



Commodities

Mowi (OTC:MHGVY)

March 29, 2021

Alternative Investments Club

Agenda

- **Company Overview**
- Industry Overview
- Investment Thesis
- Valuation
- Risks and Conclusion

Company Overview

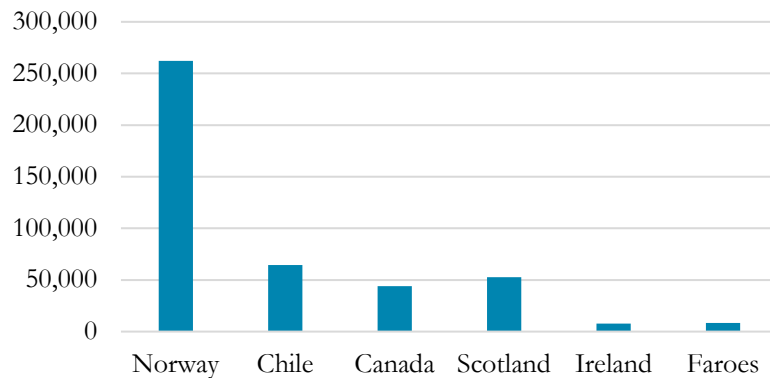
Background

- Mowi is the largest producer of Atlantic salmon by market cap and one of the largest seafood companies in the world
- Offers salmon products to 70 countries
- Traded on both Oslo Stock Exchange and US OTC exchange

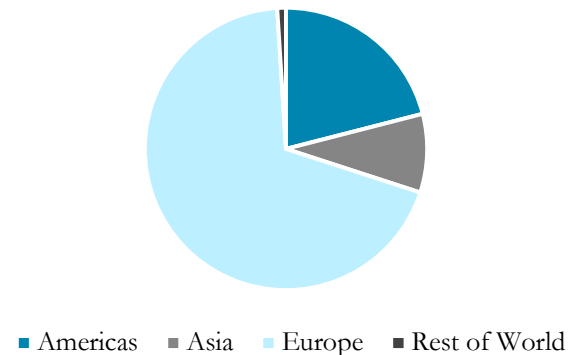
Summary Financials

- Price: \$24.69
- 2020 Revenue: \$4,286.5mm
- Market Cap: \$12,538mm
- EV/EBITDA: 13.24x
- NTM P/E: 25.1x
- Beta: 0.98

Salmon Farming in 2020 (Tonnes)



Sales By Location



Business Areas

Farming

- Largest farm is in Norway, but also has locations in Scotland, Ireland, Chile, Canada, and the Faroe Islands
- Implementing smart technology like automatic feeding and real-time monitoring of biomass

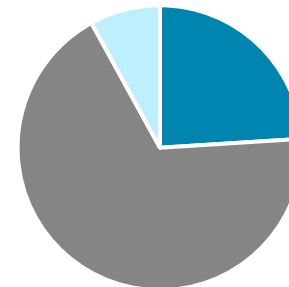
Feed

- Essential input factor for salmon production and farming
- Facilities in Norway and Scotland – located close to their farms
- In 2020 became self-sufficient for feed in Europe
- Feed generates the least revenue

