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Consumers, environment, technology & policy – a helluva mix to get right

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Consumers, environment, technology & policy – a helluva mix to get right



- The many issues surrounding how we **manage land** for **food and energy** production, our **food system**, the **technologies** we employ and their **health, environmental and social** impacts are continuing & perennial topics for debate, and policy adjustment.
- The major policies affecting food safety, competition, environment, climate, energy and agriculture all emanate from the EU.
- The decision to leave the EU offers the chance to debate and, if necessary, reset our stance on these matters
- How well are we going about this?



What lies inside this highly complex nexus of issues?



- **Consumers:** diet, exercise and wellbeing
 - Over consumption of sugars and livestock products
 - Access to green space; treatment of animals
- **Environment:** balance of positives & negatives
 - Maintain/restore natural capital; ecosystem services; PGs
 - Reduce: GHG, air & water pollⁿ, soil & biodiversity degradation

Set societal choices on land management & food systems

- **Technology:** its regulation and communication
 - How 'precautionary' to be? Eg Neonics, Glyphosate, GM, AMR
 - How to make the needed step change in productivity?
- **Policy:** our Post-Brexit trade stance & UK agricultural policy



Can't deal with them all: lets focus on policy



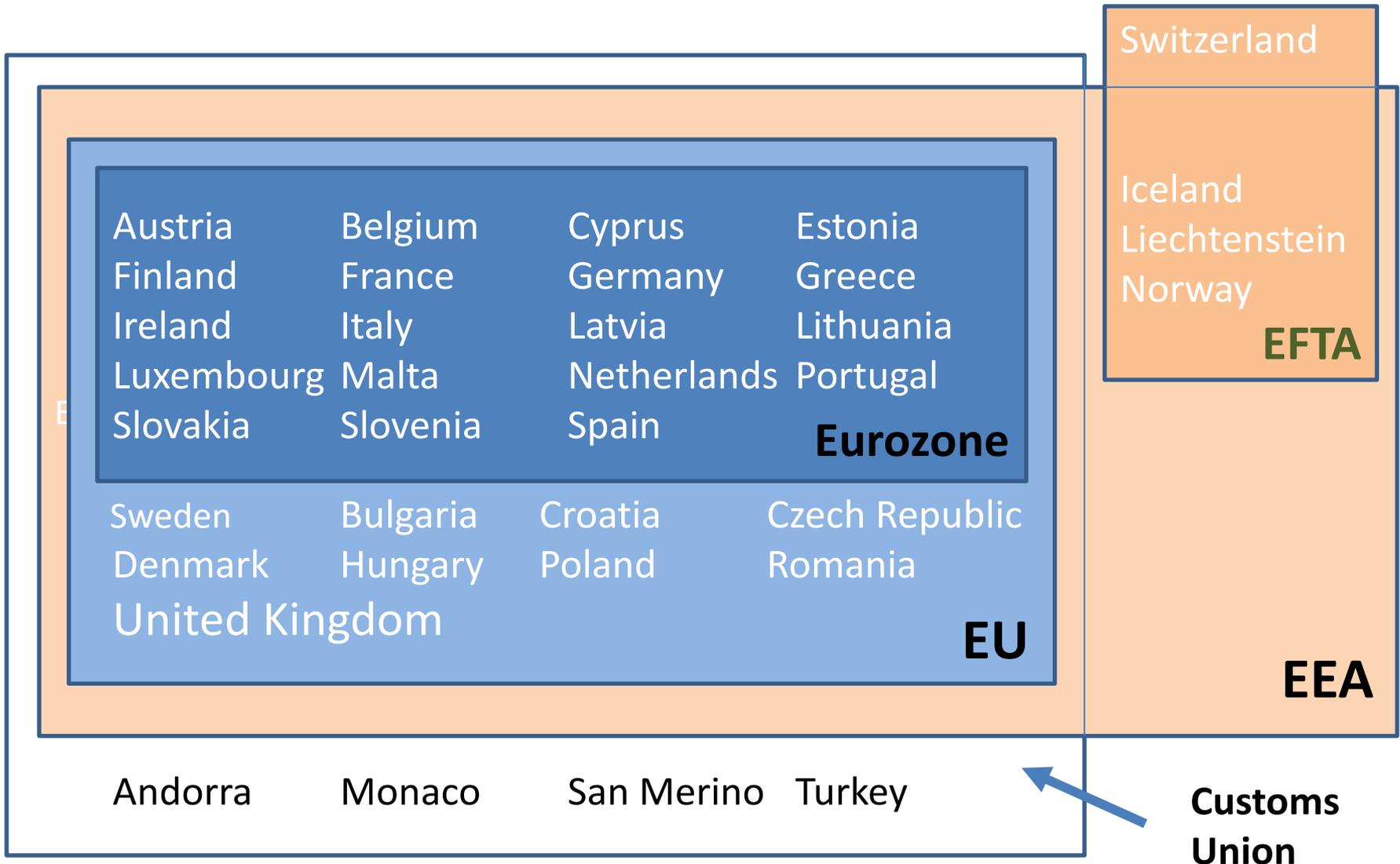
- The government's broad approach for Brexit
 - What this is
 - Three analyses of effects for Agri-food
- Meanwhile the 25 Year Environment Plan (25YEP)
- What does all this imply for the Agriculture Bill and UK agricultural policy?



