

# Contract strategy and risk in the Salmon market

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# Risk Advisory assists customers in managing financial risk, focusing on fixed income, currency and commodity exposure

## Risk Advisory - services

### Risk management for Non-financials

- Managing interest rate, currency and commodity risk
  - Assessment and quantification of exposure
  - Establish hedging policy
  - Tailored hedging solution
- Advise on derivatives pricing, new regulations, counterparty risk, CSA and liquidity risk

### Risk management for Financials

- Focus on banks, life and pension
- Effects of Solvency II and Basel III
- Strategic asset allocation, portfolio construction and risk management
- Establish financial policy and internal guidelines
- Solutions adapted to financial conditions, market conditions and clients financial position

### Courses and seminars

- Education programs on interest rates, FX and commodities for clients and bank employees:
  - Interest rates and FX seminar held since the 1980s
  - Commodities seminar since 2010
  - Markets, products and risk mgmt.
- Speakers at numerous courses and seminars

## FICC - Products and services

### Foreign Exchange

Full range of FX products in order to tailor solutions to specific needs and take control of FX risk exposure

### Interest rates

Interest rates execution covering all major interest rate markets

### Commodities

Serves corporate clients of DNB Bank ASA globally with advisory, market analysis, hedging, and origination within commodities

### Risk Advisory

Tailored Advisory services for FX, interest rate and commodity exposure for both corporate and institutional clients

### Fixed income

Norway's leading fixed income sales and trading desk delivering bonds, CP and derivatives

### Research

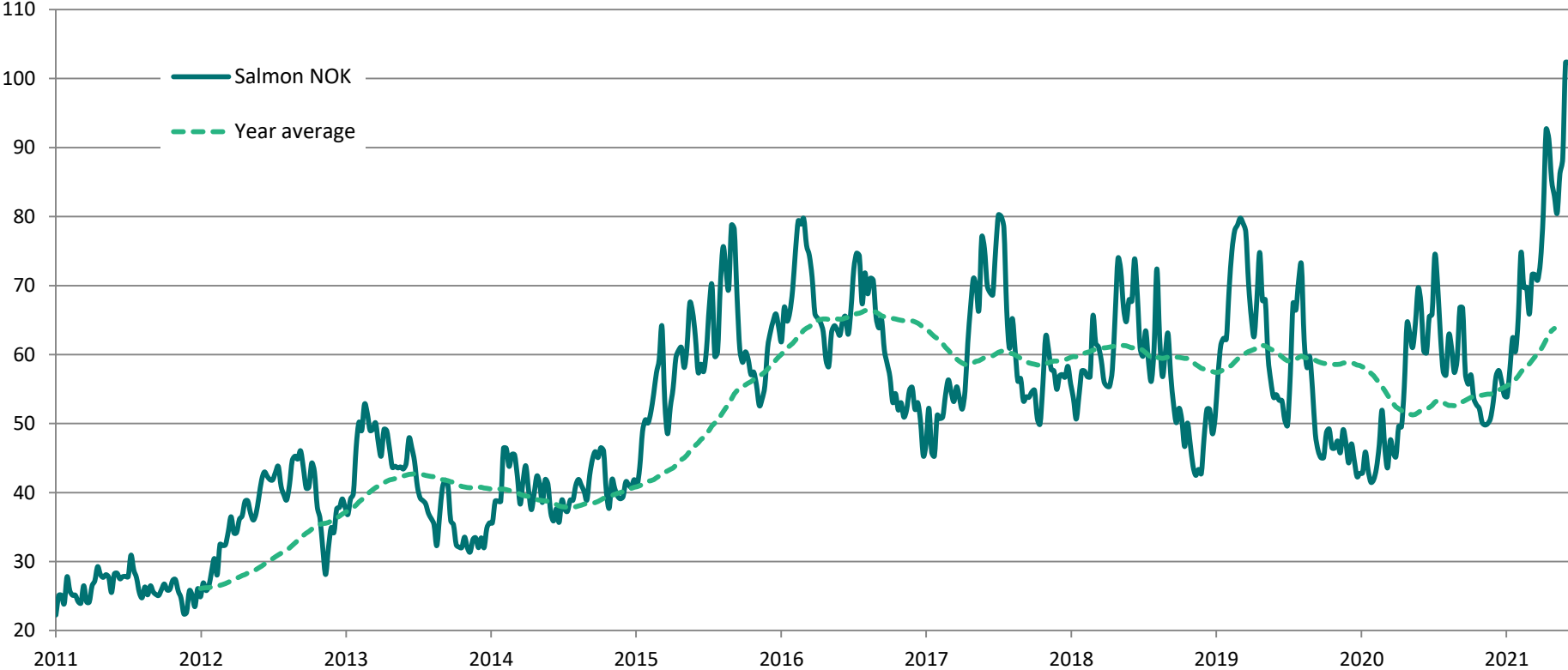
Fundamental insights for clients in FX, interest rate, credit and commodities markets

