

# Structured Reinsurance: Capital Financing for Health Insurance



## HIGHLIGHTS

Structured reinsurance provides access to capital with a number of advantages over traditional capital financing sources:

- ✓ Access to capital under flexible terms, without the impacts of leverage (debt) or dilution (equity).
- ✓ Reduces required capital at a low cost, improving product ROE.
- ✓ Provides liquidity that protects the company's capital position in the event of losses.

*"Companies that use structured reinsurance are able to deploy their capital to other higher return ventures, allowing them to grow faster with greater returns."*

## Structured Reinsurance: Capital Financing for Health Insurance

*By David Rowbottom, FSA, MAAA, FCIA  
VP, Structured Reinsurance Solutions*

Structured reinsurance is commonly used in P&C and life markets, yet under-utilized and often not well understood in health markets. This is beginning to change, with a greater proportion of health carriers realizing the benefits of reinsurance as a source of capital, and early entries into health insurance-linked securitization such as Aetna's Vitality Re program. Canada Life Reinsurance is a market leader in health structured reinsurance, having completed dozens of transactions with close to \$7B annual ceded premium in force.

Structured reinsurance accomplishes the goals of regulatory capital requirements, providing liquidity that protects the company's capital position in the event of losses. It allows access to capital at a low cost under flexible terms, without the impacts of leverage or dilution. Reducing required capital while allowing the company to retain a significant portion of profits improves product ROE. Companies that use structured reinsurance are able to deploy their capital to other higher return ventures, allowing them to grow faster with greater returns.

Structured reinsurance is a tool for insurance companies to improve their capital management efficiency, providing diversification beyond traditional capital financing sources. It can be used to support strain from new business growth, raise capital for M&A activity, fund share buybacks, or retire higher cost debt thereby reducing the company's weighted average cost of capital.

## How it Works

Reinsurance is a powerful tool for managing a health insurer's risk profile and capital requirements. A traditional quota share arrangement reduces the net risk retained and corresponding capital, but comes at the cost of ceding a substantial portion of underwriting gains. Structured reinsurance cedes the risk driving capital requirements at a charge that is commensurate to that risk, while allowing the ceding company to maintain the majority of underwriting gains. It is customized to the risk and capital needs of the particular health product and insurer, thereby offering the most cost-effective solution for efficient risk and capital management.

At its core, structured reinsurance for capital financing is simply a traditional quota share arrangement, with experience refunds that allow the ceding company to retain a greater portion of any underwriting gains. Any profit net of the reinsurance risk charge is returned to the ceding company. Any outstanding losses are carried forward to be recovered from future profits in the business if they emerge.

If the business performs well and is managed properly, the only settlement is the risk charge. If the business performs poorly, but can be returned to a profitable position, the reinsurer will provide liquidity to the ceding company during the stress event but not suffer permanent losses. If the business performs poorly, and cannot be returned to a profitable position, those losses will stay with the reinsurer in proportion to the quota share. For this reason, the reinsurer is focused on underwriting not only the business, but also the company financials and management team to determine their ability to manage the business in a stress event.

The reinsurance typically uses a modified coinsurance structure to minimize asset transfer, or it can also be done on a coinsurance basis with funds withheld. Each structure follows all risk transfer requirements under statutory accounting principles according to the Life and Health Reinsurance Agreements Model Regulation, and Appendix A791 to SSAP 61 in the NAIC Accounting Practices and Procedures Manual.

## How to Evaluate

There are a number of key factors when evaluating the results of a structured reinsurance program, but ultimately the focus is how much capital can be accessed, what the cost of that capital is relative to other sources of capital financing, and what returns are expected from deploying that capital for other purposes. Other considerations are the resulting improvements to product ROE (and whether that is reflected to allow more competitive pricing on new business), and the protection the cover provides under loss events.

*"...ultimately the focus is how much capital can be accessed, what the cost of that capital is relative to other sources of capital financing, and what returns are expected from deploying that capital for other purposes."*

*"At its core, structured reinsurance for capital financing is simply a traditional quota share arrangement"*

## I. Access to Capital

Take, for example, a company with a \$500M block of health business. The company action level risk based capital (CAL RBC) on this business is 10% of premium, and they are holding \$200M of capital, making their RBC ratio 400%.

Then, apply a 50% quota share structured reinsurance program with a reinsurance risk charge of 80bps of the ceded premium (\$250M x 80bps = \$2M).

