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AHDB
AGRICULTURE & HORTICULTURE DEVELOPMENT BOARD

The impact of Brexit on the UK agricultural workforce

SCENE SETTING

In this issue of Horizon we consider the impact that Brexit may have on the industry in terms of availability and affordability of labour.

This is an economic overview of the current situation and the potential impact of Brexit. Control of immigration was one of the key objectives of the Leave Campaign, so it would seem unlikely that free movement of people between the EU and UK will remain in place beyond Brexit. However, negotiations have not yet begun and this may change as awareness of migrant labour as a vital factor of production within the UK economy as a whole is better understood.

European Commission spokespeople have indicated that if the UK wishes to be in the single market, it would need to accept the free movement of people, along with the free movement of goods, services and capital. AHDB will, therefore, examine:

- The possible scenarios regarding future immigration policy and its effect on UK agriculture
- The key issues and the magnitude of their impact at sector level
- Alternatives to the free movement of people that have been used successfully in the past, plus additional proposals that could be considered as potential policy options.

CONTENTS

KEY ISSUES

The seasonal nature of demand and falling unemployment in the UK have resulted in the UK agricultural industry becoming increasingly reliant on a supply of labour from Europe. Employers in the UK agricultural and horticultural sectors, along with those further up the supply chain (i.e. food processors), hire both permanent and seasonal migrant workers.

Maintaining this supply of labour is an important factor influencing the competitiveness of the agricultural industry, and the wider economy post-Brexit. It is a major component of the industry's total cost of production. Figures from Defra's agricultural accounts put the value of paid labour at £2.5 billion in 2015, equating to around 14 per cent of total financial inputs. However, limiting free movement and immigration was one of the themes of the Leave Campaign and was a motivating factor for voters, meaning the UK is likely to place some restrictions on immigration. This throws up major political issues for the Brexit negotiations.

The free movement of workers within the EU has the potential to boost growth and competitiveness in both the UK and Europe as a whole. Many businesses in the UK, including those in the agricultural industry and the wider supply chain, see the ability to draw on a wide talent pool as a major advantage and benefit from the ready supply of labour.

Post Brexit, depending on negotiations with the EU, the UK could adopt immigration policies to alter the mix of imported skills and enforce border controls. Analysis by the think tank Open Europe suggests that, if policies restricted the UK labour supply or services provided by that labour, this would have a negative impact on the economy.

The existing models of EU association without full membership (see our earlier Horizon report on options for a future UK/EU trade relationship) illustrate that accepting the principle of free movement of labour may be the price the UK has to pay to gain free access into EU markets. Without agreement on this, it may be that the UK is unable to access the free market on the same terms as for example, Norway or Switzerland.

Open Europe states that restricting free movement would mean the UK economy would react differently to growth opportunities. If unilateral trade agreements opened up new potential markets for agricultural produce, a shortage of appropriate labour could mean that higher wages and the resulting increased cost of production would have negative impact on the UK's productivity and competitiveness. If this happened at the same time the UK opened up to free trade and new low-cost competition from emerging markets, some UK-based businesses may find it even harder to compete.

EU LABOUR WITHIN THE UK AGRICULTURAL INDUSTRY

Based on figures from the June Census, the number of regular employees in UK agriculture, excluding seasonal, casual and gang labour, is 115,000. If we include seasonal, casual and gang labour, the total rises to 182,000.

It is challenging to accurately measure the number of these workers who are EU migrants. A good starting point is the Government's official figures provided by the Office for National Statistics (ONS). These show there were more than 22,000 EU-born migrants working in agriculture in 2015. These numbers have increased steadily in recent years, rising 41 per cent since 2011, as shown on the table below:

Number of EU nationals employed in agriculture (2011 to 2015) Sources: ONS, Labour Force Survey 2015

Year	Number of EU-born individuals employed
2015	22,517
2014	22,371
2013	18,784
2012	19,138
2011	15,957

It is important to highlight these figures are likely to underestimate the true extent of EU and other migrant workers. While they will capture those migrants who have settled in the UK and are working in permanent roles, these figures will not capture seasonal workers coming to work in the UK for short periods of time.

Given this, it is not unreasonable to view the 22,517 EU nationals as accounting for around 20 per cent of the 115,000 regular employees in the sector.

Accurate figures for seasonal migrant labour in agriculture are not captured. However, it is clear that EU migrants are likely to be filling the majority of these roles.

For instance:

- Data from the Seasonal Agricultural Workers Scheme (SAWS), which ran until 2012, show uptake of the annual 21,250 quota was always very high (98 per cent in 2012). In 2012, this scheme was solely available for workers from Bulgaria and Romania, prior to these countries joining the EU.
- Seasonal workers are particularly important in horticulture and anecdotal evidence from employers in this sector suggests that the vast majority of seasonal workers are EU migrants. Indeed, some employers report that all their seasonal workers are EU migrants.

According to an NFU study in 2015, horticulture was already experiencing labour shortages. Looking ahead, the results of the study also show an anticipated worsening of labour availability by 2018.

