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The implicit nature of advice on the intimate topic of financial management

An exploration of how the financial management advisory system shapes financial management advice in the dairy sector in Aotearoa

A thesis presented in partial fulfilment of the requirements for the degree of Doctor of Philosophy

in

Agriculture & Environment

At Massey University, Manawatu, Aotearoa.

ABSTRACT

Financial Management (FM) skills have been argued to be essential for the effective management of a farm in response to pressures like climatic and economic volatility. Internationally, agricultural advisors are considered important actors concerned with supporting farmers in different aspects of farm management. Agricultural advisors are recognised for their role in facilitating the application and use of new knowledge by farmers through advice.

Despite the recognized importance of financial management, limited research has looked at the role of advisory services in relation to the topic of financial management in the agricultural sector. This doctoral research takes a systemic view in studying FM advisory provisioning in the New Zealand dairy sector. In particular, this study explores three different areas of the FM advisory system in the New Zealand dairy sector and how they shape FM advisory provisioning. The first area studied is how interactions between farmers and FM advisors are shaped. The second area focuses on how interactions between FM advisors around a mutual client are shaped. Lastly, the third area studied is how FM advisors navigate the multiple accountabilities and demands placed on their role.

The findings of this research are informed by forty-seven semi-structured interviews with farmers, accountants, bankers, farm management consultants, specialist financial advisors and employees of the industry good organisation DairyNZ. This study follows a social constructivistic approach and was mainly data-driven; by an empirical social phenomenon.

This research explores and enriches the literature on agricultural advisory services, by exploring advisory services in relation to farmers' FM. This study enriches this literature firstly by highlighting the influence of the sensitivity of the topic. The sensitivity of the topic and how this topic relates to farmer's identity, influences whom farmers seek advice from and the nature of that advice. Moreover, the presence of an authority dimension in the relationship between advisor and farmer is shown in this research to shape the content and form of farmer-advisor interactions. Regarding advisor-advisor interactions, this research also provides deeper insights on what drives and shapes coordination among agricultural advisors. In particular, duty of care for a farmer and authority and advocacy are found to coordinate relationships and interactions between advisors. Lastly, this thesis contributes empirical insights to discussions about the relationship between formal advisory agendas of agricultural advisory activities on the one hand and on the other hand, the reality of agricultural advisory programs. In particular, it provides a detailed illustration of the complex institutional context placing contradictory demands and accountabilities on advisors and how these advisors navigate these in their everyday practices.

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Thank you mom, dad, Luc for Skyping some Limburg into my life whenever it was needed. Thank you uncles and aunts for checking in, remembering birthdays and sharing your wisdoms. Thank you friends at home for the support from far, and friends from here for the support from near.

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- To write the main discussion with a few beers
- To create some drama in my personal life for distraction
- To get stoned
- To try Ritalin
- To use sleeping pills

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Spotify 'PhD metaphors' playlist: https://open.spotify.com/playlist/6s105QggGXP58aCvUMkxMe

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This PhD was completed by scientific papers for publication. Massey University provides doctoral students the opportunity to complete a PhD based on published research, providing it meets the following requirements:

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- The candidate is required to complete the form DRC 16 'Statement of Contribution to Doctoral Thesis Containing Publications' for each article/paper included in the thesis.

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ABBREVIATIONS

AIS Agricultural Innovation System

AC Accountant

B Banker

F Farmer

FAO Food and Agriculture Organisation

FM Financial management

FMC Farm management consultant

FMCA Financial Management Collaboration Agreement

SFA Specialist financial advisor

SME Small and medium enterprises

SUFISA Sustainable Agriculture and Fisheries

CHAPTER 1 INTRODUCTION

BACKGROUND

New Zealand dairy farming is exposed to similar pressures as farming in many other countries, including climatic and economic volatility, dynamic global markets, and societal concerns about animal health and welfare, food safety and environmental sustainability (Creamer et al., 2002, Shadbolt et al., 2017, Doole, 2014, van der Spiegel et al., 2012, Reserve Bank of New Zealand Te Putea Matua, 2018). In this context, scholars have argued that, in addition to technical production skills, business management skills are essential for the effective management of a farm (Lans et al., 2013, McElwee, 2008, Nuthall, 2006, Pyysiäinen et al., 2006, Seuneke et al., 2013). Financial Management (FM) skills, which are conceptualised as part of business management skills and farmers' engagement in FM are deemed important to farm business success in the farm management literature (Shadbolt and Bywater, 2005, Shadbolt and Gardner, 2005). Farm management scholars recognise financial management as a distinct field of farm management, along with production, marketing and human resource management (Boehlje and Eidman, 1984, Shadbolt and Bywater, 2005). Financial Management is broadly defined as involving 'decisions with respect to the acquisition of funds and the use of those funds to acquire the services of various resources' (Boehlje and Eidman, 1984, p. 23).

In line with the recognition of the importance of financial management, initiatives that aim to enhance farmers' financial management capabilities have been established in New Zealand and a range of other countries (SUFISA, 2018, FAO, 2015). In New Zealand, DairyNZ, the industry organisation for the dairy sector, is committed to improving farmers' FM skills through a range of initiatives, like the Tactics for Tight Times program (DairyNZ, 2019b) and online tools (DairyNZ, 2019a) to support financial management (e.g. budgeting tools). Examples of such initiatives in other countries include the Sustainable Finance for Sustainable Agriculture and Fisheries (SUFISA) project targeting several countries in Europe (SUFISA, 2018). Another example is the Food and Agriculture Organisation (FAO) providing training guidelines for farm business schools, an initiative that was designed to build farmers' business and financial management skills in different places, including South Asia (SUFISA, 2018, FAO, 2015).

Many of these financial management initiatives comprise advisory services, both public and private, to implement these schemes with farmers. Advisory services are taken as including (i) the actors involved in the advisory activity and the relationships they maintain with each other and with other external actors; and (ii) the methods that are used by advisory service actors to create knowledge and know-how in individual and/or collective learning processes (Faure *et al.*, 2012, pp. 462 - 463). Agricultural advisors comprise a range of actors who are funded in different ways, for example, private, public and industry-funded (Kidd *et al.*, 2000, Sutherland *et al.*, 2013, Feder *et al.*, 2011, Rivera and Sulaiman, 2009). Moreover, they include actors from a wide range of professions, for example, veterinarians and ecologists (Klerkx and Proctor, 2013, Lans *et al.*, 2013, Oreszczyn *et al.*, 2010, Pato and Teixeira, 2016, Phillipson *et al.*, 2016, Phillipson *et al.*, 2004, Proctor *et al.*, 2012).

Agricultural advisors are recognised for facilitating the application and use of new knowledge by farmers through advisory services (Birner *et al.*, 2009, Leeuwis and Van de Ban, 2004, Christoplos, 2010, Rivera and Sulaiman, 2009). Farmers are shown to be supported in their

farm management by agricultural advisors from different professions who, then, often form a network of advisors working on complementary topics (Klerkx and Proctor, 2013, Lans et al., 2013, Oreszczyn et al., 2010, Pato and Teixeira, 2016, Phillipson et al., 2004, Proctor et al., 2012, Phillipson et al., 2016).

The nature of farmer-advisor interactions, including the impact and effectiveness of advisory services, has been argued to be highly influenced by the broader context in which it occurs (Birner et al., 2009, Labarthe and Laurent, 2013). This broader context has been captured in a systemic perspective to studying advisory provisioning (Birner et al., 2009, Bourne et al., 2017, Nettle et al., 2017, Klerkx et al., 2013). In line with this, the current research takes a systemic view in studying Financial Management advisory provisioning in the New Zealand dairy sector. The provisioning of FM advice in the New Zealand dairy sector is, hence, viewed as occurring within an agricultural advisory system, which is again accepted to be part of a broader agricultural innovation system (AIS) (see Figure 1). This system encompasses the actors, interactions and structures (including institutions) that shape innovation in the agricultural sector (Faure et al., 2015, Birner et al., 2009, Rivera and Sulaiman, 2009, Klerkx et al., 2012).

Despite the importance of financial management (Lans et al., 2013, McElwee, 2008, Nuthall, 2006, Pyysiäinen et al., 2006, Seuneke et al., 2013), limited research has been conducted on this topic in the agricultural sector (e.g. Gloy and LaDue, 2003, Jackson-Smith et al., 2004). In particular, only a few studies, for example, (Hansen, 2015) have looked at the role of advisory services in relation to the topic of financial management. Furthermore, only limited previous research (e.g. Labarthe and Laurent, 2013, Mahon et al., 2010, Albaladejo et al., 2007) has been found that looks at the linkages between the different areas of an agricultural advisory system. The contribution this study makes is providing insights into how the Financial Management advisory system in the New Zealand dairy sector shapes FM advisory provisioning. In particular, this study explores the different areas of the FM advisory system in the New Zealand dairy sector and how it shapes FM advisory provisioning. The study explores three areas of the FM agricultural advisory system in the New Zealand dairy sector and the links between them, which are illustrated in Figure 1. This is the area where this study aims to make a contribution to the literature.

The main question was: How is the provision of FM advice shaped in the FM advisory system in the New Zealand dairy sector?

This research places itself within the agricultural advisory literature and aims to make contributions to this literature. In particular, the current study's focus and contributions are regarding bilateral advisory relationships and the nature of institutions within the agricultural advisory literature.

THE THREE SPECIFIC DEBATES TO WHICH THIS THESIS CONTRIBUTES

Following on from the main question, and the need to look at different areas in the advisory system, the thesis has defined the areas as displayed in Figure 1.

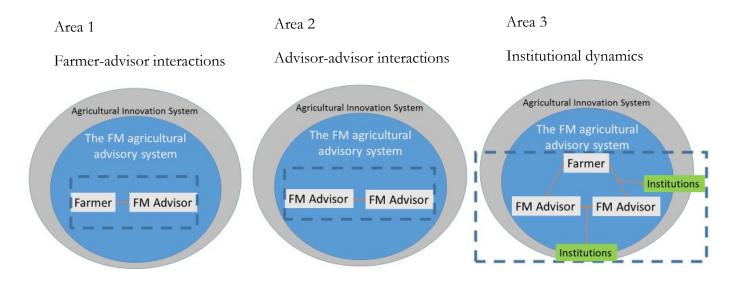


Figure 1: The three areas of the FM advisory system studied in this research

This study recognises the value of taking a systems perspective in studying agricultural advisory systems. A systems perspective is holistic and analyses of agricultural advice on a system level provide general and abstract, rather than detailed insights in certain aspects of the system (Faure *et al.*, 2015, Birner *et al.*, 2009, Rivera and Sulaiman, 2009, Klerkx *et al.*, 2012). However, in order to gain more in-depth insights into certain aspects of the system, it is important to zoom in on these aspects and explore them in more detail. Rather than researching the FM advisory system in a general and more abstract sense, the current research zooms in on three different and interrelated aspects of the advisory system. Despite the study mainly focusing on the nature of interactions around FM advice, the researcher has not lost sight of the wider system in which these aspects are embedded, for example by acknowledging how institutions in the broader context shape advisory interactions. The different areas of the system studied and contributions this research makes to a number of debates in the agricultural advisory literature are described in more detail in the following subsections, where the corresponding research question is also given.

The nature of farmer-advisor interactions about Financial Management (area 1)

The first debate to which this research contributes concerns how the network of advisors around farmers facilitates farmers' learning and/or practice change. The effectiveness of advisory provisioning has been linked to the specific nature of farmer-advisor interactions. The nature of these interactions has been found to vary, with the presence of certain factors (e.g. mutual trust, credibility and empathy) providing a more favourable context for effective knowledge exchange (Ingram, 2008). The nature of these interactions is also shaped by the power dynamics in the farmer-advisor relationship (Ingram, 2008). A body of literature

explores the role of this network of advisors in facilitating farmers' learning and/or practice change (e.g. Bergeå et al., 2008, Ingram, 2008, Oreszczyn et al., 2010, Proctor et al., 2012, Sutherland et al., 2013). However, no studies have been found that analyse in depth how farmers engage with a network of advisors on Financial Management, and the nature of these farmer-advisor interactions. Hence, deeper insights into the nature of, or what shapes, farmer-advisor interactions about FM are lacking, and this is the first element studied in this research. This study draws and builds on literature exploring farmer-advisor interactions, but also explores advisory interactions around finance in the agricultural finance literature, and advisory interactions around finance in non-agricultural small and medium enterprises (SMEs). In particular, this study's first contribution pertains to a better understanding of the factors shaping the nature of farmer-advisor interactions in relation to the topic of FM. This study explores who are farmers' FM advisors and how are interactions between farmers and these FM advisors shaped. It is guided by the following research question:

Who are farmers' FM advisors and how are interactions between farmers and FM advisors shaped?

The nature of advisor-advisor interactions around Financial Management (area 2)

The other important interactions that occur in the advisory system are the interactions between different types of agricultural advisors. Contemporary agricultural advisory systems in many countries, including New Zealand, are privatised to varying extents (Hall and Kuiper, 1998). As a result of the privatisation trend in advisory services, advisory systems are becoming increasingly pluralistic (Knierim et al., 2017, Benson and Jafry, 2013). 'Pluralistic' refers to the emerging diversity in how (topics and methods) and by whom (e.g. independent or specialised advisors, by governments or other organisations commissioning advisors, producer organisations, non-governmental organisations, etc.) agricultural advisory services are provided and funded (Birner et al., 2009, Faure et al., 2012). Interactions between the different types of advisors are suggested to be increasingly prevalent and necessary to deal with the increasing complexity of farm management (Hodge, 2007, Phillipson et al., 2016). Existing studies on advisor-advisor interactions have focused on the skills and strategies agricultural advisors use to interact and cooperate (Proctor et al., 2012, Phillipson et al., 2016, Compagnone and Simon, 2018) and strategies for developing and optimising their knowledge through inter-professional interactions (Klerkx and Proctor, 2013). These studies have explored interactions mainly between specific types of advisors: ecologists, land agents and veterinarians (Proctor et al., 2012, Phillipson et al., 2016, Klerkx and Proctor, 2013) and interactions between advisors from two different advisory organisations (Compagnone and Simon, 2018). However, limited research has explored interactions between advisors from different professions who provide advice around a certain topic area, and, specifically, Financial Management, for a mutual client. Financial Management provides an interesting case as different types of rural professionals (e.g. banks, accountants, specialised advisors, in a shared realm) are involved, which is the second element studied in this research (advisoradvisor interactions in Figure 1). This study (see Chapter 4) contributes to this debate by providing insights into the nature of the interactions between different types of agricultural advisors around a mutual client and the complementarities or antagonisms in their advisory provisioning. It is guided by the following research question:

How are interactions between FM advisors around a mutual client shaped?

How advisors navigate the institutional context in which they operate (area 3)

The institutional context within which farmers-advisors interact is the third area explored in this research. Institutions are part of the broader Agricultural Innovation System and have been argued to influence agricultural advisory services (Birner et al., 2009). The institutional context in which advisors operate (institutional dynamics in Figure 1) is the third element studied in this research. In particular, how advisors navigate the complex institutional context they operate in is explored. Studies have flagged that advisors are exposed to multiple accountabilities and demands on their role as an advisor (Bruges and Smith, 2008, Mee, 2007, Leeuwis, 2000, Klerkx et al., 2017, McDonough et al., 2015, Parkinson, 2009, Berglund et al., 2015, Landini, 2016, Paschen et al., 2017, Heffernan and Misturelli, 2011, Mahon et al., 2010, Dougill et al., 2017, Christoplos, 2012, Albaladejo et al., 2007, Mills et al., 2017, Klerkx et al., 2006), but there are limited insights into how advisors and advisory organisations respond to these accountabilities and demands in their day-to-day advisory practices. The third part of this doctoral research explores how advisory actors navigate different accountabilities and demands on their role in their day-to-day advisory practices. Moreover, this study contributes empirical insights to discussions about the relationship between formal advisory agendas or normative ideas about the nature, aims and possibilities of agricultural advisory activities on the one hand and, on the other hand, the reality of agricultural advisory practices. Scholars have acknowledged that policy intentions of agricultural advisory programs are often at odds with the program implementation (e.g. Mahon et al., 2010, Parkinson, 2009). In order to better understand this disconnect, it has been argued that there is a need for more empirical studies exploring agricultural advisory provisioning (Christoplos, 2012, Bartlett, 2010). This study (see Chapter 5) provides empirical insights in how advisors and advisory organisations navigate potentially conflicting accountabilities and demands in their day-to-day advisory practices, and is guided by the following research question:

How do FM advisors navigate the multiple accountabilities and demands placed on their role?

RESEARCH CONTEXT

To provide context for this research, this section gives information about the New Zealand dairy sector and agricultural advisory services in New Zealand.

Characteristics of the New Zealand dairy sector

Since the 19th century, New Zealand has been regarded as an agricultural country (Tsakok, 2011). The first documented arrival of domestic cows was in 1815 by the missionary Samuel Marsden who brought a bull and two cows to the Bay of Islands (New Zealand Dairy Board, 1990). Currently, the agricultural sector, including dairy, is considered by some 'the backbone' of New Zealand's economy (Scrimgeour *et al.*, 2014). The dairy sector makes a significant contribution to the economy, with a net value of 16.7 billion NZ dollar in exports from June 1st 2017 to May 31st 2018 (Ministry of Primary Industries, 2018). It is New Zealand's largest export sector and also the largest international trader in dairy products worldwide (Scrimgeour *et al.*, 2014, Tsakok, 2011).

There are approximately 12,000 dairy herds with a total 5 million dairy cows in New Zealand, with an average herd size of roughly 400 (LIC Statistics and DairyNZ, 2018). These herds work under different types of operating structures. These structures include owner-operator,

sharemilker and contract milker (LIC Statistics and DairyNZ, 2018). Owner-operators both own and operate their farms and sometimes employ a manager on a wage to run the farm. Most (72%) herds are operated under the owner-operator structure (LIC Statistics and DairyNZ, 2018). Sharemilkers run the farm on behalf of the farm owner for an agreed share of earnings and contract milkers are contracted and paid an agreed price per kilogram of milksolids (LIC Statistics and DairyNZ, 2018). Although there is uncertainty around whether New Zealand dairy farms will move from family into more corporate ownership systems (Nuthall and Old, 2017), a trend of family farmers owning multiple farms has been identified (Nuthall and Old, 2014), and this has also been reported for other countries (Pritchard *et al.*, 2007, Moreno-Perez and Lobley, 2014). These changes in ownership systems are likely to pose (new) challenges for farmers concerning financial decision-making.

One dynamic putting financial pressure on dairy farmers worldwide and, in New Zealand, specifically, is that these farmers operate in an environment of increasing (income) volatility (Reserve Bank of New Zealand Te Putea Matua, 2018). The increasing income volatility relates to an increasing milk price volatility internationally (Shadbolt and Olubode-Awosola, 2016) and a high dependence of New Zealand's dairy industry on exports to foreign markets (Shadbolt and Apparao, 2016). In particular, at the time of data collection, dairy prices were low and many New Zealand dairy farmers were 'suffering operating losses' (Reserve Bank of New Zealand Te Putea Matua, 2016, p. 4). Moreover, the total amount of the dairy industry's indebtedness is \$41.5 billion in total (Reserve Bank of New Zealand Te Putea Matua, 2018). In particular, the indebtedness of owner-operators in the New Zealand dairy industry almost doubled between 2006 and 2016 and, on average, increased noticeably faster than milk production, which heightens financial pressure through, for example, higher interest rates (DairyNZ, 2018). Related to the increased indebtedness of the New Zealand dairy sector, banks have put in place stricter lending requirements for dairy farmers (Reserve Bank of New Zealand Te Putea Matua, 2016).

Agricultural advisory services in New Zealand

To understand the broader context of the advisory system around FM, a brief explanation is given of the recent dynamics in the extension system. Internationally, government diminished their involvement in the provision of (agricultural) extension which led to privatisation of advisory services (Kidd *et al.*, 2000). This resulted in both 'diversity of organisations' providing agricultural advisory services and pluralism of 'the political dimension of organisational variety', a distinction that was made by (Knierim *et al.*, 2017, p. 46). In New Zealand, agricultural advisory services underwent radical reforms and were privatised relatively early, in the mid – late 1980s (Hercus, 1991). The New Zealand Government entirely withdrew from providing extension and New Zealand advisory service providers include a mix of industry-funded (through farmer levies), private advisory services (fee for service) and actors providing advice as a secondary service besides other services (e.g. different types of input suppliers as embedded advisors).