Sales & Marketing

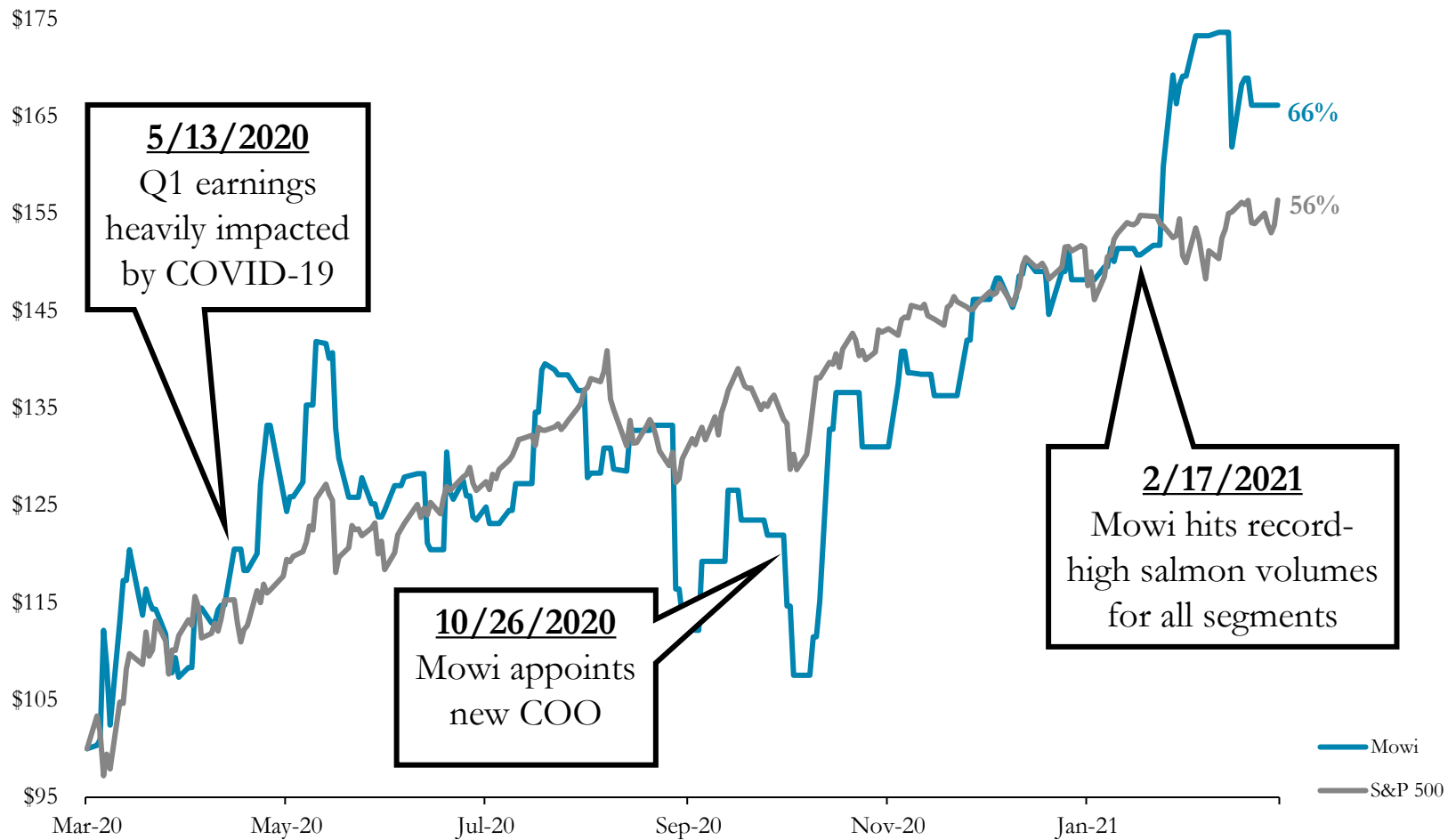
- Retailers across the entire world; other companies buy salmon from Mowi to produce their own salmon products
- Consumer Products are sold to foodservice companies
- Primary and Secondary Products – gutted fish (fresh, frozen, filet, kabobs)

Percentage of EBIT Per Segment



■ Sales & Marketing ■ Farming ■ Feed

1-Year Stock Performance Chart



Agenda

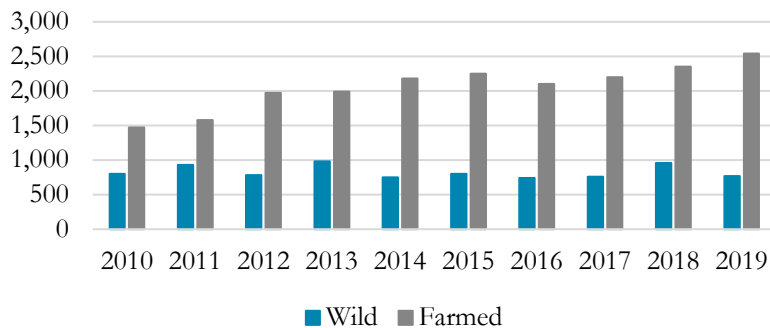
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Industry Overview

