



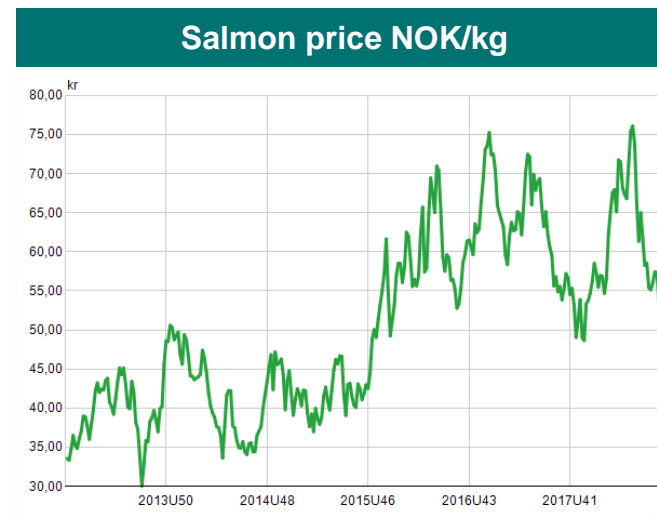
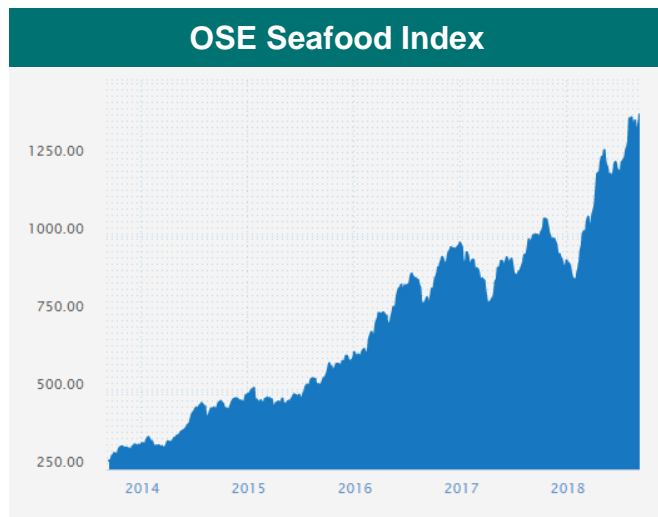
State of the union in salmon farming

IntraFish/DNB Seafood Investor Forum
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The state of the union is quite good!



But how long can you squeeze the lemon?

- Profits and share prices are high because stagnant volumes lift prices
- Lower volume = higher profits as price increases more than volume drops
- But that logic has its limits
 - Zero volume doesn't produce infinite profits..



Where are we and how did we get here?

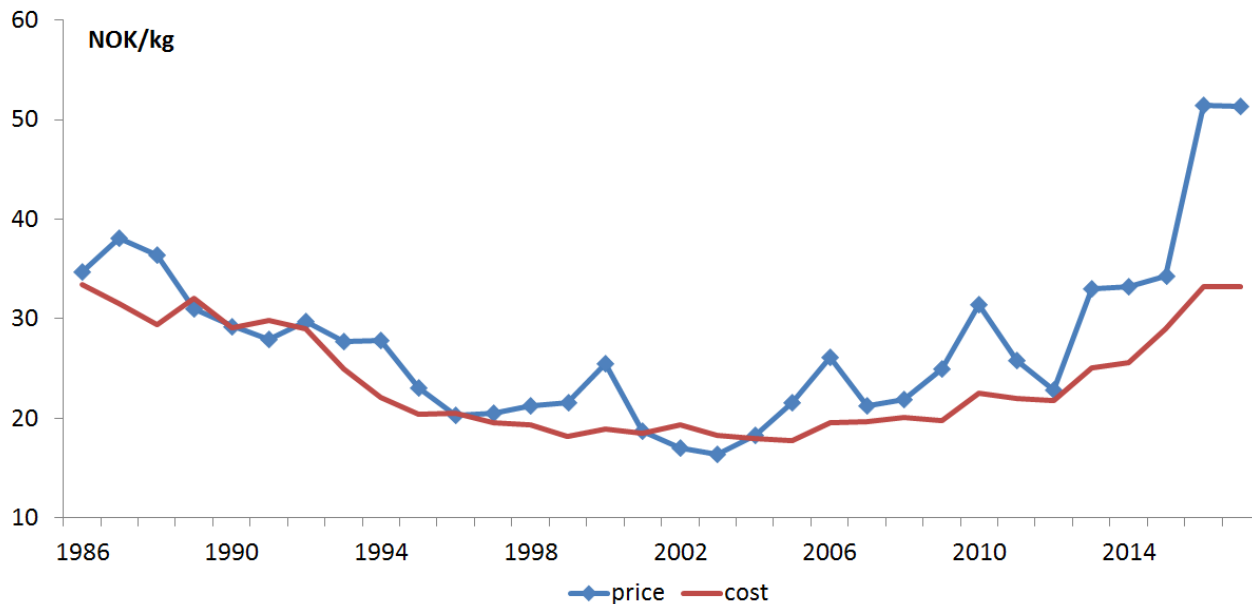
Investment analysis of salmon farming is very simple, you only need to think about 4 things:

