Review of financial and economic performance of the Fijian offshore longline fishery

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Executive Summary

At the request of the Fiji Department of Fisheries, the Forum Fisheries Agency conducted an economic survey of the longline fishery operating in the national waters of Fiji in September 2016. The purpose of the survey is to provide an assessment of the financial and economic performance of the fleet for 2012, 2013 and 2014. The information collected was also used to update the cost estimates of longline fishing in Fiji, expressed as cost per hook.

The survey population for a given year was defined as vessels that recorded more than 10 days of fishing effort (where hooks were set) in the Fijian Exclusive Economic Zone (EEZ). For 2012, the survey sampled 26 out of 72 vessels. For 2013 and 2014, the survey sample was 31 out of a population of 65 and 58, respectively. Out of the survey sample, a number of vessels also reported fishing operation in areas outside the Fijian EEZ during the survey year. The financial and economic results reported in this study focus only on the productivity and profitability of the national waters of Fiji, and therefore, revenues and costs from fishing operations outside the jurisdiction were excluded.

Financial performance results show that profit at full equity for 2012, 2013 and 2014 were –FJ\$30,047, FJ\$2,845 and FJ\$30,022, respectively. This translated to a rate of return to capital to the business owner of –4%, 0% and 4%, in the same years. When the opportunity costs of capital (the potential return to business owner of investing in a similar risk market) were included into the analysis, the economic losses of the fleet across its operations within the Fijian EEZ were –FJ\$143,373 in 2012, –FJ\$108,730 in 2013 and –FJ\$78,121 in 2014. The results indicate that over the period examined operators barely obtained returns that covered their financial costs and were making significant economic losses on their investments.

The study also provides estimates of the average economic cost per hook to the operator of FJ\$2.39 and to the Fijian economy of FJ\$2.22 across the three years, calculated using the data collected in the survey. The process of arriving to this calculation is detailed in the body of this paper. The result will feed into a related report, which updates the 2012 bioeconomic analysis of the Fijian longline fishery.

Background – the southern longline fishery

Annual catch of south Pacific albacore in the southern longline fishery of the WCP-CA (south of 10°S, excluding archipelagic waters) has followed an increasing trend in the decade from 2000, peaking at 72,734 mt in 2010 (Figure 1). Since 2012, total catch of south Pacific albacore has been declining in the fishery. The estimated 2015 catch of 56,893 mt was lower than preceding years (5% down from the catch in 2014 and 14% lower than the average over 2010-2014), and was more comparable to the 2011 catch.

While albacore catch has been increasing in the southern longline fishery over the period from 2000 and 2010, economic conditions in the fishery has actually been declining (Figure 2)[2]. The fall in economic conditions has been primarily driven by reduced catch rates over the same period. Higher fuel prices in the period from 2007 to 2014 further dampened the ability of operators to generate profits in the fishery. Economic conditions improved slightly in 2015 compared to 2014, owing to higher fish prices and reduced fuel cost, albeit still below average.
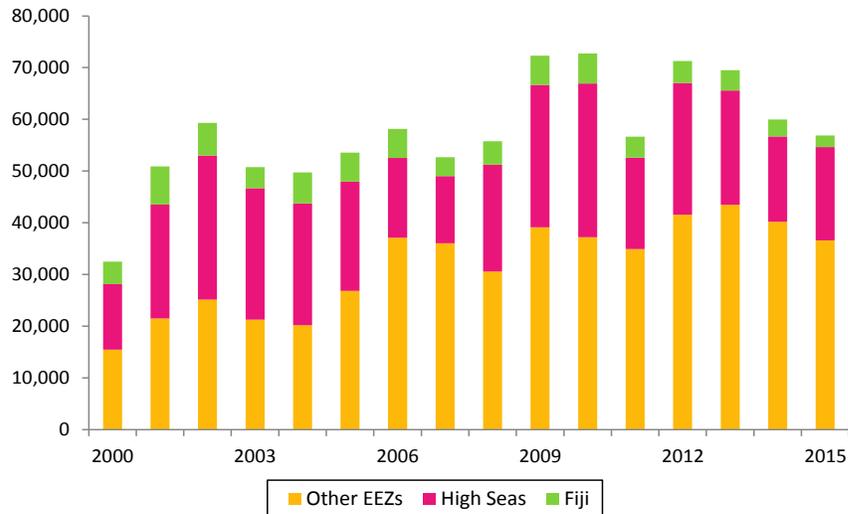
Figure 1: annual southern WCP-CA albacore longline catch estimates (Pilling and Williams 2016)[3]