Salmonids Farming Industry

- Farm Salmonids including Atlantic salmon, trout, coho, and chinook in controlled aquatic environments
- Industry retains barriers to entry due to capital-intensive nature
- Fastest growing food production system in the world

Supply of Farmed and Wild Salmonids

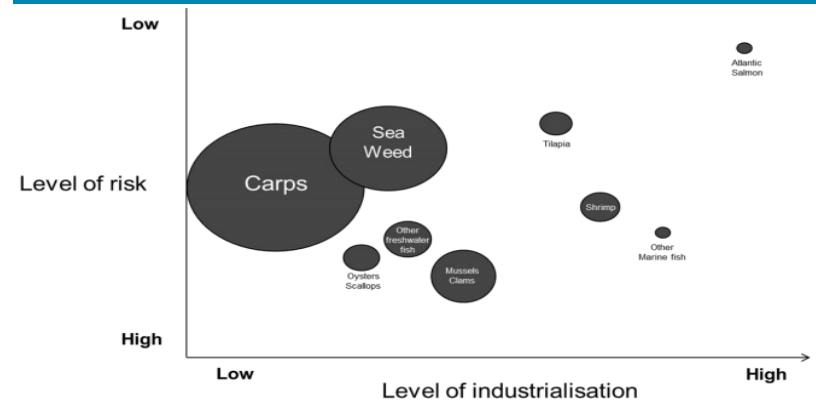


*About 69% of the world's salmon harvest is farmed

Fish Consumption

- Expected production growth of 10% during 2019-2028 > projected world population growth of 9%
- Per capita consumption expected to increase by 3% between 2019-2028
- By 2028, per capita fish consumption estimated to be 47 lbs. (vs. 45 lbs. in 2019)

Salmon Aquaculture

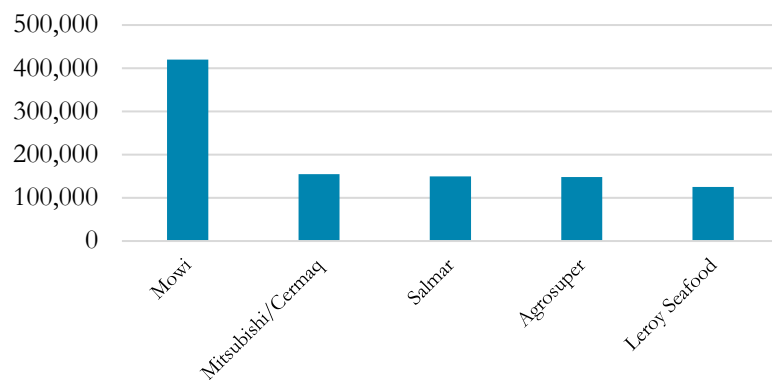


Industry Overview

Industry Structure

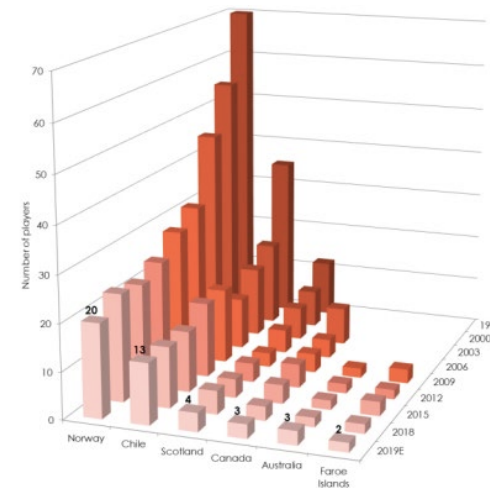
- Mowi represents the largest total production worldwide, harvesting one-fifth of salmon produced in Norway, two-fifths of total production in the U.K., and one-third of total production in North America

Top 5 Companies by Harvest Volume



Number of Companies

- Historically, the salmon industry consisted of larger number of smaller firms, however, it has been through a period of consolidation in all regions that is expected to continue throughout this decade
- Number of companies producing 80% of farmed salmon and trout in each major producing country