EU LABOUR WITHIN THE WIDER SUPPLY CHAIN

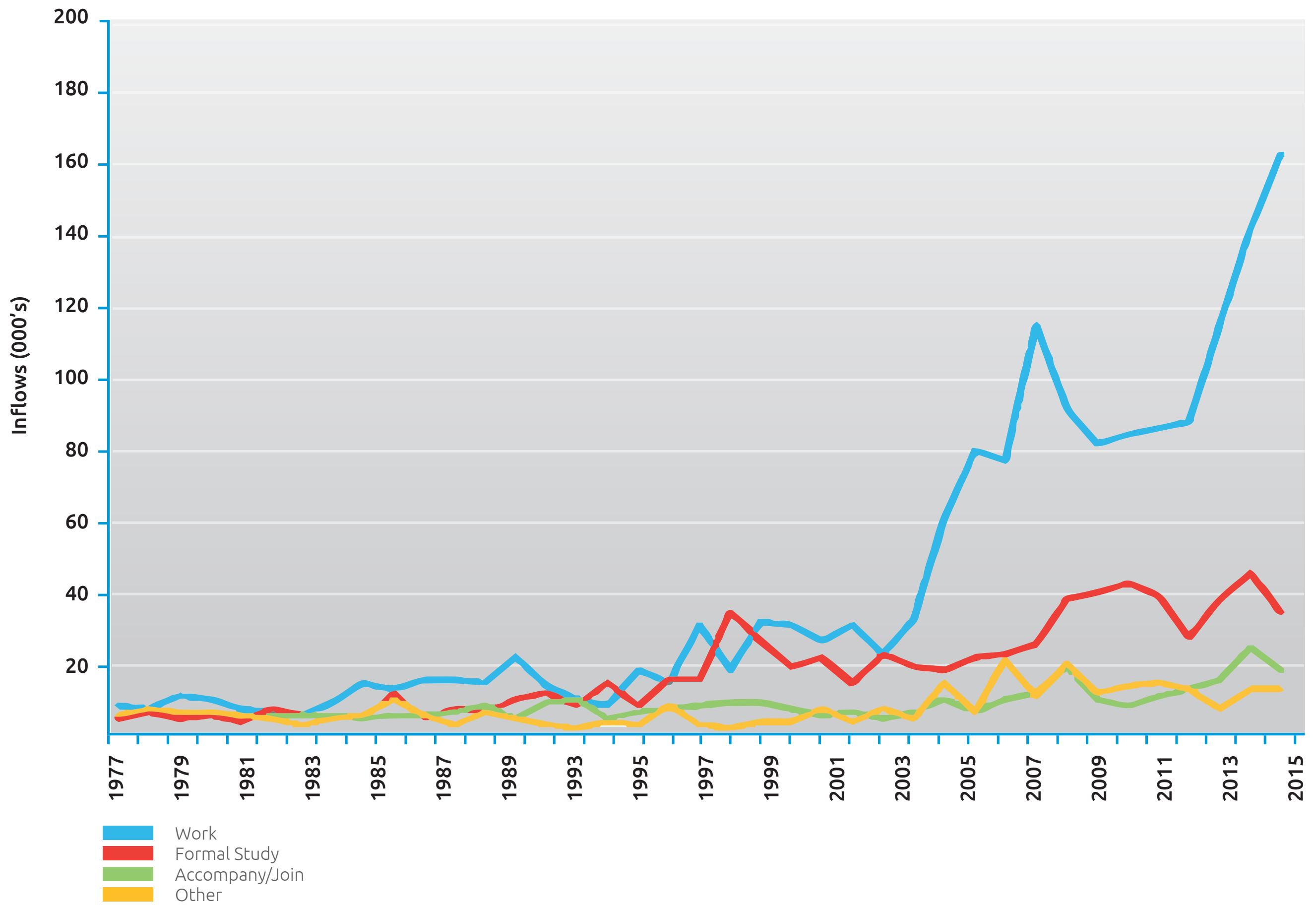
The proportion of the UK working-age population born abroad doubled between 1997 (eight per cent) and 2015 (16 per cent). The eight million working-age people born abroad comprise 3.3 million from the European Economic Area (EEA) and 4.6 million from non-EEA but more than half this latter group are now UK citizens.

The 333,000 net migration figure for 2015 comprises very similar numbers from outside the EU (188,000) and inside the EU (184,000). The major change over the last decade is the growth in the relative fraction of EU net migrants.

EU migration was relatively low until the early 2000s with work migration and formal study interchangeably the two main reasons. However, since 2002, migration for work-related reasons has increased in comparison to other reasons, increasing by more than five times between 2002 and 2015.

EU inflows by main reason for migration, 1977 to 2015

Source: Migration Advisory Committee / Integrated Processor Survey



Data from the Government's Migration Advisory Committee (MAC) shows that a million migrants in low-skilled jobs have come to the UK in the last decade. Half of them were from Central and Eastern Europe following EU enlargement. They highlight that this benefits owners of capital, for example firms in labour-intensive sectors such as food manufacturing, agriculture and restaurants, which often cannot secure an adequate supply of UK-born labour. Migrants are more mobile and flexible than UK-born workers, perhaps prepared to change location, live at the workplace and do shift work, which helps to increase the flexibility of the labour market.

