



**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 a black cover and lined pages. A pair of black-rimmed glasses is resting 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

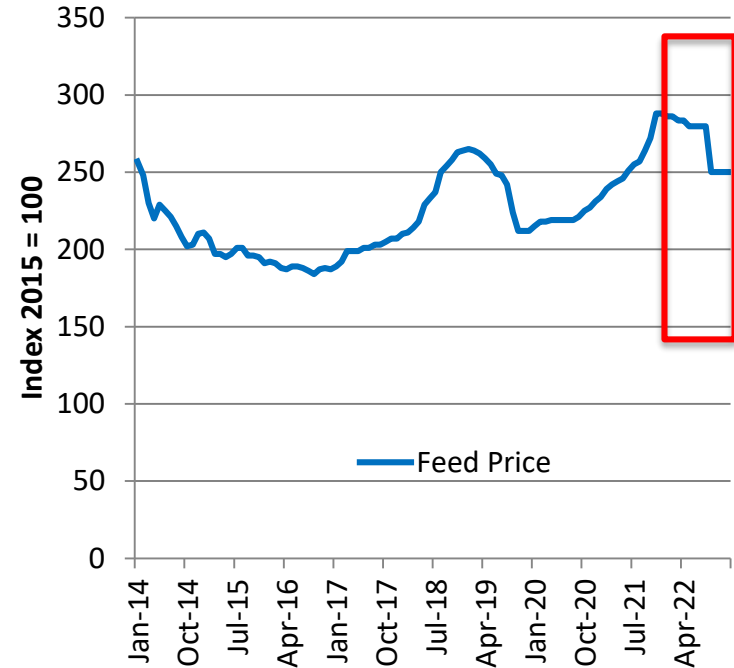
↑ ↑ ↑

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)

