



AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY



Review and Outlook Inputs and Crops



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Outlook 2022 Conference
Webinar December 7th, 2021

Overview

■ 2021 Inputs and Crops

- Where we are now in terms of the farm gate
 - » Input costs, yields, price, gross and net margin



■ 2022 Inputs and Crops

- Where we are going in terms of the farm gate
 - » Input costs, yields, price, gross and net margin



Inputs Review and Outlook



An open notebook with lined pages is shown. A pair of black-rimmed glasses is placed on the left page. A silver and black pen lies on the right page. An inset image is placed on the left page.

20 21
20 20

Inputs 2021 (Price > volume change)



Fertiliser

↑ **Price**
+ 10 %

↑ **Volume**
+ 5% in aggregate



Fuel

↑ **Price**
+29% green
+13% white
farm gate



Electricity

↑ **Price**
+ 10%



Feed

↑ **Price**
+ 16%

↑ **Volume**
+ 8% in aggregate



Total Costs

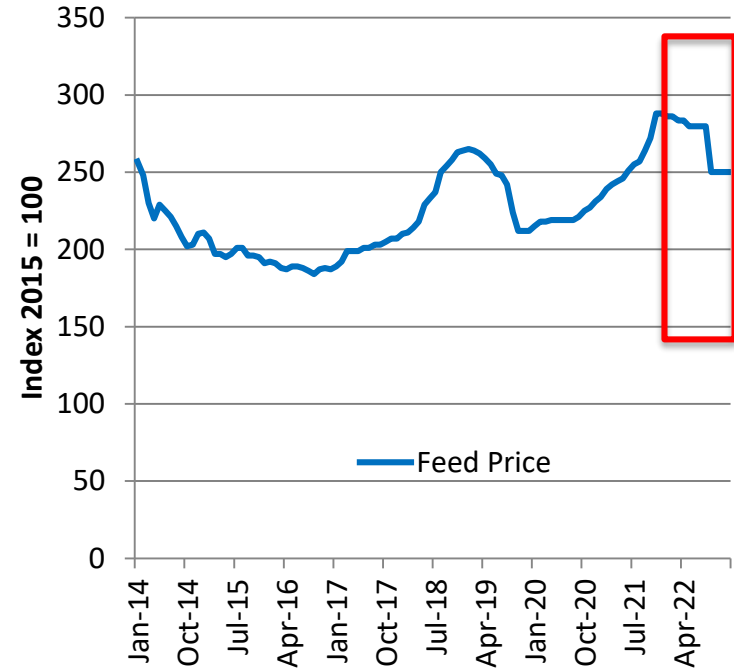
↑ ↑ ↑

Sector specific



2022 Input Story: More price increases

Feed: More price increases on top of 2021



■ Feed price is a tale of two halves

- » Increase in H1 2022 compared to same period of 2021
 - 'hangover' from 2021 harvest price increases
- » Decrease in H2 2022 compared to same period of 2021
 - still much production uncertainties

■ 6 percent increase for the year

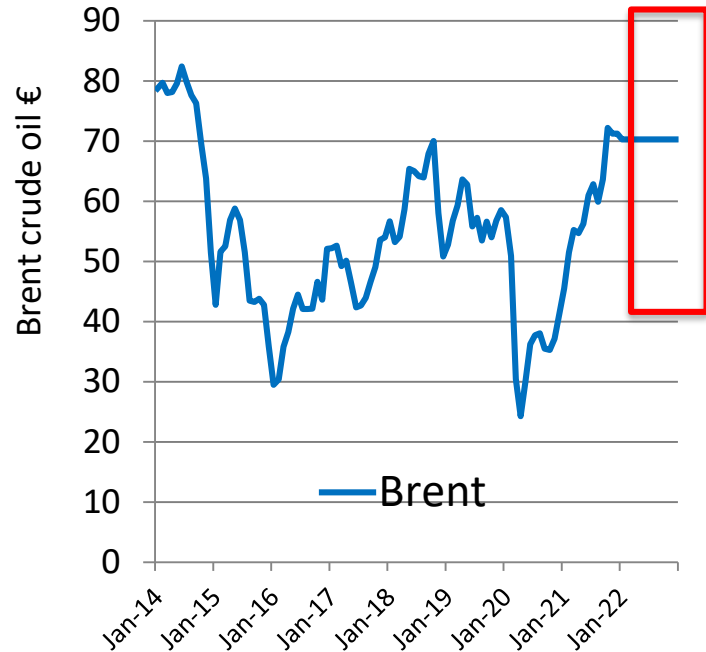
■ Feed volume: No change to plus 7% (on a per head basis)