Historically, a large portion of south Pacific albacore was taken in international waters, around 44% on average between 2000 and 2005 (Table 1A in the Appendix). However, this has fallen to an average of 32% for the period from 2011 to 2015, giving more control to Pacific Island states whose exclusive economic zones (EEZs) the fishing is occurring within. For Fiji, catches of south Pacific albacore constituted on average 14% of total albacore catch within EEZs over the period from 2000 to 2015, although following a declining trend dropping from 26% in 2001 to 6% in 2015. While the figure for 2015 seem small for a predominantly albacore targeting national fleet, it is important to note that only approximately 55% of the total fishing by the Fijian national fleet actually occurred in Fijian waters with the other 45% took place outside national

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[2] The economic conditions index is constructed based on relative fish prices, fishing costs (excluding license and access fee payments) and catch rates. The information from the three components is combined into a single value expressed as an index against average values for the period of data series (1997-2015 inclusive). Values below 100 suggest that the fishery is experiencing below average economic conditions, while values of over 100 show periods in which economic conditions in the fishery the fishery are relatively favourable and the ability of operators to generate profits and pay license and access fees is relatively higher.

[3] Piling, G and Williams, P (2016), Trends in the south Pacific longline and troll fisheries, Working paper WCPFC-SC12-2016/SA-WP-06, Scientific Committee 12, WCPFC, August 2016

waters. The overall catch by Fiji's longline fleet is made up of 31% from other EEZs, where the fleet was licensed to fish, and 69% in the waters of Fiji and international waters in 2015. Total annual catch of tuna and tuna like species, landed both inside and outside of the Fijian EEZ, actually increased in 2015 for the national fleet, by 8% compared to 2014 to 14,625 mt (Table 2A in the Appendix).
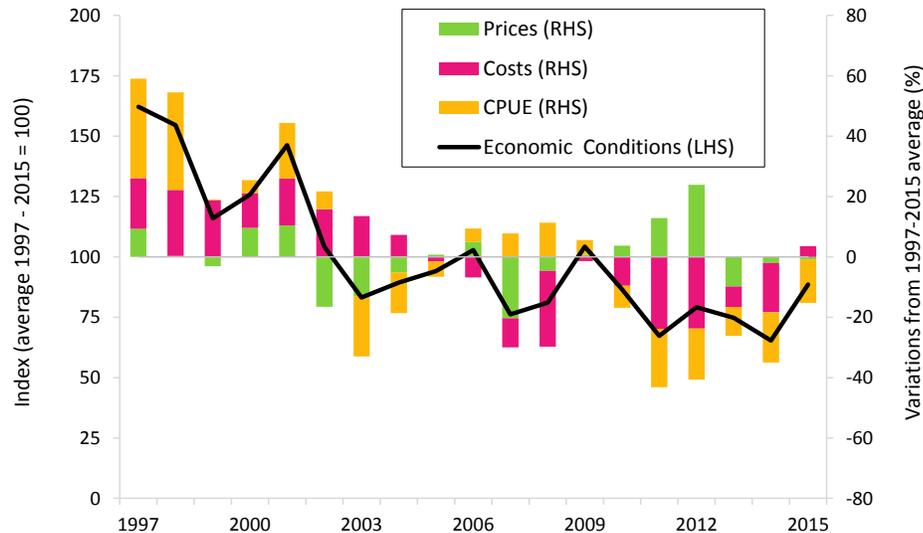

Figure 2: economic conditions index for the southern longline fishery (Skirtun and Reid 2016)[4]

The overall increase in effort in the southern longline fishery (south of 10°S, excluding archipelagic waters) over the last 2 decades is in part to blame for the decline in economic conditions. Effort data from VMS shows more than a tripling of effort from 87 million hooks in 1996 to about 316 million hooks in 2012 (Figure 3). The increase has come from both inside EEZs and on international waters.

In recent years, there has been a decline in total effort, with the total number of VMS days falling from 100,216 in 2011 to 98,807 in 2015 (Table A3 in the Appendix). This decline was predominantly driven by a fall in the days fished inside EEZs (6,004 VMS days or 8%) with fishing on international waters increasing by 4,596 VMS days (or 19%) over the same period. Despite this, catch on international waters only rose by 2% between 2015 and 2011 (Table A1 in the Appendix) suggesting a relatively larger drop in catch rates compared to within EEZs. The proportion of overall effort attributable to fishing on international waters has generally risen overtime, with around 29% of the VMS days occurring on international waters in 2015.

