DORINCO REINSURANCE COMPANY

NAIC GROUP CODE 0000 — NAIC COMPANY CODE 33499

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS - 2019

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, 2019. Information presented in this discussion supplements the financial statements, schedules, and exhibits in the 2019 Annual Statement.

Dorinco is a wholly owned subsidiary of Liana Limited which is ultimately a wholly owned subsidiary of Dow Inc. (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 strong financial results in 2019. While strengthening underwriting reserves led to a negative underwriting result it was more than offset by increased investment income. The pull back of the global financial markets evidenced in 2018 turned around and strengthened resulting in many new record highs during 2019. Dorinco's financial position remained steady with positive investment income and realized capital gains offset by some unrealized capital losses during 2019.

Overall, Dorinco's admitted assets increased from $1.568 billion in 2018 to $1.652 billion in 2019, reflecting favorable investment income earned offset by $30 million in 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.

No preliminary merger or acquisition negotiations have taken place during the year.

I. FINANCIAL POSITION

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

	$MILLION 2019	2018
ADMITTED ASSETS		
Bonds	982.1	1,122.6
Equity	0.8	0.6
Other Invested Assets	235.8	230.0
Cash/Short Term Investments	291.1	104.8
Premium Balances	95.2	73.1
Funds Held	10.4	8.7
Reinsurance Recoverable on Loss/LAE Payments	18.9	10.0
Net Deferred Taxes	5.6	6.2
Other Assets	12.2	12.3
TOTAL ASSETS	1,652.1	1,568.3
LIABILITIES		
Unpaid Losses/LAE/IBNR	907.6	803.9
Unearned Premiums	67.0	78.4
Current Federal Income Taxes Payable	20.8	38.9
Ceded Reinsurance Premium Payable	15.9	20.6
Funds Held Under Reinsurance Treaties	2.4	1.9
Provision for Reinsurance	7.2	15.8
Other Liabilities	7.3	4.8
TOTAL LIABILITIES	1,028.2	964.3
TOTAL POLICYHOLDER'S SURPLUS	623.9	604.0
LIABILITIES & SURPLUS	1,652.1	1,568.3

IA. ASSETS

Dorinco's 2019 admitted assets increased $83.8 million as compared with 2018, inclining 5.3% during the year. Cash and invested assets increased by $51.8 million or 3.6% versus 2018 primarily due to positive cash flow from operations combined with realized gains from appreciated investments.

Cash and short-term investments increased by $186.3 million and other invested assets increased by $5.8 million while bonds decreased $140.5 million in 2019, primarily due to a strategic decision to convert appreciated assets to cash.

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 addition, the Company uses currency and interest rate derivatives for income generation, and enters into various future contracts with the objective of adjusting fixed income portfolio duration.

We began 2019 with the an investment portfolio allocated between domestic and international fixed income assets (77%), other invested assets (16%) and cash and short term investments (7%). A portion (~15%) of the domestic and international fixed assets was invested in higher yield instruments which carry a lower non-investment grade rating. The other invested assets portfolio included an allocation to alternative investments (11%) and a loan receivable from the parent (5%).

The allocations ended the year in a more conservative posture with decreased market exposure and increased cash. Domestic and international fixed income represented 65% of the portfolio assets while other invested assets remained steady with alternative investments dropping to an allocation of 9% and the loan receivable from the parent increasing to 7% in 2019. The portion of the domestic and international fixed assets invested in higher yield instruments which carry a lower non-investment grade rating remained at ~15%. The allocation to cash and short term investments more than doubled to 19%.

The Company's total return on its investment portfolios for 2019 was a gain of 13.4%, compared to a loss of 1.1% in 2018. The year extended the economic expansion, making it the longest in US history, pushing risk-seeking assets to new highs while at the same time decreasing interest rates as bond markets rallied. As different fixed income sectors appreciated during the year, we elected to trim exposure to convertible bonds, emerging market and high yield debt.

