

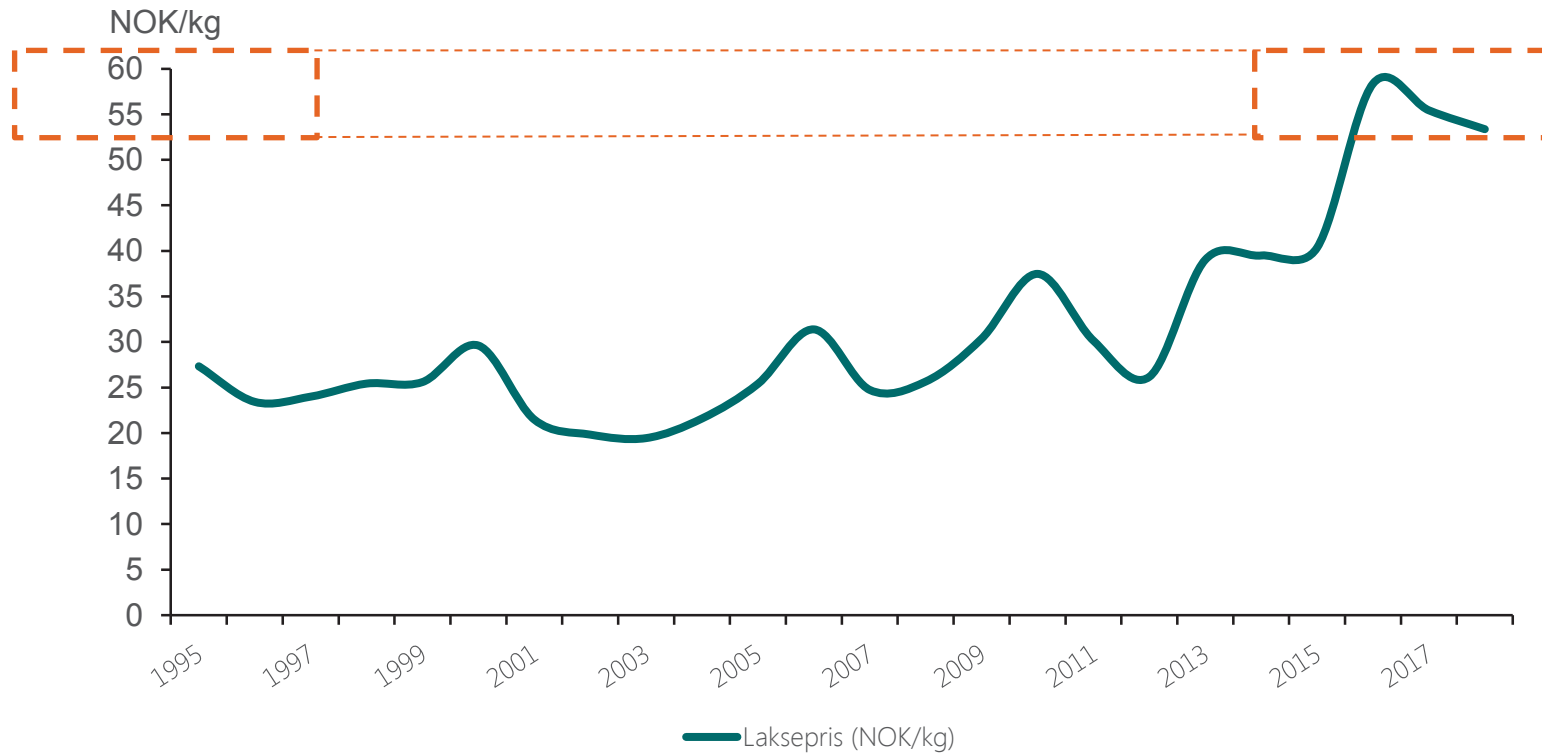
Lakseseminar 29 September

DNB Markets | September 2016

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Vil de rekordhøye lakseprisene fortsette?