UK Government approach: hard Brexit

- Lancaster House and Florence speeches
- Govt wants frictionless trade with the EU, hence a **comprehensive UK-EU Free Trade Agreement (FTA)**.
- The EU says frictionless trade outside EU membership is unavailable. Even with tariff-free access we will face new customs control costs & increasing non-tariff barriers over time if we deregulate.
- Government hopes to start negotiations on trade by Christmas (2017) and have the FTA by 29/3/19
- Recognises the challenge, hence **transition period** of about two years.
- Such transition has to be very close to status quo ?

What are we exiting? EU –yes, EEA & CU ??



The simple logic of hard Brexit

- Hard Brexit is **to leave**
 - **The EU because** 52% of those voting (37% of electorate) said so
 - **The Single Market because** we want to: restrict free movement of labour, escape ECJ jurisdiction & avoid EU Budget contributions.
 - **The Customs Union** to be outside the EU Common External Tariff (CET) and the EU's FTAs to be free to negotiate our own FTAs
- Brexiteers stress EU over-regulation; so we will **deregulate**
- The aims are thus political, but with a belief that there is economic benefit in the long run; damage limitation in SR
- These propositions are strongly contested

Note the status quo

- We are in the world's largest single market with free movement of goods, services, capital and labour, in which regulatory standards and controls have been harmonised over 40 yrs.
- This is (almost) as frictionless it is possible to make trade, (NB even less friction in Schengen and the Euro). There are no customs controls at our borders.
- **Thus *any* move out of the EU, SM or CU *will* introduce more friction than now, and thus add costs.**
- The three most discussed frictions are:
 - **Trade facilitation costs** including customs controls, rules of origin
 - **Tariff barriers**
 - **Non-tariff measures (NTM)** – differing regulatory standards
- See Matthews (2017) for detailed analysis of institutional controls and their costs

The impact of additional trade costs

- There are very different effects for **imports** vs **exports**.
- For any new friction:
 - for **UK imports (M)**: UK prices rise; UK production rises, UK consumption falls, imports fall. I.e. *more* domestic protection
 - for **UK exports (X)**: UK prices fall; UK production falls, consumption rises, exports fall, *less* domestic protection.
- Any further exchange rate change, (eg drop in €/£), reinforces the price rise for imports, counters price fall for exports.
- The bigger the new trade cost the larger these effects.
- As a big net importer of food & agricultural produce from the EU and RoW – agricultural protection rises and the food price inflation impact *will* be a political concern.

Note the strong asymmetry between UK and EU

- Population: EU27 465m UK 65m
- GDP: EU27 £ 13.1 tr UK £1.9 tr
 - The EU is a large market for the UK
 - The UK is a small market for the EU
- Trade tends to drop significantly with distance
- The UK is undertaking a decision to leave the EU for political reasons (sovereignty, immigration control) with forecast negative economic impacts but is arguing the EU should take a purely rational economic approach!

Much analysis exists, especially for agri-food

- Both Pre and Post referendum, 24 studies cited by AHDB study (App 2).
- Analysis can only proceed by assumption and use of models; assumptions & methodologies differ widely.
- Three studies summarised here
- **1 AHDB** sponsored study: recalculated current margins at assumed new prices and showed farm income effects. Does not analyse production and trade impacts.
- General equilibrium models allow production, consumption & trade to adjust (**2 Davis *et al*** and **3 Bellora *et al***). But they aggregate commodities.

1 Impact on farm incomes AHDB analysis

- Partial equilibrium calculations of policy, price and cost changes on production and income (1st round impacts)
 - seven farm types, just cereal farms considered here
 - do not allow for rent and other input price adjustment.
- Study has much more detail on UK Ag policy and labour.
- 3 scenarios:
 - **Evolution:** CAP continues as now, no restriction on migrant labour, some increase of trade costs as UK leaves single market.
Unilateral liberalisation: P1 removed, P2 expanded, labour restricted 50%, Regulatory costs fall 5%, zero import tariffs.
 - **Fortress UK:** P1 removed, P2 expanded less, labour restricted 50%, all trade at MFN tariffs (except TRQ for NZ lamb)
- UK-EU FTA option not analysed

Impact on farm incomes cont.

