

## TEAGASC PHD WALSH FELLOWSHIP OPPORTUNITY

# EXPLAINING INCOME VOLATILITY AND RISK MANAGEMENT DECISIONS ON IRISH DAIRY FARMS

Walsh Fellowship ref. 2019052

Dairy farming is a growing sector within Irish agriculture with approximately 16,100 specialist dairy farms engaging in milk production. Irish dairy farmers are however, facing substantial risks associated with climate change, institutional change, price and income volatility. There remain significant gaps in both the economic and policy literature in relation to dairy farm income volatility in Ireland. The wealth of available farm level and processor level data is underexplored. This data infrastructure, including the Teagasc National Farm Survey, can be utilised to model on a quarterly basis the determinants of volatility in farm revenues whilst accounting for the influence of risk management tools. We are looking for a PhD candidate who is interested in the economics of dairy farming in Ireland, the causes of farm income volatility, the role of institutions in providing risk management tools and the adoption decisions of farmers.

While dairy farmers in Ireland face these rising economic risks, there are few risk management tools available. The majority of milk processors in Ireland are now offering fixed milk price contracts to their suppliers. While data is available with regard to the terms and conditions of these contracts, there is little knowledge or understanding about the factors influencing the adoption of these contracts. To date, no independent economic research has been undertaken to explore the determinants of actual adoption at the farm level. Econometric analysis will be applied to identify factors influencing the adoption of fixed milk price agreements in terms of the binary adoption decision and the extent of adoption. This project will generate an improved understanding among farmers, policymakers and industry stakeholders about the causes of farm income volatility and the decision-making of Irish dairy farmers in relation to the adoption of risk management tools, in particular the fixed milk price agreements.

### Requirements

The successful candidate should be highly self-motivated with an ability to work independently and be willing to undertake recommended coursework. Strong quantitative skills and good communication skills, both written and verbal, are essential requirements. Applicants should have a good primary degree (First or Second Class Honours) and ideally hold an M.Sc. in an appropriate discipline (Economics, Agricultural Economics or related).

### Award

The Ph.D. Fellowship is a joint research project between Teagasc, Rural Economy and Development Programme, Athenry Co. Galway and the Department of Mathematics, Cork Institute of Technology and is due to begin in April 2020. The student will be work under the supervision of Dr. Declan O'Connor (CIT) and Dr. Jason Loughrey (Teagasc) and will be required to undertake some coursework during the fellowship. The successful candidate can participate in selected modules, which are offered under the Doctoral Certificate Program of Agricultural Economics in Germany. The fellowship funding is a tax-free amount of €22,000 per annum, is tenable for 3 years and 10 months with fees included.

### Further Information/Applications

Dr. Declan O'Connor, Department of Mathematics, Cork Institute of Technology, Cork.  
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Dr. Jason Loughrey, Rural Economy and Development Programme, Teagasc, Athenry, Co. Galway.  
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### Application Procedure

Submit an electronic copy of Curriculum Vitae and a letter of interest simultaneously to:  
Dr. Declan O'Connor ([Declan.OConnor@cit.ie](mailto:Declan.OConnor@cit.ie)) and Dr. Jason Loughrey ([Jason.Loughrey@teagasc.ie](mailto:Jason.Loughrey@teagasc.ie)).

**Closing Date** 5pm Friday January 24<sup>th</sup> 2020