ONS figures show migrant workers are important in many sectors of the economy. In 2014 migrants accounted for 38 per cent of the workforce in food manufacturing, the highest percentage of any sector. Of these, 14 per cent were recent migrants, again the highest for any industry.

Top 10 occupations for foreign-born workers (2014)

Source: ONS, Labour Force Survey 2014

Top 6 by workforce share, all migrants	%	Top 6 by workforce share, recent migrants	%
Manufacture of food products	38	Manufacture of food products	14
Domestic personnel	32	Accommodation	11
Manufacture of wearing apparel	29	Domestic personnel	11
Accommodation	27	Food and beverage service activities	6
Food and beverage service activities	27	Manufacture of textiles	6
Scientific research and development	22	Extraction crude petroleum and gas	6

EU migrant labour is widely used throughout the supply chain. In a 2015 paper by John Lever, University of Huddersfield, two recent trends have been identified:

'First, there has been a rise in the incidence of low paid, irregular and non-unionised work in the agricultural and meat processing sectors. Second, and related to the first trend, employment in these sectors has become less attractive to the UK workforce, leading to labour shortages.

The enlargement of the European Union in 2004 and 2007 has opened up a new pool of cheap labour from outside the UK, with a disproportionate number of migrant workers from Central and Eastern European countries now gaining employment in the agri-food sector and the meat-processing industry in particular. From the slaughter of livestock to the production of fresh, chilled and frozen meat products, the work involved in the meat-processing sector – boning, freezing, preserving and packing meat – is widely recognised to be dirty, dangerous, demanding and unattractive to UK workers.'

Source: The role of migrant labour in the meat processing industry, John Lever, Paul Milbourne, 2015

The role of supermarkets within these processes was also emphasised. 'Just in time' strategies are now widely used by the major supermarkets to connect different parts of the supply chain and conditions for food processors are shaped by the competitive pressures generated.

The production of perishable meat products is one of the most labour intensive and least profitable parts of the sector and it is all but impossible to control delivery by keeping levels of stock high. As meat-processing factories and other supply chain actors struggle to meet the changing demands of supermarkets for 'just in time' production, they look to adopt more flexible labour supply practices, with migrant workers playing an increasingly important part in these new working arrangements.

FACTORS INFLUENCING THE USE OF MIGRANT LABOUR

The chart below shows that agriculture has one of the highest proportions of hard to fill vacancies. Manufacturing, including food processing businesses, has a similarly high share of such vacancies.

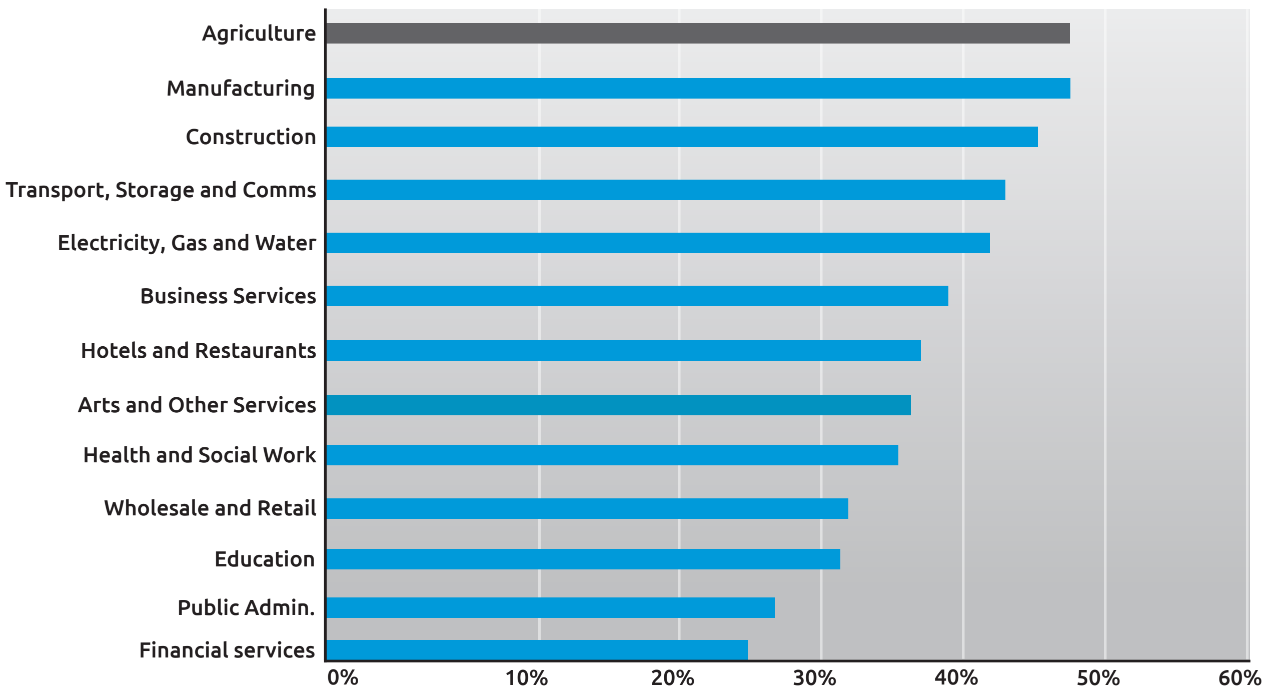
Reasons for agricultural vacancies being hard to fill are varied but evidence suggests that these are not predominately related to lack of skills, unlike some other sectors in the UK economy. Rather, they relate to the desirability of these roles within a competitive labour market.

