



The bank for a changing world

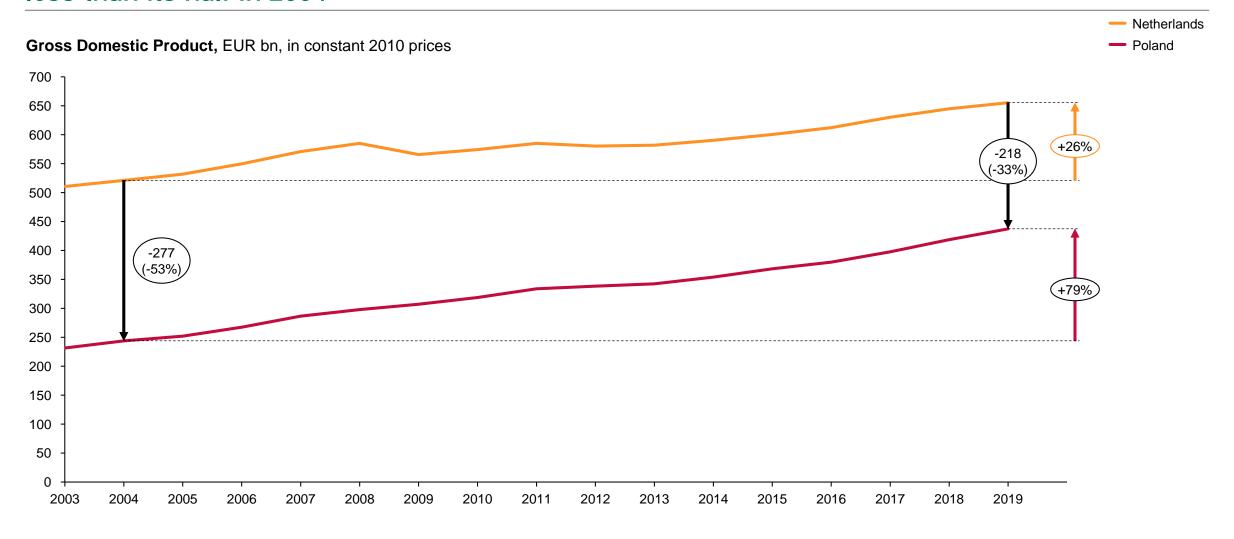
Agenda

- Positioning of Poland as a food production powerhouse
- COVID-19 effects on the food industry in Poland
- Sub-sectors focus
- Closure remarks

Positioning of Poland as a food production powerhouse

- COVID-19 effects on the food industry in Poland
- Sub-sectors focus
- Closure remarks

The size of Polish economy is presently 2/3 of the Netherlands' in comparison to less than its half in 2004



Source: Eurostat

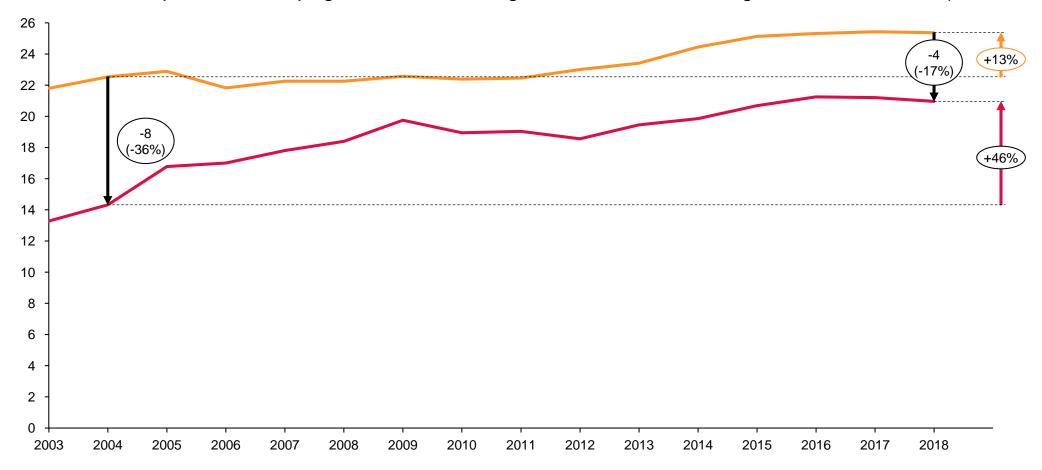


Food & Agro sector was closing the gap even faster, however, the difference in last years remained fairly stable







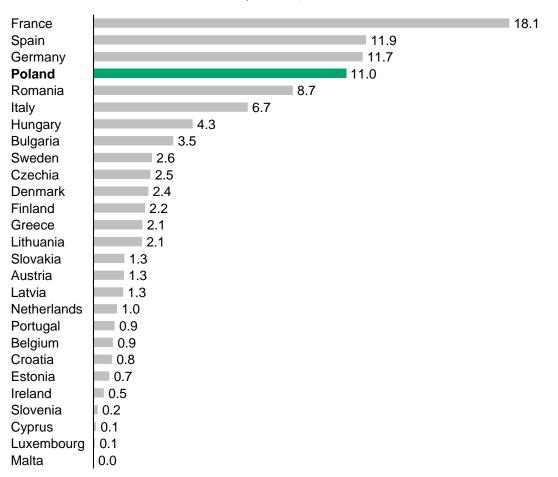


Note: 2018 in Poland was one of the least fertile years of the last decade due to unfavorable weather conditions Source: Eurostat

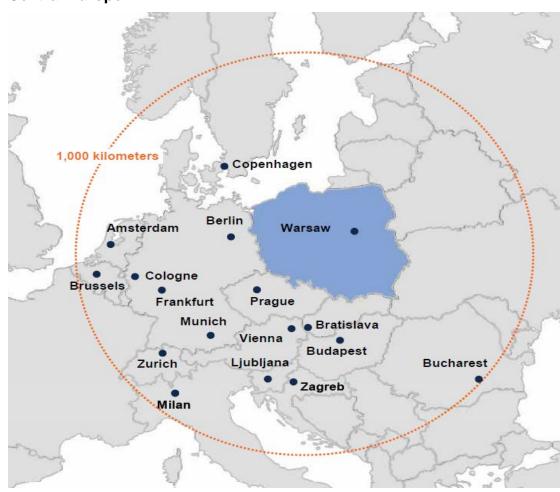


Poland has large resources of land and lays conveniently among 250 mn of consumers within the 1000 km radius

