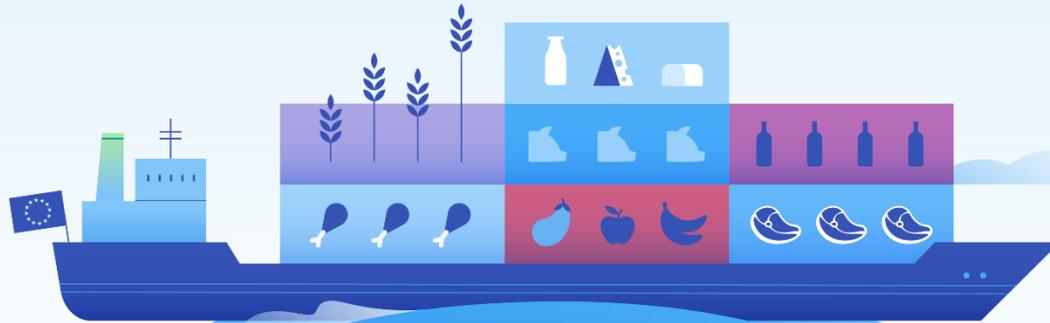




Study on the cumulative economic impact of trade agreements on EU agriculture - 2024 update



CDG on Agricultural Markets – Rice

Friday 21 June 2024

Christian Elleby, Joint Research Centre, Seville

Content of the presentation

1. Introduction to the study
2. Main impacts of the FTAs considered
3. Focus on the results for the rice sector

What is the study about?

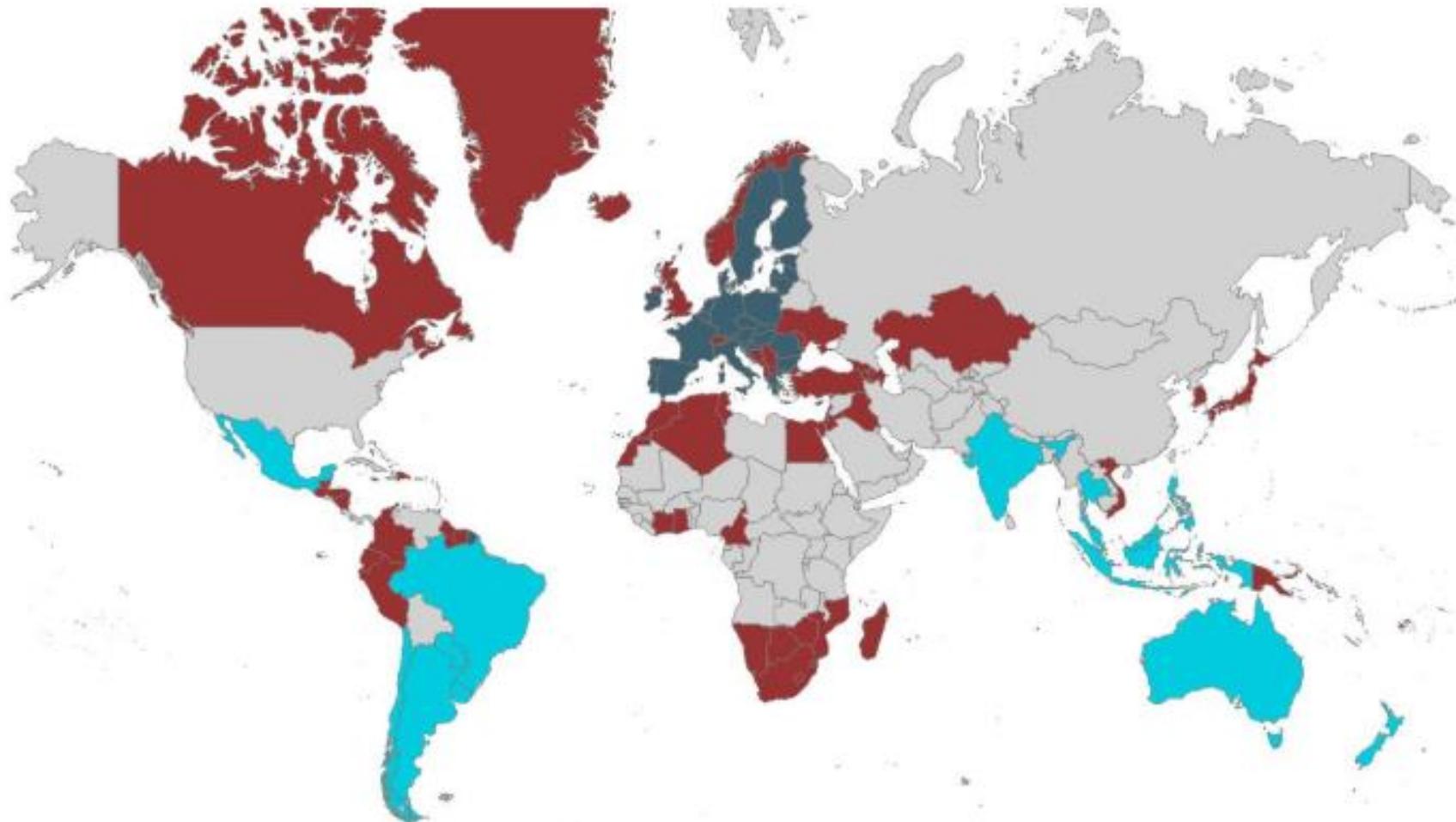
Ex-ante economic analysis of 10 of the most significant upcoming Free Trade Agreements (FTAs) on EU agri-food markets. The study includes:

- FTAs recently finalized or already in place: Chile, Mexico, Mercosur, **New Zealand**
- FTAs under negotiation or forthcoming (with high certainty): *Australia, **India**, Indonesia, Malaysia, Philippines, Thailand*
- Note: Canada, Japan and Vietnam are included in the baseline.

Compare agricultural market prospects for year 2032 with and without these FTAs.

Update of the 2021 study (similar assumptions and methodology, including TRQs): (<https://publications.jrc.ec.europa.eu/repository/handle/JRC103602>),

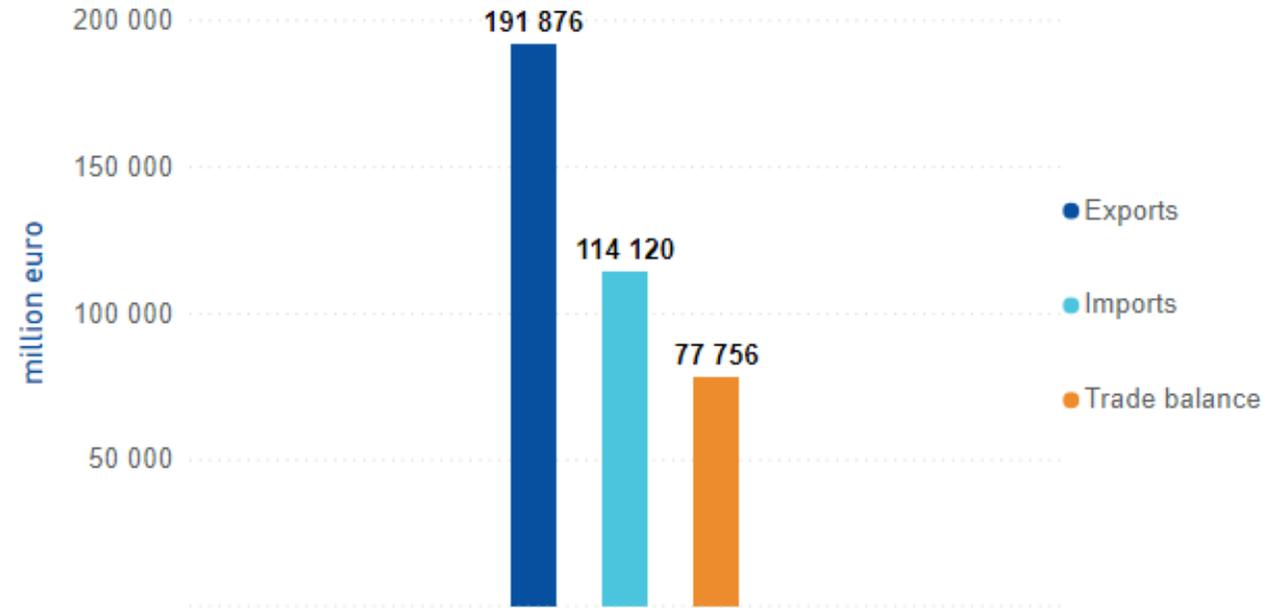
What is new? Sensitivity analysis on the impact of UK trade agenda (Australia, New Zealand, Comprehensive and Progressive Agreement for Trans-Pacific Partnership or CPTPP).



