Farmers’ land rental preferences

In an era of expansion in dairy farming, leading to increased land requirements, TEAGASC research has been looking at the structural drivers behind land prices.

With the abolition of milk quotas in 2015, the dairy sector has expanded significantly. The Food Harvest 2020 target of a 50% increase in milk production was reached two years ahead of schedule in 2018. With further expansion expected in the coming years, more land will be required to facilitate the growing dairy herd. However, Irish farmland markets are notoriously thin, with little land changing hands outside of inheritance, and rental markets dominated by short-term conacre transactions. Given the high capital cost of purchasing farmland, it is likely that land rental will be the more accessible source of land for Irish farmers in the coming years. This research aims to estimate the value of land attributes to farmers in terms of renting in and renting out land. One difficulty in studying Irish farmland markets is the lack of information concerning the structural drivers that drive land prices. This study aimed to fill this information gap by using discrete choice experiments (DCEs) to estimate farmer preferences for land mobility. The objective was to gain insight into Irish agricultural land rental markets by estimating farmers’ willingness to pay (WTP) and willingness to accept (WTA) compensation for differing land attributes.

Methodology

Four attributes were settled upon for the choice experiment: type of land access; distance of land from farmyard; the soil quality of the land; and, the rental price of the land. Type of land access describes the type of rental contract the land would be rented under and had two levels: conacre; and, lease. The distance from farmyard attribute has three levels: adjacent; one kilometre away; and, five kilometres away. Each level denotes how far the land in question was from the main farmyard. The soil quality attribute has three levels: good; medium; and, poor. To avoid subjective interpretation of these levels by participants, each soil quality level was accompanied by a description of the soil’s characteristics. The attribute describing the price for one hectare of land has six levels: €100; €200; €300; €400; €500; and, €600 per hectare.

The sample frame for this study consists of Irish farmers in 2014 and 2015. A total of 846 farmers were surveyed across the 26 counties of the Republic of Ireland. Of these, 425 farmers took the survey containing the ‘Rent In’ version of the choice experiment while 421 took the ‘Rent Out’ version. Each choice task consisted of two land rental choice alternatives and one ‘status quo’ (SQ) option where the farmer indicated a choice for no change to their current land holding position.

Results and conclusions

The results of the DCE indicate that all the examined land attributes (contract type, distance, soil quality, and price) significantly affect farmers’ WTP and WTA amounts for land, and that WTA amounts are larger than WTP amounts for identical land attributes. The model revealed a significant preference for leasing land rather than renting
under the conacre system. Farmers are willing to pay €123/ha more for a long-term lease of at least five years compared to an 11-month conacre contract. Farmers prefer land adjacent to their farmyard compared to land further away. Farmers are prepared to pay €221/ha more for land adjacent to the farmyard compared to 1km away, and €155/ha more for adjacent land compared to land 5km away. Interestingly, farmers are prepared to pay €66 more for land 5km away compared with land 1km away. A significant preference is found for good soils over poor soils. Farmers are willing to pay €251/ha more for land with good quality soil compared to land with soil of poor quality.

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Similar to the ‘Rent In’ model, farmers prefer to rent out land through a long-term lease compared to a short-term conacre contract. Farmers would require €648/ha more to accept a conacre contract over a lease agreement. Farmers prefer to rent out land that is further away from their farmyard, requiring €445/ha more to rent out adjacent land over land 5km away and €314 more to rent out land 1km away compared to 5km away. Farmers also prefer to hold on to better quality land compared to land with a poor soil type. The results of the models revealed that farmers have a preference for long-term lease rental contracts over short-term conacre contracts in both the ‘Rent In’ and ‘Rent Out’ choice experiments. This shows a greater appetite for long-term leasing among Irish farmers than the current dominance of conacre rental would suggest. Preferences in relation to distance conformed to expectations for the ‘Rent Out’ choice experiment as farmers’ willingness to rent out land increased the further the land was away from their farmyard. When renting in land, farmers prefer land with good soil compared to poor soil. However, farmers have no significant preference for medium quality soil over poor soil. This may reflect the importance of soil quality to farming in Ireland. With regard to renting out, farmers prefer to rent out poor land compared with land of medium and good quality. It must also be said that although many farmers were open to land transactions, nearly 68% of choices in each choice experiment were for the status quo option of farmers not changing their current land holdings. Given the significant cultural attachment to agricultural land in Ireland, it may be the case that there are a large number of farmers who would never transact land at any realistic price.

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