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Public funding for public goods: A post-Brexit perspective on principles for agricultural policy

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ABSTRACT

In early 2019 the United Kingdom is due to leave the European Union and with it the Common Agricultural Policy. The UK Government has announced its intentions to formulate a novel agricultural policy following the principle that public funding should be restricted to the provision of public goods. However, the acceptance, interpretation and application of this principle is the subject of intense debate. We overview the background to this debate, reveal the major flaws in present policy and identify and provide our answers to three key questions which future policy must address: (1) What are the farm related public goods that public money should support?; (2) How should that spending be allocated?; (3) How much should be spent? We believe that these questions and their answers will be of general interest beyond the UK.

1. Introduction

Following the Brexit referendum the United Kingdom is due to leave the European Union by March 2019. While this will affect all aspects of the UK economy, probably no sector will be impacted more profoundly than agriculture. For more than four decades the relationship between the UK Government and the farming sector has been dominated by the EU's Common Agricultural Policy (CAP) which has determined the public subsidies paid to farmers. While a commitment has been given to keeping these subsidies in place for the duration of this parliament (Downing et al., 2018), expected to be until March 2022, the Government has made it clear that major changes in policy are imminent. The recent publication of a Command Paper (Defra, 2018a) consulting upon a proposed Agricultural Bill expected within the current session of Parliament (Downing and Coe, 2018) has signalled an intention to radically shift the emphasis away from general support for agricultural activities and towards the longstanding objective of targeting public money towards the provision of public goods (H.M Treasury, 2007, 2013), in particular those environmental improvements that are the focus of the Government's recent 25 Year Environment Plan (H.M. Government, 2018). This radical shift in policy intentions is of significant public interest, with more than 44,000 responses to the consultation (Defra, 2018b), and we believe, is to be welcomed as a key element in delivery of the Government's overarching objective to ensure that the present generation is the first to leave the natural environment in a better state than it inherited (H.M. Government, 2011).

2. Why business as usual is not an option: the shortcomings of CAP

Whether you are pro- or anti-Brexit, withdrawal from the EU's CAP should be welcomed. CAP succeeded at promoting food production in post-war Europe, but inherent flaws in its design meant that this came at massive cost. At its peak the CAP cost 73% of the EU's budget and still accounts for 38% of total spend (EU-ARD, 2017; IoG, 2018) and provides nearly half of farm income (Lang et al., 2017). But the costs are not purely financial; despite 25% of CAP support being paid through its Pillar 2 Rural Development fund which supports a variety of Agri-Environment Schemes (AES) (Science for Environment Policy, 2017), these have been criticised as poorly targeted, relatively ineffective (Sutherland, 2002; Davey et al., 2010) and fundamentally compromised and overwhelmed by the 75% of funding which goes directly to farms under the more conventionally focused Pillar 1 of the CAP (Pe'er et al., 2014). This has meant that, despite numerous and ongoing reforms (Howarth, 2000; Hart et al., 2018), the period of the CAP has been one of unprecedented levels of environmental damage. Since the UK first joined the CAP in 1973 British farmland birds have declined by 56% (Harris et al., 2018) with iconic species such as the corn bunting suffering a 90% fall in numbers (*ibid.*); farming has contributed three-quarters of sediment-load and around 60% of nitrate pollution in UK water ways (Bewes et al., 2014; Holden et al., 2017); and, as the Secretary of State has pointed out, over-use of agricultural land means that we may have just 30–40 years before farm soil fertility

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is exhausted (Guardian, 2017). As Mitchell (2017) notes, “Overall, agriculture is a major source of greenhouse gas emissions, the main polluter and user of water, and the primary driver of habitat destruction and species loss” (p.6).

CAP was designed as a public subsidy for the private production of a private good: food. This results in the public paying twice; once as tax payers and again as food purchasers. Despite suggestions to the contrary (e.g. NFU, 2018), joining the CAP entailed the acceptance of trade tariffs which actually sent UK food prices soaring: during the first decade of CAP subsidies in the UK, food prices rose at a rate of nearly double that of comparable countries (OECD, 2018)[1]. While aiming to maintain the *capacity* to produce higher levels of food is potentially useful in a volatile world where demand and supply are imperfectly known (e.g. Patel, 2009; Forbord and Vik, 2017), subsidising *over-production*, particularly at times of ample supply, is poor policy.

It is also well recognised that the CAP has not even benefitted the majority of farmers (Jambor and Harvey, 2010; Ciaian et al., 2015; Dowler and Carter, 2016). The bulk of its funds are paid through the Pillar 1 Basic Payment Scheme. However, because this is allocated on a per hectare basis this means that three quarters of these funds go to just one quarter of farms[2]. These are the largest and often richest farms in the country and stand in sharp contrast to the 50% of farms who share just 10% of these subsidies. Fig. 1 illustrates this inequity, comparing how payments are currently allocated (the upper cumulative payments curve shown in blue) with the situation if payments were evenly spread across farms (the lower straight line shown in green). This inequality is reflected in both the stark difference between these lines and the standard measure of distribution; the Gini coefficient, a measure with a value of 0 if everyone got an equal share of payments and 1 if a single individual takes all funds. The calculated Gini value of 0.61 shows just how unequal the present system of farm subsidies is (all calculations described in the Appendix A). Wider comparisons further underline the failure of the CAP to improve the situation of ordinary farmers who only earn around two-thirds of the incomes of those in other sectors; a situation which has not improved in more than two decades (ONS, 2017).