The CAL RBC after reinsurance will depend on a few factors (e.g. RBC covariance impact, capital charge for premium returned through experience refund, etc.). For this example we will assume the premium returned through experience refund is \$18M (based on an expected loss ratio of 80%), and we will assume no RBC covariance impact. The CAL RBC is reduced by 50% from the quota share (\$50M x 50%), then increased by \$1.8M for the premium returned through experience refund (\$18M x 10%). The resulting capital to be held to maintain a 400% RBC ratio is then \$107.2M.

This allows access to \$92.8M of capital, at a cost of capital of 2.2% (\$2M / \$92.8M).

Structured reinsurance offers access to capital at a low cost without any change to the company's debt to capital ratio, providing a valuable alternative to traditional capital financing.

## II. Improved Product ROE

Following the same example, assume the expected loss ratio is 80% and direct expenses are 12% with overhead expenses of 3%, giving an ROE on a gross basis of 12.5% (\$25M / \$200M).

The 50% quota share structured reinsurance program provides an expense allowance of 12% covering all expenses directly related to administering the business. This difference in gross expense and expense allowance is ultimately returned to the ceding company through an experience refund.

The resulting net position to the ceding company improves the ROE since profit is retained (less the reinsurance risk charge) while capital is reduced. The experience refund is counted as premium when returned to the ceding company.

The company can benefit from higher ROE (\$23M / \$107.2M), or give some of that back through more competitive pricing on new business.

Gross Premium	\$ 500M
CAL RBC (10% Prem)	\$ 50M
Capital & Surplus	\$ 200M
RBC Ratio	400%

Ceded Premium	\$ 250M
Reinsurance Risk Charge	\$ 2M

CAL RBC after Reinsurance	\$ 26.8M
Capital & Surplus	\$ 107.2M
RBC Ratio	400%

Access to Capital	\$ 92.8M
Cost of Capital	2.2%

*“Structured reinsurance offers access to capital at a low cost without any change to the company's debt to capital ratio, providing a valuable alternative to traditional capital financing.”*

Incurred Claims	\$ 400M
Direct Expense	\$ 60M
Overhead Expense	\$ 15M
Gain / Loss	\$ 25M
Capital & Surplus	\$ 200M
ROE	12.5%

Ceded Claims	\$ 200M
Expense Allowance	\$ 30M
Experience Refund	\$ 18M

Net Premium	\$ 268M
Net Claims	\$ 200M
Net Expense	\$ 45M
Net Gain / Loss	\$ 23M
Capital & Surplus	\$ 107.2M
ROE	21.5%

### III. Liquidity Cover Protecting Capital in the Event of Loss

In the event of a loss the reinsurance will act to provide liquidity protection for the company's capital position. Assume in our example the loss ratio was 120%, on a gross basis this would result in a loss of \$175M, the company would need to find some way of recovering this capital loss to maintain their RBC ratio.

With reinsurance, this capital loss would be split into a reduced net loss for the ceding company, and a loss carryforward balance for Canada Life Reinsurance to be recovered from future profits.

The reinsurance has provided \$80M of liquidity cover, reducing the net loss for the ceding company to \$95M. The loss carryforward also includes the \$2M reinsurance risk charge, also to be recovered from future profits. The difference in the net loss position and the liquidity cover is due to the overhead expenses that the reinsurance does not cover because they are not directly related to the reinsured business.

Capital is liquidity, but whereas a loss in capital needs to be directly recovered to maintain the company's RBC ratio, the liquidity cover from reinsurance is only recoverable over time from future profit if it emerges.

Incurred Claims	\$ 600M
Direct Expense	\$ 60M
Overhead Expense	\$ 15M
Gain / Loss	\$ (175M)

Ceded Claims	\$ 300M
Expense Allowance	\$ 30M
Loss Carryforward	\$ (82M)

Net Premium	\$ 250M
Net Claims	\$ 300M
Net Expense	\$ 45M
Net Gain / Loss	\$ (95M)

Liquidity cover	\$ 80M
-----------------	--------

*“Capital is liquidity, but whereas a loss in capital needs to be directly recovered to maintain the company's RBC ratio, the liquidity cover from reinsurance is only recoverable over time from future profit if it emerges.”*

## Summary

The use of reinsurance for capital financing has notable advantages over the alternatives of holding capital and using traditional sources of financing. Structured reinsurance provides access to capital at a competitive cost, with beneficial termination provisions and other less restrictive terms when compared to traditional capital financing. The reinsurance structure provides capital protection and is limited to recover any loss position through future profits on the business. In addition, structured reinsurance will improve product ROE, which may allow for more competitive pricing on new business.

