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Impacts of AG 48

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Actuarial Guideline XLVIII (AG 48) is effective as of Jan. 1, 2015 for XXX and AXXX[1] business ceded to a captive reinsurer. This article provides an overview of AG 48 and an illustrative example of how AG 48 could impact asset requirements and related costs for companies that use captives to finance redundant XXX and AXXX reserves.

AG 48 introduces several new concepts for the ceding of this type of business to a captive reinsurer:

a. Actuarial Method
b. Primary Security
c. Required Level of Primary Security
d. Other Security

Using an illustrative universal life product with a secondary guarantee (ULSG), we will demonstrate each of the above concepts and its applicability as of Jan. 1, 2015. These new concepts will be compared to the same product prior to AG 48 being effective showing the difference between the pre AG 48 asset financing and the post AG 48 asset financing.

BACKGROUND

Due to perceived redundancies in statutory reserves for level premium term and universal life products with secondary guarantees (ULSG), some companies that sell these products have utilized a captive reinsurance financing structure. Using captives lessens reserve strain and frees up surplus that can be used to invest in new products or acquisitions, improve RBC ratios, or increase distributions to shareholders.

Currently, under one common financing structure, the assets supporting the first layer of statutory reserves ceded to the captive consist of securities such as bonds, stocks, and mortgages. This first layer of reserves is sometimes referred to as the economic reserve[2] and is generally based on best estimates around cash flows for benefits, expenses and premiums associated with the risk being reinsured, potentially with some added provision for risk. The assets supporting the economic reserve are usually held in trust or in a coinsurance funds withheld arrangement for the ceding company. The assets needed to support the remainder of the statutory reserve (often referred to as the redundant reserve) are financed using alternative means such as letters of credit. Before AG 48, there was no uniform guidance for the calculation of the economic reserve and no requirements for the types of assets that had to be held to support the economic reserve.

However, as of Jan. 1, 2015, reserve financing arrangements utilizing captives or special purpose vehicles are subject to AG 48, which prescribes the Required Level of Primary Security based on the Actuarial Method, a modified version of VM-20, and the asset classes that can be held as Primary Security.

ACTUARIAL GUIDELINE 48

On Dec. 16, 2014, the NAIC Executive Committee and Plenary adopted AG 48 effective Jan. 1, 2015. The purpose of the guideline is to establish uniform standards for XXX or AXXX reserve financing transactions utilizing captives or special purpose vehicles. AG 48 addresses the types and amounts of assets that need to be held as security under the reinsurance contract, on a funds withheld, trust, or modified coinsurance basis. Also, it establishes additional requirements for the actuarial opinion for reserve financing transactions. AG 48 applies to treaties entered into (or new business added to existing treaties) after Dec. 31, 2014.

AG 48 specifically applies to financing arrangements for term life insurance business subject to the Valuation of Life Insurance Policies Model Regulation (Model 830 or Regulation XXX) and universal life insurance business subject to Actuarial Guideline XXXVIII (AG 38 or AXXX). AG 48 is not limited to transactions involving a captive structure. Any reinsurer that does not meet one of the exemptions[3] and reinsures policies with Regulation XXX/AG 38 reserves will be subject to the new rules.

For ULSG, when the secondary guarantee risk is ceded, the ceding company will typically take a reserve credit for the excess of the AG 38 reserve over the reserve for the base UL policy (UL CRVM). For transactions prior to AG 48, the company calculated an economic reserve and the redundant reserve. The economic reserve calculation

	Year 5	Year 10	Year 15	Year 20	Year 25	Year 30
(1) UL CRVM	$36,167	$62,924	$58,217	$37,389	$ 9,404	$ 0
(2) AG 38	52,929	80,942	79,082	64,824	43,276	17,890
(3) Ceded reserve (2) - (1)	16,761	18,018	20,865	27,434	33,872	17,890
(4) Economic reserve[4]	0	759	4,684	10,388	18,534	11,382
(5) Retained reserve + economic reserve: (1) + (4)	36,167	63,683	62,901	47,777	27,938	11,382
(6) Amount financed/redundant reserve: (2) - (5)	16,761	17,259	16,181	17,046	15,338	6,508

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(2) AG 38	52,929	80,942	79,082	64,824	43,276	17,890
(3) Ceded reserve: (2) - (1)	16,761	18,018	20,865	27,434	33,872	17,890
(4) Actuarial Method Reserve (Primary security)	7,957	2,803	8,050	14,442	21,055	12,551
(5) Retained reserve + Primary Security: (1) + (4)	44,124	65,727	66,267	51,831	30,459	12,551
(6) Amount financed/Other Security: (2) - (5)	8,805	15,215	12,815	12,993	12,817	5,339

was based on secondary guarantee claims and reinsurance premiums. The redundant reserve was equal to the total ceded reserve less the economic reserve.

On page 8, is an illustrative example for a transaction prior to AG 48 for a ULSG product. The economic reserve in this example is a gross premium valuation reserve using moderately adverse assumptions. The example also assumes that the assets held by the captive would qualify as Primary Security assets.

In this pre AG 48 example, for policy year 10 the ceding company would take a reserve credit of 18,018 and the assets for the economic reserve of 759 would be held in a funds withheld account or trust arrangement. The redundant reserve of 17,259 would be financed by a letter of credit or other financing vehicle.

For treaties subject to AG 48, the assets required (Primary Security) would no longer be the amount necessary to back an economic reserve based on the secondary guarantee claims and reinsurance premiums but would be based on the Actuarial Method defined as a modified VM-20 reserve.

