

Outlook for the global and European egg industry

Investing under fast changing conditions



Nan-Dirk Mulder October, 8th 2021



*Growing
a better world
together.*

Rabobank

Content

Outlook for the global and European egg industry

1. *Global egg market outlook*
2. *European egg outlook*
3. *Long term investment perspective*



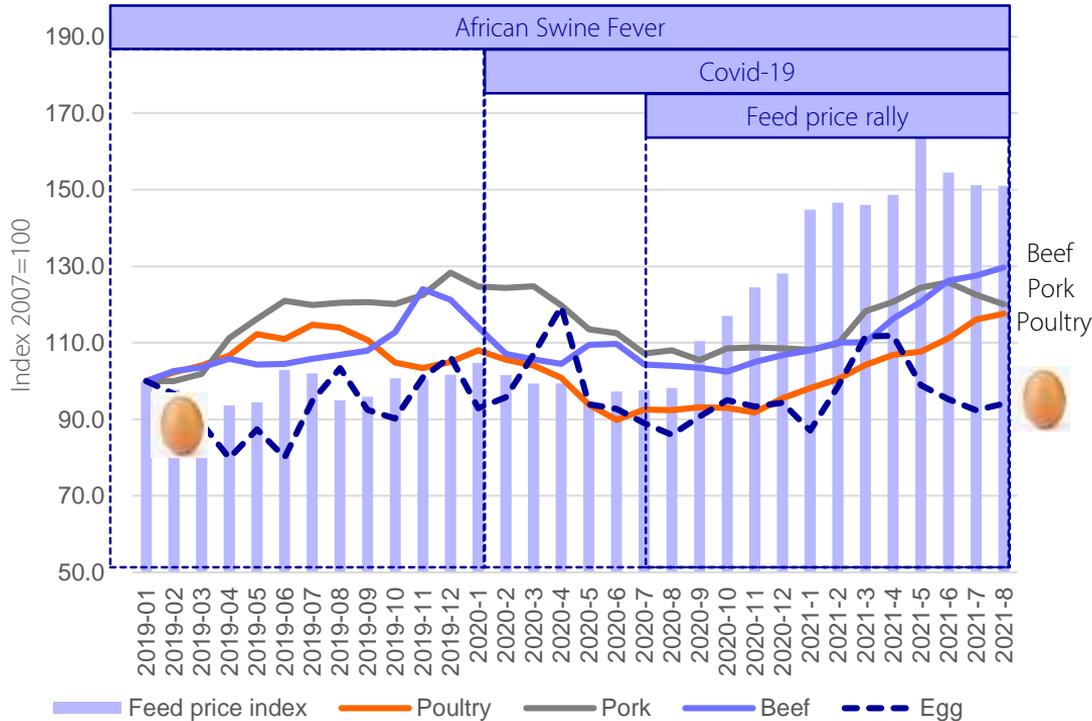
***Global egg
market outlook***



Global markets

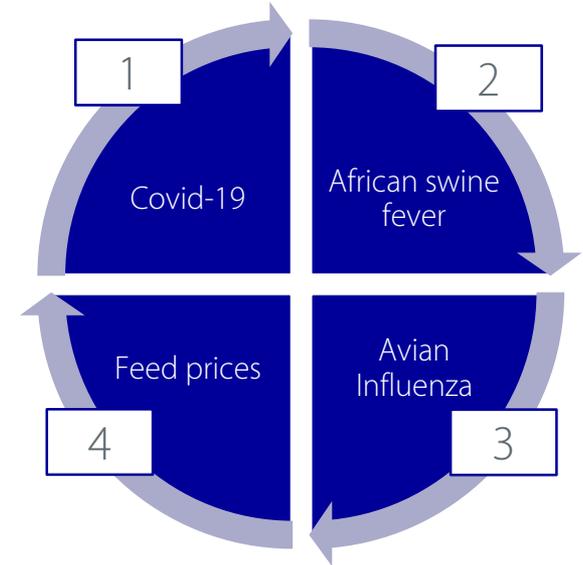
Global market recovery has started but via a bumpy road

Global animal protein market monitor: 2017-2021



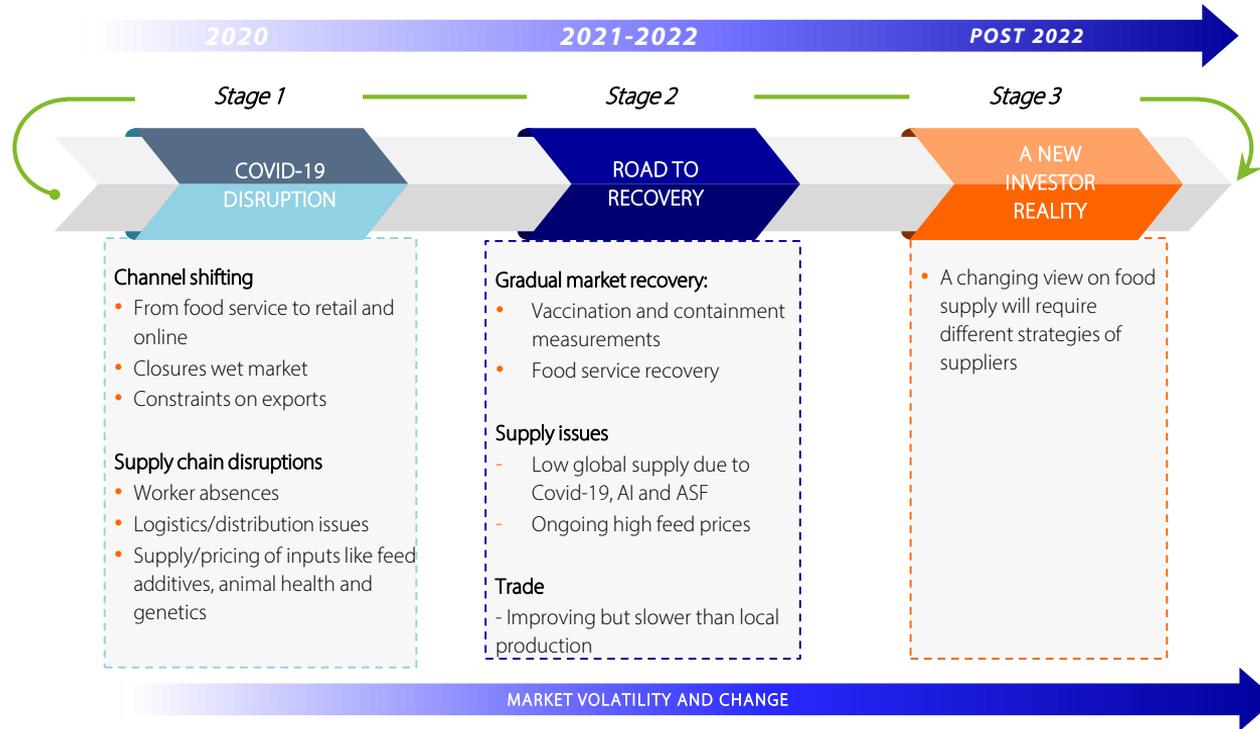
Source: Rabobank analysis based on FAO, CBOT and USDA, 2021

Key factors 2021 outlook



1. Covid-19 impact on industry

Three stages of impact of Covid-19 on the egg industry



Source: Rabobank, 2021

2. ASF in the pork industry

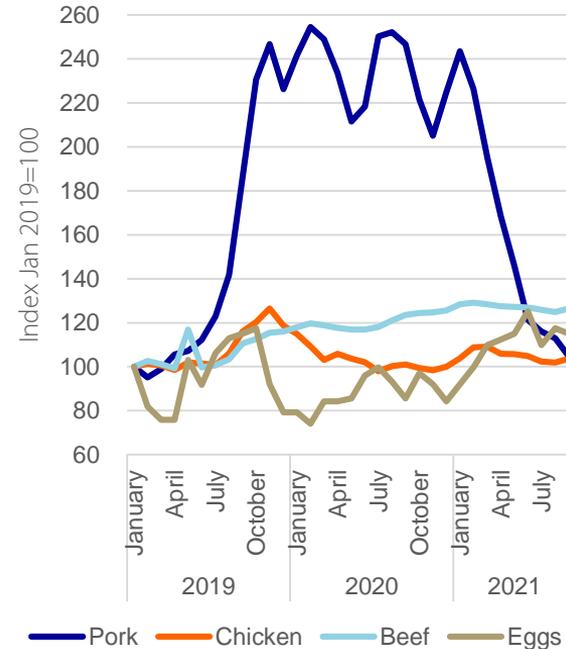
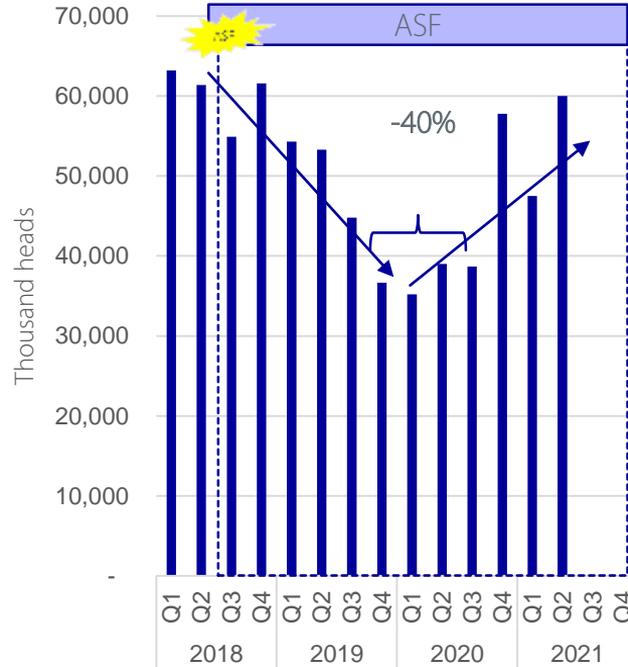
Recovery in China pork supply after 2018 40% drop, falling prices

ASF in Asia in June-Aug ongoing pressure China's pork production: H1:+35%

China prices: dropping



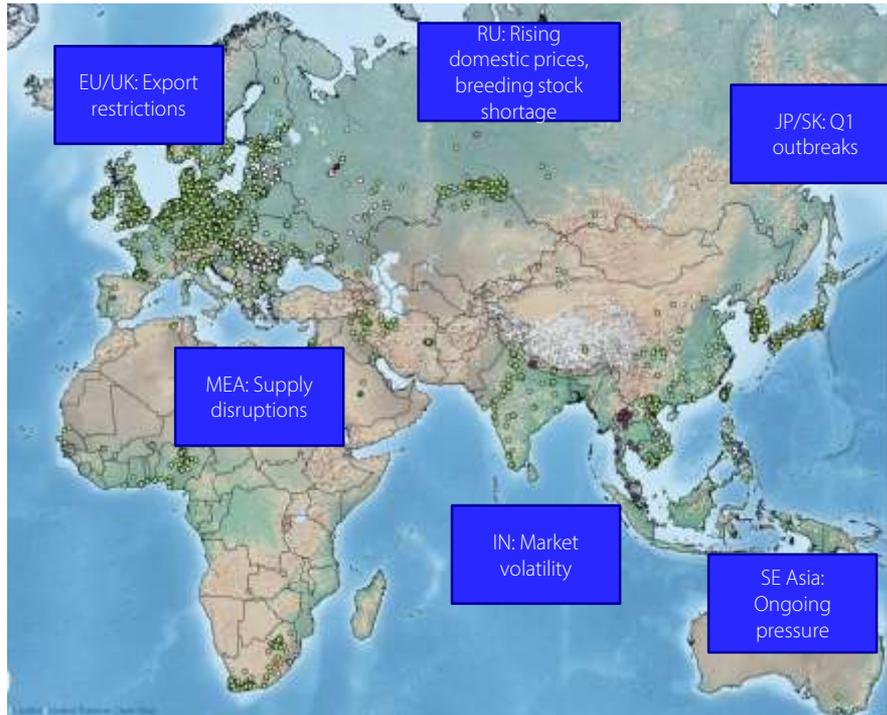
Source: Rabobank analysis, 2021



3. Avian Influenza will keep disrupting the industry

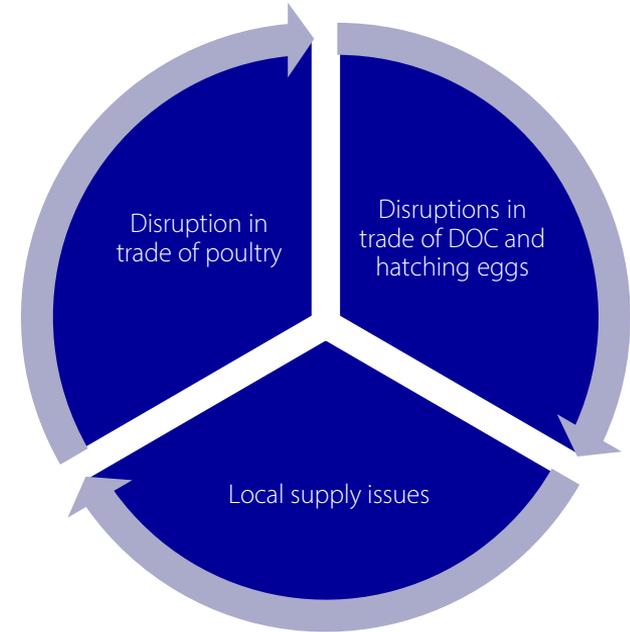
Big local impact on supply and trade in Europe, Africa and Asia