The Financial Advisors Act

The following text, which is an explanation of the Financial Advisors Act is repeated further on in chapter 5 of this thesis. The 'Financial Advisors Act' was enacted in 2008. This

regulation is legally binding and introduced to protect individuals and businesses from those providing both financial services and advice, as the advice could be biased towards the sale of the firm's other products or services which could put the client at risk. This law aims to enhance best practice in FM advisory provisioning, including the provision of sound advice by financial advisors and to increase consumers' trust in FM advisors' professionalism and integrity. The Act requires actors who provide financial advice to be officially registered as a financial advisor and to follow a certain code of conduct (authorised financial advisor). The Act, moreover, sets specific operating rules, making financial advisors more accountable for the advice they provide. These rules are designed to ensure FM advisor practise care, diligence and disclose remuneration. The regulations apply to all financial advisers, and these are defined as an individual who provides a financial advisory service. A financial advisory service is defined as a "recommendation or opinion in relation to acquiring or disposing of (including refraining from acquiring or disposing of) a financial product" (financial products include, for example, a bank term deposit) (Parliamentary Counsel Office, 2008, p. s10(1)). Financial advisory services also include both the provision of investment planning services and discretionary investment management services (Parliamentary Counsel Office, 2008).

PRACTICAL RELEVANCE

From a practical perspective, there is an interest in building farmers' FM capability by an industry advisory organisation in the New Zealand dairy sector. The practical contribution of this research relates to this and is to provide insights into what shapes advisory provisioning (around FM), which could support actors (e.g. policymakers, industry organisations) developing or providing (FM) advice.

THESIS STRUCTURE

This thesis consists of six chapters that includes three papers (see Figure 2). This chapter introduced the field of research and described the background to the research and the debates in literature to which it contributes. The second chapter presents the research design and is followed by three results' chapters in paper format. Chapter three is published as a paper in the Journal of Rural Studies and reports on the interactions between farmers and their FM advisors. Chapter 4 is in paper format and will be submitted for publication to the Journal of Agricultural Extension and Education. It provides insights into FM advisoradvisor interactions. Chapter 5 is in paper format and will be submitted for publication to the Journal of Rural Studies. This chapter explains how FM advisors navigate the institutional context in which they operate. In Chapter 6, a general discussion and conclusion is provided that integrates the findings from the three results chapters and, in particular, comments on the linkages between these different elements of the advisory system.

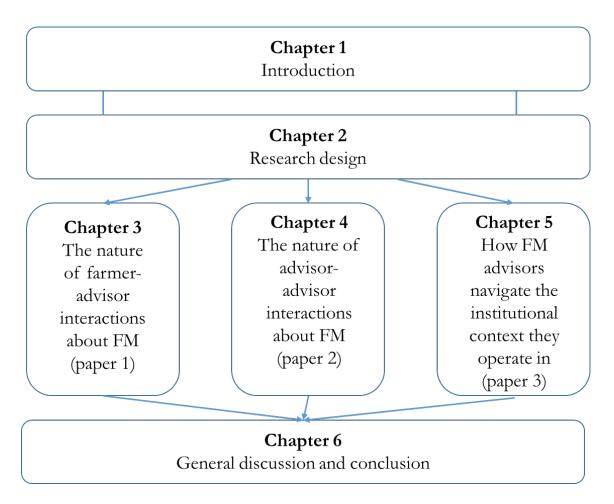


Figure 2: Overview of the different chapters in this thesis

REFERENCES

- Albaladejo, C., Couix, N. & Barthe, L. 2007. Learning in Agriculture: Rural Development Agents in France Caught between a Job Identity and a Professional Identity. *The Journal of Agricultural Education and Extension*, 13 (2), 95-106. Available: DOI 10.1080/13892240701289361
- Bartlett, A. 2010. An introduction to real-world extension. Rural Development News, 1 (2010), 7-14.
- Benson, A. & Jafry, T. 2013. The state of agricultural extension: an overview and new caveats for the future. *Journal of Agricultural Education and Extension*, 19 (4). Available: DOI 10.1080/1389224x.2013.808502
- Bergeå, H. L., Martin, C. & Sahlström, F. 2008. "I Don't Know What You're Looking for": Professional Vision in Swedish Agricultural Extension on Nature Conservation Management. *The Journal of Agricultural Education and Extension*, 14 (4), 329-345. Available: DOI 10.1080/13892240802416244
- Berglund, B., Hallgren, L. & Aradóttir, Á. L. 2015. Stakeholder Interaction in Participatory Land Restoration in Iceland: Environmental Officers' Challenges and Strategies. *Environmental Management*, 56 (2), 519-531. Available: DOI 10.1007/s00267-015-0506-0
- Birner, R., Davis, K., Pender, J., Nkonya, E., Anandajayasekeram, P., Ekboir, J., Mbabu, A., Spielman, D. J., Horna, D., Benin, S. & Cohen, M. 2009. From Best Practice to Best Fit: A Framework for Designing and Analyzing Pluralistic Agricultural Advisory Services Worldwide. *The Journal of Agricultural Education and Extension*, 15 (4), 341-355. Available: DOI 10.1080/13892240903309595
- Boehlje, M. D. & Eidman, V. R. 1984. Farm Management, New York, John Wiley & Sons, Inc.
- Bourne, M., Gassner, A., Makui, P., Muller, A. & Muriuki, J. 2017. A network perspective filling a gap in assessment of agricultural advisory system performance. *Journal of Rural Studies*, 50, 30-44. Available: DOI https://doi.org/10.1016/j.jrurstud.2016.12.008
- Bruges, M. & Smith, W. 2008. Participatory approaches for sustainable agriculture: A contradiction in terms? *Agriculture and Human Values*, 25 (1), 13-23. Available: DOI 10.1007/s10460-007-9058-0
- Christoplos, I. 2010. *Mobilizing the potential of rural and agricultural extension*. Rome: FAO. Available: http://www.fao.org/docrep/012/i1444e/i1444e00.htm.
- Christoplos, I. 2012. Climate advice and extension practice. *Geografisk Tidsskrift-Danish Journal of Geography*, 112 (2), 183-193. Available: DOI 10.1080/00167223.2012.741882
- Compagnone, C. & Simon, B. 2018. Cooperation and competition among agricultural advisory service providers. The case of pesticides use. *Journal of Rural Studies*, 59, 10-20. Available: DOI https://doi.org/10.1016/j.jrurstud.2018.01.006
- Creamer, L. K., Pearce, L. E., Hill, J. P. & Boland, M. J. 2002. Milk and Dairy Products in the 21st Century. *Journal of Agricultural and Food Chemistry*, 50 (25), 7187-7193. Available: DOI 10.1021/jf020711b
- DairyNZ. 2018. DairyNZ Economic Survey 2016-17. Hamilton: DairyNZ.
- DairyNZ. 2019a. *Budgeting* [Online]. Available: https://www.dairynz.co.nz/business/budgeting/ [Accessed 26-02-2019 2019].
- DairyNZ. 2019b. Forewarned is forearmed [Online]. Available: https://www.dairynz.co.nz/business/budgeting/ [Accessed 26-02-2019 2019].
- Doole, G. J. 2014. Least-cost greenhouse gas mitigation on New Zealand dairy farms. Nutrient Cycling in Agroecosystems, 98 (2), 235-251. Available: DOI 10.1007/s10705-014-9608-v

- Dougill, A. J., Whitfield, S., Stringer, L. C., Vincent, K., Wood, B. T., Chinseu, E. L., Steward, P. & Mkwambisi, D. D. 2017. Mainstreaming conservation agriculture in Malawi: Knowledge gaps and institutional barriers. *Journal of Environmental Management*, 195, 25-34. Available: DOI https://doi.org/10.1016/j.jenvman.2016.09.076
- FAO. 2015. Introducing the farm business school A training package. Rome: FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS.
- Faure, G., Desjeux, Y. & Gasselin, P. 2012. New Challenges in Agricultural Advisory Services from a Research Perspective: A Literature Review, Synthesis and Research Agenda. *The Journal of Agricultural Education and Extension*, 18 (5), 461-492. Available: DOI 10.1080/1389224X.2012.707063
- Faure, G., Havard, M., Toillier, A., Djamen Nana, P. & Moumouni, I. 2015. Innovations in Extension and Advisory Services for Family Farms. In: Sourisseau, J.-M. (ed.) Family Farming and the Worlds to Come. Dordrecht: Springer Netherlands. Available: DOI 10.1007/978-94-017-9358-2_15.
- Feder, G., Birner, R. & Anderson, J. R. 2011. The private sector's role in agricultural extension systems: potential and limitations. *Journal of Agribusiness in Developing and Emerging Economies*, 1 (1). Available: DOI 10.1108/20440831111131505
- Gloy, B. A. & LaDue, E. L. 2003. Financial management practices and farm profitability. *Agricultural Finance Review*, 63 (2).
- Hall, M. H. & Kuiper, D. 1998. Commercialization and privatization of agricultural extension: The New Zealand experience. *Journal of Production Agriculture*, 11 (1), 135-140.
- Hansen, B. G. 2015. Financial extension that challenges farmers' thinking in discussion clubs helps farmers improve their problem solving abilities. *Agricultural Systems*, 132 (0), 85-92. Available: DOI http://dx.doi.org/10.1016/j.agsy.2014.09.009
- Heffernan, C. & Misturelli, F. 2011. Is demand the answer? An exploration of pro-poor, demand-led research. *Livestock Science*, 138 (1), 109-117. Available: DOI https://doi.org/10.1016/j.livsci.2010.12.011
- Hercus, J. 1991. The commercialization of government agricultural extension services in New Zealand. *In:* Rivera, W. M. & Gustafson, D. (eds.) *Agricultural extension: worldwide institutional evolution and forces for change.* Amsterdam: Elsevier.
- Hodge, I. 2007. The Governance of Rural Land in a Liberalised World. *Journal of Agricultural Economics*, 58 (3), 409-432. Available: DOI 10.1111/j.1477-9552.2007.00124.x
- Ingram, J. 2008. Agronomist–farmer knowledge encounters: an analysis of knowledge exchange in the context of best management practices in England. *Agriculture and Human Values*, 25 (3), 405-418. Available: DOI 10.1007/s10460-008-9134-0
- Jackson-Smith, D., Trechter, D. & Splett, N. 2004. The Contribution of Financial Management Training and Knowledge to Dairy Farm Financial Performance. Applied Economic Perspectives and Policy, 26 (1), 132-147. Available: DOI 10.1111/j.1467-9353.2003.00166.x
- Kidd, A. D., Lamers, J. P. A., Ficarelli, P. P. & Hoffmann, V. 2000. Privatising agricultural extension: caveat emptor. *Journal of Rural Studies*, 16 (1), 95-102. Available: DOI https://doi.org/10.1016/S0743-0167(99)00040-6
- Klerkx, L., de Grip, K. & Leeuwis, C. 2006. Hands off but Strings Attached: The Contradictions of Policy-induced Demand-driven Agricultural Extension.

 Agriculture and Human Values, 23 (2), 189-204. Available: DOI 10.1007/s10460-005-6106-5
- Klerkx, L., Koutsouris, A. & Labarthe, P. 2013. Systems approaches to innovation and advisory services: selected papers from the 2012 International Farming Systems

- Association Symposium, 1-4 July 2012, Aarhus, Denmark. *Journal of Agricultural Education and Extension*, 19 (3). Available: DOI 10.1080/1389224x.2013.782192
- Klerkx, L. & Proctor, A. 2013. Beyond fragmentation and disconnect: Networks for knowledge exchange in the English land management advisory system. *Land Use Policy*, 30 (1), 13-24. Available: DOI 10.1016/j.landusepol.2012.02.003
- Klerkx, L., Seuneke, P., de Wolf, P. & Rossing, W. A. H. 2017. Replication and translation of co-innovation: The influence of institutional context in large international participatory research projects. *Land Use Policy*, 61, 276-292. Available: DOI https://doi.org/10.1016/j.landusepol.2016.11.027
- Klerkx, L., van Mierlo, B. & Leeuwis, C. 2012. Evolution of systems approaches to agricultural innovation: concepts, analysis and interventions. *In:* Darnhofer, I., Gibbon, D. & Dedieu, B. (eds.) *Farming Systems Research into the 21st Century: The New Dynamic.* Springer Netherlands. Available: DOI 10.1007/978-94-007-4503-2_20.
- Knierim, A., Labarthe, P., Laurent, C., Prager, K., Kania, J., Madureira, L. & Ndah, T. H. 2017. Pluralism of agricultural advisory service providers – Facts and insights from Europe. *Journal of Rural Studies*, 55, 45-58. Available: DOI https://doi.org/10.1016/j.jrurstud.2017.07.018
- Labarthe, P. & Laurent, C. 2013. The Importance of the Back-office for Farm Advisory Services
- L'importance des activités de 'back-office' dans les systèmes de conseil à l'agriculture
- Die Bedeutung des Back Office für die Agrarberatung. *EuroChoices*, 12 (1), 21-26. Available: DOI 10.1111/1746-692X.12015
- Landini, F. 2016. Unfolding the knowledge and power dynamics of the 'farmers–rural extensionists' interface in North-Eastern Argentina. *The Journal of Agricultural Education and Extension*, 22 (5), 399-413. Available: DOI 10.1080/1389224X.2016.1227050
- Lans, T., Seuneke, P. & Klerkx, L. 2013. Agricultural Entrepreneurship. In: Carayannis, E. G. (ed.) Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship. New York, NY: Springer New York. Available: DOI 10.1007/978-1-4614-3858-8_496.
- Leeuwis, C. 2000. Learning to be sustainable. Does the Dutch agrarian knowledge market fail? *The Journal of Agricultural Education and Extension*, 7 (2), 79-92. Available: DOI 10.1080/13892240008438809
- Leeuwis, C. & Van de Ban, A. 2004. *Communication for rural innovation,* Oxford, Blackwell Publishing LTD.
- LIC Statistics & DairyNZ. 2018. New Zealand Dairy Statistics 2016 / 17. Hamilton: DairyNZ.
- Mahon, M., Farrell, M. & McDonagh, J. 2010. Power, Positionality and the View from within: Agricultural Advisers' Role in Implementing Participatory Extension Programmes in the Republic of Ireland. *Sociologia Ruralis*, 50 (2), 104-120. Available: DOI 10.1111/j.1467-9523.2010.00505.x
- McDonough, C., Nuberg, I. K. & Pitchford, W. S. 2015. Barriers to Participatory
 Extension in Egypt: Agricultural Workers' Perspectives. *The Journal of Agricultural Education and Extension*, 21 (2), 159-176. Available: DOI 10.1080/1389224X.2014.927374
- McElwee, G. 2008. A taxonomy of entrepreneurial farmers. *International Journal of Entrepreneurship and Small Business*, 6 (3), 465-478.
- Mee, J. F. 2007. The role of the veterinarian in bovine fertility management on modern dairy farms. *Theriogenology*, 68, S257-S265. Available: DOI 10.1016/j.theriogenology.2007.04.030
- Mills, J., Gaskell, P., Ingram, J., Dwyer, J., Reed, M. & Short, C. 2017. Engaging farmers in environmental management through a better understanding of behaviour.

- Agriculture and Human Values, 34 (2), 283-299. Available: DOI 10.1007/s10460-016-9705-4
- Ministry of Primary Industries 2018. Situation and Outlook for Primary Industries 2018. Wellington: Ministry for Primary Industries.
- Moreno-Perez, O. & Lobley, M. 2014. The morphology of multiple household family farms. *Sociologia Ruralis*, 55 (2), 125-149. Available: DOI http://dx.doi.org/10.1111/soru.12062
- Nettle, R., Klerkx, L., Faure, G. & Koutsouris, A. 2017. Governance dynamics and the quest for coordination in pluralistic agricultural advisory systems. *The Journal of Agricultural Education and Extension*, 23 (3), 189-195. Available: DOI 10.1080/1389224X.2017.1320638
- New Zealand Dairy Board. 1990. *The growth of an export industry*. Wellington: New Zealand Dairy Board.
- Nuthall, P. L. 2006. Determining the important management skill competencies: The case of family farm business in New Zealand. *Agricultural Systems*, 88 (2–3), 429-450. Available: DOI http://dx.doi.org/10.1016/j.agsv.2005.06.022
- Nuthall, P. L. & Old, K. M. 2014. Report on a Succession and Governance Survey of a Random Stratified Sample of NZ Farms. Available: http://handle.net/10182/6261.
- Nuthall, P. L. & Old, K. M. 2017. Will future land based food and fibre production be in family or corporate hands? An analysis of farm land ownership and governance considering farmer characteristics as choice drivers. The New Zealand case. *Land Use Policy*, 63, 98-110. Available: DOI https://doi.org/10.1016/j.landusepol.2017.01.018
- Oreszczyn, S., Lane, A. & Carr, S. 2010. The role of networks of practice and webs of influencers on farmers' engagement with and learning about agricultural innovations. *Journal of Rural Studies*, 26 (4), 404-417. Available: DOI http://dx.doi.org/10.1016/j.jrurstud.2010.03.003
- Parkinson, S. 2009. When Farmers Don't Want Ownership: Reflections on Demand-driven Extension in Sub-Saharan Africa. *The Journal of Agricultural Education and Extension*, 15 (4), 417-429. Available: DOI 10.1080/13892240903309678
- Paschen, J.-A., Reichelt, N., King, B., Ayre, M. & Nettle, R. 2017. Enrolling advisers in governing privatised agricultural extension in Australia: challenges and opportunities for the research, development and extension system. *The Journal of Agricultural Education and Extension*, 23 (3), 265-282. Available: DOI 10.1080/1389224X.2017.1320642
- Pato, M. L. & Teixeira, A. A. C. 2016. Twenty Years of Rural Entrepreneurship: A Bibliometric Survey. Sociologia Ruralis, 56 (1), 3-28. Available: DOI 10.1111/soru.12058
- Phillipson, J., Gorton, M., Raley, M. & Moxey, A. 2004. Treating farms as firms? The evolution of farm business support from productionist to entrepreneurial models. *Environment and Planning C*, 22 (1), 31-54.
- Phillipson, J., Proctor, A., Emery, S. B. & Lowe, P. 2016. Performing inter-professional expertise in rural advisory networks. *Land Use Policy*, 54, 321-330. Available: DOI http://doi.org/10.1016/j.landusepol.2016.02.018
- Pritchard, B., Burch, D. & Lawrence, G. 2007. Neither 'family' nor 'corporate' farming: Australian tomato growers as farm family entrepreneurs. *Journal of Rural Studies*, 23 (1), 75-87. Available: DOI https://doi.org/10.1016/j.jrurstud.2006.04.001
- Proctor, A., Donaldson, A., Phillipson, J. & Lowe, P. 2012. Field expertise in rural land management. *Environment and Planning-Part A*, 44 (7), 1696.
- Pyysiäinen, J., Anderson, A., McElwee, G. & Vesala, K. 2006. Developing the entrepreneurial skills of farmers: some myths explored. *International Journal of*

- Entrepreneurial Behavior & Research, 12 (1), 21-39. Available: DOI doi:10.1108/13552550610644463
- Reserve Bank of New Zealand Te Putea Matua. 2016. Financial Stability Report. Available: https://rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Financial%20stability%20reports/2016/fsr-nov2016.pdf.
- Reserve Bank of New Zealand Te Putea Matua. 2018. Financial Stability Report.
- Rivera, W. M. & Sulaiman, V. R. 2009. Extension: object of reform, engine for innovation. *Outlook on Agriculture*, 38 (3), 267-273.
- Scrimgeour, F., Emerson, A. & Rowarth, J. S. 2014. New Zealand agriculture: an economic perspective, Wellington: NZX Ltd., 2014.
- Seuneke, P., Lans, T. & Wiskerke, J. S. C. 2013. Moving beyond entrepreneurial skills: Key factors driving entrepreneurial learning in multifunctional agriculture. *Journal of Rural Studies*, 32, 208-219. Available: DOI http://dx.doi.org/10.1016/j.jrurstud.2013.06.001
- Shadbolt, N., Apparao, D., Hunter, S., Bicknell, K. & Dooley, A. 2017. Scenario analysis to determine possible, plausible futures for the New Zealand dairy industry. *New Zealand Journal of Agricultural Research*, 60 (3), 349-361. Available: DOI 10.1080/00288233.2017.1351377
- Shadbolt, N. & Bywater, T. 2005. The dimensions of management. *In:* Shadbolt, N. & Martin, S. (eds.) *Farm management in New Zealand.* Melbourne: Oxford University Press.
- Shadbolt, N. & Gardner, J. 2005. Financial management. *In:* Shadbolt, N. & Martin, S. (eds.) *Farm management in New Zealand.* Melbourne: Oxford University Press.
- Shadbolt, N. M. & Apparao, D. 2016. Factors Influencing the Dairy Trade from New Zealand. *International Food and Agribusiness Management Review*, 19 (B), 241 255.
- Shadbolt, N. M. & Olubode-Awosola, F. 2016. Resilience, risk and entrepreneurship. *International Food and Agribusiness Management Review*, 19 (2), 33 52.
- SUFISA. 2018. SUFISA [Online]. SUFISA. Available: https://www.sufisa.eu/ [Accessed 11-12 2018].
- Sutherland, L.-A., Mills, J., Ingram, J., Burton, R. J. F., Dwyer, J. & Blackstock, K. 2013. Considering the source: Commercialisation and trust in agri-environmental information and advisory services in England. *Journal of Environmental Management*, 118, 96-105. Available: DOI http://dx.doi.org/10.1016/j.jenvman.2012.12.020
- Tsakok, I. 2011. Success in agricultural transformation: what it means and what makes it happen, New York: Cambridge University Press, 2011.
- van der Spiegel, M., van der Fels-Klerx, H. J. & Marvin, H. J. P. 2012. Effects of climate change on food safety hazards in the dairy production chain. *Food Research International*, 46 (1), 201-208. Available: DOI https://doi.org/10.1016/j.foodres.2011.12.011

CHAPTER 2 RESEARCH DESIGN

INTRODUCTION

As outlined in the introduction, the aim of this study is to increase the understanding of how FM advice provision is shaped by, in particular 1) providing insights into who are farmers' FM advisors and how farmer-advisor interactions are shaped, 2) to understand how advisor-advisor interactions are shaped, and 3) to understand how FM advisors navigate the multiple accountabilities and demands of their roles.