1. Price
2. Cost
3. Volume
4. Valuation



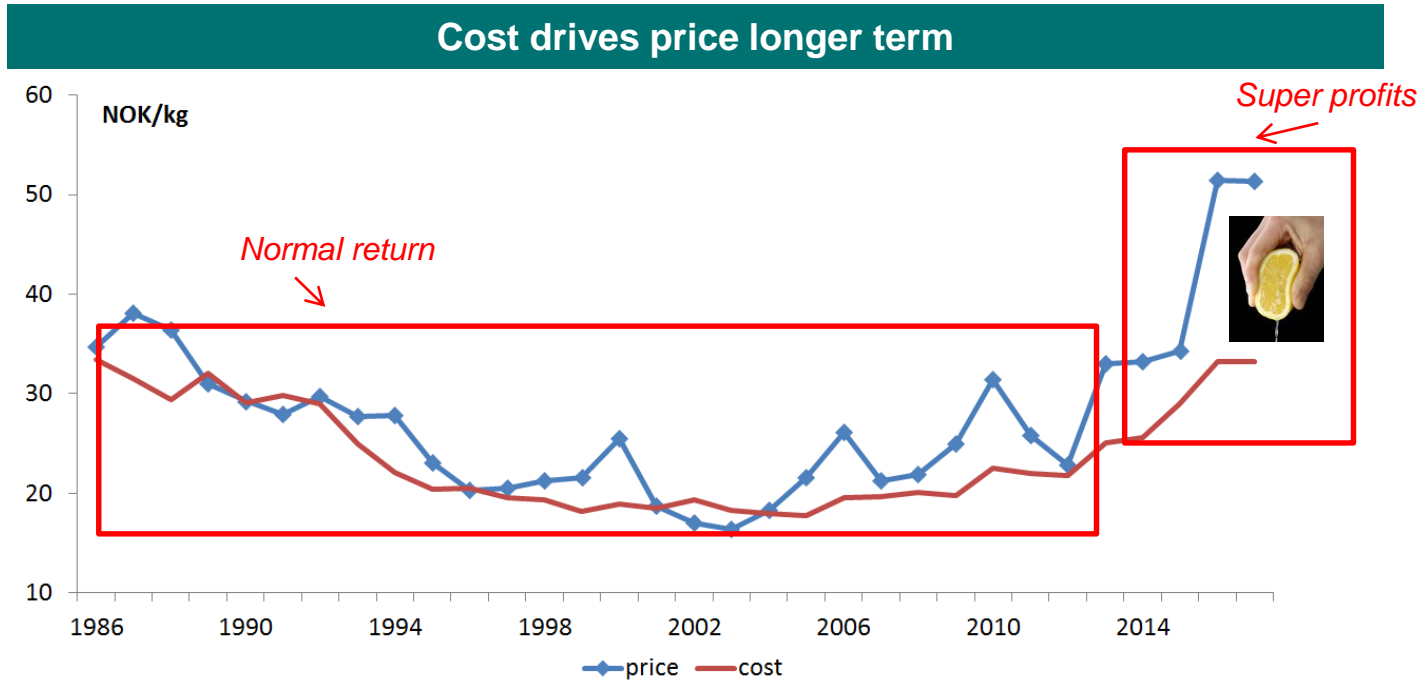
Price & cost have decoupled..

