DORINCO REINSURANCE COMPANY

NAIC GROUP CODE 0000 — NAIC COMPANY CODE 33499

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS - 2018

1. Overview

This discussion provides an assessment by management of the current financial position, results of operations, cash flow and liquidity for Dorinco Reinsurance Company (Dorinco, the Company) for the year ended December 31, 2018. Information presented in this discussion supplements the financial statements, schedules, and exhibits in the 2018 Annual Statement.

Dorinco is a wholly owned subsidiary of Liana Limited which is ultimately a wholly owned subsidiary of The Dow Chemical Company (Dow). Dorinco issues direct property and liability insurance policies to Dow and certain related companies, and participates in property and casualty reinsurance treaties covering Dow or unrelated parties with other insurance companies.

1.1. General

Dorinco maintained its recent strong financial results in 2018, recording positive underwriting and investment income. The strengthening of the global financial markets evidenced in 2016 and continuing into 2017 pulled back during 2018. Dorinco's financial position remained steady with positive investment income and realized capital gains offset by some unrealized capital losses during 2018.

Overall, Dorinco's admitted assets increased from $1.548 billion in 2017 to $1.568 billion in 2018, reflecting favorable underwriting and investment income earned in addition to the decrease of dividends paid to stockholders during the year.

Dorinco's main focus is to provide an efficient vehicle to Dow to manage its risks and to complement it with top quality profitable unrelated business.

I. FINANCIAL POSITION

Dorinco's financial position at December 31 was as follows:

	$MILLION 2018	2017*
ADMITTED ASSETS		
Bonds	1,122.6	1,021.9
Equity	0.6	6.6
Other Invested Assets	230.0	251.5
Cash/Short Term Investments	104.8	149.0
Premium Balances	73.1	82.4
Funds Held	8.7	4.8
Reinsurance Recoverable on Loss/LAE Payments	10.0	15.7
Net Deferred Taxes	6.2	6.1
Other Assets	12.3	9.9
TOTAL ASSETS	1,568.3	1,547.9
LIABILITIES		
Unpaid Losses/LAE/IBNR	803.9	804.7
Unearned Premiums	78.4	75.1
Current Federal Income Taxes Payable	38.9	24.0
Ceded Reinsurance Premium Payable	20.6	52.2
Dividends Declared and Unpaid	0.0	0.0
Funds Held Under Reinsurance Treaties	1.9	0.6
Provision for Reinsurance	15.8	3.1
Other Liabilities	4.8	8.5
TOTAL LIABILITIES	964.3	968.2
TOTAL POLICYHOLDER'S SURPLUS	604.0	579.7
LIABILITIES & SURPLUS	1,568.3	1,547.9

*Immaterial reclasses were made to certain lines items throughout this document from the originally filed 2017 annual statement amounts to align with the results of the audited financial statements.

IA. ASSETS

Dorinco's 2018 admitted assets increased $20.5 million as compared with 2017, inclining 1.3% during the year. Cash and invested assets increased by $29.1 million or 2.0% versus 2017 primarily due positive cash flow from operations.

Cash and short-term investments decreased by $44.2 million and other invested assets decreased by $20.4 in 2018, primarily due to a shift in our strategic asset allocation which plans for increased investments in fixed income and alternative assets.

The goal of Dorinco's investment policy is to maximize its long-term rate of return. Dorinco, via a service contract, utilizes the portfolio management services of Dow's Portfolio Investment group. To accomplish the above stated goal, a diversified investment portfolio consisting of fixed income, equities, and alternative investments has traditionally been maintained.

In 2018, as a result of changes in US GAAP accounting, the portfolio shifted to allocate very heavily to domestic and international fixed income assets (77%), other invested assets (16%) and cash and short term investments (7%). The other invested assets portfolio includes an allocation to alternative investments (11%) and a loan receivable from the parent (5%). Alternative investments can be further broken down into private equity (9%) and real estate (2%).

In the future, we will seek to further diversify the portfolio across domestic and international investment grade bonds, convertible bonds and leveraged leases with varying durations. As a result of the changes already implemented and those to be implemented in the future, the portfolio will typically be more predictable in generating coupon income with less mark-to-market volatility.

Overall, the Company's total return on its investment portfolios for 2018 was a loss of -1.1%, compared to a gain of 6.4% in 2017, as most asset classes were under pressure with a synchronized slowdown in global growth, volatile energy markets, and trade skirmishes punctuating much of 2018.

Macroeconomic data has moderated somewhat but there are significant areas of strength. Forecasts suggest U.S. real GDP may grow at a rate of 2.4% in 2019, 50 bps slower growth than what was observed in 2018 but roughly 20 bps faster growth than that of 2017. Longer-dated GDP forecasts suggest additional moderation in growth expectations for both 2020 (+1.9%) and 2021 (+1.8%).