Arable land in the EU countries, mn ha, 2019



Central Europe

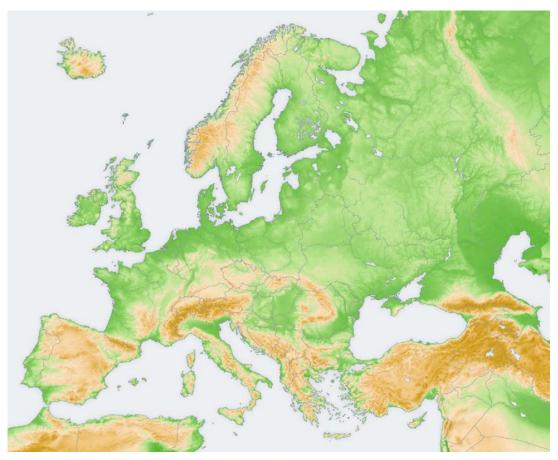


Source: FAO, McKinsey & Company

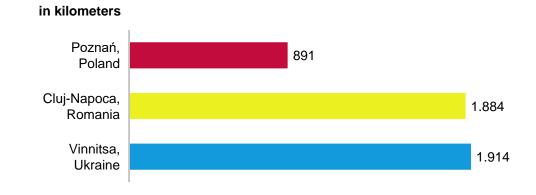


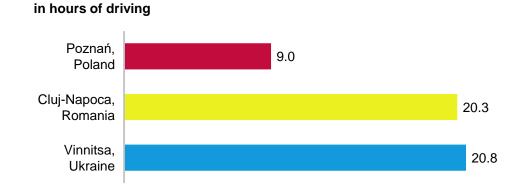
Flat area and the location in the middle of Europe facilitates transportation of Polish Food & Agri goods, giving advantage over direct competitors

Physical map of Europe



Distance from Amsterdam to major agricultural region in largest CEE countries



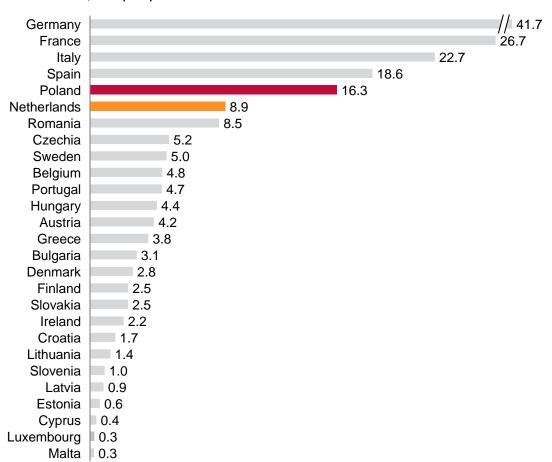


Source: Google Maps, Wikimedia

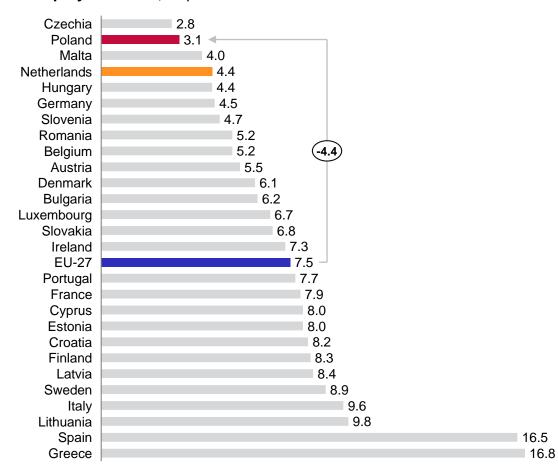


Poland has large labor force and ranks among the EU's member states with the lowest unemployment rate

Labor force, mn people



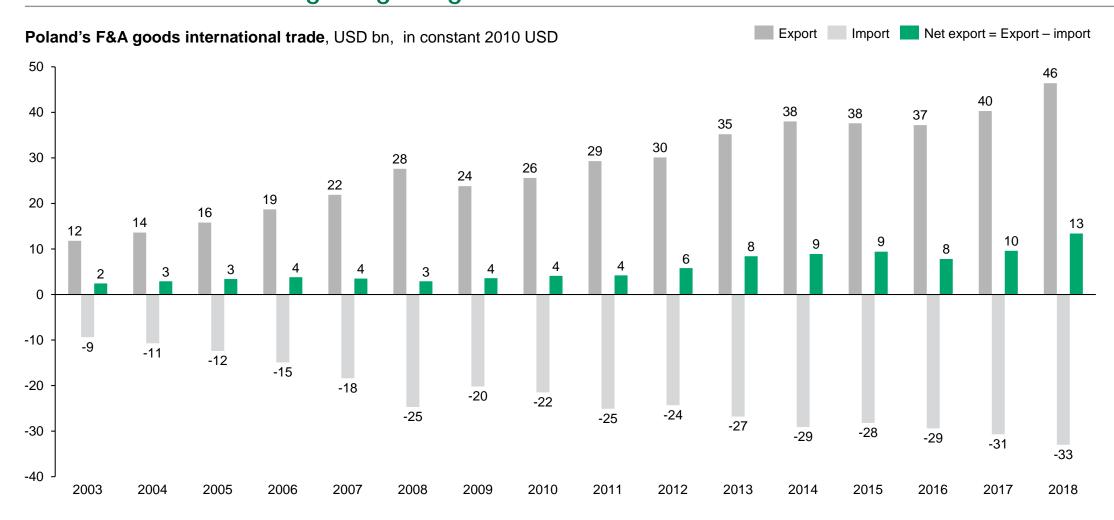
Unemployment rate, Sep 2020



Source: Eurostat



Poland has been gradually raising its significance in the Food & Agri international trade and has been recording a regular growth in the trade balance



Note: The numbers may not add up due to roundings Source: Harvard's Atlas of Economic Complexity



Agriculture plays a key role in Polish international sales, being responsible for 15% of Polish exports

Polish export composition, 2018

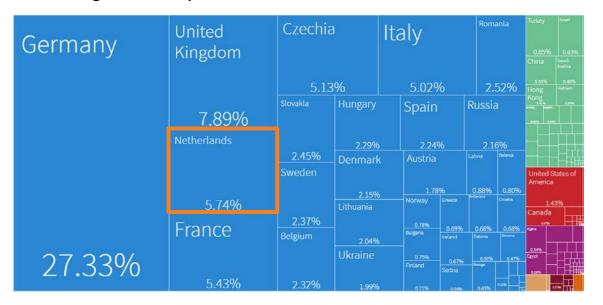


Source: Harvard's Atlas of Economic Complexity

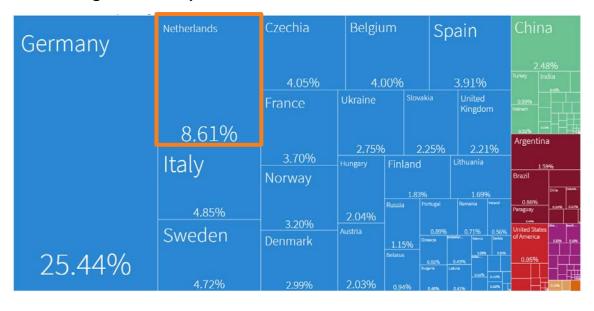


Concerning agriculture, the Netherlands is the 3rd largest partner in exports and 2nd largest in imports of Poland