Cost drives price longer term



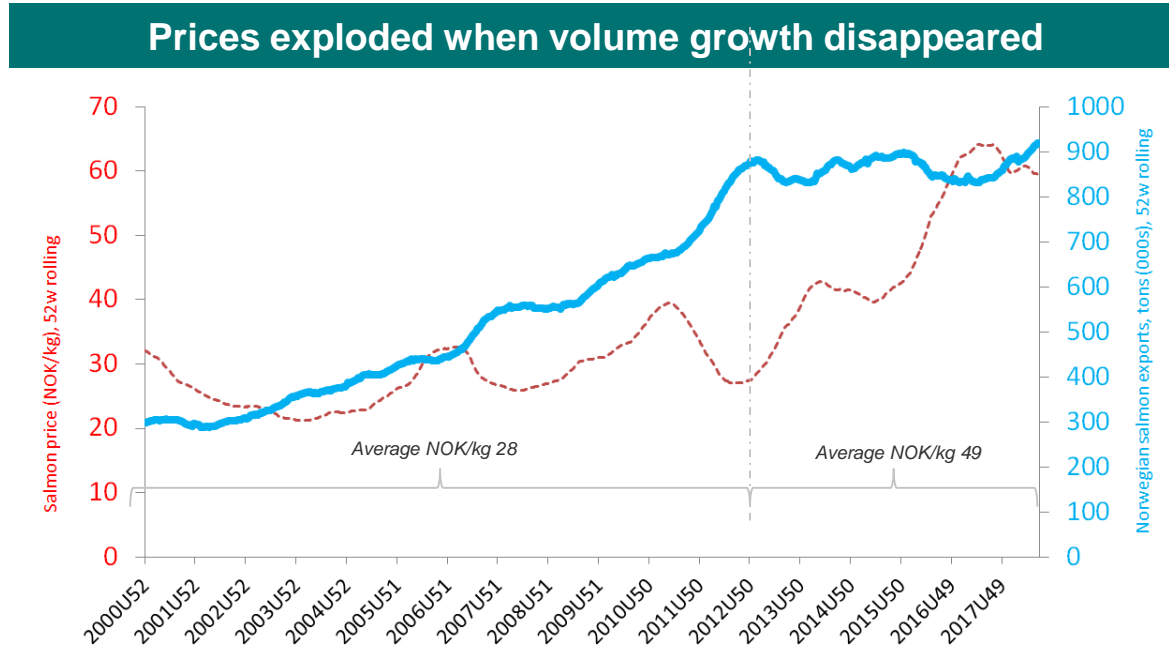
- Step change in profitability last 5 years
- Price is no longer determined by cost
- Cost is up but so far the consumer has picked up the bill..

Price & cost have decoupled..



- Step change in profitability last 5 years
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..as flat volumes create a tight market