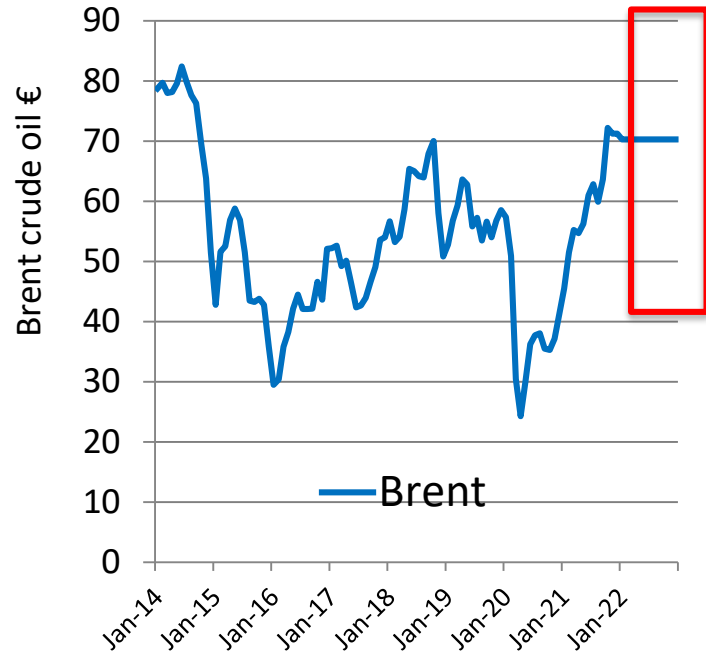
- » Due to fertiliser price story

Source: CSO and Author's estimates



# 2022 Input Story: More price increases

Fuel: More price increases in 2022 for the full year

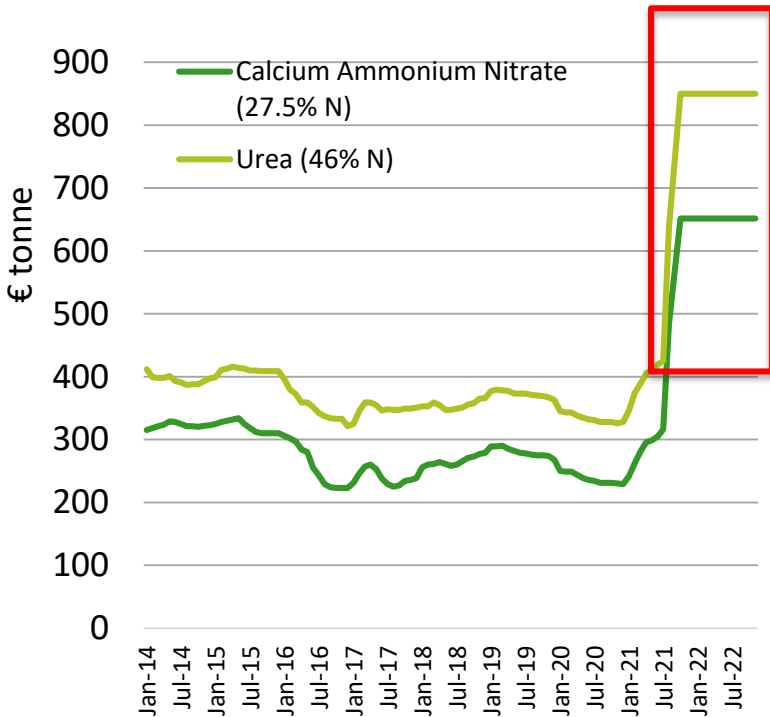


- **Fuel: more price increases in 2022 for the year as a whole**
  - » Brent crude oil 16% increase in Euro terms
  - » Slightly lower increase in US\$, but ER to heighten € increase
- **Account for price transmission at the farm level**
  - » Carbon tax increases
  - » Green diesel: 20% increase in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



