

A Work Project, presented as part of the requirements for the Award of a Master Degree in Finance from the
NOVA – School of Business and Economics.

DIRECT RESEARCH INTERNSHIP

REAL HOLDINGS INTERNATIONAL LIMITED

INVESTMENT FUND STRATEGIC GROWTH PLAN



APPENDIXES

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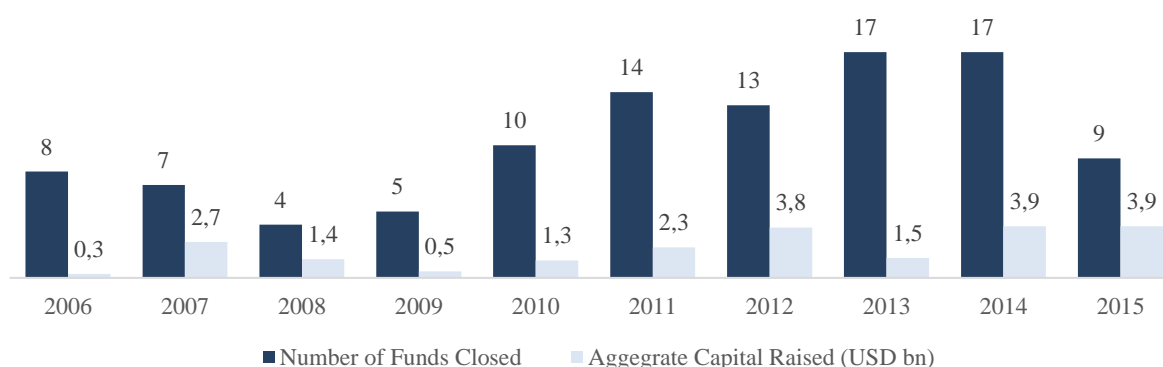
A Project carried out on the Master in Finance Program, under the supervision of:

Professor Paulo Soares de Pinho

6th January 2017

Appendixes

Appendix 8 – Agriculture/Farmland Funds 2006 – 2015



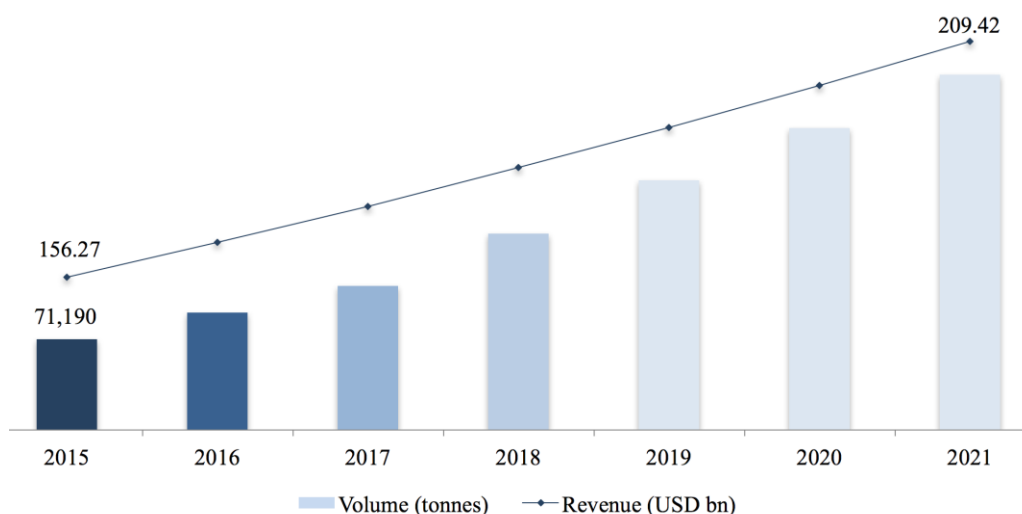
Source: Preqin, *Special Report: Natural Resources, November 2015*