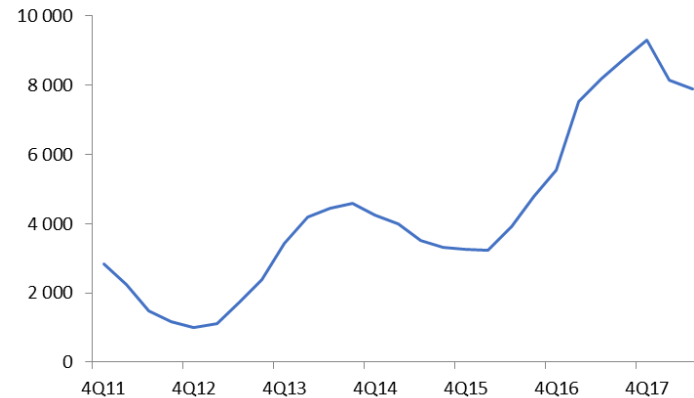


Higher & more stable margins → higher multiples

Price/Book Marine Harvest

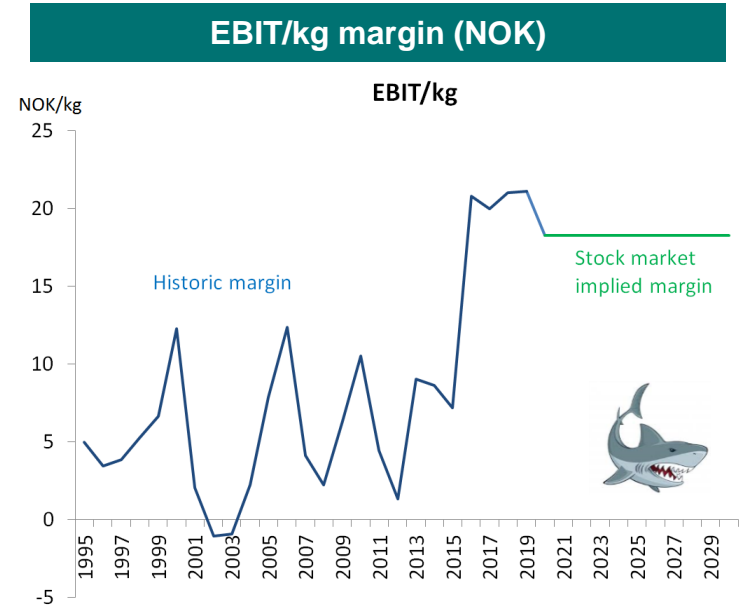
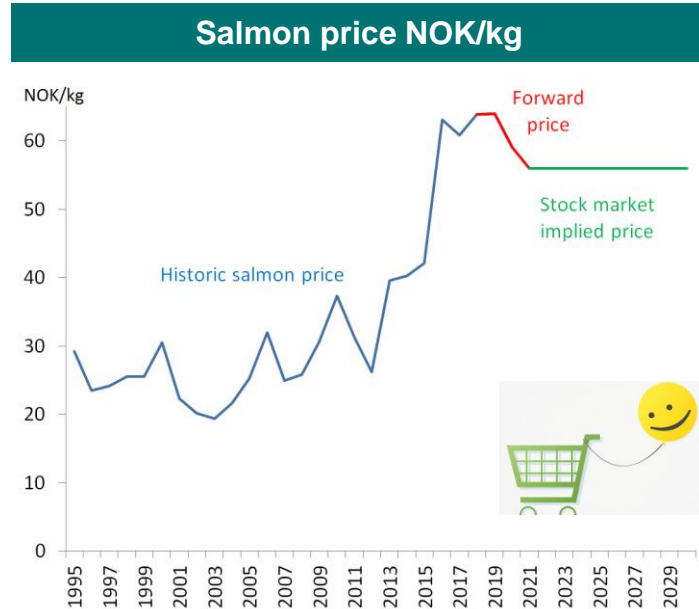