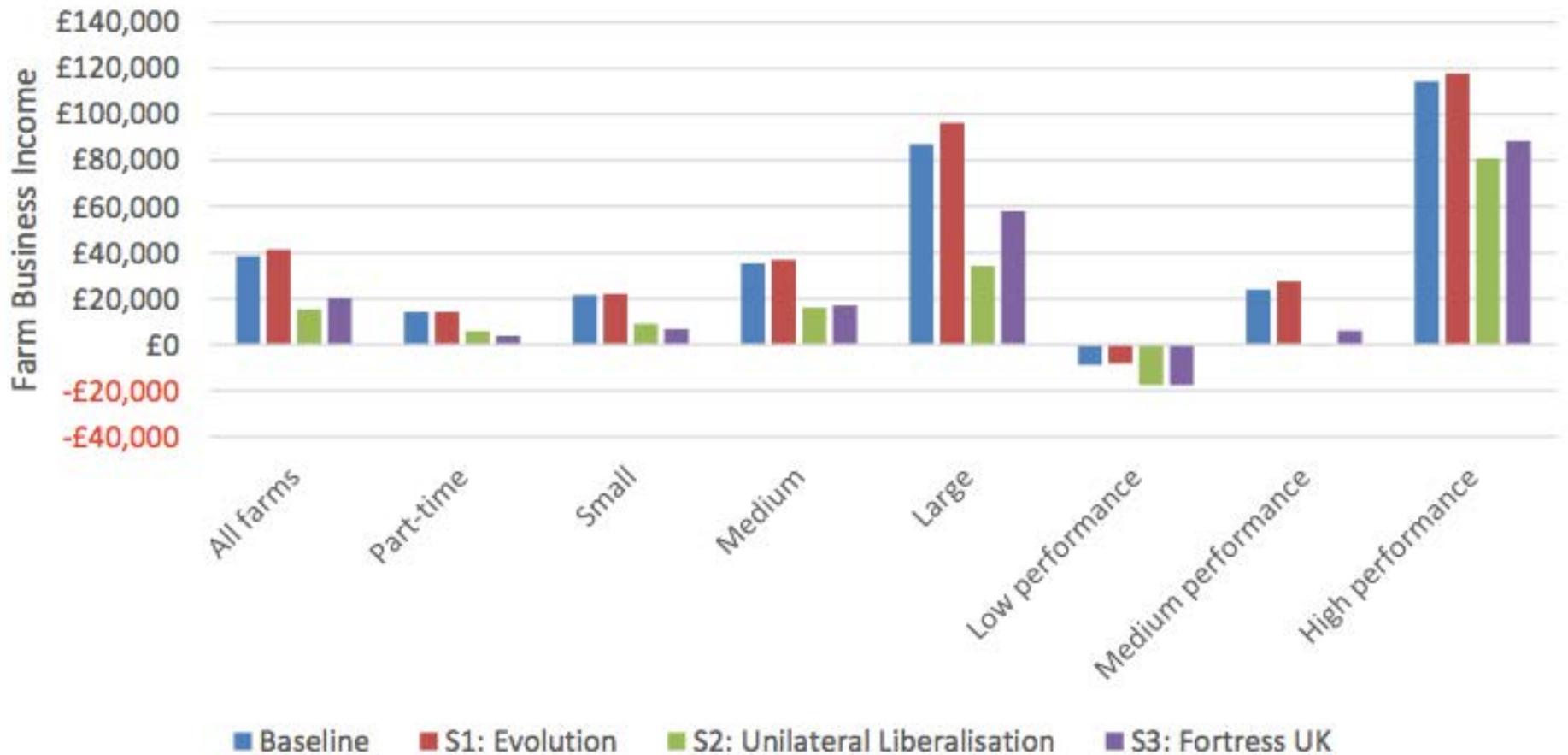
- Scenarios 2 & 3 devastate Farm Business Income (FBI) (except pigs & dairy farms)

| FBI £/farm | Cereals | Gen. Cropping | All farms |
|-------------------|----------------|----------------------|------------------|
| Baseline | £44k | £61k | £38k |
| 1 Evolution | £39k | £61.5k | £41.2k |
| 2 Unilat Libn. | £ 8k | £20k | £15.4k |
| 3 Fortress UK | £-1k | £24.5k | £20.1k |

- Similar effect for all sizes of farms, labour assumptions hurt some farms much more than others.
- But highest performing farms have highest incomes, which fall least: clear lesson – be in the top quartile