## Services related to derivatives and risk management

|                         |                            |                   |                                          |
|-------------------------|----------------------------|-------------------|------------------------------------------|
| Finance policy          | Accounting                 | Cash Flow at Risk | Portfolio model interest rates           |
| Trading on credit lines | Credit Support Annex (CSA) | Regulations       | Counterparty risk in bilateral contracts |

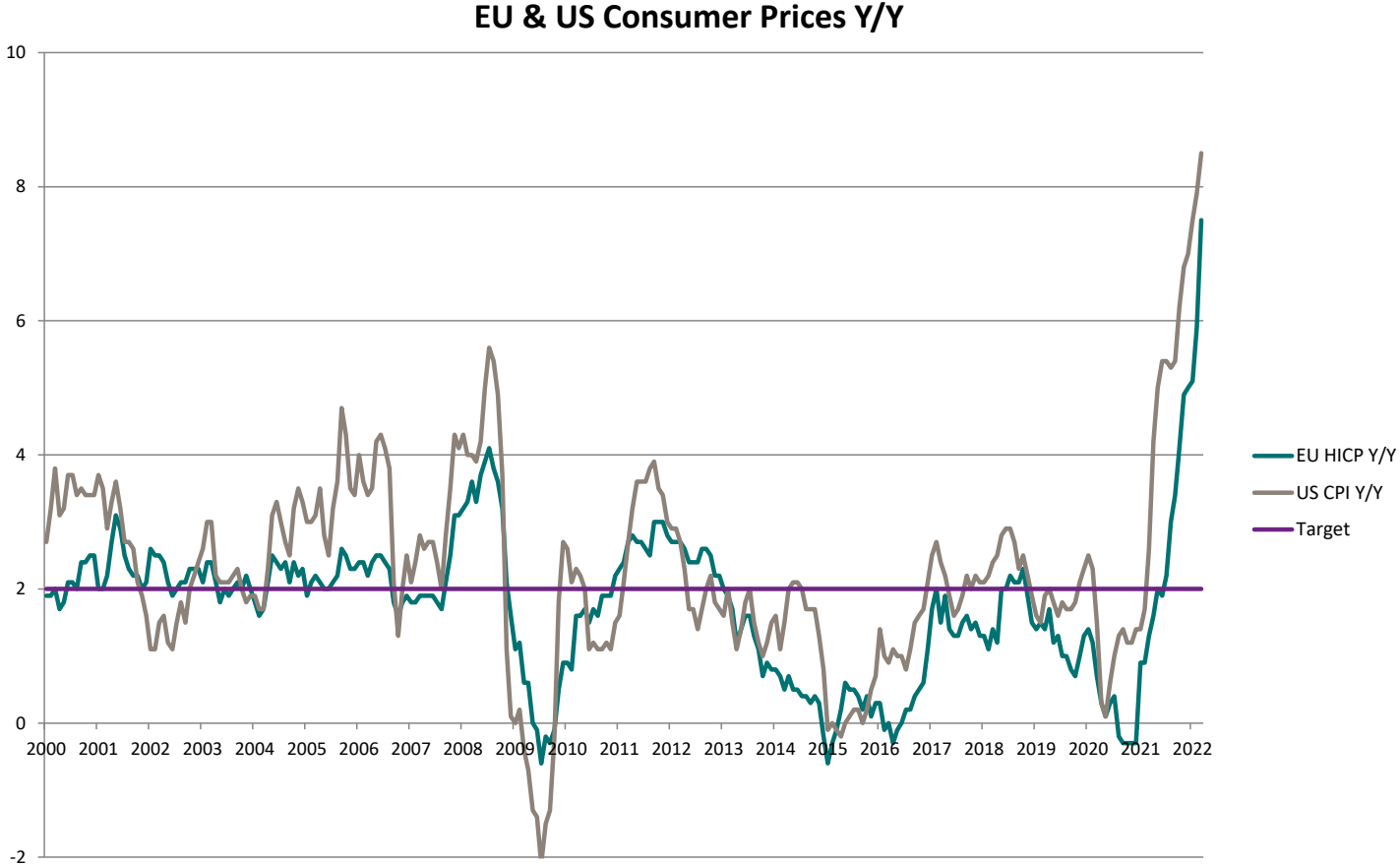
# Development in the spot price

## Salmon Fresh Guttet Spot: Fish Pool Index



Source: Bloomberg / DNB Markets

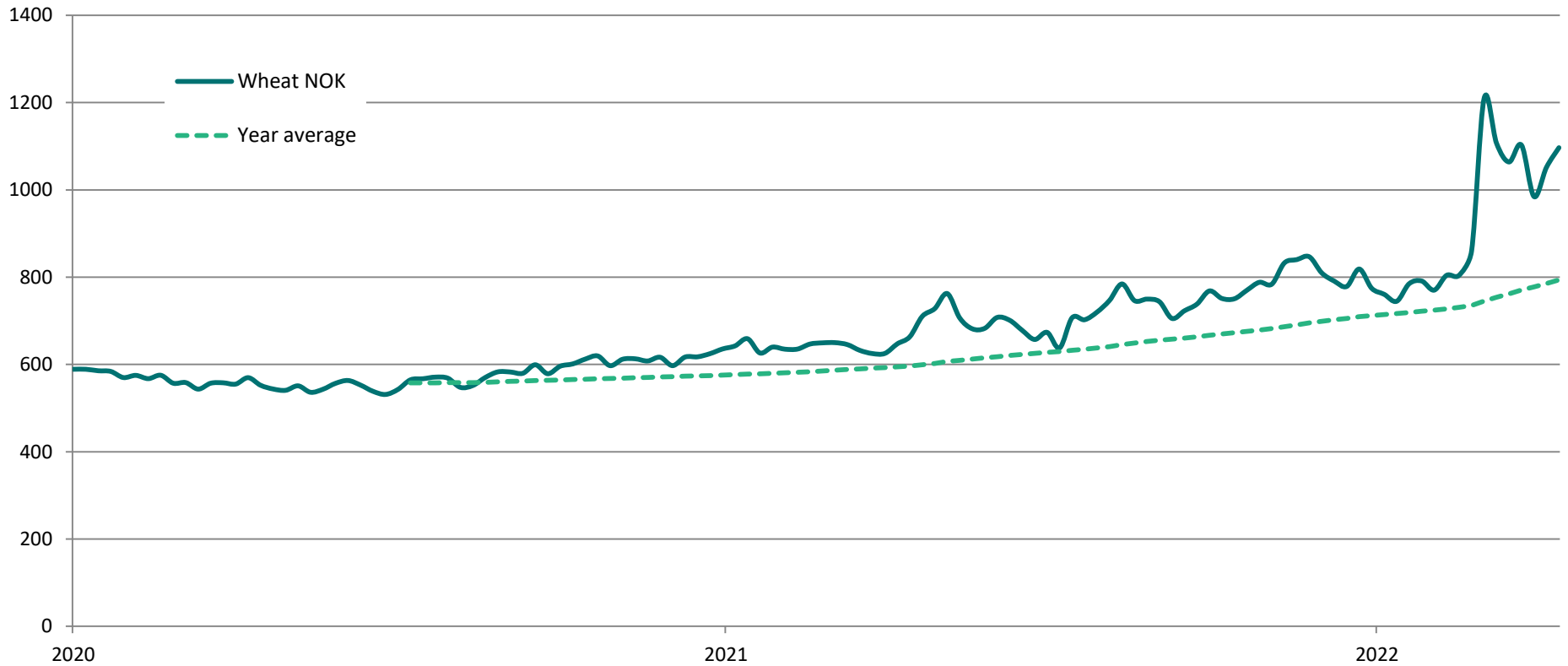
# Inflation is high in USA and the EUR zone