High pathogenic avian influenza cases 2021



Source: Rabobank analysis based on OIE, 2021

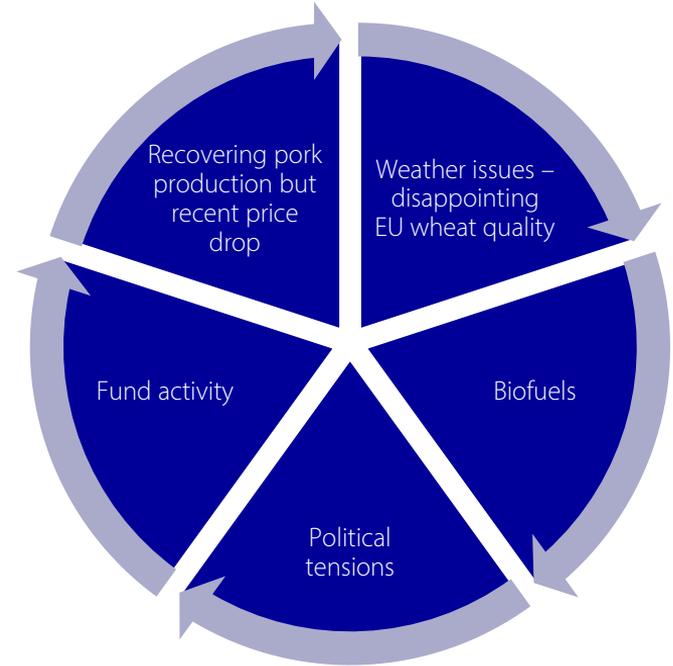
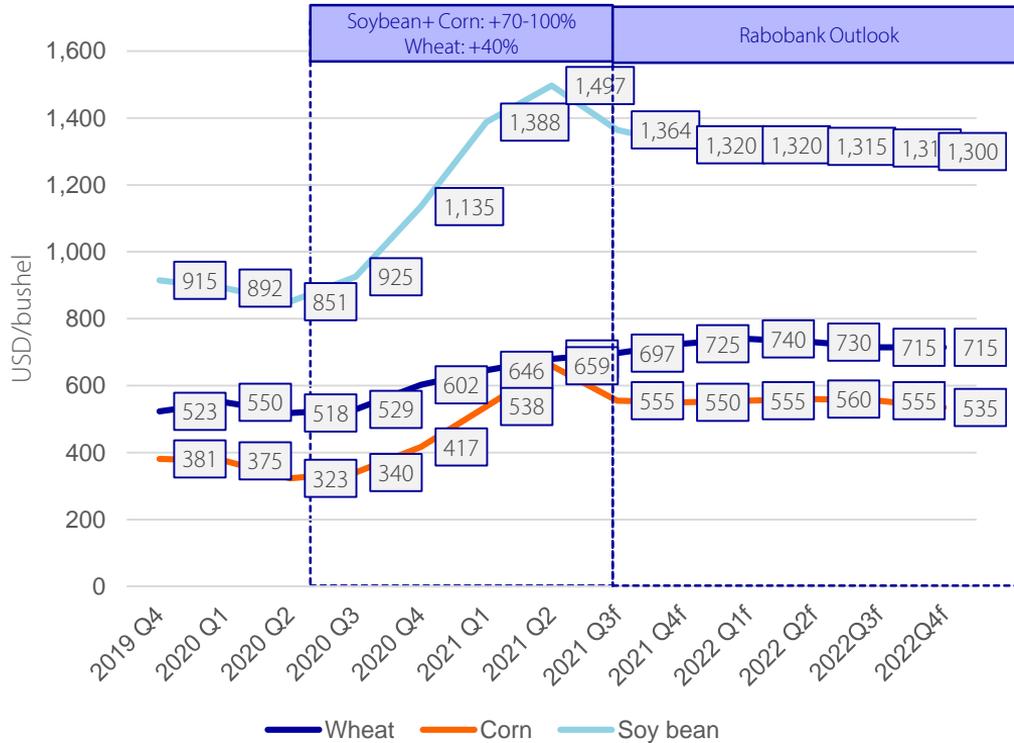
Impact on markets



4. Global feed price rally in 2020/21

Prices expected to stay high and volatile until deep 2021

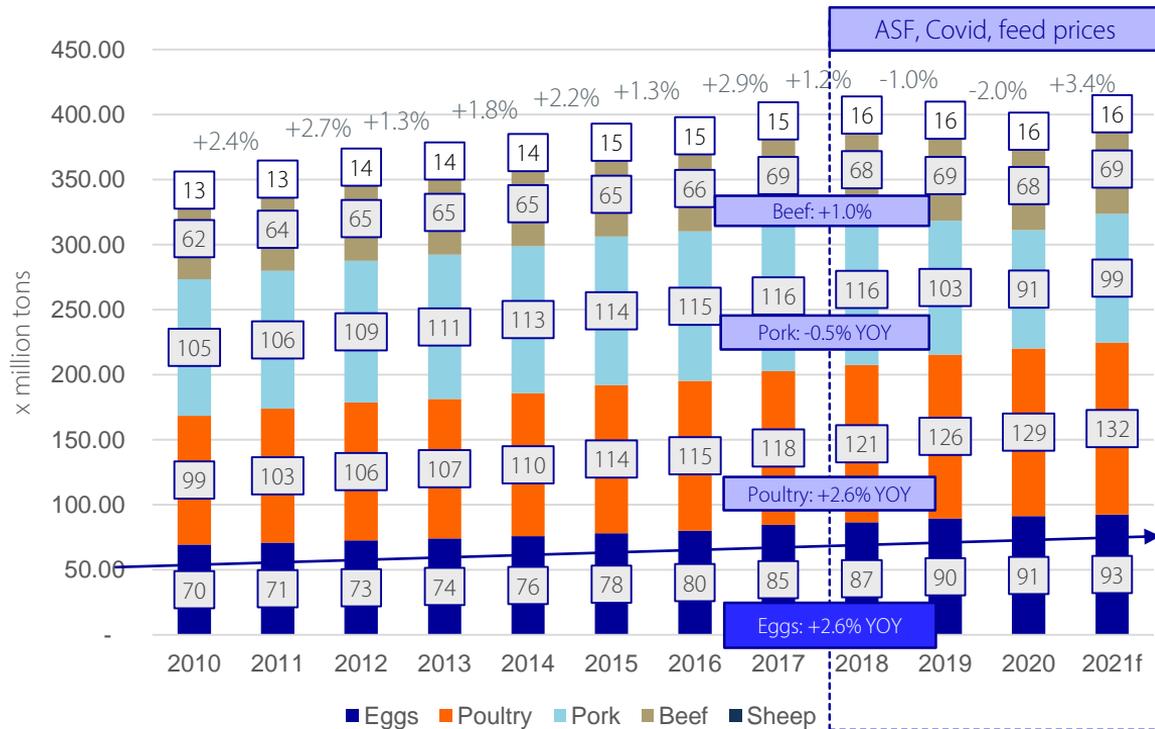
Rabobank Grains and oilseed price outlook



Eggs is the winning protein worldwide

Egg consumption is rising and is on its way to become second protein

Global meat and egg consumption 2010-2021f



Drivers for growth eggs

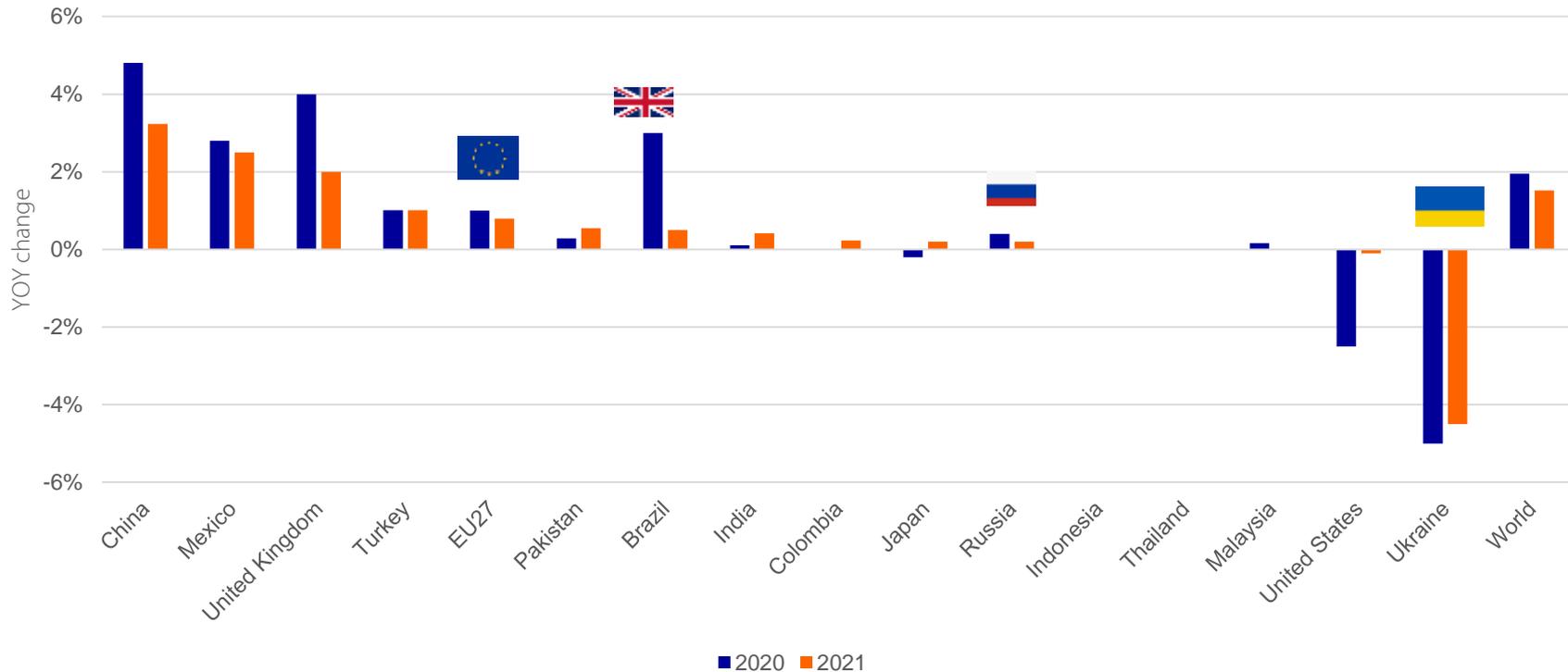


Source: Rabobank based on USDA, FAO and local statistics, 2021

Egg industry still growing: 2020 +1.9%, 2021: +1.5%

Strong egg demand during Covid-19 crisis in most countries, trade challenged

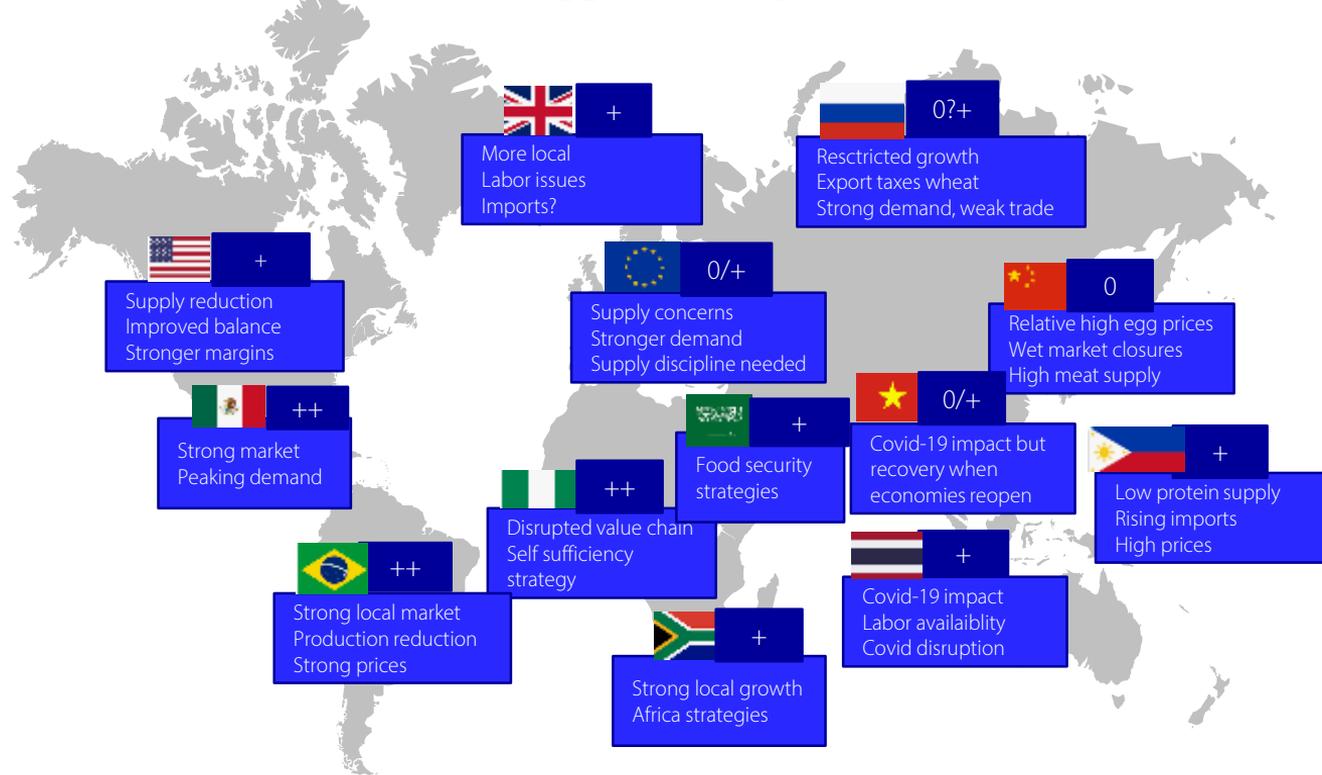
Worldwide Egg production growth by country in Covid-19 years 2020 and 2021



