

Free Bird Institute Limited

Fiji Islands

23 January 2018

MARKET ANNOUNCEMENT

- FBL receives final report from Actuarialist

FBL engaged a firm out of New Zealand to undertake an assessment and review of its In-house insurance scheme in November 2017. Eriksens Global (Eriksens) is a total independent firm of actuaries and investment strategists with offices in Auckland and Wellington in New Zealand and have strategic partners based in Australia.

The firm was engaged primarily to assess the premiums and liabilities of the self-insured cover for international students studying in Fiji who are predominately Japanese nationals and provide recommendations for systems to manage operations, claims assessment and case management.

Chief Financial Officer, Waisale Iowane, highlighted that it will take on board the comments and recommendations by Eriksens to ensure that the exposure of FBL is kept at a minimal. "It is also pleasing to note that despite the minor setback we encountered in August 2017 relating to two of our clients, this scheme continues to be profitable," he added.

A copy of the report is annexed to this announcement.

Yours sincerely



Hiroshi Taniguchi
Chairman



Waisale Iowane
Executive Director



FREE BIRD INSTITUTE LIMITED

Actuarial Review

as at

31 December 2017

Eriksen & Associates Ltd

January 2018

Contents

Item	Page
1. Executive Summary	3
2. Background	3
3. Data	3
4. Calculations	5
5. Results	5
6. Comments	6
Appendix A Claims	8
Appendix B Students	12
Appendix C Results.....	15

1. Executive Summary

Free Bird Institute Limited (the Company) is a Fiji company providing English learning programs, facilitating high school learning to international students, assisting in the management of local students and providing an in-house insurance scheme to international students. The Company has requested Eriksen & Associates Ltd to carry out an actuarial review of the In-House Insurance Scheme.

I have examined the data and am satisfied it is complete and accurate for the purpose of this report.

Loss ratios by policy type and sex were calculated. Even with the one large claim they are very low showing the business is very profitable.

The business is highly concentrated in one area (Japanese students). This means that it is very vulnerable to a catastrophic risk, such as a major illness breaking out amongst the students or an accident involving a group of students. It is recommended that the Company look at reinsurance to manage this risk.

The IBNR in the 2016 financial statements is too high. In Section 6 we recommend an appropriate method for calculating IBNR.

2. Background

Free Bird Institute Limited (the Company) is a Fiji company providing English learning programs, facilitating high school learning to international students, assisting in the management of local students and providing an in-house insurance scheme to international students. The parent company of Free Bird Institute Limited is South Pacific Free Bird Company Limited, a private company incorporated in Japan. The in-house insurance scheme commenced in early 2016.

The Company has requested Eriksen & Associates Ltd, a New Zealand actuarial firm, to carry out an actuarial review of the In-House Insurance Scheme.

In this review we shall calculate loss ratios for each policy type, separately for male and female to determine the profitability. We shall also make comments on any other matters we consider relevant.

This is the first actuarial review of the In-House Insurance Scheme.

This review conforms with the New Zealand Society of Actuaries Professional Standard No.30: Valuations of General Insurance Claims.

3. Data

I have been supplied with

- A spreadsheet of all insured students and all claims notified to 24 November 2017,

- A monthly analysis by the Company of the In-House Insurance Scheme to September 2017
- Audited financial statements for the year 31 December 2016,
- Copy of the insurance policy provisions
- Summary of the insurance policy provisions, and
- An announcement of the half yearly results to 30 June 2017.

The claim amounts are in Fiji Dollars and the premiums are in Japanese Yen.

The date of the last claims notified are 15 November 2017 for BPFBI and 24 November 2017 for the Language School.

Total claims notified are:

School	Number	\$
BPFBI	678	34,135.58
Language School - Paid	393	249,652.30
Language School - Outstanding	1	91,357.00
Total	<u>1,072</u>	<u>375,144.88</u>

A split of the claims into claim year, policy type and sex appears in Appendix A.

There were 2,322 students insured for 196,099 days at a total premium of ¥84,864,440 (approximately \$1,543,000).

Refunds of ¥1,781,968 have reduced the actual net premiums received to ¥83,082,472 (approximately \$1,510,600). A split into year, policy type and sex appears in Appendix B.

Using a conversion rate of \$1 = ¥55, the 2016 premiums in the data are compared with the premiums in Note 7 to the 2016 financial statements:

	Received Data		Financial Statements
	¥	\$	\$
Gross Written Premiums	33,273,480	604,972	627,025
Less Refunds	-1,065,888	-19,380	-45,682
Less Unearned Premium	-3,241,727	-58,940	-59,186
Net Premiums	<u>28,965,865</u>	<u>526,652</u>	<u>522,157</u>

In view of the movement in exchange rates, except for Refunds, I regard the differences as insignificant. I have been advised that the difference is due to the different treatment of premiums/refunds in the financial statements and the received data. The broad agreement in the Net Premiums leads me to conclude that the data is adequate for the purposes of this first review.