Poland's agriculture export, in USD



Poland's agriculture import, in USD

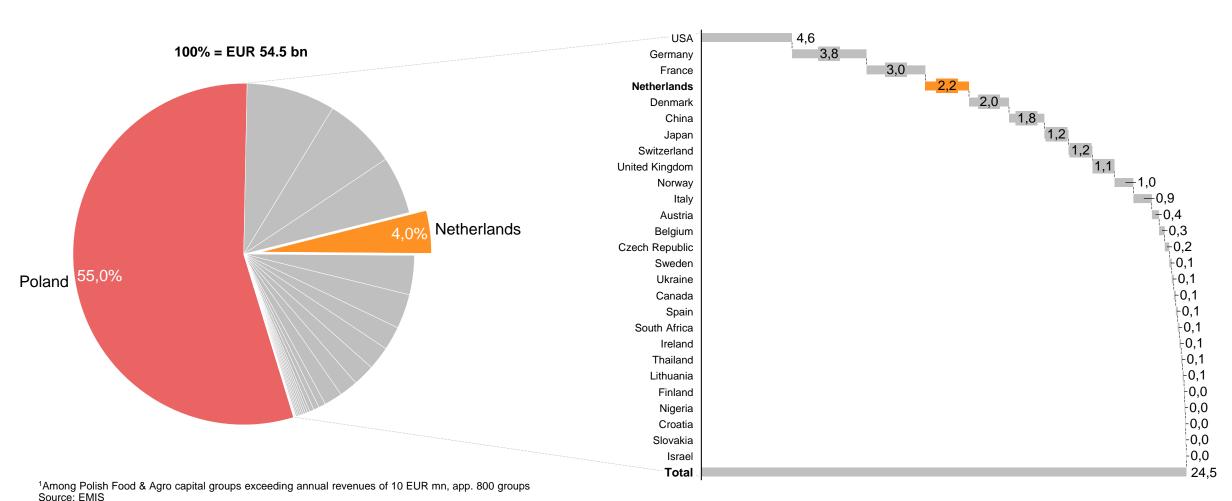


Source: Harvard's Atlas of Economic Complexity



Foreign owners control almost half of the revenues of the largest F&A companies in Poland, the Dutch own 4% of the revenue stream

F&A revenues by origin of group shareholders¹, %





APPROXIMATION

Agenda

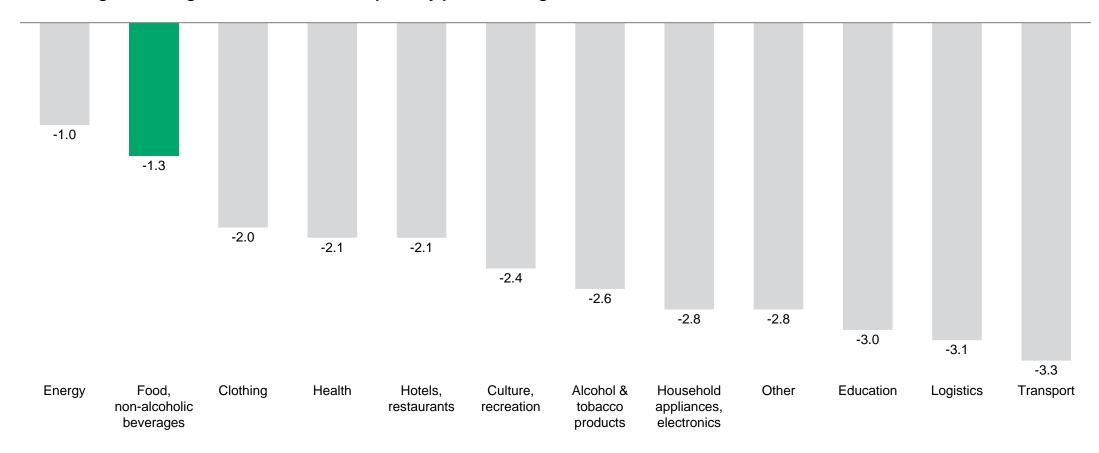
Positioning of Poland as a food production powerhouse

COVID-19 effects on the food industry in Poland

- Sub-sectors focus
- Closure remarks

Food & Agro products tend to be less affected by crises than other economy branches

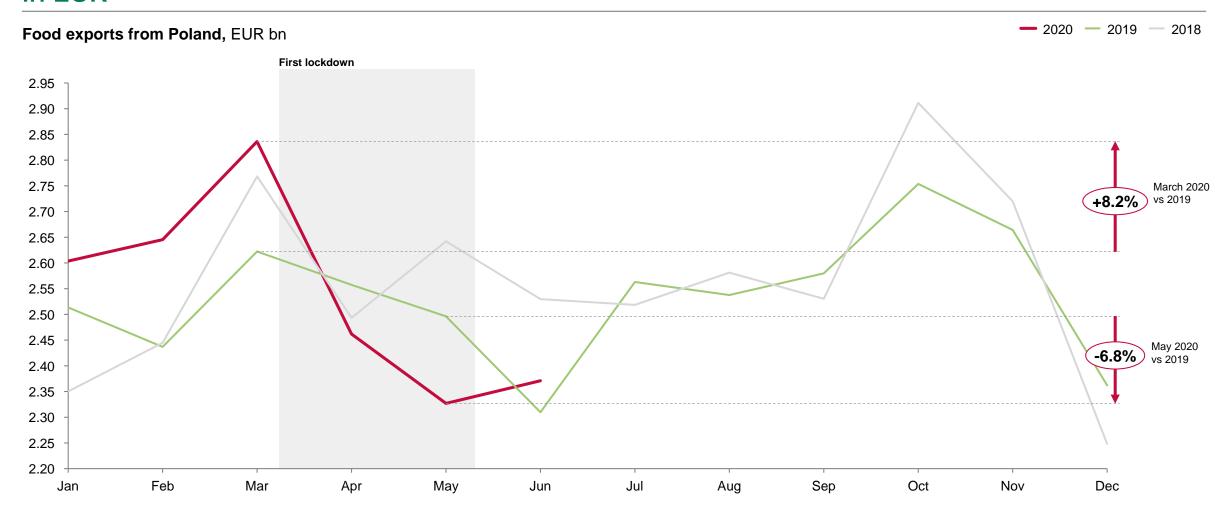
Median negative change in household consumption by product categories in the EU+UK, 1996-2019, %



Source: Eurostat



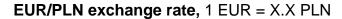
Polish food exports during the pandemic fell below the levels observed in preceding years in EUR



Source: UN Comtrade



Polish złoty (PLN) depreciated significantly during the first lockdown and remained at the level of 4.50-4.60 PLN for 1 EUR, vs. 4.20-4.30 rate below the crises...