EU and global market outlook

Improved performance but ongoing risks, supply discipline is key

Global key egg industry performance



Global trends

Global demand
To grow by 1.5%,
Europe: 1%

Performance: Improved conditions worldwide, EU supply discipline will be key

Covid-19 recovery via a bumpy road

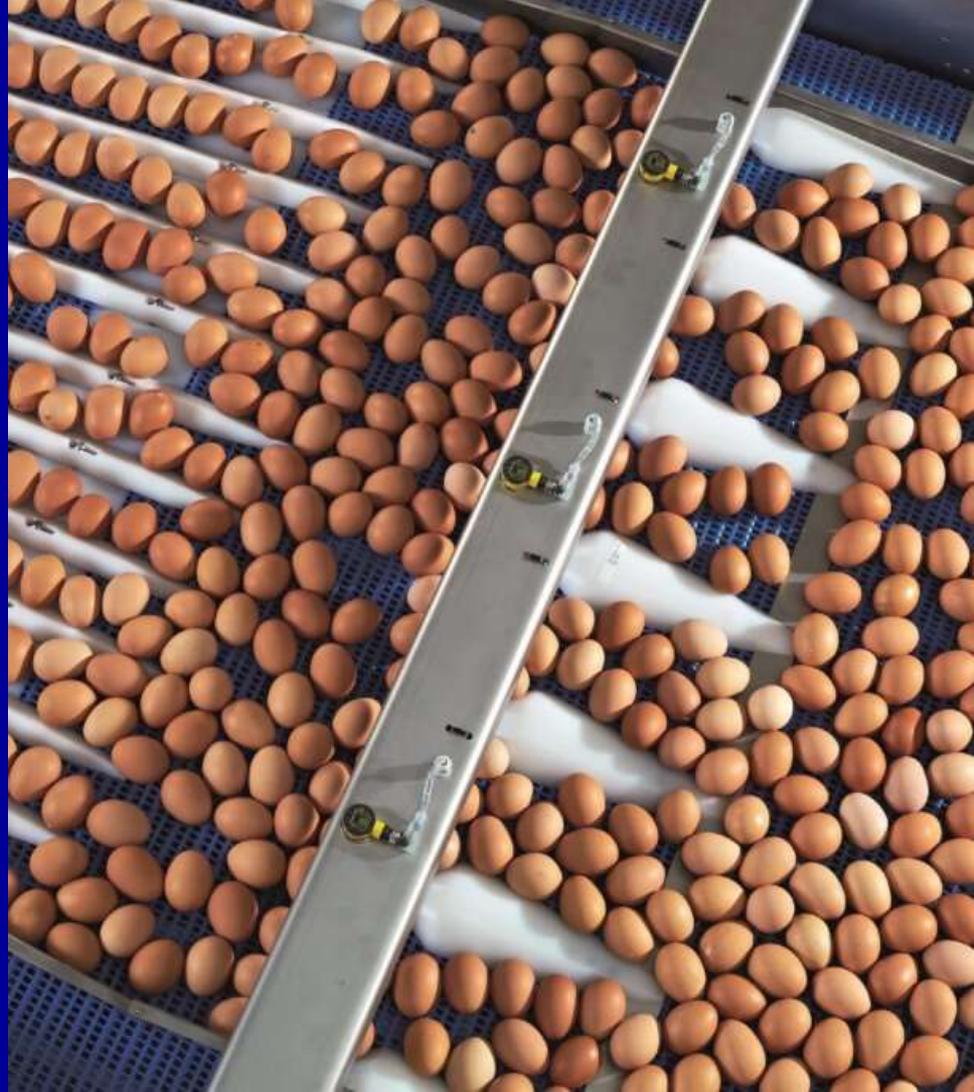
Avian influenza: Ongoing business risk in EMEA/APAC

Ongoing high feed costs: Working capital issues

Labor and logistics issue will disrupt markets

Rabobank

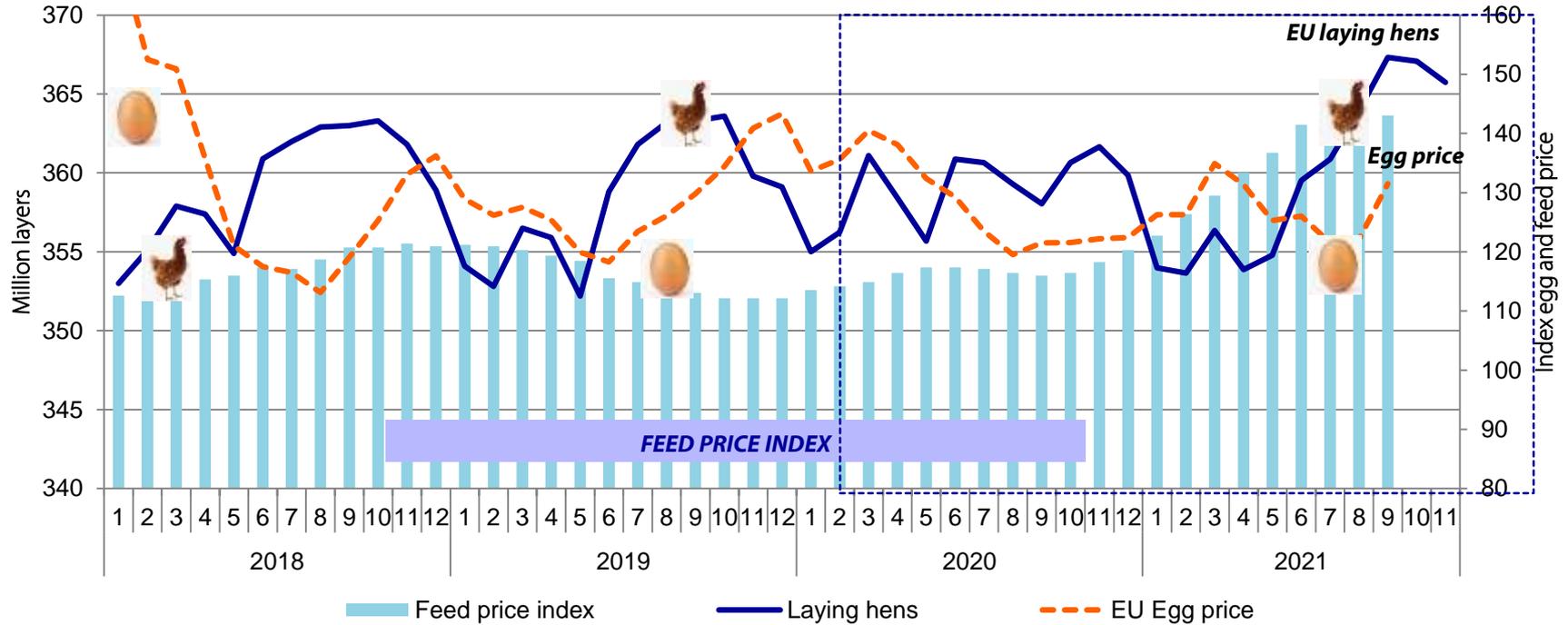
EU egg market outlook



EU Egg market in 2021: Supply concerns

Improved conditions in Q3, but expanding European laying hen flock

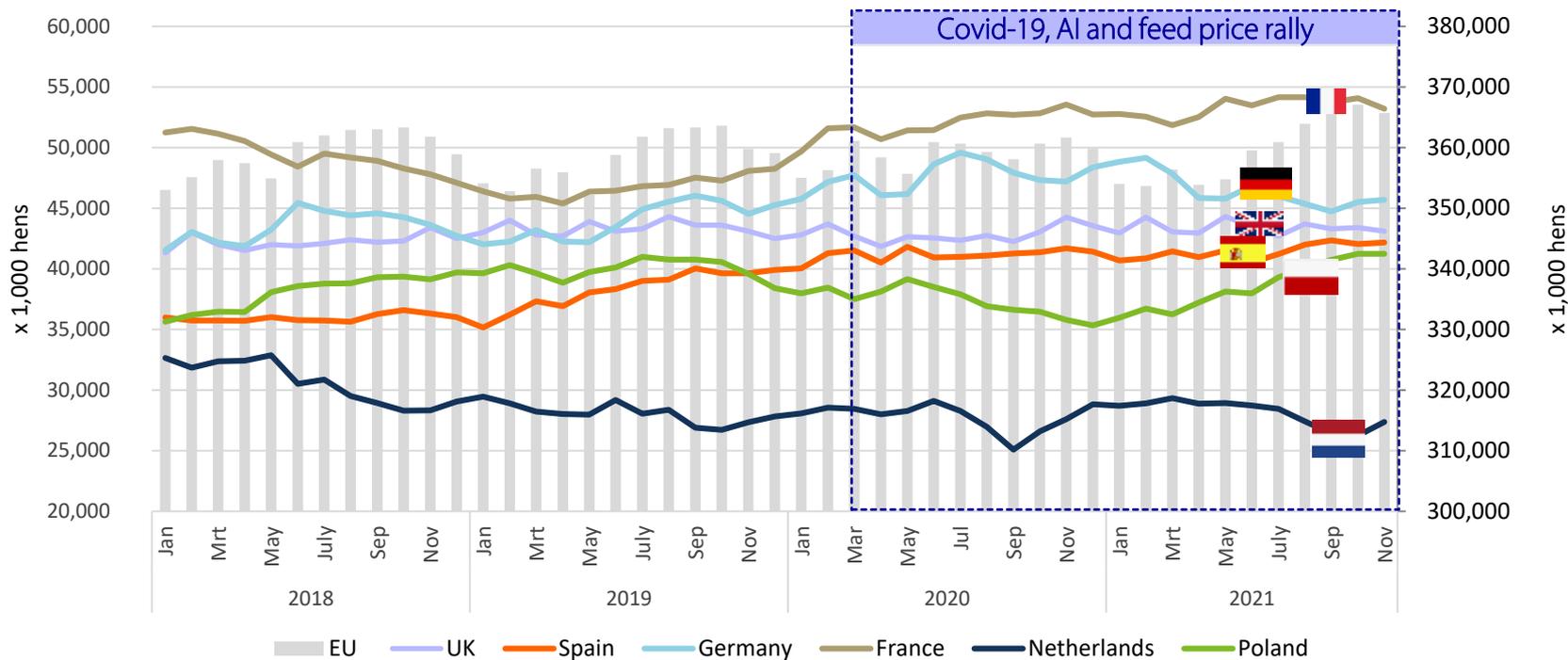
EU Egg market: Theoretic laying hen flock versus egg price and feed price



Theoretic laying hen flock:

Expansion in France, Poland and Spain, drop in Germany and Netherlands

European laying hen flock 2017-2021 based on theoretic 14 months placements

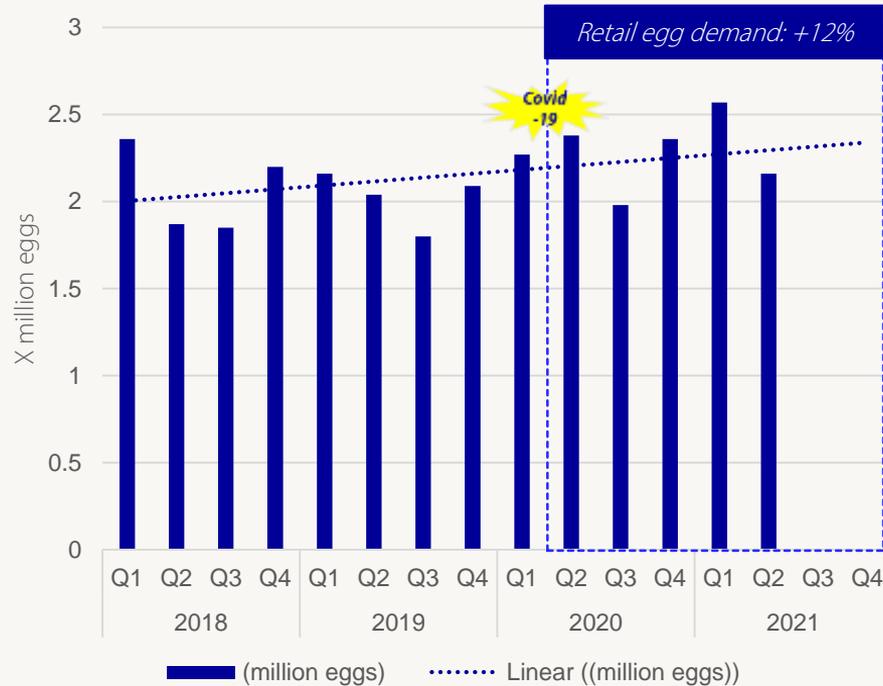


Covid-19 and egg demand

Food service bounce back after lockdown driven strong retail sales



Germany retail egg demand, quarterly 2018-2021



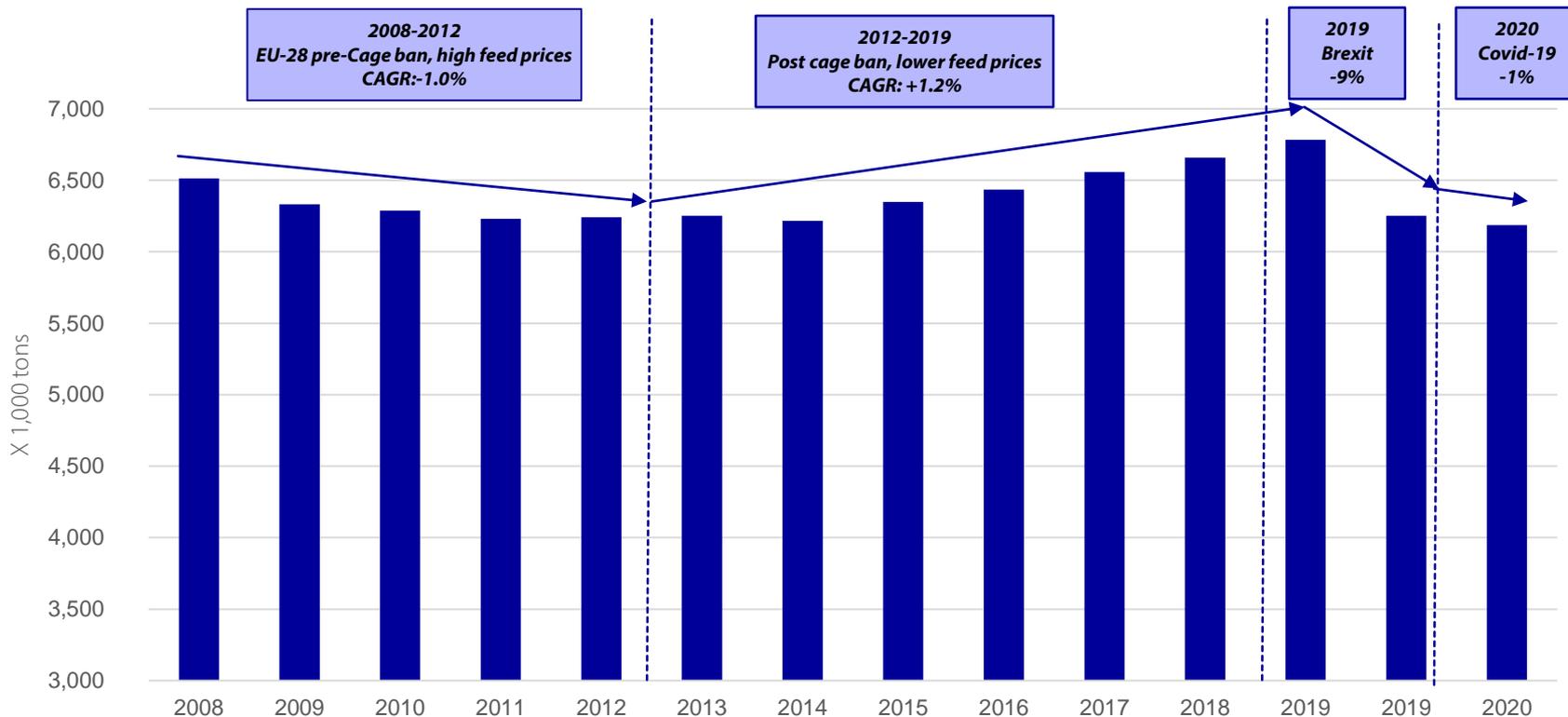
EU/UK food service demand 2020/21 vs 2019