By the middle of 2019, macroeconomic data had moderated somewhat but there were pockets of strength. In the US, the consumer was strong and drove a great retail season to end the year pressuring stocks higher due to strong earnings in 4Q19. Going into 2020, global economic conditions were stable until the onset of coronavirus in Wuhan, China. The virus since named Covid-19 has spread dramatically in the last two months and has officially been declared a pandemic. The change has been dramatic as the world grapples with self-imposed quarantines, travel prohibitions, border closures effectively shutting down consumption, travel, sports events & concerts, tourism, hotels and the entire services industry. Airlines, cruise ships, hotels and restaurants will see dramatically reduced activity, adversely affecting millions of employees forcing them to seek unemployment benefits for several months.

Forecasts have changed dramatically to now suggest a recession is a 'base case' and US unemployment may actually reach 20%. Research published at the time of writing (March 2020) suggests global GDP may contract two consecutive quarters. Full year GDP is expected by some to be a contraction of ~1.1%. The world economy has already been impacted in 1Q20 and is expected to be more dramatically impacted in 2Q and 3Q. As of March 25th, estimates to 1Q20 Chinese growth suggest a wide range of quarter-over-quarter GDP growth rates with the median estimate showing a contraction of 4.6% with a range of -15.0% and +3.9%. For the US, estimates for 2Q20 quarter-over-quarter GDP growth range are even wider – somewhere between -30.1% and +2.2%, with the median estimate being roughly zero growth in 2Q20 relative to 1Q20. The economies in Europe will probably be similarly affected bringing down global growth substantially but in a magnitude nobody can currently estimate with any certainty. If countries are successful in taking disciplined approach to social distancing and scientists can bring testing, therapies and vaccinations to market quickly, perhaps the impact to the Covid-19 crisis will affect only a few months of 2020 providing an opportunity for a snap back in growth in 2H20.

As the virus spread, the US Federal Reserve attempted to calm markets and cut rates two times between scheduled meetings, once for 50 basis points and another, on March 15, 2020, brought an additional 100 basis points of rate cuts, bringing the effective short-term policy rate effectively to zero. In addition, the Fed has added QE measures in an amount of $70 billion while the Trump administration readies additional stabilization measures to help offset the dire situation. Other central banks are similarly inclined.

A lack of business activity will make it extremely likely that certain sectors of the economy will be adversely affected for several consecutive quarters, hampering cash flow generation for companies and negatively affecting their credit metrics. This will inherently strain credit ratings, prompting credit rating agencies to downgrade a wide swath of the corporate investment grade market. Credit quality will be stretched and the companies most exposed to those sectors affected by the change in consumer behavior associated with Covid-19 may very likely default on their outstanding debentures and loans.

Given the economic backdrop described above, even a well-diversified fixed income portfolio will struggle to perform well. We remain optimistic that the portfolio will generate a return equal to the coupon income of the bonds being held which is our base case assumption. Recent history guides us and suggests the portfolio, absent any defaults may expect a coupon return of 2.5%-3.0% per annum. Using the asset allocation noted above with roughly 80% of the portfolio deployed in fixed income, we expect returns ranging between $30 million and $40 million before considering the possibility of any credit deterioration as the global economy enters recession.

We remain optimistic that there will be a bounce back when countries can find a way to manage the security of their borders and use technology and pharmaceutical tools to vaccinate against the possible re-infection. In such a case, the bounce back scenario will be that the population of the world will go about its business and demand will rebound, allowing companies to grow and prosper. In the meantime, a high quality fixed income portfolio is the best way to position the assets but even that will bring volatile results and some unexpected outcomes.

Premium receivables and reinsurance recoverables increased by a combined $32.7 million in 2019 versus 2018 largely due increased premiums written during 2019 combined with an increase in reinsurance recoverables at year end. Premium receivable balances are gross of ceded reinsurance premiums payables of $15.9 million in 2019 and $20.6 million in 2018.

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 $350.9 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	
	2019	2018
Unpaid Losses and Loss Expense at Beginning of Year	803.9	804.7
Loss and Loss Expenses Incurred for Current Year	218.9	197.8
Increase (Decrease) in Estimates for Prior Loss Years	12.4	(56.4)
Loss and LAE Payments Made in Current Year	(127.6)	(142.2)
Unpaid Losses and Loss Expenses at End of Year	907.6	803.9

During 2019, 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 increased primarily due to product liability for business that was spun as a result of the DowDuPont transaction and additional property claims, resulting in an increase in estimates for current and prior years of $35 million.