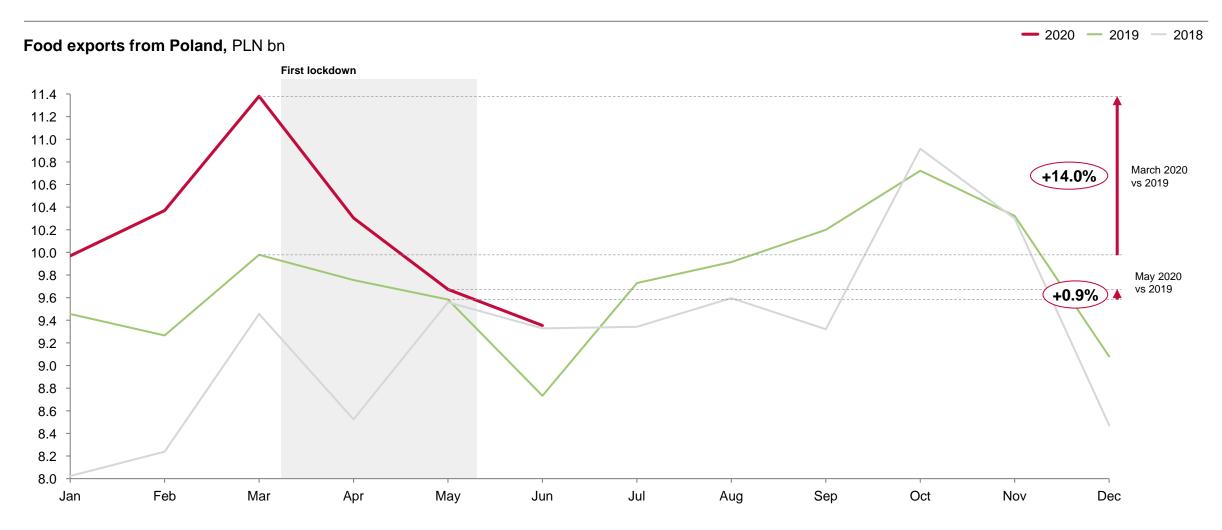




Source: National Bank of Poland



...what helped the exports measured in PLN to actually keep growing



Source: UN Comtrade, National Bank of Poland



The first pandemic wave influenced the exports of Polish Food & Agri products sector with varying degrees; meat and vegetables were the subsectors affected most severely

Food exports¹ from Poland, in PLN bn, % change YoY



Note: The top 10 HS2 categories of Polish food exports, in total 78% of the value of food exports in 2019 Source: UN Comtrade, National Bank of Poland



Agenda

- Positioning of Poland as a food production powerhouse
- COVID-19 effects on the food industry in Poland

Sub-sectors focus

Closure remarks

We will be further focusing on 5 subsectors...







Feed



Dairy



Vegetables

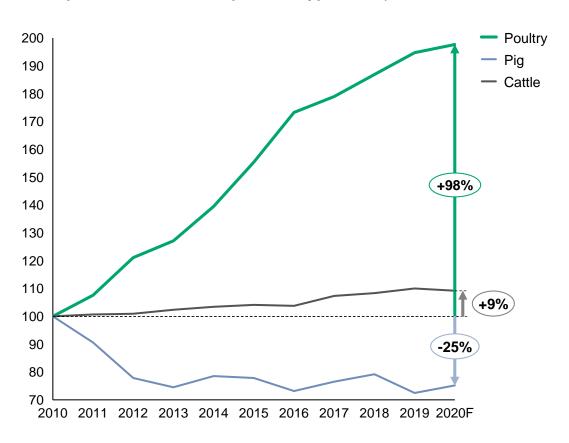


Potato

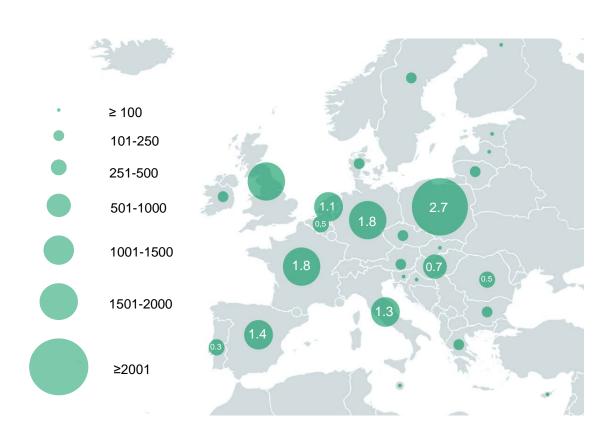


Poultry meat production doubled in the last decade and is currently the largest in the EU; other meat production have been stagnating however its size is fairly considerable

Meat production in Poland per meat type, 2010 production = 100



Poultry meat production in EU, 2019, M t



Source: Institute of Agricultural Economics and Food Economy (IERiGŻ), Eurostat

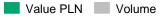


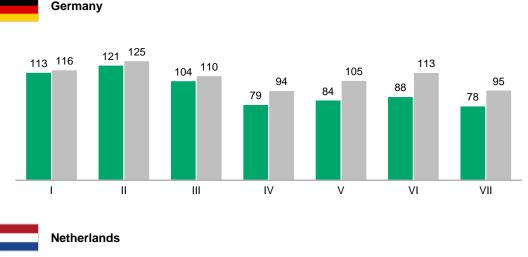


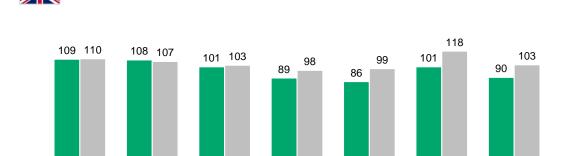
Pandemic restrictions did not stop the export volumes from Poland to exceed historical maximums

Poultry meat export change from Poland to the largest importers, 2020 Jan-Aug

Value PLN and Volume are percentages of the maximum level of theirs in the relevant months from the period 2010-2019

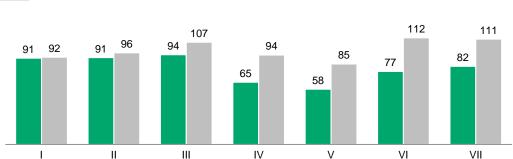


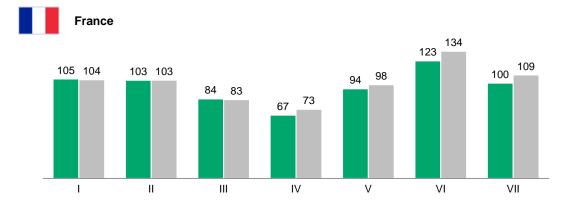




IV

Ш





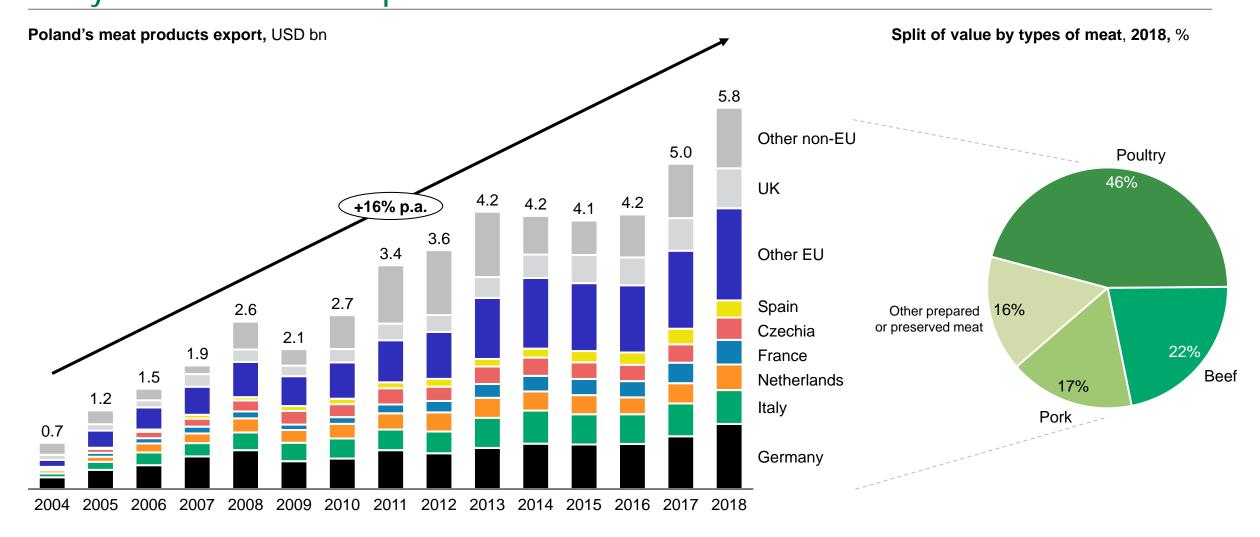
Source: Eurostat, Blavatnik School of Government Oxford University