Simulative fiscal policy has been dialed down but has been somewhat offset by the reduction in the pace of quantitative tightening. Additionally, the Fed has temporarily eliminated any tightening of monetary policy noting labor market strength and stable inflation. In January, the Fed moved to a neutral stance and left short-term rates unchanged in a range between 2.25% and 2.50%, signaling risks were balanced causing the bond market to reconsider the path of future interest rates.

Given the economic backdrop described above, a well-diversified fixed income portfolio should perform relatively well. The economy, though slowing is still growing and company balance sheets are strong. Inflation is benign and economy is at full employment. The Federal Reserve is in a 'neutral' stance – idling their usage of monetary policy and non-traditional tools -- and is ready to act to stabilize markets if needed. Coupon income should be strong. If rates remain stable or drift lower, portfolio performance would be enhanced.

Premium receivables and reinsurance recoverables decreased by a combined $11.2 million in 2018 versus 2017 largely due to a novation contract entered into in late December (premium receivable balances are gross of ceded reinsurance premiums payables of $20.6 million in 2018 and $52.2 million in 2017).

IB. LIABILITIES

Loss and loss expense reserves are stated at Dorinco's estimate of the ultimate loss, net of ceded reinsurance recoverables. Included as a reduction to unpaid loss reserves are $326.4 million of recoverables from affiliate Dorintal Reinsurance Limited. This balance is fully collateralized by a reinsurance trust. The remainder of the recoverables are with companies rated A or better by a reputable insurance rating agency or are not material.

The amount of reserves related to reported claims for direct business is based upon a case-by-case estimate determined by the claims professionals employed by Dorinco. Other reserves on other business assumed are based on statements received from ceding companies. Loss and loss expense reserves are not discounted.

The estimate of losses arising from claims which have not yet been reported (IBNR) to Dorinco is based upon management's best judgments; however, the ultimate liability may be in excess of or less than the amounts provided. All unpaid reserves reported and IBNR are certified annually by a qualified independent actuary.

Activity with respect to loss and loss expense reserves for the last two years is detailed below:

	$MILLION	
	2018	2017
Unpaid Losses and Loss Expense at Beginning of Year	804.7	815.6
Loss and Loss Expenses Incurred for Current Year	197.8	182.9
Increase (Decrease) in Estimates for Prior Loss Years	(56.4)	(70.9)
Loss and LAE Payments Made in Current Year	(142.2)	(122.9)
Unpaid Losses and Loss Expenses at End of Year	803.9	804.7

During 2018, Dorinco continued its review of outstanding reserves and, based on loss history, trends, claim reporting activity and analysis of existing claims, it was determined that reserves should be decreased, resulting in an decrease in estimates for prior years of $37.0 million.

Unearned premiums increased from $75.1 million in 2017 to $78.4 million in 2018, reflecting an increase in gross written premiums for the Company’s third party business.

IC. CAPITAL AND SURPLUS ACCOUNTS

There has been no change to the capital stock or paid in and contributed surplus for the last two years.

There were no declared dividends in either 2018 or 2017.

Policyholder's surplus increased from $579.7 million at December 31, 2017, to $604.0 million at December 31, 2018. During 2018, the Company generated a profit after tax of $48.6 million from operations. This was significantly offset by $9.3 million in unrealized losses, $2.0 million deferred tax loss and $12.7 million for a change in provision for reinsurance. The sum of these three items, less $0.3 million in combined other minor items, contributed to an overall increase in policyholder's surplus of $24.4 million, or 4.2% during 2018.
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II. RESULTS FROM OPERATIONS

Dorinco produced net income of $48.6 million for the year. Earned premiums in 2018 were $213.2 million, as compared with $153.9 million in the previous year. The increase in the earned premiums balance was due mainly to an increase in certain assumed reinsurance contracts combined with a decrease in certain ceded contracts offset by a decrease in the net written premiums for the direct property and liability insurance policies issued to Dow.

The underwriting results for 2018 produced income of $26.3 million. This was accompanied by net investment income of $34.4 million, which included $5.4 million of net realized capital gains. The Company carried $9.3 million of unrealized capital gains (net of taxes) in a portfolio consisting of $1.5 billion of invested assets. The investment portfolio was split approximately 77.0% fixed income, 15.8% other investments, and 7.2% cash and short term investments at year end 2018.

Cash flow from operations was $45.8 million, increasing from $(1.1) million in 2017, primarily due to a $33.3 million increase in premiums collected combined with a decrease of $40.5 million in income taxes paid offset by a $8.0 million increase in benefit and loss payments and an increase of $15.7 million in commissions and other expenses paid (see also Cash Flow section below).

The Company continues to add value for policyholders in the related captive segment of its business which made up approximately 31% of 2018 earned premiums. The unrelated business, making up the remaining balance of 2018 premiums, continues to present opportunities in niche markets in which the Company participates. Dorinco has solidified its position as a niche market for assumed reinsurance, specializing in less volatile lines of business offering predictable and consistent results. The company is well-positioned for the current market cycle. Regional U.S. insurance companies continue to be the Company's targeted clients.