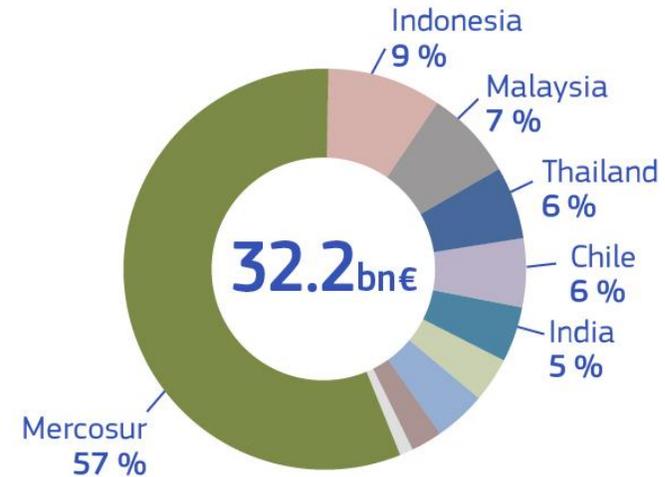
■ EU countries ■ EU FTAs included in the scenarios ■ EU FTAs included in the baseline

Baseline trade projections, 2032

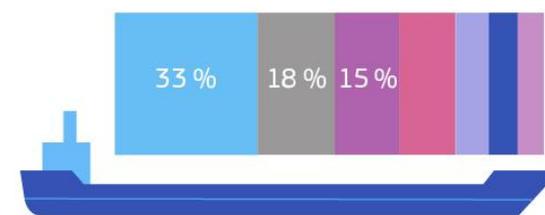
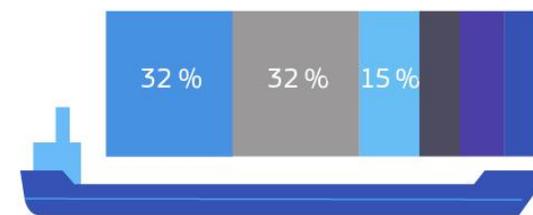
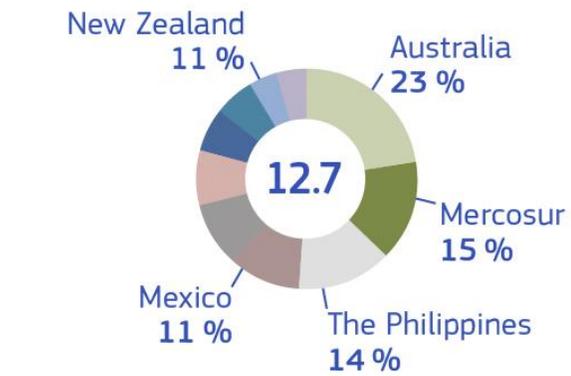
Agri-food trade 2032 with the 10 FTA partners (baseline)



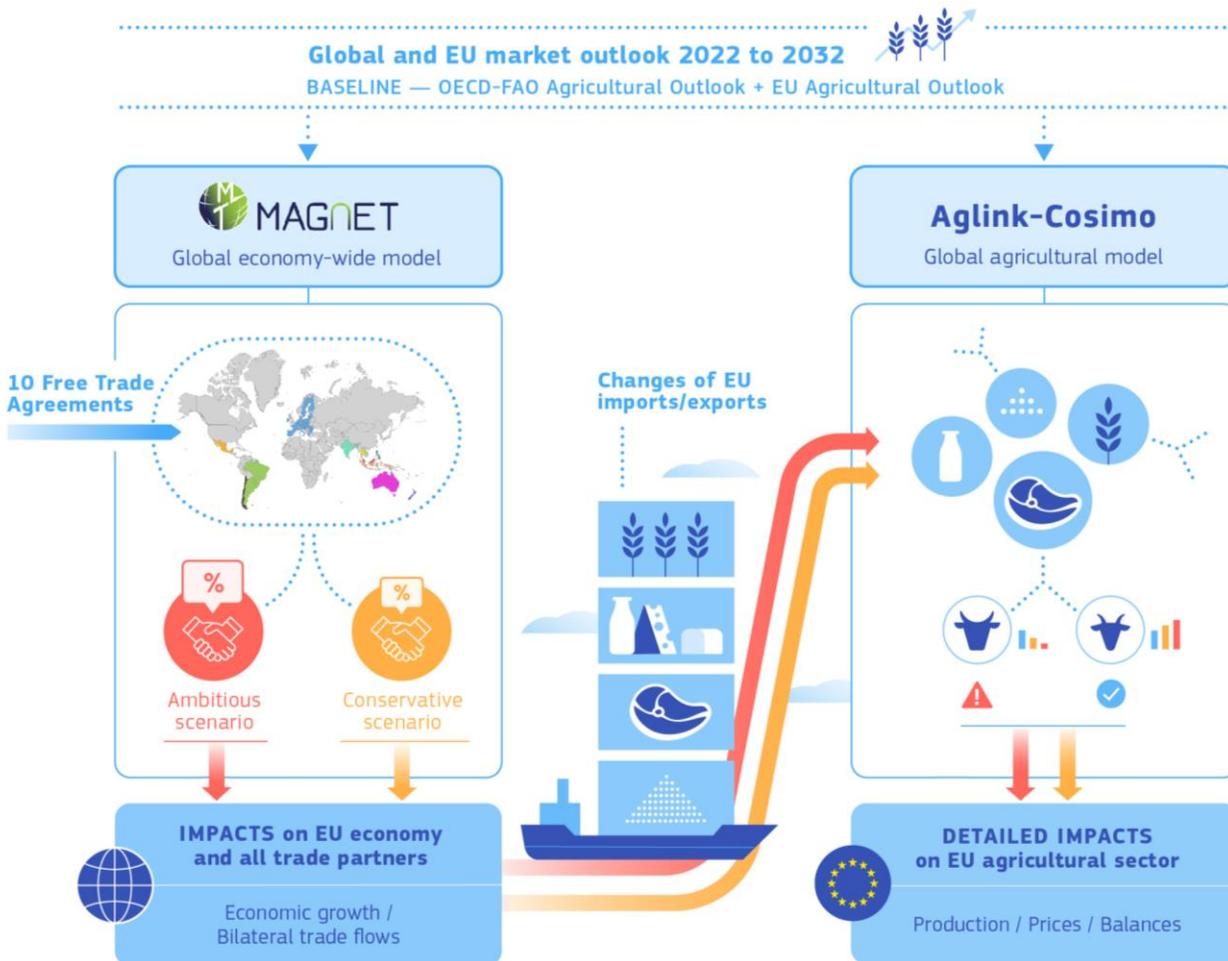
EU IMPORTS 2032



EU EXPORTS 2032



The study uses 2 economic models to quantify the potential impacts on EU agri-food markets



- **MAGNET:** global, GTAP-based CGE model (full disaggregation of agri-food sectors).
- **Aglink-Cosimo:** PE (detailed) model of the global agri-food sectors

Model linkages

| MAGNET | Aglink-Cosimo |
|---------------------------------------|--|
| Wheat | Soft wheat Durum wheat |
| Grains | Barley Maize Oats Rye Other cereals |
| Paddy rice | Rice |
| Processed rice | Soybean |
| Oilseeds | Rapeseed Rapeseed meal Soybean meal Sunflower meal Rapeseed oil Sunflower oil Palm oil |
| Oils and meals | Not modelled at trade level |
| Sugar beet and sugar cane | White sugar |
| Sugar | Raw sugar |
| Fruit and nuts | Not modelled |
| Vegetables | Not modelled |
| Other crops* | Not modelled |
| Live animals (cattle) | Cattle |
| Live animals (sheep, goats, etc.) | Sheep |
| Beef and veal | Beef and veal |
| Sheep (and other red) meat | Sheep and goat meat |
| Live pigs and other animal products** | Swine |
| Live animals (chickens) | Poultry |
| Pigmeat | Pigmeat |
| Poultry meat | Poultry meat |
| Raw milk | Not modelled at trade level |
| Dairy | Butter Cheese Skimmed milk powder Whole milk powder Whey powder |
| Other food | Not modelled |
| Beverages and tobacco | Not modelled |

The models are ‘soft linked,’ to ensure meaningful exchange of results:

- MAGNET baseline calibrated to the EU medium-term agricultural outlook (EC, 2022).
- MAGNET calculates the cumulative changes in EU exports and imports of FTAs (tariff shocks and TRQs).
- Changes in volumes implemented as relative shocks on EU export and import volumes in Aglink-Cosimo.