The claims paid for 2016 in the data supplied agrees with the claims notified and incurred of \$21,225 in Note 8 to the financial statements.

4. Calculations

From the claims data, we calculated the number and amount of claim separately for 2016 and 2017, separately for each policy type and separately for male and female. In a few cases the sex was unknown.

One very large Plan C claim involving a mother and daughter was excluded from the sex/policy type calculations since including it would distort the relativities.

The results are shown in Appendix A.

From the insured student data, we calculated the number of students commencing policies in 2016 and 2017 separately for each policy type and for males and females.

From the days covered for each student, after adjustment for refunds, we calculated the number of days covered for each policy type separately for 2016, 2017 and 2018, separately for each policy type and separately for male and female.

We then calculated the earned premium for each category by apportioning the Deposited Premium among 2016, 2017 and 2018 according to the days covered in each year for each student after adjusting for refunds.

The results are shown in Appendix B.

Claim rates per thousand days covered were then calculated by dividing the sum of the number of claims for each category for BPFBI and Language School, and then dividing the sum by the number of days covered and multiplying by 1,000.

Loss Ratios were calculated by dividing the sum of the amount of the claims for each category for BPFBI and Language School, and then dividing the sum by the earned premium and multiplying by 55, assuming a currency conversion rate of fifty five Japanese yen to one Fiji dollar.

The results are in Appendix C.

5. Results

As expected the claim rates per thousand days are higher for the more expensive policies, decreasing overall from 7.52 for policy type A to 5.34 for policy type B and 5.20 for policy type C. Claim rates for females are slightly higher at 6.36 verses 5.78 for males. Overall claim rate increased from 4.78 in 2016 to 6.94 in 2017. However, some of the 2017 claims would relate to 2016 incidences. We only have date claim made and not date of occurrence.

Overall loss ratios for policy types A, B and C were 4.54%, 3.74% and 4.55%, excluding the one very large claim. These are extremely low loss ratios, indicating that the business is very profitable.

Including the very large claim, overall loss ratio was 19.76%, still indicating a very profitable business.

Los ratios were marginally higher for males at 4.32% verses 4.25% for females.

6. Comments

The business is very profitable and likely to remain so even with the occasional very large claim.

However, the business is highly concentrated in one area (Japanese students). This means that it is very vulnerable to a catastrophic risk, such as a major illness breaking out amongst the students or an accident involving a group of students. It is recommended that the Company look at reinsurance to manage this risk.

I have been advised that, due to lack of experience data, the IBNR of \$23,614 in the 2016 financial statement was calculated on a conservative basis as an amount equal to the notified claims plus 11%. In the next paragraph I recommend a more accurate method of calculating IBNR.

Claim data usually shows incident date so that claims made in a year can be allocated to the correct claim year. Using time data between incident and notification dates would assist in calculating a more accurate IBNR. I have been advised that claims are notified as soon as they occur and are usually paid out immediately. This would mean that a small IBNR would probably be sufficient. Even though there is the potential for large claims, it is expected that these would be notified soon after the event. From my understanding of the claims process, it is likely that all claims would be notified three days of occurring. This would lead to an IBNR of $\frac{3}{365}$ (approximately 1%) times the year's notified claims. However, due to the infrequency of large claims, it would be more appropriate to relate the IBNR to the earned premium. The overall loss ratio was shown above to be 19.7% of premium. The recommended level of IBNR is therefore 0.2% (1% of 19.7%) of earned premium. For 2016, the IBNR should have been 0.2% of \$522,157 or \$1,044.

In the data, Gender initially appeared to be specified as "Mr." or "Ms.". However, in a few cases other specifications such as "Mstr." and "Miss". were used. I have been advised that the different "Mstr." And "Miss" refer to very young students. As the other specifications would not make a significant difference, only the "Mr." and "Ms." were used to specify sex in this initial analysis.

Some dates were entered in the spreadsheet in text format rather than date format. Using a consistent format would enable easier analysis.

The loss ratios show the business is highly profitable. However, they should not be used to anticipate profit from the unearned premium. That profit, although expected, belongs to the next year.