This chapter provides an overview and discussion of the research design, data collection, and data analysis that was conducted to answer the research questions.

The main question was: How is the provision of FM advice shaped in the FM advisory system in the New Zealand dairy sector?

The sub-questions were:

- Who are farmers' FM advisors and how are interactions between farmers and FM advisors shaped?
- How are interactions between FM advisors around a mutual client shaped?
- How do FM advisors navigate the multiple accountabilities and demands placed on their roles?

DESIGN

This section explains and provides background about the research approach taken in this study. Subsequently, it is explained how the case study research strategy aligns with the research aim. A detailed description of the data collection process can be found later in this chapter.

The role of the researcher: Positionality

In this section I discuss my positionality. In interpretive research it is recognized, as do I, that the researcher has a 'position' which is shaped by the researcher's values, beliefs and experiences which influences the observations and interpretations (s)he makes (Thomas, 2013).

I was born in The Netherlands and grew up on the small farm of my parents, where they grow cherries, had pigs for meat and provide day care for mentally disabled and elderly people. I studied Applied Communication Science at Wageningen University, with a minor in sustainable food management and my Masters thesis focused on the influence of the social context on dairy farmers' antibiotic usage for mastitis. For the purpose of this research, I visited and interviewed Dutch dairy farmers. I lived in the Netherlands until I was 24 and started my doctoral research at Massey University in Palmerston North.

Before commencing this research, financial management, New Zealand, its culture and dairy system were new to me. Brinkmann and Kvale (2015) argue that it is important that the researcher becomes knowledgeable about the study's subject, before she starts interviewing. Besides reviewing scientific and also technical literature, such as New Zealand dairy

magazines, I also immersed myself in the dairy sector by working on the dairy farm of the university and attended to some events organised by the industry funded organisation which aimed to support farmers with financial management or other production-specific topics. I immersed myself in the sector with the objective of being able to understand the language dairy farmers and their advisors speak. Further, I read literature about financial management and was given a crash course from one of the farm business management teachers at Massey University in dairy farm financial management.

In-depth interviews seek to capture the participants' process of sense-making; descriptions of how participants attribute meaning to their experiences, with the interviewer being as open as possible towards the phenomenon being studied (Brinkmann and Kvale, 2015). Although I immersed myself in the topic of study, I am still a foreigner in New Zealand and have very limited background in financial management and, thus, likely to be perceived as an outsider. The outsider status enabled me to be genuinely and 'deliberately naïve' (Brinkmann and Kvale, 2015, p. 33) and ask about what is taken for granted as participants expected me to be unknowing.

My personal values and cultural differences will have influenced the interviewing process. Perceptions of what is rude, polite or appropriate can be quite different for different countries and, in my case, New Zealand versus The Netherlands. I tried to minimize the negative influence of cultural differences on the interviewing process, by asking for feedback on my interview guide from my New Zealand supervisors and discussions with supervisors. I also asked key informants for feedback on the interview process, in general, and on interview questions, in particular.

Research approach

Whereas some authors have made relatively simplistic differentiations between different research approaches, such as simply a distinction between 'positivism' and 'interpretivism' by, for example, Thomas (2013), other authors are more nuanced and have described a larger diversity of approaches, from positivism, empiricism, interpretivism, constructivism to subjectivism (O'Leary, 2004, Blaikie, 2000). This study follows a constructivistic approach (O'Leary, 2004), with the aim being to gain insights about how the advisory system shapes financial management (FM) advisory provisioning in the Aotearoa New Zealand dairy sector. This objective requires an in-depth understanding of how farmers' and advisors' behaviour are shaped, and, in particular, their interactions with each other. In order to gain these insights, dairy farmers' and advisors' accounts about their reflections on interactions about FM were sought. In particular, the nature of interactions was explored, including how actors' different worldviews and the institutional context in which these interactions occurred, shaped these interactions. This approach to research aligns with the social constructivist approach, because social constructivists argue that the way humans assign meaning and understand the world, is constructed in interactions with others and thus historically and culturally specific (Burr, 2003; O'Leary, 2004). The study followed an inductive research approach which is about discovering as opposed to testing theory (O'Leary, 2004). This research took an inductive approach in that the study was mainly driven by an empirical social phenomena and driven by data, in line with Hodkinson (2008, p. 82) perspective on inductive research; 'inductive researchers attempt to take empirical social phenomena as their starting point and seek through the process of research and analysis to generate broader theories about social life'. However, the study was not void of theory and at different points also theory was used to inform the research. The data collection and specifically interview guides and questions, were sensitised by literature and after data collection, the researcher went back to the literature to see what theories and literature would be useful in explaining how the provision of FM advice is shaped in the FM advisory system in the New Zealand dairy sector.

Research strategy: Case study

The purpose of the research is to gain an in-depth understanding of how the advisory system of the New Zealand dairy industry shapes Financial Management advice provisioning and, therefore, a case study was employed. A case study has been defined as 'an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, programme or system in a 'real life' context' (Simons, 2009, p. 19). The uniqueness of a case study lies in the focus on studying all aspects of a social phenomenon as a whole (Blaikie, 2000). The case study strategy hence enabled this comprehensive understanding of the FM advisory system sought in this research, in line with what has been argued by several scholars (Swanborn, 2013, Blaikie, 2000).

A single case study was conducted. This research contained an applied component with an interest in providing insights that could be used by actors involved in FM advisory provisioning in the New Zealand dairy sector. A single case study has been argued to be an appropriate research strategy if insights to be gained from a case are intrinsically interesting and aimed to be used and applied in practice (Merriam, 1998). Moreover, the study endeavoured to provide a more general understanding and new knowledge about the functioning of FM advisory systems, for which a single case study has been argued to be an appropriate approach (Stake, 1995, Rog and Bickman, 2009).

The three results' chapters each deal with what could be conceptualised as a sub-case within the case study (Merriam, 1998). Different sub-cases are included to increase the understanding of the functioning of the advisory system.

The case studied and, hence, social phenomenon of interest, is the advisory system in the New Zealand dairy sector and how it shapes financial management advisory provisioning in this sector. Examples of the social phenomenon of interest are New Zealand dairy farmers and their advisory network. Research has shown that there is diversity in how farmers engage with advisory networks, which means that this network is likely to be different per farmer (e.g. Jansen *et al.*, 2010). Therefore, multiple farmers and multiple advisors were selected as participants to gain a more complete understanding about the phenomenon of interest.

The selection criteria for selecting the site were that it contained dairy farmers who (partly) owned the farm business (owner-operators) and had a significant financial stake in the farm, and were decision-makers about FM, because these farmers were likely to engage in FM practices. The Manawatu region complied with these criteria and was, furthermore, selected for logistical reasons, as it is the region in which the researcher lives and studies. Sometimes, actors outside the Manawatu region were also included. Some actors were involved in the

advisory system in New Zealand operate at a national level and, only in these cases, I made an exception to the Manawatu boundary and included these actors.

Considerations around participant selection within this case are discussed in the section about participant selection.

DATA COLLECTION

In this section the data collection protocol, the participant selection, and the tools used for gathering data are discussed. The analytical tools employed in this research are also described. The data collection included two parts. The first part was an initial pilot study that informed the methods used in the main study. The second part was the main data collection, which was completed in two phases. The process of data collection is shown in figure 3 below.

Before the data collection and analysis phase started, a literature review was completed and, from this, 'sensitizing concepts' were identified. Sensitizing concepts have broad definitions and serve as 'the researcher's lens through which to view the field of research' (Boeije, 2010, p. 23). At the start of the research, prior to the interviews, they were used to inspire the development of research and interview questions and to order the data.

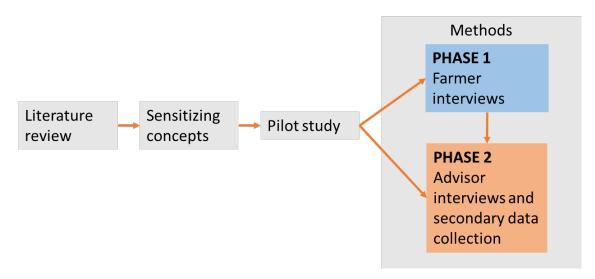


Figure 3: a visualisation of the data collection process

Pilot study

Data collection protocol

The aim of the pilot study was to familiarise myself with the field and test the methods developed. The data collected in the pilot phase was thus used to fine tune the methods used, in particular the interview guides. Even though the aim of the pilot study was not to gather data that would be used in answering the research questions, one key informant (banker) provided useful data about the relationship between bankers and farmers and interactions with other advisors and therefore this interview was also included in the analysis of the interviews with bankers.

The pilot study consisted of semi-structured interviews with key informants. These interviews were carried out to fine-tune the interview guide by asking key informants for feedback on the interview process, in general, and questions, in particular. Interview experiences from the pilot study informed the development of the interview guides for the data collection phases, for example, terminology used in questions. Moreover, these interviews helped to familiarise myself with the field. Specifically, they provided me with a better understanding about the FM terminology used by the different actors involved in FM advice and practices. The pilot study was also conducted to explore what actors have a stake or play a role in financial management and what role these actors exactly play. Interview experiences from the pilot study informed the development of the interview guides for the data collection phases, for example, terminology used in questions. Moreover, the interviews in the pilot study provided a first overview about different actors who are involved in FM advice, for example, bankers, accountants, farm management consultants and industry-funded advisors were mentioned to be involved in providing FM advice to farmers.

The opportunity arose to attend a rural accountants' conference, at a time when it was hard to source contacts of potential accountant interviewees. Even though the organisation for rural accountants has a database with contacts of rural accountants in New Zealand, the researcher did not have access because of a confidentiality policy. Attending the accountants' conference provided the opportunity to make contacts with potential interviewees and learn more about the role of accountants in FM advice to farmers.

Participant selection

Key informants were selected because they were known or recognised to be someone with knowledge about the FM advisory system on the basis of experience and expertise. Initial contacts were made through contacts at Massey University and others.

Key informants in the pilot study were interviewed with the aim of gaining insights about, but not limited to, these aims only:

- the terminology used by the different actors involved in FM advice and practices
- what actors have a stake or play a role in financial management and what role these actors play exactly
- important characteristics of dairy farmers to direct how to select farmers as participants for the research
- the specific role different types of advisors play in FM advice

Table 1: Overview of research participants in the pilot study:

Profession of participant	Number:	Type of participant
Academic specialised in Agricommerce	1	Key informant
Academic specialised in Farm Business Management	1	Key informant
Banker (relationship manager)	1	Key informant
Rural accountant	1	Key informant
Farm management consultant	1	Key informant
Total participants (phase 1)	5	

Main data collection

The second part of the data collection was the substantive data collection, guided by the pilot study. The main data collection consisted of two phases. The first phase was interviews with farmers and the second phase was interviews with FM advisors.

Protocol

The first phase consisted of semi-structured interviews with farmer respondents. Farmers were selected and interviewed first, because they are the recipients of the advisory activities that were provided to support farmers with their financial management. Semi-structured interviews were conducted with the selected participants, with the aim to gain insights about how farmers draw on advisors for FM advice and the nature of interactions between farmers and advisors. The advisory actors identified by the farmers were bankers, accountants, consultants and industry-funded advisors. As not all farmers were willing to provide me with the contacts of their advisors, I could not study the exact advisory networks around particular farmers. However, as farmers described the types (regarding profession) of actors they had contact with for FM advice, it was possible to identify what types of actors constituted the FM advisory networks. In the second phase, rather than contacting the specific persons farmers engaged with for FM advice, actors that matched farmers' description (i.e. having the same profession as the actors farmers reported to engage with for FM) were recruited. It is technically possible that there are advisor-client matches, but if that is the case, the researcher did not know when collecting and analysing the data.

Subsequently, semi-structured interviews were undertaken with advisory actors identified by farmers. The different advisory respondents also identified specialist financial advisors as actors who provide advice about finances and financial management to farmers. Therefore, specialist financial advisors were also included in the participant selection.

The purpose of the interviews with advisors was to gain insights into the nature of the interactions between farmers and advisors and the nature of interactions between different FM advisors. Moreover, the purpose was to gain insights about the institutional dynamics (in particular, advisors' strategies in dealing with potentially conflicting accountabilities and demands) shaping FM advisory provisioning in the New Zealand dairy sector.

Data collection tools

This section explains the choice of data collection tools.

Semi-structured interviews

An important part of the research was to study interactions between farmers and advisors and, moreover, interactions between advisors. An advantage of interviews was that participants were more likely to freely share their perspectives and reflections, and also about issues concerning other participants, because of the confidentiality that can be guaranteed with doing interviews as compared to, for example, field observations. Moreover, as limited research has been conducted in the topic of study, interviewees would most likely provide insights that were not anticipated before starting data collection. Semi-structured interviewing allowed the interviewee to address topics not in the interview guide and left room for the interviewer to also further explore these topics (Legard *et al.*, 2003), because there is a balance between structure and flexibility (Thomas, 2013, Legard *et al.*, 2003). On the one hand, the interview was structured, as the interviewer prepared an interview guide which served as a reminder of the list of topics to discuss during the interview. On the other hand, it was flexible, as topics could be dealt with in an order that came naturally to both the researcher and participant during the interview.

There is no numerical standard for the number of semi-structured interviews that need to be conducted (Brinkmann and Kvale, 2015). Brinkmann and Kvale (2015, p. 140) argue that researchers should interview sufficient participants 'to find out what you need to know' and not more than that. Therefore, when saturation (Francis et al., 2010, Cardon et al., 2013) occurred in interview-data after a certain number of interviews, no new interviews were planned with actors in the respective group. Saturation has been defined as the moment that no new themes emerge from the (interview) data (Francis et al., 2010, Cardon et al., 2013). Five farmer interviews were initially conducted. These interviews were transcribed by the researcher and analysed to identify the themes that emerged from the data. Different interviews yielded new themes and, as a result, more interviews were conducted. After twelve farmer interviews, no new themes emerged and "saturation" was deemed to have occurred and farmer interviews ended. Similar to the process employed with farmers, three to five interviews were conducted with different groups of advisors. Thereafter, an initial analysis was undertaken to decide if new themes were emerging from the interviews and, thus, more interviews were needed to be conducted. If no new information was being sourced in the interviews, no new interviews were undertaken with farmers and accountants.

A semi-structured interview guide was used to frame the interviews with each group of participants. The interview guide included topics that were drawn from the literature reviewed, and completed prior to data collection. One or more guided questions were formulated per topic. Guides differed for each group of participants as reflected in the topics. The interview guides for the different interviews can be found in Appendix 1. As proposed by Kvale (1996), to enable a flow in the conversation, the interview questions were thematically related to one of the topics but, at the same time, kept short, simple and formulated in such a way that they were understandable for the interviewees. Interviews were

guided by a similar key aim of gaining insights into the functioning of the FM advisory system in the New Zealand dairy sector and tailored to specific interviewee groups.

All participants were contacted initially either by phone or email. The researcher's identity, the aim of the research and wish to interview them was relayed in this interaction. If participants agreed to take part or indicated a potential willingness, then an information sheet was sent and a date for the interview was organised. Prior to the interview, the purpose of the research was again explained and informed consent gained from interviewees.

At the start of the interview, the researcher went over the information sheet and consent form with the interviewee and checked whether they were happy for the interview to be recorded. Lastly, they were asked to sign an informed consent form (Appendix 2). The first question of the interview was a general question about the background of the interviewee. In the case of farmers, I asked whether they could tell me about their background and the history of the farm and I asked the advisors whether they could tell me about their background and how they became, for example, a consultant or accountant. The participant's answers to this first general question determined my follow-up question. This procedure was applied during the whole interview. As Legard *et al.* (2003) state, the first answer to a question is often cursory and of a general nature. Probing was done to explore the interviewee's meaning through subsequent questions.

As argued by Brinkmann and Kvale (2015), it is important that the interviewer finds a balance between being empathetic and keeping an appropriate distance, so as to reduce the risk of getting too close to the interviewee. A potential result of being too close to the interviewee is that questions are asked that only highlight the 'good side' of the interviewee. If trust exists between the interviewer and interviewee, it is more probable that rich data is gathered from the interviews (Legard *et al.*, 2003). Several actions were taken to create trust and build rapport during the interview. The first was that most participant contacts were obtained through snowball sampling, which meant that the researcher got into contact with them via someone they knew. Further, I tried to be as open as possible in introducing myself and the research and answered any questions the interviewee had in an attempt to increase the interviewee's trust in me. At the end of each interview, the interviewees were thanked for their time, asked if there was anything to add, or whether they knew anyone they thought should be interviewed.

All interviews were recorded and transcribed. Initial transcriptions were done by the researcher and the last interviews were transcribed by a professional transcriber. This process enabled the researcher to focus entirely on facilitating the interview and gather data with sufficient depth. As some interviewees expressed more sensitive information after the interview finished, it is likely that the answers have been influenced by the use of the recorder. The researcher tried to minimise this influence, by emphasising that data gathered from interviews was confidential. For gaining an in-depth understanding of interactions among participants, it is important that the data is captured in its natural form (Legard *et al.*, 2003). Literally transcribing the interviews was done because that enabled capturing the data in a more detailed and natural form compared to note-taking, as that would change participants' stories more (Legard *et al.*, 2003).

Most interviews were conducted in person, as it was easier to be responsive. As argued by Legard et al. (2003), not only tone of voice, but also facial expressions and body language can be observed in a physical encounter. Unfortunately, for logistical reasons, not all the interviews could be conducted in person. In this study, there did not seem to be a substantial difference in richness of the data gathered from telephone versus in-person interviews, which is surprising considering what Legard et al. (2003) have argued. According to them, 'it would be extremely difficult to conduct really detailed in-depth interviewing over the telephone (...) and a physical encounter is essential context for an interview which is flexible, interactive and generative, and in which meaning and language is explored in depth' (Legard et al., 2003, pp. 141 - 142). A reason why the richness of the data did not seem to be compensated by the telephone conversation, could be that I met most of those interviewees in person at the accountants' conference. It is possible that, in this way, enough rapport had been built with the interviewees in order to make them feel comfortable to talk freely.

Secondary data

Secondary data was gathered to complement interview data and gathered simultaneously with the second phase interviews. Secondary data is data that is collected and documented by a person other than the researcher (Cowton, 1998). Some interviewees provided me with secondary data which was offered by them, like financial reports prepared by accountants, research conducted by the bank about farmer clients and a financial management collaboration agreement. The secondary data was supplementary to the data gathered from the interviews and helped to clarify what interviewees referred to in the interviews, for example, to clarify tools that advisors used in interactions with farmer clients. This is in line with what Perakyla and Ruusuvuori (2013) have described as an informal approach to secondary data analysis, as the data from documents is supplementary to the data gathered from interviews.