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Investment Thesis

Thesis Primer

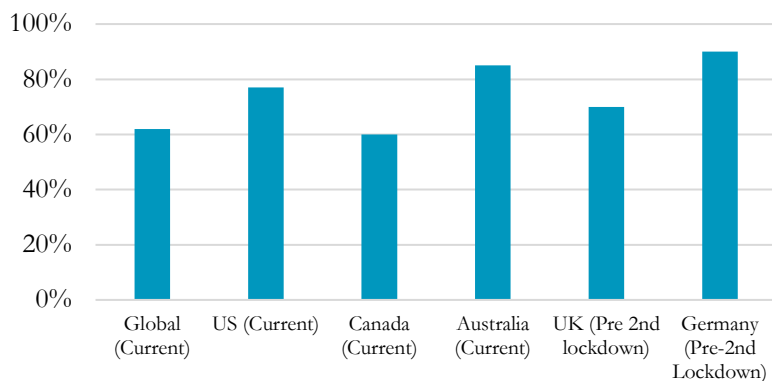
AIC should invest in Mowi to capitalize on key industry trends such as the reopening of restaurants worldwide as pandemic restrictions are eased, the rise of a more health-conscious younger generation as well as a rapidly growing senior population, and the Company's commitment to expanding their fully integrated AI supply chain. We recommend holding this investment for a period of **18 months** with a PT of **\$33** which implies upside of **35.78%**.

Investment Thesis

Reopening of Restaurants

- 2021 restaurant industry revenues projected to increase 10.2% in U.S., with lower growth in Europe and Asia
 - 70% of total seafood spending in U.S. is in restaurants
 - Approximately 50% of seafood is eaten out in U.K., 30% in Germany pre-pandemic
- Pent-up demand for eating out again; 83% of American adults want to eat out more often
- Global restaurants open for reservations and currently operating at around 87% capacity

Percentage of Restaurants Open



Popularity of Sushi

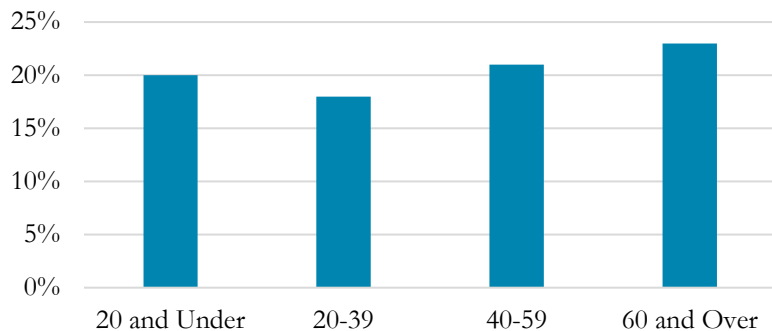
- Salmon is most popular sushi topping in Japan over past decade
- Sushi industry projected to grow at 5% CAGR, 12% CAGR forecasted for 2021
 - 77% of growth from Asia-Pacific
- Norwegian-farmed salmon dominating fish serviced in sushi restaurants

Investment Thesis

Health-Conscious Younger Generation

- Millennials seeking out healthier and more nutritious foods in their diets
 - Seafood consumption increased 30% between 2017 and 2018
 - 59% of consumers surveyed bought more seafood in 2020 due to desire to eat healthier
 - Retail fish sales increased 28.4% in 2020 due to home cooking during pandemic
 - 74% of millennial households purchase fresh seafood in supermarkets compared to <70% for other generations

Seafood Consumption by Age (U.S.)



*Consumed seafood at least 2 times per week

Health Benefits for Elderly

- Older adults (65+) projected to outnumber children under 18 in U.S. by 2034
 - EU and Japan both further along
- Health benefits of seafood being promoted by global health organizations
- Omega-3 from salmon found to fight Alzheimer's, improve heart health, and relieve inflammation caused by arthritis

Investment Thesis

Increasing Automations and Robotization of Supply Chain

- Mowi is largest VAP, allowing them to proficiently automate their supply chain with automatic feeding, remote operations, digital lice counting, and more
- European feed plants are self-sustainable through automation
- Implementation of AI into their supply chain allow Mowi to improve feed plant efficiency, remote operations, and data synthesis, helping them cut costs substantially