Appendix 9 – Capture vs. Aquaculture Fish Production 2009 – 2014

Production (mm tonnes)		2009	2010	2011	2012	2013	2014	CAGR
Capture	Inland	10.5	11.3	11.1	11.6	11.7	11.9	3.18%
	Marine	79.7	77.9	82.6	79.7	81.0	81.5	0.56%
	Total Capture	90.2	89.2	93.7	91.3	92.7	93.4	0.88%
	% change		-1.11%	5.04%	-2.56%	1.53%	0.76%	
Aquaculture	Inland	34.3	36.9	38.9	42.0	44.8	47.1	8.25%
	Marine	21.4	22.1	23.2	24.4	25.5	26.7	5.69%
	Total Aquaculture	55.7	59.0	62.1	66.4	70.3	73.8	7.29%
	% change		5.92%	5.25%	6.92%	5.87%	4.98%	
TOTAL	145.9	148.2	155.8	157.7	163.0	167.2	3.47%	
% change		1.58%	5.13%	1.22%	3.36%	2.58%		

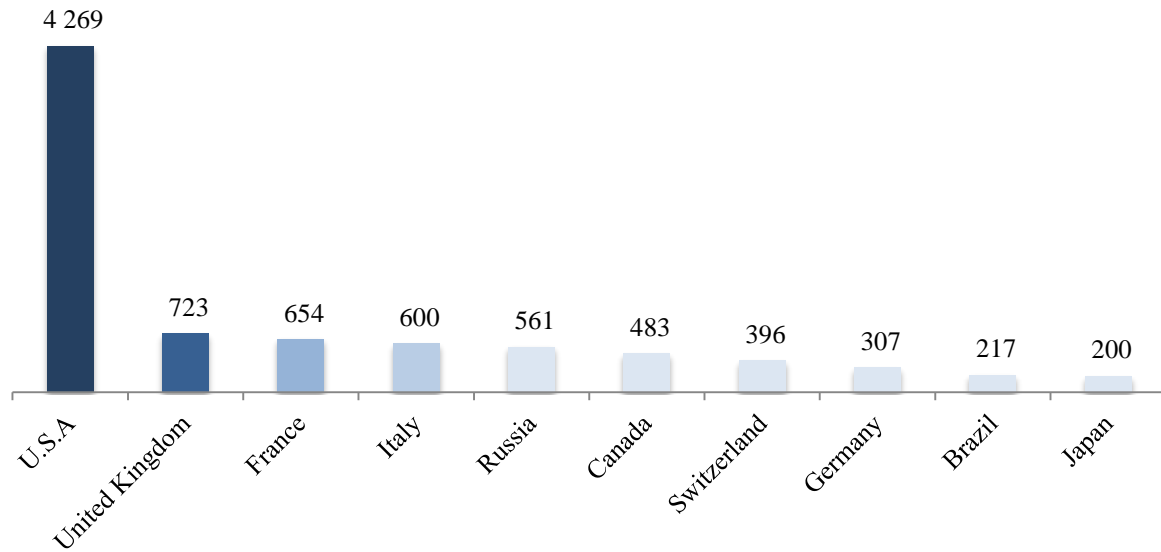
Source: FAO, *The State of World Fisheries and Aquaculture 2016*