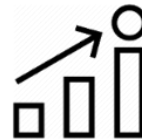
21% increase cereal  
production



Approx. €525 per ha  
increase in cereal net  
margins



21 - 33% increase in  
cereal prices

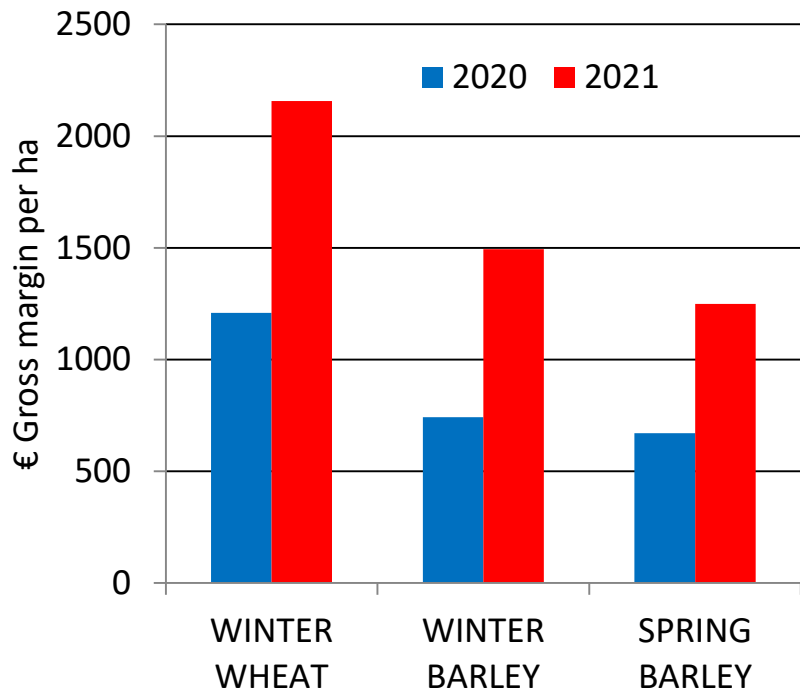


90 % of cereal farmers  
earn positive net margin



# 2021 – A Positive News Story for Cereals

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

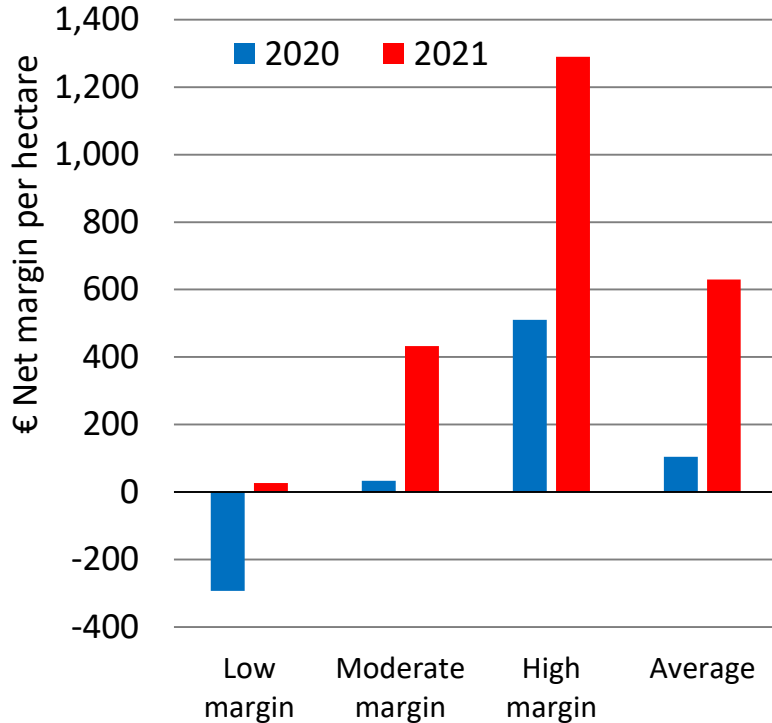


- Increase in yield, price, moisture bonuses, straw receipts and Straw Incorporation Measure (SIM)
- But remember margins in 2020 were extremely low
  - Spring barley: Up €580 per hectare
  - Winter barley: Up €750 per hectare
  - Winter wheat: Up €950 per hectare
  - Variability around margins

Source: Teagasc, NFS and authors' estimates

# 2021 – A Positive News Story for Cereals

€525 per hectare increase in net margin in 2021



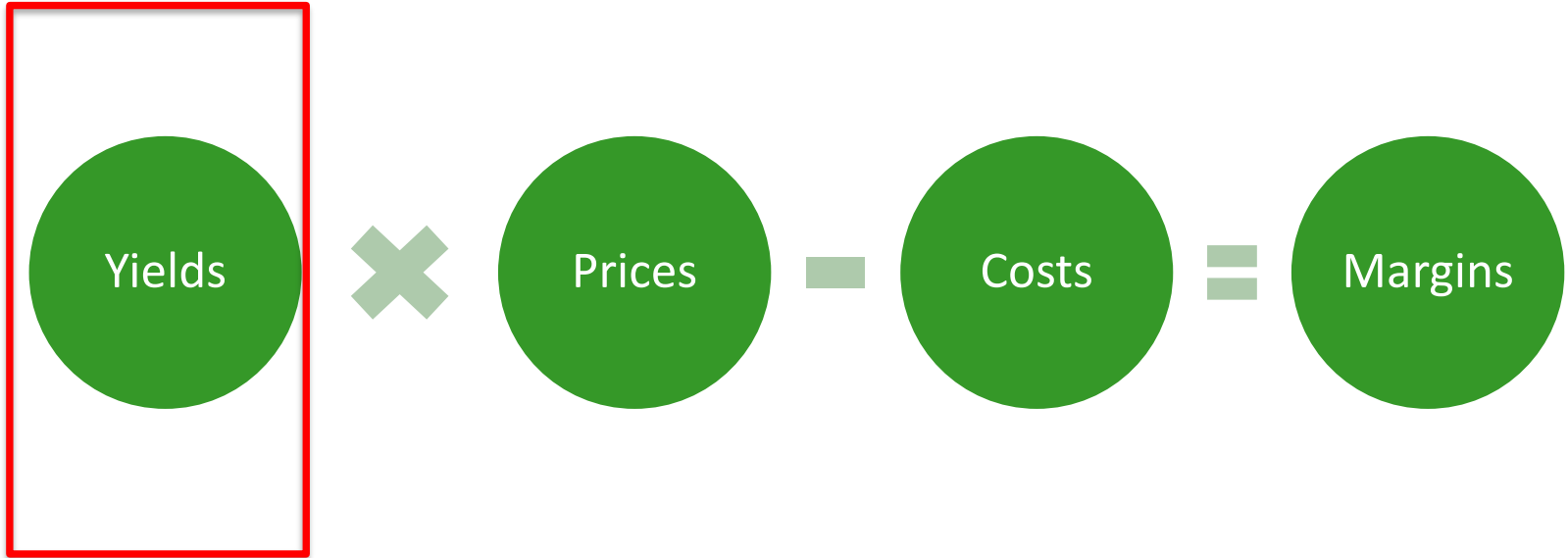
- **Average cereal based enterprise on specialist tillage farms**
  - Net margin (incl. SIM)
  - Takes account of change in cereal area
- **90 % earn a positive net margin in 2021**
  - Average = € 630 per ha.
  - High margin farms = €1290 per ha.
  - Low margin farms = €27 per ha.