VI



Germany, the UK, Italy and the Netherlands are top Polish meat importers; poultry constitutes nearly half of Polish meat exports



Source: Harvard's Atlas of Economic Complexity



M COVID-19 situation highlights

Demand in place

Turmoil on the poultry market

Reshuffling of distribution channels

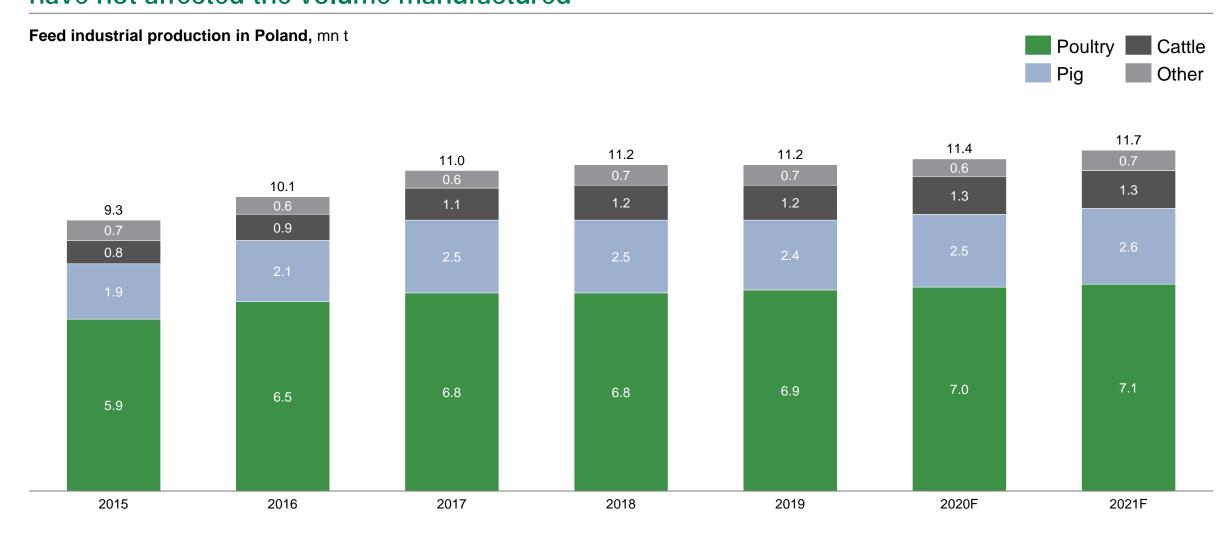
Integration

- Volumes of sales actually turned out to be not worse than pre-COVID in the end of the day, exports volumes were over their historical maximums
- Disturbances with off-take at the beginning of pandemic were not a result of lack of demand but rather troubles with organization of transportation
- Poultry sector in Poland came into pandemic with record high placements levels and clashed against off-take disturbances
- As production run in cycles that need to be planned and the producers have limited flexibility the initial turmoil distorted the market for the few following months
- Closures and limitations in domestic and international HoReCa channel broken established business relations and sales routes, demand from retail chains and traders replaced it however with lower prices offered
- There was little understanding of end-customer in companys' value chain, both scale and characteristics – magnitude of changes was hard to forecast for the players
- Integration allowed for amortization of margin disbalances in one value chain by another
- Contractation allowed for better prices and secured off-take





Feed production in Poland keep moderate growths over last years – the COVID-19 pandemic have not affected the volume manufactured

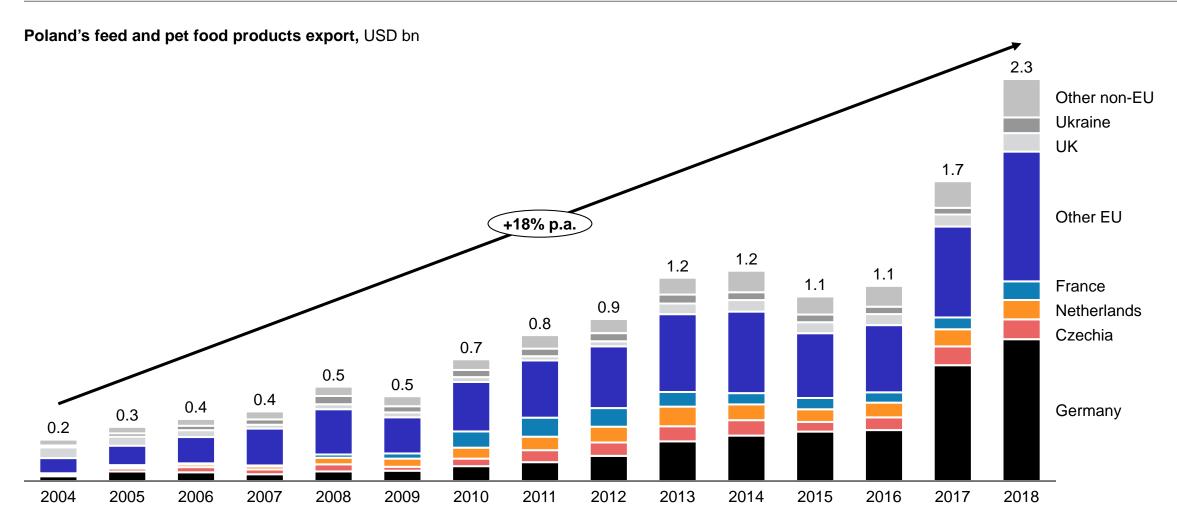


Source: Institute of Agricultural Economics and Food Economy (IERiGZ), October 2020





Polish feed and pet food export doubled in years 2016-18; export to the EU constitutes 80% of the international sales of the feed and pet food from Poland



Source: Harvard's Atlas of Economic Complexity



© COVID-19 situation highlights

Demand dependent on the meat market

Higher costs of raw materials

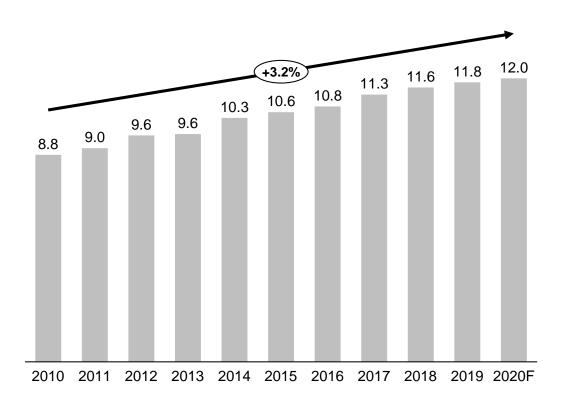
Meat market problems inhibit feed price growths