Secondary data that was gathered and analysed included:

- Conference proceedings of the National Primary Sector Conference 2016 for Rural Accountants
- Accountants' financial reports produced for dairy farmer clients
- Financial Management Collaboration Agreement
- Documentation (e.g. annual reports, strategic plans) from the industry-funded organisation DairyNZ
- Government policy documents related to the Financial Advisory Act

Participant selection

In this section, the different types and number of research participants are described. An elaboration on how the participants were recruited is also provided. Moreover, besides the key aim of gaining insights into the functioning of the FM advisory system in the New Zealand dairy sector, the more tailored aims of specific interviewee groups are described.

Participants were chosen on the premise that they were likely to provide valuable insights about the advisory system and how it shapes FM advisory provisioning in the New Zealand

dairy sector. A purposive strategy for identifying participants has been argued to be suitable if the aim is to select participants from whom 'most can be learned' (Merriam, 1998, p. 61). A purposive strategy was thus used to identify the different types of participants. The way participants were recruited and particular purposive strategy including selection criteria, differed per interviewee group. This is discussed hereafter per interviewee group.

Some participants were recruited through snowball sampling because, for most of the groups, no central database with contacts and characteristics was available with the implication that there was no centralised place from where participants with certain characteristics could be picked. Snowballing means identifying new participants by asking already identified participants (Ritchie *et al.*, 2003). Initial contacts were made through contacts at Massey University and others who were indicated through people the researcher interviewed. The different sources provided the researcher with contacts they believed complied with the selection criteria explained by the researcher. Some interviewees were recruited through making direct contact after internet searches.

For bankers and specialist financial advisors working with dairy farmers, it was hard to source participants, so all participants that were found were included in the sample and no new interviews were undertaken when no new interviewees could be sourced. For DairyNZ, an interview was undertaken with all the interviewees that were suggested by the contact person in DairyNZ.

Farmer participants

Farmer participants were interviewed to gain insights about how farmers draw on advisors for financial management advice and the nature of the interactions between farmers and advisors.

A literature review and key informant interviews from the pilot study guided the identification of selection criteria for farmer participants. However, very little research exists that could guide the selection of farmers. Therefore, the researcher chose to select farmer interviewees who (partly) owned the farm business, had a significant financial stake in the farm and were decision-makers about FM. These criteria were used, because the people in these decision-making positions were likely to engage in FM practices and potentially seek FM advice. When approaching farmers for interviews, the interviewer asked whether she could speak with the person(s) involved in financial decision-making on the farm. In practice, it turned out that financial decision-making is often shared between two partners or between parent(s) and child(ren). Some of the interviews are conducted with all whereas other interviews were conducted with only one of the decision-makers. The decision how many and whom of the decision-makers participated in the interview was left up to the farmer participants. Nine interviewees were owners and three of the interviewees were in equity and profit share arrangements. Of the interviewees who were in equity and profit share arrangements, two of these arrangements were with family members and one with nonfamily members. The size of the farms ranged between 130 to 850 cows (40 and 600 ha respectively).

Table 2 below gives an overview of the different farmer participants and the number of cows they farm, size of land holding and the ownership structure of the dairy farm business.

Table 2: Overview of the different farmer participants

Farmer	Number of cows	Amount of hectares	Ownership structure
1	130	40 ha,	Owner operator
		27 ha beef grazing	-
2	3 farms with: 350	Lease 400 ha	Equity and profit share
	* 200*		arrangements
	and 800** cows		_
3	270	(=140 ha)	Owner operator
		(= 220 ha) run-off	
4	460	214 ha	Owner operator
5	400	180 ha	Owner operator
6	300	80 ha own + 46 lease 44 run-off	Owner operator
		lease	
7	850	600 ha	Owner operator
8	190	69 ha (64 ha effective)	Owner operator
9	370	140 ha	Owner operator
10	420	230 ha	Equity and profit share
			arrangements
11	230	92 ha	Owner operator
12	300*	105 ha	Equity and profit share
		70 ha run-off	arrangements

^{*:} Sharemilker contract: in these instances, the interviewed farmer is a sharemilker. A sharemilker owns the cows and another farmer owns the farm and land; the profit is then shared between owner and sharemilker. **: The farmer is in an equity partnership; both farmers own half of the farm (half the land, the cows and shares)

Advisor participants

The table below shows the amount of advisor participants per profession and type. Table 3: Overview of the different advisor participants (phase 2):

Profession of participant	Number	Type of participant
Retired banker	1	Banker participant
Banker (head of agri initiatives)	1	Banker participant
Banker (relationship manager)	8	Banker participants
Rural accountant	10	Rural accountant
		participants
Farm management consultant	6	Participants
Specialist financial advisor	3	Participants
DairyNZ Project developer	1	DairyNZ participant
DairyNZ Project leader	2	DairyNZ participants
DairyNZ Regional leader	1	DairyNZ participant
DairyNZ Member of leadership team	1	DairyNZ participant
Freelancer doing contract work for DairyNZ	1	DairyNZ participant
Total participants (phase 2)	35	

The more specific aims guiding the advisors' interviews, were:

- How advisors interact with farmers about finances
- With whom advisors interact about supporting farmers in their financial management and how
- How advisors stay up to date with financial management information and developments
- To find out whether, why and how changes occur and have occurred in supporting dairy farmers in financial management

Bankers

Initial interviews were undertaken with interviewees who also constituted key informants because they had knowledge of the field. The recruitment of bankers was directed by these initial interviews to help decide how to select banks and which employees within banks to interview. These interviews made clear that there are five main rural lenders (banks) in New Zealand with customer-facing employees who build relationships with clients, but also backoffice employees who, for example, develop policies for different sectors. Several strategies were employed to get into contact with potential respondents. Initially, it was attempted to contact a representative of each main rural lender who knows the structure of the bank and the bank's process of engaging with dairy farmer clients to connect with both customerfacing employees working with dairy farmers as well as back-office employees. Unfortunately, in engaging bankers from some banks, there was some resistance, and it was difficult to find bank employees who were willing to be interviewed. A reason mentioned was a heavy workload. One bank was therefore not included. Moreover, for most banks, only one participant was included and these participants were mainly customer-facing employees (relationship managers). Only one back-office employee (head of agri-initiatives) was found willing to be interviewed.

Accountants

Initial interviews were undertaken with interviewees who also constituted key informants because they had knowledge of the field. The recruitment of accountants was directed by these initial interviews to help decide how to select banks and which employees within banks to interview. The key informants provided insights about the different types of accountants and the organisational structure of accountancy firms. From these interviews, it became clear that it was best to target rural accountants, as they engage with dairy farmers. Rural accountants usually work for accountancy practices that range from one-man-firms to larger firms that employ multiple accountants and support personnel, with some or all accountants specialising in rural accountancy. The selection criteria for accountants were that they were located in the Manawatu and worked with dairy farmers. Rural accountants who worked for different accountancy practices were included. Snowball sampling was undertaken to find accountants who worked with dairy farmers. Key informants provided some contacts of rural accountants that complied with the selection criteria and also other individuals working in or with the dairy industry identified accountants who work with dairy farmers, to reduce selection bias. Attending a national rural accountants' conference provided the opportunity to also recruit a number of accountant participants.

Farm management consultants

Initial interviews were undertaken with interviewees who also constituted key informants because they had knowledge of the field. The recruitment of farm management consultants (FMCs) was directed by these initial interviews to help decide how to select banks and which employees within banks to interview. The key informants provided insights about the different types of farm management consultants and the organisational structure of farm consultancy companies. From these interviews, it became clear that farm management consultants generally work for a farm advisory company which, in some cases, also provides other services or goods, besides advice (e.g. artificial insemination). Furthermore, there is a lot of variation among farm management consultants in the extent to which they provide FM advice to their farmer clients.

Farm management consultants from different consultancy practices were included. The interest was in farm management consultants who provide FM advice to farmers and work with dairy farmers. Snowball sampling was thus done to find these professionals that work with dairy farmers and provide FM advice to (some of) their clients.

Participants from the industry funded organisation DairyNZ

The New Zealand dairy sector's industry organisation is funded by farmer levies and is the extension and research organisation for dairy farmers in New Zealand. First, a senior staff member within DairyNZ was interviewed, complemented with a search of their website to gain insights about the organisational structure of DairyNZ and how they try to build FM capability among farmers. Following the advice from the key informant, a project developer who was involved in FM projects was approached for an interview and this developer was asked to select other staff. Criteria used for selection was to include both staff that directly work with farmers in FM, but also (project) development staff in FM. Moreover, employees who were selected needed to be involved in projects aimed at improving farmers' financial management capability.

Specialist financial advisors

Specialist financial advisors (SFAs) were selected as participants, because other advisory participants identified specialist financial advisors as actors that advise farmers about finances and financial management. Specialist financial advisors work for practices that range from one-man firms to larger firms with some or multiple advisors specialised in agriculture. The criteria used for selecting SFAs is that they had dairy farmer clients. Specialist financial advisors from different practices were included. Snowball sampling was used to find these professionals that work with dairy farmers.

DATA ANALYSIS

The main activities in qualitative data analysis were segmenting and reassembling data, in line with what has been argued by Boeije (2010). These activities were guided by the purpose of the research. Segmenting data refers to structuring or classifying data in categories. Reassembling refers to the activity of synthesis. When reassembling, relationships between

the categories were sought. The following section describes how the interviews were analysed.

The data analysis process adopted in this research, followed the stepwise approach for qualitative data analysis described by Boeije (2010). This approach is built on the three principles of constant comparison, analytic induction and theoretical sensitivity (Boeije, 2010).

- 1) Constant comparison: The belief on which constant comparison is based, is that phenomena reveal differently in different situations and by systematically comparing data, these varying situations can be distinguished (Boeije, 2010). Constant comparison involved repeatedly going through data and comparing words and sentences (Boeije, 2010, Thomas, 2013).
- 2) Analytic induction: Analytic induction was employed as a 'search strategy' to identify the theories best suited to make sense of the data (Boeije, 2010). In the process of analytic induction, first, a theoretical framework was developed. Subsequently, ideas and insights were inducted from the data. The collected data was compared to the theoretical framework, which was mainly interview data in the present study. These activities of comparing data to the theoretical framework and inducting ideas from the data were repeated until answers to the research questions were formulated.
- 3) Theoretical sensitivity: Theoretical sensitivity was the ability of the researcher to make sense of qualitative data in the light of scientific theory and develop and add to literature.

The researcher engaged in the process of coding as this aided the data analysis process. Boeije (2010, p. 79) describes coding as 'the process of naming fragments by giving them a summarizing label'. In the coding process, the researcher repeatedly went through the interview transcripts, comparing words and sentences (constant comparison). Codes were connected to parts of text in order to give them meaning (Miles and Huberman, 1994). For the farmer interviews, the software program NVivo (version 11) was used as a tool to aid the coding process. For the other interviews, Microsoft Word 2016 was used for coding.

The data analysis process was iterative in line with an inductive research approach. First and before data collection, a theoretical framework was developed that sensitized the development of the interview questions, see appendix 5A for the theoretical checklist that informed the development of the interview questions in the interview guides in appendix 1A to 1H. After collecting the data from interviews and other secondary data, initial (descriptive coding) was done, with the researcher writing descriptions on the printed transcript, see appendix 5B for an example. Also, a summary of initial thoughts was made per interview, see appendix 5C and 5D for examples. Then a summary with initial coding was done per interviewee group. These summaries included codes and listed the quotes, sometimes with an explanatory description, extracted from the different interviews, see appendix 5E for an example. Initially, mostly general and descriptive codes were assigned to structure the data. For example, bankers' utterances relating to their interactions with farmers, were coded as 'Farmer & Bank'. As the analysis proceeded, more in-depth coding and analysis was done.

Codes were both inspired by sensitising concepts informed by the literature and what emerged from the data. Not all concepts derived from the literature review emerged as significant and concepts that were used to inform the interview questions were only included if they were still relevant to the data, theoretical concepts that distinguished between 'back-office' and 'front-office' were less relevant than expected, which also related to a very limited amount of back-office advisory actors being included in the research participants. See the final list of sensitising concepts used for the first results chapter as an example in appendix 5G. Codes became more analytical, were adapted – merged, were renamed, and reorganised – as the process proceeded and their meaning became clearer in the context of the advisory system of financial management in the New Zealand dairy sector. In the analysis process, codes were also assigned to interrelationships between the different interviewee groups. The last part of analysis was done in developing the papers for publication, with themes becoming clearer through the process of writing the papers.

It is important to note that the data collected from the different research participant groups informed all three chapters. Even though the data collected in the farmer interviews was mainly used to inform the answers to the first sub-question (and reported in the first results chapter), data from interviews with farmers also informed the answers to the second and third sub-questions (and is reported in the respective results chapters). The data collected in the advisor interviews was more evenly used in answering the three different sub-questions. Lastly, one of the key informant interviews in the pilot study also informed answers to the three sub-questions.

In the findings section, interview quotes are used to illustrate the points made and enrich the findings. The coding system used for quotes is an abbreviation of the interviewee type per profession, followed by the number assigned to the individual interviewee. See table 4 for an overview of the abbreviations per interviewee type:

Table 4: Abbreviations per interviewee type

Interviewee	Farmer	Banker	Accountant	Farm	Specialist	DairyNZ
				Management	Financial	•
				Consultant	Advisor	
Abbreviation	F	В	AC	С	SFA	DairyNZ

ETHICAL RESPONSIBILITIES

In this section, I discuss how I dealt with ethical responsibilities in the research.

Being a researcher in a university gives the researcher power and privileges that require her or him to take responsibilities (O'Leary, 2004, Thomas, 2013). Ethical considerations are concerned with these privileges and responsibilities. Researchers that involve human participants in their research are responsible for integrity in their practices and need to establish practices that minimize potential negative consequences to participants (O'Leary, 2004). Participants are affected by the interaction in interviews in this research and, therefore, it is considered whether the expected influence of the interviews on participants is acceptable. Kvale (1996) enumerates ethical considerations that are relevant in research that uses interviews:

- the benefits of the research
- how to assure informed consent of interviewees
- how to assure confidentiality of information
- the consequences of participation in the study for interviewees
- the role of the researcher (positionality)

An information sheet was developed for the interviewees (Appendix 3) The information sheet is a short document which includes information about the researcher, a description of the project, why the participant is recruited and what type of information is sought, the interview procedure and participants' rights. This information sheet was sent in advance of the interview if I had the email address of the interviewee. At the start of each interview, I discussed the information sheet with the interviewees and asked if they had any questions or remarks. I also asked the interviewees whether they would allow me to record the interview and asked them to sign a form to confirm that. The recordings were only heard by me and the professional transcriber that transcribed part of the interviews.

No participant can be identified without the consent of that participant. Pseudonyms were used in the thesis so that individuals could not be identified. However, full confidentiality could not be guaranteed, because of the small number of people in certain positions in the field. This is clearly communicated to the participants in the information sheet and also verbally repeated to participants at the start of the interviews.

Several actions were taken to minimize any negative consequences to participants. It was considered that the main risk for participants lies in discussing a topic that could be sensitive to them. Financial information can be perceived personal and is sensitive to people. The interviews were undertaken in a period where the milk price was very low and some farmers were making losses. On the one hand, talking about finances in a period of financial stress could thus have been confronting for the farmer participants. On the other hand, the interview could also have been constructive for participants, as sometimes interviewees enjoy the experience of being interviewed, especially because someone is listening to the participant (Kvale, 1996, Boeije, 2010). The participants' rights that were emphasized in the information sheet and at the beginning of the interview are:

- That participants are under no obligation to accept the invitation to participate
- That they can decline to answer any particular question;
- That they can withdraw from the study (specify timeframe);
- That they can ask any questions about the study at any time during participation;
- Provide information on the understanding that their name would not be used unless they give permission to the researcher;
- That they can be given access to a summary of the project findings when it is concluded;
- That they can ask for the recorder to be turned off at any time during the interview. The potential risk of negative consequences to participants of partaking in this study was carefully dealt with and discussed with supervisors and other colleagues. After several discussions, it was concluded that the risk participants confront in this research was low and not more than participants would experience in daily life. A low risk notification was accepted

by Massey University Human Ethics Committee on the 13th of March 2015 and can be found in Appendix 4.

REFERENCES

- Blaikie, N. 2000. Designing social research, Malden, Polity Press.
- Boeije, H. 2010. Analysis in Qualitative Research, London, SAGE Publications Ltd.
- Brinkmann, S. & Kvale, S. 2015. *InterViews Learning the Craft of Qualitative Research Interviewing,* Thousand Oaks, SAGE Publications, Inc.
- Burr, 2003: Burr, Vivien. *Social Constructionism*, Routledge, 2015. ProQuest Ebook Central, available at: https://ebookcentral.proquest.com/lib/massey/detail.action?docID=2011179.
- Cardon, P., Poddar, A. & Fontenot, R. 2013. Does Sample Size Matter in Qualitative Research?: A Review of Qualitative Interviews in is Research AU Marshall, Bryan. *Journal of Computer Information Systems*, 54 (1), 11-22. Available: DOI 10.1080/08874417.2013.11645667
- Cowton, C. J. 1998. The Use of Secondary Data in Business Ethics Research. *Journal of Business Ethics*, 17 (4), 423-434.
- Francis, J. J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M. P. & Grimshaw, J. M. 2010. What is an adequate sample size? Operationalising data saturation for theory-based interview studies. *Psychology & Health*, 25 (10), 1229-1245.
- Hodkinson, P. 2008. Grounded Theory and Inductive Research. In: Gilbert, G. N. (ed.) Researching Social Life. Los Angeles: SAGE Publications Ltd. Available at: <a href="http://eds.a.ebscohost.com.ezproxy.massey.ac.nz/eds/ebookviewer/ebook/bmxlymtfXzEwOTk0NDFfX0FO0?sid=26f1b80c-8c7c-4fef-9fb6-4542626cbdd1@sdc-v-sessmgr01&vid=0&format=EB&lpid=lp_80&rid=0
- Jansen, J., Steuten, C. D. M., Renes, R. J., Aarts, N. & Lam, T. J. G. M. 2010. Debunking the myth of the hard-to-reach farmer: Effective communication on udder health. *Journal of Dairy Science*, 93 (3), 1296-1306. Available: DOI http://dx.doi.org/10.3168/jds.2009-2794
- Kvale, S. 1996. *Interviews An introduction to Qualitative Research Interviewing,* Thousand Oaks, SAGE Publications, Inc.
- Legard, R., Keegan, J. & Ward, K. 2003. In-depth interviews. *In:* Ritchie, J. & Lewis, J. (eds.) *Qualitative Research Practice.* London: SAGE Publications Ltd.
- Merriam, S. B. 1998. *Qualitative Research and Case Study Applications in Education*, San Francisco, Jossey-Bass.
- Miles, M. & Huberman, A. 1994. *An Expanded Sourcebook Qualitative Data Analysis*, Thousand Oaks, SAGE Publications.
- O'Leary, Z. 2004. The essential guide to doing your research project, London, SAGE Publications Ltd.

- Perakyla, A. & Ruusuvuori, J. 2013. Analyzing Talk and Text. *In:* Denzin, N. & Lincoln, Y. (eds.) *Collecting and Interpreting Qualitative Materials.* Thousand Oaks: SAGE Publication, Inc.
- Ritchie, J., Lewis, J. & Elam, G. 2003. Designing and Selecting Samples. *In:* Ritchie, J. & Lewis, J. (eds.) *Qualitative Research Practice*. London: SAGE Publications Ltd.
- Rog, D. J. & Bickman, L. 2009. The SAGE Handbook of Applied Social Research Methods, Los Angeles, SAGE Publications, Inc.
- Simons, H. 2009. Case Study Research in Practice. London: SAGE Publications, Ltd.
- Stake, R. E. 1995. The art of case study research, Thousand Oaks, Sage.
- Swanborn, P. 2013. Case studies: wat, wanneer en hoe?, Den Haag, Boom Lemma uitgevers.
- Thomas, G. 2013. How to do your research project a guide for students in education and applied social sciences, London, SAGE Publications Ltd.

CHAPTER 3 FARMER-ADVISOR INTERACTIONS

This chapter is in paper-format and has been published as a scientific paper in the Journal of Rural Studies. The chapter constitutes the first results chapter and discusses who are farmers' financial management advisors and how interactions between farmers and these financial management advisors are shaped.