The study assumes two trade policy scenarios – conservative and ambitious

1. Conservative:

- Concluded agreements: as per negotiated outcome (tariff cuts + TRQs)
- Other agreements:
97% of tariff lines fully liberalised; other (sensitive) lines get a **25% tariff cut**

2. Ambitious:

- Concluded agreements: same as for conservative
- Other agreements:
98.5% of tariff lines fully liberalised; other (sensitive) lines get a **50% tariff cut**

Trade policy scenarios

CONSERVATIVE SCENARIO

97%

Full tariff liberalization

-25%



Tariff cuts for sensitive lines

AMBITIOUS SCENARIO

98.5%

Full tariff liberalization

-50%



Tariff cuts for sensitive lines



Considered in the analysis:



COVID-19 impact



UK trade agreements



Russia's invasion of Ukraine

Treatment of sensitive products

- Sensitive products do not necessarily have to be agricultural or agri-food products.
- The list of sensitive products for each agreement and trading partner has been established based on two criteria applied in the following priority order:
 - expert judgement based on the evidence of ongoing negotiations with trading partners or on analyses carried out prior to the launch of the negotiations;
 - objective statistical indicators, notably the tariff revenue associated with each tariff line
- **Rice** is, in general, considered a sensitive product in the EU => 25/50% import tariff cut in the scenarios

Tariff shocks

All partners

| | Exports | | | Imports | | |
|-----------------------|-------------------|-----------------------|--------------------|-------------------|-----------------------|--------------------|
| | Baseline scenario | Conservative scenario | Ambitious scenario | Baseline scenario | Conservative scenario | Ambitious scenario |
| Wheat | 12.43 | 12.41 | 12.41 | 0.00 | 0.00 | 0.00 |
| Other cereals | 7.61 | 7.58 | 7.58 | 0.23 | 0.17 | 0.17 |
| Fruit | 4.05 | 3.71 | 3.69 | 3.64 | 2.91 | 2.88 |
| Vegetables | 5.15 | 5.07 | 5.04 | 3.87 | 3.70 | 3.64 |
| Oilseeds | 2.57 | 2.50 | 2.50 | 0.00 | 0.00 | 0.00 |
| Other crops | 3.06 | 2.78 | 2.74 | 0.18 | 0.13 | 0.12 |
| Beef | 4.63 | 4.56 | 4.50 | 29.35 | 23.34 | 22.84 |
| Poultry meat | 5.04 | 4.92 | 4.87 | 10.14 | 7.26 | 6.60 |
| Sheep meat | 6.60 | 5.78 | 5.78 | 1.99 | 0.95 | 0.82 |
| Pigmeat | 5.54 | 5.19 | 4.92 | 1.63 | 1.37 | 1.28 |
| Oils and meals | 6.23 | 4.54 | 4.54 | 2.46 | 1.67 | 1.31 |
| Dairy products | 6.99 | 6.53 | 6.43 | 5.91 | 4.03 | 3.85 |
| Processed rice | 2.02 | 1.87 | 1.87 | 8.95 | 7.53 | 6.14 |
| Sugar | 6.69 | 6.33 | 6.32 | 15.29 | 13.93 | 13.76 |
| Other food | 6.93 | 6.32 | 6.25 | 3.74 | 2.74 | 2.38 |
| Beverages and tobacco | 10.79 | 10.27 | 9.91 | 2.77 | 1.90 | 1.79 |

10

FTA partners

| | Exports | | | Imports | | |
|-----------------------|-------------------|-----------------------|--------------------|-------------------|-----------------------|--------------------|
| | Baseline scenario | Conservative scenario | Ambitious scenario | Baseline scenario | Conservative scenario | Ambitious scenario |
| Wheat | 2.55 | 0.16 | 0.16 | 0 | 0 | 0 |
| Other cereals | 3.08 | 0.25 | 0.17 | 0.61 | 0.01 | 0 |
| Fruit | 10.37 | 1.12 | 0.73 | 4.56 | 0.72 | 0.54 |
| Vegetables | 4.51 | 2.21 | 1.63 | 3.02 | 1.31 | 0.76 |
| Oilseeds | 3.39 | 0.07 | 0.07 | 0 | 0 | 0 |
| Other crops | 7.82 | 1.58 | 0.78 | 0.24 | 0.02 | 0.01 |
| Beef | 9.83 | 4.52 | 0 | 43.42 | 33.86 | 33.06 |
| Poultry meat | 17.73 | 10.45 | 6.93 | 13.88 | 9.53 | 8.53 |
| Sheep meat | 5.79 | 0 | 0 | 3.21 | 1.42 | 1.18 |
| Pigmeat | 10.71 | 6.06 | 2.4 | 7.9 | 4.24 | 2.95 |
| Oils and meals | 7.83 | 0.18 | 0.18 | 2.71 | 1.64 | 1.15 |
| Dairy products | 7.94 | 2.3 | 1.09 | 43.25 | 20.38 | 18.19 |
| Processed rice | 5.06 | 0.49 | 0.57 | 12.61 | 9.61 | 6.66 |
| Sugar | 7.98 | 2.38 | 2.12 | 28.74 | 18.61 | 17.35 |
| Other food | 9.28 | 1.7 | 0.87 | 8.34 | 3.59 | 1.91 |
| Beverages and tobacco | 19.21 | 10.01 | 3.77 | 5.51 | 1.16 | 0.59 |



Results

Cumulative impact on EU trade in 2032 (additional value)

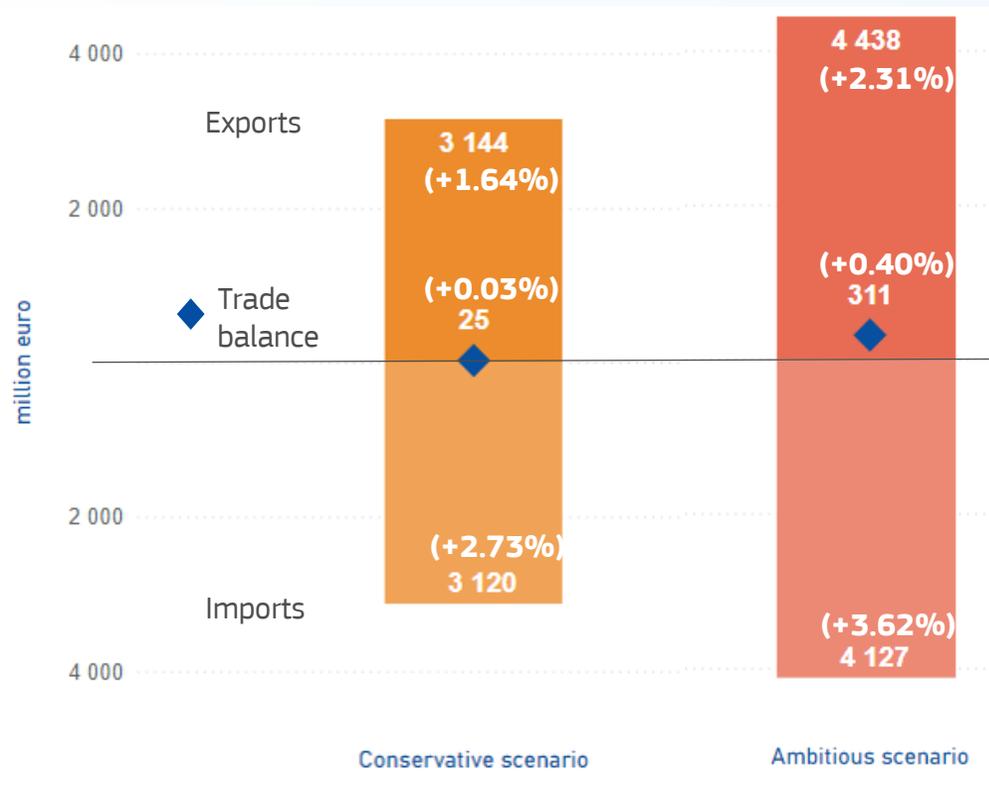


- The 10 FTAs increase net exports of the EU agri-food sector but the magnitude depends on the scenario
- Important sectoral differences