EBIT MHG, NOKm



P/B & EV/kg at new highs on record earnings

Implicit salmon price levels & margins



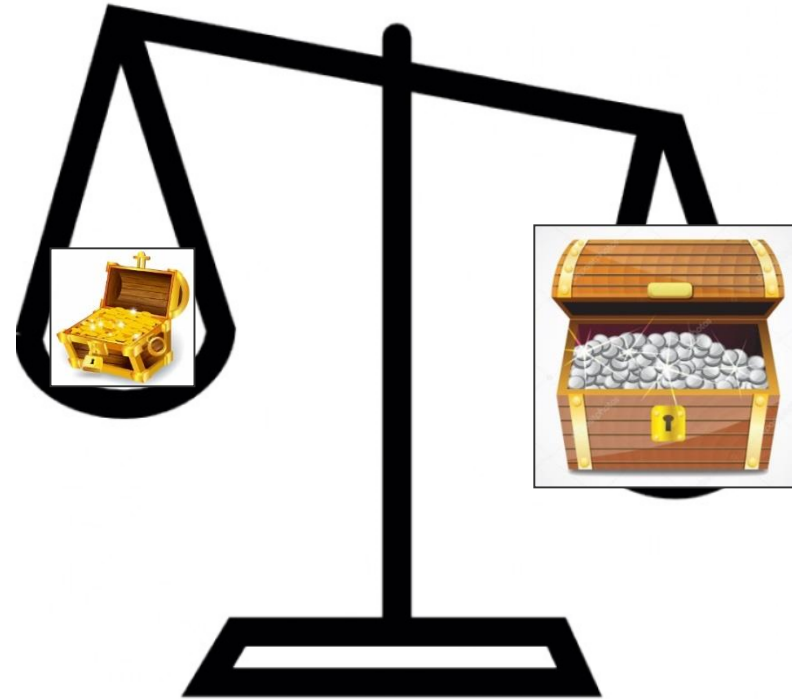
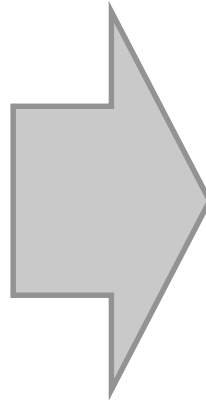
- High prices are not a worry, the market accepts these levels
- High margins could be a worry in that it triggers massive innovation, new players and potential disruptive changes down the road

How to drive value from here?

There is a limit to how high prices can go

Economic value added of 1 mill tons @ NOK/kg 20 margin and 2 mill tons @ NOK/kg 10 could be almost identical if the higher supply cuts license values in half

- 80% of capital employed is the license value, and the license value is a function of the margin..
- If existing players don't do this, the Gov't or new entrants might eat their lunch thru economic rent tax or disruptive technology
- And supply can help build demand..

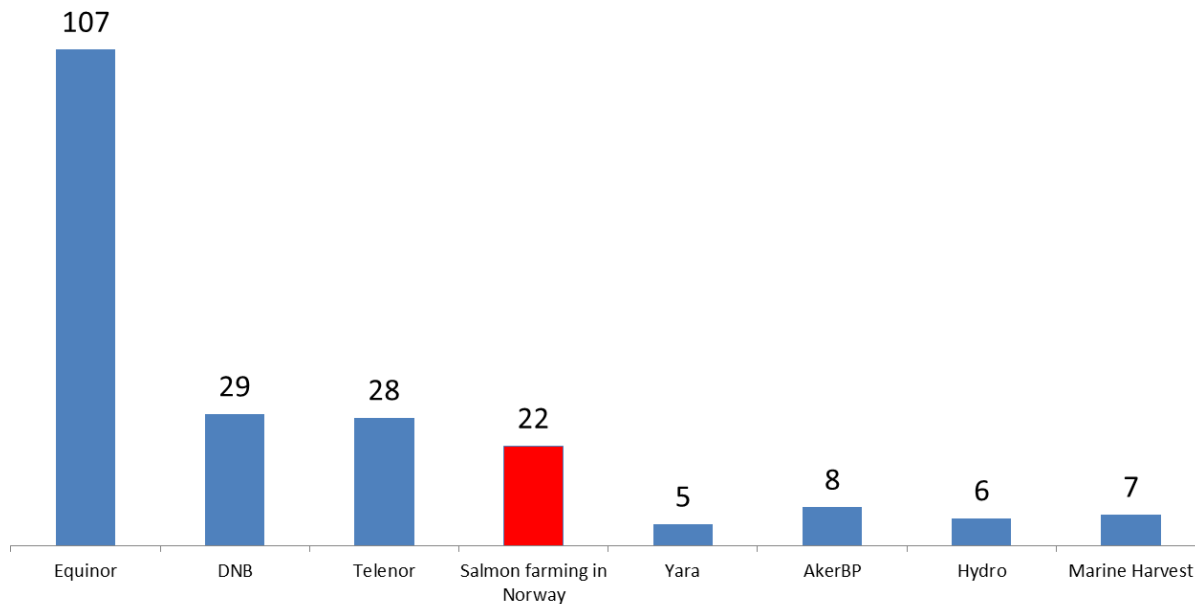


A big chest of silver can be more valuable than a small pot of gold

..the end of the road or room for further growth?