Key reasons highlighted include:

- not enough people interested in this type of work
- remote locations
- unsociable hours
- the fact that many vacancies are seasonal

Hard to fill vacancies as % of all current vacancies

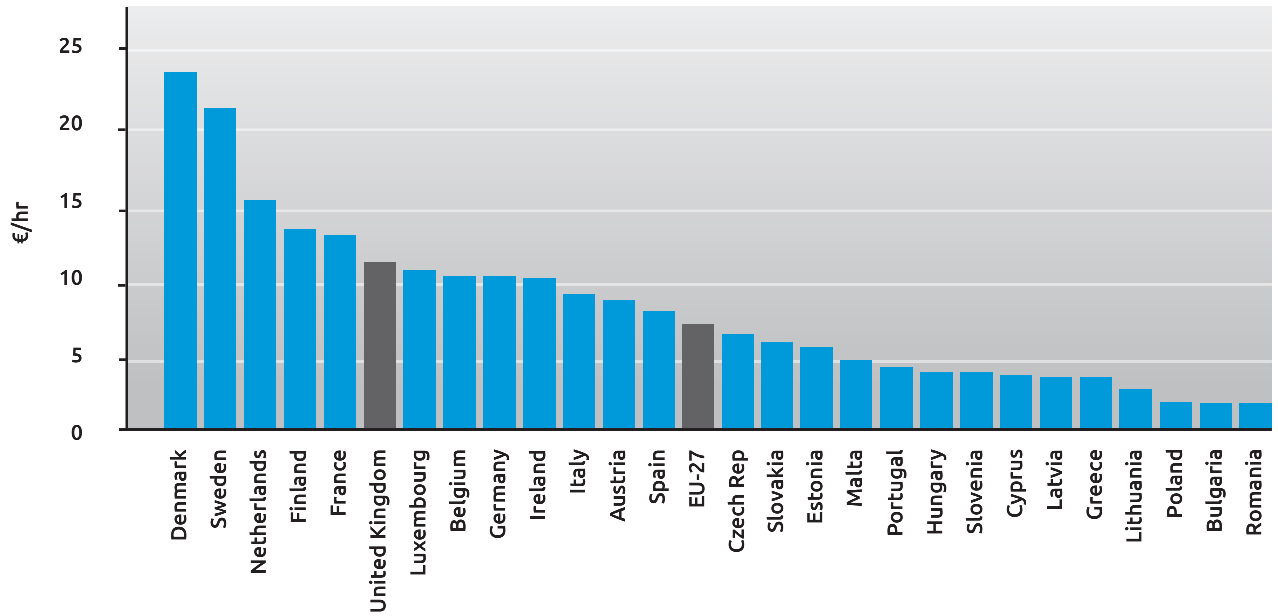
Source: UK Commission for Employment and Skills (UKCES) 2015



In contrast, migrant workers will view these vacancies differently. Most agricultural workers come from EU countries with low wage structures and high unemployment. Agricultural wages in the UK are higher than the EU average and higher than in most eastern European countries, making the UK an attractive destination for workers.

Average wages euro/hour by country (2012)