JA....

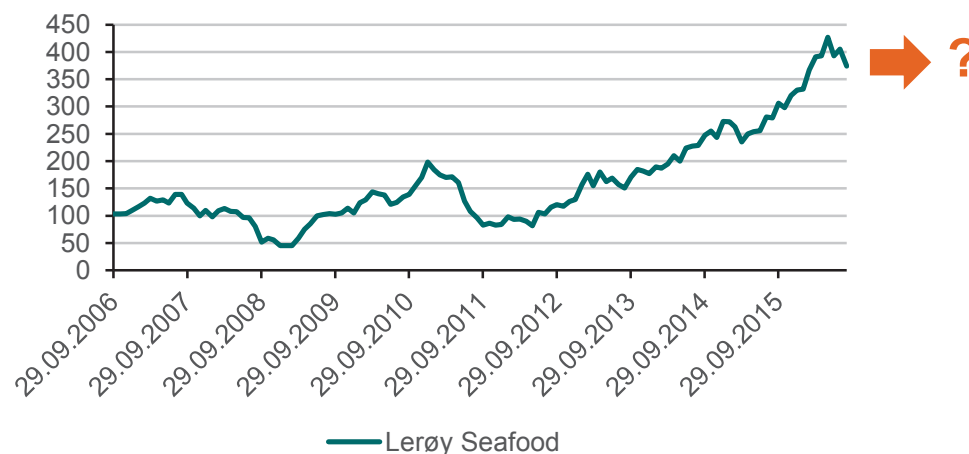
Høye laksepriser vil vedvare

PRIS ESTIMATENE SKAL OPP..

Fordi veksten, om det i det hele tatt blir noe vekst, blir meget begrenset og etterspørselen god

.. HVA MED AKSJEKURSENE?

Vi tror det, men 'lakse-caset' er ikke lenger så svart/hvitt som det var tidligere



Aksjekursen skal opp...

- 1 Volum estimatene skal ned...
- 2 ...da skal forward priser og laksepris estimer opp.
- 3 Høyere priser fører til høyere kurser...
- 4 ...og ingen selskapsspesifikke nyheter ødelegger festen før Q3 i November

...men hvorfor er ikke 'caset' da like enkelt som før?

.. Men det er noen faktorer som forstyrrer

1 Lavere vekst er bra... Ingen eller negativ vekst er derimot er ikke så bra

2 Lavere vekst grunnet biologi = kostnadsdriver

3 “Vinninga går opp i spinninga”

4 Det politisk bildet oppleves som ‘uoversiktig’ mao risikabelt (både i Norge og Chile...)

‘Caset’ ikke like enkelt som før

What volume growth? Accumulated 2016-2018e volume growth revised down 14kt

Figure 21: Change in global supply estimates (000' tonnes)

	New			Old			Change (kt)		
	2016e	2017e	2018e	2016e	2017e	2018e	2016e	2017e	2018e
Norway	1,160	1,195	1,231	1,185	1,232	1,269	-25	-37	-38
UK	171	176	181	171	176	181	-	-	-
Ireland	17	18	19	17	18	19	-	-	-
Faroes	81	81	81	81	81	81	-	-	-
Iceland	6	9	14	6	9	14	-	-	-
Total Europe	1,434	1,478	1,525	1,459	1,516	1,563	-25	-37	-38
Chile	467	486	534	473	463	463	-6	22	71
Canada	138	143	149	138	143	149	-	-	-
USA	21	22	23	21	22	23	-	-	-
Total Americas	626	651	706	632	629	635	-6	22	71
Australia/Other	68	82	98	68	82	98	-	-	-
Total Atlantic	2,128	2,211	2,329	2,159	2,226	2,297	-31	-15	32

Source: DNB Markets

Figure 22: Change in global supply (% YOY)