Scotland Farm Modernization

- New farm opened in Scotland in 2019
- Mowi to implement remote operations in Scotland as done to farms in Norway
- Technological improvements and use of AI will cut labor costs and improve efficiency

Smart Farming by 2025

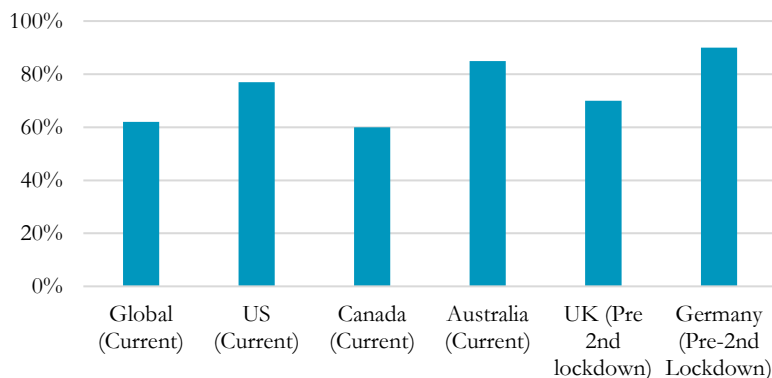
- All farms in PA 4 and PA 5 in Norway on track to be connected by 2022
- Smart Farming initiative to have all farms connected and operated remotely from Degnepoll, Norway by 2025, allowing Mowi to further reduce cost and improve profit per location

Investment Thesis

Full Capacity Utilization and Expansion Plan

- Global demand for salmon has exceeded supply for past 10 years
- Mowi worked at 80% capacity as they increase production in newly-opened Scotland feeding plant, expand existing sites, and implement technological solutions
- Vertical integration strategy and implementation of technology will help Mowi become more efficient and reduce costs in coming years, as well as become independent from suppliers
- Mowi developing own eggs, for which only three major suppliers currently exist

Mowi's Harvest vs. Other Companies



Smolt and Freshwater Expansion

- Five potential locations to build new smolt sites in Scotland by 2025
- Smolt site construction timeline:
 - Two years for construction
 - Six months for growth post-smolt
 - One year for production
- Expansion plan for current smolt and freshwater harvest locations

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Revenue Build

(all units in millions except per tonne data)

	2018A	2019A	2020A	2021P	2022P	2023P	2024P	2025P	2026P	CAGR
Mowi Revenue	4426.9	4560	4286.5	5271.238	6418.038	7232.297	8210.538	9233.16	9717.479	13.01%
<i>Growth</i>										
<i>Market share</i>	24.24%	26.49%	27.30%	28.50%	30.00%	29.50%	29.50%	29.50%	29.00%	
Global salmon production	2.50	2.66	2.75	2.95	3.16	3.38	3.62	3.88	4.11	6.88%
<i>Growth</i>		6.20%	3.74%	7.10%	7.10%	7.10%	7.10%	7.10%	6.00%	
Average \$/tonne	7,304.20	6,484.80	5,700.00	6,270.00	6,771.60	7,245.61	7,680.35	8,064.37	8,145.01	5.37%
<i>Growth</i>		-11.22%	-12.10%	10.00%	8.00%	7.00%	6.00%	5.00%	1.00%	
Global salmon consumption spend	18,260.50	17,217.14	15,699.49	18,495.57	21,393.46	24,516.26	27,832.33	31,298.85	33,508.55	

Operating Model Assumptions

Norway Federal Tax Rate	22%
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(all units in millions except per share data)