Source: Farm Accountancy Data Network 2012

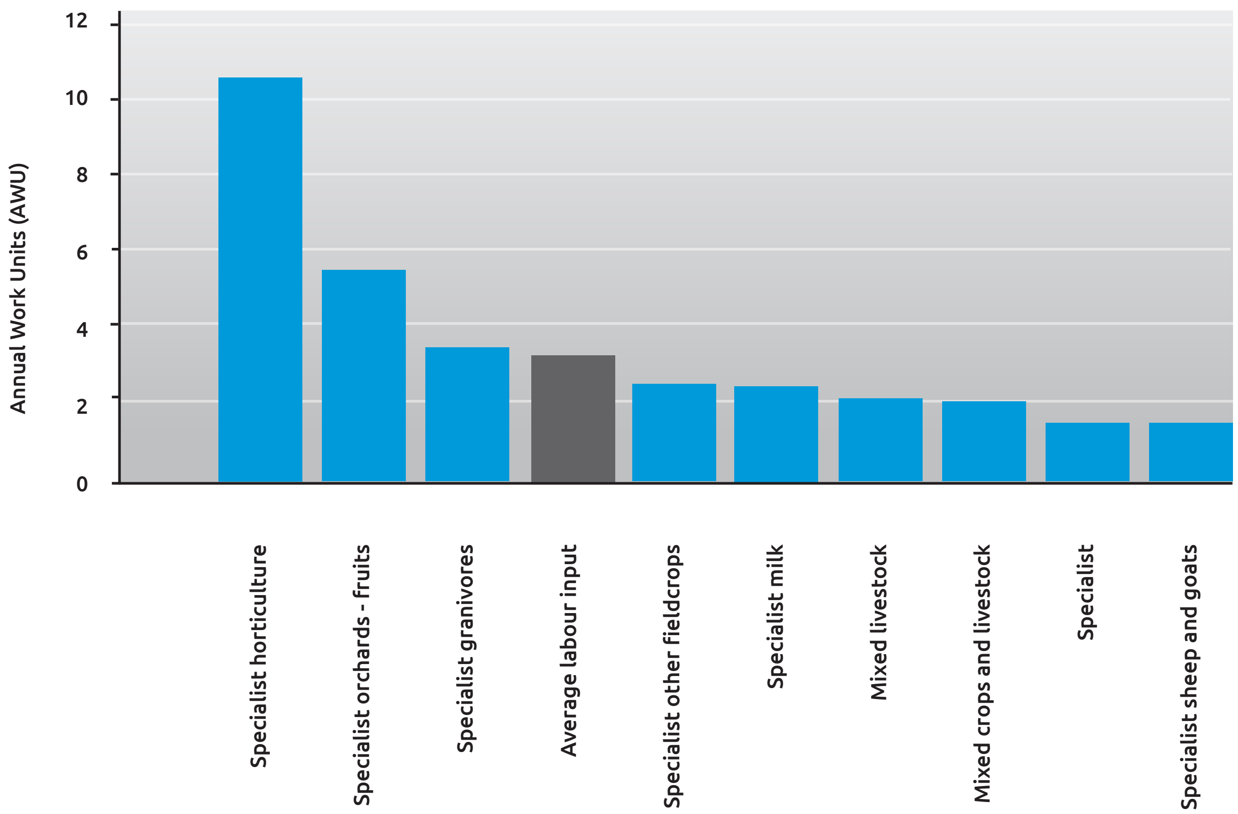


LABOUR USAGE BY SECTOR IN THE UK

The chart below shows labour input by Annual Work Unit (AWU) by sector in the UK. An AWU equates to the work performed by a full-time employee over the course of a year. All sectors in the UK make use of EU labour, in particular the more labour-intensive sectors such as horticulture and specialist fruit.

Labour input per farm (AWU) by type of farm

Source: Eurostat 2015



POSSIBLE SOLUTIONS

Depending on the trade agreement reached between the EU and the UK, it may be that free movement of labour remains beyond Brexit. However, given that control of immigration was a major focus of the Leave Campaign, it would seem unlikely that this option would be politically viable.

Attempts to fill vacancies with UK workers have proved difficult in the past, as mentioned previously in this report. It would appear that UK workers would prefer permanent work, better locations and more sociable hours. In addition, the UK benefit system does not work well for seasonal workers when their contracts come to an end. Therefore, if UK agriculture is to continue in its present structure, it either requires access to migrant labour or an alternative solution. A number of possible solutions are discussed on the following pages.

1. Schemes to maintain the current availability of migrant labour

2. Increasing agricultural labour productivity

3. Increasing automation

4. Increasing incentives for the unemployed/economically inactive to work?

1. Schemes to maintain the current availability of migrant labour

The UK already runs a five tier points based style system for immigration for non-EU nationals.

Tier 1 - Entrepreneurs, investors, exceptional talent

Tier 2 - Highly skilled workers

Tier 3 - Low-skilled workers filling specific temporary labour shortages

Tier 4 - All student visas

Tier 5 - Temporary workers and youth mobility

Tier 3 is currently suspended by the Government. A strong supply of labour from the European Economic Area (EEA), members of which do not require visas to work in the UK, has meant it has not been required since the points-based system was implemented in 2008.

A recent study by the Oxford Observatory for the Financial Times points out that in its current form, 96 per cent of migrants currently employed on UK farms would fail entry under the UK system. This is because the vacancies being filled would not meet the requirements for Tier 1 or 2.

In its recently published options paper, the National Farmers Union (NFU) has suggested a number of possible schemes, specific to agriculture, which could be used to maintain labour supply. These include:

- Working visa entry, where the Government recognises a requirement for EU seasonal lower-skilled labour
- A new SAWS-type scheme, where EU workers are allowed to work in the UK industry for a defined period of time
- A student agricultural workers scheme similar to SAWS
- Recruitment workers from Commonwealth countries
- A points based system

The Food and Drink Federation has also highlighted the importance of Government action as one of four key priorities to the industry post-Brexit. It has called on Government to maintain free movement of people to ensure a continued supply of labour. Its document A new UK-EU relationship states:

'Government must develop a new migration policy that ensures manufacturers have continued access to the workers we need to address a looming skills gap and the drive for future innovation to support the UK's competitive advantage. We believe the best way of achieving this is to retain the free movement of labour without disincentives for people coming to the UK to work. This would help to ensure continued rapid transfer of expert knowledge to the UK which helps to build the skills level in the UK's workforce.'