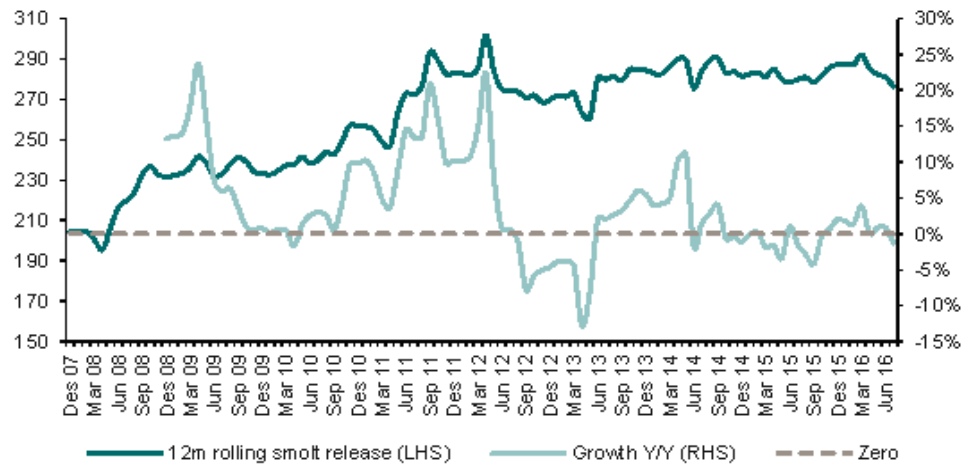
Atlantic salmon supply growth YOY	New			Old			Change		
	2016e	2017e	2018e	2016e	2017e	2018e	2016e	2017e	2018e
Norway growth	-6.0%	3.0%	3.0%	-4.0%	4.0%	3.0%	-2.0%	-1.0%	0.0%
UK growth	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%
Ireland	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	0.0%	0.0%	0.0%
Faroes growth	5.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Iceland	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	0.0%	0.0%	0.0%
Total Europe	-4.2%	3.1%	3.1%	-2.5%	3.9%	3.1%	-1.6%	-0.8%	0.0%
Chile growth	-21.0%	4.0%	10.0%	-20.0%	-2.0%	0.0%	-1.0%	6.0%	10.0%
Canada growth	2.0%	4.0%	4.0%	2.0%	4.0%	4.0%	0.0%	0.0%	0.0%
USA	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	0.0%	0.0%	0.0%
Total Americas	-16.1%	4.0%	8.5%	-15.3%	-0.5%	1.1%	-0.8%	4.5%	7.4%
Australia/Other	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	0.0%	0.0%	0.0%
Total Atlantic (Harvest volumes)	-7.5%	3.9%	5.4%	-6.1%	3.1%	3.2%	-1.3%	0.8%	2.2%

Source: DNB Markets

Norway will disappoint on volume growth in 2016 and probably in 2017 as well....

Norwegian smolt release is falling

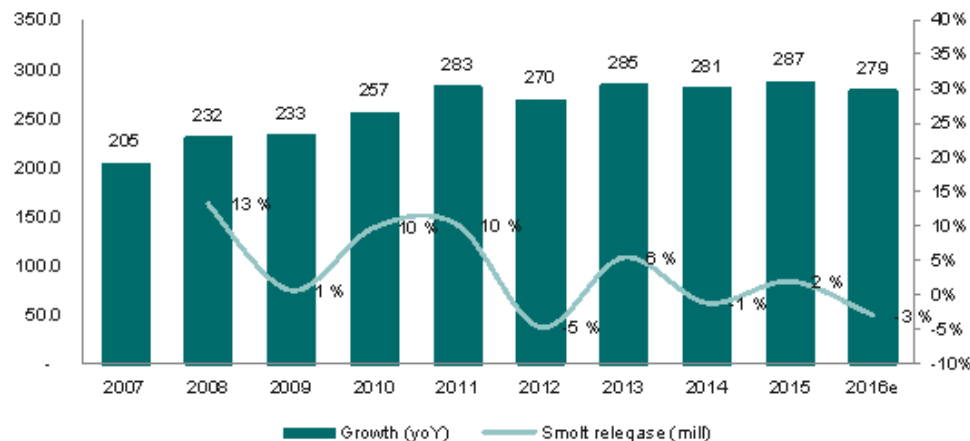
Figure 3: 12-month rolling Norwegian smolt release (mill individuals)



Source: Directory of Fisheries (historical data)

Smolt release YTD is down 4% and 12 month rolling is in negative territory as well.