EU egg market: Brexit and Covid-19 shocks

Brexit has led to 9% drop in market size, Covid-19 added another -1%

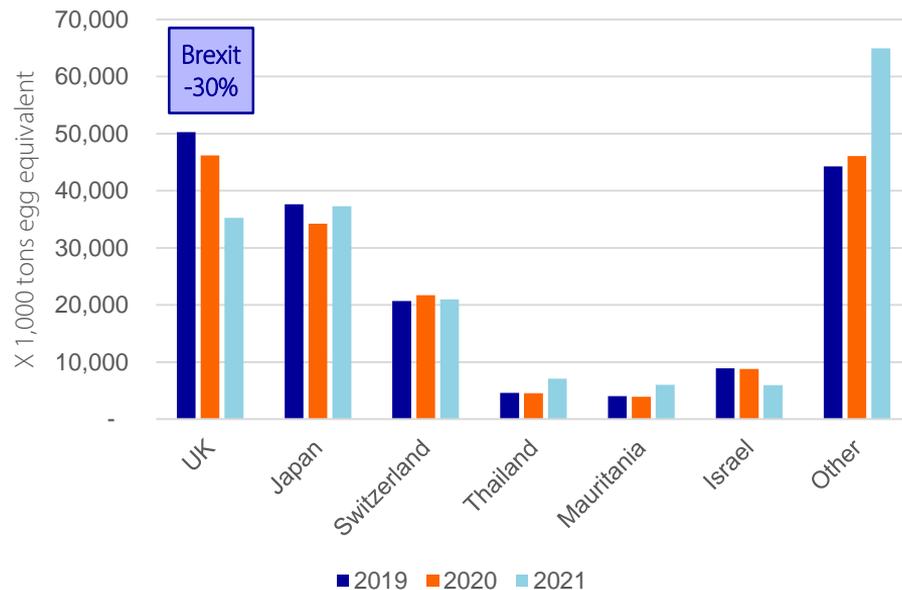
EU egg market: Ongoing growth driven by improved image



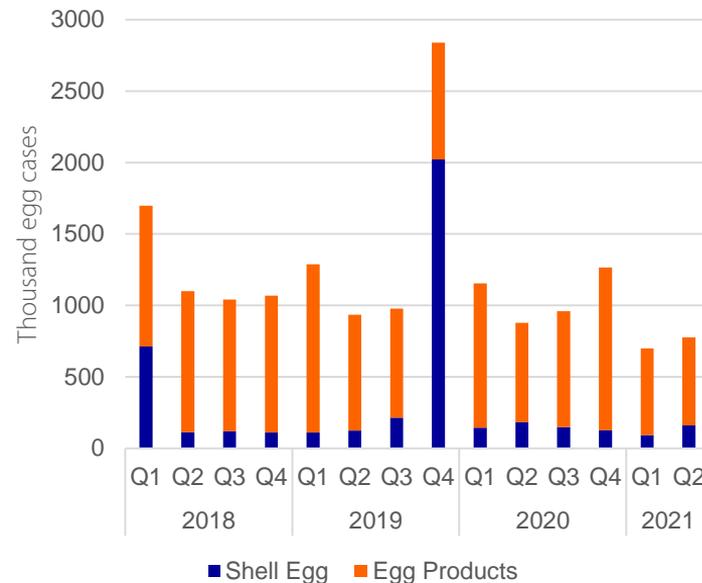
EU exports: Less UK, more other destinations

Brexit has led to 30% drop in UK exports, other destination exports are rising

EU egg exports H1 2019-2021



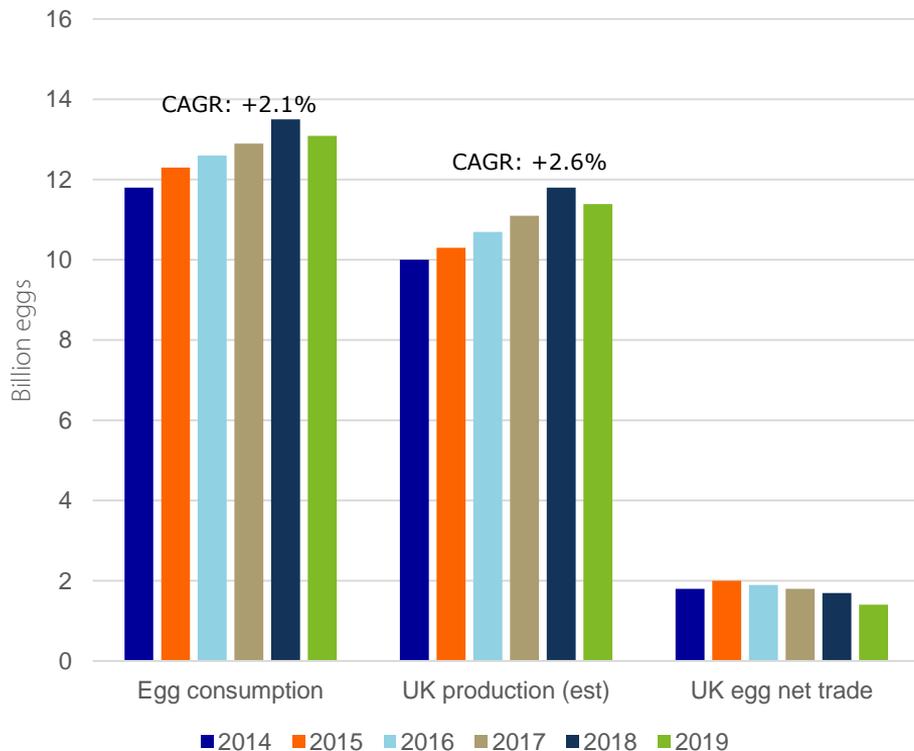
UK egg imports 2018-2021: significantly down



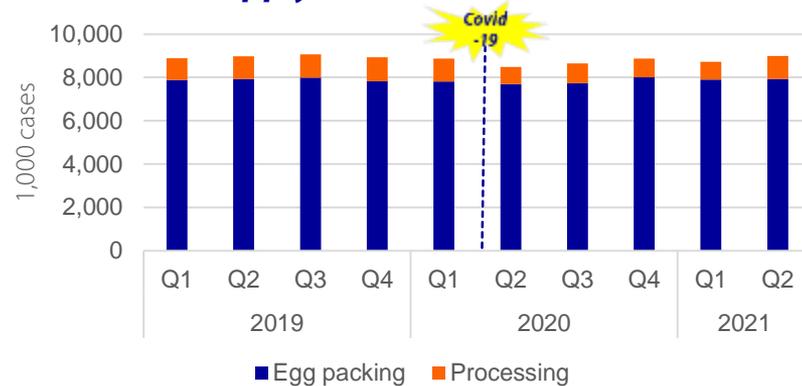
Brexit: UK towards higher self sufficiency

Brexit to further increase UK's self sufficiency in shell eggs and egg products

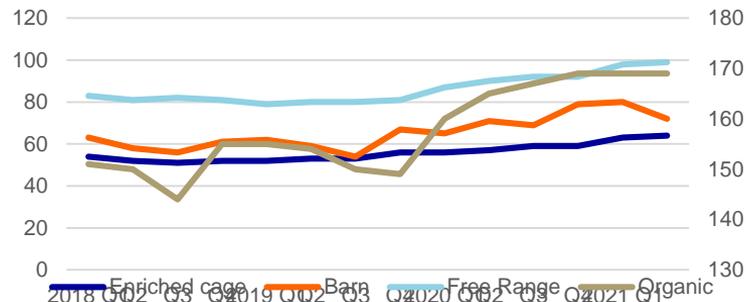
UK balance sheet eggs: ongoing growth



UK Supply in brexit times



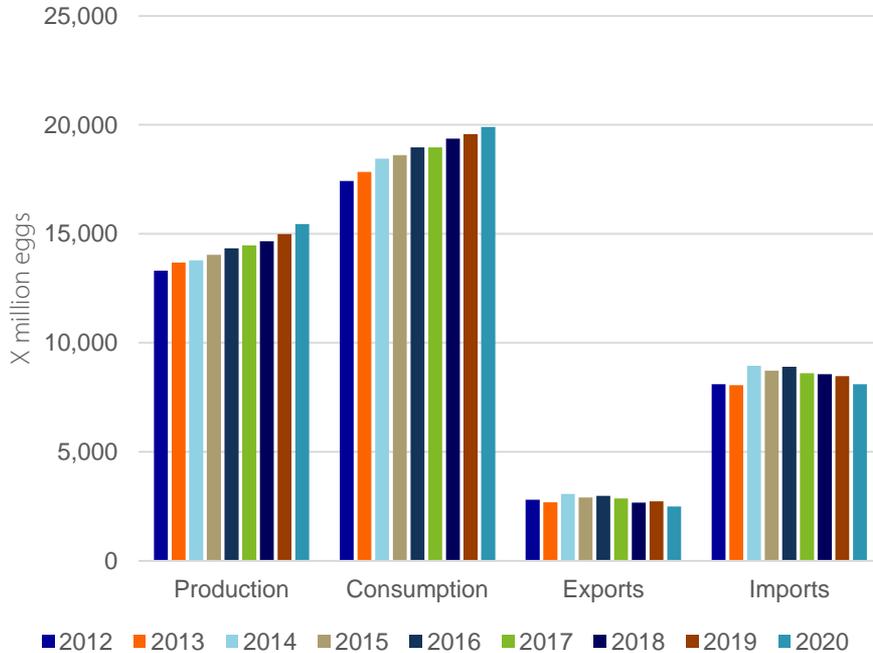
UK egg prices: Improved prices since Brexit



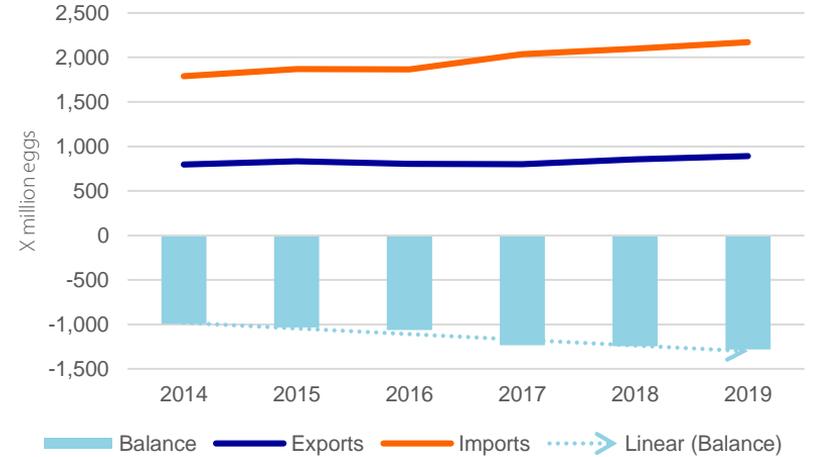
Germany's move to higher self sufficiency

Covid-19 has accelerated the shift to more local, egg products more international