- Polish feed consumption depends highly on production of meat and it is driving most of fluctuations in the feed market
- Meat production and consumption have not changed significantly in volume terms, what resulted in stable demand for feed
- In recent months, prices of major feed raw materials cereals and oilseeds recorded significant gains – current global wheat and maize prices are ~15-20% higher than in June, soybean price increased by 33%
- The price growth is a result of low supply in Europe and the US, and strong demand from China
- Global price growth affected Polish market despite high harvest in 2020, cereal & rapeseed prices in last months increased by 10-20%
- Despite significant growth of raw materials, feed prices in Poland has been remaining stable in last months – still, the prices are 3-5% higher comparing to recent years
- Turbulences in the Polish meat industry prevent feed prices from following the cereal & oilseed prices path and further price increases

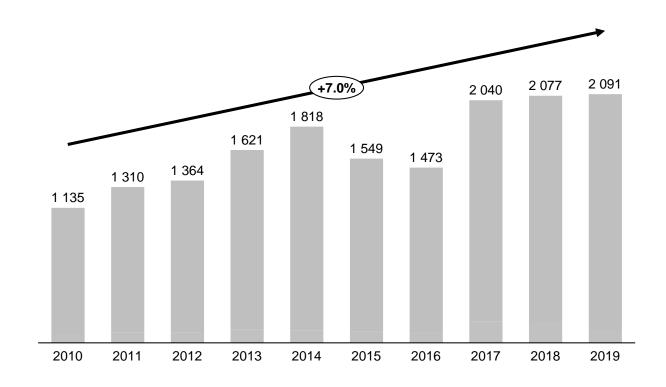


Export of dairy products has been growing faster than domestic production

Milk collection in Poland (2010-202, bn liters)



Value of dairy products export from Poland (2010-2019, mn EUR)



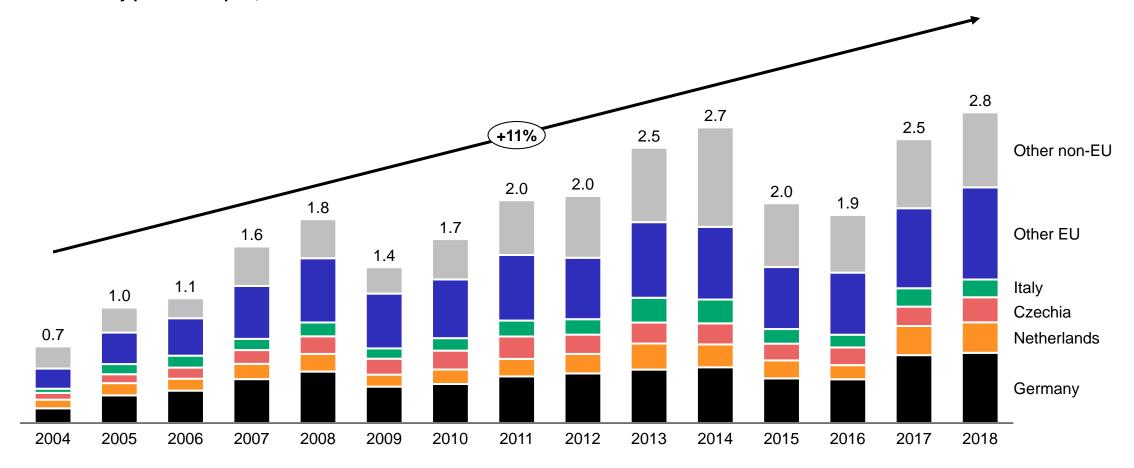
Source: Polish Central Statistical Office, Institute of Agricultural Economics and Food Economy (IERIGŽ)





Poland regained its export value after the 2015-16 drop, the Netherlands are the second largest importer of Polish dairy products

Poland's dairy products export, USD bn



Note: EU data do not include UK

Source: Harvard's Atlas of Economic Complexity



D COVID-19 situation highlights

Low impact on activities of the milk producers

Growth in demand on the domestic market

Temporary downward impact on export prices

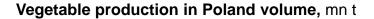
- Milk production process has been affected only to a small extent by the COVID-19 pandemic milk production takes place in areas with low population density and can be performed without the contact between the farmers and the drivers
- The increase in milk production was accompanied by the maintenance of a high level of purchases (only few dairies limited the volume bought from milk producers), resulting in maintaining prices at a similar level as in 2019
- The COVID-19 pandemic had a positive impact on the consumption of dairy products in Poland

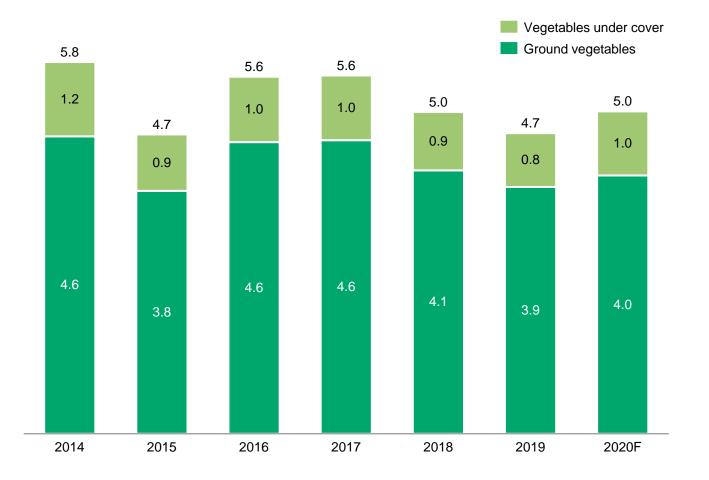
 the increase in demand regarded in particular drinking milk and hard cheese
- Restrictions in the HoReCa sector had less impact on pizzerias (heavy users of cheese), which already had their home delivery systems developed
- In the first phase of the pandemic, prices of dairy products sold on foreign markets (skimmed milk powder, butter in blocks) decreased by nearly ¼
- In subsequent months, a recovery in prices was observed, as commodity products have a long shelf life and can be stored – due to significant price fluctuations, the eventual performance results of the companies largely depended on the timing of sales of their products



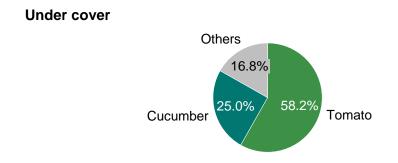


Cabbage, carrot, tomato and onion are largest vegetable species in terms of volume produced, tomato and cucumber make 85% of production under cover