If all salmon farming in Norway was one company, it would not make the top 3 on OSE..

EBIT NOK bn, top 7 OSE companies by Mcap, 2017



Sources: companies, DNB Seafood, Kontali

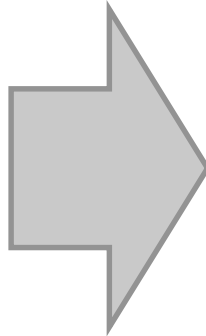
Key issues for the next decade

1. Price
2. Demand
3. Sustainability
4. Supply & Innovation
5. Macro



What sets the price?

*Volume planning
for salmon
farmers in the
current market
environment is
easy*



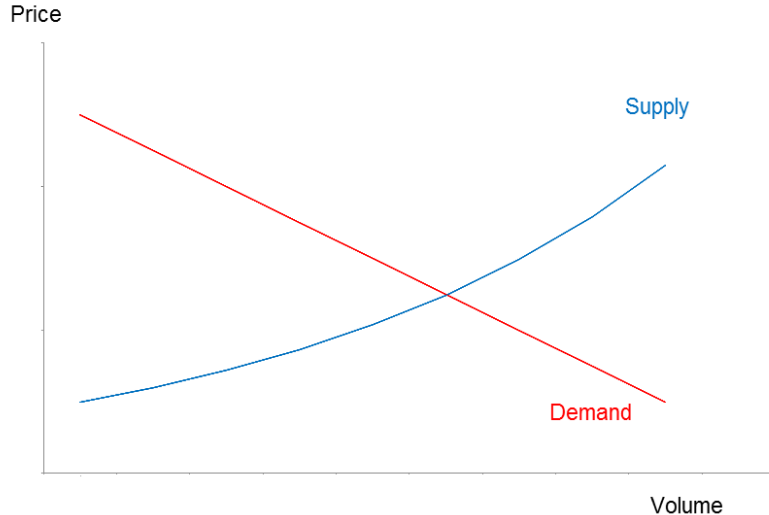
*From Pork Cycle to The Pedal To The Metal: supply doesn't impact prices in a systematic way anymore
(Random biological and weather factors still do)*

DNB Foods & Seafood

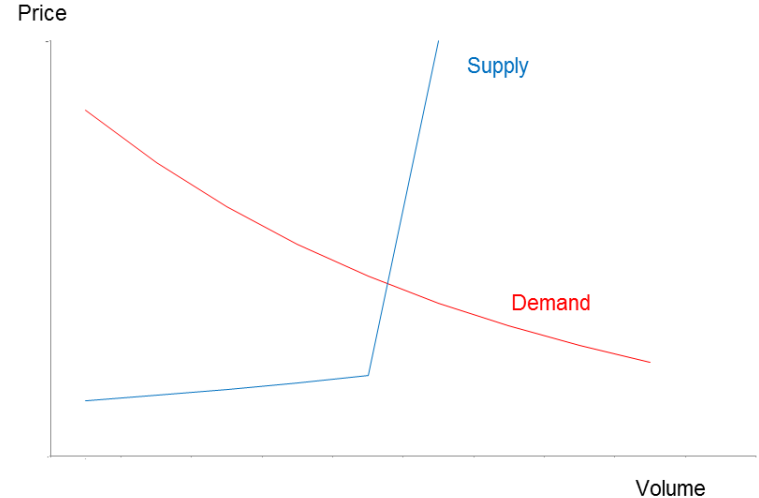
What sets the price?