Any company looking to improve their capital management position or operate their business at a more competitive level should evaluate the use of structured reinsurance.

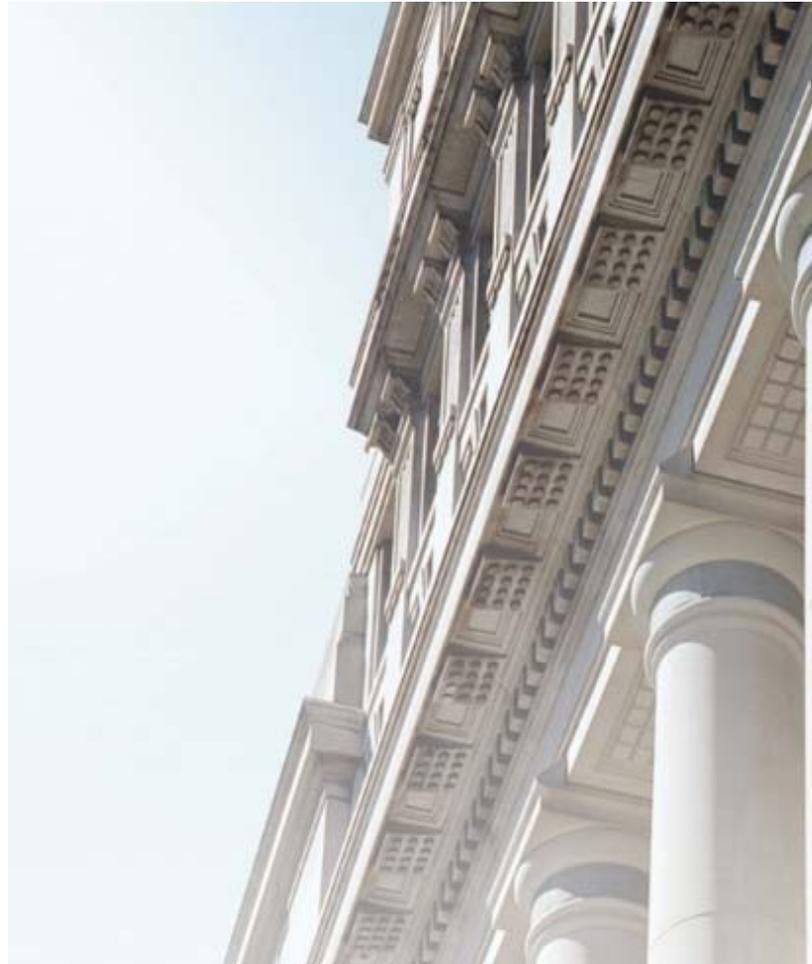
## About Canada Life Reinsurance

Canada Life Reinsurance is a division of The Canada Life Assurance Company and certain of its subsidiaries and affiliates. The Canada Life Assurance Company is a subsidiary of Great-West Lifeco Inc. and a member of the Power Financial Corporation group of companies.

Canada Life Reinsurance is one of the leading providers of reinsurance solutions designed to optimize insurers' capital and surplus positions. Our structured reinsurance solutions are designed for many types of insurance products and can be used to reduce capital requirements and improve returns. Canada Life Reinsurance has been consistently ranked as the market leader for structured reinsurance in the SOA/Munich reinsurance survey and the NMG US Structured Financial Solutions study for group products.

Our clients benefit from our financial strength, our strong team of reinsurance professionals and access to a wide range of solutions that can be customized to provide flexibility. We have offices in the United States, Canada, Ireland and Barbados.

If you're looking for strength, stability and solutions from your reinsurance provider, contact us to learn more about how we can support your business.



**David Rowbottom, FSA, MAAA, FCIA**  
VP, Structured Reinsurance Solutions  
610-547-1810  
[david.rowbottom@canadalifere.com](mailto:david.rowbottom@canadalifere.com)

**Lonny Meewes, FSA, MAAA**  
SVP, Marketing  
704-243-9333  
[lonny.meewes@canadalifere.com](mailto:lonny.meewes@canadalifere.com)