German egg supply: Covid-19 accelerated shift to more local



German egg products: more imports

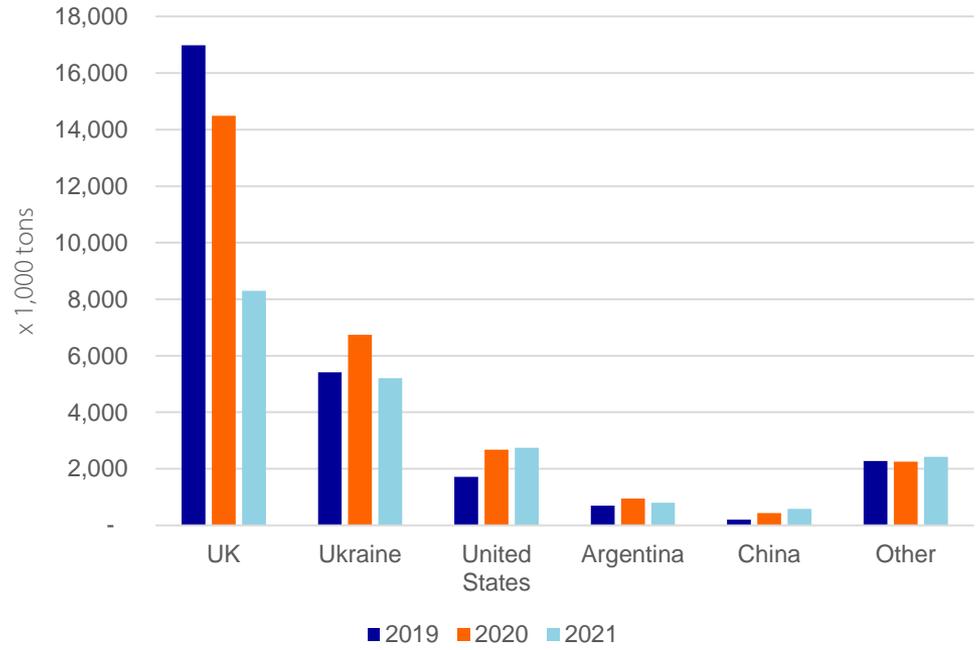


- Country of origin labeling
- Male chick: sexing technology + brütherhänchen
- Shell eggs more local, egg products international

EU imports: Brexit decline and Ukraine pressure

Brexit has led to 50% drop in UK imports, Ukraine supply is dropping

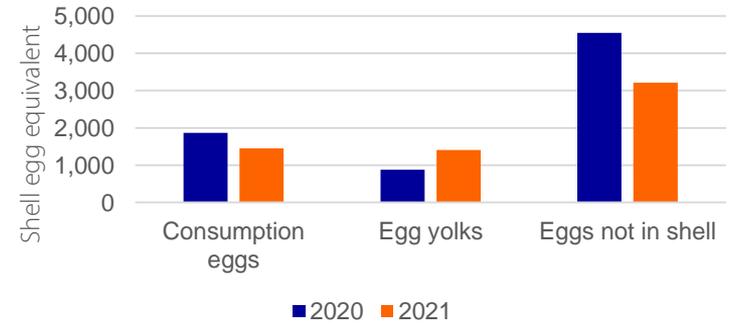
EU egg imports H1 2019-2021



Ukraine egg production 2020/2021



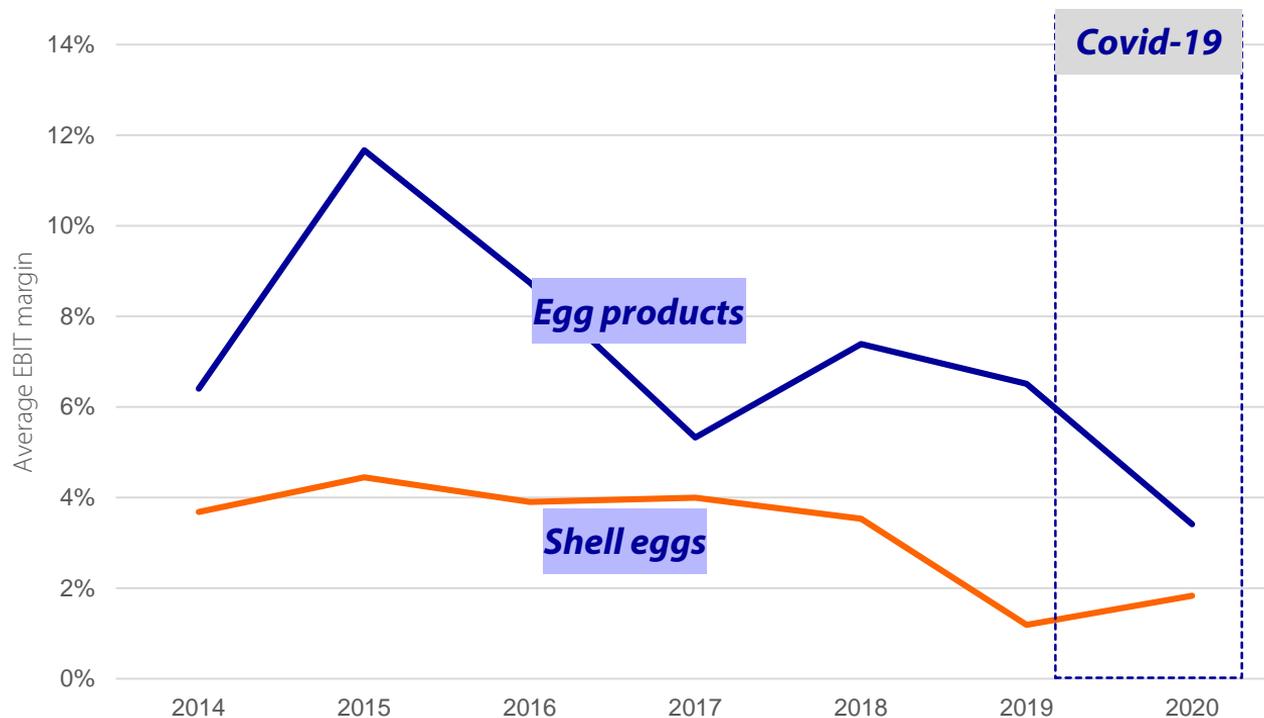
Ukraine - EU exports H1 2020 /2021



Shell egg and egg processor margins

2019 and 2020 have been challenging years especially for shell egg producers

European egg Industry EBIT margin monitor 2014-2020f



Big differences between producers

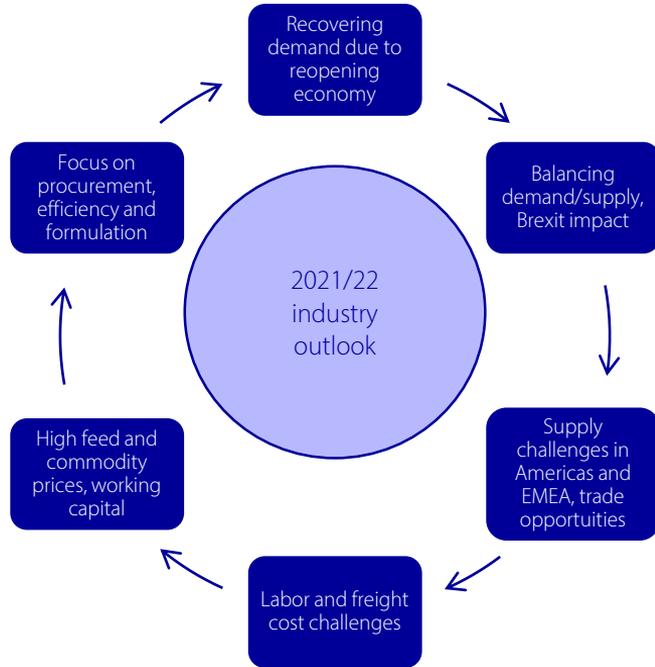
Retail driven companies strong, food processors weak

High feed prices supports efficient businesses

Outlook 2021/22: cost focus essential

Reopening markets will cause more price inflation, ongoing cost focus

Operational focus is changing in 2021/22



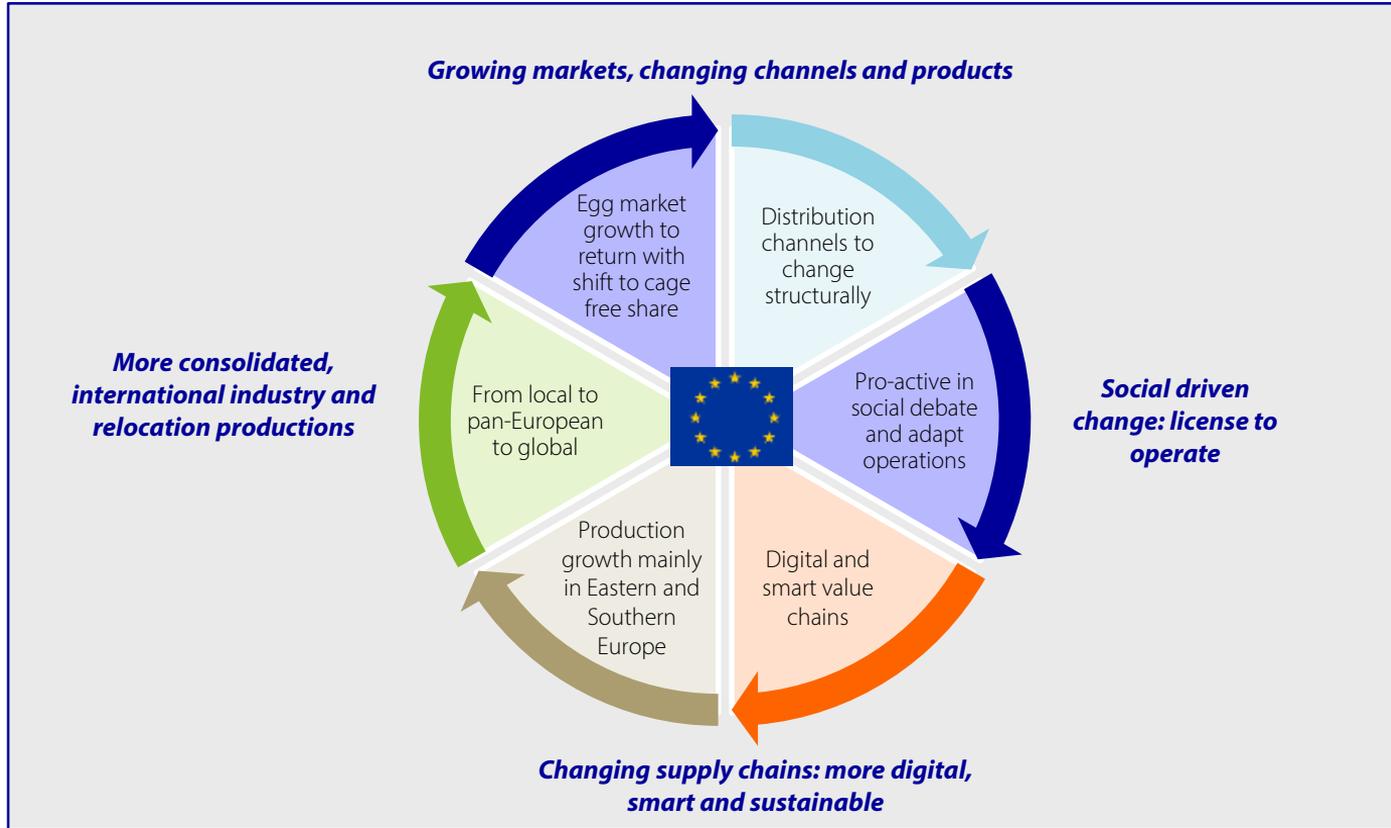
FAO food price index: food inflation risks



***Long term
investment
perspective***



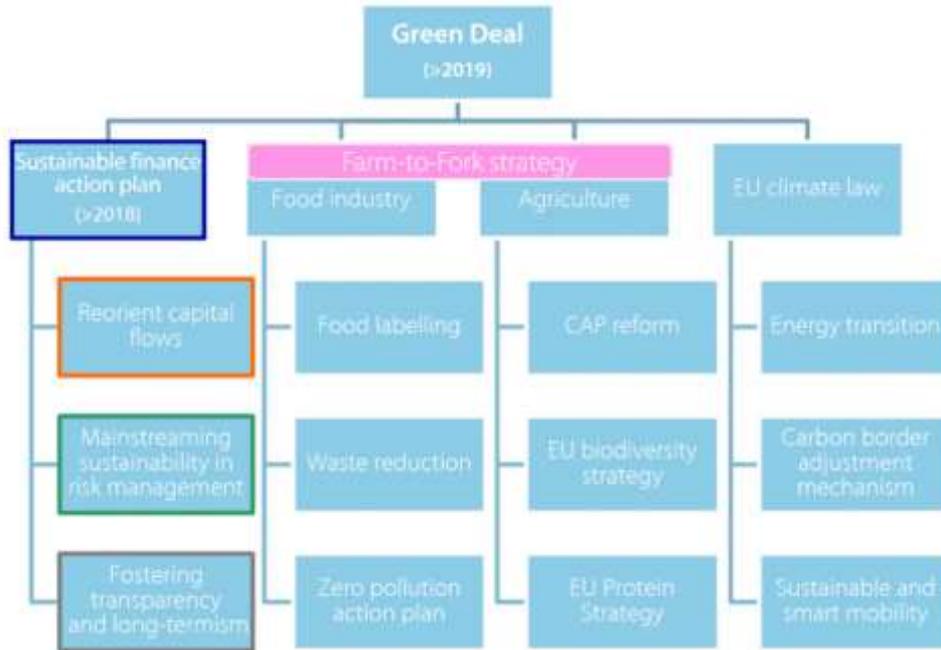
Long term investment perspective



Green deal proposals

Regulations are changing and will impact the poultry and egg industry

EU green deal & other relevant policies



Impact on the poultry industry

- Food waste: -50%
- Healthier more sustainable diet
- Reduce footprint: -55%
- Nutrition and eco labeling
- More sustainable packaging
- Zero pollution action plan

Impact on farming

- Organic land: 25%
- Antibiotics: -50%
- Pesticides: -50%
- Fertilizers: -20%
- Less imported protein crops
- Strengthen Natura 2000