Money talk: how relations between farmers and advisors around financial management are shaped

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ABSTRACT

The nature of interactions between farmers and advisors is the focus of a growing body of research. While many studies explore the potential role of advisors in facilitating farmers' practice change in practices related to agricultural production such as soil, water, pest and animal health management, studies that specifically investigate how advisors support farmers with financial management (FM) are limited. The contribution this paper makes is to identify who farmers' FM advisors are and to shed light on how farmer-advisor interactions about FM are shaped. Semi-structured interviews with both farmers and a range of advisors (bankers, accountants, farm management consultants, specialist financial advisors and industry funded advisors) were conducted. The main findings are that farm financial information and FM are considered to be sensitive topics and being good at FM is not central to farmers' identity (relative to e.g. production management). Due to the sensitivity around the topic and the low level of interest in FM, most farmers do not actively seek to acquire financial advice. Farmers most openly discuss FM with their banker and accountant and some seek advice from farm management consultants. Advice seeking from other advisors was limited. Theoretical implications are that FM as a topic of advice introduces unique dynamics to interactions between farmer and advisor, which highlights the importance of better consideration of taboo and sensitive topics in advisory interactions. Furthermore, the findings on how the bankers' authority impacts on the advisory relationship with farmers indicated that issues of power in view of such authoritative advisory relationships need to be better considered. To enhance effective provisioning on FM advice, policy could focus on improving the match between demand and supply, and help create awareness about the importance of discussing FM to reduce the sensitivity of the topic.

Keywords: agricultural advice, rural extension, farm management, agricultural finance, financial management, farmer-advisor relationships, dairy, agricultural entrepreneurship

INTRODUCTION

In agriculture internationally, business management skills are now recognised to be of paramount importance besides technical craftsmanship (Lans et al., 2013, Nuthall, 2006, Nuthall, 2001, Phillipson et al., 2004, Seuneke et al., 2013, Knudson et al., 2004, McElwee, 2008, Pyysiäinen et al., 2006). Farm management scholars recognise financial management (FM) as a distinct field of farm management, as is production, marketing and human resource management (Boehlje and Eidman, 1984, Shadbolt and Bywater, 2005). Moreover, farmers' engagement in FM is deemed vital to farm business success in the farm management literature (Shadbolt and Gardner, 2005) and FM is broadly defined as involving 'decisions with respect to the acquisition of funds and the use of those funds to acquire the services of

various resources' (Boehlje and Eidman, 1984, p. 23). FM decisions are generally viewed to vary concerning impact and how frequent they need to be made. FM decisions range from less frequent, high impact decisions, e.g. succession planning of a farm business, investment in irrigation or the purchase of additional land to more frequent, low impact decisions, e.g. the development of a cash flow budget for the coming year buying fertiliser. It is argued that farmers' decision making capabilities are critical to the quality of their FM decisions and studies emphasize the importance of FM education for farmers in this domain (Jackson-Smith *et al.*, 2004).

Farmers are shown to be supported in their farm management by advisors from different professions who then often form a network of advisors working on complementary topics (Pato and Teixeira, 2016, Oreszczyn et al., 2010, Lans et al., 2013, Phillipson et al., 2016, Proctor et al., 2012, Klerkx and Proctor, 2013, Phillipson et al., 2004). While a body of literature explores the role of this network of advisors in facilitating farmers' learning and/or practice change (e.g. Ingram, 2008, Bergea et al., 2008, Proctor et al., 2012, Sutherland et al., 2013, Oreszczyn et al., 2010), a limited number of studies specifically investigate interactions between farmers and their network of advisors about FM. Studies from agricultural finance touch on topics like farmers' motivations in choosing banks (Farley and Ellinger, 2007), the type (profession) of advisors farmers draw on for FM advice (Byrne et al., 2003) and the relationship between farmers' contact with an advisory organisation and farm financial decision making and performance (Hansen, 2015). These studies do not however analyse indepth how farmers compose and engage with a network of advisors on FM, or how farmers receive FM advice from advisors. Hence, deeper insights on the nature of, or what shapes, farmer-advisor interactions about FM are lacking, and this is what this study aims to explore. Because of the limited existing in-depth research on the topic, the research reported in this paper has taken an inductive qualitative case study approach (Merriam, 1998). Given that the focus is on farmer-advisor interactions around FM, the research is not a specific enquiry on farmers' FM decision-making, but rather analyses who dairy farmers go to for FM advice and how these farmer-advisor interactions about FM are shaped in Aotearoa, New Zealand.

The paper proceeds as follows. Literature on agricultural advisory networks and advisory encounters is reviewed in section 2. Given the inductive nature of the research, rather than creating hypotheses and subsequently test these, the literature review provided a conceptual framework that was used to design the data collection protocol for the case study (Boeije, 2010). It also ensured the researchers had suitable theoretical sensitivity when analysing the data and reflecting on the nature of the findings (Boeije, 2010). After the literature review, the case context and research design are described, followed by the findings from the study. The paper ends with a discussion and conclusion section reflecting on the theoretical and practical implications from the study as well as the limitations of the research and recommendations for future studies.

LITERATURE REVIEW: INTERPERSONAL FACTORS IN ADVISORY INTERACTIONS ON FINANCIAL MANAGEMENT

Advisors are part of the wide group of actors (or 'web of influencers' (Oreszczyn et al., 2010, p. 410) argued to be influential in shaping farmers' practices. Advisors can be more or less dedicated to focusing solely on providing advice ('specialised advisors') or providing advice

in addition to other goods or services ('embedded advisors') (Klerkx and Jansen, 2010). Increasingly emphasis is placed on the importance of advice being steered by the demands of farmers themselves, based on their needs and aspirations (Faure et al., 2012, Phillipson et al., 2016, Kilelu et al., 2014, Landini, 2016), where the farmer is seen as a client as opposed to a beneficiary. Farmers who employ an advisor on a fee for service basis will tend to receive advice tailored to their specific needs and circumstances. Whereas in instances that advice is funded by industry or public bodies it is likely to reflect more industry and public good goals rather than those of individual farmers. When advice is funded by industry or public bodies it is likely to represent topics they deem of importance, and a desire to change farmers' practices in view of public or industry goals. A desire to change farmers' practices can influence an advisor's interactions with farmers (Oreszczyn et al., 2010). This desired change can reflect a normative model of 'ideal behaviour' held by the advisor and their employer or the regulatory context they work in (Vrain and Lovett, 2016, Höckert and Ljung, 2013). This may lead to advisors taking a prescriptive position. Whereas it is argued that knowledge exchange is most likely to lead to learning in advisory interactions typified as 'facilitative' (Ingram, 2008, p. 409). In these types of interactions, both parties equally value each other's input and knowledge and want to maintain the partnership. Counter to these types of interactions are those where mutual respect and learning does not exist and there is an imbalance between parties in terms of perceived input and expertise (Ingram, 2008).

The following sections will explore how the literature suggests that the level of trust in the relationship and the views, expectations and positions of farmers and advisors may influence farmer-advisor interactions about FM. Due to the scarcity of literature specific to advisory encounters on FM in agriculture, agricultural finance literature in general (e.g. Halabi and Carroll, 2015) and research that explores advisory encounters around finance in non-agricultural small and medium enterprises (SMEs) (Halabi *et al.*, 2010, Klyver and Hindle, 2010, Gill *et al.*, 2006, Stone, 2015, Stone and Lightbody, 2012, Carey and Tanewski, 2016) is drawn on in this review. The SME literature mainly focuses on bank staff and accountants and to a lesser degree on specialist FM advisors. The literature pertinent to SMEs is used as the dairy farm businesses explored in this research conform to the definition of an SME¹, in particular, they often go to the small side of the SME-spectrum (OECD, 2005).

¹ The definition of SME adopted in this research, is the one brought forward by OECD. 2005. OECD SME and Entrepreneurship Outlook: 2005 Edition. Paris: OECD:

^{&#}x27;Small and medium-sized enterprises (SMEs) are non-subsidiary, independent firms which employ fewer than a given number of employees. This number varies across countries. The most frequent upper limit designating an SME is 250 employees, as in the European Union. However, some countries set the limit at 200 employees, while the United States considers SMEs to include firms with fewer than 500 employees'.

How (farmer) clients' and advisors' positions influence their interactions

The SME centred literature suggests that advisors and clients differ in their views and understanding about FM (Dyer and Ross, 2007, Halabi et al., 2010). How advisors deal with this difference is argued to influence their interactions with clients including how effectively learning and practice change is facilitated (Benard et al., 2014, Höckert and Ljung, 2013). Differences also may exist in what advisors and clients expect in terms of process and outcomes in their interaction (Nikolova et al., 2009, Dyer and Ross, 2007). Learning, it is argued, is only effective when advisors and clients have similar expectations about process and outcome (Nikolova et al., 2009). A commonly understood language is also highlighted as important (Halabi et al., 2010, Dyer and Ross, 2007). Verbal and written accounting reports, accepted by accounting textbooks as helpful for informing clients' FM decision making, were found to be not understood by all clients (Halabi et al., 2010). This lack of understanding is argued likely to be why few clients use the reports (Halabi and Carroll, 2015), a factor accountants are reported to recognise (Stone, 2015, Stone and Lightbody, 2012).

Advisor and client differences are identified also in the agricultural finance literature. Farm management consultants (Kemp *et al.*, 2000) were aware of differences between their own and clients' understanding of FM and reported adapting written and verbal reports in line with clients' FM understanding. Differences in how farmers and bankers view the purpose of budgets is reported, also (Jakobsen, 2017). Bankers expected farmers to use budgets as a 'management control tool', whereas for farmers budgets were an 'entrance card for getting a loan' (Jakobsen, 2017, p. 148).

Differences can extend also to how farmers and advisors give meaning to and value farming and farming practices including financial management (Burton *et al.*, 2008, Warren *et al.*, 2016). Burton (2004) as well as Jakobsen (2017) found that farmers studied measured success by the amount and quality of production, and not (or to a lesser extent) in financial terms. Farmers were found also by Jakobsen (2017) to choose advisors whose views and advice aligned with the farmer's plans and approach and changed advisors if they did not. One point of difference highlighted was advisors being critical about the farmer not using financial measures of success (Jakobsen, 2017).

Trust within advisory interactions on Financial Management

Trust is acknowledged as important in relationships between advisors and clients in both the agricultural advisory literature (Ingram, 2008, Fisher, 2013, Kemp *et al.*, 2000, Sutherland *et al.*, 2013, Garforth, 2015), and business literature (Klyver and Hindle, 2010, Raich, 2008, Ardley *et al.*, 2016, Gill *et al.*, 2006, Carey and Tanewski, 2016, Howorth and Moro, 2006, Kautonen *et al.*, 2010, Cherry, 2016, Moro and Fink, 2013, Hawke and Heffernan, 2006). It is argued that if a client lacks trust in the advisor, (s)he is unlikely to ask for or use the advice provided by that advisor (Fisher, 2013). Trust has also been found to enhance loyalty of the client to the advisor (e.g. Tan *et al.*, 2014).

What shapes or influences clients' trust in the advisor in FM has been explored. Both for farmer-advisor as well as SME-advisor relationships longevity of the relationship and frequency and consistency of contact are argued to be essential elements of a trusting relationship (Berry *et al.*, 2006, Vegholm, 2011, Fisher, 2013). Client's trust is argued to be

enhanced if the client perceives the service provider to be technically competent (Kemp et al., 2000, Gill et al., 2006). For example, studies show that accountants were more likely to be trusted and used for business advice if clients felt the accountant proved capable in providing statutory services (Gooderham et al., 2004, Carey and Tanewski, 2016). In addition, Kemp et al. (2000) reported that having the client's best interests at heart was essential for building trust between an advisor and the farmer client. Though not focused on FM, in the agricultural advisory literature, the issue of working in the client's interest has been discussed by scholars with concerns that embedded advisors are more focused on supporting the sale of goods and services through advice (Sutherland et al., 2013, Wolf, 1995), which may not necessarily be in the client's best interest. Despite the potential existence of a perverse incentive for embedded advisors to support the sale of their goods and services, there is evidence that farmers can see embedded advisors as a credible source of advice. Veterinarians for example, are seen as a credible source of advice, even though they are also often the main providers of animal remedies to farmers (McDougall et al., 2017, Fisher, 2013, Swinkels et al., 2015). This could be relevant where FM advisors are embedded advisors, e.g. an accountant providing FM advice in addition to statutory services, and banks providing advice in addition to selling loans.

Based on this analytical lens informed by the review of literature on 1) farmer and advisor positions in and views on advisory interactions and 2) interpersonal issues in this interaction such as trust, credibility and loyalty, the specific research questions guiding our study are:

- Who do farmers go to for Financial Management advice to create an advisory network on the topic and why?
- How are advisory interactions around Financial Management shaped with different sorts of advisors and why?
- How do interpersonal factors shape farmer-advisor interactions about Financial Management?

In the next section, the context in which these questions were explored is described, as well as methods for data collection and analysis.

CASE DESCRIPTION AND METHODS

Case context

The study was conducted in the New Zealand dairy sector, where both scholars and the industry emphasize the importance of business management in farming (DairyNZ, 2013, Shadbolt and Martin, 2005, Nuthall, 2010), and where organisations like the industry funded advisory organisation, DairyNZ, seek ways to support dairy farmers with FM (DairyNZ, 2016). To understand the broader context of the advisory system around FM a brief explanation of recent dynamics in the extension system and financial management on dairy farms is given.

In line with international trends, agricultural advisory services in New Zealand have gone through reforms. Governments 'reduced their role' in the provision of (agricultural) extension which led to privatisation of advisory services (Kidd *et al.*, 2000). This resulted in both 'diversity of organisations' providing agricultural advisory services and pluralism of 'the

political dimension of organisational variety', a distinction by Knierim et al., 2017, p. 46. In New Zealand, agricultural advisory services were privatised relatively early (in 1986) (Hercus, 1991). Government entirely withdrew from providing extension and New Zealand agricultural advisory services providers are pluralistic and include a mix of specialised private advisory services (fee for service), embedded advisors, who provide advice as a secondary service besides other services (e.g. different types of input suppliers) and also industry-funded advisory services (through farmer levies). Currently, different dynamics influence and put financial pressure on dairy farmers worldwide and in New Zealand specifically (Creamer et al., 2002, Shadbolt et al., 2017). One of these dynamics is these farmers operating in an environment of increasing (income) volatility, relating to an increasing milk price volatility internationally (Shadbolt and Olubode-Awosola, 2016) and a high dependence of New Zealand's dairy industry on export to foreign markets (Shadbolt and Apparao, 2016). In particular, at the time of data collection, dairy prices were low and many New Zealand dairy farmers were 'suffering operating losses' (Reserve Bank of New Zealand Te Putea Matua, 2016, p. 4). Moreover, the indebtedness of owner-operators in the New Zealand dairy industry almost doubled between 2006 and 2016 and on average increased noticeably faster than milk production, which heightens financial pressure through e.g. higher interest rates (DairyNZ, 2018). Related to the increased indebtedness of the New Zealand dairy sector, banks have already put in place stricter lending requirements for dairy farmers (Reserve Bank of New Zealand Te Putea Matua, 2016). Although there is uncertainty around whether New Zealand dairy farms will move from family into more corporate ownership systems (Nuthall and Old, 2017), a trend of family farmers owning multiple farms has been identified (Nuthall and Old, 2014), which has also been reported for other countries (Pritchard et al., 2007, Moreno-Perez and Lobley, 2014). These changes in ownership systems are likely to pose (new) challenges for farmers concerning financial decision-making.

Case study design

As mentioned in the introduction, the research reported in this paper has taken an inductive qualitative case study approach, rather than looking for causal patterns, because of the limited existing in-depth research on the topic (Merriam, 1998). A case study design was employed, as this enabled the researchers to develop a 'holistic understanding' about the social phenomenon of interest (O'Leary, 2004, p. 116). The case is a FM advisory system in the New Zealand dairy sector. Multiple farmers and advisors in the advisory system were research participants, to gain an understanding about who are farmers' financial advisors, capture the diversity of farmer-advisor interactions and the interpersonal factors shaping New Zealand dairy farmer-advisor interactions. The geographical boundary of the case was the Manawatu-Wanganui region. Actors outside the Manawatu-Wanganui region were also included if these actors were involved in the advisory system in New Zealand, but only operated at the national level, outside the Manawatu-Wanganui region. Manawatu-Wanganui is a region in the lower half of the North Island of New Zealand, with almost 500 herds comprising 5% of all herds in New Zealand (LIC Statistics and DairyNZ, 2018). The average herd-size was almost 400 cows which is similar to the national average of 413, in 2016 (LIC Statistics and DairyNZ, 2018).

The empirical research was undertaken in 2015 and 2016, and two stages of in-depth semi-structured interviews with farmers and advisors respectively (Brinkmann and Kvale, 2015).

The first stage comprised of interviews with 12 farmer participants and aimed to gain an understanding about who farmers receive FM advice from and moreover, an understanding about the dynamics in farmer-advisor interactions from the farmers' perspective. A snowball approach to identifying farmer respondents was followed and the size of the farms ranged between 130 and 850 cows (40 and 600 ha respectively). Farmer interviewees were selected:

- whose main business is dairy farming
- who were the primary financial decision-makers on the farm
- who had a significant financial stake in the farm (sole owner-operators or farmers who were in an equity share arrangement)

These selection criteria for farmers were determined after undertaking key informant interviews and a literature review. The key informant interviews were with two academics, one specialised in agribusiness and the other in farm business management, a banker, rural accountant and a farm management consultant. The literature review concluded that research on advisory systems around FM in general, but also in particular on how farmers use advisors for FM advice is limited. At the moment of data collection, there was no clarity (scientific evidence) about 1) farmers' characteristics that could influence farmers' use of FM advisors and 2) farmers' characteristics that could influence the dynamics in interactions between farmers and FM advisors.

In the second stage, interviews with advisors were conducted with the aim of gaining an understanding about the dynamics in farmer-advisor interactions from the advisors' perspective. The types of advisors indicated by farmer respondents as relevant for FM advice, were interviewed. A total of thirty-five advisors were interviewed (Table 1) and they comprised bankers, accountants, specialist financial advisors, advisors from the industry organisation DairyNZ, and farm management consultants. Mostly customer-facing (frontoffice) bank employees from four of the five largest rural lending institutions (banks) in New Zealand were interviewed. Rural accountants, farm management consultants and specialist financial advisors were selected on the basis of whether they had dairy farmer clients. Although none of the interviewed farmers reported employing a specialist financial advisor themselves, specialist financial advisors were also interviewed as most advisor interviewees reported that specialist financial advisors provided advisory services for dairy farmers. DairyNZ employees were selected on the basis of whether they were involved in projects that are aimed at (upskilling) farmers' financial management capability. In this case, both staff that directly work with farmers (front-office), but also (project) development staff (backoffice) were selected as participants.

Table 1: Overview of advisor interviewees

Profession of participant	Number
Retired banker	1
Banker (head of agri-initiatives)	1
Banker (relationship manager)	8
Rural accountant	10
Farm management consultant	6
Specialist financial advisor	3
DairyNZ Project developer	1
DairyNZ Project leader	2
DairyNZ Regional leader	1
DairyNZ Member of leadership team	1
Freelancer doing contract work for DairyNZ	1
Total participants (phase 2)	35

A snowball approach to identifying advisor respondents was also followed in the second stage, as information about the number of advisors on FM and their characteristics for each type was difficult to source and not publicly available. This is because of the highly privatised and competitive nature of the New Zealand advisory system. Furthermore, the provision of FM advice was predominantly a secondary service for the advisors with more emphasis being placed on their primary service provision (e.g. taxation services by accountants and loans by bankers). There was information about who the five main rural lending institutions were, but there was no access to a database of employees within these banks. Moreover, there was no access to a database of (rural) accountants, farm management consultants or specialist financial advisors. Therefore, for identifying respondents within all the advisor types, key informants were interviewed to decide about the selection criteria for these participants. The key informants were an academic specialised in banking and an academic specialised in (rural) accounting, two bankers, two rural accountants, a farm management consultant and an employee from DairyNZ (team leader).

The interviews were recorded and transcribed verbatim. The data analysis followed the process of qualitative data analysis (O'Leary, 2004). The data analysis process reflects what (O'Leary, 2004, p. 261) describes as 'moving between inductive and deductive reasoning'. In the data collection process, the researchers and interview questions were sensitised by literature about farmer-advisor interactions (Boeije, 2010). After the interviews and transcripts were completed a process of 'constant comparison' occurred in which the transcripts were inductively analysed. Interview texts were compared to find themes and connections between themes. Consequently, themes were compared to the concepts and theories that initially sensitised the data collection (deductive reasoning). These sensitizing concepts have broad definitions and serve as 'the researcher's lens through which to view the field of research' (Boeije, 2010, p. 23). See table 2 for a list of the sensitizing concepts used for the data analysis.