Graham Osborn

Fellow of the New Zealand Society of Actuaries

Fellow of the Institute of Actuaries of Australia

Eriksen & Associates Ltd

22 January 2018

Appendix A – Claims

BPFBI – Number of Claims

2016	Policy Type	Male	Female	Unknown	Total
	A	31	46	0	77
	B	16	18	0	34
	C	11	31	0	42
	A+70	0	0	0	0
	B+70	0	0	0	0
		58	95	0	153

2017	Policy Type	Male	Female	Unknown	Total
	A	142	127	0	269
	B	66	72	0	138
	C	28	90	0	118
	A+70	0	0	0	0
	B+70	0	0	0	0
		236	289	0	525

Total	Policy Type	Male	Female	Unknown	Total
	A	173	173	0	346
	B	82	90	0	172
	C	39	121	0	160
	A+70	0	0	0	0
	B+70	0	0	0	0
		294	384	0	678

Language School – Number of Claims

2016	Policy Type	Male	Female	Unknown	Total
	A	44	21	1	66
	B	15	30	-	45
	C	19	20	-	39
	A+70	-	-	-	-
	B+70	-	-	-	-
	Non-specific	-	-	2	2
		78	71	1	152

2017	Policy Type	Male	Female	Unknown	Total
	A	24	46	-	70
	B	43	61	1	105
	C	27	40	1	68
	A+70	-	-	-	-
	B+70	1	-	-	1
	Non-specific	-	-	10	10
		95	147	12	254

Total	Policy Type	Male	Female	Unknown	Total
	A	68	67	1	136
	B	58	91	1	150
	C	46	60	1	107
	A+70	-	-	-	-
	B+70	1	-	-	1
	Non-specific	-	-	12	12
		173	218	15	406

BPFBI – Amount of Claims

2016	Policy Type	Male	Female	Unknown	Total
		\$	\$	\$	\$
	A	5,882	1,949	-	7,831
	B	692	844	-	1,536
	C	374	3,106	-	3,480
	A+70	-	-	-	-
	B+70	-	-	-	-
		6,948	5,899	-	12,847
2017	Policy Type	Male	Female	Unknown	Total
		\$	\$	\$	\$
	A	5,755	4,979	-	10,734
	B	2,504	3,119	-	5,623
	C	1,182	3,750	-	4,932
	A+70	-	-	-	-
	B+70	-	-	-	-
		9,441	11,848	-	21,289
Total	Policy Type	Male	Female	Unknown	Total
		\$	\$	\$	\$
	A	11,637	6,928	-	18,565
	B	3,196	3,963	-	7,159
	C	1,556	6,856	-	8,412
	A+70	-	-	-	-
	B+70	-	-	-	-
		16,389	17,747	-	34,136

Language School – Amount of Claims

2016	Policy Type	Male	Female	Unknown	Total
		\$	\$	\$	\$
	A	2,538	1,229	19	3,786
	B	739	1,330	-	2,069
	C	1,095	1,104	-	2,199
	A+70	-	-	-	-
	B+70	-	-	-	-
	Non-specific	-	-	324	324
		4,372	3,663	343	8,378
2017	Policy Type	Male	Female	Unknown	Total
		\$	\$	\$	\$
	A	1,399	3,641	-	5,040
	B	3,680	4,486	30	8,196
	C	2,785	3,082	32	5,899
	A+70	-	-	-	-
	B+70	48	-	-	48
	Non-specific	-	-	222,091	222,091
		7,912	11,209	222,153	241,274
Total	Policy Type	Male	Female	Unknown	Total
		\$	\$	\$	\$
	A	3,937	4,870	19	8,826
	B	4,419	5,816	30	10,265
	C	3,880	4,186	32	8,098
	A+70	-	-	-	-
	B+70	48	-	-	48
	Non-specific	-	-	222,415	222,415
		12,284	14,872	222,496	249,652

Appendix B – Students

Number of Students

2016	Policy Type	Male	Female	Unknown	Total
	A	159	181	7	347
	B	112	161	2	275
	C	121	196	6	323
	A+70	2	2	0	4
	B+70	1	0	0	1
		395	540	15	950

2017	Policy Type	Male	Female	Unknown	Total
	A	237	312	11	560
	B	201	280	2	483
	C	136	183	4	323
	A+70	0	1	0	1
	B+70	2	3	0	5
		576	779	17	1,372

Total	Policy Type	Male	Female	Unknown	Total
	A	396	493	18	907
	B	313	441	4	758
	C	257	379	10	646
	A+70	2	3	0	5
	B+70	3	3	0	6
		971	1,319	32	2,322

Number of Days (after adjustment for Refunds)

2016	Policy Type	Male	Female	Unknown	Total
	A	12,209	10,569	100	22,878
	B	7,607	10,570	30	18,207
	C	10,086	12,315	186	22,587
	A+70	62	25	0	87
	B+70	29	0	0	29
		29,993	33,479	316	63,788

2017	Policy Type	Male	Female	Unknown	Total
	A	19,083	21,955	183	41,221
	B	18,926	23,122	39	42,087
	C	12,635	16,045	68	28,748
	A+70	21	50	0	71
	B+70	100	53	0	153
		50,765	61,225	290	112,280