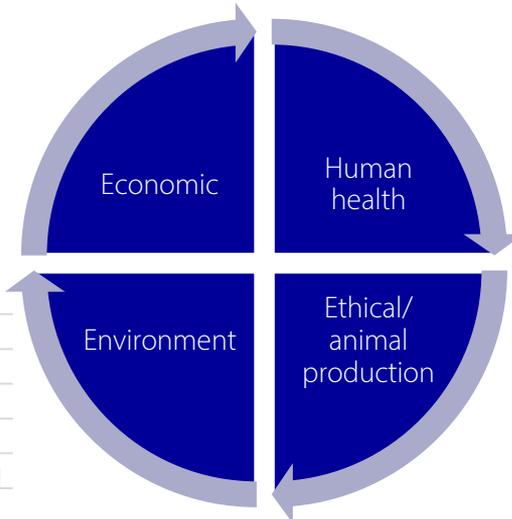
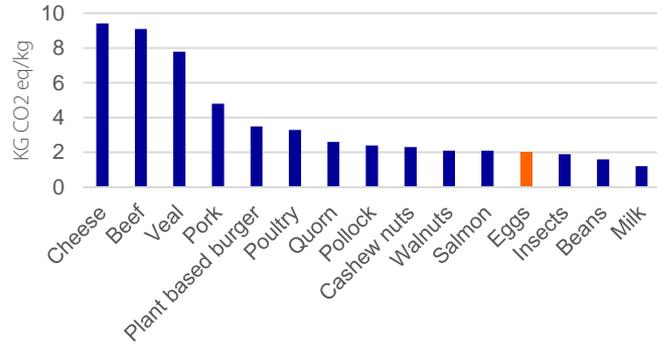
Industry needs to be more pro-active in social debate

Industry has a good story to tell but it has to be told

Economic importance



Environment: Co2 footprint



Human health: Nutriscores, fresh well positioned



| | Nutri score | KiloCal | Sat. Fat | Carbo- Hydrate | Sugar | Fiber | Protein | Salt | Price (EUR/kg) |
|---------------|-------------|---------|----------|----------------|-------|-------|---------|------|----------------|
| Omega 3 | A | 140 | 2.6 | <0.5 | <0.5 | <0.5 | 13 | 0.3 | 4.33 |
| Columbus | A | 133 | 2.6 | 1 | 0.3 | 0 | 12.5 | 0.4 | 7.83 |
| Barn egg | B | 152 | 3.7 | <0.5 | <0.5 | <0.5 | 13 | 0.3 | 2.00 |
| Free range | B | 152 | 3.7 | <0.5 | <0.5 | <0.5 | 13 | 0.3 | 4.83 |
| Organic | B | 152 | 3.7 | <0.5 | <0.5 | <0.5 | 13 | 0.3 | 6.67 |
| Tofu omelette | B | 156 | 2.4 | 4.9 | <0.5 | 2.1 | 34 | 1.2 | 16.50 |
| Hard boiled | D | 154 | 3.5 | 0.7 | 0 | 0 | 12.9 | 0.2 | 6.83 |

Ethical/animal production

The ethical "Animal as production resource" discussion is often leading

Source: Rabobank analysis based Harvard, WUR, 2021

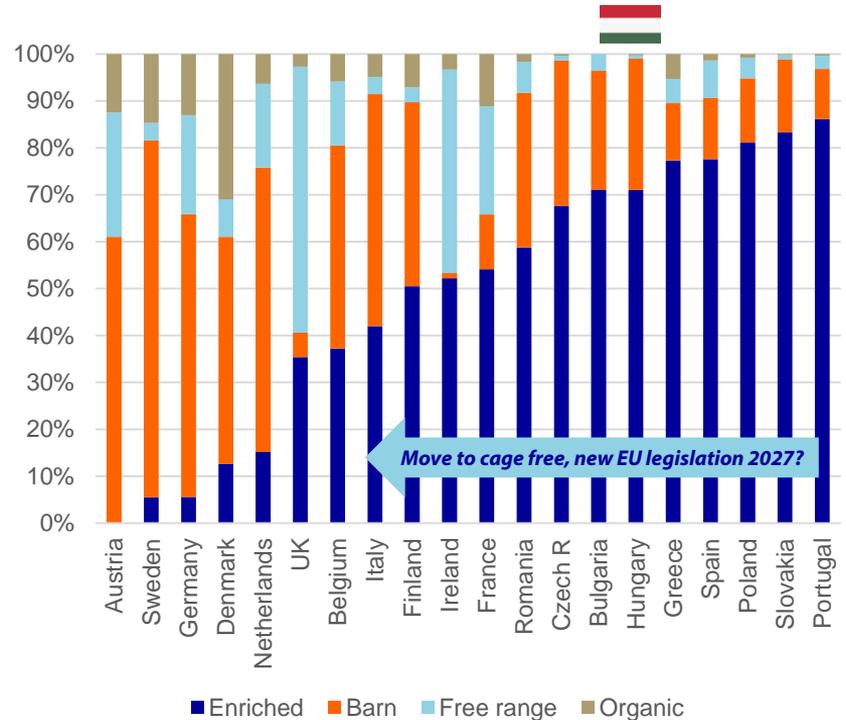
EU's changing egg market; cage free in 2027?

Move to cage free, market and regional driven- big pending industry impact

Drivers for concept eggs and cage free



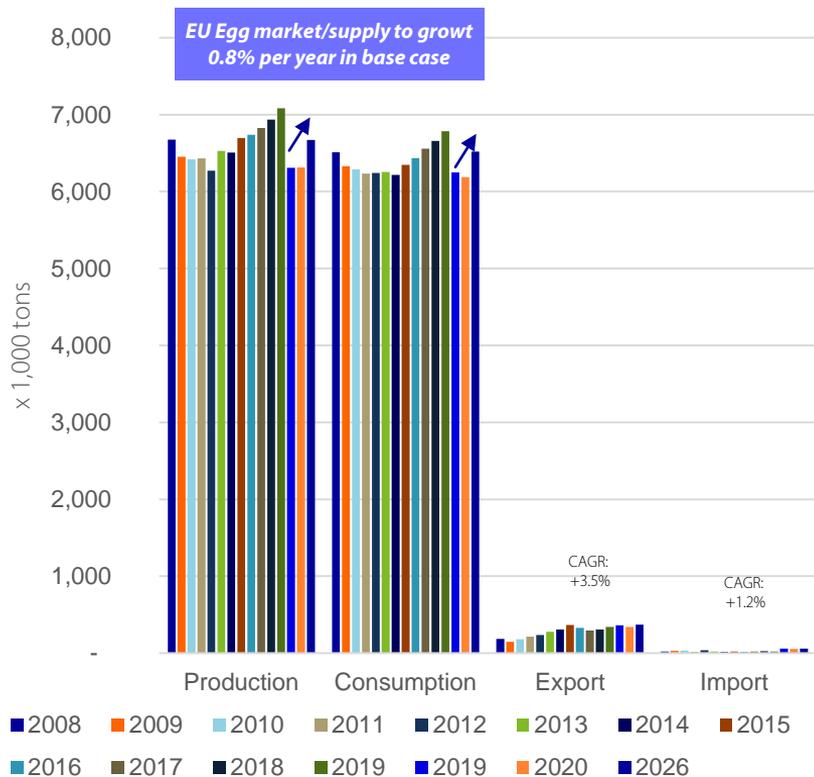
EU egg market by concept (laying hen flock, 2020)



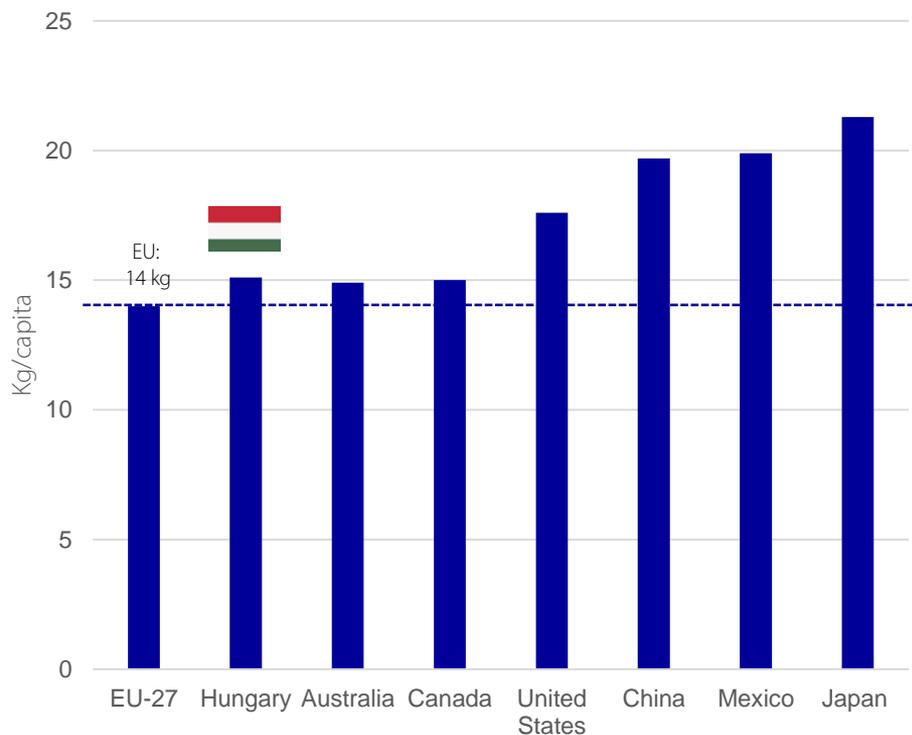
EU egg market: Recovering growth 2020-2026

EU market to grow by 0.8% YOY despite Brexit and Covid-19 reduction

EU egg market: Ongoing growth driven by improved image



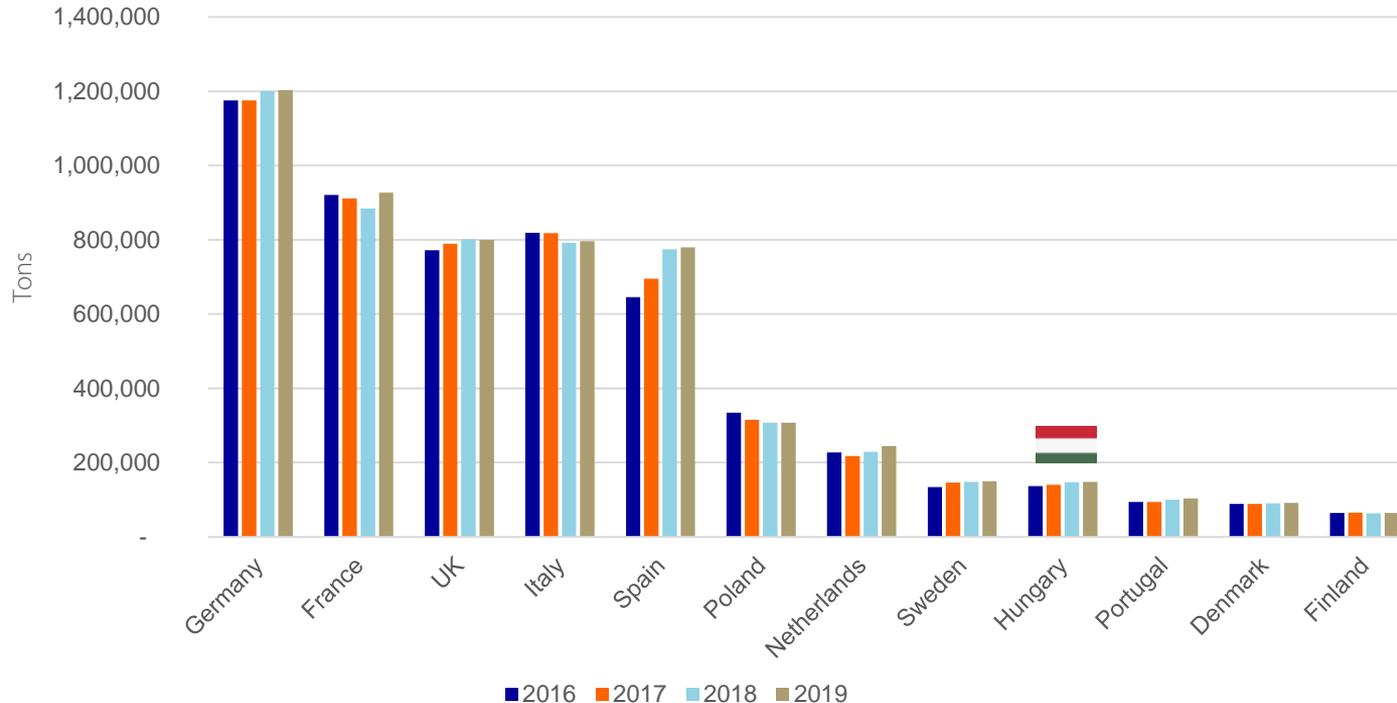
Egg consumption per capita: ongoing EI growth potential



Ongoing EU growth especially in NW Europe and CEECs

Gradual shift towards Cage free, especially customer driven

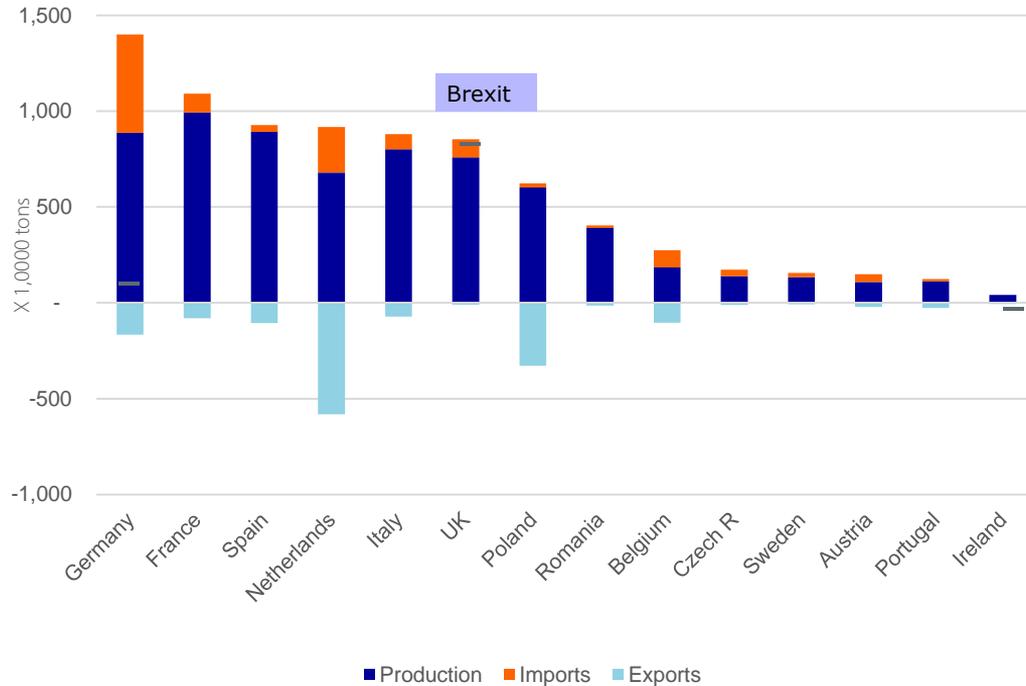
Egg consumption : ongoing growth potential in Europe