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

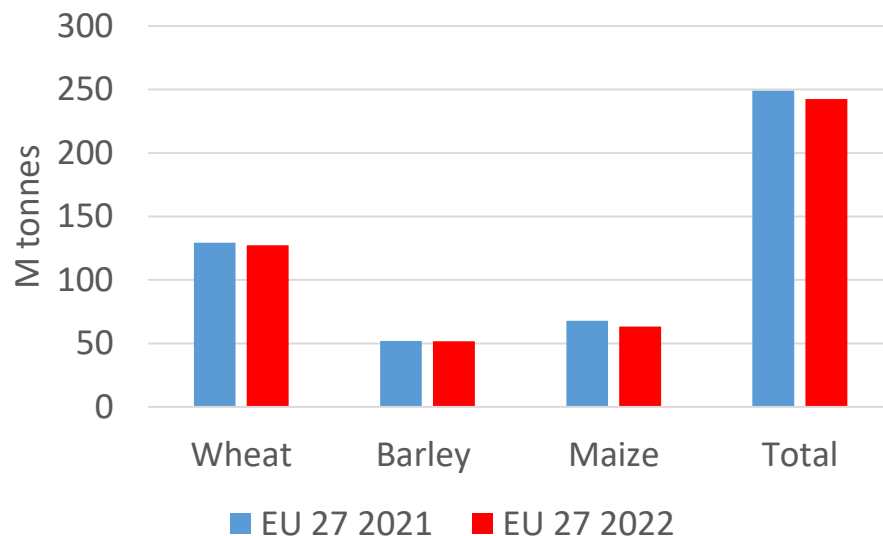
## ■ Decrease in some EU stock/use ratios in 2021

- 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?

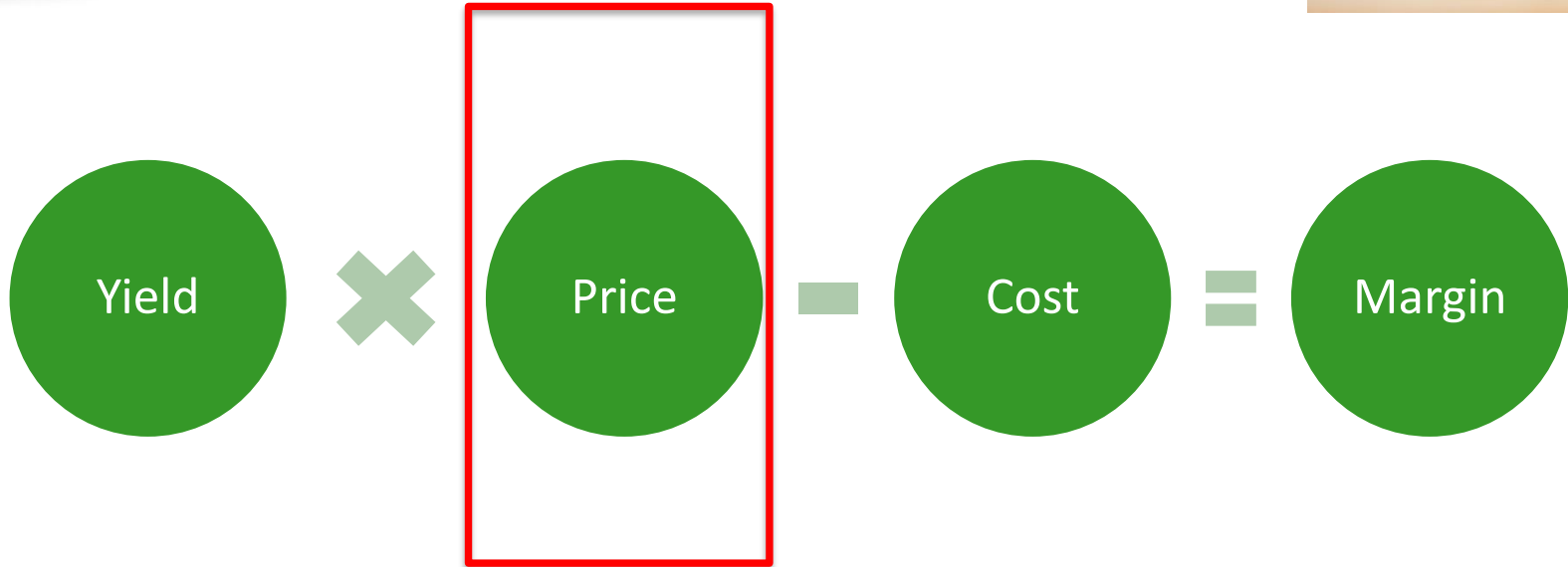
- Not much change in winter plantings in the EU
- Return to trend yield in 2022, lower EU yield potential

