiums written of \$40.9 billion (= \$654.7 billion - \$613.8 billion, Table

⁶ This assumed reduction is about 3.8 times the total drop in reinsurance under the Warner/Neal Bill (\$18.3 billion from Table 7 in the full report).

1),⁷ which is 4.4 times larger than what we predict under the Warner/Neal Bill (\$9.3 billion from Table 7 in the full report). In Figure 1 below, we show the potential impact of the proposal on the U.S. insurance market under a range of scenarios.

Figure 1. Border Adjustment Impact on Gross Premiums Written (\$ Billions)



- At the low end, for example, a 20 percent reduction in reinsurance would lead to a \$15.6 billion drop in the supply of U.S. insurance, which is 67 percent greater than the impact we calculated under the Warner/Neal Bill, and U.S. consumers would pay \$8.4 billion more to obtain the same coverage.
- At the high end, an 80 percent reduction in reinsurance would lead to a \$69.3 billion drop in the supply of U.S. insurance, which is 7.5 times the impact we calculated under the Warner/Neal Bill, and U.S. consumers would pay \$37.4 billion.
- If we apply our analysis of the Warner/Neal Bill and assume the 39 percent reduction in reinsurance ceded by foreign firms in long-return lines similarly applied to all

⁷ Our estimates ignore the potential impact from foreign exchange rate changes caused by the border adjustments. However, foreign reinsurance companies writing U.S. business will incur the majority of the related expenses such as claims, claims reserves, loss adjustments expenses, *etc.* in U.S. dollars.

firms and all lines, the impact would be a \$31.2 billion drop in the supply of U.S. insurance, and U.S. consumers would pay \$16.9 billion more to obtain the same coverage.

We note that our estimates above do not capture all of the adverse consequences of the BAT, for several reasons:

First, under the border adjustment proposal, the diversification benefits obtained by U.S. insurance companies exporting risks to foreign reinsurers would be materially diminished. This change in diversification benefits to the U.S. insurance and reinsurance industry would cause larger price increases than predicted by our quantitative analysis, which is based on the observed behavior of insurers and reinsurers between 1995 and 2015.

Second, after nearly a decade of low reinsurance rates in the U.S., over which period some reinsurers have already reduced U.S. reinsurance premiums in many lines below the actuarial cost of the exposure, reinsurers' ability to absorb any tax impact is limited. The ability to replace lost insurance coverage is further limited given the regulatory hurdles in setting up U.S. insurance operations and difficulties in raising external equity capital quickly. Thus, reinsurers and insurers would have to pass on the price impact directly onto insurance consumers.