Table 2: Sensitizing concepts

Topic	Sensitizing concepts		
Advisor network and types of	Embedded versus independent advisors		
advisors in the network	Demand versus supply driven advice		
Advisors' and farmers' positions	Prescriptive versus facilitative interactions		
and views	Perception of ideal behaviour		
	Understanding of topic of FM		
	Expectations about process and outcome of interactions		
	Differences in language and terminology use		
	Written and verbal reports or tools for FM		
	Perception of how to use and how used		
	(Technical) understanding		
Trust in advisory interactions	Longevity of relationship		
	Farmer's perception of advisor's technical competence		
	Frequency and consistency of contact		

The iterative process of data analysis supported interpretation of the qualitative data in light of theory and moreover helped sharpen the researchers' theoretical understanding.

In the findings section, interview quotes are used to illustrate the points made and enrich the findings. The interviewees gave permission for verbatim quotes to be used provided they remained anonymous. In instances when the term 'advisor(s)' is used, this refers to all the types of advisors that were interviewed (banker, accountant, farm management consultant, specialist financial advisors and advisors from DairyNZ). The coding system used for quotes is an abbreviation of the interviewee type per profession, followed by the number assigned to the individual interviewee. See Table 3 for an overview of the abbreviations per interviewee type:

Table 3: Abbreviations per interviewee type

Interviewee	Farmer	Banker	Accountant	Farm	Specialist	Employee
type				management	financial	of
				consultant	advisor	DairyNZ
Abbreviation	F	В	AC	FMC	SFA	DairyNZ
used						-

FINDINGS

The nature of interactions between farmers and the different FM advisors they use is explored in this section as is factors that affect these encounters. Table 4 gives some background information about the different advisors and is also a summary of the key characteristics of advisors in relation to their interactions with farmers. This is discussed in the following sections.

Table 4: Key characteristics of advisors in their interactions with farmers

	Bankers	Accountants	Farm management consultants	Specialist Financial Advisors	DairyNZ advisors
Information about employing organisation	Relationship managers employed by one of the five main rural lenders in New Zealand	Accountants employed by accountancy practices ranging from one-man to larger firms, potentially employing support personnel and multiple accountants, with some or all specialised in rural accountancy	Consultants employed by a farm advisory business ranging from one-man to larger firms, potentially employing support personnel and multiple consultants	Employed by a financial advisory business ranging from one-man to larger firms, potentially employing support personnel and multiple advisors, with some or all specialised in agriculture	Employed by DairyNZ, either 'consulting officers' who organise discussion groups in the different districts in New Zealand or other personnel providing workshops or trainings to dairy farmers
Operational sector	Private	Private	Private	Private	Industry- funded
Type of advisor	Embedded	Embedded	Specialised / embedded	Specialised	Specialised
Payment for advice	No direct payment	Fee for advice / no direct payment	Fee for advice	Fee for advice	No direct payment (levy funded)
Type of interaction	One on one	One on one	One on one	One on one	Group-based
Farmer's acting on advice	Voluntary / Mandatory	Voluntary	Voluntary / mandatory if in association with banker	Voluntary	Voluntary
Nature of advice provision	Pro-active	Reactive	Reactive / pro-active if in association with banker	Reactive	Pro-active
Farmer's disclosure of financial information to advisor	Mandatory	Mandatory	Voluntary / mandatory if in association with banker	Voluntary	Voluntary

Farmers' financial advisors -a requirement rather than active demand

Most farmers interviewed had little demand for advice about FM and sought FM advice from a limited range of advisors. Of the different types of advisors, bankers and accountants were identified by farmers as being the key advisors from whom they sought financial advice and discussed financial information, constituting their principal network of advisors on FM. A farmer comments that the bank and accountant:

'have more weighting than other [advisors]. They would give me a lot more financial input in weight' [F6].

In the sections that follow, the different characteristics and interactions between farmers and advisors about FM advice are described. All advisors had one-on-one contact with their farmer clients, except for the industry funded advisors, who generally work with farmer groups (Table 4).

Bankers

Bankers are key FM advisors for the majority of interviewed farmers. They are embedded advisors as the advice they provide is in addition to other financial services. Farmers did not pay a fee for the bank's advice (no direct payment), but the bank was recompensed through the interest the farmer paid on their loans (see table 4). There was no evidence that bankers tried to sell products and services through their advice. All farmer interviewees, to varying degrees, dealt with a bank for the purpose of obtaining credit and loans as well as managing cash reserves for the farm business. Banks who lent money to farmers were fully informed as to the farmer's financial situation and the ongoing financial status of the farm business. As also shown in table 4, this full disclosure of financial information is a requirement rather than a choice made by farmers (mandatory disclosure). For many farmers, accountants and bankers were the only external advisors that had full information about the farm business finances (see table 4).

The farmer-banker relationship has unique dimensions not evident in farmer's relationships with other FM advisors. One of these dimensions is the farmer's financial dependency on the bank, necessary for farmers to run their businesses. Farmers interviewed were aware that banks financial support was conditional as one farmer articulates in the following quote:

'[Banks] are always going to make money. Good or bad, they always make money. So they are going to put themselves first, before us. We ask for the money [...] so while there is good communication, while they are supportive, largely supportive, you have to be realistic that they are always going to be paid before everyone else. And you just have to be realistic to that fact.' [F7]

Another dimension is the bank's stake in the relationship with the farmer as a consequence of the investment the bank had made into the farm business and the potential risk of losing that investment or client. Unique to the farmer-banker relationship as opposed to the farmer's relationship with other advisors is that the bank made the ultimate decision about whether to maintain or provide a loan to the farmer. The bank and therefore banker had a

degree of authority over the farmer which was not the case for other advisors. The banker's authority was expressed for example in the case that a farmer needs funding to buy land or equipment as this farmer's quote illustrates:

'The bank really, their final say goes. [If the banker says] oh I don't think it's a good idea if you buy the tractor now, I think you'd better wait till June, you can't go and say oh we bought it anyway.' [F6]

Whereas part of the advice provided by banks was not obligatory, e.g. advice on interest rates, banks required farmers to whom they loaned money to complete budgets and/or other financial reports (see table 4). The authority banks had over farmers to whom they have lent money meant they had influence over farmers' FM practices. FM advisors (including bankers) interviewed were concerned that the only reason farmers did budgets was to keep the bank happy and the extent farmers changed their practices was only to comply with the bank's requirements. So farmers produced (or asked their farm management consultant or accountant to produce) the reports (e.g. cashflow reports or forecasts or budgets), but were perceived to lack intrinsic motivation to use the reports for managing their farm finances. For example, a farm management consultant describes an experience in which he had been asked to complete a budget for a farmer who did not use it to guide his decision-making:

'Then [...] he had run out of money. When I turned up the farm just looked very different and it was like he's gone and spent quarter of a million dollars that wasn't in the budget and he's just gone and made all these changes. So I guess I didn't realise that he had very poor financial skills. You can set a budget and then he would just put it in the drawer and not look at it.' [FMC5]

The level of interest and effort put into the relationship by the bank depends on the farm's debt level or the prospect that the farmer will borrow more from the bank in the future. The bankers interviewed distinguished between farmers with low debt and low prospects for future borrowing (small borrowers) and (large borrowers) farmers with high debt or high prospects for future borrowing within accepted risk levels. The banks approached large and small borrowers differently, selectively and strategically. Banks appointed relationship managers that develop personal relationships with large borrowers and pro-actively interacted at least every 90 days – and thus actively worked to develop strong bonds with these farmers. Banks did not do this with small borrowers as they did not perceive it profitable to invest in building personal relationships with these farmers. A banker outlines his bank's policy:

If you were a farmer and you only owed the bank 200,000 dollars, you haven't got enough what we call, skin in the game. The bank is not getting enough profit from that customer to be able to justify personalised service.' [B1]

The level of a farmer's debt thus influences the quality of the relationship with the bank and the level of advice received. Bonding with large borrowers was an important client-retention

strategy for the bankers interviewed. Developing personal relationships allowed them to compete successfully with other banks, and retain customers in situations where other banks may offer cheaper loans. A banker outlines their rationale:

'If the customer enjoys dealing with that manager, generally speaking, they will stay with the bank. If [the farmer customers] don't enjoy dealing with that manager, [the bank] probably risks [the farmers] moving to another bank.' [B3]

Advice, therefore, was seen as an element of building a 'good' relationship and bond with farmer clients. Some bankers were even reported to sometimes distance themselves from their role as banker when providing advice:

'Every now and then they take their banker's hat off and give some advice of their personal opinions. But then they make it very clear that they take their banker's hat off.' [F8]

Bonding appears to be important not only for the banker, but also for some farmer clients interviewed. Large borrowers perceived that building personal relationships with their banker would increase the banker's trust in their capability and therefore the bank would more likely provide them financial support when they needed it. A farmer explains:

'It pays to keep in touch with [the bank], for good relations. Like if you suddenly go I need another 100,000 dollar they go hooo I haven't seen you in a year, hang on here. I'm not giving any money, what's it for? Whereas you go, oh we're doing this much production, you keep them in the loop. Tell them when it's going to get dry, tell them when you're going to destock. Cash might be a bit hard can we have a little bit more money?' [F6]

Large borrowers had a relationship manager and ample opportunity to ask FM advice from the bank and, in general, had a relatively close bond with their banker. On the other hand, small borrowers did not have a relationship manager, got little advice from the bank and compared to large borrowers in general had a more distant relationship with their banker. The bank's distinction between large and small borrowers also influenced accountant's advisory practices and the accountant-farmer relationship. The bank demanded more financial reporting requirements from farmers with higher debt levels and these were often provided by the farmer's accountant. As a result, large borrowers also tended to have more contact with their accountants and as such, had greater opportunity to receive tailored advice compared to small borrowers.

Accountants

All farmers interviewed, at minimum, paid for the annual services of an accountant. Accountants are embedded advisors as they provide advice in addition to other services. Sometimes FM advice was informally provided by accountants, but farmers mostly paid a fee for advice (see table 4). Other services provided by accountants included supporting

farmer clients to meet their statutory tax obligations. These obligations include an annual statement that enumerates all sources of income and a calculation of the tax on the income (Inland Revenue, 2004). As with banks, accountants had access to the farmer's full financial information, which is a requirement rather than a choice made by farmers (mandatory disclosure). Furthermore, implementing the accountant's advice is voluntary and unconditional for farmers. Farmer and accountant interviewees reported that some accountants tended to be reactive rather than pro-active in providing FM advice and the amount of FM advice provided by the accountant to the farmer depended largely on the farmer's active demand for advice (also shown in table 4). This appeared to be linked in part to the way farmers pay for their accountant's services. Accountants are paid on a fees-for-service basis according to the amount of time they spend on work for a client. The time-based charging appeared to inhibit some farmers from seeking FM advice from their accountant, as the following quote by a farmer illustrates:

'We don't go to our accountant willy nilly, because it costs us every time you ring up.' [F3]

Accountants expressed concerns about clients who did not involve them in the process of financial decision making. They argued that had a client sought their advice prior to making the decision, the decision would have been better informed, as the following quote by an accountant illustrates:

'Quite often we'll find out that people have gone ahead and bought a farm and then they come and tell us oh we've just bought a farm. [...] They haven't actually asked for someone else's opinion as to whether it was a good idea or not. I think the problem with that is that if you're not involved with the process then no one's questioning anything and saying are you sure this is going to work? [...] It's trying to guide their processes and make sure that they've thought of everything.' [AC8]

Farmers' limited use of accountants for FM advice is likely also because accountants in the main analyse what has occurred historically rather than looking forward. In the following quote a farmer compares the relative value of his accountant's and banker's advice:

'I often say accountants are more rear-vision mirror sort of people. They look at what you've done, not what you're looking forward [to do]. They'll be saying you didn't do very well. [...] But bankers are more looking at the actuals right now and going forward. Same as us, how are we looking right now, today, but also how we're going to be looking in the next 12 months. [...] So accountants are always 6 or 12 months behind with what we're doing. [F7]

Farm management consultants

Predominantly, farm management consultants provide specialised advice and farmers pay a fee for their advice (see table 4). However, some also provide services like access to a software package. Farm management consultants can thus be specialised or embedded advisors whose advice the farmer is under no obligation to accept or follow (voluntary),

unless the farmer's engagement with the farm management consultant is in association with the bank (mandatory), which is explained below, as also shown in table 4. The consultant's main service and primary responsibility is providing advice about farm management for a fee. Farm management consultants interviewed provided a range of advice, including FM, production management and human resource management. Generally consultants only provided FM advice if the farmer sought this type of advice from them (reactive), but in some instances farm management consultants were commissioned by the banker (explained below) and hence pro-actively provided FM advice to a farmer client.

Less than half of the farmer interviewees that employed a farm management consultant used them for financial advice. Some had employed the consultant on a regular basis over a long period of time and others had used them occasionally, for example for one-off consultancy visits to advise on a possible shift from twice a day to once a day milking of the dairy herd (all-round advice with a financial component). Unlike with banks and accountants, farmers are under no compulsion to provide financial information to their farm consultant. The extent of the disclosure was dependent on individual farmers and when it did occur it tended not to be full disclosure, as the following quote from a consultant illustrates:

'Not everyone really opens up their financial books to you. I discuss [finances] but they're not necessarily opening it up, fully transparent.' [FMC4]

At the time of data collection, the price paid to dairy farmers for milk was low. A number of farm management consultants interviewed mentioned how the low milk price gave them an opportunity to move into providing FM advice to some clients. A consultant explains:

With the dropping milk prices there's just been more of a need for financial consultancy. I have noticed that in my client base that two years ago I was only involved in the farm system and feed budgeting, and since the milk prices have come down and they've needed more help that's been an opening for me to get into that space.' [FMC5]

As mentioned earlier, FM advisors sometimes worked together. For example a farm management consultant was commissioned by a banker to 'sort out' a farmer client who was in financial difficulty and to act as a neutral party to assess the viability of another farmer's farm business. A consultant explains:

If you get brought in, you get a new client who's already in a very difficult financial position. So sometimes the bank will give you the referral before the farm business has gone over the cliff.' [FMC2]

Where the nature of farm management consultant's advice is usually voluntary and unconditional, in cases that the bank involves a consultant 'to sort out' a farmer client, working with a farm management consultant and the advice provided can become mandatory

and conditional. The bank can also influence the degree of disclosure of the farmer's financial situation to the farm management consultant.

Specialist financial advisors

A 'specialist financial advisor' provides financial advice as a primary service and is a specialised advisor. None of the farmer interviewees reported using a specialist advisor for FM advice, but several advisor interviewees identified the existence of specialist financial advisors who provided FM advice to farmers. This area of specialist financial advice to farmers is an emerging area, which is illustrated in the following quote by a specialist financial advisor who explains that he started a specialist financial advisory company because there was a lack of such advice:

We broke off [from the accountancy firm] and formed a financial advisory business (...), which we've been running for the last six years. My main niche market has been the rural industry because there are no [specialist] financial advisers in the rural industry that I've met yet. So you have accountants that are compliance advisers, you have lawyers that are legal advisers, but you actually have no one that gives [specialised] financial advice in the rural field.' [SFA1]

Contact with a specialist financial advisor is a matter of choice and specialist financial advisors only provided FM advice if the farmer sought this type of advice from them (reactive). Farmers engaged with specialist financial advisors only if they were motivated to receive FM advice, because unlike accountants and bankers, farmers do not have a relationship with specialist financial advisors for any reasons other than FM advice. Specialist financial advisors were therefore reactive to farmers' demands for FM advice. Specialist financial advisors interviewed reported that farmers used them as an expert for strategic decisions, often in one-off projects like investment decisions, business structures and succession planning. The specialist financial advisor then facilitates the process of development of a project (e.g. a succession plan). Like with farm management consultants, farmers are under no compulsion to provide financial information to their specialist financial advisor (voluntary disclosure). Farmers pay a fee for advice and uptake or implementation of the advice is voluntary and unconditional, as also shown in table 4.

Advisors from DairyNZ

Lastly, some farmers interviewed participated in events in which financial advice was provided, organised by DairyNZ. The industry organisation is levy-funded and runs regular farmer discussion groups across each region as well as specific training events for farmers. Some of these events were specifically focused on FM or events with broader topics that also covered FM. Industry funded advisors are specialised advisors and mainly use group settings for providing FM advice, with one advisor to many farmers, whereas the other FM advisors use a one to one interaction (see table 4).

DairyNZ interviewees reported that the organisation was pro-active in promoting FM advice to farmers, because one of the targets in the industry strategy that they had committed to is farm profitability (DairyNZ, 2013). The organisation believes that to achieve this target, it is

crucial to improve farmers' FM skills. The following quote illustrates the organisation's proactiveness in providing FM advice:

'And we keep promoting the theory of financial management. [...] We keep pushing it and it is quite hard work.' [DairyNZ4]

However, participation in FM events or workshops organised by the organisation is voluntary and unconditional and farmer's disclosure of financial information to the industry funded organisation was voluntary (see table 4). Some farmer interviewees participated in FM training events organised by the industry organisation, but the organisation recognises that farmers in the main do not use the advice on FM they present for farmers. Two staff members of the organisation explain why they think it is difficult for the organisation to get farmers excited about FM:

'[...] the challenge [is] for farmer's time, particularly if they're not highly excited about money management. They've only got 24 hours in a day and a great portion of those need to be tending to their stock and milking their cows. [...] The challenge for us is to make sure that they want to spend time doing this stuff [Financial Management] and that they see the value in doing it.' [DairyNZ1]

'So we're limited by the fact that not all farmers want to engage with us at a group level, so a lot of farmers prefer to do that through one to one or other channels, so that's one challenge.' [DairyNZ2]

The sensitivity around the topic of FM also influences farmers' usage of advisors for FM advice, which is discussed in the next section.

Dynamics affecting advisory interactions about Financial Management

The data raised two principle dynamics that affect FM advisory relationships: 1) different approaches to FM between farmers and their FM advisors and 2) the sensitivity of the topic. In the following subsections, how these dynamics shape interactions around FM is further unravelled.

Farmer and advisor approaches to FM shape advisory relationships

Farmers and their advisors had different approaches to FM which shaped the advisory relationships on FM. FM did not attract as much attention from farmers as production management and farmers' demand for FM advice is limited.

