

#### Introduction

While there are a lot of unknowns at this stage in relation to the Brexit process, it is safe to say that the outcome will affect a wide range of issues, including the movement of goods (trade), people and capital. Given the significance of Irish agri-food exports to the UK, it is not surprising that the Brexit vote has caused significant debate and uncertainty within the Irish agri-food sector.

While there has been some diversification away from the UK market over the past decade, it still accounted for 37% of Irish food and drink exports, valued at €4.13bn, in 2016 (Bord Bia, 2017). Although much uncertainty remains as regards the longer-term impact of Brexit on Irish-UK agri-food trade, slower growth and weaker farm gate prices in Ireland can be expected to result from Brexit. The Irish beef and dairy sectors are particularly vulnerable, with half of all beef exports (in both value and volume terms), and one-third of the value of all dairy exports, going to the UK in 2016.

Against this background, the objective of recent research carried out by economists in the Department of Agricultural Economics and Farm Surveys in Teagasc, was to carry out a farm level impact assessment for Irish farms, with a focus on the possible impacts on farm income and economic viability.

### What assumptions were made in the analysis?

The farm level impact assessment used micro data from the Teagasc National Farm Survey (NFS). A set of informed assumptions regarding the potential impacts of a 'hard' Brexit outcome on the future level of farm prices and support payments was assembled following a literature review (primarily based on van Berkum *et al.*, 2016) and stakeholder consultation. The analysis is static in that no account is taken of the impact on levels of agricultural activity of the reduced levels of profitability likely to result from Brexit.

## Implications for farm income

Baseline data from the Teagasc NFS were used to determine the potential impact of the assumed price and income support reductions that might result from Brexit for the main sectors of Irish agriculture: dairy; beef; sheep; and, tillage. Price reductions are sector specific and reflect the relative dependence on the UK market of the different

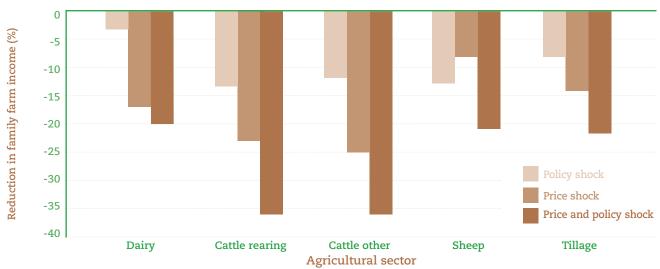


FIGURE 1: Potential impact of a hard Brexit on family farm income, by system.

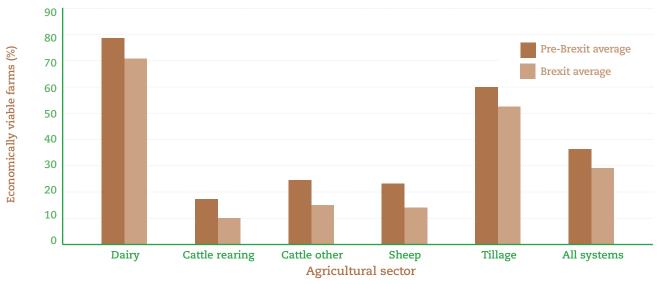


FIGURE 2: Potential impact of a hard Brexit on proportion of economically-viable farms, by system.

sectors, and the potential impact on prices of Brexit under an assumed trade liberalisation scenario (van Berkum *et al.*, 2016).

In addition to the market price impact of Brexit, a 10% reduction in Common Agricultural Policy (CAP) support across sectors was assumed to result from Brexit, due to the reduction in the EU CAP budget that will follow the exit of the UK from the EU. The UK is currently the second largest net contributor to the EU budget (Matthews, 2016). Figure 1 shows that the two cattle systems in the Teagasc NFS were the most exposed to both the price and policy shocks applied. This is a result of their high exposure to the UK market and their reliance on direct payments. Given an assumed 10% beef price reduction from Brexit, coupled with a 10% reduction in the Single Farm Payment, family farm income (FFI) on the average Irish cattle farm would drop by more than one-third. The presence of a cattle enterprise on dairy farms, alongside an assumed reduction in the Irish milk price of 5%, resulted in a projected decline in dairy farm incomes of 20%. Similarly, FFI on sheep farms was projected to decline by 21%, even though a decline of only 5% in prices was assumed. The decline in incomes on Irish sheep farms was also driven by a high dependence on subsidies and the importance of beef output as a secondary enterprise on many sheep farms. For similar reasons, FFI on tillage farms was projected to decline by 22% (given the beef component of output), although cereal markets are least likely to be affected by Brexit (with an only -1% price shock assumed) among the four farm types examined.

# Implications for economic viability

The implications of the Brexit-related FFI reductions, as outlined in **Figure 1**, for the economic viability of Irish farming were examined using the Frawley and Commins (1996) definition of economic viability. Frawley and Commins defined a viable farm as one having: (a) the capacity to remunerate family labour at the minimum agricultural wage; and, (b) the capability to give an additional 5% return on non-land assets. **Figure 2** shows that economic viability levels fell by over 20% in the 'hard' Brexit scenario analysed, with the cattle and sheep sectors the worst affected, due to a combination of price and decoupled income support payment reductions.

#### Conclusions

The farm level analysis carried out has shown that the effects of the assumed price and direct payment support changes have very

different impacts across the sub-sectors of Irish agriculture. The Irish beef sector is likely to suffer the largest negative impact in terms of farm income and of economic viability.

## Further reading

Donnellan, T., Hanrahan, K. and Thorne, F. (2016). 'Brexit Update: Considering the Impact on Irish Farm Incomes.' Available at: https://www.teagasc.ie/media/website/publications/2016/BrexitNov\_R\_and\_O\_final\_for\_web.pdf.

van Berkum, S., Jongeneel, R.A., Vrolijk, H.C.J., van Leeuwen, M.G.A. and Jager, J.H. (2016). 'Implications of a UK exit from the EU for British agriculture.' Available at:

https://www.wur.nl/upload\_mm/b/1/3/5f8e5eb2-305a-4a06-9e48-627f9f448c96\_2016-046%20Berkum\_DEF.pdf.

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