Nevertheless, the overall increase in effort over the last decade has resulted in falling CPUE in the southern longline fishery, which has in turn contributed to declining economic conditions (Figure 2). While there are a number of factors individual PICs cannot control, such as changes in oceanographic conditions and stock exploitation at the regional level, governments can manage stock exploitation at the national level through various management control measure, for example, restrictions on the total allowable catch or the number of licensed vessels. For Fiji, a license cap to fish within its own EEZ of 60 vessels was introduced in May 2014. The fleet structure for 2015 consists of 102 Fiji national vessels; of which 9 are chartered foreign flagged

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[4] Skirtun and Reid (2016), Analyses and projections of economic conditions in WCPO fisheries, Working paper WCPFC-SC12-2016/ST-WP-04, Scientific Committee 12, WCPFC, August 2016

vessels, 33 are flagged to Fiji but not authorised to fish in Fiji's EEZ (fishing in other EEZs and international waters) with the remaining 60 vessels licensed to fish within Fiji's own national waters.

Figure 3: Temporal trends in effort (millions of hooks) in the southern longline fishery (Pilling and Williams 2016)
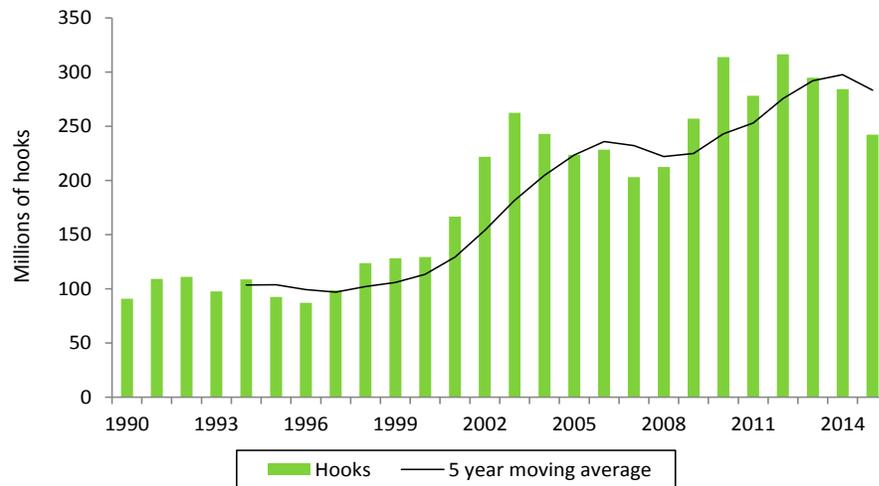
Financial and economic performance – national waters of Fiji

The purpose of this analysis is to examine the financial and economic performance of longline vessels operating inside the Fijian EEZ in recent years. Financial performance estimates are calculated for the average longline boat fishing for more than 10 days per year in the national waters of Fiji. These estimates reflect profit and loss statements collected for business activities relating to longline fishing. Where boats have operated both inside and outside the Fijian EEZ (i.e. other EEZs and international waters), cash receipts and costs were split to isolate only those related to fishing inside the Fijian EEZ. Similarly, revenues and costs related to other business activities for vertically integrated companies, such as processing or fish trading activities, are also excluded from the financial and economic performance measures.

The survey population for offshore longline vessels fishing more than 10 days per year was 72 in 2012, 65 in 2013 and 58 in 2014. The survey sample was 26 in 2012, and 31 in 2013 and 2014. This represents 36%, 48% and 53% of the population for 2012, 2013 and 2014 respectively. Financial performance results for the average vessel are weighted based on the distribution of sampled vessels among the population[5].