Figure 4: Norwegian smolt release (mill individuals on calendar basis)



Source: Directory of Fisheries (historical), DNB Markets (forecast)

If no more fish goes into the sea, growth potential appears limited...

Vaccination numbers are declining and mortality rising

Figure 5: Norwegian vaccination numbers (million doses)

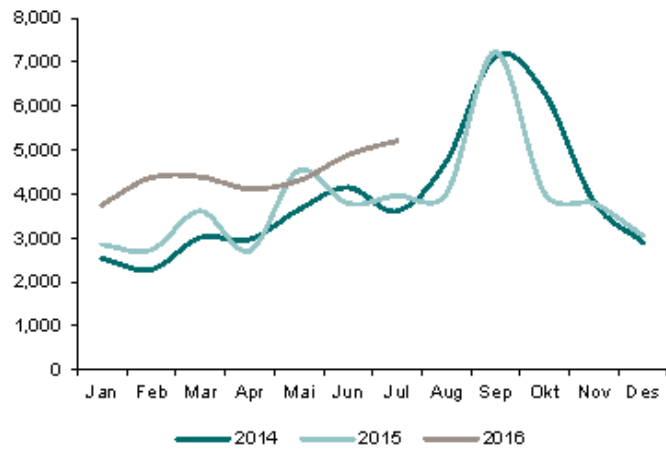


S1+S2 vaccination numbers down 1%
S0 numbers down 4% (151m vs. 158m)

Mortality YTD is 28% above 2015...

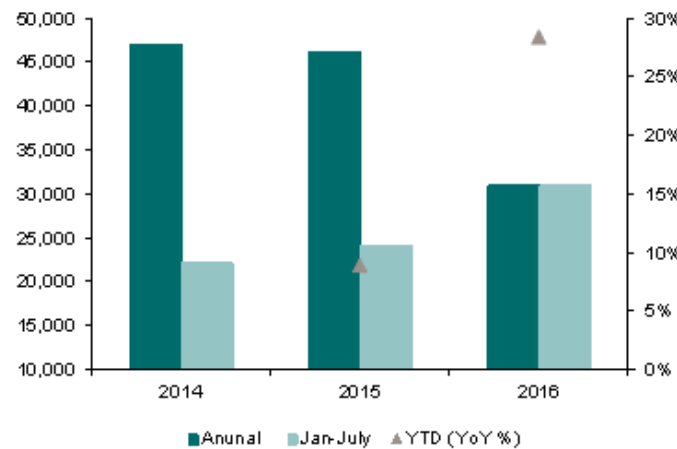
Source: Kontali (historical)

Figure 6: Monthly reported mortality (mill individuals)



Source: Directory of Fisheries (Historical)

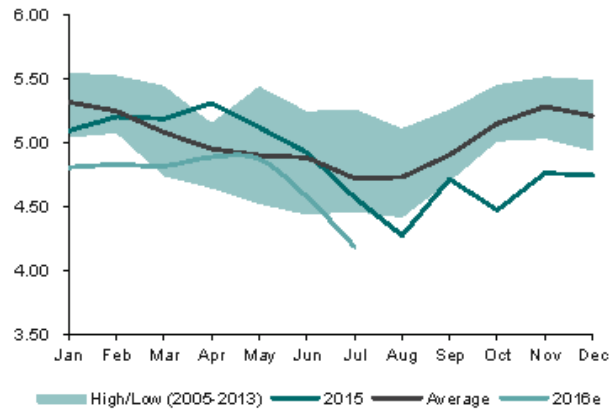
Figure 7: Accumulated mortality (mill individuals)