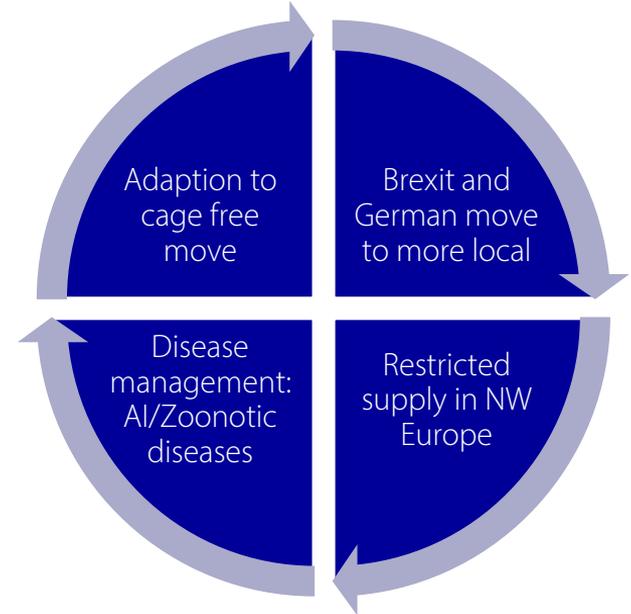
EU egg trade: highly NL, Poland and Germany focused

Germany to become more important import market for egg product market

EU egg industry self sufficiency



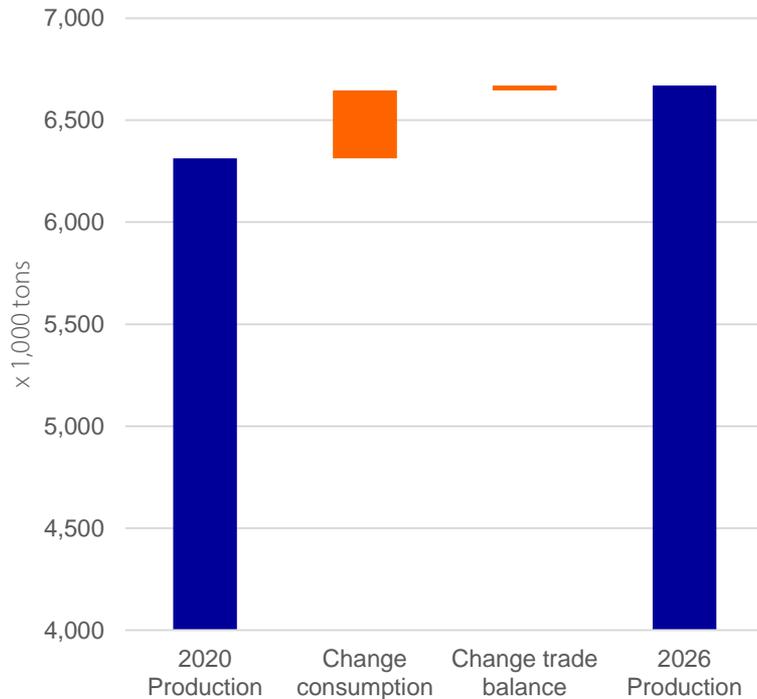
Shifting supply: key drivers



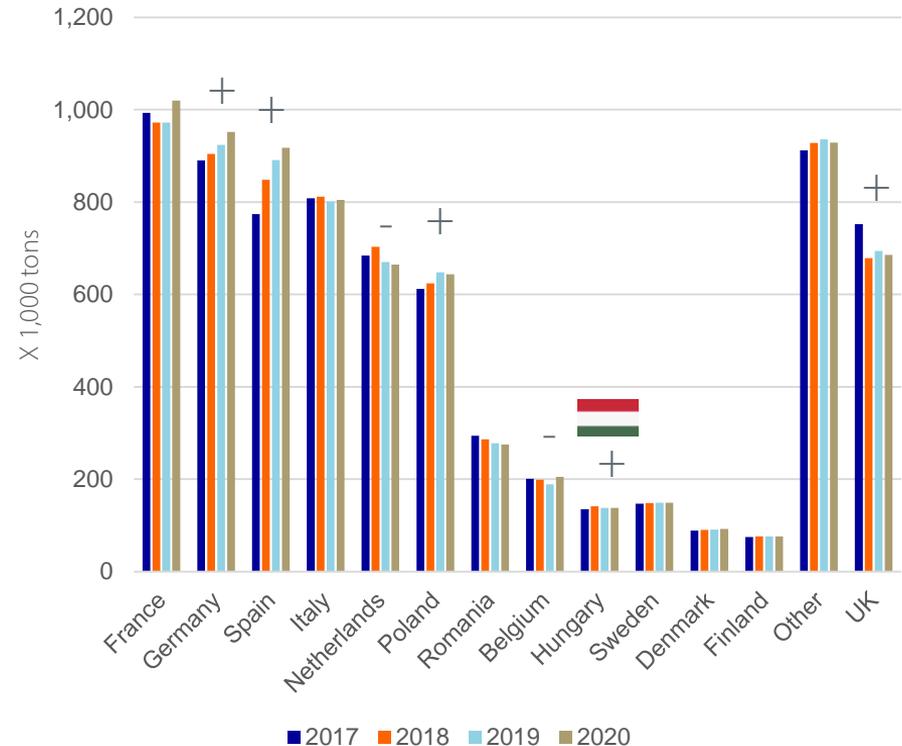
EU egg production 2026: +350,000 tons

Germany and UK more self sufficient, Poland, Hungary and Spain to further expand

EU egg industry 2020-2026: + 350,000 tons

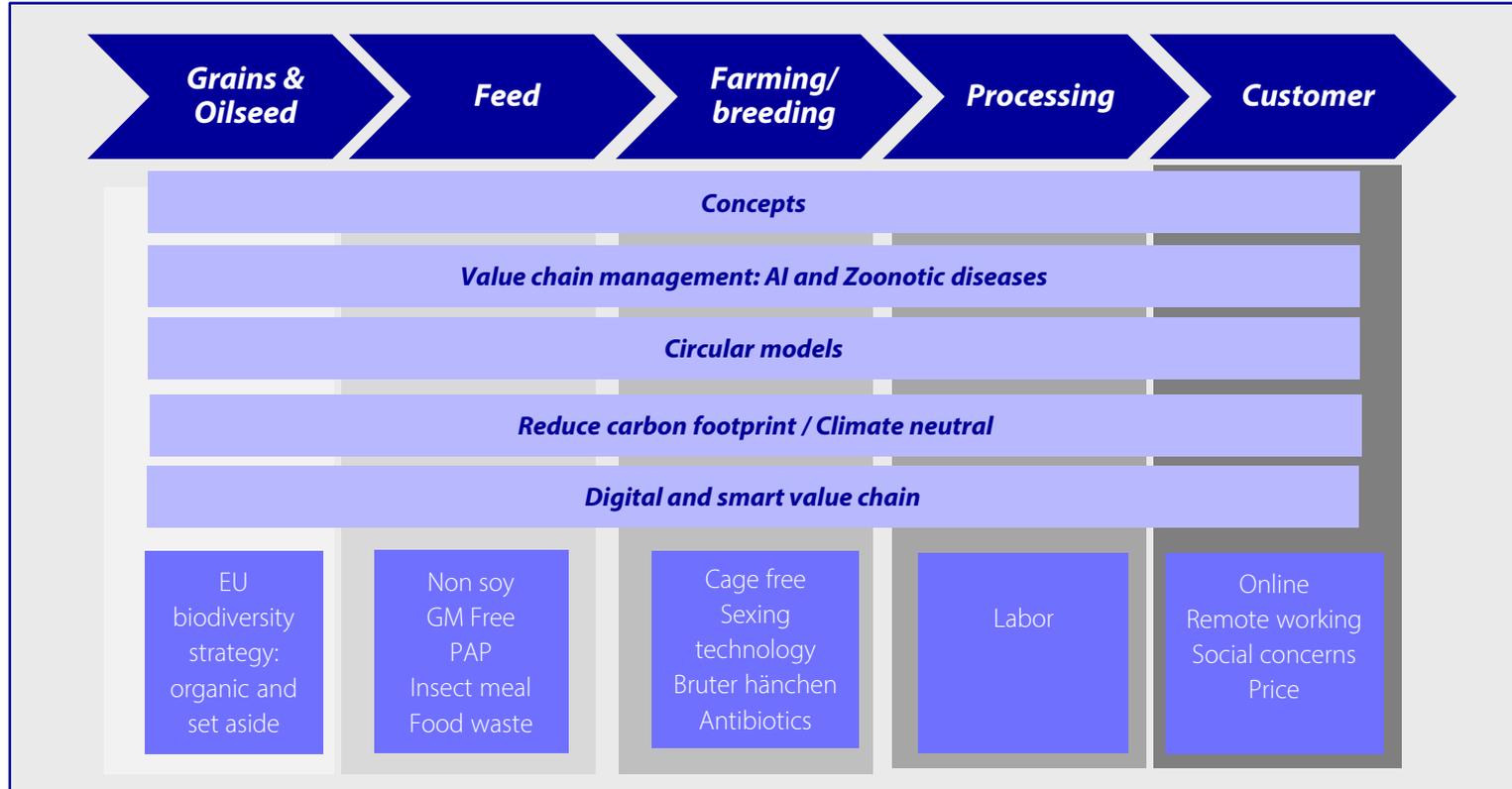


EU egg production growth towards 2026: Germany, UK, Spain and Poland



Social change as driver for changing value chain models

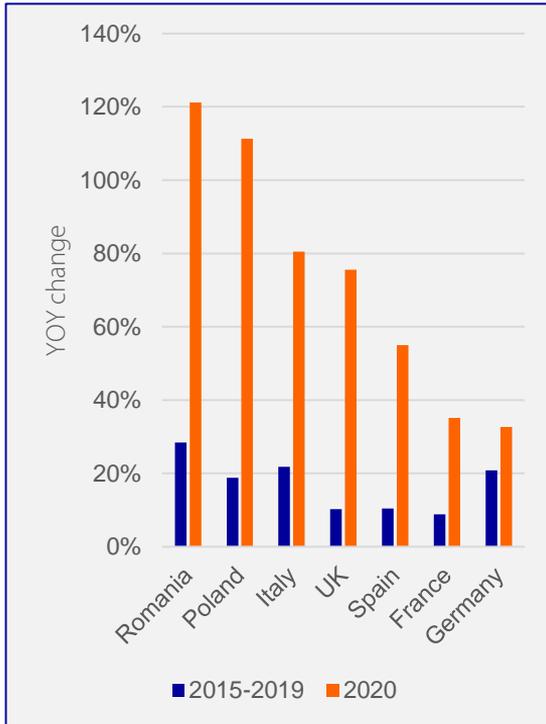
Industry will gradually adapt new technology, access to farm capacity to become strategic