Old supply curve



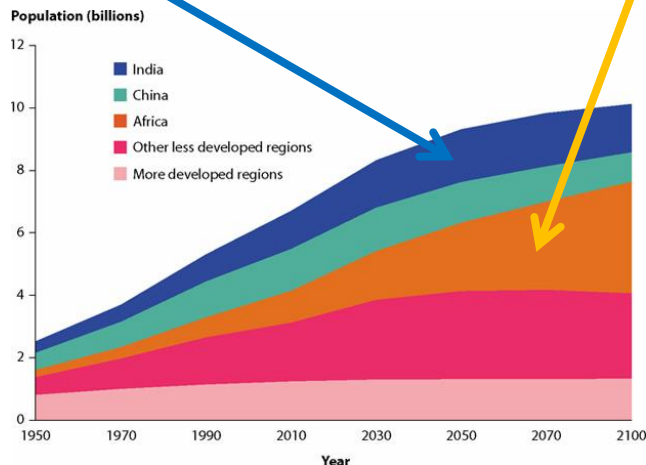
New supply curve



- Until 2012 higher prices meant higher volumes. Not anymore
- Will new technology add capacity high on the supply curve or low?
 - *Oil sand vs shale oil – very different impact on incumbent producers*

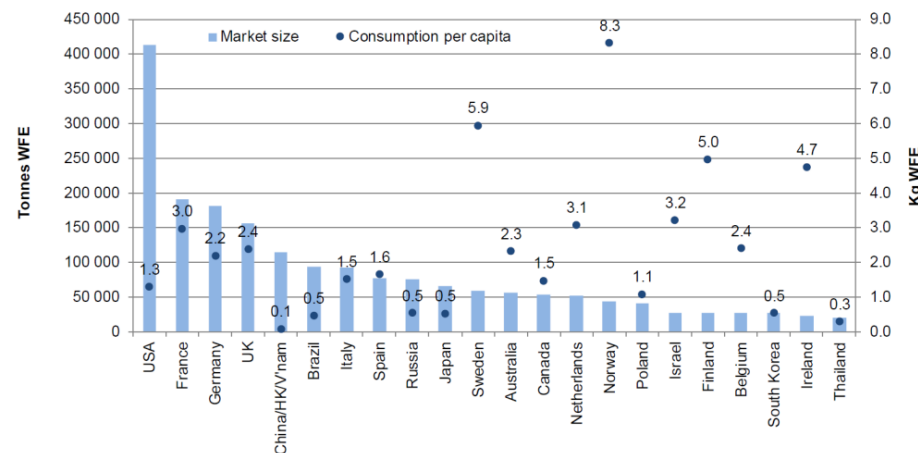
Demand is the new sheriff in town

Population growth is enormous..
but driven by Africa and India & Pakistan.. where
purchasing power and food culture are challenges



Driving consumption per capita has a major potential

Market size and consumption per capita



- Better market segmentation
- E-commerce, new distribution formats, better logistics
- Dark side of the moon, we drown in data for supply but have mostly anecdotes for demand
- Consumption/capita +1.3 kg in Finland last 8 years – same as total in USA...

Sustainability

Changing perception from being a problem to part of the global solution

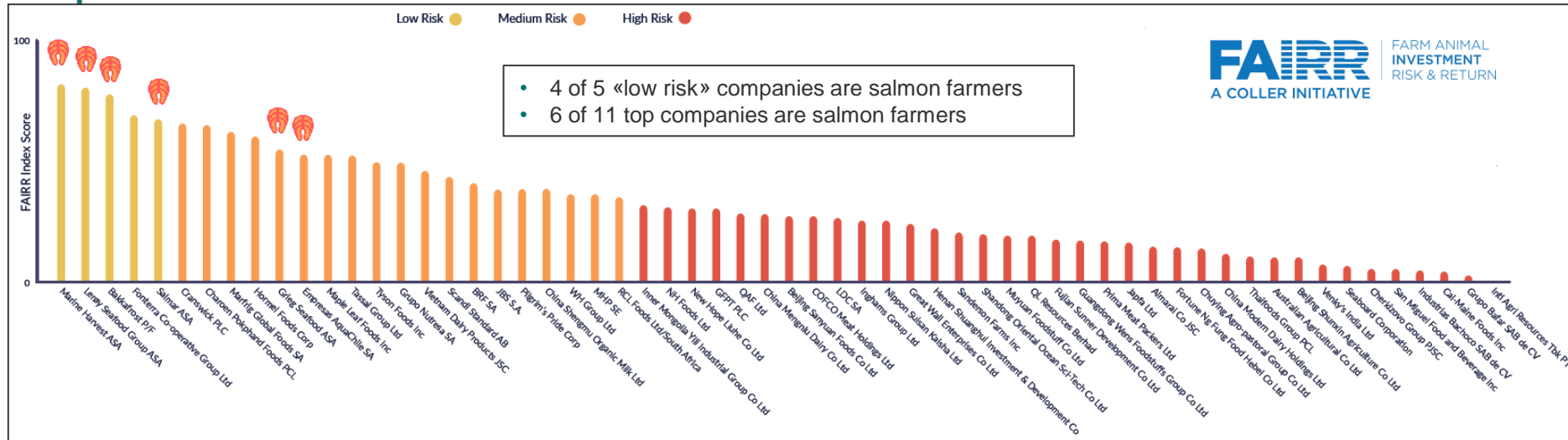
Changing perception from being a problem to part of the global solution