Source: Directory of Fisheries (historical)

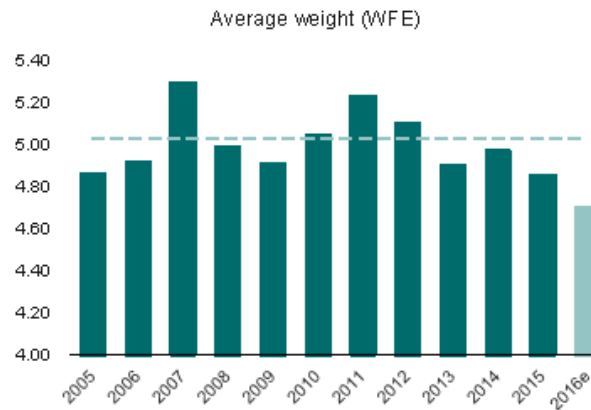
And harvest weights are not rebounding from 2015 low's and feed sales are slowing

Figure 9: Norwegian average harvest size (WFE)



Source: Directory of Fisheries (Historical)

Figure 10: Annual harvest weight (WFE) (2016e is YTD)



Source: DNB Markets (forecast), Directory of Fisheries (historical)

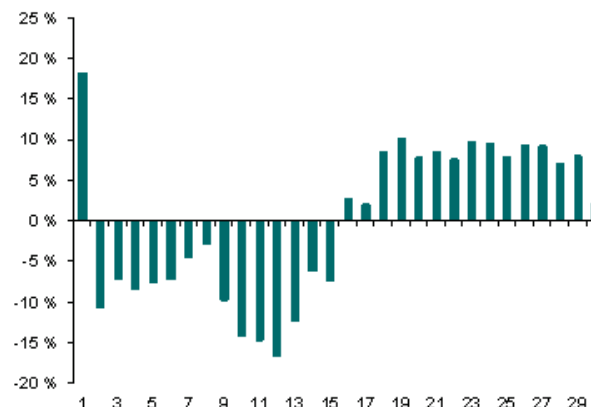
2016 harvest weights likely to be even lower than in 2015

Figure 11: Norwegian weekly feed sales (tonnes per week)



Source: Seafood Norway(historical) Kontali (historical)

Figure 12: 4-week rolling growth in feed sales (YoY %)



Source: Seafood Norway (historical), Kontali (Historical)

Feed sales have slowed down rather than accelerated...

Where have the missing fish gone?

Figure 11: Norway – Smolt-in/ smolt-out model

	2009	2010	2011	2012	2013	2014	2015	2016e	2017e
Mill fish available for harvest (18month prod cycle)	216	232	238	273	275	280	275	278	281
Reported Loss (mill fish)	42	45	53	42	40	47	46	47	48
Mortality (% of total available)	20%	19%	22%	15%	15%	17%	17%	17%	17%
No. individuals available for harvest post loss (mill)	174	187	185	231	235	233	229	231	233
No of individuals actually harvested (mill)	174	181	188	231	226	243	256	231	239
Over/under harvesting (% of available)	0%	3%	2%	0%	-4%	4%	12%	0%	2%
Over/under harvesting (mill)	-0	-6	3	-0	-9	9	27	-	6
Harvest Size (HOG)	4.44	4.56	4.73	4.61	4.44	4.50	4.39	4.50	4.50
Harvest Size (WFE)	4.93	5.07	5.25	5.12	4.93	4.99	4.88	5.00	5.00
Harvest volume (WFE)	856	917	987	1,181	1,112	1,212	1,248	1,154	1,193
Growth (YOY%)		7%	8%	20%	-6%	9%	3%	-7%	3%