	Historical					Projection Period						CAGR
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
Revenue	3874.35	4094.97	4426.89	4560.04	4286.53	5271.238	6418.038	7232.297	8210.538	9233.16	9717.479	
<i>Growth</i>		5.69%	8.11%	3.01%	-6.00%	22.97%	21.76%	12.69%	13.53%	12.46%	5.25%	
COGS	2466.82	2501.65	2831.52	3269.77	3892.56	3795.291	4492.626	4917.962	5558.534	6301.632	6680.767	
<i>% of Revenue</i>	63.67%	61.09%	63.96%	71.70%	90.81%	72%	70%	68%	68%	68%	69%	
Gross Profit	1407.53	1593.32	1595.38	1290.27	393.98	1475.947	1925.411	2314.335	2652.004	2931.528	3036.712	
<i>Margin</i>	36.33%	38.91%	36.04%	28.30%	9.19%	28%	30%	32%	32%	32%	31%	
SG&A	422.57	526.29	650.40	393.19	293.70	527.1238	731.6563	976.3601	1211.054	1384.974	1457.622	
<i>% of Revenue</i>	10.91%	12.85%	14.69%	8.62%	6.85%	10%	11%	14%	15%	15%	15%	
EBIT	864.71	1202.15	937.78	971.73	396.37	948.8229	1193.755	1337.975	1440.949	1546.554	1579.09	
<i>Margin</i>	22.32%	29.36%	21.18%	21.31%	9.25%	18%	19%	19%	18%	17%	16%	
NOPAT	674.48	937.68	731.47	757.95	309.17	740.0818	931.1289	1043.621	1123.941	1206.312	1231.69	
<i>Margin</i>	17.41%	22.90%	16.52%	16.62%	7.21%	14%	15%	14%	14%	13%	13%	
D&A	157.63	169.64	180.97	321.34	385.43	316.9536	617.3722	739.0924	740.271	790.7738	778.6506	
<i>% of Capex</i>	67.34%	59.00%	44.31%	98.09%	107.06%	75%	80%	85%	90%	95%	100%	
Chg. NWC	-16.48	-106.70	-178.14	-120.10	-23.48	-121.2385	-166.869	-209.7366	-262.7372	-323.1606	-369.2642	
<i>% of Revenue</i>	-0.43%	-2.61%	-4.02%	-2.63%	-0.55%	-2%	-3%	-3%	-3%	-4%	-4%	
CapEx	234.07	287.51	408.43	327.60	360.00	421.6991	770.1645	867.8757	821.0538	830.9844	777.3983	
<i>% of Revenue</i>	6.04%	7.02%	9.23%	7.18%	8.40%	8%	12%	12%	10%	9%	8%	
Unlevered Free Cash Flow	581.56	713.11	325.87	631.59	311.11	514.10	611.47	705.10	780.42	842.94	863.68	CAGR
<i>Growth</i>		23%	-54%	94%	-51%	65%	19%	15%	11%	8%	2.5%	10.93%

Comparable Companies

Comparable Companies

Mowi

dollars in millions except per share price

Company Name	Fiscal Period	Price	Shares Outstandin g	Mkt Cap	Shares Outstanding Dilluted	Enterprise Value	Sales	EBIT	EBITDA	Enterprise Value / EBIT	Enterprise Value / EBITDA	Price / Earnings Ratio (NTM)	Total Debt / EBITDA
Mowi	12/31/2020	208.00	517.1	107,559.1	517.1	121,160.1	40,357.5	5,520.2	9,148.0	21.95x	13.24x	23.0	1.5
Bakkafrost	12/31/2020	640.00	59.1	37,788.2	59.1	40,160.5	6,678.7	814.4	1,457.7	49.31x	27.55x	26.6	1.2
Empresas AquaChile	12/31/2020	5.49	2,109.2	11,586.6	2,109.1	12,764.3	10,709.2	-1,085.7	-681.7	-	-	-	-
Nippon Suisan Kaisha	12/31/2020	43.85	312.4	13,643.1	311.1	31,945.3	58,224.6	1,660.0	3,436.9	19.24x	9.29x	12.2	5.4
Grieg Seafood	09/30/2020	83.05	113.4	9,321.0	112.2	12,429.0	7,123.1	412.3	902.5	30.15x	13.77x	15.7	3.6
Salmar	09/30/2020	581.80	113.3	65,879.8	113.1	69,523.5	13,050.0	3,247.4	4,030.9	23.24x	18.28x	23.4	0.9