Overall trade impacts, 2032

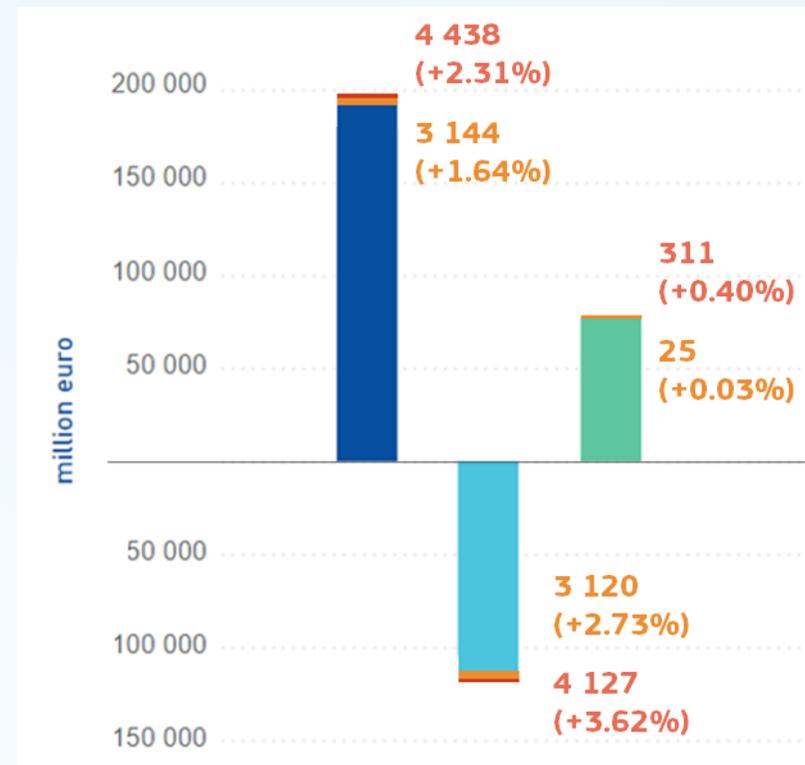
Change in EU agri-food trade value

Trade scenarios compared to the baseline, 2032

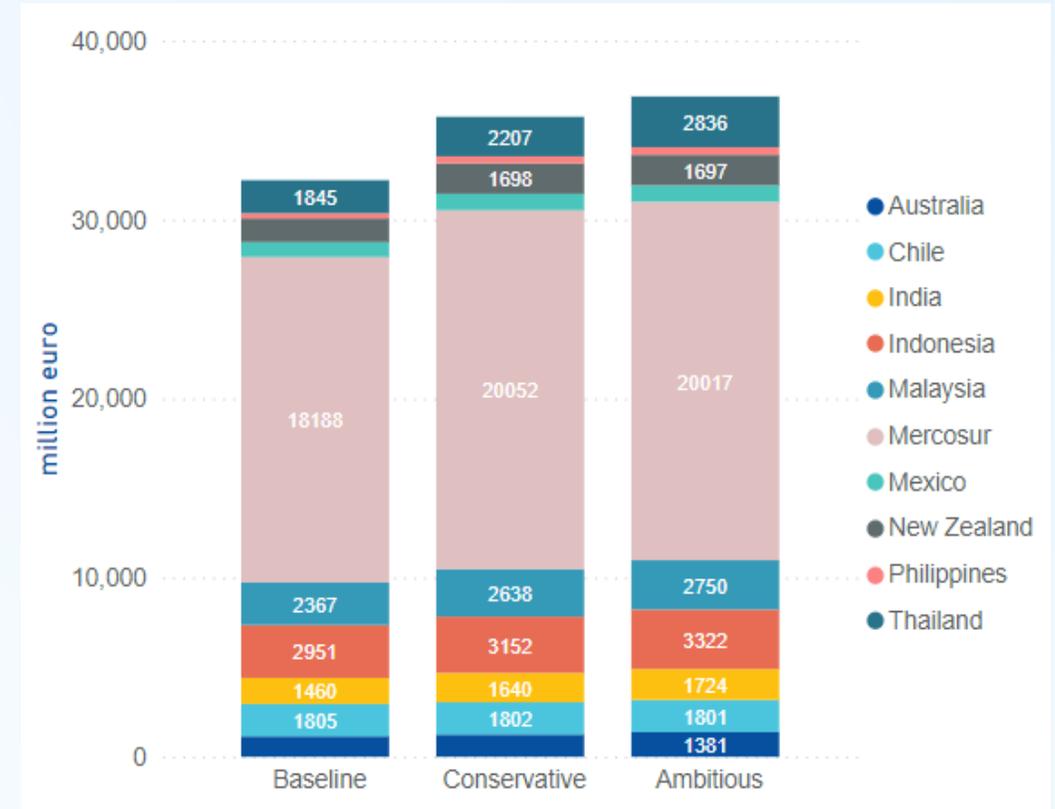
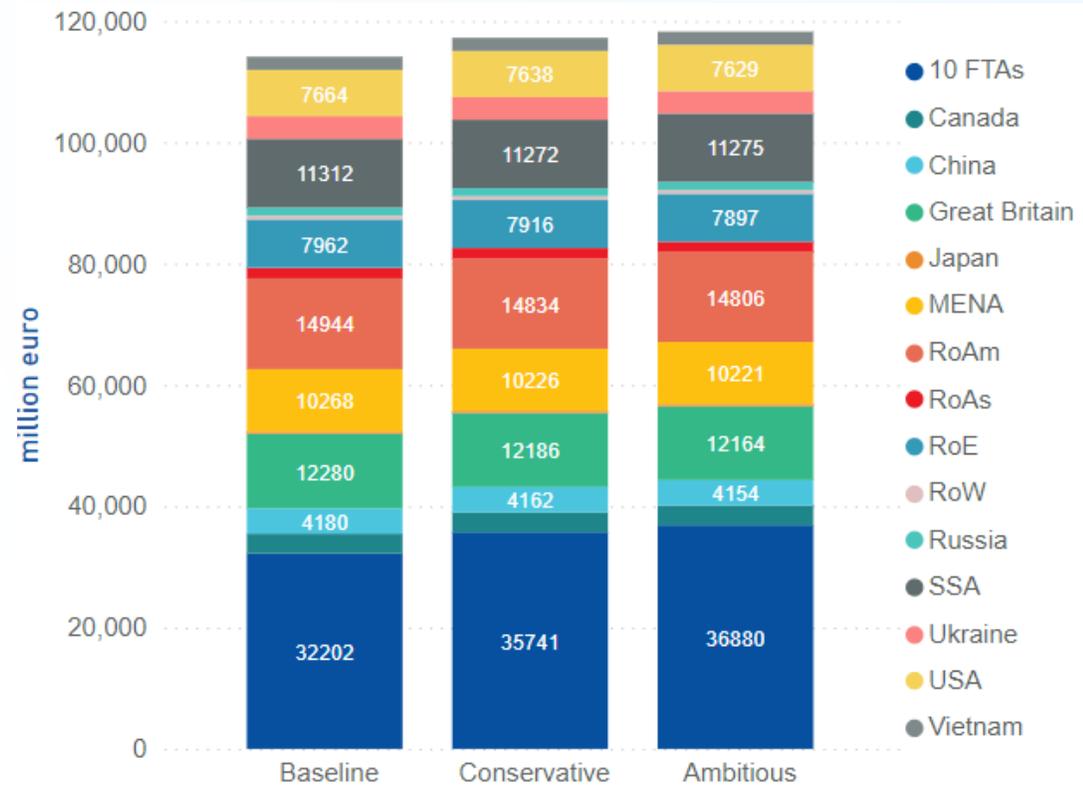