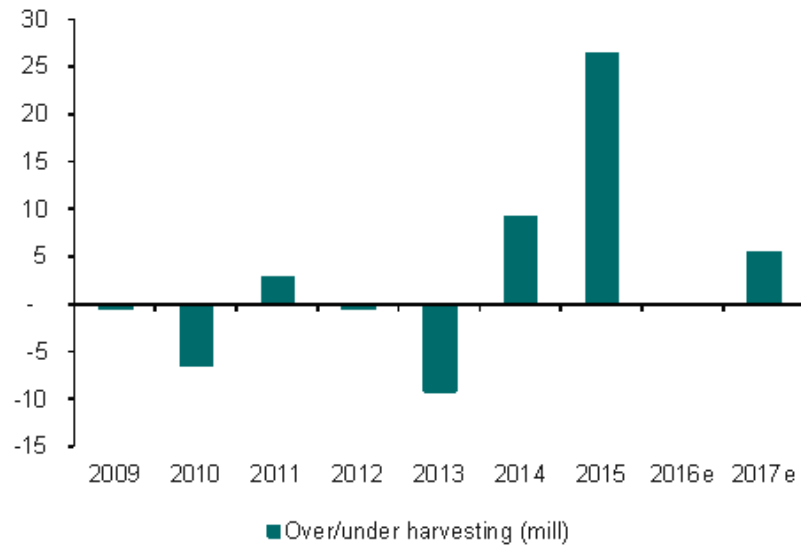
Source: DNB Markets (forecast) Directory of Fisheries (historical)

- Did we ‘overharvest’ 27million individuals in 2015 which should be harvested in 2016?
- The results are evident in lower number of harvested individuals YTD (Jan-July down 5.8mill) but that still means we are missing 21million individuals for the remaining 5months of 2016?
- Are we going to steal them from 2017 harvest or will 2016 volumes be much lower than expected?
- Or are the input numbers just wrong?
- Model may be crude, but worked fine between 2009-2014 though...

*This model suggest -7%
...and that is using optimistic
assumptions on mortality and
harvest weights...*

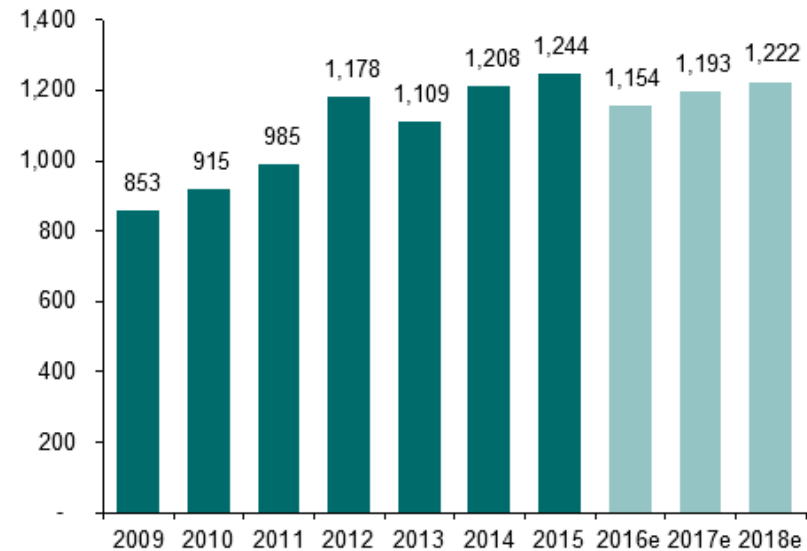
Where have the missing fish gone?