Appendix 10 – Global Aquaculture Market 2015 – 2021



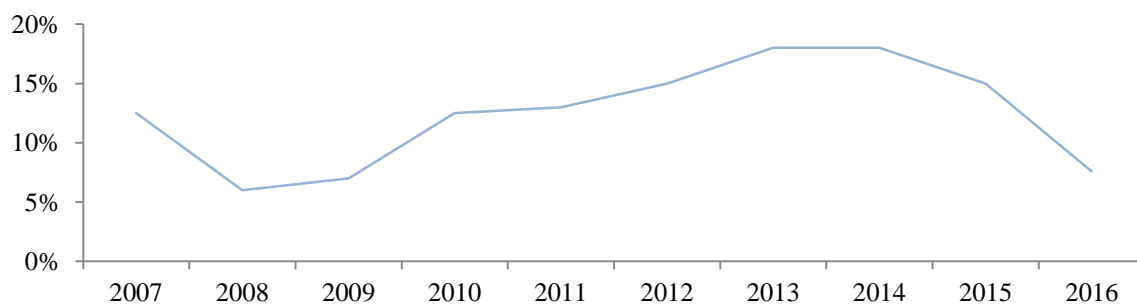
Source: Zion Research Analysis 2016

Appendix 11 – Craft Breweries by Country in 2015



Source: Statista

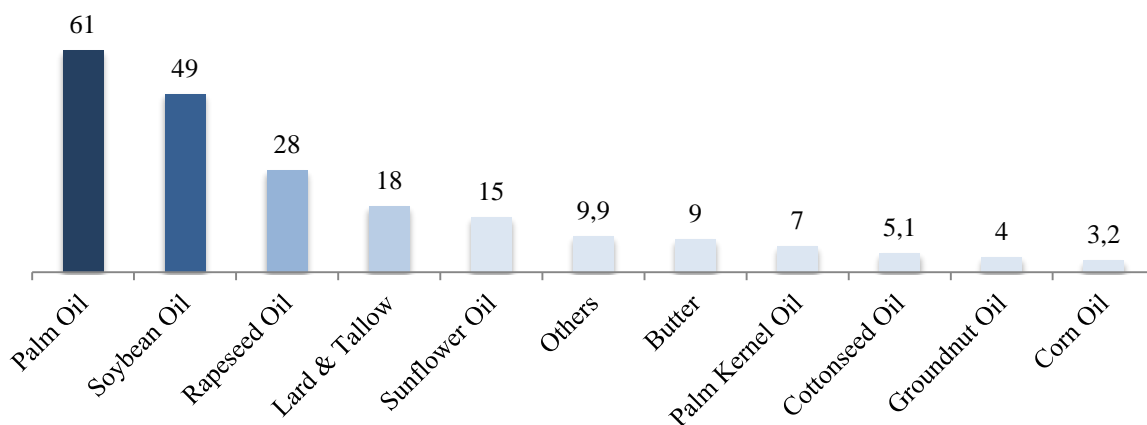
Appendix 12 – % Change in the U.S. Craft Beer Sales Growth



Note: 2016 is referred as half year

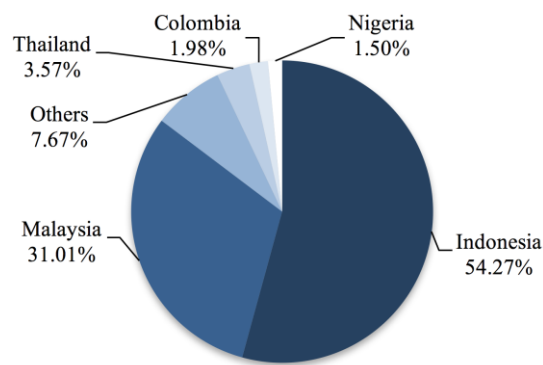
Source: Financial Times

Appendix 13 – Consumption in 2015 (mm tonnes)