- License to operate and grow
 - Governments
 - Consumer perception
- Improving existing sustainability issues
- Lifting max sustainable production capacity



Salmon is good for the planet!

Salmon farmers top the FAIRR animal protein sustainability index



FAIRR is the world's first comprehensive assessment of the largest global animal protein companies on critical environmental, social and governance issues

New frontiers and technology

- Optimizing & debottlenecking current production
- New territories: Iceland, NE Canada, Chile region XII
- Land based
- Offshore
- Digitalization

3 steps of the digital disruption for newspapers

How will salmon play out in comparison?



Saving cost

Good for almost everybody



Known disruption

Good for some, bad for most as entry barriers lowered



Unknown disruption

Good for very few, bad for everyone else as market totally redefined

DNB

General macro is not important for the salmon market
But growing emerging middle class is



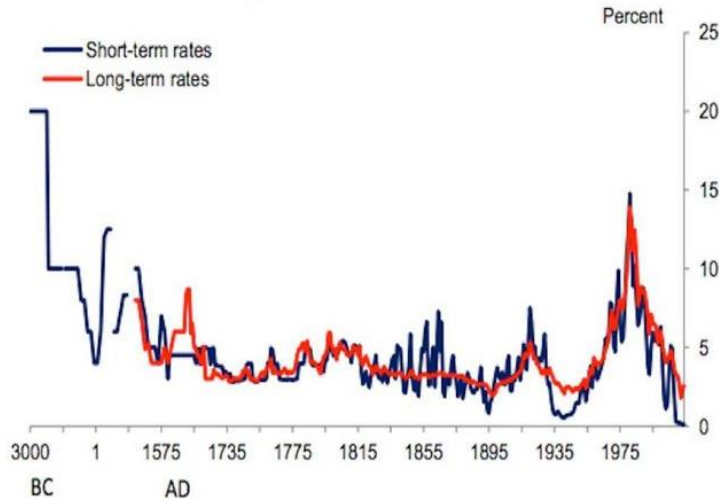
“Normal” trade wars are manageable...
Fresh fish very vulnerable against technical trade barriers

FX major impact on relative regional competitiveness
NOK collapse & USD strength in 2014 major pain for Chile



Two big macro themes

Interest rates at 5000 year low



Interest rates at 5000 year low & biggest monetary policy experiment ever being set in reverse...

Sources: Bank of England

A battle for world hegemony



Current trade tension, protectionism and geopolitical conflict more fundamental than previous decades?

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The force is with you!

“All” the mega-trends in favor of the fish farming industry

An increasing
world
population
needs food

Limited CO2
waste and
water
consumption
vs other animal
production

Growing
middle class in
emerging
markets
demands more
protein

**MAY THE
FORCE
BE
WITH YOU**

Low feed
conversion rate
vs other animal
production

Better grocery
retail supply
chains in
emerging
markets

Higher
educated
population eats
healthier

Ageing
population eats
more fish

Limited volume
potential in
fishing, growth
has to come from
fish farming

Thank you for the attention