Quite clearly then the current system of public support for farming is indefensible for the environment, for taxpayers, for food consumers and even for most farmers. A radical revision is long overdue. What then are the principles that should guide this revision?

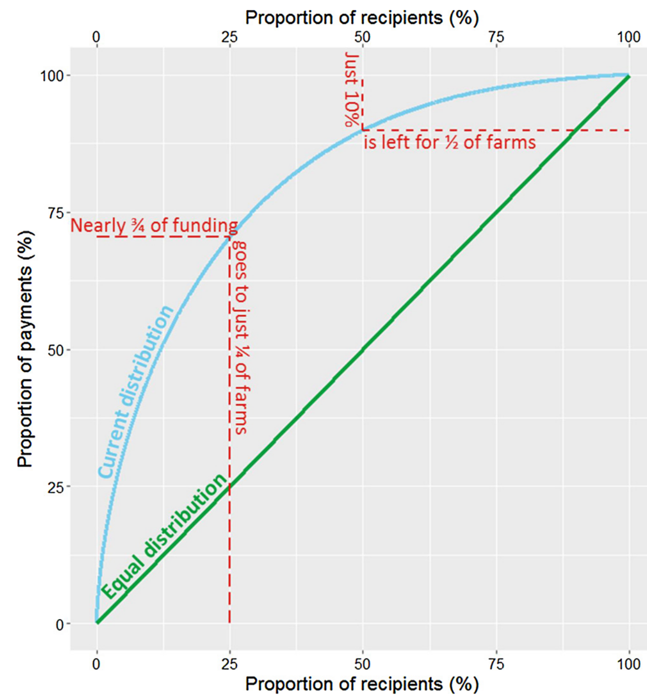

Fig. 1. Cumulative distribution of subsidies paid under the current CAP Basic Payment Scheme (blue line) and how this curve would look with equal payments to all farmers (green line). (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article). Data from Defra, available at http://cap-payments.defra.gov.uk/Download.aspx ; see Appendix A for calculation and data details.

3. A new deal for public spending on UK farming: the key questions

A consideration of public spending on the UK farming sector requires that we address three key questions:

(1) What are the farm related public goods that public money should support?
(2) How should that spending be allocated?
(3) How much should be spent?

These questions, and their answers, are inter-related. Addressing Question (1) requires a clear understanding of the benefits that farming can provide, which of these are private goods best provided by markets, and which are public goods requiring public support. Ultimately, Questions (2) and (3) will determine the effectiveness of any subsidy scheme. Question (2) addresses two issues. First, the way in which funding is allocated determines both its uptake by farmers (e.g. heavy bureaucracy, forbidding application processes or risky payments may deter involvement in publically funded schemes[3]) and the value for money which it delivers (e.g. introducing elements of competition for funding and, where reasonably possible, payments for outcomes rather than actions, can substantially increase the efficiency of funding). Second, the degree to which farms can deliver some public goods (particularly those related to the natural environment) varies markedly between locations (Bateman, 2009). Targeting funds to those locations which yield the highest net benefits can significantly improve value for money to the taxpayer. The current Farming Consultation (Defra, 2018a) says little about Question (3), however the ability to efficiently target spending on farm subsidies will be a major determinant of the level of public goods provided by different levels of budget and should in turn partly determine the size of that budget.

3.1. What are the farm related public goods that public spending should support?

Agriculture is a private enterprise and food is sold in markets, directly to consumers, and is therefore by definition (and according to official government guidance) a private, rather than a public, good

[1] CAP also caused farmland prices and rents to rise at an unprecedented rates as they capitalised subsidy values (Hyder and Maunder, 1974; Traill, 1979, 1984), an effect that has not been dissipated by subsequent reforms and has been seen across the EU (Guastella et al., 2017; Milczarek-Andrzejewska et al., 2018; O’Neill and Hanrahan, 2013). It is important to note that this capitalisation benefits land owners and that over 30% of farmers are tenants and do not own the land they farm (Eurostat, 2018).

[2] Indeed half of Europe’s farms share just 5% of CAP direct payments (Matthews, 2016). In contrast the 10% most supported farms (750,000 farms) across Europe capture 55% of all direct payments which accounts for some 15% of the entire EU budget (ibid.).

[3] There are of course a diversity of factors which determine farmers’ provision of public goods (Zimmermann and Britz, 2016; Weltin et al., 2017; Inman et al., 2018). Nevertheless, evidence shows that the main motivation for participation in agri-environmental schemes is economic (Pavlis et al., 2016; Howley, 2016).