Estimated and Forecasted EU Production Grains 2021/2022

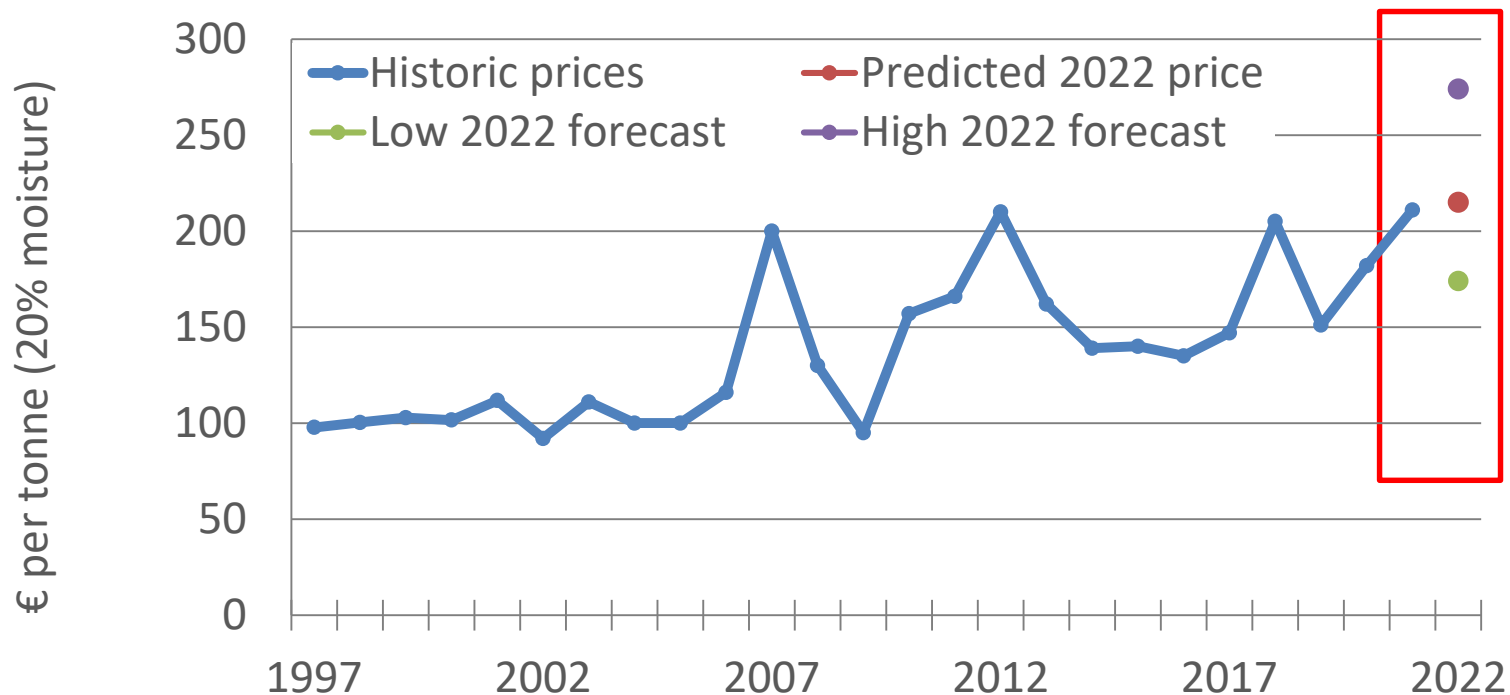


Source: *Strategie Grains*, November 2021

# 2022 – The Calculations

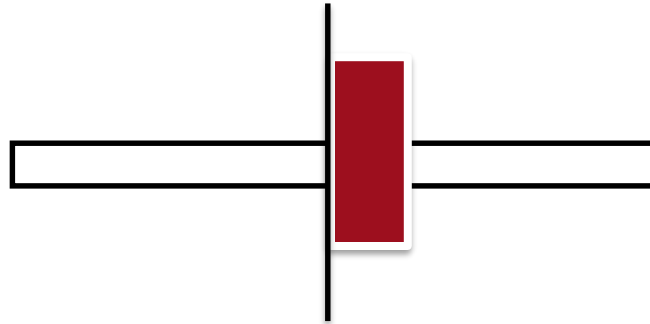


# 2022 Futures Wheat Harvest Price to Increase (by 2%)



Source: Authors' own estimates and forecasts