EU agri-food trade value

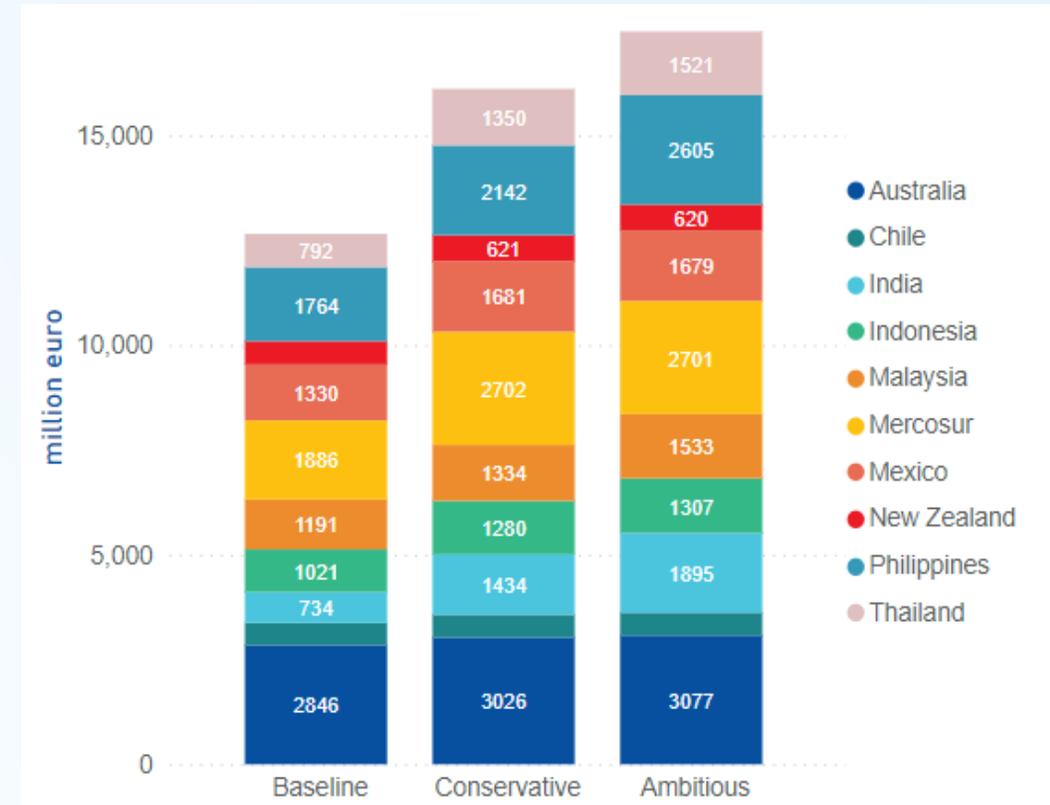
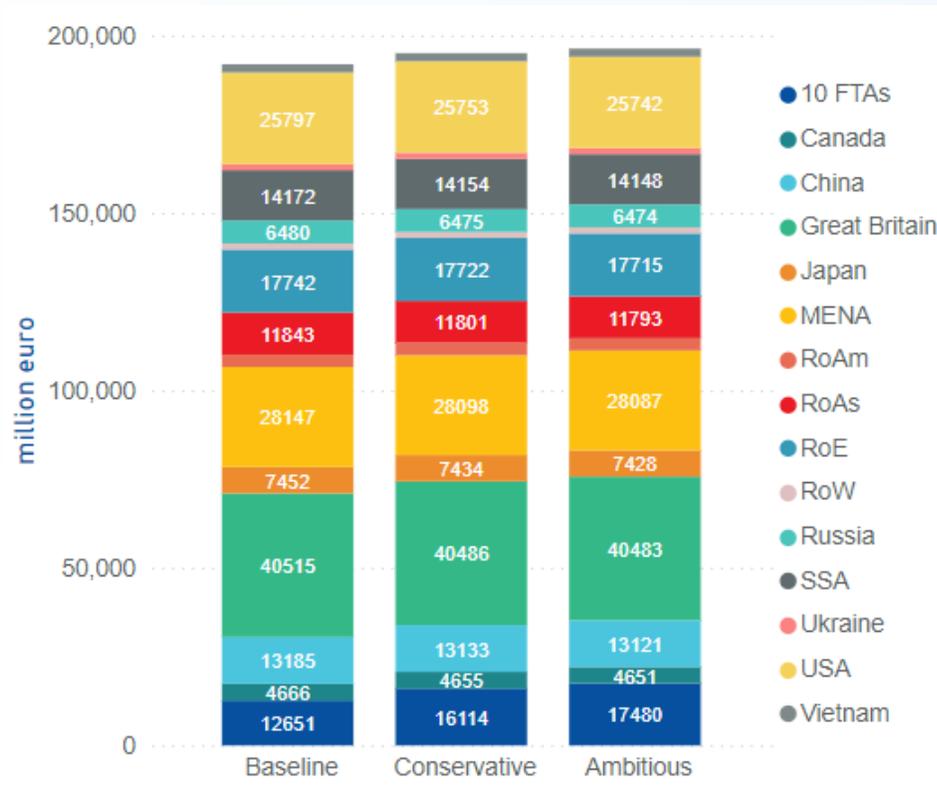
Additional trade flows in the scenarios on top of the baseline, 2032



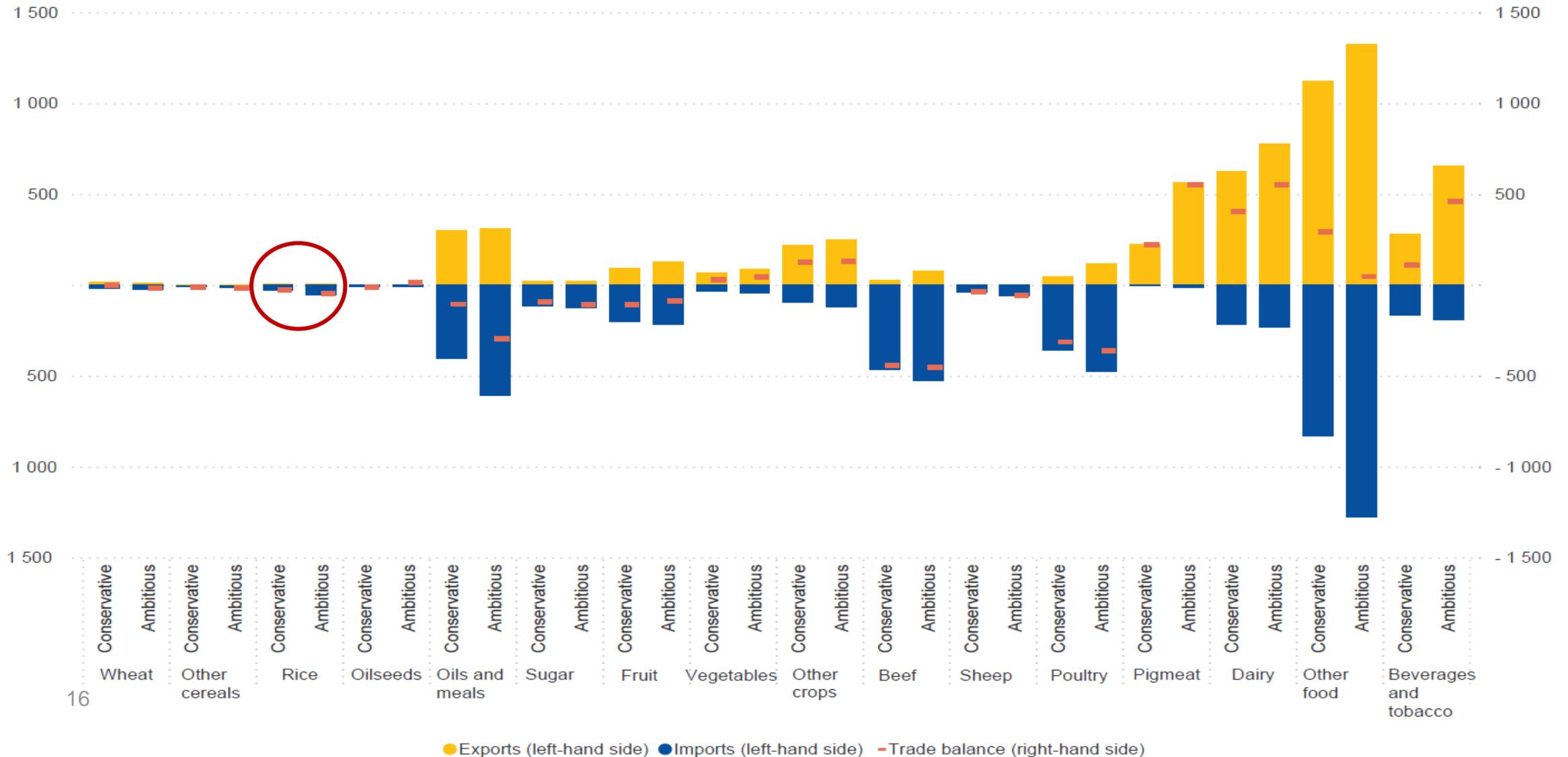
EU agri-food imports by trading partner, 2032



EU agri-food exports by trading partner, 2032

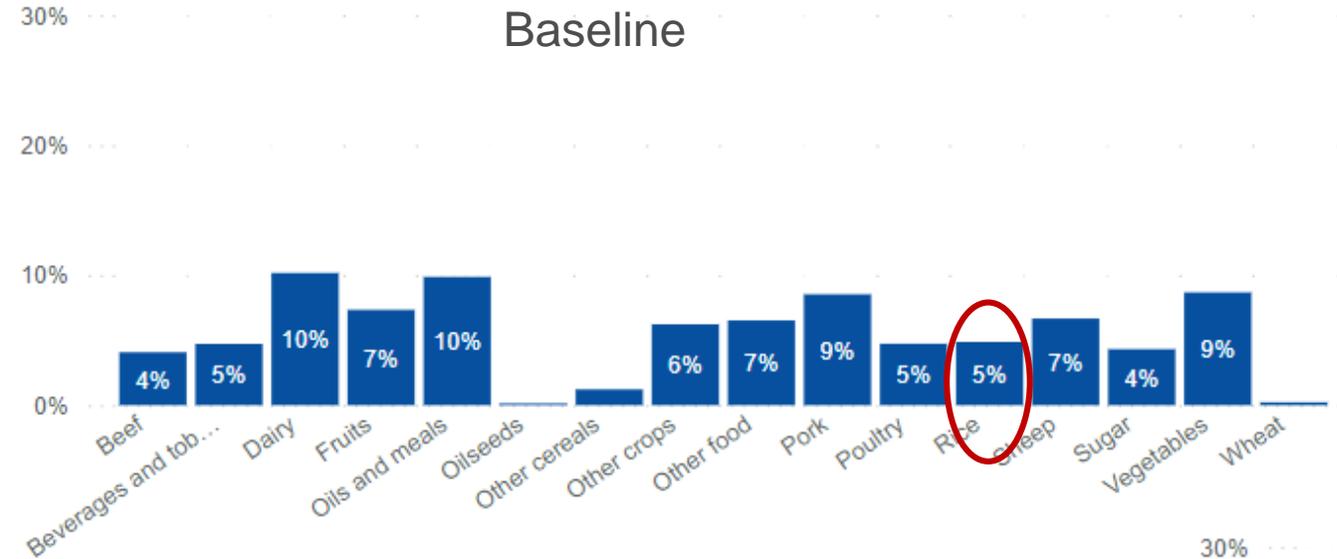


Changes in EU trade value of agri-food products by commodities and scenario (2032, million EUR)