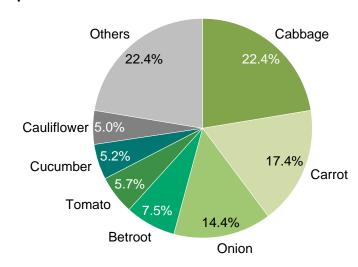




Vegetable production in Poland volume composition



Ground production

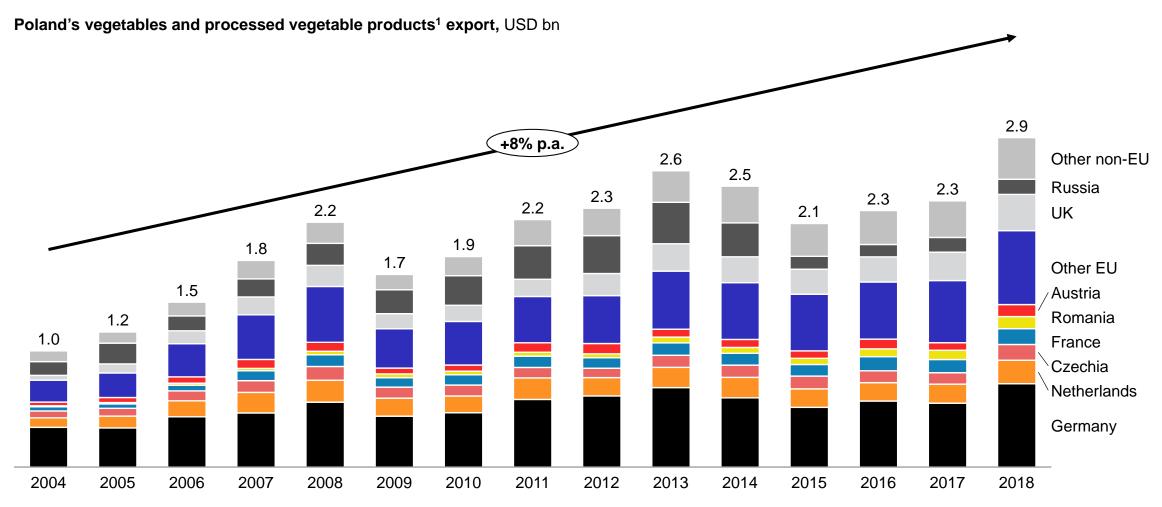


Source: Polish Central Statistical Office, Institute of Agricultural Economics and Food Economy (IERiGŻ)





W Germany, the UK and the Netherlands are largest importers of Polish vegetables



¹Includes processed (non-fresh) fruit products Source: Harvard's Atlas of Economic Complexity



W COVID-19 situation highlights

No adverse impact to slow perishable vegetables

Troubles with perishable vegetables distribution

Shifts in sales channels

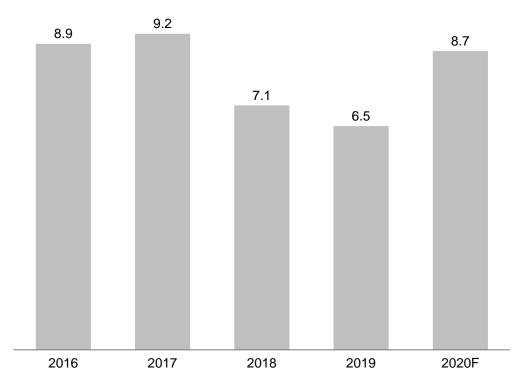
- At the onset of the COVID-19 outbreak there has been a significant increase in demand for some root vegetables, onions and potatoes, it was driven by the same factors as large purchases of long-term staple products (flour, pasta, rice, etc.)
- High demand sustained later on the market, lower export levels were a result of not a good harvest results in previous year, hence lower availability of ware for sale
- Sudden fall in demand during the first wave of "panic" purchases, followed later by the decrease in store visits frequency – hit e.g. tomato, cucumber, lettuce, mushroom
- Difficulties in transportation at the beginning of pandemic some disruption of delivery to stores (no sales as open markets were closed, too),
- Closures and limitations shaked the business relations patterns that had been in place for a long time, previous presence in diversified channels (HoReCa, retail, direct) allowed for more swift reaction
- In some cases it was not possible to re-direct assortment to alternative channels, e.g. tomato or cucambers of worse features used in cheaper fast food would not attract retail clients from the shelf
- During pandemic it is difficult to build new relations with retail from the scratch (no meetings, no travel) – clients differentiation from the past is a premium today





Polish potato harvest is highly dependent on the weather conditions, food processing types are over 20% of potato production in Poland





Yield, dt/ha, 2016-20

285

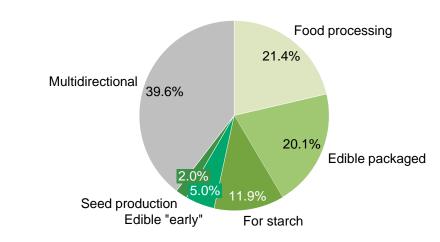
279

251

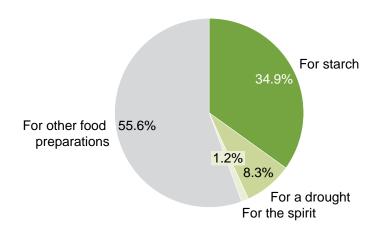
225

280

Potato production in Poland structure, volume, %



Potato processing in Poland structure, volume, %

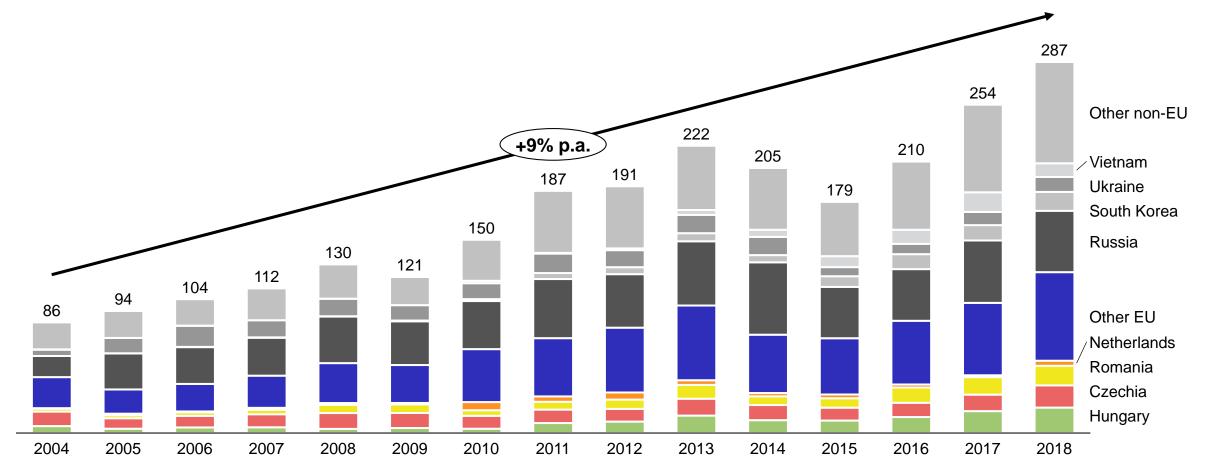


Source: Polish Central Statistical Office, Institute of Agricultural Economics and Food Economy (IERiGŻ)