Source: Bloomberg / DNB Markets

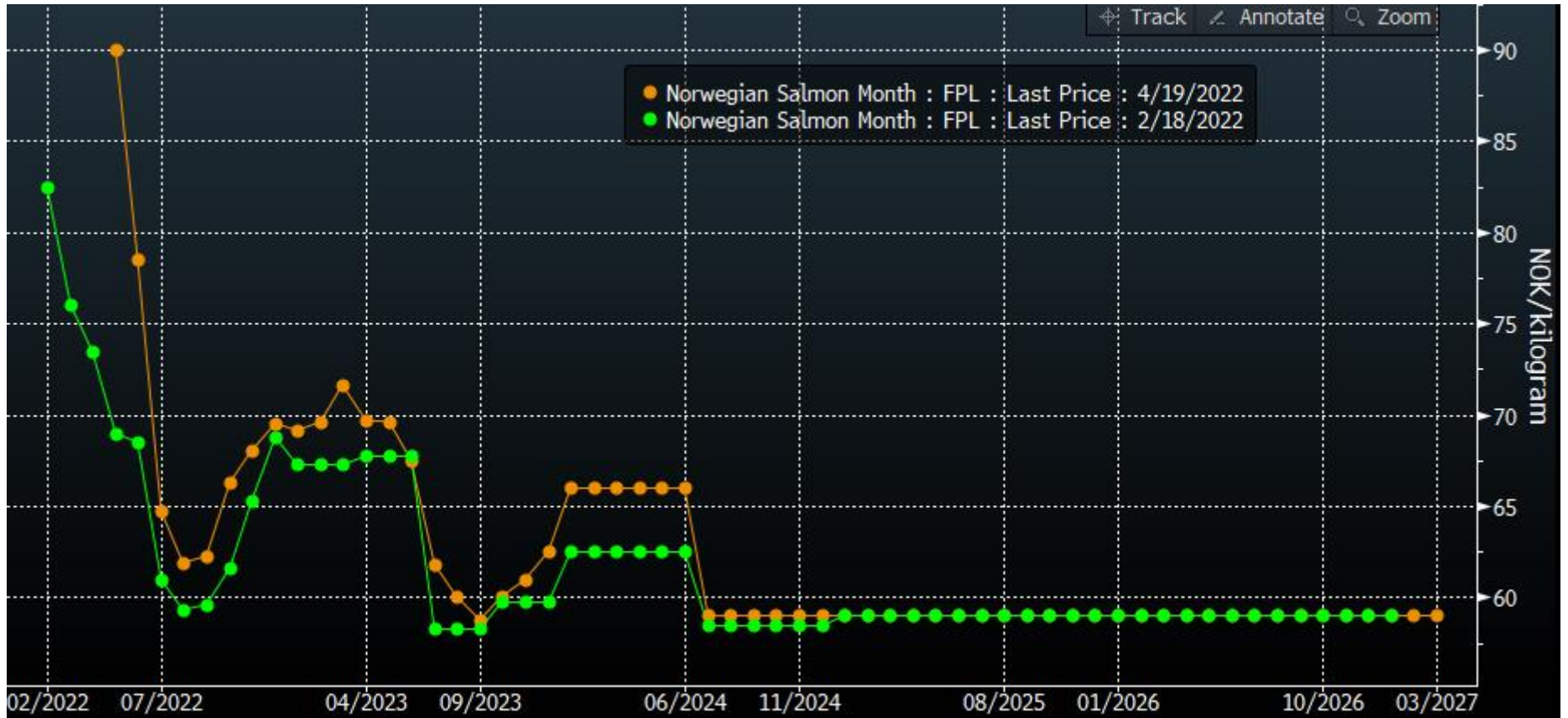
# Others food prices are going sky high

## Wheat CBT 2 month - USD pr Bushell



Source: Bloomberg / DNB Markets

# Only limited movement on the Salmon Forward @ Fish Pool



# The Salmon farmers are not selling

## Trading screen

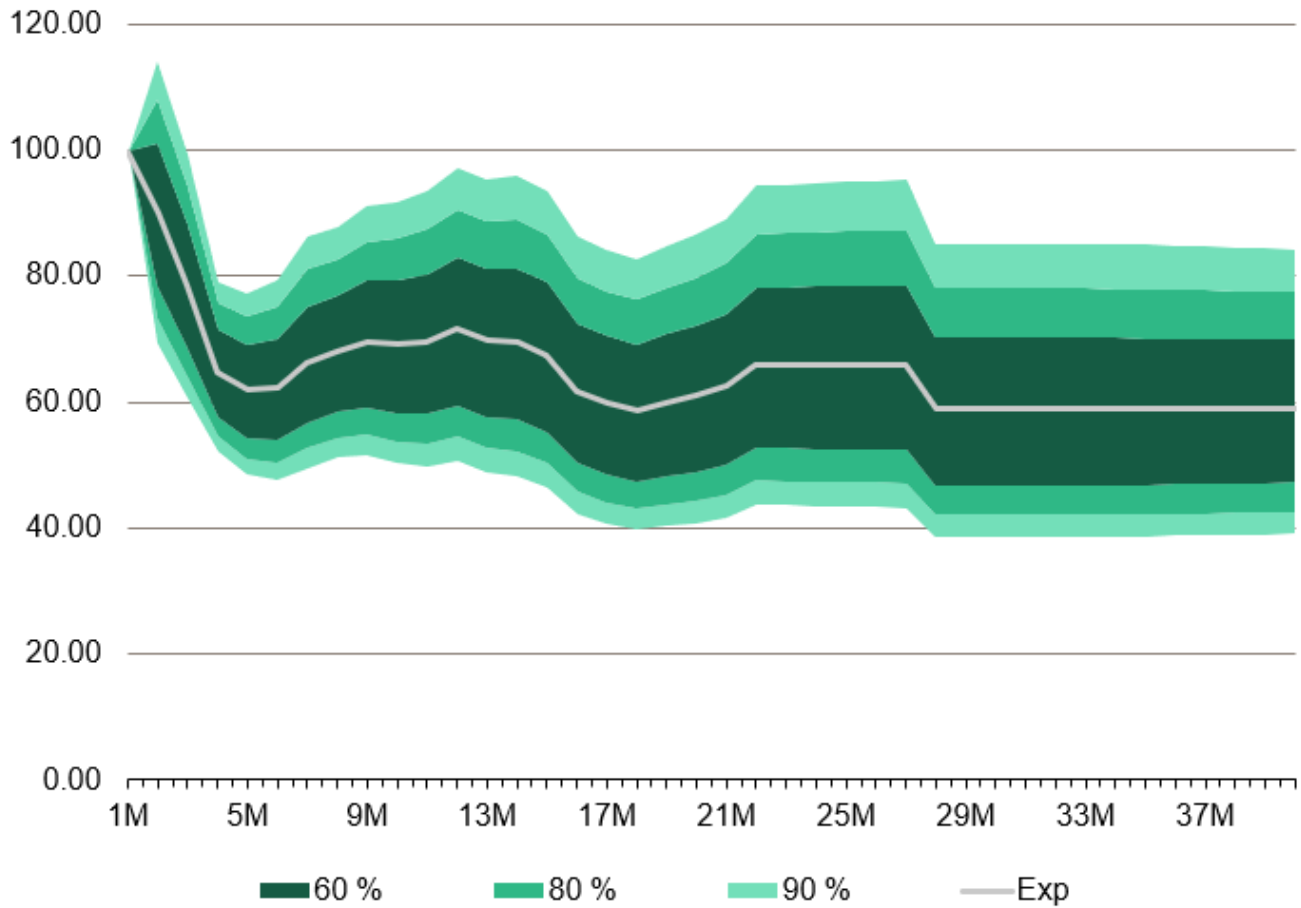
Standards ▾

| + Period                  | Tons/month | Price buy | Price sell | Tons/month | Last  | Close    |
|---------------------------|------------|-----------|------------|------------|-------|----------|
| Apr-22<br>Weeks 14-17     | -          | -         | -          | -          | -     | → 101,75 |
| May-22<br>Weeks 18-21     | 200        | 72,50     | -          | -          | -     | → 90,00  |
| + Jun-22<br>Weeks 22-26   | 200        | 68,00     | -          | -          | -     | → 78,50  |
| Q2-22<br>Weeks 14-26      | 20         | 81,00     | -          | -          | 87,50 | → 90,08  |
| Q3-22<br>Weeks 27-39      | 10         | 62,50     | -          | -          | -     | → 62,95  |
| Q4-22<br>Weeks 40-52      | 10         | 67,00     | -          | -          | -     | → 67,92  |
| Q1-23<br>Weeks 1-13       | -          | -         | -          | -          | -     | → 70,10  |
| + Q3+Q4-22<br>Weeks 27-52 | 160        | 65,00     | -          | -          | -     | → 65,43  |
| Q1+Q2-23<br>Weeks 1-26    | -          | -         | -          | -          | -     | → 69,52  |
| Q3+Q4-23<br>Weeks 27-52   | -          | -         | -          | -          | -     | → 60,68  |
| Q1+Q2-24<br>Weeks 1-26    | -          | -         | -          | -          | -     | → 66,00  |
| + Y2023<br>Weeks 1-52     | 100        | 65,00     | -          | -          | -     | → 65,10  |
| Y2024<br>Weeks 1-52       | -          | -         | -          | -          | -     | → 62,50  |