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[5] That is, a weight is calculated for each sample boat based on how representative that boat is in the population. Weights are computed using Generalized Reduced Gradient nonlinear optimisation, conditioned on meeting 3 core criteria: 1) the weights of sampled boats sum to the population the sample is representing, 2) and the weighted sum of catch of sample boats is equal to the total catch for the fishery according to SPC logbook data, and 3) each individual boat has a weight of 1 or more (it is representing at least itself in the population). More specifically:

1) $\sum w_i = P$, 2) $\sum w_i x_i = X$ and 3) $w_i \geq 1$ where:

w_i is the weight for the ith boat
P is the number of boats in the population
x_i is the catch for the ith boat
X is the total catch for the target population

Table 1: financial performance for the average offshore longline vessel fishing in the national waters of Fiji

Nominal (in FJ$)	2012	2013	2014
Processing revenue			
Sales from fishing	1,246,732	1,177,562	1,268,326
Non-fishing receipts**	5,142	3,037	20,009
Total cash receipts	**1,251,874**	**1,180,600**	**1,288,334**
Operating costs			
Admin	13,014	14,065	11,466
Bait	121,934	133,212	112,843
Crew costs	112,689	116,579	171,596
Equipment and gear	41,294	32,944	39,975
Food and stores	26,810	26,151	34,090
Fuel and oils	335,943	324,486	241,177
Freight and marketing	268,499	198,995	250,009
Leasing and rent	5,761	6,258	8,063
Insurance	20,616	21,070	9,917
Interest paid	1,653	7,508	9,821
Licence and levies	4,502	8,207	10,898
Packaging	49,898	48,749	72,384
Repairs and maintenance	167,490	152,072	171,135
Other costs	76,565	54,825	63,660
Total costs	**1,246,667**	**1,145,122**	**1,207,034**
Vessel profit			
Boat cash income	65	32,441	61,292
less depreciation	37,525	43,362	49,154
Boat business profit	**(37,460)**	**(10,921)**	**12,138**
plus interest, leasing and rent	7,413	13,766	17,883
Profit at full equity	**(30,047)**	**2,845**	**30,022**
Capital investment	755,509	743,833	720,952
Rate of return to capital	**-4%**	**0%**	**4%**
Sample size	26	31	31
Population	72	65	58

The financial performance for the average offshore longline vessel operating in the national waters of Fiji is displayed in Table 1. For 2012, cash income for the average vessel was estimated to be FJ$65, indicating a very small positive cash flow. After accounting for depreciation, the average vessel was calculated to be making financial loss of around FJ$37,460. Profit at full equity, a profit indicator that assumes all assets are fully owned by the operator (i.e. no interest or lease is paid under full ownership), was estimated at −FJ$30,047. This yielded a return to capital investment ratio of −4%, where the value of capital investment is evaluated as the depreciated replacement value of capital asset owned by the proprietor and employed in the fishing business for any given year. It includes the value of the boat, hull, engine, other onboard equipment (including gear and electronics) as well as any onshore assets that are used to

support the fishing operation (e.g. storage, refrigeration, tools, utility and forklift vehicles used to transport or unload the fish etc.). Therefore, the return to capital investment ratio provides a measure of the financial return to the proprietor from all investments into the fishing business.

Financial performance for the average vessel improved in 2013 relative to 2012, with boat cash income increasing to FJ$32,441 and contributing to a smaller boat business loss of FJ$10,921, and a profit at full equity of FJ$2,845. This marginal profit at full equity translated to a 0% return on capital investment, computed as profit at full equity divided by capital investment. The situation improved further in 2014, with boat cash income and boat business profit increasing to FJ$61,292 and FJ$12,138, respectively. This generated a profit at full equity of FJ$30,022 and a return to capital investment of 4% for the average vessel.

It is important to reiterate that the results are estimated for the average longline vessel fishing inside Fiji's EEZ. In each year, there were vessels making positive financial profits but also vessels generating large losses. The financial performance indicator aims to capture the general picture for operating in the fishery based on the sample weights. How representative the sample vessels are at epitomising the financial performance of the population can depend on the size of the operations (small, medium and large producers) and whether the business is vertically integrated or not. For example, profit and loss statements may be slightly skewed, in either direction, for vessels owned as part of an integrated business. This is because the revenue from catch could be higher or lower than the industry average if the fish is supplied to factories up the supply chain. In addition, even under unbiased prices for catch, estimates of financial performance is likely to be different from those that would have been obtained if information had been collected from a census of all boats. Therefore, care should be taken in interpreting the results.

The economic performance of the fleet differs from that of its financial performance as it includes additional economic costs to the proprietor from operating in the offshore longline fishery of Fiji that are not accounted for in their financial statements. These costs relate to the opportunity cost of labour and capital. The opportunity cost of labour refers to the wage that would have been earned working in a similar role elsewhere and essentially account for any underpaid labour provide by the owners of the business. In the same vein, the opportunity cost of capital refers to the return that could have been earned if the capital was invested elsewhere at a similar risk, and reflects the cost to the economy of the capital being invested in the Fijian longline fishery.