Polish potato products export is very differentiated and its majority is exported outside the EU

Poland's potato products export, USD mn



Note: EU data do not include UK

Source: Harvard's Atlas of Economic Complexity



P COVID-19 situation highlights

Heavy blow from HoReCa restrictions

Discussions on future production plans adjustments

Change of ways of business relations

- Demand for potato processing products (primarily French fries) was significantly reduced due to restaurants and canteens closures
- Alternative sales channels (observed increase in the retail) could not sell the excising stock, as 80% of the French fries in Poland is sold via HoReCa – this resulted in French fries prices collapse
- Demand for chips, potato flakes or potato flour (starch) also decreased due to lower needs of hotels and restaurants and less social occasions, but as HoReCa plays less significant part in sales of these products, the demand shock was less severe
- In the first weeks of the pandemic, the potato processing sector in Poland had high stocks of ready products and/or high contracting of the raw material from farmers – the sudden drop in demand led to a backlog of stocks in warehouses
- As potato production takes place in annually seasonal cycles, adjusting the volume of potato supply to the reduced demand will be possible only after some time – COPA-COGECA calls for limitation of production of industrial potato in 2021-22 season
- The sector had operated largely by contracts in 2020, for the first time in many years, processing plants could not fully meet the contracts with farmers and purchase all potatoes, while the HoReCa was unable to realize its contracts with processors
- Potato processors need to verify internal procurements and sales policies in order to match them to the current market situation



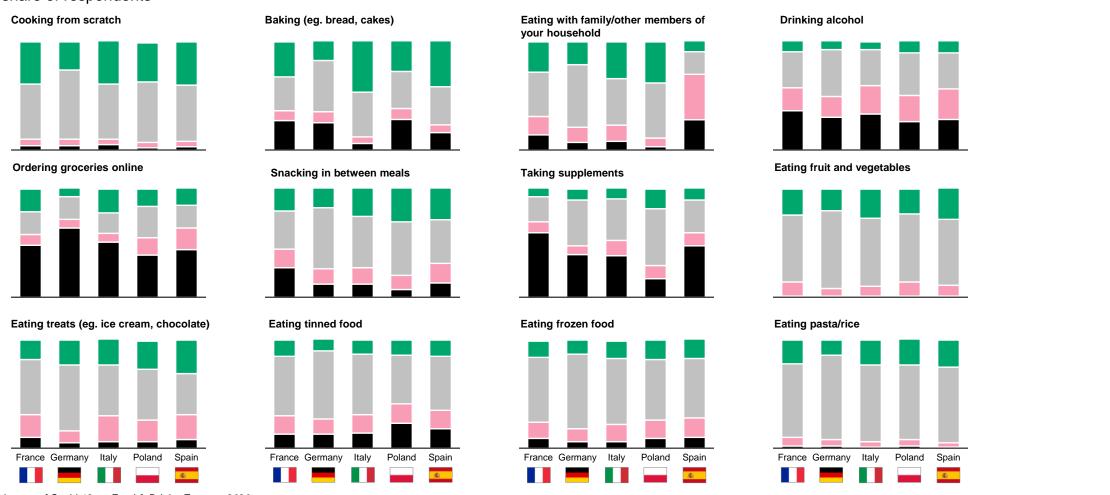
Agenda

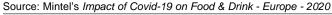
- Positioning of Poland as a food production powerhouse
- COVID-19 effects on the food industry in Poland
- Sub-sectors focus

Closure remarks

Consumption behavior from before the COVID-19 situation remains in place in the case of most of the people

Change in frequency of selected food and drink habits since the start of the COVID-19 outbreak per country, May 2020, share of respondents



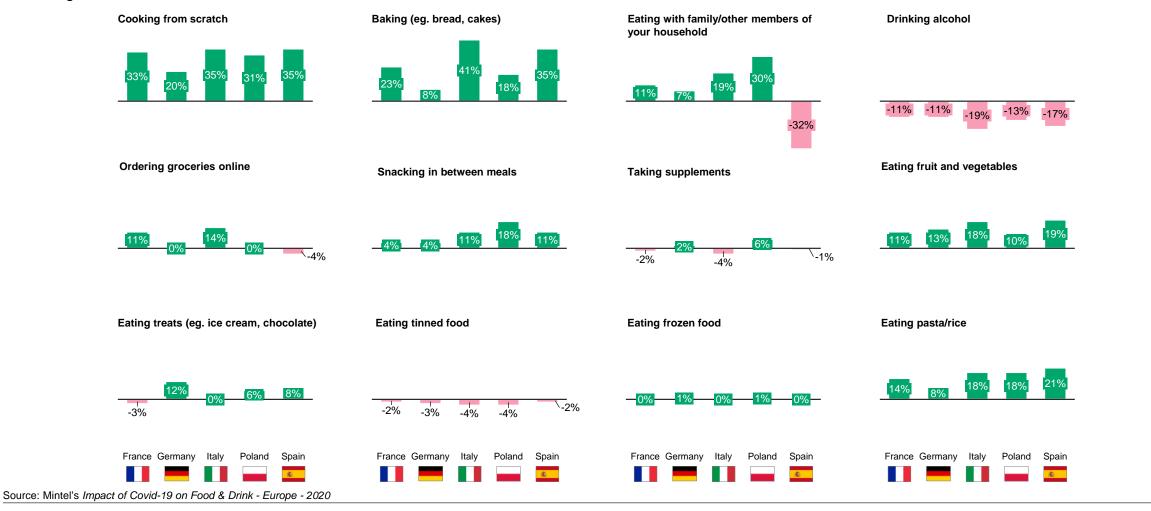




More About the same Less I don't do this

Changes in consumer behavior in Europe during the COVID-19 were not uniform, sometimes even counterintuitive – understanding of the final consumer cannot be overestimated

Change in frequency of selected food and drink habits since the start of the COVID-19 outbreak per country, May 2020, difference betwen share of respondents answering "More" and "Less"



In summary...

- Poland has been developing well as economy and agriculture production house –
 it is well positioned geographically and has good resource base
- The Netherlands are an important partner of Poland in food&agriculture they are its 3rd largest export market and 2nd largest source of imports, Dutch investors own ca. 4% of reveneus of the largest F&A companies in the country
- F&A sector in Poland overall did well during pandemic exports value kept growing even during the most severe turbulances
- Pandemic brought some distribution disturbances at the beginning, required reshuffling of the sales channels and confirmed that differentiation of the off-takers is beneficial to producers
- Most of the consumers stick to their behaviors from before the pandemic and modifications to that happen to be counterintuitive sometimes



BNP Paribas Group



BNP Paribas Bank Polska Spółka Akcyjna z siedzibą w Warszawie przy ul. Kasprzaka 2, 01-211 Warszawa, zarejestrowany w rejestrze przedsiębiorców Krajowego Rejestru Sądowego przez Sąd Rejonowy dla m. st. Warszawy w Warszawie, XIII Wydział Gospodarczy Krajowego Rejestru Sądowego, pod nr KRS 0000011571, posiadający NIP 526-10-08-546 oraz kapitał zakładowy w wysokości 147 418 918 zł, w całości wpłacony.