Total	Policy Type	Male	Female	Unknown	Total
	A	31,292	32,524	283	64,099
	B	26,533	33,692	69	60,294
	C	22,721	28,360	254	51,335
	A+70	83	75	0	158
	B+70	129	53	0	182
		80,758	94,704	606	176,068

2018	Policy Type	Male	Female	Unknown	Total
	A	1,587	1,897	0	3,484
	B	1,524	1,803	0	3,327
	C	1,558	1,324	0	2,882
	A+70	0	0	0	0
	B+70	0	0	0	0
		4,669	5,024	0	9,693

Note that number of days in 2016 is the actual number of days exposed in 2016 for 2016 students. The number of days in 2017 is the number of days exposed in 2017 for 2016 and 2017 students. Total is 2016 plus 2017. The number of days in 2018 is the number of days exposed in 2018 for 2017 students.

Earned Premium (after adjustment for Refunds)

2016	Policy Type	Male	Female	Unknown	Total
		¥	¥	¥	¥
	A	6,362,591	5,663,834	58,080	12,084,505
	B	3,251,380	4,489,242	14,400	7,755,022
	C	4,046,607	4,931,131	73,440	9,051,178
	A+70	39,921	18,600	0	58,521
	B+70	16,640	0	0	16,640
		13,717,139	15,102,807	145,920	28,965,865
2017	Policy Type	Male	Female	Unknown	Total
		¥	¥	¥	¥
	A	9,890,407	11,138,914	103,680	21,133,001
	B	8,019,957	9,808,026	18,000	17,845,982
	C	4,787,321	6,106,209	28,800	10,922,330
	A+70	13,479	34,320	0	47,799
	B+70	55,120	32,240	0	87,360
		22,766,284	27,119,708	150,480	50,036,472
Total	Policy Type	Male	Female	Unknown	Total
		¥	¥	¥	¥
	A	16,252,998	16,802,747	161,760	33,217,506
	B	11,271,336	14,297,268	32,400	25,601,004
	C	8,833,928	11,037,340	102,240	19,973,508
	A+70	53,400	52,920	0	106,320
	B+70	71,760	32,240	0	104,000
		36,483,422	42,222,515	296,400	79,002,337
2018	Policy Type	Male	Female	Unknown	Total
		¥	¥	¥	¥
	A	769,338	919,205	0	1,688,542
	B	615,944	728,252	0	1,344,196
	C	566,392	481,004	0	1,047,396
	A+70	0	0	0	0
	B+70	0	0	0	0
		1,951,674	2,128,461	0	4,080,135

Appendix C - Results

Claim rates per thousand days exposure

2016	Policy Type	Male	Female	Unknown	Total
	A	6.14	6.34	10.00	6.25
	B	4.08	4.54	0.00	4.34
	C	2.97	4.14	0.00	3.59
	A+70	0.00	0.00		0.00
	B+70	0.00			0.00
		4.53	4.96	9.49	4.78
2017	Policy Type	Male	Female	Unknown	Total
	A	8.70	7.88	0.00	8.22
	B	5.76	5.75	25.64	5.77
	C	4.35	8.10	14.71	6.47
	A+70	0.00	0.00		0.00
	B+70	10.00	0.00		6.54
		6.52	7.12	41.38	6.94
Total	Policy Type	Male	Female	Unknown	Total
	A	7.70	7.38	3.53	7.52
	B	5.28	5.37	14.49	5.34
	C	3.74	6.38	3.94	5.20
	A+70	0.00	0.00		0.00
	B+70	7.75	0.00		7.75
		5.78	6.36	24.75	6.16

Loss Ratio assuming \$1 = ¥55

2016	Policy Type	Male	Female	Unknown	Total
		%	%	%	%
	A	7.28	3.09	1.80	5.29
	B	2.42	2.67	0.00	2.56
	C	2.00	4.70	0.00	3.45
	A+70	0.00	0.00		0.00
	B+70	0.00			0.00
		4.54	3.48		4.03
2017	Policy Type	Male	Female	Unknown	Total
		%	%	%	%
	A	3.98	4.26	0.00	4.11
	B	4.24	4.26	9.17	4.26
	C	4.56	6.15	6.02	5.45
	A+70	0.00	0.00		0.00
	B+70	4.75	0.00		3.00
		4.19	4.68		28.86
Total	Policy Type	Male	Female	Unknown	Total
		%	%	%	%
	A	5.27	3.86	0.65	4.54
	B	3.72	3.76	5.09	3.74
	C	3.38	5.50	1.69	4.55
	A+70	0.00	0.00		0.00
	B+70	3.65	0.00		2.52
		4.32	4.25		19.76

The large loss in the Ao Sorami case appears in the 2017 total loss ratio (28.86%) and in the overall Total loss ratio (19.76%) but not in the loss ratios for policy type and sex due to the distorting effect.