- » Due to fertiliser price story

Source: CSO and Author's estimates

2022 Input Story: More price increases

Fuel: More price increases in 2022 for the full year

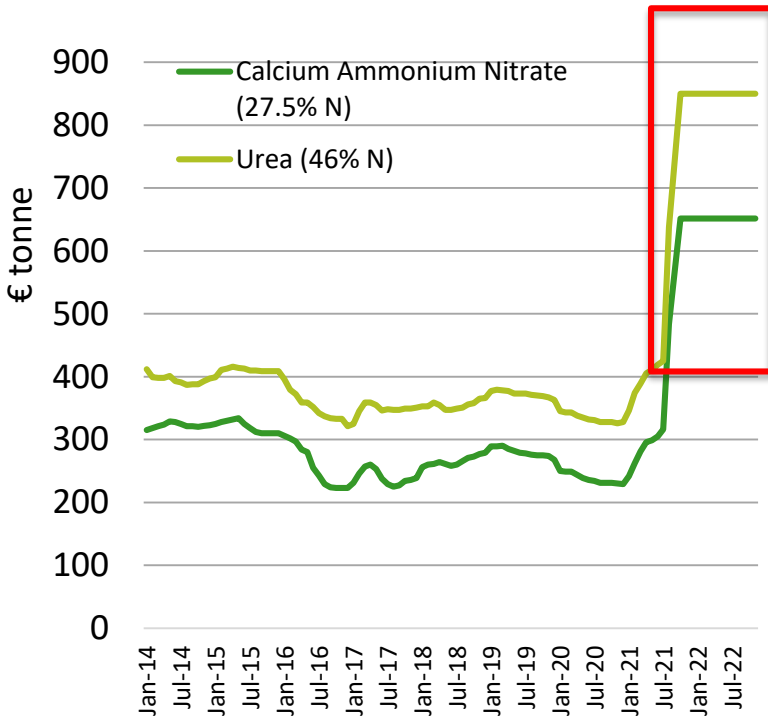


- **Fuel: more price increases in 2022 for the year as a whole**
 - » Brent crude oil 16% increase in Euro terms
 - » Slightly lower increase in US\$, but ER to heighten € increase
- **Account for price transmission at the farm level**
 - » Carbon tax increases
 - » Green diesel: 20% increase in 2022 at farm level
 - » Motor fuel index: 12% increase in 2022 at farm level
 - » Sector specific price increases take usage into account

Source: AHDB and author's estimates

2022 Input Story: More price increases

Fertiliser: Unprecedented price increases in 2022 for the full year



- **Price up significantly in 2022**
 - Reflecting gas price increases
 - Nitrogen based products up 120%
 - P & K lower price increases than N
- **High price causing production uncertainties**
 - Fertiliser supply uncertainty
- **Sector specific price stories**
 - Purchase timing
 - Product specification

Source: CSO and authors' estimates

Inputs 2022 (Large upward price pressure)



Fertiliser

↑ **Price**
+ 120%

↓ **Volume**
-20% to 0



Fuel

↑ **Price**
+ 12 to 20 %
at farm gate



Electricity

↑ **Price**
+5%



Feed

↑ **Price**
+ 6%

↑ **Volume**
0 to + 7%
per head



Total Costs

↑ Large
increases but
sector
specific

From Inputs Summary to....Crops



- **Inputs summary**

- For 2022 much larger price changes overall
- Some volume change per hectare (some differences at sector & whole farm level)
- Overall upward pressure on prices
 - Feed, fertiliser, fuel, seed