Figure 12: Over/under harvest (million individuals)



Source: DNB Markets

Figure 13: Implied Norwegian supply (000 tonnes, WFE)



Source: DNB Markets

It look's like we overharvested 27million individuals in 2015, but next two years will still lag behind 2015 production volumes

Smolt yield model in Norway suggest -6% in 2016 and 3% pa in 2017-2018e

Figure 14: Norway - Smolt yield model

	Smolt release (m)	Fish harvest (m)	Mortality (%)*	WFE (kt)	Supply growth (YOY)	Smolt yield (kg/release)	Harvest weight (kg)
2013	275	226	-18%	1,143		4.2	5.1
2014	280	243	-13%	1,199	5%	4.3	4.9
2015	275	256	-7%	1,234	3%	4.5	4.8
2016e	278	239	-14%	1,161	-6%	4.2	4.9
2017e	281	244	-13%	1,197	3%	4.3	4.9
2018e	289	252	-13%	1,233	3%	4.3	4.9

Source: DNB Markets (forecast), Directory of Fisheries (historical)

1. We argue the smolt yield in 2015 was artificially high as the harvested volume includes tonnage from the 'stolen' 2016 individuals, hence 2015 volumes includes some 2016 tonnes.
2. The low estimated 2016 smolt yield is the price farmers pay for the 'stolen 2016 fish'
3. We suspect farmers continue to 'poach' on next years volumes in order to weight up for the current years deficit. This will pump up smolt yield, but reduce harvest weights.

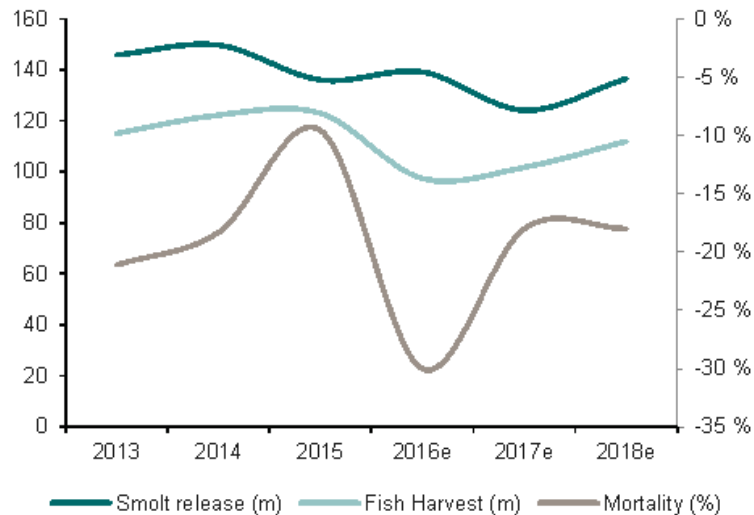
Smolt yield model in Chile suggest -21% in 2016, 4% growth in 2017 and 10% in 2018e

Figure 17: Chile – smolt yield model

	Smolt release (m)	Fish Harvest (m)	Mortality (%)	WFE (kt)	Supply growth (YOY)	Smolt yield (kg/release)	Harvest Weight (kg)	Normal mortality (m)	Extr. ord. algae loss (m)
2013	146	115	-21%	493		3.4	4.3		
2014	150	122	-18%	587	19%	3.9	4.8		
2015	136	123	-10%	591	1%	4.4	4.8		
2016e	139	97	-30%	468	-21%	3.4	4.8	118	21
2017e	124	102	-18%	488	4%	3.9	4.8	105	4
2018e	137	112	-18%	537	10%	3.9	4.8		
YTD 2016	83	61	-27%	283		3.4	4.6		

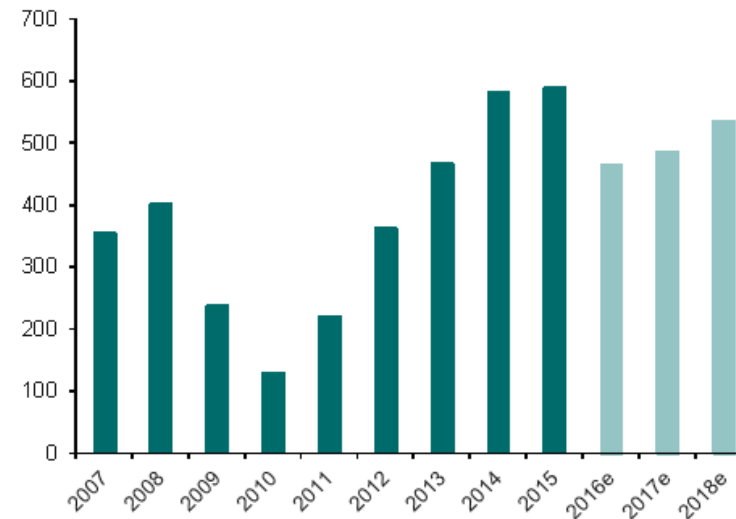
Source: DNB Markets (forecast), Aquabench (historical)