Assuming that vessel owners in the sample were paid a salary which reflected the amount they would have otherwise earned elsewhere for the surveyed periods, the only economic cost estimated in this paper is the opportunity cost of capital. The business index rate by major bank in Fiji (e.g. ANZ and BRED bank) was 9.95% in October 2016. This provides some indication of the level of risk and expected return banks require from investing or lending to small businesses. In this paper, economic performance is calculated based on 3 sets of opportunity costs of capital (10%, 15% and 20%) to account for sensitivity around estimates. The results are displayed in Table 2 below.

Table 2: economic performance for the average offshore longline vessel fishing in the national waters of Fiji

Economic return to boat owner (in FJ$)	2012	2013	2014
Profit at full equity	(30,047)	2,845	30,022
Capital investment	755,509	743,833	720,952
Opportunity cost of capital A (10%)	75,551	74,383	72,095
Opportunity cost of capital B (15%)	**113,326**	**111,575**	**108,143**
Opportunity cost of capital C (20%)	151,102	148,767	144,190
Economic return at full equity A	(105,598)	(71,538)	(42,074)
Economic return at full equity B	**(143,373)**	**(108,730)**	**(78,121)**
Economic return at full equity C	(181,149)	(145,921)	(114,169)

For the average offshore longline vessel operating inside the Fijian EEZ, the economic return to boat owner under 10% opportunity cost of capital was estimated at –FJ$105,598 in 2012, –FJ$71,538 in 2013 and –FJ$42,074 in 2014. This suggests that if the owner had sold the 'average' vessel in those years (i.e. value of vessel is the 'as at' or depreciated value in each respective year) and loaned the money/capital to a small business instead, the annual return would be FJ$105,598 greater than the financial return (–FJ$30,047) received in 2012. Using a return on investment rate of 10% to calculate the opportunity cost of capital is quite conservative for the Fijian fishing industry as capital is relatively more difficult to obtain in small Pacific island states compared to advanced economies. In the 2012 Fiji longline bioeconomic report (Reid 2012), the selected rate of return was 15% to reflect the opportunity cost of investing in a similar risk industry[6]. Under this assumption, the economic return to boat owner would be –FJ$143,373, –FJ$108,739 and –FJ$78,121 in 2012, 2013 and 2014 respectively.

In summary, the results indicate that over the period examined operators barely obtained returns that covered their financial costs and were making significant economic losses on their investments.

Ex-vessel prices and cost per hook

As part of the economic survey, ex-vessel prices for key target species were also collected from the sampled vessels. For fresh export of albacore, the ex-vessel price (not including cost of freight and insurance) ranged from US$2,280 to US$6,614 per metric ton, with MSC certified products fetching the higher values but constituting a small portion of exports (~15%). Frozen albacore export price were quoted at US$2,600 to $2,800 per metric ton. Fresh exports of yellowfin and bigeye received relatively similar prices, extended from around US$5,840 to US$10,472 per metric ton with most of the survey responses in the $9,000 to $10,000 range. For fresh local sales of other bycatch species, the price ranged from FJ$1,500 to FJ$2,117. In contrast, frozen exports of bycatch species were estimated to attain prices of around US$2,680 to US$8,451.

The weighted average[5] prices by species across sampled vessels, based on individual export market composition and associated prices reported, are as follows: US$2,964 per metric ton for albacore, US$8,359 for bigeye, US$7,908 for yellowfin and US$3,036 for other species.

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[6] Reid, C (2012), A bioeconomic analysis of the longline fishery in the national waters of Fiji, Report to the Fiji TMDP Review 2nd stakeholder consultation, June 2012

Table 3: ex-vessel prices for longline landed species (in US$) for 2015-16

Species	Lower range	Upper range
Fresh albacore	$2,280	$3,300
Fresh albacore (MSC)	$2,640	$6,614
Frozen albacore	$2,600	$2,800
Fresh yellowfin	$5,840	$10,472
Fresh bigeye	$5,840	$10,472
Fresh OTH (export)	$2,680	$8,451
Fresh OTH (local in FJ$)	$1,500	$2,117