- **Implications**

- Sector specific story in inputs for 2022

- **Begin with margin story for crops**

- Given the importance of feed for other sectors



Crops Review and Outlook



2021 – Very Positive News Story for Cereals



Average 13 % increase in crop yield per hectare



6% increase in direct costs



Winter cereal area increase



90% increase in gross margin



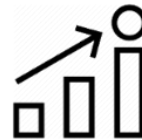
21% increase cereal production



Approx. €525 per ha increase in cereal net margins



21 - 33% increase in cereal prices

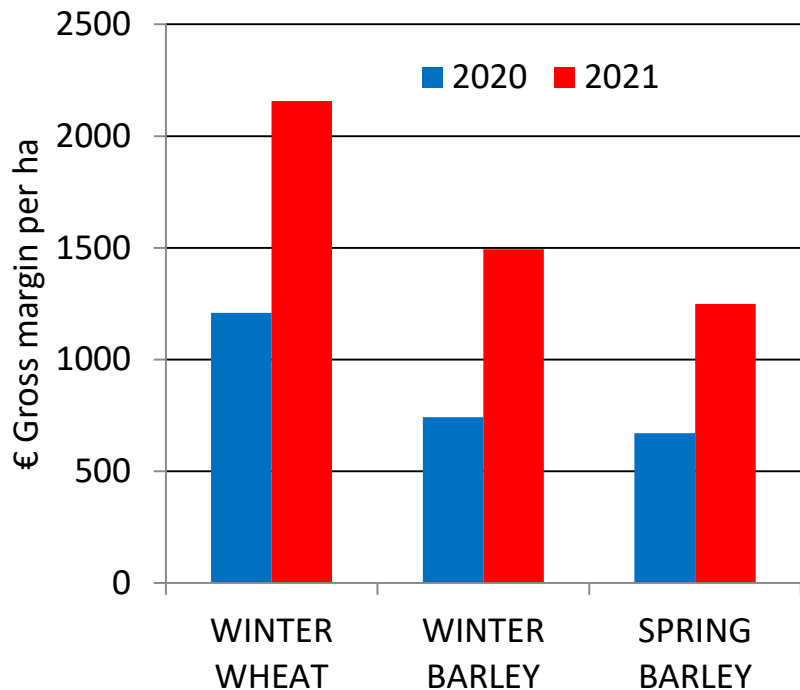


90 % of cereal farmers earn positive net margin



2021 – A Positive News Story for Cereals

Average 90% increase in gross margins for cereal crops in 2021

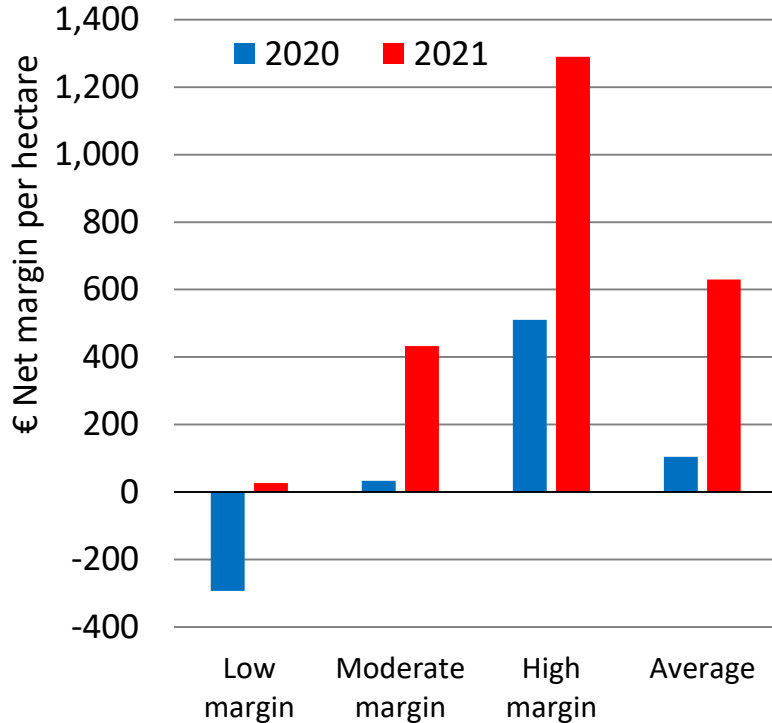


- Increase in yield, price, moisture bonuses, straw receipts and Straw Incorporation Measure (SIM)
- But remember margins in 2020 were extremely low
 - Spring barley: Up €580 per hectare
 - Winter barley: Up €750 per hectare
 - Winter wheat: Up €950 per hectare
 - Variability around margins