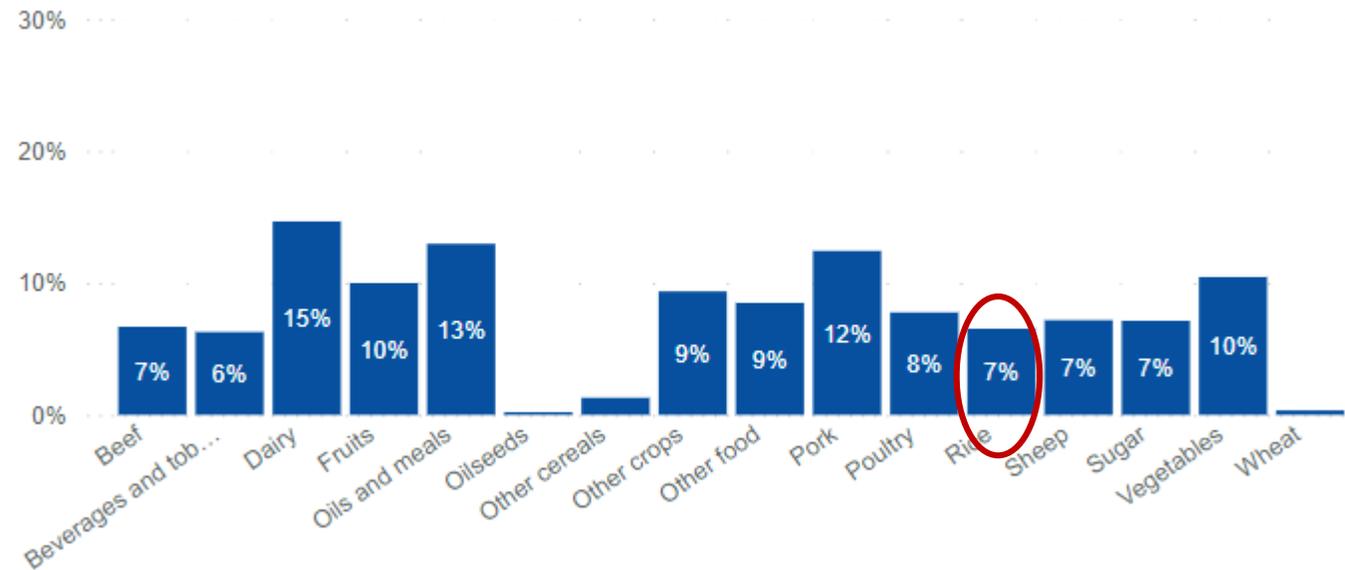


Contribution of the 10 FTA partners to EU exports by commodities, 2032

Baseline

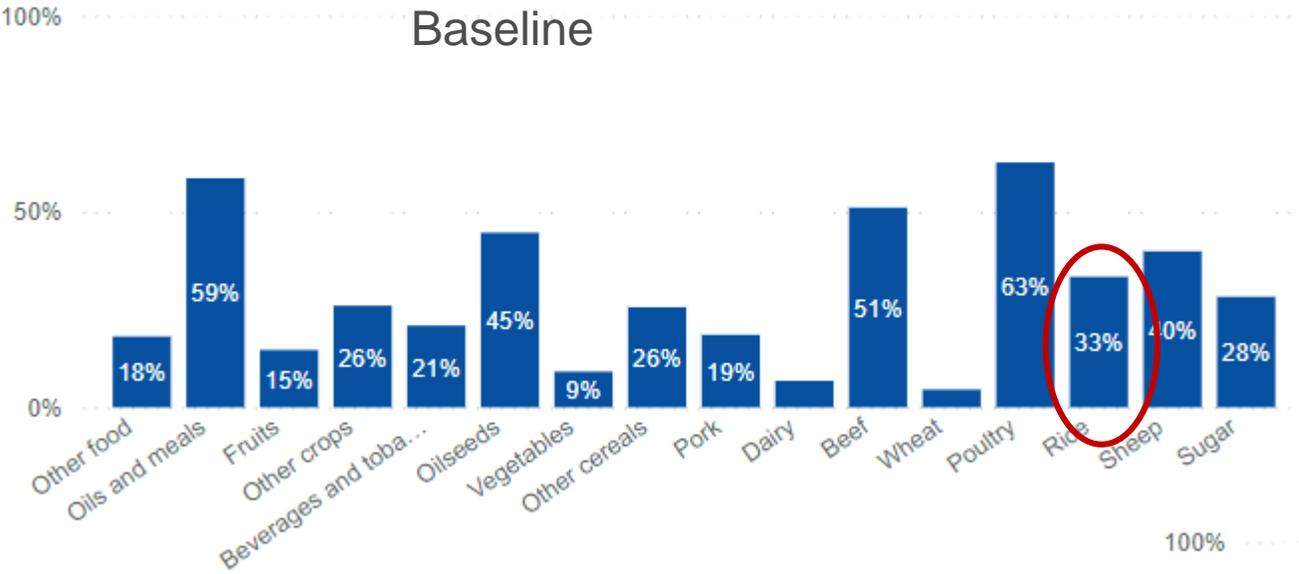


Ambitious Scenario

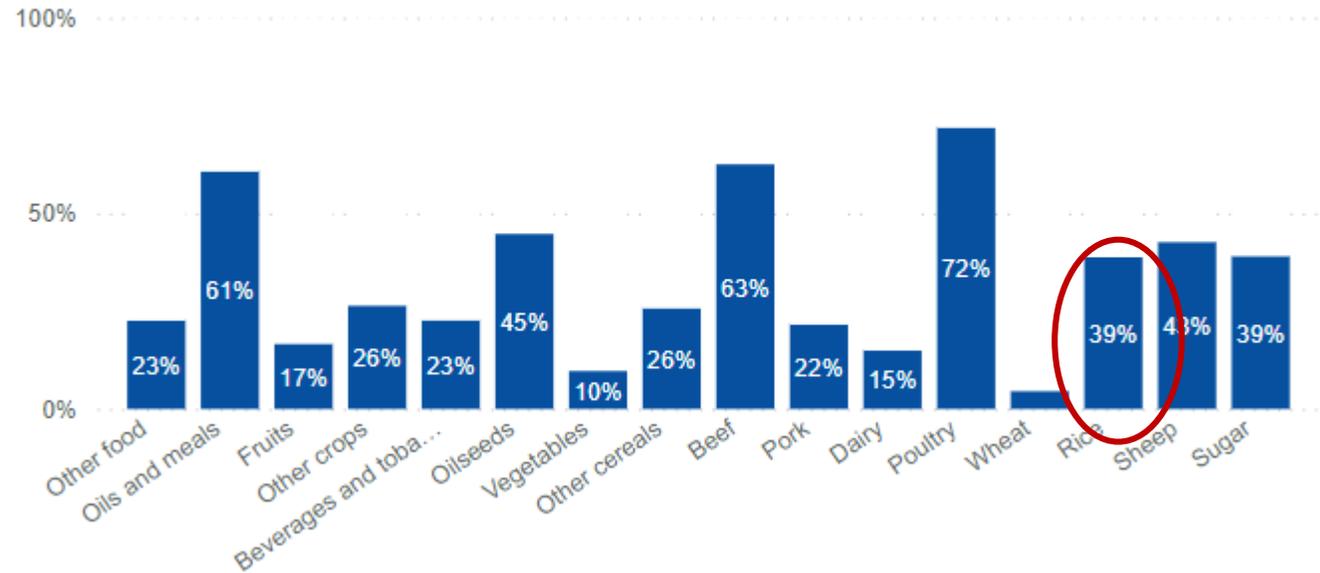


Contribution of the 10 FTA partners to EU imports by commodities, 2032

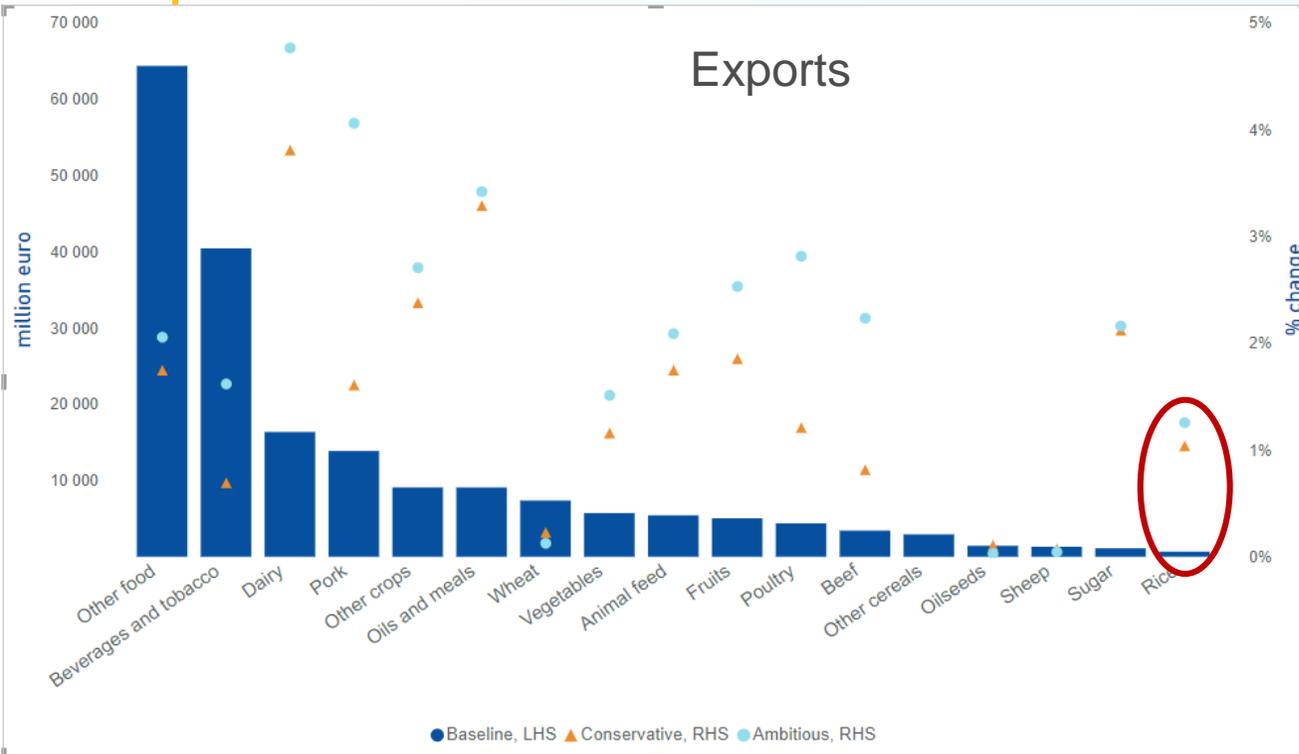
Baseline



Ambitious Scenario



Development of EU exports and imports, 2032



EU imports and exports of rice and trade balance, by FTA partner and scenario (2032, million EUR)

| | Imports | | | Exports | | | Balance | | |
|-----------------|-------------------|-----------------------|--------------------|-------------------|-----------------------|--------------------|-------------------|-----------------------|--------------------|
| | Baseline scenario | Conservative scenario | Ambitious scenario | Baseline scenario | Conservative scenario | Ambitious scenario | Baseline scenario | Conservative scenario | Ambitious scenario |
| AU | 0.2 | 0.2 | 0.3 | 15.5 | 15.4 | 15.4 | 15.3 | 15.2 | 15.1 |