The findings highlighted that farmer's (intrinsic) demand for FM advice is low. Most farmers were not pro-active in or did not prioritize improving FM skills. This related to farmer's identity not being strongly associated with FM, but rather with the physical and practical farming activities (e.g. milking cows), as illustrated in the following quotes of a farmer and farm management consultant:

'[Farming] was a job for me, and that was the banker's job, to do the budget, not mine.' [F7]

'All [the farmer] wants to do is drive his tractor or milk cows or dag sheep or something, fencing, he wants to do something outdoors, and when it comes to budgets that just makes him go to sleep.' [FMC5]

Some of the farmers interviewed also believed that if they get their production management right, this will ensure their farm is profitable. The following farmer quote illustrates these points:

Part of our theory is if I get the basics right, so if I feed my cows well and I'm very efficient how I use my grass and my cows are healthy and all those things, my finances should almost look after themselves. So we focus a lot on the system of the farm rather than targeting certain financial outcomes.' [F2]

Improving skills in FM was not a priority for many of the farmers in the study. Advisors expressed frustration with farmers for lacking interest in FM practices. The formal tools advisors suggested farmers use for FM decision-making, were not considered particularly useful by farmers. Due to the uncertainty of seasonal dynamics and the impact of this on finances, tools like budgets completed at the start of a season needed to be adjusted through the year. A farmer explains that the variability in seasons negatively impacts the usefulness of making and doing budgets:

'I don't personally do a budget [...] the problem I find with budgets is, the seasons are also variable and quite different.' [F11]

Even though the farmers' demand for FM advice is generally low, the data highlights that some advisors are proactive and have strategies for expanding their services with FM advice, for example by asking farmers about finances in periods when the milk price is low. This led some farmers to reflect on their need for FM advice and sometimes resulted in them requesting help in this area. The following quote by a farm management consultant illustrates this:

I purposefully would ask them how's your financial budgeting going? Then that often would lead to a "well we don't know how to do it", or "we need some help there as well".' [FMC5]

The findings showed that even if there is demand for FM advice, the relationship may still be unsatisfactory. Most FM advisors took an expert role as opposed to a facilitator role. Several advisors interviewed attributed their expert role to farmers not being aware or trained to act as an equal partner in conversations about FM, lacking knowledge about FM and having a 'lack of ownership' of the issue:

'It's no use discussing [FM] with the farmers a lot of the time, as they don't understand the financial side [of farming].' [AC5]

'If [farmers] have a lack of ownership of the problem, it's almost impossible to affect change. [...] They might take on board suggestions and they might make some changes but they still don't necessarily get it, they don't understand how big the issue is.' [FMC4]

Advisors also indicated that farmers' limited understanding about FM made it difficult to tailor advice and services for farmers. This limited understanding also inhibited equal and facilitative conversations about FM. For example, advisors think farmers should actively monitor financial forecasts against actual financial performance to know when they need to introduce contingencies to ensure the business does not get into financial difficulty. As one banker explains:

'So [farmers] that had been budgeting cash flows for years, they know their business, they know basically what they need and when it occurs – what month of the year it occurs. [...] And with a loss, we can look at restructuring on to a different product, and providing enough cash flow to operate through the years – pay their bills, that sort of thing. For [farmers] who don't do any of that, we've got to go and try to manufacture what it might look like. And because they are not very sure themselves, they don't always get it right. [...] So sometimes what we end up providing them is not enough, or is at the wrong time.' [B9]

The effectiveness of the FM advisory relationship was also influenced by the capability of advisors to explain financial terms and information. Some advisors adapted their communication to farmers' language. However, some farmer interviewees indicated that advisors were not always able to communicate in a language they understood. This was demotivating for farmers as they did not get value from advisory encounters about FM and in some cases even perceived it a waste of time, as the following farmer quote illustrates:

'We used to sit through accountant meetings and it was like gobble di gook. We didn't understand what they were telling us. And we walked out and we would say what the hell was that all about? We didn't know what equity was. Wow that was a waste of an hour.' [F9]

The taboo topic of farm financial information

A taboo around farm financial information played a role in shaping farmer-advisor interactions about FM, as an advisor states:

'Talking about money is like talking about their sex life, you just don't do it.' [DairyNZ1]

In addition to farmers' identity not being strongly linked to FM practices, the taboo around farm financial information also related to farmers' low demand for FM advice. Whereas farmers talked openly with peers, advisors and industry actors about technical farming aspects (for example levels of production and grass growth), financial information was treated differently, for several reasons. The data suggests that farmers think that talking about finances could be perceived as being boastful. Farmers were furthermore reluctant to open up about their farm financial situation, particularly if they were going through financial hardship. The following quote from a farm management consultant illustrates this in an instance that the farm management consultant was asked by the banker to engage with the farmer:

I notice that too when I come in, especially for these assessment jobs, because I need to look at their bank statements and I need to look at their bills. Sometimes they've got a big long list of bills that they haven't paid and also how many bills have you got, those sorts of questions, and some people find that a bit uncomfortable.' [FMC5]

The sensitivity around the topic for some is also related to competitive issues, as other farmers in the region can be potential buyers of farm land. If potential buyers know about the farmer's financial situation, the selling farmer is disadvantaged. A farmer states the following about why he did not want to discuss the topic with certain people:

'My neighbour, either neighbour. Because technically they are the ones that maybe want to buy your farm if you'd ever want to sell. So if you say I'm in the shit, they are going to come along with not the best [proposal], but if they think if you're living good and if they think you're farming really really well, they will give you a top dollar.' [F8]

In particular, farmer's debt level was sensitive information and unlikely to be shared with peers. In contrast, farm working expenses or the cost of production were perceived to be less personal and sometimes shared with other farmers. In the words of a farmer:

With the other farmers you might talk about the [farm] working costs, costs of supplementary feed or you always talk about costs a bit. Day to day costs. But not the depth of your personal borrowings.' [F6].

In general, farmers indicated that the development of trust by farmers in advisors appears to be positively influenced by an advisor having an understanding of the dairy sector. Farmers expressed that they expect their advisors to understand the agricultural sector and farming, and the interviews with advisors corroborated this. For FM specifically, a degree of farmer's trust in the advisor was necessary because of the personal and sensitive character of financial information. Farmers trust the advisors they use to treat this information confidentially. Trust in the advisor was also identified to be important in building farmer loyalty to a FM advisor and maintaining a long term farmer-advisor relationship. The following quote from an accountant expresses this:

'The accountant knows all about your financial, personal things. So people have got to feel comfortable with you to know that information. So that's why you don't get [farmers] swapping accountants a lot.' [AC5]

For farm management consultants when they also began advising on finances, they reported that the trust in the relationship increased because of the personal and sensitive character of the information. A farm management consultant explains:

When you start to advise them in that financial space and they can see that the plans that are put in place are happening, that level of trust really builds. I don't know if

it's the right word but it's more intimate. Because there's a lot of personal stuff in there as well.' [FMC5]

The study highlights that the advisor's trust in the farmer is also important, because of the commercial interest the banker has in the relationship with the farmer. This trust is developed in the farmer when they are transparent in their communication and show competency in farm management, as a banker explains:

'That's part of the role of the bank to believe the farmer can actually do what the plan says. Particularly in challenging environments, you really have to understand okay well this is what you've done in the past, this is what you're saying you're going to do in the future, is it realistic?' [B6]

DISCUSSION AND CONCLUSION

The objective of this research was to explore which advisors farmers go to for Financial Management advice and why they use these advisors and explore how farmer-advisor interactions about FM are shaped. The distinctive nature of the domain of financial management and how it influences the relationship between farmers and advisors has not previously been explored in the agricultural advisory literature, and this is where this paper contributes.

Farmers' principal network of advisors on FM constituted of bankers, accountants and for some farmers, farm management consultants also. Mostly, farmers initially had a relationship with their key advisors for reasons other than obtaining FM advice and for the advisors, providing FM advice was generally a secondary service as well. Of the key FM advisors, farmers most frequently engaged with banks and accountants, sometimes in light of statutory duties or mandatory advice connected to loans. Although less frequently, farmers more proactively engage with farm management consultants (if not commissioned by the bank). Advisors from DairyNZ and specialist financial advisors seem to be used least. Advisory interactions moreover vary concerning the mode of provision: between one advisor on one farmer (accountant, farm management consultant, banker and specialist financial advisor), one advisor on a group of farmers (advisors from DairyNZ) and in joint meetings, one farmer with all his or her FM advisors.

This study shows that there are unique dynamics shaping the nature of farmer-advisor interactions around FM that differ from advice on other topics, for example sustainable land use (e.g. Ingram, 2008, Proctor *et al.*, 2012, Sutherland *et al.*, 2013). While some dynamics are similar, such as differences between farmers and advisors as regards views on the topic of advice, FM advice appears to be distinct in terms of the sensitivity of the topic and the dynamics in farmer-advisor interactions that come with this sensitivity. Furthermore, this study reflects on the diversity of interactions between farmers and their FM advisors. The main dynamics shaping advisory interactions on FM, and their theoretical and practical implications are discussed in sections 5.1 to 5.3. Section 5.4 provides some policy implications. Section 5.5 reflects on limitations and provides areas for further research.

A mismatch between expectations, attitudes and practices around Financial Management

Most farmers initially had a relationship with the advisors portrayed in this study for reasons other than FM advice which suggests that farmers have a passive attitude towards obtaining FM advice. This passive attitude and FM not being central to farmer's identity compared to more technical farming activities, reflects findings from earlier studies (e.g. Jakobsen, 2017, Burton *et al.*, 2008). The passive attitude may influence the effectiveness of farmer-advisor interactions and is likely to contribute to a dissonance between demand and supply.

As earlier studies have found as well, there was a dissonance between farmers and advisors (Halabi and Carroll, 2015, Halabi et al., 2010, Jakobsen, 2017, Burton et al., 2008). Mismatches related to the lack of understanding of and importance that farmers put on FM in measuring the farm's success and their limited usage of budgets and other tools for financial decision-making. Farmers' limited use of advice and formal tools for FM decision-making did not only originate from a lack of understanding about these formal tools, but also from farmers not finding them particularly useful (also observed by Halabi and Carroll (2015), Halabi et al. (2010)).

The mismatch was moreover underpinned by advisors and their organisations having a normative model of "farmers' FM behaviour". Farmers' passive attitude to procuring FM advice led to frustration among advisors. This dissonance between what farmers do and what advisors think they should do has also been identified in other farmer advisory settings (e.g. Vrain and Lovett, 2016, Höckert and Ljung, 2013). As also indicated by Ingram (2008) in different advisory settings, farmers tended to be passive in the relationship with advisors. According to advisors, farmers' passive attitude led to insufficient development capacity to enable a productive advisory relationship. As other authors have found, the effectiveness of interactions also depended on the skills of advisors to develop the right language, which was often too technical from the farmer's perspective (Halabi and Carroll, 2015, Halabi *et al.*, 2010).

These dynamics create interactions unlikely to be conducive for learning about FM. One of the challenges is farmers' FM approach contrasting with FM advisors' approach, and acknowledgement of the usefulness of each other's approach is sometimes lacking. Furthermore, the sensitivity of the topic in combination with this mismatch between farmers and advisors, limits interactions and thus potential learning about FM.

The sensitivity around finances limits productive advisory interactions about FM and highlights the importance of trust

Farmers' passive attitude towards FM and obtaining FM advice was fuelled in part by the sensitivity around the topic of finances. The sensitivity around FM has not been reported for other more technical production specific topics. Farmers' interactions about FM with peers and others were limited. This finding reflects earlier findings on farmers' reluctance to share their data in relation to sensitive issues (such as nutrient management) in a contested regulatory environment (Klerkx and Jansen, 2010). Farmers were more likely to open up in one-on-one encounters with trusted advisors.

The role of trust differed for the different FM advisors and their interactions with farmers. A degree of interpersonal trust in the advisor was necessary before the advisor was used for

FM advice, which was also found in other advisory studies with farmers (Fisher, 2013, Sutherland et al., 2013). Interpersonal trust was particularly important in relationships between farmers and FM advisors that are not linked to loans or compliance and in instances that farmers engage with FM advisors voluntarily and proactively, in particular farm management consultants. For farm management consultants, a high level of interpersonal trust in the advisor is necessary before the advisor is used for FM advice. The inclusion of FM advice in the interaction contributed to trust being enhanced and the relationship becoming stronger, a phenomenon also found by Tan et al. (2014). The importance of trust for procuring FM advice meant long-term advisor-farmer relationships were a prerequisite for farmers seeking FM advice from their farm consultant. While farm consultants who are not always specialised FM professionals can become trusted advisors on FM over time, on the contrary, accountants, who deal with farm financial information in their daily work, are not automatically trusted. Different from Gooderham et al. (2004) and Carey and Tanewski (2016), accountants' proven competency in statutory services to farmers was not a guarantee for farmers to trust and use their accountant for FM advice, also. The farmer's experience with the accountant's historical focus in providing these services limited farmers' tendency to use the accountants for FM advice. An implication of these findings is that FM advisors from different professions need to build trust in different ways, as farmers seem to base their trust in these advisors on different grounds. Farm management consultants build trust in a similar way as earlier reported for other agricultural and SME advisors, as the relationship with a farmer develops over time (Fisher, 2013, Berry et al., 2006, Vegholm, 2011). However, this research suggests this does not suffice for accountants. For accountants to expand their FM advisory services, it seems important to develop strategies in order to convince farmers about them being useful.

Additionally, there is also an element of 'professional' trust, which seems to go beyond 'organisational trust' but reflects the wider profession. Both bankers and accountants have a particular professional standing and integrity associated with a surety of confidentiality in dealing with client's financial information. This 'trust' influenced the interactions between farmers and these advisors. In some instances, for advisors who had full access to the farmer's financial information, professional trust without interpersonal trust was sufficient for farmers to seek advice.

Another notable finding from this study is the main direction in which interpersonal trust is exercised. Even though studies in the agricultural advisory literature acknowledge the importance of mutual trust in the client-advisor relationship (Ingram, 2008), the emphasis is usually on the importance of the client's trust in the advisor (Fisher, 2013, Kemp et al., 2000). This study emphasises that advisors' trust in the farmer is also important, as consistent with other scholars (Ingram, 2008, Fisher, 2013, Kemp et al., 2000), in particular for the banker-farmer relationship. The banker's trust in the farmer's competence was a criterion influencing the banker's decision to provide a loan to a farmer and with that, also to become a potential FM advisor.

Reflections on embedded advisors

The nature of bias in embedded advice

Considering bankers and accountants as embedded advisors, this study can reflect on concerns that have been expressed about embedded advisors being focused on the sale of products through advice, which may not necessarily be in the farmers' best interest (Sutherland et al., 2013, Wolf, 1995). Farmers' success is not only in the farmer's but also in the bank's interest and bankers were not found to be perversely incentivised to try and sell products through their advice, that are not in the client's interest. However, scale, in terms of the level of borrowing, influenced the opportunities farmers had to obtain FM advice from banks and indirectly also from accountants and farm management consultants. In terms of these opportunities, large scale borrowers were privileged over small scale borrowers. This is in line with other studies that have reported on access to advice being more difficult for small scale farmers (Labarthe and Laurent, 2013, Prager et al., 2016, Laurent et al., 2006). Hence, this shows that beyond possible bias of embedded advisors in terms of providing advice that promotes a product or non-advisory service, a product linked to embedded advisors (a loan in this case), introduces a bias in form of excluding farmers from advice, a risk noted earlier by Klerkx et al. (2006).

The study moreover provides insights into the distinction between embedded and specialised advisors. The concept of embedded advisors is shown to be useful, as advice can be potentially biased due to advisors' commercial interests. However, it highlights that simply differentiating between embedded and specialised advisors does not capture the richness and diversity of advisors and services provided around FM. This is for example illustrated by added complexity of the banker having a financial stake in the client's business, in addition to the potential commercial bias of wanting to provide a product (e.g. a loan).

The authoritative dimension in advisory encounters around FM

Beyond these inclusion and exclusion effects, this study highlights the dimension of bankers' authority over the farmer, influencing the content and form of farmer-advisor interactions. The banker and farmer have a connection through the farmer's loan with the bank which provides the bank with the authority to put certain requirements (e.g. to provide budgets or financial reporting) on the farmer, which we termed "binding advice". Moreover, in instances that a farmer is in financial difficulty and represents a potential risk for the bank, the banker had a dominant position in interactions, because of the ultimate power to stop funding a farmer. Because of the power imbalance in interactions under these circumstances, encounters were most similar to what Ingram (2008, p. 409) has defined as "expert knowledge exchange encounters". However, authoritative encounters are different from the expert encounter, as disregarding a bank's advice can have severe consequences, leaving the farmer with little options other than to implement the advice. In instances that the bank commissioned a farm management consultant to "sort out" a farmer, "binding advice" was also provided by farm management consultants in "authoritative encounters" between farmers and farm management consultants.

As with the other non-facilitative encounters distinguished by Ingram (2008), an authoritative encounter is unlikely to be optimal for learning to occur. This is because the farmer and

advisor are not equal and the partners in interaction do not challenge each other's views, but the farmer only changes behaviour to comply with the bank's demands, but is not necessarily motivated to learn about FM or improve FM skills.

Policy implications

The survival of dairy farms partially depends on adequate financial management. Given the public goods dairy farms provided (food security, local employment, but also environmental services and territorial development) the need of supporting farmers with FM could be an issue for public support, in New Zealand and elsewhere and also extends to other sectors than dairy. This research highlighted that mismatches between demand and supply are an important issue, potentially blocking the effectiveness of support provided to farmers in FM which points to the need for coordination between demand and supply. In particular, small borrowers – whom are likely to also be small scale farmers – are disadvantaged. In countries where the government's role in providing agricultural extension is limited, it could nonetheless take up an intermediary role in connecting demand and supply for FM advice (following (Klerkx and Leeuwis, 2008, Klerkx and Jansen, 2010)) or creating opportunities for farmers who have limited access to FM advice to counteract exclusion (following Labarthe and Laurent, 2013). Such intermediaries could for example be producer-funded organisations, but can also be temporary organizations that stimulate an advisory market until it has become mature.

Moreover, for FM advice, optimal advice provision is complicated due to the sensitivity of the topic. One-on-one mode of advice provision appears most likely to be effective and group based advice is likely only to be effective if a high level of trust among participants exists. Policy could be aimed at creating awareness about the topic and also fostering a cultural change to make these topics more debatable (following Klerkx and Jansen, 2010). Developers of FM advice could also consider other modes of advice provision, in which the farmer's anonymity is preserved, e.g. online discussion groups.

Limitations and areas for further research

This study explored the dynamics shaping the nature of farmer-advisor interactions about FM, which in many respects resemble advisory interactions on other topics (e.g. sustainable land use and environmental management), but also have particularities related to the sensitivity of the topic, as well as the authoritative dimension in the case of embedded advice.

A limitation of this study is that farmer participants were selected on the basis of their role in financial decision-making, their financial stake in the farm and that dairy farming was their main business. The number of farmers was limited and as such it is likely that not all types of farmers were included. Further diversity in terms of advisory interactions could exist in terms of stage of the farm family life cycle, scale, educational background, system type, levels of risk and so-on, and how this affects their decision making on FM. As such, it is likely that not all interaction dynamics around FM in the New Zealand dairy sector are captured. It was also outside the scope of this research to explore cause-effect relationships between particular farmers' characteristics and interaction dynamics between farmers and different actors for FM.

Given these limitations, and since the results suggest a connection between the size of a farmer's borrowings and their interaction dynamics with bankers, more research is necessary. Future research could look more deeply at the nature of farmers' FM decision-making, and study (cause-effect) relationships between farms' and farmers' characteristics (e.g. age, farm size, value of loans, educational background) and their interaction dynamics with different FM advisors. Further insights into this area could also be gained through field observations of the actual interactions between farmers and their FM advisors and the content of such advice and provide deeper insights on complementarities, contradictions and gaps concerning the content of FM advice between the different FM advisors.

Despite these limitations, the study yielded interesting insights, such as those on authoritative encounters, and future research could explore whether they are more widely prevalent and occur between farmers and other advisors than bankers and around other topics of advice than FM. Also, while many studies have focused on trust of the farmer in the advisor, this research highlighted that conversely also advisors' trust in the farmer in farmer-advisor interactions is important, especially in the banker-farmer relationship. Future research could study the dimensions of advisors' trust in the farmer and its implications on the effectiveness of advisory encounters in more depth, both for FM and also other topics of advice.