Per VM-20, the reserve is the higher of the net premium reserve, deterministic reserve, and stochastic reserve. The net premium reserve is a formulaic reserve using prescribed assumptions that is meant to serve as a floor to the more principles-based components of VM-20. The deterministic reserve is a gross premium valuation using prudent best estimate assumptions. The stochastic reserve is a CTE 70 calculation based on the greatest present value of accumulated deficiencies concept similar to Actuarial Guideline 43 (VACARVM or AG 43).

The modification to the VM-20 reserve required by the Actuarial Method is a factor applied to the net premium reserve. The factors (which are all less than or equal to 1.0) vary by issue age, gender, and smoking class. The reserve requirement for a ULSG product per AG 48 is the maximum of (i) the factor times the net premium reserves, (ii) the deterministic reserve, and (iii) the stochastic reserve. The VM-20 items are calculated on a gross of reinsurance basis. The primary security requirement for the captive is equal to the modified VM-20 reserve less the retained reserve (UL CRVM).

A key component of the illustration is calculating the Actuarial Method Reserve according to VM-20. The calculation of the VM-20 reserve will likely require companies to upgrade modelling capabilities to allow stochastic projections of both assets and liabilities. Sensitivity analysis of key assumptions will also be required. Processes and controls around assumption setting and model governance will need to be strengthened as valuation moves from formulaic reserves using prescribed assumptions to a principles-based approach using company specific assumptions.

TABLE 1

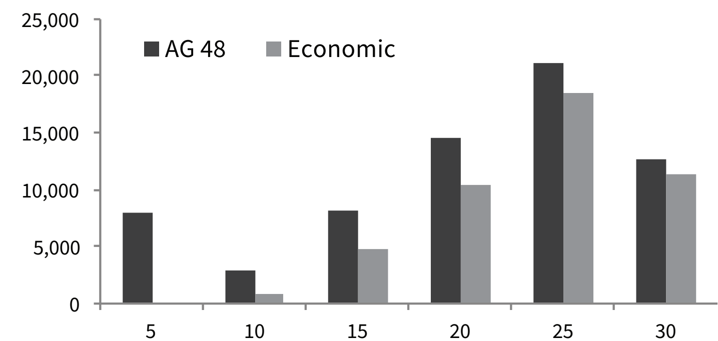
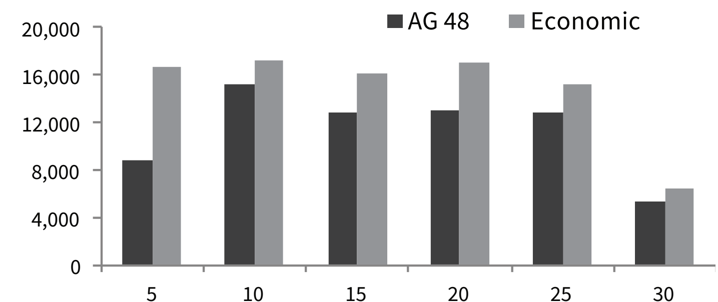


TABLE 2



CONTINUED ON PAGE 10

On page 9 (top) is an illustrative example for the transaction considered above subject to AG 48.

Table 1 (pg. 9) compares the asset requirements based on a pre AG 48 economic reserve and the Primary Security requirements per AG 48.

In this example, with AG 48, more of the reserve will have to be backed by real assets and less of the XXX/AG38 reserve can be financed.

Table 2 (pg. 9) compares the amount of assets financed using other securities (redundant reserves) based on an economic reserve (as defined for this illustration) and the Primary Security requirements per AG 48.

OTHER CONSIDERATIONS

In addition to specifying the Amount of Primary Security and Amount of Other Security requirements for captive transactions, AG 48 addresses the types and amounts of assets that need to be held as security under the reinsurance contract, on a funds withheld, trust, or modified coinsurance basis. The requirements differ for Primary Security and Other Security assets.

Primary Security assets are the assets backing the reserve calculated by the Actuarial Method per AG 48. Other Security assets are the assets allowed to back the excess of the AG 38 reserve or Regulation XXX reserve over the AG 48 reserve.

For Primary Security assets, allowable assets include cash and SVO-listed securities meeting certain criteria. For funds withheld and modified coinsurance reinsurance arrangements, allowable assets include commercial loans in good standing of CM3 quality and higher, policy loans, and derivatives used to support and hedge liabilities pertaining to the actual risks in the policies ceded pursuant to the reinsurance arrangement.

AG 48 defines Other Security assets as any asset acceptable to the Commissioner of the ceding insurer's domiciliary state, including any asset meeting the definition of Primary Security.

AG 48 also requires the ceding company's appointed actuary to certify that Primary Security funds are held in an amount at least equal to the Required Level of Primary Security and that Other Security funds are held in an amount at least equal to the remaining portion of the reserve that is financed.

CONCLUSION

While offering standardization of captive treatment in the U.S. life insurance industry, AG 48 also brings about changes to the levels of captive funding as well as the operational complications associated with the newly required AG 48 calculations. Companies need to be aware that the economic and administrative costs of funding XXX and AG 38 reserve redundancies have likely risen in the AG 48 environment. ■

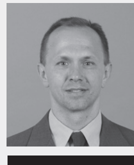
ENDNOTES

1 XXX refers to the Valuation of Life Insurance Policies Model Regulation and AXXX refers to Actuarial Guideline 38

2 In this article, the term economic reserve is used generically as the reserve amount required by the regulator of the captive.

3 These exemptions include: (1) YRT reinsurance, (2) Reinsurance transactions with certified reinsurers, (3) Collateral trust funding, (4) Captives that file financial statements without any departures from NAIC statutory accounting practices, and (5) Exemptions granted by the ceding insurer's domiciliary regulator.

4 The calculated economic reserve in year 5 was negative and floored at 0 in this illustration.



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