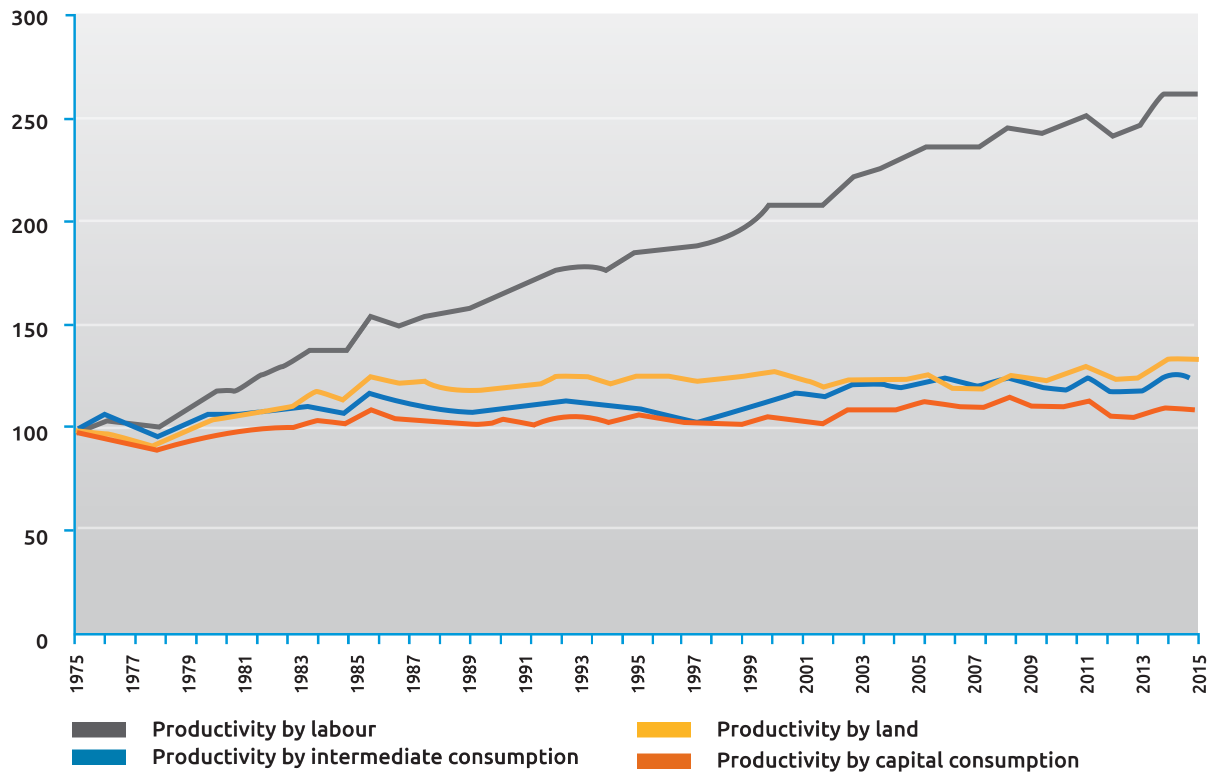
Any of these proposals would require support from Government and are dependent on what is politically achievable in a post-Brexit UK.

2. Increasing agricultural labour productivity

Increases in UK agricultural labour productivity have outstripped those of capital and land over the last 40 years.

Partial Factor Productivity Indicators (1973 = 100)

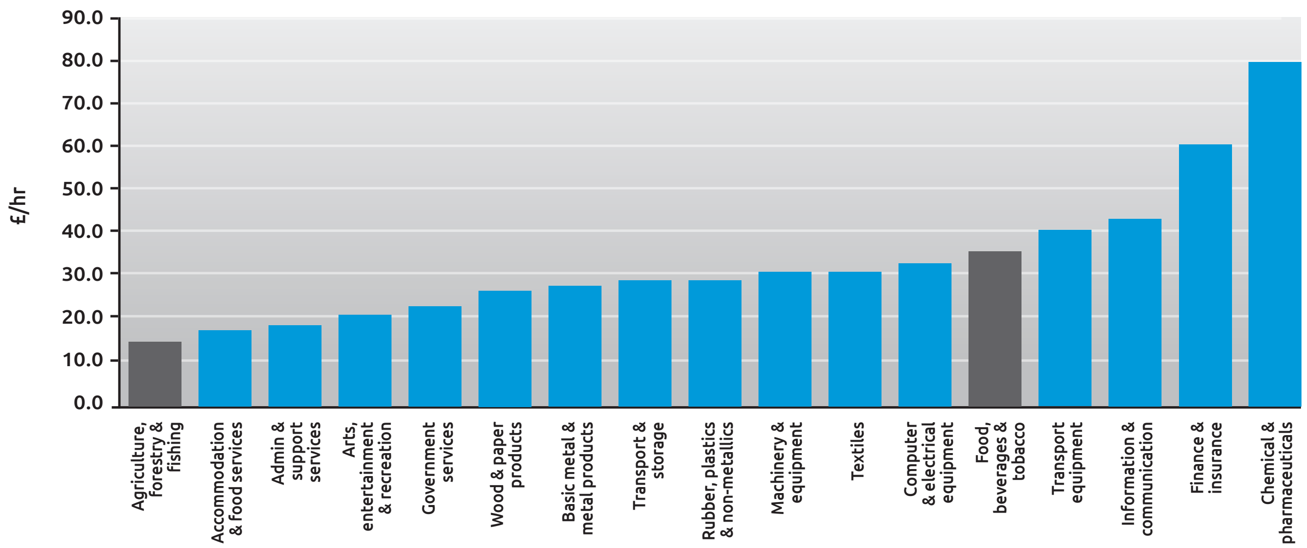
Source: Defra 2015



However, agricultural labour productivity has not kept pace with other sectors. This would suggest that further increases in productivity are possible. In 2013, the Government published an agricultural technology (agri-tech) strategy with the stated ambition of raising productivity.

