

Project number: 6526
Funding source: Teagasc

Date: July, 2019
Project dates: Feb 2013- Dec 2016

Development of a risk assessment index (Riskometer) for use in Financial Business Planning



Farm Financially Fit event presenters, Tullamore, March 2015

Key external stakeholders:

Farmers, Advisors, DAFM, Policymakers, Researchers

Practical implications for stakeholders:

- Through engagement of advisors with farmers through discussion groups/workshops, risk management is a more integral part of financial business planning, making it a more mainstream process that farmers themselves can engage with and complete on their farm.
- The better integration of risk in the business planning process has been facilitated by the creation of a number of worksheets/documents within this project.
- Active business planning by farmers themselves, rather than getting an accountant to do so, means that farmers better understand the farm business and the underlying financial data and are now better informed in assessing risk on their farm

Main results:

The importance of building knowledge with advisors as well as with farmers has been the key finding of this research project.

- Training to include the on-farm investment options, risk management and the decision-making process is recognised as being most important. This knowledge gap has been addressed by workshops, publications, tools and spreadsheets developed as part of this project, now included as part of mainstream agriculture training modules. Outputs of the project fill the knowledge gaps in farm financial planning and risk management. Building on these outputs, DAFM has since developed a proposal on financial instruments (Teagasc facilitated DAFM questionnaire on attitudes to risk sharing instruments).
- One of the main outcomes of this project is that, through engagement of advisors with farm management specialist and research team, risk management is now a more mainstream process for farmers, further aided by worksheets/documents developed by the project team. Business planning by the farmers themselves leads to a better understanding of the farm business, the underlying figures and the risks.

Opportunity / Benefit:

In the context of risk management, farmers and advisors have directly benefitted from the results of this project and will continue to do so into the future as project outcomes are further developed and refined.

Collaborating Institutions:

University of Vermont, USA
Department of Agriculture, Food and the Marine (DAFM) /Indecon – survey Nov 2016
DAFM – Agri Taxation Review

Teagasc project team: Anne Kinsella (PI)
Fintan Phelan
James McDonnell
Kevin Connolly

External collaborators: Denis Kauppila, University of Vermont, USA

1. Project background:

CAP reform post 2013 suggested that a “risk management toolkit” be developed under Pillar II. The need for and extent of such a toolkit and its successful application depend on better understanding the risks that are faced by Irish farmers and the relative impacts of these risks on agricultural production/incomes. Managing risks involves identifying risks, weighting (costing) the relative importance of each risk and thereby creating a Risk index. A Riskometer will better inform the whole business planning process.

As an integral part of SMART agriculture, combining research and Knowledge Transfer activities, the Riskometer will inform any proposed production expansion with robust financial planning and thereby manage the risk so that it is set and maintained at a reasonable level.

Risk management research is becoming increasingly important in the United States of America, especially in states in the North East. Funding from the US federal government has been used in the education of farmers about risk, so as to try and avoid disaster payments to farmers. The University of Vermont and their extension service has undertaken numerous research projects in the areas of investment, risk and insurance, looking at the various components of risk. The University of Minnesota have created a risk library in the US, with this university also holding a biennial conference on agricultural risk. The adoption of these US models to the Irish situation, with the addition of local Irish knowledge and farm data, will lead to better informed decision making.

Research conducted in this project, included a literature review and an analysis of farm data to better understand farmers’ decision making and their attitudes to risk. The application of these learnings at farm level were utilised to develop a risk assessment index, a “Riskometer” for use in the business planning process, to better demonstrate to farmers their risk exposure. Utilising the outputs of same, the adviser and farmer can then create a mitigation plan to reduce the risk(s). The impact of the research will be to add risk management tools to apply at farm level.

2. Questions addressed by the project:

Some of the questions that the project set out to answer was to ;

- Carry out further literature review on risk management tools and to evaluate their merits in application to the Irish context. In this regard US research was utilised with the application of such methods by D. Kauppila (U. Vermont) during his research visit to Teagasc
- Another question posed was to identify the farm specific types of risk and to investigate the sources of risk that most affect dairy farms and attitudes to risk. This was analysed with the assistance of Teagasc eProfit Monitor, along with the expertise of the farm management specialists, allowing the development of a traffic light method of risk assessment. This tool will continue to be developed so as to inform farmers of their risk exposure (with visual aids), rating the risks using a traffic light system and identifying possible ways to mitigate those risks
- The final and most important outcome was to inform stakeholders of the benefits of a risk management index in better informing the business planning process, thereby increasing the overall extent of farm management activity and within that specifically risk management

3. The experimental studies:

The main work undertaken to inform this project consisted of literature review, farm data analysis, mainly utilising the eProfit Monitor, and development of tools around the eProfit Monitor which could be applied at farm level via the development of workbooks and worksheets, which include a traffic light Microsoft Excel add-on. Regular project team meetings between farm management specialists and researchers, as well as liaison with advisors who work closely with farmer discussion groups, meant that research findings were applied to IT technology and tools currently in use, to develop ideas and apply these at the farm level.