# 2022 Futures Harvest Price to Increase

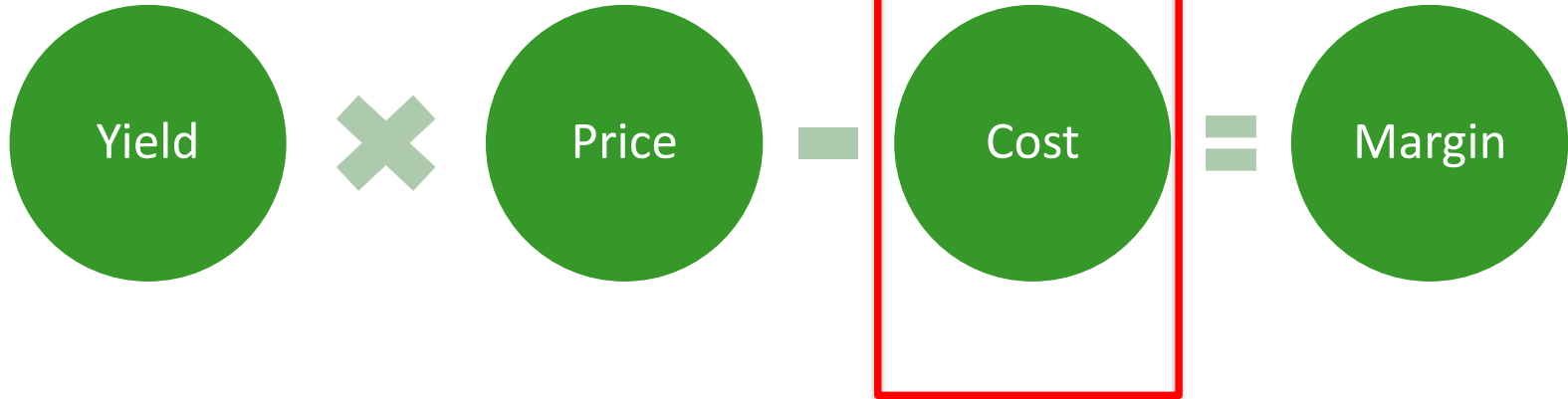


*'Grain quality and moisture'*  
*'Market fundamentals more in balance'*  
*'Less panic buying'*

Slightly positive +2%

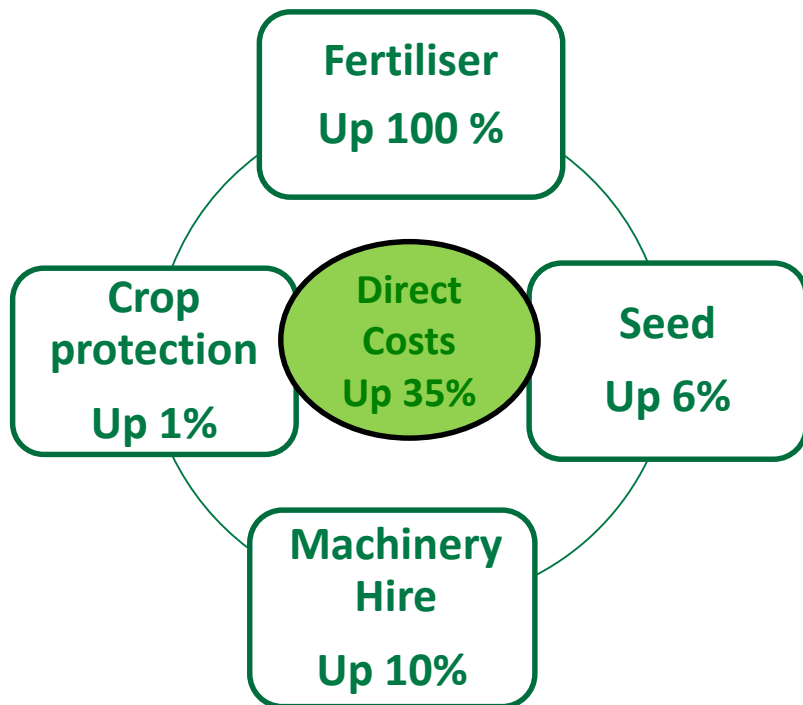
*'La Niña'*  
*'Trend yields'*  
*'Exchange rate'*  
*'Supply chain difficulties'*