Source: Teagasc, NFS and authors' estimates

2021 – A Positive News Story for Cereals

€525 per hectare increase in net margin in 2021

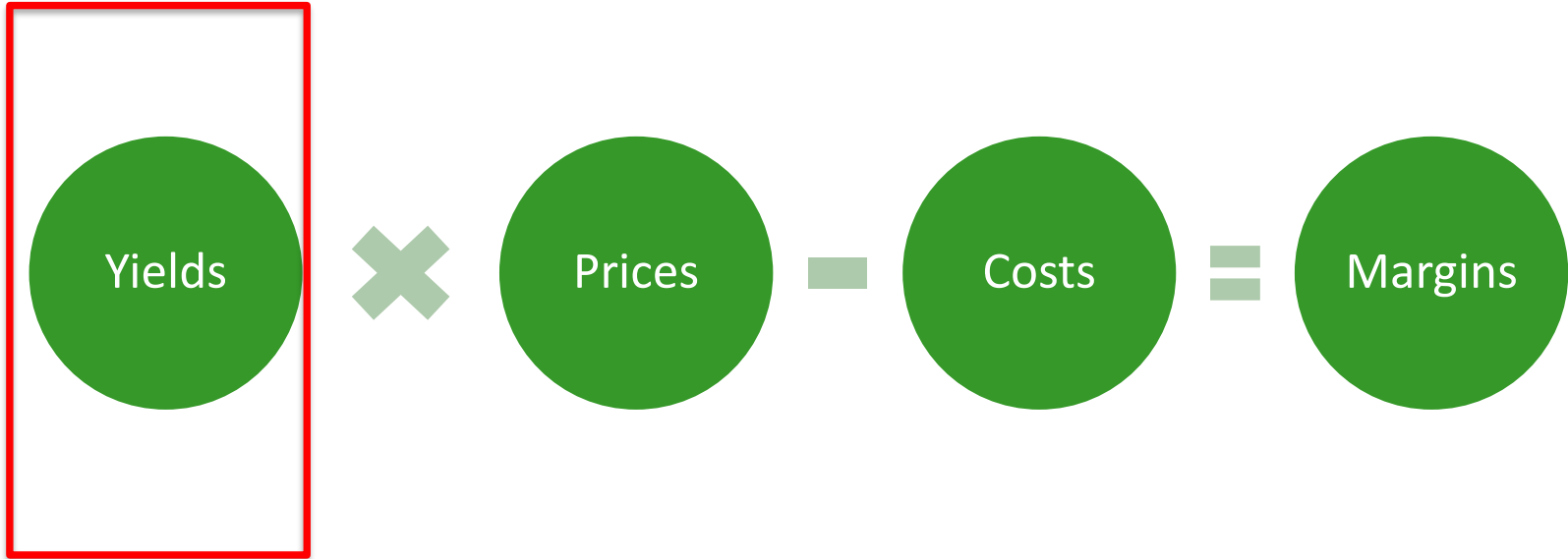


- **Average cereal based enterprise on specialist tillage farms**
 - Net margin (incl. SIM)
 - Takes account of change in cereal area
- **90 % earn a positive net margin in 2021**
 - Average = € 630 per ha.
 - High margin farms = €1290 per ha.
 - Low margin farms = €27 per ha.

Source: Teagasc, NFS and authors' estimates



2022 – The Calculations





2022 Production To Decrease Very Slightly

Very slight reduction in EU production potential in 2022 forecast

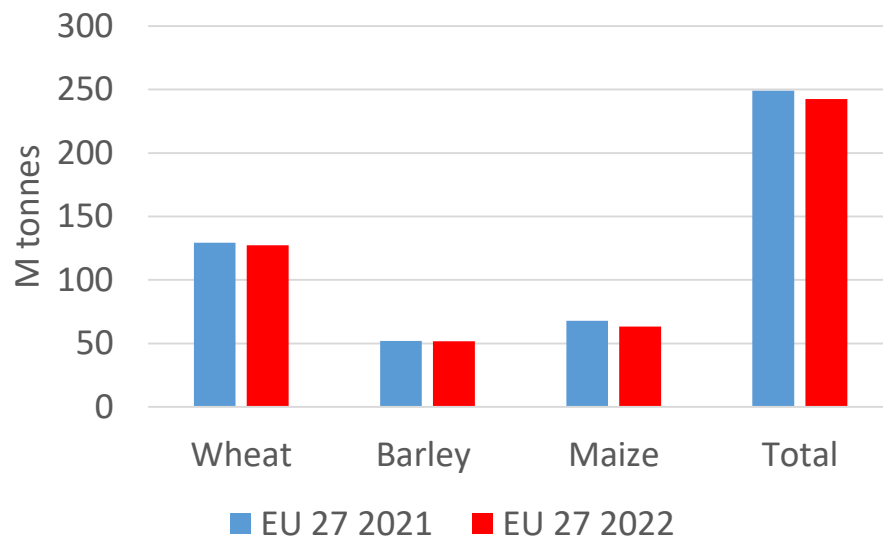
■ Decrease in some EU stock/use ratios in 2021

- Increase EU, wheat, barley and maize production
- 4.5 percent increase in EU grains
- But increase in demand for wheat and maize
- Leaving some stock/use ratios low
- Increase in wheat and barley prices

■ Will '21 global harvest be replicated in '22?

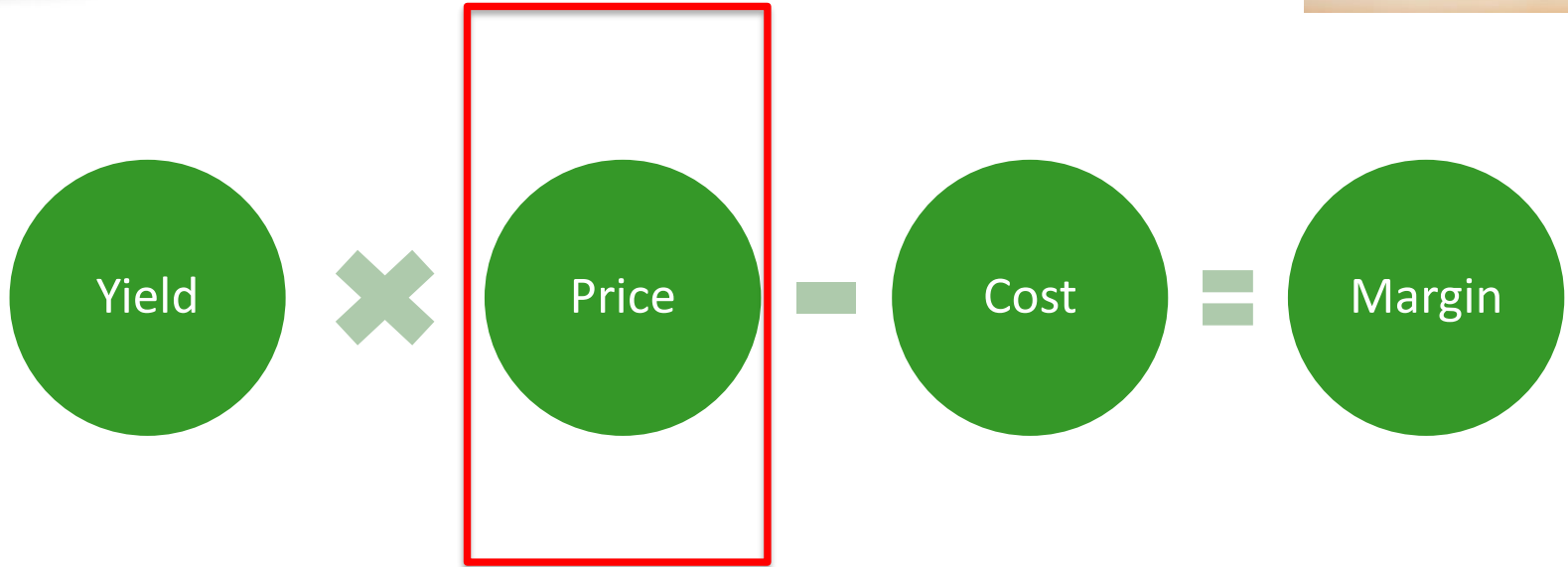
- Not much change in winter plantings in the EU
- Return to trend yield in 2022, lower EU yield potential