Unearned premiums decreased from $78.4 million in 2018 to $67.0 million in 2019, reflecting an decrease in gross written premiums for the Company's third party business combined.

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.

A $30 million dividend was declared and paid in 2019. There were no declared dividends in 2018.

Policyholder's surplus increased from $604.0 million at December 31, 2018, to $623.9 million at December 31, 2019. During 2019, the Company generated a profit after tax of $47.2 million from operations. This was offset by a $30 million dividend, $3.7 million in unrealized losses, $2.4 million in additional non admitted assets. The sum of these three items, plus $8.6 million for a change in provision for reinsurance and other minor items, contributed to an overall increase in policyholder's surplus of $19.9 million, or 3.3% during 2019.

II. RESULTS FROM OPERATIONS

Dorinco produced net income of $47.2 million for the year. Earned premiums in 2019 were $244.7 million, as compared with $213.2 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 an increase in the net written premiums for the direct property and liability insurance policies issued to Dow.

The underwriting results for 2019 produced a loss of $30.6 million. This loss was offset by net investment income of $78.8 million, which included $36.9 million of net realized capital gains. The Company carried $3.7 million of unrealized capital losses (net of taxes) in a portfolio consisting of $1.5 billion of invested assets. The investment portfolio was split approximately 65.1% fixed income, 15.6% other investments, and 19.3% cash and short term investments at year end 2019.

Cash flow from operations was $43.7 million, decreasing slightly from $45.8 million in 2018, primarily due to a $11.0 million increase in premiums collected combined with a $11.1 million increase in investment income, $8.1 million decrease in commissions and other expenses paid and a decrease of $2.8 million in miscellaneous losses. The increase in cash was offset by a $4.3 million increase in benefit and loss payments an increase of $30.8 million in income taxes paid and (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 35% of 2019 earned premiums. The unrelated business, making up the remaining balance of 2019 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 utilizing 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 quarterly 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 2019	2018
Underwriting Results:		
Gross premiums written	350.2	331.7
Net premiums written	233.2	216.5
Net premiums earned	244.7	213.2
Loss and loss adjustment expense ratio	94.5%	66.4%
Underwriting expense ratio	18.0%	21.4%
Combined ratio	112.5%	87.8%

Gross premiums written increased to $350.2 million in 2019, from $331.7 million in 2018, primarily due to a policy novation that decreased written and earned premium $18.8 million in 2018. Net premiums written were similarly impacted by the same $18.8 million novation combined with a $13.0 million increase in direct premium for 2019 primarily related to a policy renewal that was only extended in 2018 for four months offset by a $15 million decrease in assumed business from the unrelated business segment of the Company's business during 2019 in the Company's primary regional target. Net premiums earned were primarily impacted by the higher 2018 written premiums continuing to earned out.

Dorinco's combined ratio as reported in the Annual Statement for 2019 amounted to 112.5%, an increase from 87.8% in 2018 due to primarily increased incurred losses combined with increased reserves. Refer to 1B Liabilities.

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 2019 and 2018 are summarized below:

	$MILLION	
	2019	2018
Cash Provided by Operations	43.7	45.8
Cash From Investment Activities	171.6	(90.4)
Other Cash Used	(28.9)	0.4
Net Change in Cash and Short-Term Investments	186.4	(44.2)

Operating cash flow in 2019 was slightly lower than in 2018, primarily due to $30.8 million increased income taxes paid and an increase of $4.3 million in benefit and loss payments being slightly greater than the offsetting cash inflows of $11.0 million increase in premiums collected, $11.1 million in increased investment income, $8.1 million decreased commission expenses and $2.8 million decreased in miscellaneous loss.

Net cash from investment activities was significantly higher in 2019 due to selling more bonds than acquired during 2019, when compared to 2018 when more bonds were purchased than sold.

Other cash used increased in 2019, primarily due to a stockholder’s dividend payment in 2019 of $30.0 million, as compared to $0 million paid in 2018. See also Note 13D to the 2019 Annual Statement. The dividend outflow was offset by an additional $1.1 million of other cash received.

Dorinco made no significant capital expenditures in 2019.

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 2019 and 2018, Dorinco met its cash needs from internally generated funds. Dorinco does not anticipate any difficulties in meeting its future cash needs.