Output per hour (£)

Source: ONS 2016



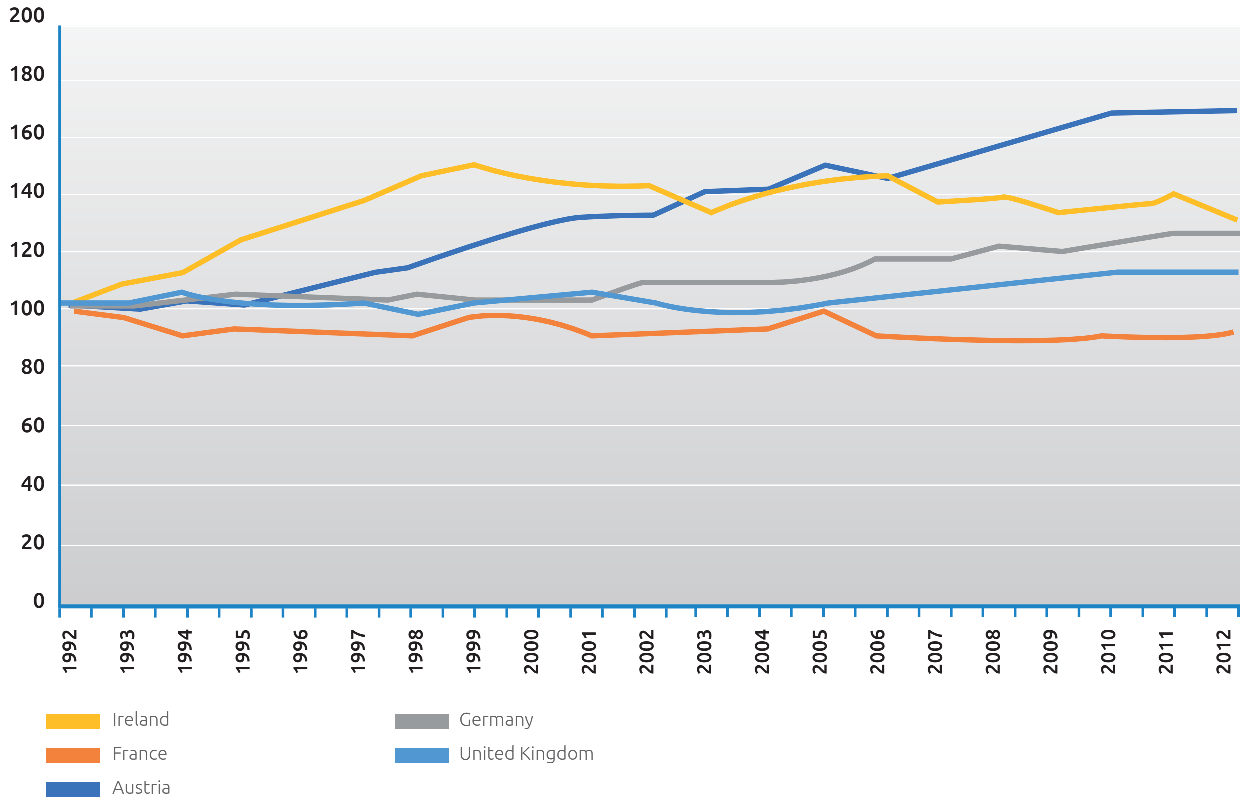
Figures from ONS in Q1 2016 show that output per job per hour in Agriculture, Forestry and Fishing is the lowest for all sectors in both manufacturing and services. Food, beverages and tobacco is one of the most productive categories within the manufacturing sector of the economy.

In practical terms, there are a range of solutions that businesses have introduced to improve their labour productivity. For instance, new innovations can save time and money by automating repetitive tasks. Examples of this include robotic milking in the dairy sector, automated feeding systems for pigs and poultry and automated product handling systems in horticulture. Farms can also alter their production systems, for example by introducing block calving in dairy or batch farrowing in the pig sector, to intensify labour requirements.

In summary, UK agriculture and the wider supply chain currently depend heavily on EU migrant labour, particularly in certain sectors. If the industry were to lose this supply of affordable labour post-Brexit, it would appear there is scope to increase labour productivity to at least partially mitigate losses.

In addition, Agricultural Total Factor Productivity (TFP) is below that of many of our European trading partners.

Agricultural Total Factor Productivity by country (1992 = 100) Source: USDA



3. Increasing automation

If the supply of labour cannot be maintained, or is significantly reduced, the implications for UK agriculture and the supply chain would be profound. Wages are likely to increase in an attempt to make jobs more attractive to UK nationals. This would increase costs of production for growers and processors and drive up prices. Depending on other variables, including crucially the trade agreements reached post Brexit, this may make certain sectors less competitive on world markets.