Estimated and Forecasted EU Production Grains 2021/2022

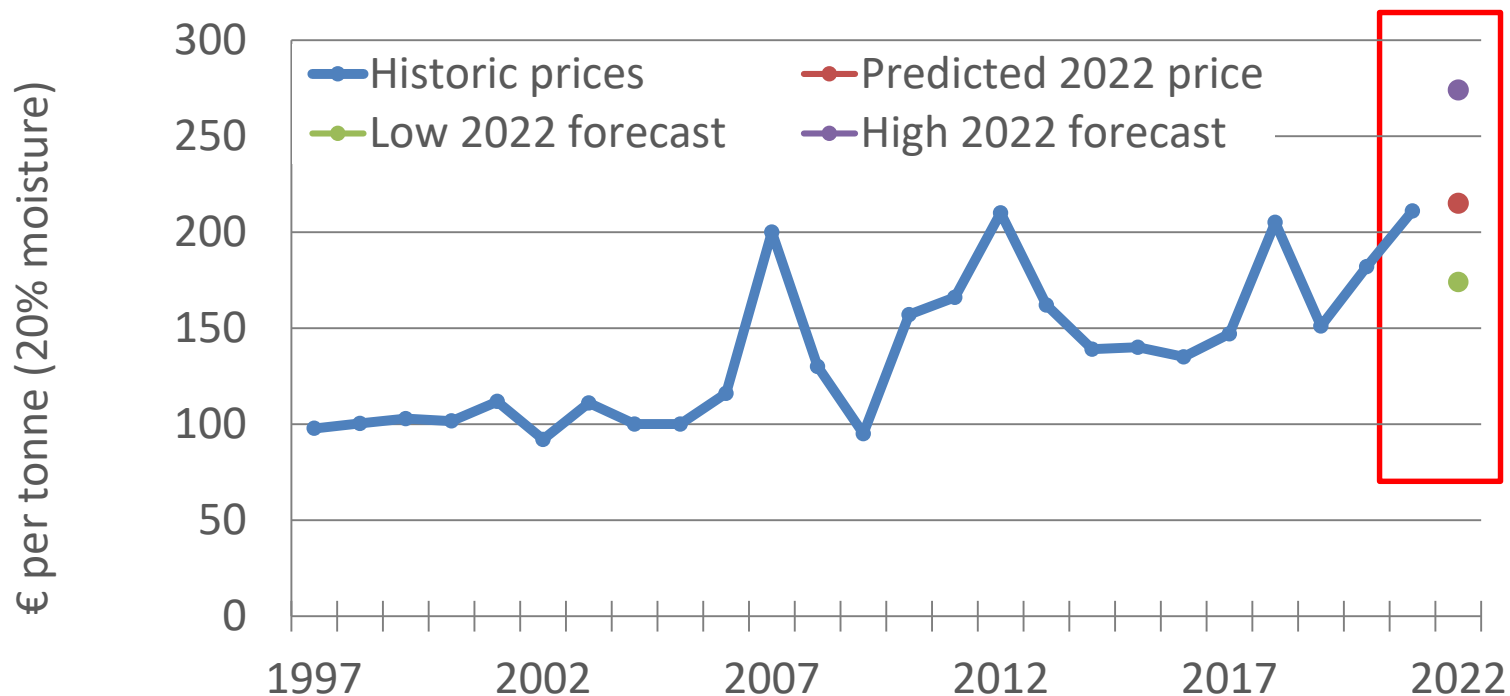


Source: *Strategie Grains*, November 2021

2022 – The Calculations

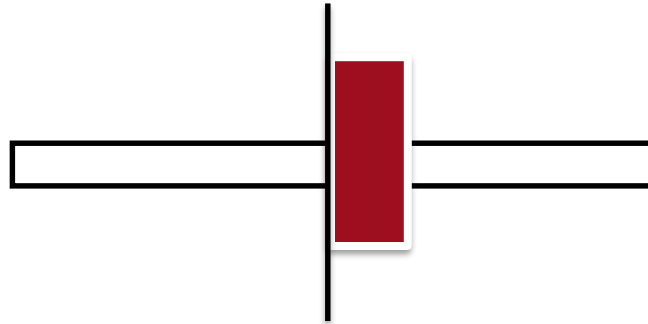


2022 Futures Wheat Harvest Price to Increase (by 2%)



Source: Authors' own estimates and forecasts