# 2022 – The Calculations

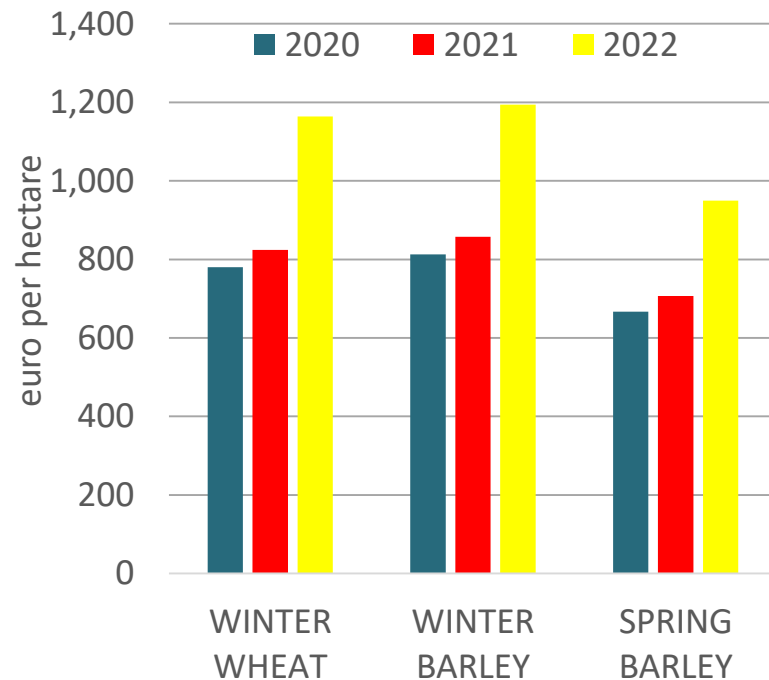


# Overall increase in direct costs in 2022

## 2022 direct costs per hectare



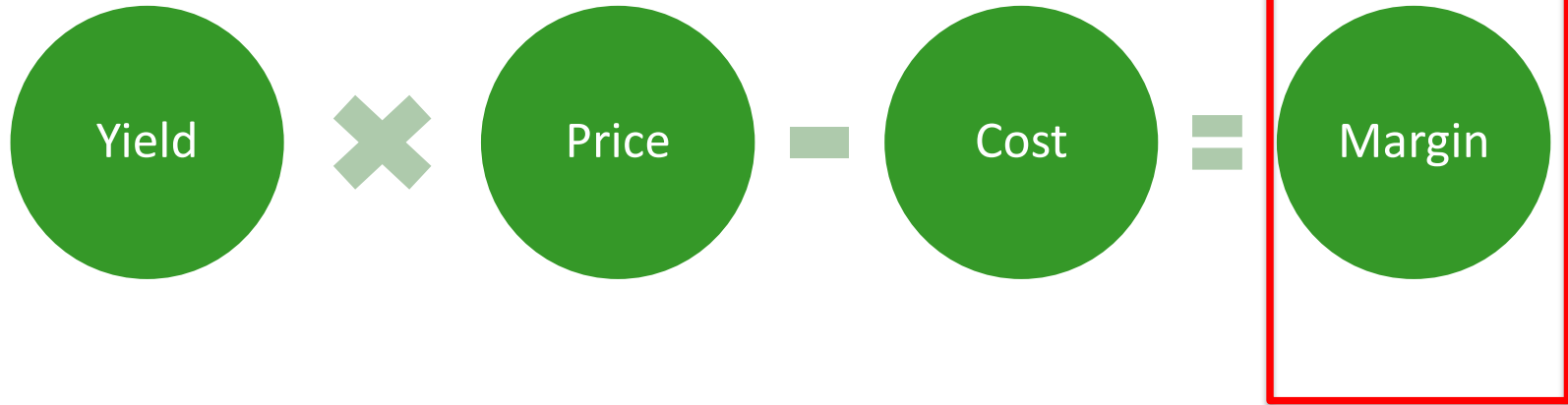
## 2022 direct costs per hectare



Source: Authors' estimate for 2021 and forecast for 2022

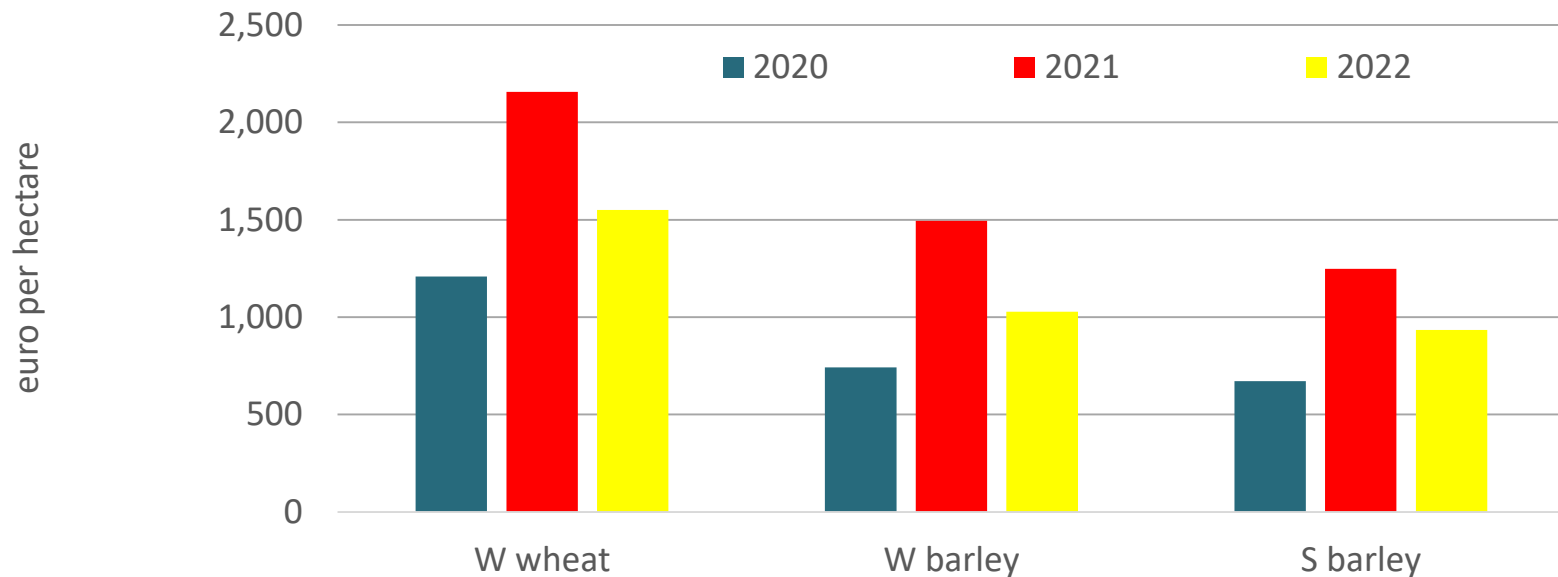