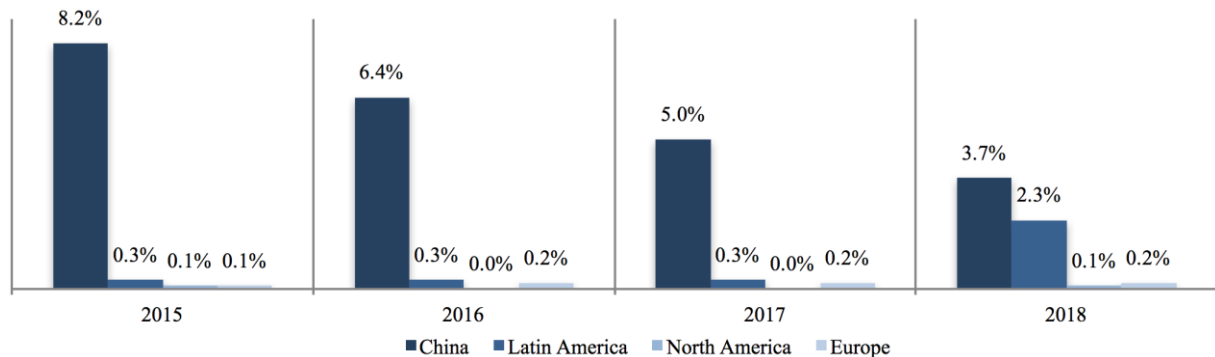
Source: Oil World 2016

Appendix 14 – Global Palm Oil Productions in 2016



Source: USDA, *United States Department of Agriculture*

Appendix 15 – Pulp Demand Year/Year Growth



Source: *Financial Times*

Appendix 16 – Description of OpCo’s Operating Model Calculations

1. Revenues

Starting with revenues, as mentioned in Inputs section, olives start to harvest on year 3 and reach their full harvesting on year 5. As such, during year 1 and year 2 of operations, OpCo does not have any revenues but merely operating expenses. Considering the olive oil yield explained in Inputs section, from year 3 and onwards the olives harvested are converted to olive oil and sold. The olive oil season price⁴⁰ (€3.00) is annually increasing at inflation-based rate³⁸, 1.25%.

2. Operating Expenses

Regarding operating expenses, Real Holdings extracted the Portuguese average Super-Intensive Irrigation System olive oil expenses from the International Olive Oil Council report, “*International Olive Oil Plantation Costs Study*”. The company is considering the following operating expenses per ha: soil management (€75), irrigation (€373), fertilization (€582), harvesting (€260) and pruning (€624). Since olives need to be transformed into olive oil, the group is also considering operating variable expenses such as transportation (0.40% €/kg) and

olive oil processing (4.00% €/kg). The operating expenses considered in the valuation are incorporating employees and wages costs. Also, all operating expenses excluding variable expenses are annually increasing at inflation-based rate³⁸, 1.25%.

3. Depreciation and Amortization

As for Depreciation and Amortization, the company assumed a straight-line method accordingly to each Capital Expenditures' (CAPEX) lifetime. The group consulted the *Autoridade Tributária e Aduaneira: Regime das Depreciações e Amortiações (Decreto Regulamentar n° 2/90)* to evaluate precisely the depreciation lifetime of each CAPEX. The group is considering the following CAPEX and the respective lifetime: machinery, 15 years of lifetime; irrigation system, 20 years of lifetime; olive plantation, 25 years of lifetime; and plant protection, 15 years of lifetime.

4. Income Tax

The Portuguese corporate tax rate considered in the valuation is 21.00%. As the project will account for negative cash flows during year 1 and year 2, Real Holdings considered Tax-Loss carryforward. In Portugal, small and medium-sized companies can carry operating losses forward for 12 years, however these losses cannot exceed 70% of the taxable profits. Since Real Holdings is considered a small enterprise, the company considered the Portuguese carryforward conditions explained above to calculate the income tax.

5. Net Working Capital

Real Holdings calculated Changes in Net Working Capital (NWC) using the Farming/Agriculture benchmark from Aswath Damodaran as the date of November 29, 2016. Each working capital driver was calculated as a percentage of sales. The Farming/Agriculture benchmark used was the following: Accrued Receivables/Sales equal to 7.16%; Inventory/Sales equal to 11.95%; and Accrued Payables/Sales equal to 9.21%.

6. Capital Expenditures

The CAPEX considered has an initial investment cost per ha of €7,050 for the Super-Intensive Irrigation System olive plantation. The group considered the following costs: machinery (€3,900,000); irrigation system (€2,200,000); plantation (€7,987,500); and plant protection (€939,330). Note that plantation cost was calculated with the number of ha (2,130 ha), number of olive plants per ha (1,500 plants per ha) and the olive plant price (€2.50). The plant protection was calculated assuming a cost of €441 per ha. As for the maintenance CAPEX, the group is considering 0.20% of machinery and irrigation system costs. Both plantation and plant protection do not have maintenance CAPEX since operating expenses already include their maintenance.