2022 Futures Harvest Price to Increase

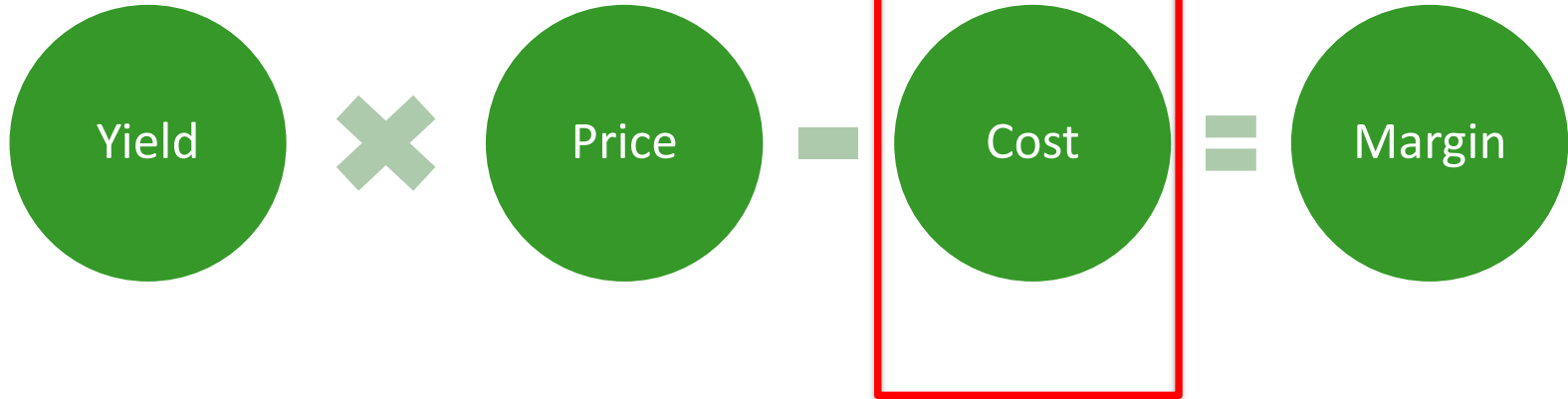


'Grain quality and moisture'
'Market fundamentals more in balance'
'Less panic buying'

Slightly positive +2%

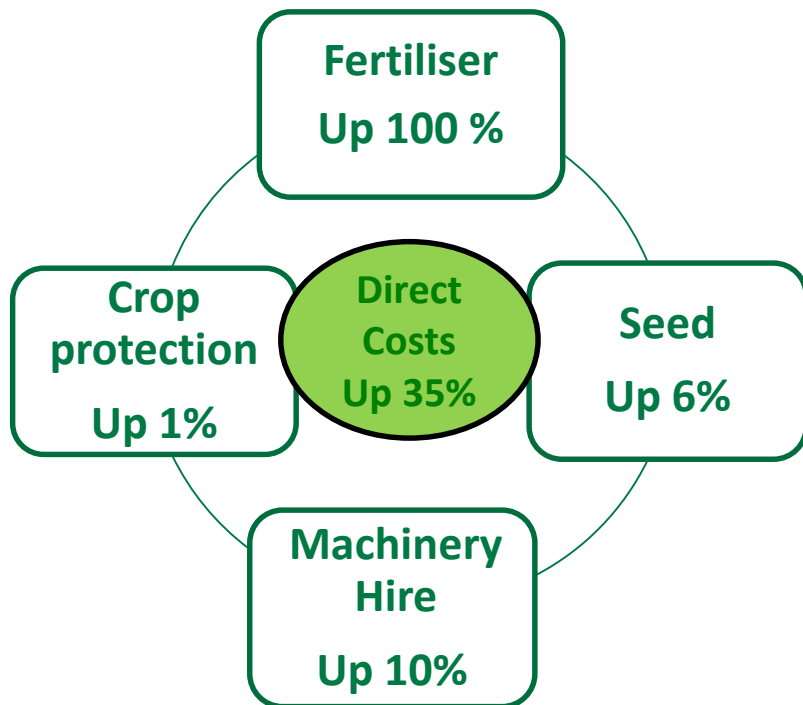
'La Niña'
'Trend yields'
'Exchange rate'
'Supply chain difficulties'