Mean		260.37	537.43	40,962.97	536.97	47,997.12	22,690.53	1,761.42	3,049.04	28.78x	16.43x	20.18x	2.52x
Min		5.5	59.1	9,321.0	59.1	12,429.0	6,678.7	-1,085.7	-681.7	19.24x	9.29x	12.20x	0.90x
Q1		53.6	113.3	12,100.7	112.5	17,559.5	8,019.6	512.8	1,041.3	21.95x	13.24x	15.70x	1.20x
Median		145.5	212.9	25,715.7	212.1	36,052.9	11,879.6	1,237.2	2,447.3	23.24x	13.77x	23.00x	1.50x
Q3		488.4	465.9	58,856.9	465.6	62,182.8	33,530.7	2,850.6	3,882.4	30.15x	18.28x	23.40x	3.60x
Max		640.0	2,109.2	107,559.1	2,109.1	121,160.1	58,224.6	5,520.2	9,148.0	49.31x	27.55x	26.60x	5.40x

DCF – Perpetuity Method

Discounted Cash Flow

Terminal Period	Perpetuity
WACC	5.41%
Perpetuity growth rate	1.20%
2026 EBITDA	2,357.74
Median industry EBITDA multiple	13.77x

	2021	2022	2023	2024	2025	2026	TP (Perpetuity)	TP (Multiples)
Stub	0.375	1.25	2.25	3.25	4.25	5.25		
UFCF	385.57	611.47	705.10	780.42	842.94	863.68	20764.49191	32469.96544
Discount factor	0.980438552	0.936270341	0.888223541	0.842642369	0.799400297	0.758377288	0.758377288	0.758377288
PV UFCF	378.0310509	572.4990294	626.2869174	657.6154175	673.8474224	654.9941758	15747.31907	24624.48434
EV	19310.59308							
Debt	2380.3							
Cash	131.2							
Equity Value	17061.49308							
Shares outstanding	517.1							
\$/share	\$32.99							
Current stock price	24.3							
Implied upside	35.78%							

DCF – Multiples Method

Discounted Cash Flow

Terminal Period	Multiples
WACC	5.41%
Perpetuity growth rate	1.20%
2026 EBITDA	2,357.74
Median industry EBITDA multiple	13.77x

	2021	2022	2023	2024	2025	2026	TP (Perpetuity)	TP (Multiples)
Stub	0.375	1.25	2.25	3.25	4.25	5.25		
UFCF	385.57	611.47	705.10	780.42	842.94	863.68	20764.49191	32469.96544
Discount factor	0.980438552	0.936270341	0.888223541	0.842642369	0.799400297	0.758377288	0.758377288	0.758377288
PV UFCF	378.0310509	572.4990294	626.2869174	657.6154175	673.8474224	654.9941758	15747.31907	24624.48434
EV	28187.75836							
Debt	2380.3							
Cash	131.2							
Equity Value	25938.65836							
Shares outstanding	517.1							
\$/share	\$50.16							
Current stock price	24.3							
Implied upside	106.43%							

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Risks

Risks

- **Regulation:** Could see crackdown on fish farming in future as more people push for sustainable practices
- **Disease:** Fish can be affected by sea lice, which could be costly as it compromises fish welfare and requires increased treatments to fish sites
- **Climate Change:** Abnormally cold or warm waters, changes in oxygen levels, and extreme weather can affect salmon farms, creating loss of biomass, affecting fish health, and increasing infrastructure repair costs
- **OTC Market Risk:** Riskier/more illiquid than traditional markets, higher price volatility

Mitigants

- Ranked #1 most sustainable salmon farmer in the world (Blue Revolution Plan):
 - Sustainable feed sources by having full traceability
 - Reducing plastic usage for packaging
- Mowi has sea lice strategy in place
 - Improving integrated pest management
 - Minimizing amount of female sea lice
 - Following limits on maximum number of sea lice allowed
- Farms in many areas means climate changes or natural disasters in one area should not greatly affect overall performance
- Mow is largest company of its kind by market cap (\$13.2bn)

Conclusion

We recommend that AIC takes advantage of the global economic reopening and the rise of health-conscious eating among both younger and aging populations with an investment in Mowi—the distinct and expanding industry leader within the salmon farming industry. We should invest in Mowi with an intended holding period of **18 months**, and a PT of **\$33** which implies upside of **35.78%**.