Figure 18: Chilean smolt release, harvest volumes and mortality (million individuals)



Source: DNB Markets (forecast), Aquabench (historical)

Figure 19: Chilean supply growth (000 tonnes, WFE)



Source: DNB Markets (forecast), Kontali (historical)

2018e volume still below 2015...

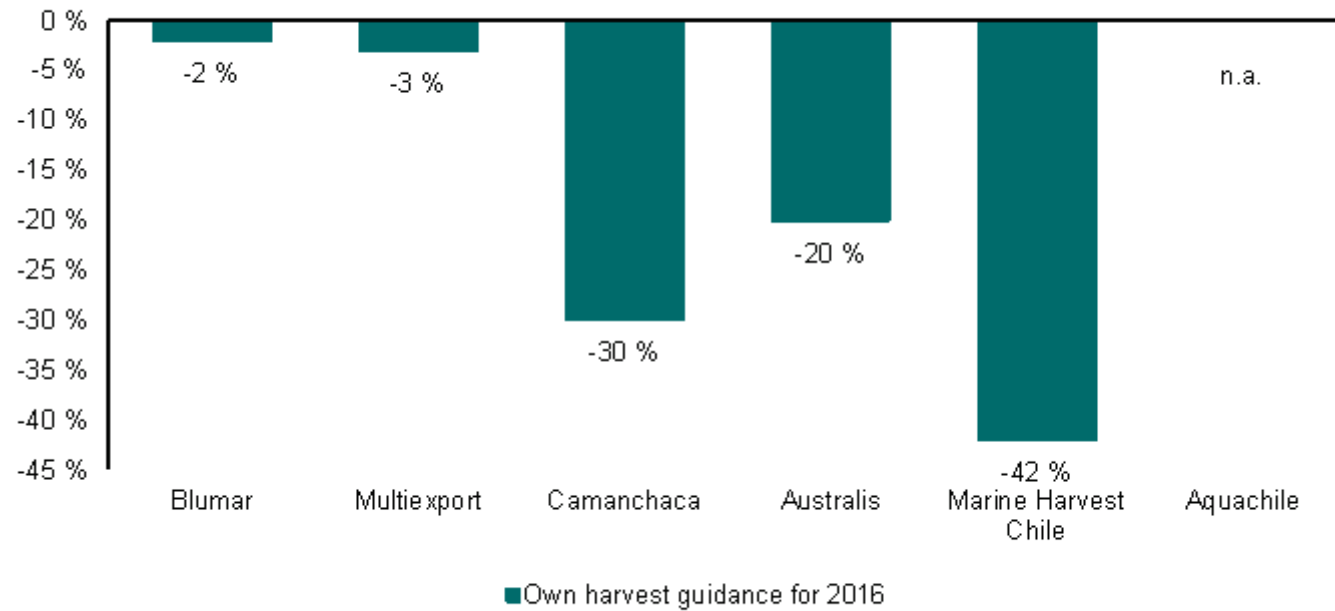
Why should Chilean volume rebound be lower this time around?

- 1 Access to capital should be harder (banks and feed companies in particular)
- 2 New regulations should dampen the possibility for short term volume spikes
- 3 The industry must have learned something the last 10 years...?

Chilean growth will come, but not to the same extent as in 'the old days'

Listed Chilean companies guide for high material decline in 2016

Figure 20: Chilean companies own 2016 volumes guidance



Source: Company reports