4. Main results:

As detailed in the summary above and contained in relevant reports, presentations and articles as listed below

5. Opportunity/Benefit:

The primary stakeholders for this research are Teagasc advisors and farmers. Benefits of the project will be conferred to public stakeholders via application of financial tools at farm level. The project team continue to actively engage and participate in informing the Agri Tax review annually, making successful submissions to same assisted by research, knowledge and information forthcoming from the outputs of the Riskometer project. By working closer together, utilising research findings and analysis, ideas have been developed and actioned on the ground by engaging with advisors, specialists and farmers. Teagasc are currently in the process of developing a new modular programme for the delivery of its in-service training to advisers, with modules on financial management, including risk assessment, forming part of this new initiative.

6. Dissemination:

Main publications:

Kauppila, D, Kinsella, A, Loughrey, J, McDonnell, J, O'Donoghue, C, Thorne, F. (2013) Identifying and managing risks, National Dairy Conference, Nov 2013

Loughrey, J., Thorne, F, Kinsella, A, Hennessy, T, O Donoghue, C, Vollenweider, X, Market Risk management and the demand for forward contracts among Irish Dairy farmers, IJAM, 2015.

<https://doi.org/10.5836/ijam/2015-04-173> <https://doi.org/10.5836/ijam/2015-04-173>

Popular publications:

Making every Euro count, (2015), Kinsella, A. (2015), *Farming Independent*, June 2015

Get BPS Smart, Budget Plan and Spend, (2015), Kinsella, A. (2015), *Irish Farmers Journal* August 2015.

Capital Gains Tax relief, Kinsella, A. and McDonnell, J. (2014) Teagasc Advisory Newsletter, March 2014

Farm succession Headaches far from unique to Ireland, Kinsella, A., *Farming Independent*, Sept 2017

Coping with the pressures of farming, Colgan, Caslin, B., McNamara, J., Macken-Walsh, A., Kinsella, A. Whitten, McDonnell, J. (2017) Teagasc & Mental Health Ireland

<https://www.teagasc.ie/publications/2017/coping-with-the-pressures-of-farming.php>

New thinking to encourage active farmer participation in financial self-awareness, K. Connolly (2015)

Presentation at ASA Conference <http://www.asaireland.ie/wp-content/uploads/2015/05/9.-Kevin-Connolly.pdf>

My farm, my plan – (launch - new method addressing business plan, accessing risk)

<https://www.teagasc.ie/news--events/news/2014/business-planning-book.php> - - Updated 2018

<https://www.teagasc.ie/media/website/rural-economy/farm-management/MyFarm-MyPlan-Business-Plan.pdf>

GFFF 5 min cashflow - <https://www.teagasc.ie/news--events/news/2016/managing-through-2016.php>

Cash Plan Programme – Workshop material - [http://tnet.teagasc.net/farm-](http://tnet.teagasc.net/farm-management/workshop_material/Cash%20Plan%20Programme/index_copy(1).asp)

[management/workshop_material/Cash%20Plan%20Programme/index_copy\(1\).asp](http://tnet.teagasc.net/farm-management/workshop_material/Cash%20Plan%20Programme/index_copy(1).asp)

Farm Financial Health check - various links - [http://tnet.teagasc.net/farm-](http://tnet.teagasc.net/farm-management/financial_health_check/index.asp)

[management/financial_health_check/index.asp](http://tnet.teagasc.net/farm-management/financial_health_check/index.asp)

Investment Appraisal - [http://tnet.teagasc.net/farm-management/farm-financial-management/step4_farm-](http://tnet.teagasc.net/farm-management/farm-financial-management/step4_farm-investment-appraisal/index.asp)

[investment-appraisal/index.asp](http://tnet.teagasc.net/farm-management/farm-financial-management/step4_farm-investment-appraisal/index.asp)

Agri Taxation Budget submissions (Annually)

7. Compiled by: Anne Kinsella