2022 – The Calculations

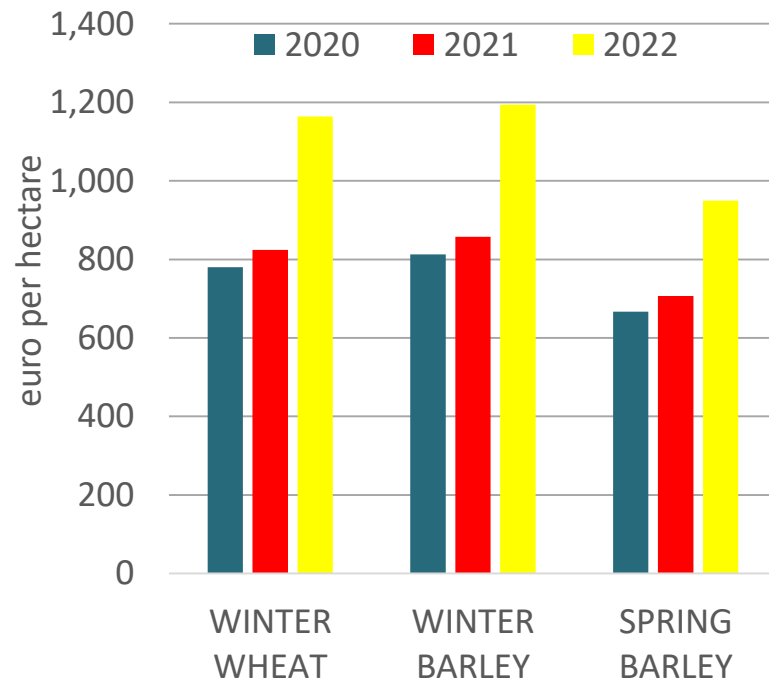


Overall increase in direct costs in 2022

2022 direct costs per hectare

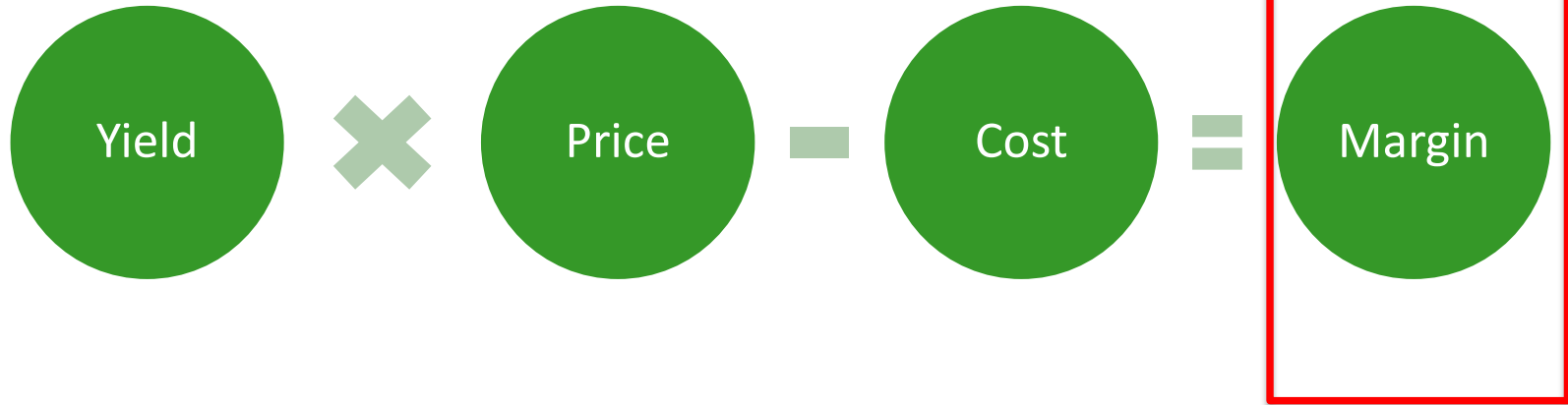


2022 direct costs per hectare



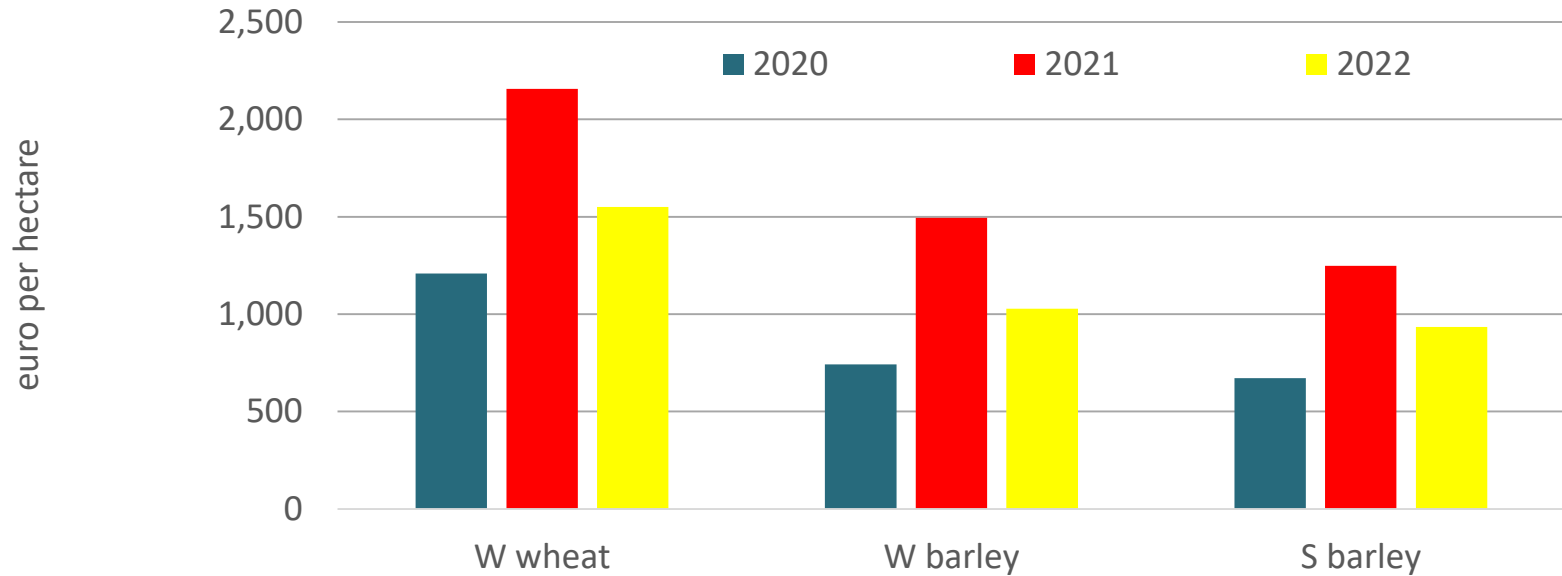
Source: Authors' estimate for 2021 and forecast for 2022