REINSURANCE PROGRAM

Dorinco participates in an intra group reinsurance plan that utilizes the capacity of each company within the group. Sister company Dorintal Reinsurance Limited participates as a reinsurer (all reserve balances are secured). Separate reinsurance arrangements with commercial insurers and reinsurers exist for the coverage provided to the ultimate parent.

ORGANIZATIONAL PROCESS

The Company utilizes a quantitative pricing model and has taken a 'hands on' management of its reserving practices by its own Actuarial Business Service Unit. This unit interfaces with the independent consulting actuary appointed by the Board of Directors.

RISK MANAGEMENT OF CATASTROPHE EXPOSURES

Guidelines are established for assumed contracts with catastrophe exposure to include a cap to the limit of liability. Maximum exposure by contract is monitored on a geographic basis. This information is used in establishing underwriting direction and the purchasing of reinsurance. With the reduction in the assumed reinsurance portfolio subject to catastrophe loss, the Company currently relies less on catastrophe modeling of probable maximum loss and more on the monitoring of its exposures on a gross limits exposed basis.

ENTERPRISE RISK MANAGEMENT

The Company utilizes several models, metrics and evaluation methodologies in effectuating enterprise risk management. Insurance risk management techniques include: underwriting, catastrophe management, and reserve adequacy management. Dorinco looks for non-correlation of Dow and third-party risks. Third party risks are U.S.-only exposed, primarily short-tail non-standard auto risks. Geographic exposure accumulation is described under "Risk Management of Catastrophe Exposures." Reserves are established internally by claim, line of business, and/or policy. Reserves are reviewed internally on a quarterly basis and annually by external actuaries. Methodologies used in reserve analysis include: Company loss development, industry loss development, adjusted loss development and Bornheutter Ferguson.

Investment risk management includes setting parameters for asset allocation, volatility appetite, and investment policy. These investment measures are monitored by the Finance Committee and presented to the Board of Directors.

There is a Board-approved delegation of authority for policy underwriting, based upon business type, premium level, and exposure limits. There is an established delegation of authority for claim payments, with larger payments requiring formal review prior to authorization.

Optimization of capital structure is reviewed monthly and maximum policy limits and investment risk are monitored at that time. The Finance Committee and Board of Directors meet quarterly; the management team meets monthly, at a minimum. Dorinco leverages its formal disaster recovery program from its ultimate parent.

UNDERWRITING RESULTS

	$MILLION 2018	2017
Underwriting Results:		
Gross premiums written	331.7	351.7
Net premiums written	216.5	157.3
Net premiums earned	213.2	153.9
Loss and loss adjustment expense ratio	66.2%	72.8%
Underwriting expense ratio	20.3%	20.6%
Combined ratio	86.5%	93.4%

Gross premiums written decreased to $331.7 million in 2018, from $351.7 million in 2017, primarily due to a $61.3 million decrease in direct premium related to a policy extension for five months and a policy novation offset by a $41.3 million increase in assumed business from the unrelated business segment of the Company's business as market conditions improved during 2018 in the Company's primary regional target. Dorinco's combined ratio as reported in the Annual Statement for 2018 amounted to 86.5%, a decrease from 93.4% in 2017.

Dorinco is a part of Dow's consolidated federal income tax return. Dorinco and Dow have entered into a tax allocation agreement whereby Dorinco computes and pays its tax obligation as if separate returns were being filed.

III. CASH FLOW AND LIQUIDITY

CASH FLOW

Primary sources of cash for the Company include cash provided from premiums collected, dividend and interest income, and proceeds from the sale or maturities of invested assets. The cash flows of Dorinco for 2018 and 2017 are summarized below:

	$MILLION 2018	2017
Cash Provided by Operations	45.8	(1.1)
Cash From Investment Activities	(90.4)	115.0
Other Cash Used	0.4	(20.8)
Net Change in Cash and Short-Term Investments	(44.2)	93.1

Operating cash flow in 2018 was higher than in 2017, primarily due to $33.3 million increased premiums collected net of reinsurance, $4.4 million in increased investment income and $40.5 million in decreased tax payments. Offset by a $7.4 million decrease in miscellaneous income, an increase of $15.7 million in commissions and expenses paid, in addition to an increase of $8.3 million in benefit and loss payments. The increase in commissions and other expenses is due largely to the timing of payments to the increase in assumed business from the unrelated business segment of the Company's business during 2018.

Net cash from investment activities was significantly lower in 2018 due to acquiring more bonds than sold during 2018, when compared to 2017 when more equities were sold than purchased.

Other cash used increased in 2018, primarily due to a stockholder's dividend payment in 2017 of $20.0 million, as compared to $0 million paid in 2018. See also Note 13D to the 2018 Annual Statement.

Dorinco made no significant capital expenditures in 2018.

LIQUIDITY

Dorinco collects and invests premiums written in advance of payments for associated claims. Funds available for investment which exceed the amount required to satisfy liabilities are primarily invested in fixed income, equities and short-term securities.

For 2018 and 2017, Dorinco met its cash needs from internally generated funds. Dorinco does not anticipate any difficulties in meeting its future cash needs.