Cost per hook is calculated using the financial data reported in Table 1 and the weighted average number of hooks deployed per year (Table 4). To the proprietor, the average ex-vessel economic cost of operating in the Fiji offshore longline fishery over the period 2012 to 2014 was FJ$1,057,791. This translates to a cost per hook of FJ$2.39. At the fishery level, the cost per hook (economic cost to the fishery divided by the number of hooks set per year) for the average vessel is estimated to be FJ$2.22 over the same period. Economic cost to the fishery excludes the cost of fishing licences and levies as these costs represent a transfer from fishing operators to the Fijian Government. In addition, from a societal perspective the cost of the labour utilised by the vessels should represent the opportunity cost of that labour to Fiji's economy (that is, the value that the labour would be creating if it was available to other sectors of the economy) rather than the wage cost faced by operators. In this analysis the opportunity cost of crew labour is taken to be 50% of the wage cost. That is, crew costs from Table 1 are reduced by 50% to reflect the likely decline in wages earned by the crew (and the likelihood of unemployment) that would have been the case if they were not working in the fishery.

The estimated average cost per hook of FJ$2.22 across the 3 years compares with an estimated FJ$1.85 from the 2012 bioeconomic analysis (Reid 2012)[6] and FJ$1.63 in the 2004 study (Reid and Langley 2004)[7]. Adjusting the estimates from the previous studies to account for inflation using the Fiji CPI[8] so as to express them in 2013FJ$ gives a value of FJ$2.36 for the 2004 study and FJ$1.90 for the 2012 study. That is, the value estimated in this study falls between the 2013FJ$ values of the estimates obtained from the 2004 and 2012 analyses.

An important thing to note is that the estimated cost per hook to the Fijian economy of FJ$2.22 presented in this paper is for the harvesting sector alone and does not take into consideration of benefits generated in the downstream processing sector. There are also indirect benefits generated by the domestic fleet in upstream sectors. Upstream benefits include those generated through the provision of goods and services to vessel operators (e.g. slippage and maintenance services, the sale of food and rations and so forth), where the economic cost of providing these goods and services are less than the purchase price.

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[7] Reid, C and Langley, A (2004), an economic analysis of the Fiji longline fishery, a report to the Fisheries Department of Fiji

[8] Asia Development Bank, Key Indicators for Asia and the Pacific 2015, Country table: Fiji, October 2015, available at https://www.adb.org/publications/key-indicators-asia-and-pacific-2015

Table 4: ex-vessel cost per hook calculations for the average longline vessel fishing in the Fijian EEZ

Calculation breakdown (values in FJ$)	2012	2013	2014	Average
Hooks per year	487,453	429,713	414,169	443,779
Hooks per set	3,036	2,991	2,946	2,991
Days fished per year	155	144	142	147
Catch per year (mt)	116	106	125	116
Economic cost per year to proprietor[a]	$1,079,122	$1,052,314	$1,041,937	$1,057,791
Cost per hook to operator	$2.21	$2.45	$2.52	$2.39
- from fuel	$0.69	$0.76	$0.58	$0.68
- from labour	$0.23	$0.27	$0.41	$0.31
- from maintenance and gear	$0.43	$0.43	$0.51	$0.46
- from bait	$0.25	$0.31	$0.27	$0.28
- from other	$0.61	$0.68	$0.74	$0.68
Economic cost per year to fishery[b]	$1,018,276	$985,818	$945,241	$983,112
Cost per hook to fishery	**$2.09**	**$2.29**	**$2.28**	**$2.22**

Note: **a**. for consistency (with ex-vessel prices), economic cost to the proprietor is taken at the ex-vessel level. That is, it is calculated as total operating cost in Table 1 less freight and marketing; and packaging, but plus depreciation; and opportunity cost of capital B (15%) from Table 2. Opportunity cost of labour of proprietors/directors is not included under the assumption that a salary similar to working elsewhere for the proprietor is received. **b**. economic cost to fishery is computed as the economic cost to proprietor excluding licence and levies costs found in Table 1 and an opportunity cost of crew labour of 50%. This is to reflect the high levels of unemployment in Fiji and the likelihood of unemployment for crew members if they were not working on longline vessel.

Conclusion

The purpose of this paper was simply to examine the financial and economic performance of vessels fishing in the national waters of Fiji in recent years and to provide better understanding behind the calculation of prices and cost per hook used in bioeconomic analyses. The results of the analysis suggest that over the period examined operators barely obtained returns that covered their financial costs and were making significant economic losses on their investments.