The loss of cheap labour may force the industry to restructure and adapt to the new economic environment. Substitution of capital for labour would be one possible consequence, as the costs of these factors of production change relative to one another. This may encourage increased automation, where possible, within the industry.

The think tank The Resolution Foundation has looked in detail at increased automation in all industries.

The report states:

'Given high employment, terrible productivity performance and low investment, the UK arguably needs more automation, not less. And public policy may be adding to this need. The welcome National Living Wage is increasing labour costs at the bottom, while the – as yet unclear – nature of Britain's exit from the EU may lead to reductions in low-skilled immigration. Looking at those sectors with the highest proportion of EU migrants, we find that some (such as cleaning and domestic staffing) face relatively low prospects for automation, while others (such as agriculture, food manufacturing and food and drink services) may see new pressures (or opportunities) to automate.

While the impact of Brexit on migration will take some time to unfold, the ready supply of low-skilled EU migrants ultimately looks likely to be restricted in the future. All else being equal this will raise labour costs in migrant-reliant industries, thereby increasing employers' incentives to invest in labour-replacing or augmenting technologies. This would not be without precedent: evidence shows, for example, that restrictions on migration in the US led to increased mechanisation in the tomato industry.

Given the UK's poor productivity growth in recent years, and the potential for further economic disruption related to Brexit, it seems fair to say we need more robots, not fewer.

Part of the logical policy response would be encouraging more investment, research, education and responsive regulation; while continuing to pursue goals of high pay and full employment, which in turn promote capital investment.'

Source: Robot Wars, The Resolution Foundation, 2016

There are difficulties with increasing automation in the agricultural industry. The most obvious is the current climate of uncertainty. Given the uncertainty surrounding Brexit, producers may be reluctant to increase capital investment at the level required to offset a potential loss of labour supply. Despite interest rates being at an all-time low, reassurances would be needed from Government regarding future policy for investment to increase significantly. Indeed, it is more likely that during this prolonged uncertainty, investment will fall, leaving the industry ill-equipped to compete in global markets post-Brexit.

Secondly, the practicalities of automation. Some sectors within the industry may well lend themselves to increased automation but this is not universal. A normal adoption pattern for new technology would suggest more progressive farmers with sufficient financial reserves would be more likely to invest in automation and robotics. Sectors most heavily dependent on migrant labour, where it cannot easily be replaced by increased automation, will be the most vulnerable should EU migration be curtailed post Brexit. This would impact on the current structure of the industry and the nature of UK agricultural production.

Thirdly, the time-scale required would leave industry vulnerable to labour shortages in the short and medium term. It has not yet been announced whether the Government will negotiate a hard or soft Brexit, but a hard exit, coupled with a lack of alternative labour schemes, would leave a large section of the industry vulnerable in the short term. In the absence of support for investment, the UK agricultural industry will become less competitive in a post-Brexit global trading environment.

4. Increasing incentives for the unemployed/economically inactive to work?

Finally, while unemployment is relatively low in the UK it is clear that there are potential domestic sources of labour which could be used.

The ONS figures for August 2016 highlight:

- There were 1.6 million unemployed people[1], an unemployment rate of 4.9 per cent
- There were 8.8 million people aged from 16 to 64 who were economically inactive[2], an inactivity rate of 21.6 per cent

However, there will be multiple barriers to overcome to move these people into the workforce. For instance, we have already highlighted a number of factors relating to the desirability of roles in agriculture on page 7, and many people may prefer to remain outside the workforce than take a seasonal or relatively low paid role. As such, broader changes to the welfare system to increase the incentives to work may be required.

[1]people not in work but seeking and available to work

[2]not working and not seeking or available to work

CONCLUSION

UK agriculture and its wider supply chain are currently heavily dependent on EU migrant labour. As such, if migration is restricted and no exceptions made for agricultural labour, it seems likely that the industry will go through structural change.

By changing the relative cost of factors of production, it could divert businesses into less labour-intensive production systems and change the nature of UK agricultural production. Horticultural businesses would be particularly vulnerable to a reduction in affordable, seasonal labour.

Various schemes are proposed that would mitigate the impact of this reduction in supply of labour. However, given that the industry is already suffering shortages in some sectors, it is hard to envisage these schemes fully compensating for this loss. In addition, their adoption would depend on the political climate and agriculture's place in overall Brexit negotiations.

There is scope for productivity increases in agriculture. The loss of affordable labour and readily available sources of labour may be the catalyst that forces the industry to achieve these increases, in order to remain competitive in a global market post Brexit. Increased capital investment is a possibility. Although not a short-term solution, due to the cost and time scales involved, it could be feasible in the medium to long term.

Authors

David Swales | Head of Strategic Insight
T: 024 7647 8854 **E:** david.swales@ahdb.org.uk

Sarah Baker | Senior Analyst
T: 024 7647 8845 **E:** sarah.baker@ahdb.org.uk

AGRICULTURE & HORTICULTURE DEVELOPMENT BOARD

Agriculture and Horticulture Development Board
Stoneleigh Park
Warwickshire
CV8 2TL

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