2022 – The Calculations



Decrease in 2022 Gross Margins

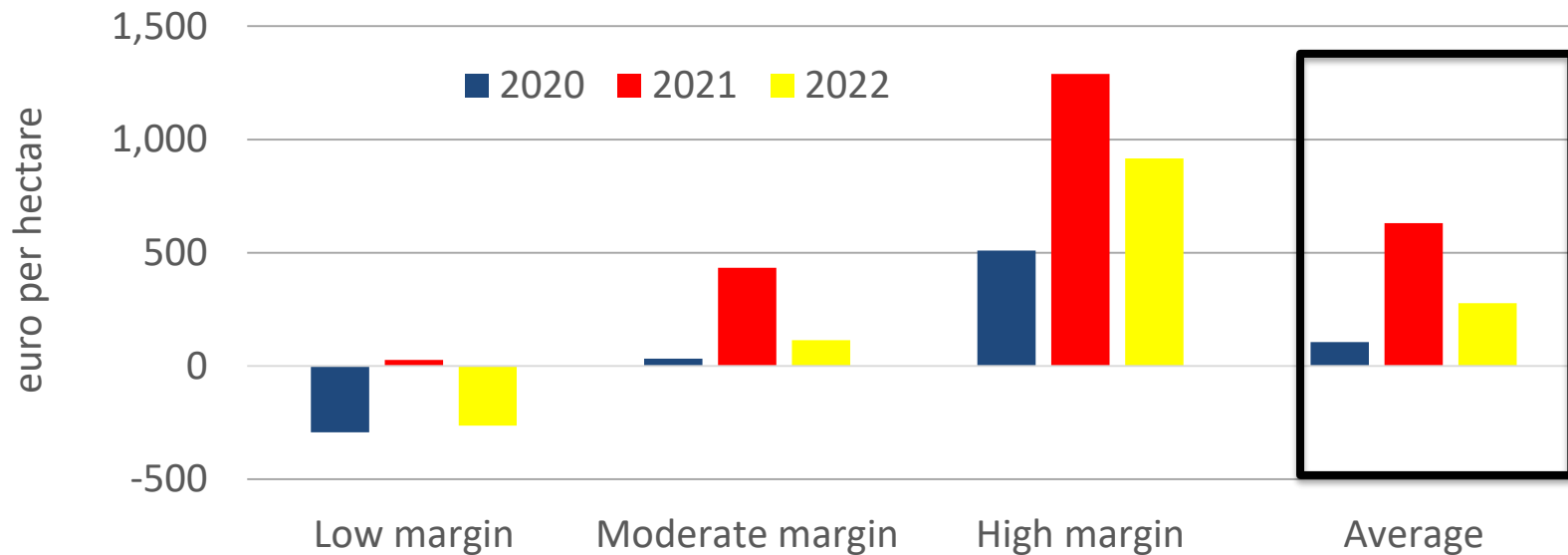
Gross margin per hectare to decrease by €315 for spring barley and €610 for winter wheat and €470 for winter barley



Source: Authors' estimate for 2021 and forecast for 2022

Decrease in 2022 Net Margins

Net margin per hectare forecast to decrease by over €350 per hectare



Source: Authors' estimate for 2021 and forecast for 2022

Summary of 2022 Crops Forecast

■ Forecast 2022

- Prices
 - Probability that price will increase at harvest 2022 by approx. 2%
 - Much uncertainties about 2022 price at present
- Reversion to trend yields – decrease in yields
- Direct costs to increase by on average 35%
- Overall decrease in gross and net margins in 2022
- Average net margin for cereal enterprise €258 in 2022
- Average cereal based net margin will be negative on 40% of specialist tillage farms

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