Online food distribution's break through

Many new opportunity to market poultry and communicate with consumers

Online food distribution



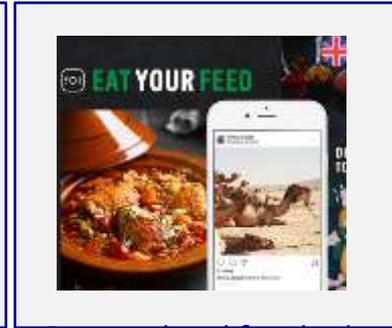
Value chain tracking & tracing



Personalized advertisements



Using social to inspire



Meal planners



DNA based food choices



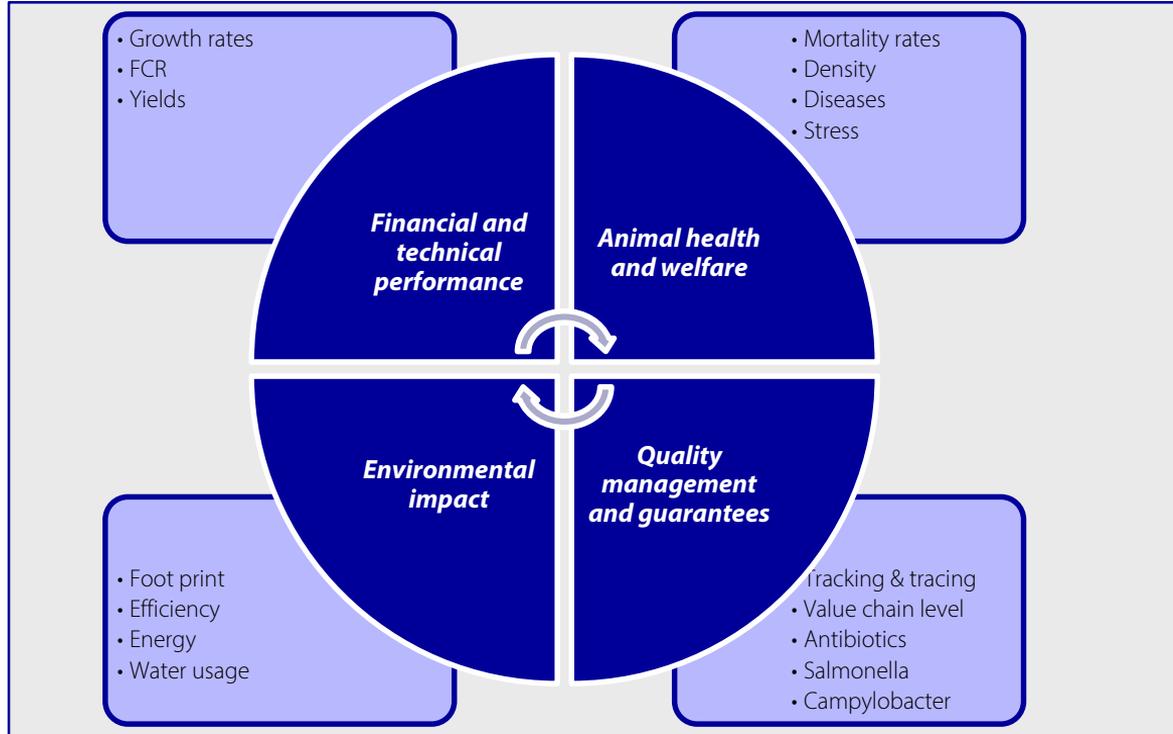
Personalized food advise



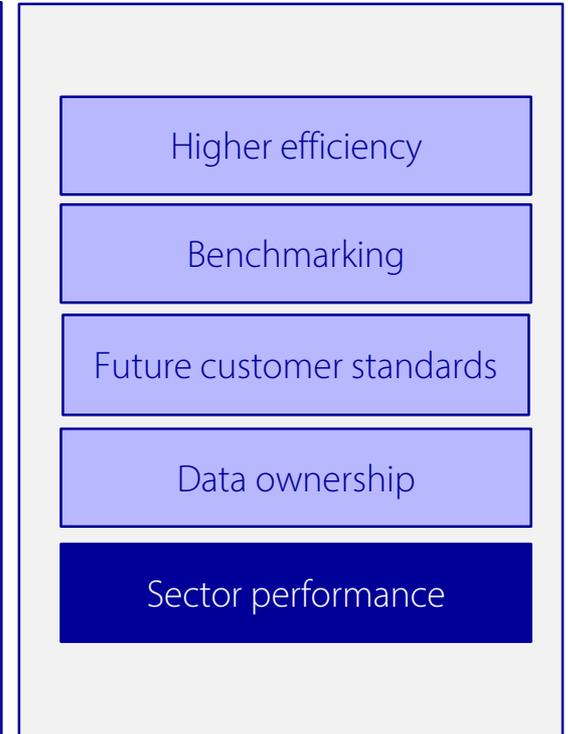
Value chain models to change

Towards digital, smart and more multi-disciplinary value chains

More multi-disciplinary view on production

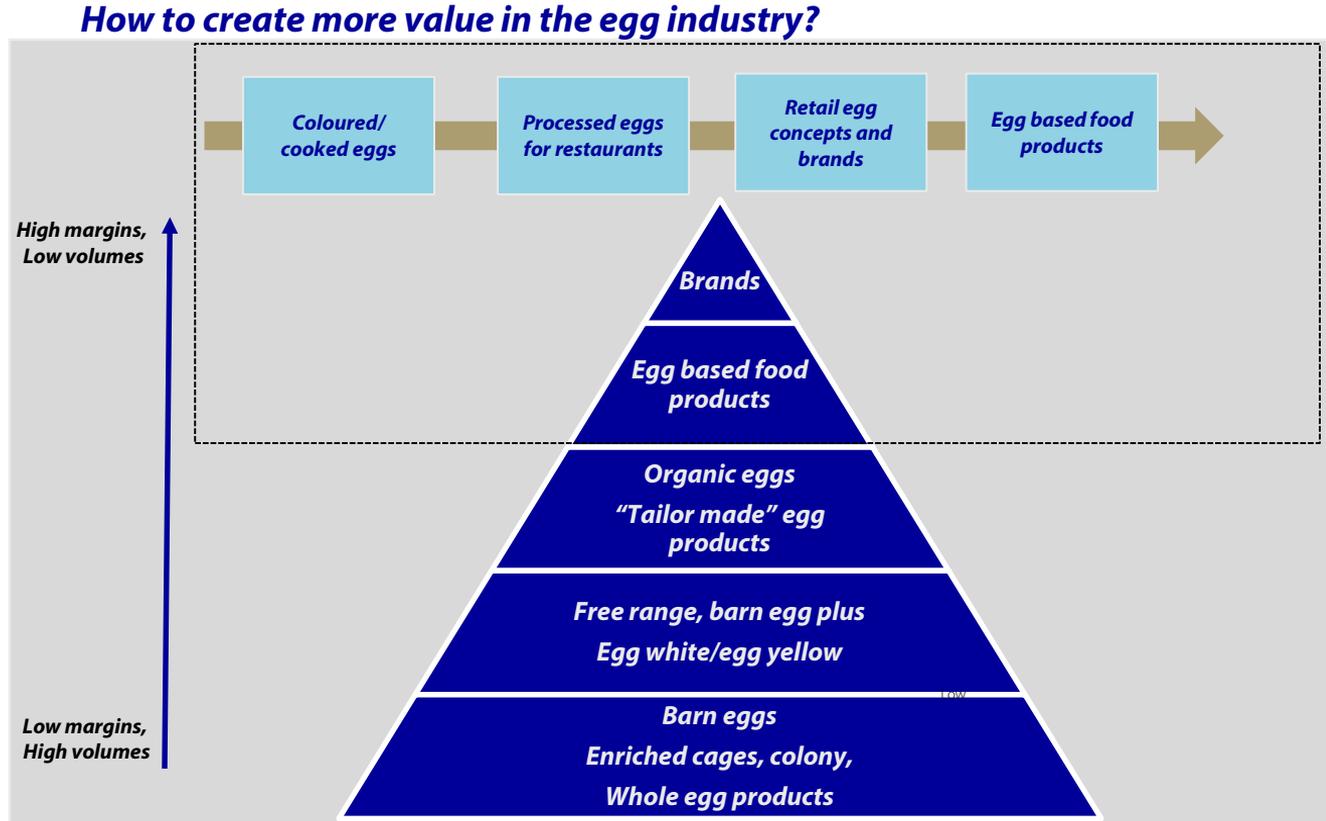


Industry benefits



More focus on value added

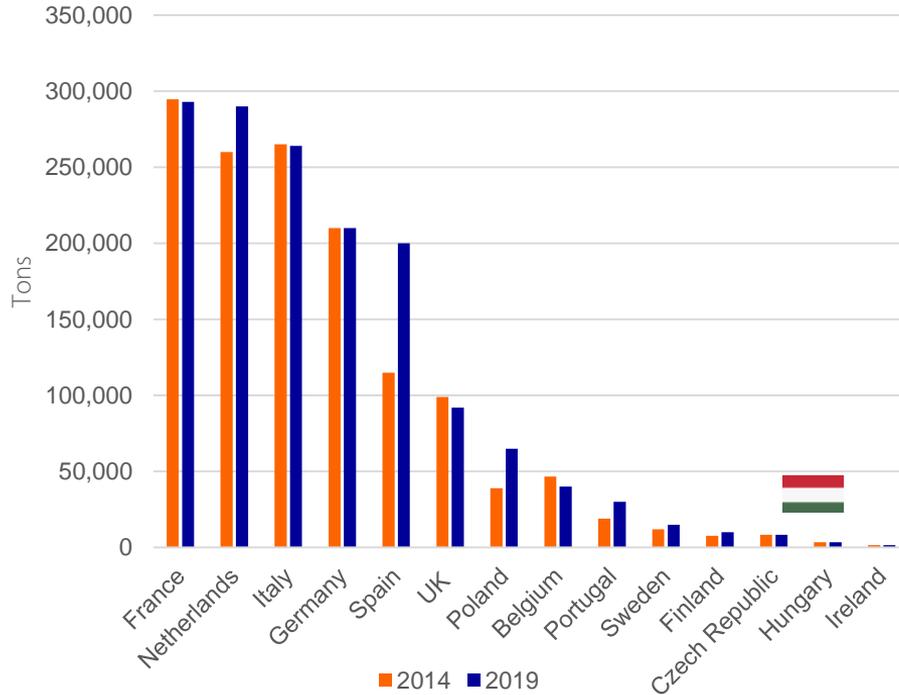
Industry to capture further value added growth potential



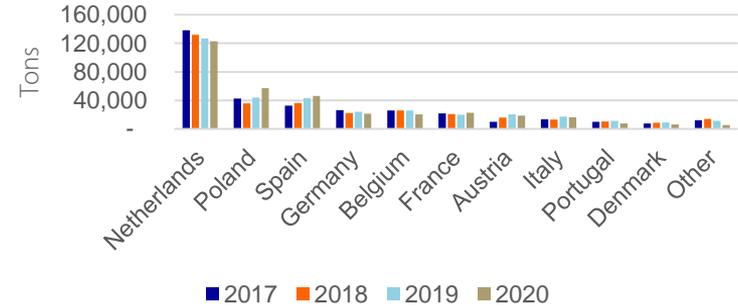
Egg product industry to grow 1-2% per year

Gradual expanding supply – Spain and Poland more competitive

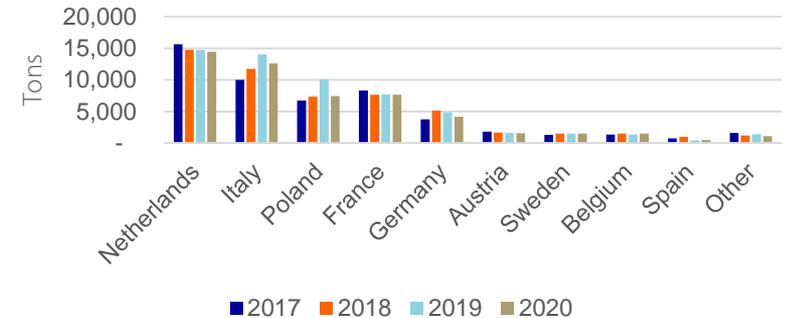
EU egg products – Gradually rising production



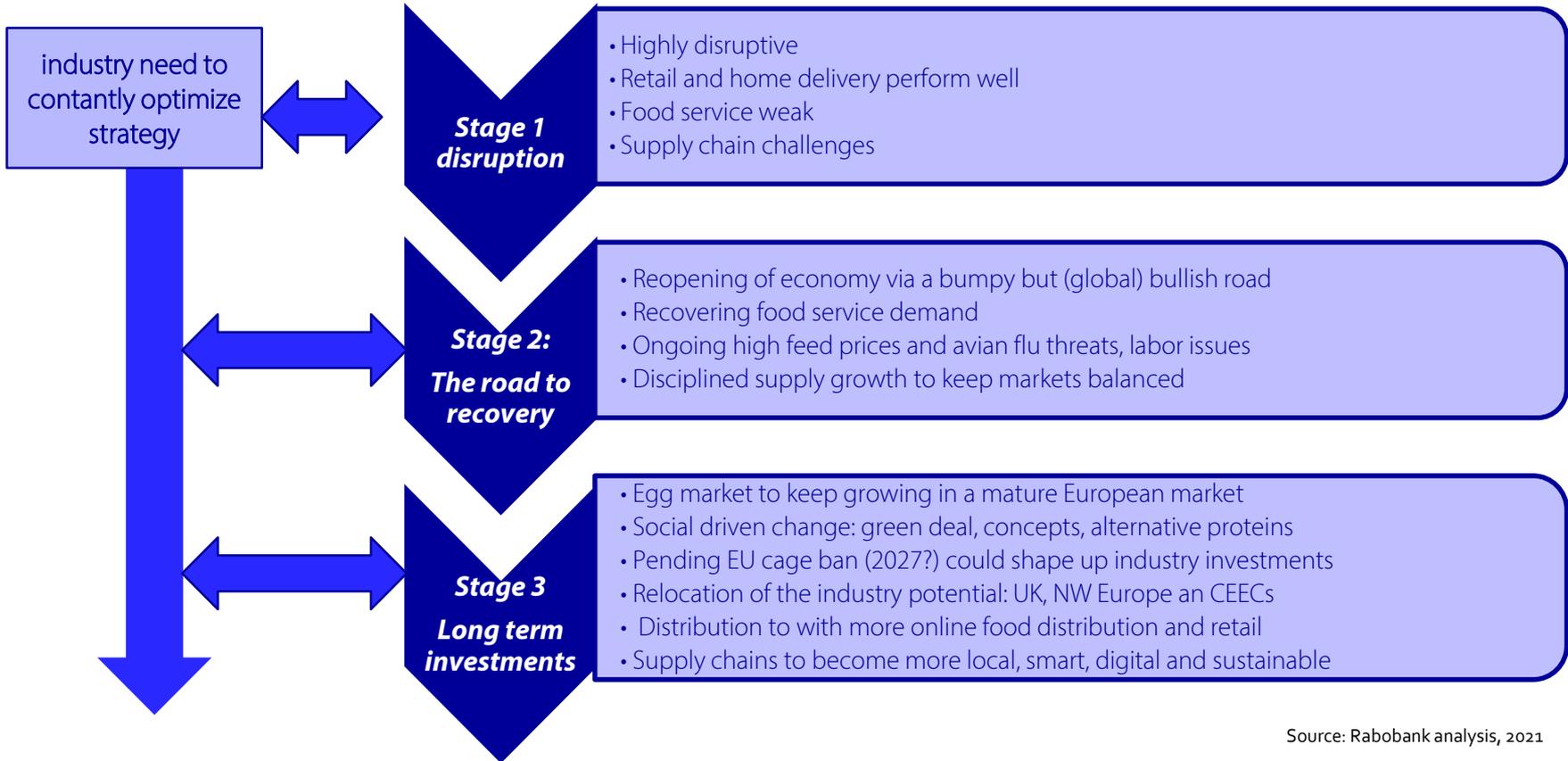
EU liquid egg exports: PL and ES gain market share



EU dried egg exports: NL keeps leadership



Conclusion



Thank you for your attention

Nan-Dirk Mulder
nan-dirk.mulder@rabobank.com



Rabobank

*Growing
a better world
together.*