

## Extended Abstract

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<b>Paper/Poster Title</b>	<b>Animal Welfare, Altruism and Policy Support</b>
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<b>Abstract</b>	<i>200 words max</i>
<p>Animal welfare provision by dairy farmers has implications that go well beyond the individual dairy farm. In this study, we assess dairy farmers' willingness to pay to support a policy aimed at improving calf welfare, and link this to altruism. We conceptualise the farmer's decision into private reasons, and motivations to improve animal welfare on their own farm or eliminate bad practices on other farms. Our data comes from a survey with over 400 Irish dairy farmers that included an experimental component. Specifically, we used a contingent valuation referendum method to elicit farmers' willingness to pay. We measured altruism with a financially incentivised social value orientation scale. Our findings indicate that most farmers are supportive of a policy scheme to improve animal welfare, and altruism is positively associated with higher willingness to pay. Specifically, our findings indicate that altruists are willing to pay €429 per annum, while individualistically minded farmers are willing to pay €220 per annum to support the new initiative. Our findings have important policy implications as we show that the majority of farmers are willing to financially support the implementation of a policy that can help to prevent public bads.</p>	
<b>Keywords</b>	Animal welfare, altruism, willingness to pay, dairy industry.
<b>JEL Code</b>	Q120; Q180; D90 see: <a href="http://www.aeaweb.org/jel/guide/jel.php?class=Q">www.aeaweb.org/jel/guide/jel.php?class=Q</a> )
<b>Introduction</b>	<i>100 – 250 words</i>
<p>Public acceptance of farming practices relating to animal welfare is an ongoing concern. Failure to maintain acceptance could drive negative perceptions, lowering consumer demand and creating regulatory pressures.</p> <p>Recent studies show that many dairy industry practices are perceived negatively by the public, including lack of pasture access, dehorning without pain relief, and separating calves from dams soon after birth.</p> <p>Calf welfare offers a unique case, as specialized operations that raise calves are a common feature of the dairy industry, involving the movement of calves shortly after birth, sometimes across large distances. These transactions have the potential to create animal welfare concerns among consumers, if they become aware of suboptimal practices. In addition, calf welfare is likely to elicit strong emotional responses of sympathy. This is particularly relevant as most people feel empathy and have altruistic preferences for animals beyond private benefits derived from improved animal well-being.</p>	

In this study, we explore dairy farmers' willingness to pay (WTP) to improve calf welfare, and the role of their altruistic preferences. As it is difficult to directly assess how farmers value animal welfare, we focus on policy solutions to improve calf welfare. As such, we assess the implementation of a sexed semen laboratory in Ireland to facilitate greater uptake of sexed semen. This would help to reduce the number of unwanted dairy calves and improve marketing of dairy calves, with positive implications on calf welfare.

## Methodology

100 – 250 words

We conducted an online survey with over 400 Irish dairy farmers at the beginning of 2020. The survey included a double bounded dichotomous referendum question where farmers voted on the implementation of a new sexed semen lab, which was associated with an annual fee per cow. This was framed as a new policy scheme implemented by the Department of Agriculture. After the WTP assessment, we asked for reasons (not) to support the lab divided into private, industry and animal welfare reasons.

We then used an experimental method to elicit farmers' altruistic preferences by implementing a financially incentivised form of the dictator game. Specifically, we used the social value orientation scale that measures the magnitude of concern people have for others.

We apply a random effects probit model that controls for incentive incompatibility to calculate median WTP. We then divided our sample based on social value orientation into the following three groups: Altruists, prosocials and individualists, and calculate median WTP for the three groups separately.

## Results

100 – 250 words

Our results indicate that 65% of surveyed farmers are willing to financially support the implementation of a new policy scheme to improve calf welfare. We also find that increasing altruistic preferences are positively related to higher WTP.

Median WTP is €2.3 per cow for the overall sample. When grouping farmers based on their social value orientation reveals that altruistically minded farmers are willing to forgo more profit than less altruistically minded farmers. More specifically, we find that median WTP of altruists is €2.9 per cow, amounting to €429 per annum. Median WTP for prosocials is €2.4 per cow, amounting to €303 per annum, while individualists have the lowest median WTP with €1.7 per cow. This implies at WTP of €220 per annum based on their smaller dairy herd size.

When linking these findings to motivations to support the new policy scheme, we find that private reasons are main motivating factors, followed by industry reasons. Animal welfare improvements played the least important role. As such, we do not find

conclusive evidence of an altruism animal welfare link based on exploring motivational factors.

**Discussion and Conclusion**

*100 – 250 words*

Animal welfare has attracted increasing attention over the last number of years, and the fact that an overwhelming majority of Europeans feel it is important to protect the welfare of farmed animals, shows that this topic is of general interest. While the majority of economic studies on animal welfare focus on consumer views, in this study we explore dairy farmers' willingness to pay (WTP) for a new policy scheme to improve animal welfare.

Our findings have important policy implications. First, we find that altruistically minded farmers have a higher WTP for the animal welfare friendly policy. However, in contrast to previous literature on animal welfare, we do not find that altruists are more motivated by animal welfare considerations. If anything, it appears that reducing negative actions of others is of higher importance to altruists. This is important in relation to our second implication.

Specifically, our findings indicate that the majority of farmers are willing to financially support the implementation of a new policy to improve farming practices. While we focused on animal welfare, it is likely that these findings also hold for other policies. One example would be policies to reduce GHG emissions from dairy farming, as similar to animal welfare, negative actions by individual farmers (or ignorance of the problem in this case) cause harm to the entire industry. Importantly, the use of sexed semen is also considered a GHG mitigation measure for the dairy industry. Thus, supporting its uptake will likely bring considerable public good benefits.