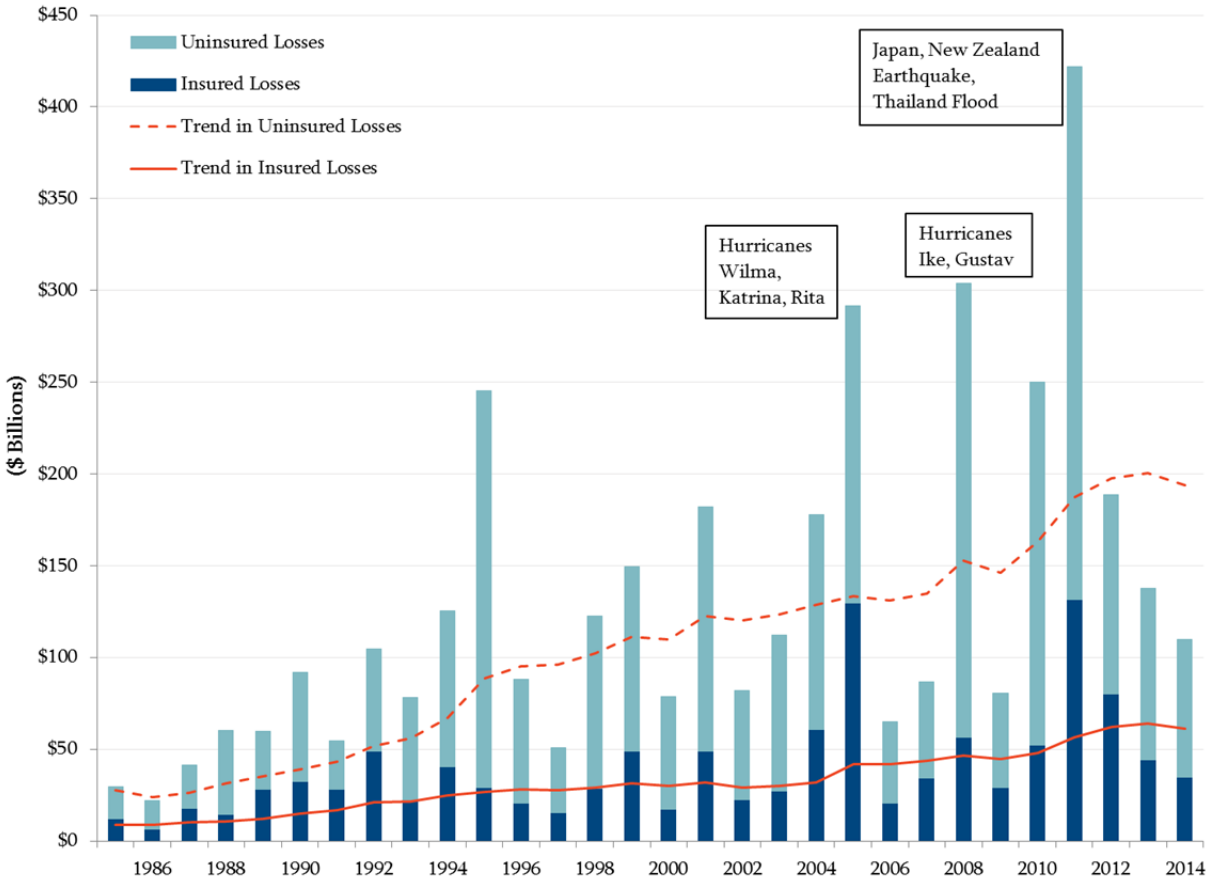
Third, our simulation model ignores some practical constraints such as mandatory requirements for insurance (for home mortgage, commercial real estate, commercial financing, *etc.*) which limit the extent to which insurance can be dropped. Inelastic demand in these circumstances would force further increases in the price of insurance. Moreover, rating agencies and regulators demand insurers maintain robust equity and reinsurance coverage regardless of pricing, further contributing to constraints on reduction of demand. These impacts will be particularly severe in certain coastal states such as Florida where local insurance companies struggle to raise equity and diversification of risk is most critical.

Fourth, mutual insurance companies, which provide a material portion of U.S. primary insurance coverage (36% of P&C market and 63% of life by assets),⁸ would be more negatively impacted by the reduction in reinsurance. This is because mutual insurers are capitalized by premiums and retained earnings, lacking access to external equity capital.

Finally, BAT (and the Warner/Neal Bill) would widen the protection gap between insured and uninsured economic losses. As can be seen from Figure 2, the trend in overall losses worldwide is increasing faster than in insurance losses.

⁸ NAIC and The Center for Insurance Policy and Research, Capital Markets Special Report, April 28, 2015. Available at: http://www.naic.org/capital_markets_archive_index.htm

Figure 2. Gap between Insurance Losses and Overall Losses



Source: Swiss Re, "Underinsurance of Property Risks: Closing the Gap," No. 5/2015.

Insurance provides critical support to compensate consumers facing losses, and underinsurance represents a gap between the economic losses and insured losses. The increasing prevalence of natural and man-made catastrophes makes closing this gap even more important. If not properly managed, part of this gap will fall on the governments at the state and Federal levels as a safety net.

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