Impact on farm business income cereal farms

- Farm Business Income per farm all farms



2 Impacts on prices & production (Davis *et al*)

- 3 trade scenarios:
 - UK–EU Free Trade Agreement
 - WTO tariffs,
 - Unilateral Free Trade
- They assume no change in:
 - Access to labour
 - Domestic agricultural policy
 - Regulation and Non Tariff Measures
- Note: MFN tariffs: wheat €95/t, barley €93/t
- Results in next slide

| Davis et al % change from base | | UK-EU FTA | WTO tariffs | Unilat free trade |
|-----------------------------------|--------|-----------|-------------|-------------------|
| Beef | Price | 3 | 17 | -45 |
| | Prodn. | 0 | 10 | -10 |
| Sheep | Price | -1 | -30 | -29 |
| | Prodn. | 0 | -11 | -11 |
| Pigs | Price | 0 | 18 | -12 |
| | Prodn. | 1 | 22 | -6 |
| Poultry | Price | 0 | 15 | -9 |
| | Prodn. | 0 | 11 | -6 |
| Milk & dairy | Price | 1 | 30 | -10 |
| | Prodn. | 0 | 7 | -2 |
| Wheat | Price | 1 | -4 | -5 |
| | Prodn. | 0 | -1 | -1 |
| Barley | Price | -1 | -5 | -7 |
| | Prodn. | 0 | -1 | -2 |

Davis *et al* cont. - impacts on trade

- Barley exports under scenario 2, WTO tariffs
 - 78% fall in exports to EU
 - Authors assume “UK continues to export malting barley to EU at lower end of last 10 years’ range”.

| | Baseline ,000 tonnes | Scenario 2, WTO tariffs |
|-------------------|----------------------|-------------------------|
| Total exports | 1,450 | 850 |
| Exports to EU | 850 | 200 |
| Exports to non-EU | 600 | 650 |

3 Trade impact study for EP, Bellora *et al*

- Focused on hard Brexit: assumes WTO tariffs on UK-EU trade, rising NTMs and 8% facilitation costs.
- **Macroeconomic effects:** -2.3% for UK, -0.3% for EU, all EU27 negatively affected, Ireland worst -3.4% (-\$63b)
- Agrifood has highest increase in protection (T + NTB)
 - EU Agrifood X value to UK falls 62% (\$34b)
 - EU Agrifood M value from UK falls 62% (\$19b).
- UK agrifood export volumes to EU27 **fall**: red meat 98%, wheat 73%, other cereals 58%.
- UK agrifood value added **rises** 2%, local production displaces imports. (NB assumes no change in domestic ag. Policy or labour).
- Consumer food prices rise 4%.

25 Year Environment Plan (25YEP)



- **Brave decision to set the scene with this? Sends clear signal.**
- **The Natural Capital Committee advises 12 targets including:**
 - Protection against a 0.5% annual probability flood event.
 - All surface and ground waters meet good status requirements.
 - GHG emissions meet or exceed int^{nl} targets, including land mgmt.
 - Wild species and habitats thrive in restored & enhanced pop^{ns}.
 - Soils are healthy, productive and managed sustainably.
 - Discharges of polluting substances are prevented and managed
 - Access to local greenspace and open recreation for all.
 - Development managed for overall net increase in natural capital.
- **Who could oppose these laudable aims?**
- **Very vague on making this operational**



UK Agriculture Bill

- Cannot decide until the trade relationships are known
- Meanwhile:
 - CAP supports as now continue for 2018 and 2019
 - Will extend within similar support envelope til 2022 under CAP regulations transposed into UK (EU Repeal Bill).
- Key question will be fate of the direct payments. Hints:
 - Payment capping
 - More payments for public environmental goods
- White paper on Agriculture Bill spring '18, within the 25YEP
- Greens are working hard on this: NFU (defence of basic payments) and CLA (Land Management Contracts) diverging?
- NB difficult questions with devolved governments.

Drawing the threads together

- The analyses are broad brush – indicate directions, and crude magnitudes, and show dangers.
- Trade policy and domestic policy combinations are critical, ultimately it's the details which count
- Wide range of outcomes possible from little change to strong crisis
- Most vulnerable are sectors most reliant on CAP payments: grazing livestock and exports: lamb, barley.
- Clear lesson from AHDB study: be in the top quartile
- Bumpy road ahead, markets can over-react

References

- **Matthews, A.** (2017), Research for AGRI Committee – *Possible transitional arrangements related to agriculture in the light of the future EU - UK relationship: institutional issues*, European Parliament, Policy Department for Structural and Cohesion Policies, Brussels
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- **Davis, J, Feng S, Patton M, Binfield J** (Aug 2017) *Impacts of Alternative Post-Brexit Agreements on UK Agriculture: Sector Analyses using the FAPRI-UK Model*, FAPRI-UK Project, Agri-Food and Biosciences Institute, Queens University Belfast. www.afbini.gov.uk
- **Bellora, C., Emlinger, C., Fouré, J. And Guimbard, H.** (2017), Research for AGRI Committee, *EU – UK agricultural trade: state of play and possible impacts of Brexit*, European Parliament, Policy Department for Structural and Cohesion Policies, Brussels

If you have been,
thanks for listening
and good luck!

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