| CL | 0.0 | 0.0 | 0.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| ID | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| IN | 147.8 | 162.4 | 176.6 | 2.4 | 3.1 | 3.2 | - 145.4 | - 159.3 | - 173.4 |
| Mercosur | 152.7 | 150.1 | 145.8 | 9.2 | 15.2 | 15.2 | - 143.5 | - 134.9 | - 130.6 |
| MX | 0.0 | 0.0 | 0.0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| MY | 1.9 | 2.2 | 2.6 | 0.4 | 1.8 | 0.7 | - 1.5 | - 0.4 | - 1.9 |
| NZ | 0.4 | 1.0 | 1.0 | 1.5 | 1.5 | 1.5 | 1.1 | 0.5 | 0.5 |
| PH | 0.0 | 0.0 | 0.0 | 0.9 | 1.3 | 2.1 | 0.9 | 1.3 | 2.1 |
| TH | 206.3 | 242.7 | 283.9 | 0.2 | 0.3 | 0.4 | - 206.1 | - 242.4 | - 283.5 |
| 10 FTA partners | 509.3 | 558.6 | 610.2 | 31.5 | 40.0 | 39.9 | - 477.8 | - 518.6 | - 570.3 |
| Other countries | 1 007.8 | 987 | 959.2 | 576.5 | 572 | 573.4 | - 431.3 | - 415.0 | - 385.8 |
| Total | 1 517.1 | 1 545.6 | 1 569.4 | 608.0 | 612.0 | 613.3 | - 909.1 | - 933.6 | - 956.1 |

Source: Authors' calculations, based on MAGNET results.

EU exports increase in both scenarios

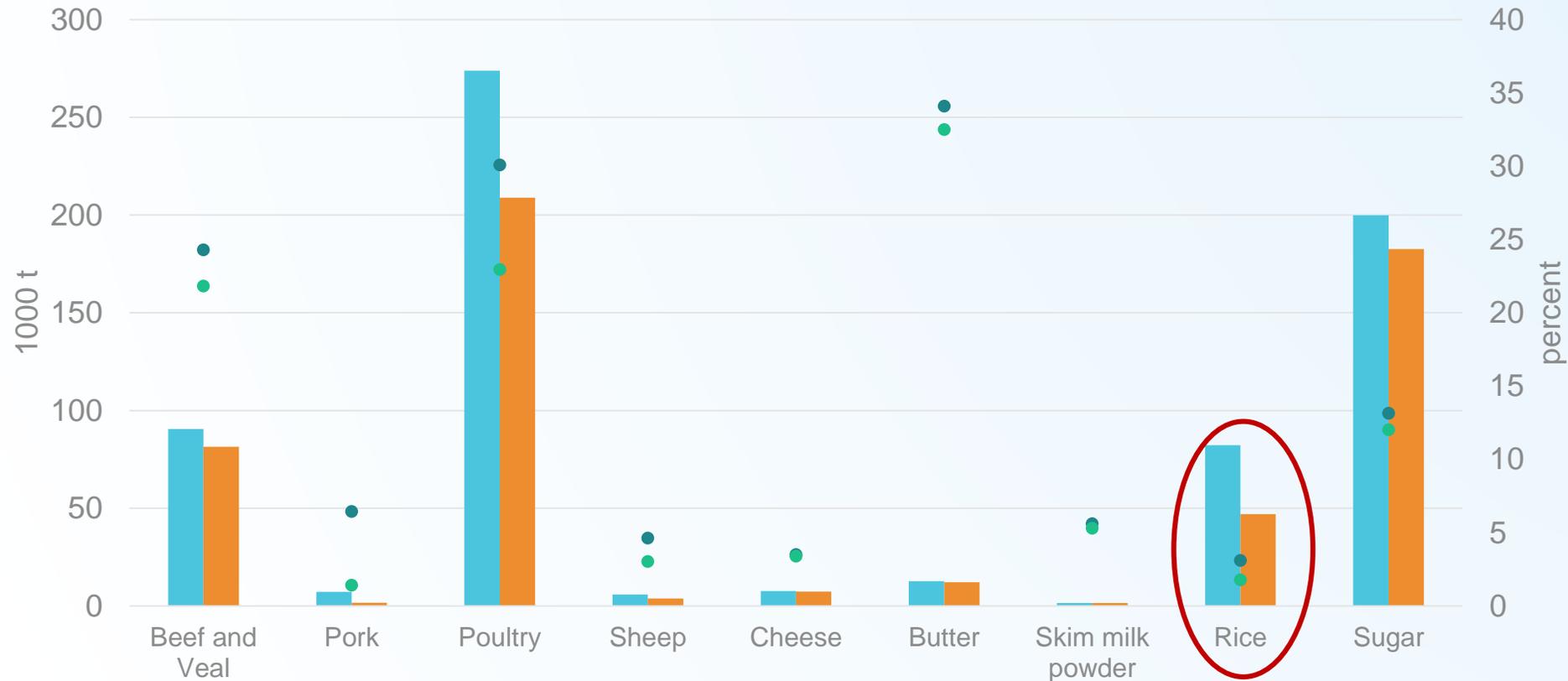
Change in EU exports of agri-food products
Trade scenarios compared to the baseline in 2032