Appendix

Table 1A: annual south Pacific albacore longline catch estimates by EEZ and High Seas (Pilling and Williams 2016)[2]

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
American Samoa	626	3,217	5,353	3,212	2,019	2,880	4,078	4,667	2,963	3,299	3,065	2,224	2,414	1,760	1,277	1,601
Australia	359	554	505	391	587	619	2,526	1,867	1,256	1,471	706	627	529	592	515	742
Cook Islands	-	9	1,112	1,847	2,172	2,282	1,954	3,482	2,491	5,385	5,973	5,862	10,727	6,283	4,805	2,924
Fiji	4,382	7,417	6,327	4,045	5,986	5,617	5,620	3,659	4,533	5,627	5,810	4,068	4,221	3,946	3,270	2,238
High Seas	12,650	21,997	27,874	25,445	23,565	21,127	15,421	12,964	20,681	27,551	29,721	17,703	25,471	22,090	16,502	18,057
Jarvis (USA)	-	-	-	53	-	-	-	-	-	-	-	-	-	-	-	-
Kiribati	271	729	775	712	839	238	300	677	386	1,220	1,219	597	1,329	923	1,552	1,952
non-attributed non-high seas area	4	4	1	19	12	11	6	6	2	26	14	7	10	-	-	5
New Caledonia	885	1,015	1,160	1,087	1,367	1,579	1,348	1,312	1,484	1,611	1,923	1,732	1,700	1,712	1,624	1,570
Niue	-	-	34	-	-	55	258	216	337	239	191	-	-	374	323	206
New Zealand	1,334	2,593	2,522	2,936	1,246	602	496	277	382	422	460	418	266	302	311	223
French Polynesia	3,464	4,261	4,555	3,819	2,210	2,259	2,846	3,924	3,060	3,560	3,482	3,223	3,591	3,495	3,743	3,367
Papua New Guinea	105	72	82	645	1,529	2,181	1,790	1,919	508	865	795	304	803	240	308	356
Solomon Islands	317	170	1,092	958	2,460	3,943	8,551	6,790	8,413	11,577	10,786	9,849	10,656	13,139	17,359	12,319
Tokelau	-	-	-	-	-	-	-	-	121	-	-	106	252	-	7	2,313
Tonga	858	1,074	845	318	196	256	405	354	220	124	57	38	1,582	3,242	1,068	4,394
Tuvalu	224	104	186	52	234	276	10	476	159	320	680	458	912	1,457	342	261
Vanuatu	2,966	2,882	2,714	2,964	4,081	8,344	10,425	6,988	6,450	6,189	5,323	8,037	4,769	8,329	6,172	3,514
Wallis and Futuna	-	-	-	-	-	33	-	-	-	-	-	3	-	-	-	-
Samoa	4,067	4,820	4,205	2,253	1,233	1,263	2,113	3,113	2,342	2,816	2,529	1,415	2,037	1,640	801	851
Total	32,512	50,918	59,342	50,756	49,736	53,565	58,147	52,691	55,788	72,302	72,734	56,671	71,269	69,524	59,979	56,893
% EEZ	61%	57%	53%	50%	53%	61%	73%	75%	63%	62%	59%	69%	64%	68%	72%	68%
% High Seas	39%	43%	47%	50%	47%	39%	27%	25%	37%	38%	41%	31%	36%	32%	28%	32%

Table 2A: total annual catch landed for the Fiji National fleet, 2011 to 2015 (Fiji 2016)[9]

Species	2011	2012	2013	2014	Provisional 2015
Albacore	7,793	7,958	6,202	6,703	7,855
Bigeye	681	1,019	685	1,586	1,184
Yellowfin	2,248	2,081	1,328	3,594	3,647
Other tuna like species	1,422	1,388	1,293	1,702	1,939
Total	12,144	12,446	9,508	13,585	14,625

Table 3A: total VMS days at sea for the southern longline fishery (Pilling and Williams 2016)

Year	2010	2011	2012	2013	2014	2015
EEZs	74,825	76,419	82,180	85,434	68,734	70,415
International waters (IW)	21,362	23,796	24,021	32,463	28,122	28,392
Total	96,187	100,216	106,201	117,897	96,856	98,807
% EEZs	78%	76%	77%	72%	71%	71%
% High Seas	22%	24%	23%	28%	29%	29%

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[9] Fiji Department of Fisheries, Annual report to the Commission: part 1 information on fisheries, research and statistics, Country report WCPFC-SC12-AR/CCM-07, Scientific Committee, WCPFC, August 2016