Fish Pool: Market interest at 20. april 2022 @ 10.45

# What is the price risk in the Salmon market?

**Salmon Fish Pool**      1M: 99.7500      Vol -1Y: 19.75 %      Date 20.04.2022

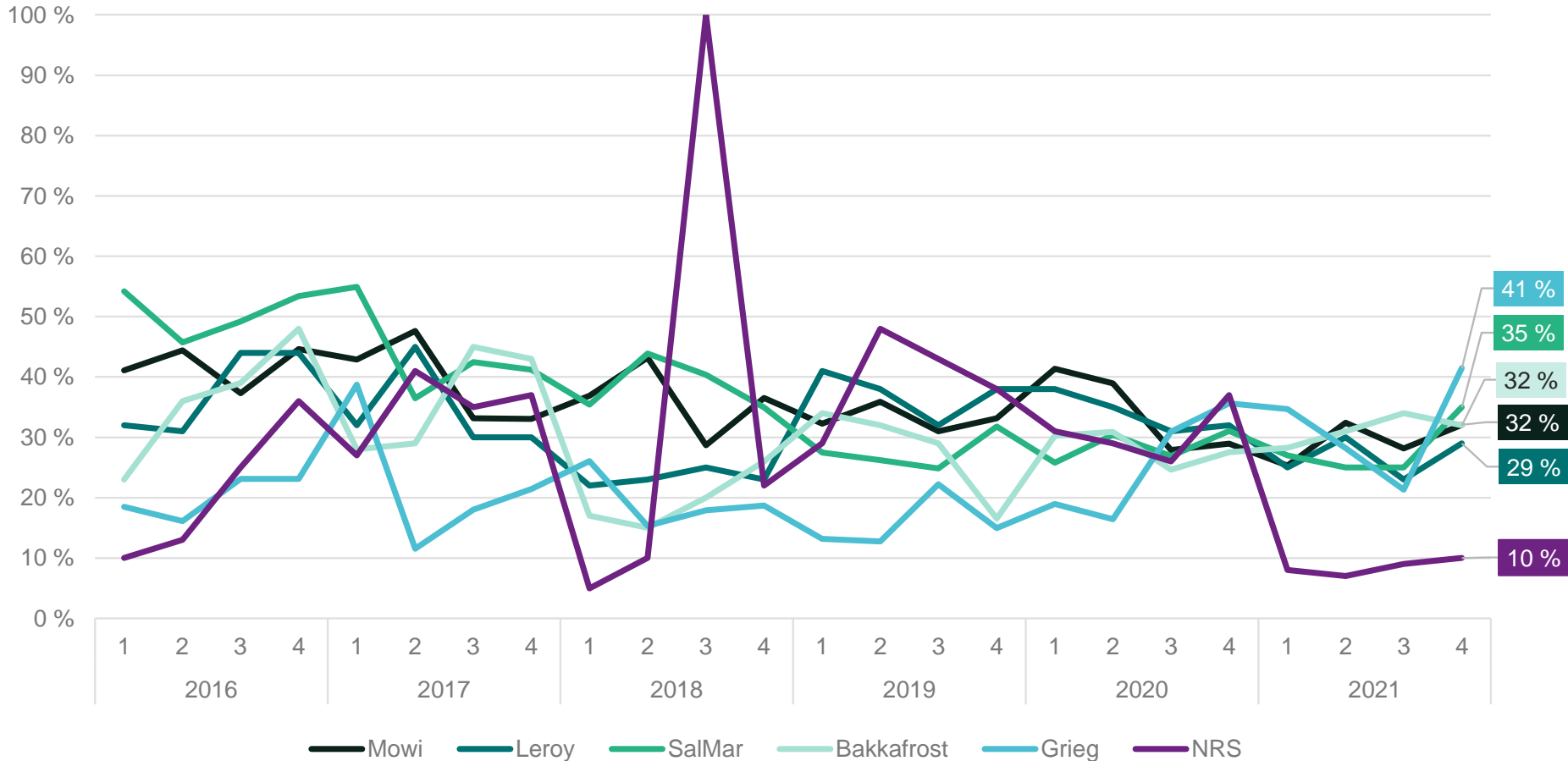


But the forward prices can not be trusted, since there are hardly any sellers in the market.



# Risk management strategy: Farmers

## Share of production sold on fixed price



# Risk management strategy: Salmon Farmers

| Company    | Policy on fixed price contracts |             | Historical average* 2016-2021 | Historical average* 2020-2021 |
|------------|---------------------------------|-------------|-------------------------------|-------------------------------|
|            | Share of volume and maturity    |             |                               |                               |
| Mowi       | 20-50%                          | 3-12 mnths  | 36%                           | 32%                           |
| SalMar     | Undisclosed                     | Undisclosed | 36%                           | 28%                           |
| Bakkafrost | 40-50%<br>(all VAP)**           | 6-12 mnths  | 30%                           | 30%                           |
| Lerøy      | Undisclosed                     | Undisclosed | 32%                           | 30%                           |
| Grieg      | 20-50%                          | Undisclosed | 22%                           | 28%                           |
| NRS        | 0-40%                           | 3-12 mnths  | 28%                           | 20%                           |

- All companies hedge against fluctuations in salmon prices, either via fixed-price contracts and / or financial derivatives on Fish Pool.
- Historically, all companies have sold 30-40% of harvested volume within a quarter via fixed-price contracts and / or financial derivatives
- The companies often have a policy / strategy that allows up to 12-month contracts.

\* Average share of sales at a fixed price last quarter

\*\* Value-added products

## Risk management strategy: Buyers, VAP and currency hedging

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- Buyers:
  - Strategies not visible. Fish Pool interest indicates strategies about equivalent to the Farmers.
- VAP:
  - Challenging position – the optimal strategy would be to have equal fixed share and maturity on buy side and sell side.
- Currency Hedging:
  - Use the same hedging profile on currency as the salmon hedging, if you have currency risk...

## Avoid the pitfall!

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- When negotiating: Do you offer the counterparty a fixed price and volume with a week to accept?
- Such an offer has great value for the one that can choose to accept or not after one week.
- In the financial market, we can price this type of offers, or options as we name them.
  
- What is the value?
  - One week option
  - Implied volatility: 35% (Salmon implied volatility might be even higher)
  - Value of the option contract: 1,94% of the contract value.

# DNB Markets wishes for more turnover at Fish Pool

| Company<br>Oslo<br>Stock<br>Exchange | Harvest Volum<br>Norway (GWT)<br>2020 | Harvest Volum<br>Global (GWT)<br>2020 |
|--------------------------------------|---------------------------------------|---------------------------------------|
| Mowi                                 | 262 016                               | 439 829                               |
| Lerøy                                | 170 849                               | 182 900                               |
| SalMar                               | 150 300                               | 161 535                               |
| Grieg                                | 49 962                                | 86 847                                |
| Bakkafrost                           |                                       | 85 686                                |
| Måsøval                              | 16 253                                | 16 253                                |
| <b>Sum</b>                           | <b>649 380</b>                        | <b>973 050</b>                        |

- In many other Markets, the Financial products have larger turnover than the physical market?
- The volume on the left is from selected listed companies.
- The exported volume from Norway on fresh salmon in 2021: **1 047 277 tonnes**
- Today's topic in the bar: How to increase the volume?

Average Fish Pool volume: about 80 000 tonnes pr year

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