- Ambitious scenario VOLUME change, LEFT axis
- Conservative scenario VOLUME change, LEFT axis
- Ambitious scenario % change, RIGHT axis
- Conservative scenario % change, RIGHT axis

Same as export, EU imports are also expected to increase in 2032

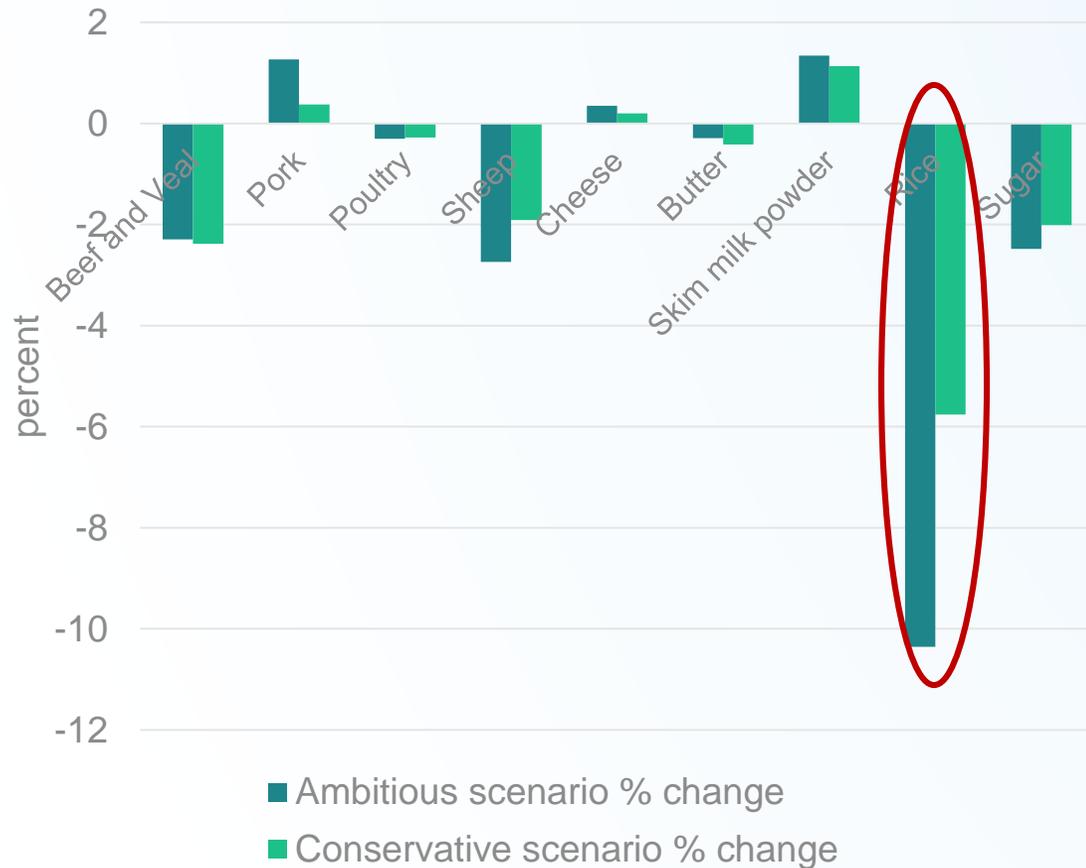
Change in EU imports of agri-food products
Trade scenarios compared to the baseline in 2032



- Ambitious scenario VOLUME change, LEFT axis
- Conservative scenario VOLUME change, LEFT axis
- Ambitious scenario % change, RIGHT axis
- Conservative scenario % change, RIGHT axis

EU producer prices and production

Change in EU prices of agri-food products
Trade scenarios compared to the baseline in 2032



Change in EU production of agri-food products
Trade scenarios compared to the baseline in 2032



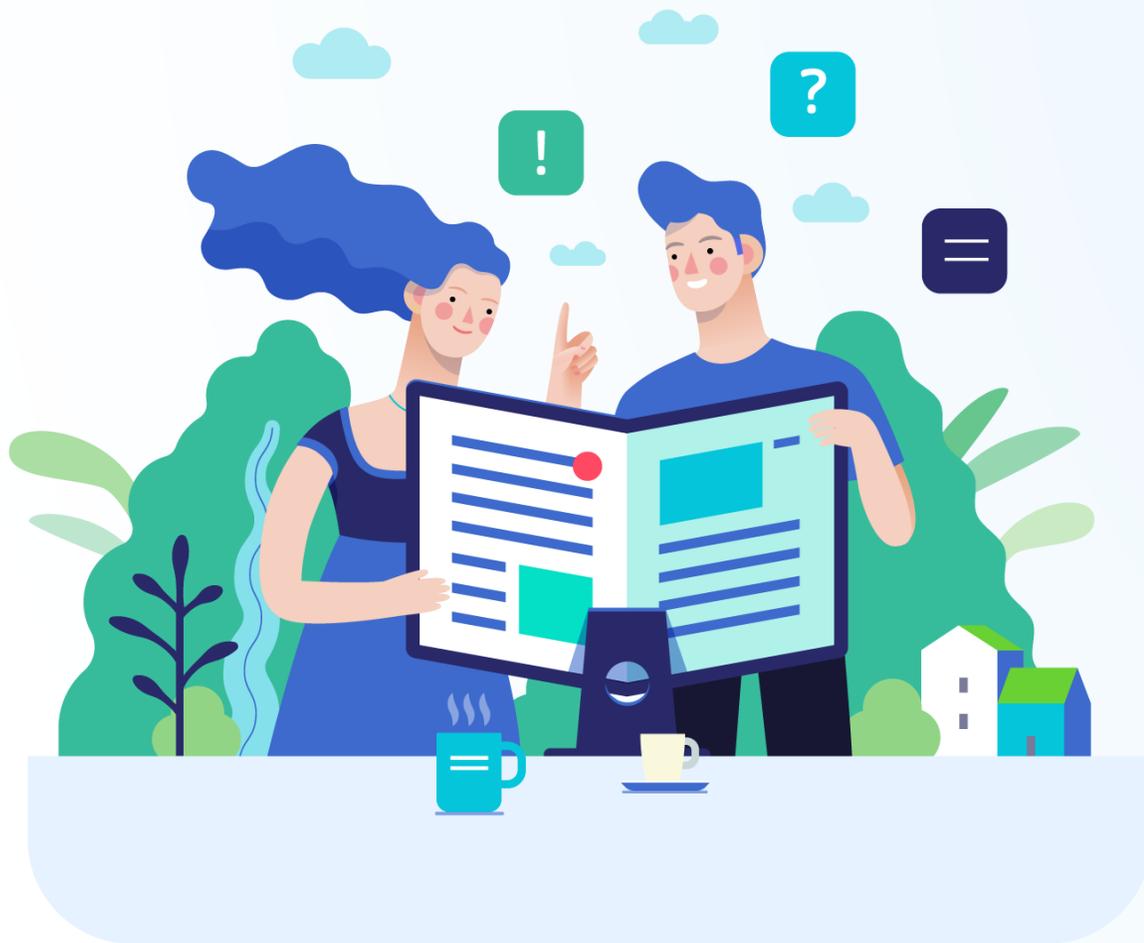
EU rice market impacts summarized

- **Tariff shock:** 25/50% reduction in the EU tariff on processed rice
- **Trade impacts:** ~1% higher EU exports, 2/3% higher imports (47/82 Kt)
- **Domestic market impacts:** 6/10% lower producer prices, 1/2% lower production
- Why such a large price impact?
 - **Homogenous goods** in the model (no differentiation between varieties)
 - **High import-dependency ratio**, with consumption twice as high as production. (Although EU is self-sufficient in japonica rice)
- **Inelastic demand** (price elasticity of demand ~ -0.1)

Further results on DataM



https://datam.jrc.ec.europa.eu/datam/mashup/FTA_2024



Conclusions

Conclusions

As in the previous study, results confirms that the EU agrifood sector can benefit from trade liberalization.

Results justify the approach taken by the Commission for the agricultural chapters in trade negotiations.

TRQs are an appropriate tool to balance market access for sensitive products while limiting negative impacts on the sector concerned.

Key offensive FTAs (Japan and Canada) now in baseline so results look less positive than in 2021.

UK trade agenda (very limited) negative impacts on EU exports.

Main caveats ...

- Future EU-Ukraine relationship not reflected.
- Green Deal / Farm to Fork / Biodiversity Strategy not implemented.
- No analysis of non-tariff trade barriers (e.g., NTMs, sanitary and phytosanitary measures) nor impact of protecting Geographical Indications.
- EU aggregated results, not considering national or regional disaggregation.
- Detailed impact for only the main agricultural sectors.

... future research

- Sustainability aspects of FTA (land use and change, water, jobs, ...).
- More detailed analysis of social impacts of FTA (welfare, non-ag sectors).