



Arkansas Bureau of Legislative Research Analysis and Recommendations

October 3, 2024

Kyle M. Hales, ACAS, MAAA
Principal & Consulting Actuary
Director | Risk Strategies & Solutions

Charles Lenz, ACAS, MAAA
Principal & Consulting Actuary







Agenda

- Pro-Formas Plan D
- 2 Certified Self-Insured vs. Captive
- Risk Pooling Advantages
- 4 Observations
- 5 Final Recommendations





Plan D – Self-Insurance Up To \$50M Agg



Sample Scenario:

Scenario	Self-Insured Retention	Fiscal Year 1 Funding Level	Initial Capital	Reinsurance Premium	Total Premiums
1	\$2M / \$50M	\$31,600,000	\$50,000,000	\$40,000,000	\$71,600,000
2	\$3M / \$50M	\$33,600,000	\$50,000,000	\$39,000,000	\$72,600,000
3	\$5M / \$50M	\$36,200,000	\$50,000,000	\$35,000,000	\$71,200,000

Notes:

- 1. Funding levels for FY 1 set such that Adverse Scenario produces break-even level after five years.
- 2. Funding levels for FY 2 through FY 5 projected to increase 5% each year.
- 3. Adverse Scenario = FY 2 and FY 3 experience losses equal to 85^{th} percentile confidence level.
- 4. Will need to review XS reinsurance premiums to recommend optimal retention structure.



Insurance Structure Differences



Certified Self-Insured

- Regulation
 - Less tightly regulated



Typically not allowed



Captive Insurance Company

Regulation

- Regulated as an insurance company
- Afforded same protections as insurance company
- Must meet AID requirements
 - Audit
 - Actuarial opinion
 - Min. capital & surplus requirements

Risk Pooling

Strategically respond to shifts in market premiums







Risk Pooling Advantages



· + · + · +

AMAIT - FYE 2025 Reinsurance Premiums for Coverage \$50M XS \$8.5M

Reinsurer	Limit	Pooled Percentage	Quoted Premium	Rate per \$100M of \$1K TIV
Company 1	\$25,000,000	50.0%	\$6,954,314	\$1.102
Company 2	\$2,000,000	4.0%	\$719,091	\$1.425
Company 3	\$5,000,000	10.0%	\$1,963,749	\$1.557
Company 4	\$5,000,000	10.0%	\$1,323,561	\$1.049
Company 5	\$3,750,000	7.5%	\$1,440,493	\$1.522
Company 6	\$9,250,000	18.5%	\$3,728,114	\$1.597
Total	\$50,000,000	100.0%	\$16,129,322	\$1.279
Total Excl. Company 3	\$45,000,000	90.0%	\$14,165,573	\$1.248

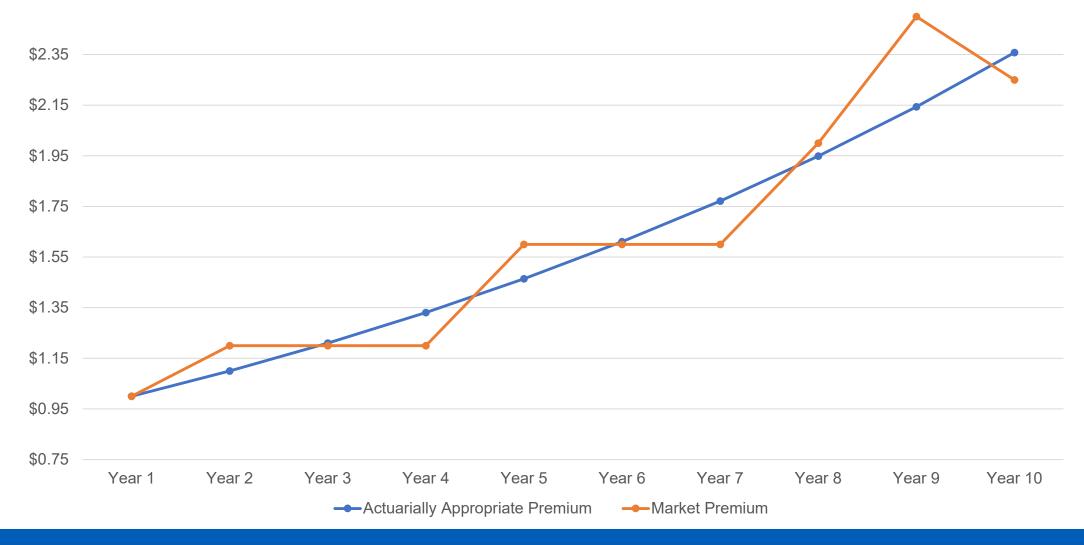
For all three entities combined (AMAIT, ASPIT, & ASBA), a Captive would have saved the agencies over \$1,450,000 in insurance premiums for fiscal year 2024/25.



Actuarial vs. Market Premium



Sample Scenario





Observations – Property Coverage



AMAIT	Reinsurance Premiums	Fund Balance*
2020	\$8,240,680	\$9,189,820
2021	\$7,507,479	\$9,281,602
2022	\$16,908,812	\$11,582,306
2023	\$30,548,655	\$10,267,873
2024	\$26,130,043	\$6,990,784

APSIT	Reinsurance Premiums	Fund Balance*
2020	\$4,411,801	\$16,989,558
2021	\$5,306,355	\$18,453,445
2022	\$7,009,234	\$15,838,504
2023	\$16,494,480	\$11,456,468
2024	\$16,156,754	\$10,578,870

ASBA	Reinsurance Premiums	Net Position
2020	\$7,344,409	\$22,658,217
2021	\$8,728,704	\$22,875,777
2022	\$11,728,903	\$22,082,996
2023	\$13,638,163	\$16,804,829
2024	\$30,281,755	\$8,211,176

Notes:

^{*} Does not include a reduction for case reserves or IBNR



Observations





Up through 2021, Everything Was Going Well ...

Reinsurance premiums were stable Fund Balances / Net Positions (i.e. Surplus) were rising No actuarial studies performed



Warning Signs Began in 2022

Reinsurance premiums see unusual increases



Reinsurance Market Hardens in 2023

No plan in place for hard market

- Little choice but to pay soaring reinsurance premiums
- Surplus could have been used to retain more risk vs. paying reinsurance premiums



While Actuarial Studies in 2024 Addressed IBNR ...

Didn't consider higher retentions

No actuarially appropriate rating plan developed

Baseline comparisons from pre-2022 not possible



Need an Independent Wholistic Risk Management Plan Assess the agencies' capacity to retain more risk

Pool SIRs

Optimize participation in reinsurance risk pools



Final Recommendations





Combine the Insurance Operations for All Three Entities



Form a Captive to Self-Insure the Entities' Property Coverage



Annually Consult with an Independent Strategic Risk Consultant to Optimize the Use of the Captive



Annually Perform Independent Actuarial Analyses