# 2022 – The Calculations



# Decrease in 2022 Gross Margins

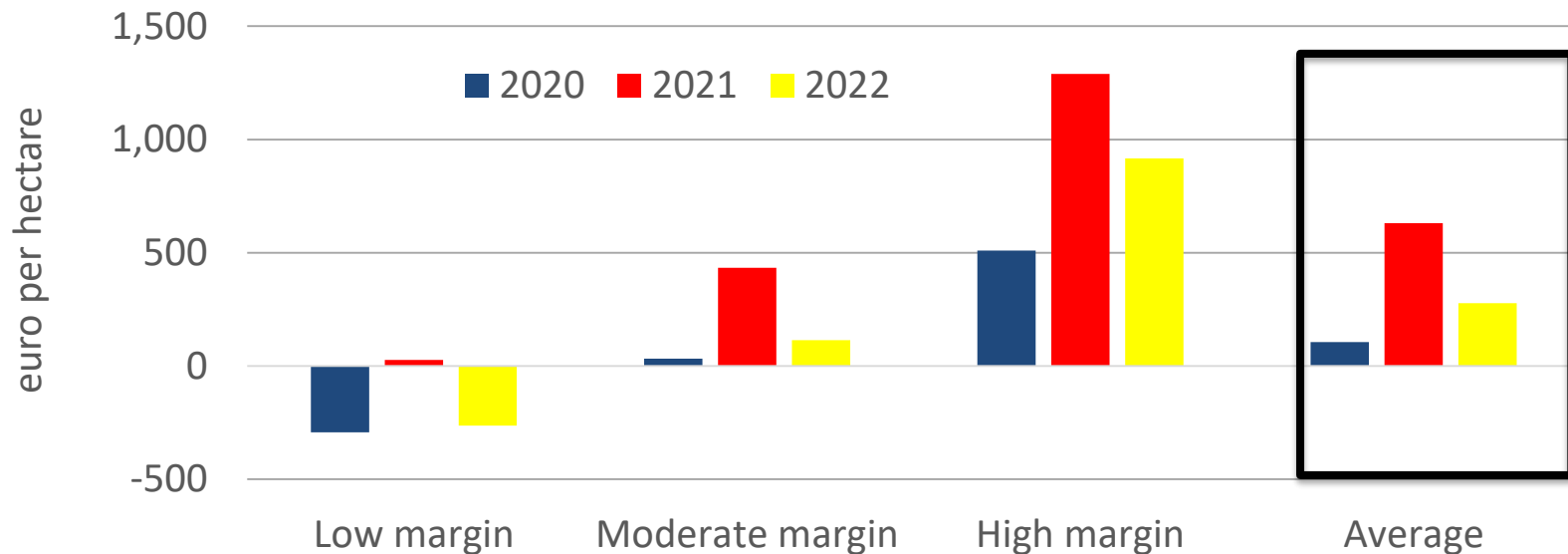
**Gross margin per hectare to decrease by €315 for spring barley and €610 for winter wheat and €470 for winter barley**



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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