REFERENCES

- Ardley, B., Moss, P. & Taylor, N. 2016. Strategies Snarks and stories: SME owner manager perceptions of business advisers. *Journal of Research in Marketing and Entrepreneurship*, 18 (2), 211-231. Available: DOI doi:10.1108/JRME-07-2015-0037
- Benard, M., Schuitmaker, T. & Cock Buning, T. 2014. Scientists and Dutch Pig Farmers in Dialogue About Tail Biting: Unravelling the Mechanism of Multi-stakeholder Learning. *Journal of Agricultural & Environmental Ethics*, 27 (3), 431-452. Available: DOI 10.1007/s10806-013-9471-x
- Bergea, H. L., Martin, C. & Sahlstrom, F. 2008. "I Don't Know What You're Looking for": Professional Vision in Swedish Agricultural Extension on Nature Conservation Management. *The Journal of Agricultural Education and Extension*, 14 (4), 329 345.
- Berry, A. J., Sweeting, R. & Goto, J. 2006. The effect of business advisers on the performance of SMEs. *Journal of Small Business and Enterprise Development*, 13 (1), 33-47. Available: DOI doi:10.1108/14626000610645298
- Boehlje, M. D. & Eidman, V. R. 1984. Farm Management, New York, John Wiley & Sons, Inc. Boeije, H. 2010. Analysis in Qualitative Research, London, SAGE Publications Ltd.
- Brinkmann, S. & Kvale, S. 2015. *InterViews Learning the Craft of Qualitative Research Interviewing,* Thousand Oaks, SAGE Publications, Inc.
- Burton, R. J. F. 2004. Seeing Through the 'Good Farmer's' Eyes: Towards Developing an Understanding of the Social Symbolic Value of 'Productivist' Behaviour. *Sociologia Ruralis*, 44 (2), 195-215. Available: DOI 10.1111/j.1467-9523.2004.00270.x
- Burton, R. J. F., Kuczera, C. & Schwarz, G. 2008. Exploring Farmers' Cultural Resistance to Voluntary Agri-environmental Schemes. *Sociologia Ruralis*, 48 (1), 16-37. Available: DOI 10.1111/j.1467-9523.2008.00452.x
- Byrne, A., Kelly, T. & Ruane, D. 2003. Business Management Practices on Irish Dairy Farms
 The Role Played by Extension. *Journal of International Agricultural and Extension Education*, 10 (3), 5 11.
- Carey, P. & Tanewski, G. 2016. The provision of business advice to SMEs by external accountants. *Managerial Auditing Journal*, 31 (3), 290-313. Available: DOI doi:10.1108/MAJ-12-2014-1131

- Cherry, M. 2016. Accounting for Trust: A Conceptual Model for the Determinants of Trust in the Australian Public Accountant SME Client Relationship. *Australasian Accounting Business & Finance Journal*, 10 (2), 3-22.
- Creamer, L. K., Pearce, L. E., Hill, J. P. & Boland, M. J. 2002. Milk and Dairy Products in the 21st Century. *Journal of Agricultural and Food Chemistry*, 50 (25), 7187-7193. Available: DOI 10.1021/jf020711b
- DairyNZ. 2013. Making dairy farming work for everyone Strategy for Sustainable Dairy Farming 2013-2020. Hamilton: DairyNZ.
- DairyNZ. 2016. Annual Report 2015/16. Hamilton: DairyNZ.
- DairyNZ. 2018. DairyNZ Economic Survey 2016-17. Hamilton: DairyNZ.
- Dyer, L. M. & Ross, C. A. 2007. Advising the Small Business Client. *International Small Business Journal*, 25 (2), 130-151. Available: DOI 10.1177/0266242607074517
- Farley, T. A. & Ellinger, P. N. 2007. Factors influencing borrowers' preferences for lenders. *Agricultural Finance Review*, 67 (2), 211-223. Available: DOI doi:10.1108/00214660780001205
- Faure, G., Desjeux, Y. & Gasselin, P. 2012. New Challenges in Agricultural Advisory Services from a Research Perspective: A Literature Review, Synthesis and Research Agenda. The Journal of Agricultural Education and Extension, 18 (5), 461-492. Available: DOI 10.1080/1389224x.2012.707063
- Fisher, R. 2013. 'A gentleman's handshake': The role of social capital and trust in transforming information into usable knowledge. *Journal of Rural Studies*, 31, 13-22. Available: DOI http://dx.doi.org/10.1016/j.jrurstud.2013.02.006
- Garforth, C. 2015. Livestock Keepers' Reasons for Doing and Not Doing Things Which Governments, Vets and Scientists Would Like Them to Do. *Zoonoses & Public Health*, 62, 29-38. Available: DOI 10.1111/zph.12189
- Gill, A. S., Flaschner, A. B. & Shachar, M. 2006. Factors that affect the trust of business clients in their banks. *International Journal of Bank Marketing*, 24 (6), 384-405. Available: DOI doi:10.1108/02652320610701726
- Gooderham, P. N., Tobiassen, A., Døving, E. & Nordhaug, O. 2004. Accountants as Sources of Business Advice for Small Firms. *International Small Business Journal*, 22 (1), 5-22. Available: DOI 10.1177/0266242604039478
- Halabi, A. K., Barrett, R. & Dyt, R. 2010. Understanding financial information used to assess small firm performance: An Australian qualitative study. *Qualitative Research in Accounting & Management*, 7 (2), 163-179.
- Halabi, A. K. & Carroll, B. 2015. Increasing the usefulness of farm financial information and management: A qualitative study from the accountant's perspective. *Qualitative Research in Organizations and Management: An International Journal*, 10 (3), 227-242. Available: DOI doi:10.1108/QROM-07-2014-1240
- Hansen, B. G. 2015. Financial extension that challenges farmers' thinking in discussion clubs helps farmers improve their problem solving abilities. *Agricultural Systems*, 132 (0), 85-92. Available: DOI http://dx.doi.org/10.1016/j.agsy.2014.09.009
- Hawke, A. & Heffernan, T. 2006. Interpersonal liking in lender-customer relationships in the Australian banking sector. *International Journal of Bank Marketing*, 24 (3), 140-157. Available: DOI doi:10.1108/02652320610659003
- Hercus, J. 1991. The commercialization of government agricultural extension services in New Zealand. *In:* Rivera, W. M. & Gustafson, D. (eds.) *Agricultural extension: worldwide institutional evolution and forces for change.* Amsterdam: Elsevier.
- Höckert, J. & Ljung, M. 2013. Advisory Encounters towards a Sustainable Farm Development—Interaction between Systems and Shared Lifeworlds. *The Journal of Agricultural Education and Extension*, 19 (3), 291-309. Available: DOI 10.1080/1389224x.2013.782178

- Howorth, C. & Moro, A. 2006. Trust within Entrepreneur Bank Relationships: Insights from Italy. *Entrepreneurship Theory and Practice*, 30 (4), 495-517. Available: DOI 10.1111/j.1540-6520.2006.00132.x
- Ingram, J. 2008. Agronomist–farmer knowledge encounters: an analysis of knowledge exchange in the context of best management practices in England. *Agriculture and Human Values*, 25 (3), 405-418. Available: DOI 10.1007/s10460-008-9134-0
- Inland Revenue. 2004. *Business Income Tax* [Online]. Inland Revenue. Available: http://www.ird.govt.nz/business-income-tax/paying-tax/ [Accessed 2017].
- Jackson-Smith, D., Trechter, D. & Splett, N. 2004. The Contribution of Financial Management Training and Knowledge to Dairy Farm Financial Performance. *Applied Economic Perspectives and Policy*, 26 (1), 132-147. Available: DOI 10.1111/j.1467-9353.2003.00166.x
- Jakobsen, M. 2017. Consequences of intensive use of non-financial performance measures in Danish family farm holdings. *Qualitative Research in Accounting & Management*, 14 (2), 137-156. Available: DOI doi:10.1108/QRAM-04-2016-0035
- Jansen, J., Steuten, C. D. M., Renes, R. J., Aarts, N. & Lam, T. J. G. M. 2010. Debunking the myth of the hard-to-reach farmer: Effective communication on udder health. *Journal of Dairy Science*, 93 (3), 1296-1306. Available: DOI http://dx.doi.org/10.3168/jds.2009-2794
- Kautonen, T., Zolin, R., Kuckertz, A. & Viljamaa, A. 2010. Ties that blind? How strong ties affect small business owner-managers' perceived trustworthiness of their advisors. Entrepreneurship & Regional Development, 22 (2), 189-209. Available: DOI 10.1080/08985620903168265
- Kemp, E. A., Williams, P., Gray, D. I., Gardner, J. & Kuiper, D. 2000. Rapport building in farm management consultancy: A case study. *Journal of Applied Systems Studies*, 3 (1), 194-217.
- Kidd, A. D., Lamers, J. P. A., Ficarelli, P. P. & Hoffmann, V. 2000. Privatising agricultural extension: caveat emptor. *Journal of Rural Studies*, 16 (1), 95-102. Available: DOI https://doi.org/10.1016/S0743-0167(99)00040-6
- Kilelu, C. W., Klerkx, L. & Leeuwis, C. 2014. How Dynamics of Learning are Linked to Innovation Support Services: Insights from a Smallholder Commercialization Project in Kenya. *The Journal of Agricultural Education and Extension*, 20 (2), 213-232. Available: DOI 10.1080/1389224x.2013.823876
- Klerkx, L., de Grip, K. & Leeuwis, C. 2006. Hands off but Strings Attached: The Contradictions of Policy-induced Demand-driven Agricultural Extension. *Agriculture and Human Values*, 23 (2), 189-204. Available: DOI 10.1007/s10460-005-6106-5
- Klerkx, L. & Jansen, J. 2010. Building knowledge systems for sustainable agriculture: supporting private advisors to adequately address sustainable farm management in regular service contacts. *International Journal of Agricultural Sustainability* 8(3), 148-163.
- Klerkx, L. & Leeuwis, C. 2008. Matching demand and supply in the agricultural knowledge infrastructure: Experiences with innovation intermediaries. *Food Policy*, 33 (3), 260-276. Available: DOI https://doi.org/10.1016/j.foodpol.2007.10.001
- Klerkx, L. & Proctor, A. 2013. Beyond fragmentation and disconnect: Networks for knowledge exchange in the English land management advisory system. *Land Use Policy*, 30 (1), 13-24. Available: DOI 10.1016/j.landusepol.2012.02.003
- Klyver, K. & Hindle, K. 2010. The role of 'professional advisors on financial matters' in entrepreneurial networks. *Journal of enterprising culture*, 18 (01), 1-27.
- Knierim, A., Labarthe, P., Laurent, C., Prager, K., Kania, J., Madureira, L. & Ndah, T. H. 2017. Pluralism of agricultural advisory service providers Facts and insights from Europe. *Journal of Rural Studies*, 55, 45-58. Available: DOI https://doi.org/10.1016/j.jrurstud.2017.07.018

- Knudson, W., Wysocki, A., Champagne, J. & Peterson, H. C. 2004. Entrepreneurship and Innovation in the Agri-Food System. *American Journal of Agricultural Economics*, 86 (5), 1330-1336. Available: DOI doi:10.1111/j.0002-9092.2004.00685.x
- Labarthe, P. & Laurent, C. 2013. Privatization of agricultural extension services in the EU: Towards a lack of adequate knowledge for small-scale farms? *Food Policy*, 38, 240-252. Available: DOI https://doi.org/10.1016/j.foodpol.2012.10.005
- Landini, F. 2016. How to be a good rural extensionist. Reflections and contributions of Argentine practitioners. *Journal of Rural Studies*, 43, 193-202. Available: DOI 10.1016/j.jrurstud.2015.11.014
- Lans, T., Seuneke, P. & Klerkx, L. 2013. Agricultural Entrepreneurship. In: Carayannis, E. G. (ed.) Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship. New York, NY: Springer New York. Available: DOI 10.1007/978-1-4614-3858-8_496.
- Laurent, C., Cerf, M. & Labarthe, P. 2006. Agricultural Extension Services and Market Regulation: Learning from a Comparison of Six EU Countries. *The Journal of Agricultural Education and Extension*, 12 (1), 5-16. Available: DOI 10.1080/13892240600740787
- LIC Statistics & DairyNZ. 2018. New Zealand Dairy Statistics 2016 / 17. Hamilton: DairyNZ. McDougall, S., Compton, C. W. R. & Botha, N. 2017. Factors influencing antimicrobial prescribing by veterinarians and usage by dairy farmers in New Zealand. New Zealand Veterinary Journal, 65 (2), 84-92. Available: DOI 10.1080/00480169.2016.1246214
- McElwee, G. 2008. A taxonomy of entrepreneurial farmers. *International Journal of Entrepreneurship and Small Business*, 6 (3), 465-478.
- Merriam, S. B. 1998. *Qualitative Research and Case Study Applications in Education*, San Francisco, Jossey-Bass.
- Moreno-Perez, O. & Lobley, M. 2014. The morphology of multiple household family farms. Sociologia Ruralis, 55 (2), 125-149. Available: DOI http://dx.doi.org/10.1111/soru.12062
- Moro, A. & Fink, M. 2013. Loan managers' trust and credit access for SMEs. *Journal of Banking & Finance*, 37 (3), 927-936. Available: DOI http://dx.doi.org/10.1016/j.jbankfin.2012.10.023
- Nikolova, N., Reihlen, M. & Schlapfner, J.-F. 2009. Client–consultant interaction: Capturing social practices of professional service production. *Scandinavian Journal of Management*, 25 (3), 289-298. Available: DOI http://doi.org/10.1016/j.scaman.2009.05.004
- Nuthall, P. L. 2001. Managerial ability A review of its basis and potential improvement using psychological concepts. *Agricultural Economics*, 24 (3), 247-262. Available: DOI 10.1016/s0169-5150(00)00069-4
- Nuthall, P. L. 2006. Determining the important management skill competencies: The case of family farm business in New Zealand. *Agricultural Systems*, 88 (2–3), 429-450. Available: DOI http://dx.doi.org/10.1016/j.agsv.2005.06.022
- Nuthall, P. L. 2010. Farm business management: the human factor, Wallingford, Oxfordshire, UK; Cambridge, MA, CAB International.
- Nuthall, P. L. & Old, K. M. 2014. Report on a Succession and Governance Survey of a Random Stratified Sample of NZ Farms. Available: http://handle.net/10182/6261.
- Nuthall, P. L. & Old, K. M. 2017. Will future land based food and fibre production be in family or corporate hands? An analysis of farm land ownership and governance considering farmer characteristics as choice drivers. The New Zealand case. *Land Use Policy*, 63, 98-110. Available: DOI https://doi.org/10.1016/j.landusepol.2017.01.018
- O'Leary, Z. 2004. The essential guide to doing your research project, London, SAGE Publications Ltd.
- OECD. 2005. OECD SME and Entrepreneurship Outlook: 2005 Edition. Paris: OECD.

- Oreszczyn, S., Lane, A. & Carr, S. 2010. The role of networks of practice and webs of influencers on farmers' engagement with and learning about agricultural innovations. *Journal of Rural Studies*, 26 (4), 404-417. Available: DOI http://dx.doi.org/10.1016/j.jrurstud.2010.03.003
- Pato, M. L. & Teixeira, A. A. C. 2016. Twenty Years of Rural Entrepreneurship: A Bibliometric Survey. *Sociologia Ruralis*, 56 (1), 3-28. Available: DOI 10.1111/soru.12058
- Phillipson, J., Gorton, M., Raley, M. & Moxey, A. 2004. Treating farms as firms? The evolution of farm business support from productionist to entrepreneurial models. *Environment and Planning C*, 22 (1), 31-54.
- Phillipson, J., Proctor, A., Emery, S. B. & Lowe, P. 2016. Performing inter-professional expertise in rural advisory networks. *Land Use Policy*, 54, 321-330. Available: DOI http://doi.org/10.1016/j.landusepol.2016.02.018
- Prager, K., Labarthe, P., Caggiano, M. & Lorenzo-Arribas, A. 2016. How does commercialisation impact on the provision of farm advisory services? Evidence from Belgium, Italy, Ireland and the UK. *Land Use Policy*, 52, 329-344. Available: DOI http://dx.doi.org/10.1016/j.landusepol.2015.12.024
- Pritchard, B., Burch, D. & Lawrence, G. 2007. Neither 'family' nor 'corporate' farming: Australian tomato growers as farm family entrepreneurs. *Journal of Rural Studies*, 23 (1), 75-87. Available: DOI https://doi.org/10.1016/j.jrurstud.2006.04.001
- Proctor, A., Donaldson, A., Phillipson, J. & Lowe, P. 2012. Field expertise in rural land management. *Environment and Planning-Part A*, 44 (7), 1696.
- Pyysiäinen, J., Anderson, A., McElwee, G. & Vesala, K. 2006. Developing the entrepreneurial skills of farmers: some myths explored. *International Journal of Entrepreneurial Behavior & Research*, 12 (1), 21-39. Available: DOI doi:10.1108/13552550610644463
- Raich, M. 2008. Basic values and objectives regarding money: Implications for the management of customer relationships. *International Journal of Bank Marketing*, 26 (1), 25-41. Available: DOI doi:10.1108/02652320810847093
- Reserve Bank of New Zealand Te Putea Matua. 2016. Financial Stability Report. Available: https://rbnz.govt.nz/-
 /media/ReserveBank/Files/Publications/Financial%20stability%20reports/2016/fsr-nov2016.pdf.
- Seuneke, P., Lans, T. & Wiskerke, J. S. C. 2013. Moving beyond entrepreneurial skills: Key factors driving entrepreneurial learning in multifunctional agriculture. *Journal of Rural Studies*, 32, 208-219. Available: DOI http://dx.doi.org/10.1016/j.jrurstud.2013.06.001
- Shadbolt, N., Apparao, D., Hunter, S., Bicknell, K. & Dooley, A. 2017. Scenario analysis to determine possible, plausible futures for the New Zealand dairy industry. *New Zealand Journal of Agricultural Research*, 60 (3), 349-361. Available: DOI 10.1080/00288233.2017.1351377
- Shadbolt, N. & Bywater, T. 2005. The dimensions of management. *In:* Shadbolt, N. & Martin, S. (eds.) *Farm management in New Zealand*. Melbourne: Oxford University Press.
- Shadbolt, N. & Gardner, J. 2005. Financial management. *In:* Shadbolt, N. & Martin, S. (eds.) *Farm management in New Zealand.* Melbourne: Oxford University Press.
- Shadbolt, N. & Martin, S. 2005. Farm Management in New Zealand, South Melbourne, Oxford University Press.
- Shadbolt, N. M. & Apparao, D. 2016. Factors Influencing the Dairy Trade from New Zealand. *International Food and Agribusiness Management Review*, 19 (B), 241 255.
- Shadbolt, N. M. & Olubode-Awosola, F. 2016. Resilience, risk and entrepreneurship. *International Food and Agribusiness Management Review*, 19 (2), 33 52.

- Stone, G. 2015. Power, dependence and frustration: A study of power in Australian accountants' advisory relationship with small business. *Meditari Accountancy Research*, 23 (3), 250-275. Available: DOI doi:10.1108/MEDAR-05-2014-0042
- Stone, G. & Lightbody, M. 2012. The Nature and Significance of Listening Skills in Accounting Practice. *Accounting Education*, 21 (4), 363-384. Available: DOI 10.1080/09639284.2011.617062
- Sutherland, L.-A., Mills, J., Ingram, J., Burton, R. J. F., Dwyer, J. & Blackstock, K. 2013. Considering the source: Commercialisation and trust in agri-environmental information and advisory services in England. *Journal of Environmental Management*, 118, 96-105. Available: DOI http://dx.doi.org/10.1016/j.jenvman.2012.12.020
- Swinkels, J. M., Hilkens, A., Zoche-Golob, V., Krömker, V., Buddiger, M., Jansen, J. & Lam, T. J. G. M. 2015. Social influences on the duration of antibiotic treatment of clinical mastitis in dairy cows. *Journal of Dairy Science*, 98 (4), 2369-2380. Available: DOI http://doi.org/10.3168/jds.2014-8488
- Tan, L. M., Braithwaite, V. & Reinhart, M. 2014. Why do small business taxpayers stay with their practitioners? Trust, competence and aggressive advice. *International Small Business Journal*, 34 (3), 329-344. Available: DOI 10.1177/0266242614555556
- Vegholm, F. 2011. Relationship marketing and the management of corporate image in the bank-SME relationship. *Management Research Review*, 34 (3), 325-336. Available: DOI doi:10.1108/01409171111116330
- Vrain, E. & Lovett, A. 2016. The roles of farm advisors in the uptake of measures for the mitigation of diffuse water pollution. *Land Use Policy*, 54, 413-422. Available: DOI http://dx.doi.org/10.1016/j.landusepol.2016.03.007
- Warren, C. R., Burton, R., Buchanan, O. & Birnie, R. V. 2016. Limited adoption of short rotation coppice: The role of farmers' socio-cultural identity in influencing practice. *Journal of Rural Studies*, 45 (Supplement C), 175-183. Available: DOI https://doi.org/10.1016/j.jrurstud.2016.03.017
- Wolf, S. A. 1995. Cropping systems and conservation policy: The roles of agrichemical dealers and independent crop consultant. *Journal of Soil and Water Conservation*, 50 (3), 121-141.

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STATEMENT OF CONTRIBUTION DOCTORATE WITH PUBLICATIONS/MANUSCRIPTS

We, the candidate and the candidate's Primary Supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the candidate's contribution as indicated below in the Statement of Originality.

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CHAPTER 4 ADVISOR-ADVISOR INTERACTIONS

This chapter is in paper-format and will be submitted for publication as a scientific paper to the Journal of Agricultural Education and Extension. The chapter constitutes the second results chapter and discusses the nature of interactions between different types of agricultural advisors around a mutual client.

Interactions of advisors around a mutual client: Co-operative and competitive strategies of financial management advisors in the New Zealand dairy sector

ABSTRACT

Purpose: This paper explores how interactions between dairy farmers' Financial Management (FM) advisors are shaped.

Design and methodology: Semi-structured interviews were held with farmers and the mix of advisors from whom they gain FM advice: bankers, accountants, farm management consultants (FMCs), specialist financial advisors (SFAs) and industry-funded advisors.

Findings: Most interactions between FM advisors occurred around a mutual client and were mostly cooperative in nature. The strategies discerned are maintaining relationships for knowledge exchange intermediation, jointly developing strategies and aligning advice for a mutual client, referrals and negotiation with the banker on behalf of the farmer. Lastly, only one example of competition was found.

Theoretical Implications: This study highlights unique dynamics in interactions between FM advisors, shaping interactions between advisors. Limited evidence of "economic competition" between advisors was found in which they try to capture a client fully for themselves, but advisors compete in terms of the content and focus of advice. Advisors' duty of care for farmer clients and motivation to preserve their professional integrity was found to shape advisor-advisor interactions. The study highlights that if one advisor has an authoritative relationship with a mutual client, such as that of a bank over farmers, other advisors around the client can act as an intermediary between this advisor and farmer (collaborative strategy), or as an advocate for the farmer in negotiations with the advisor who has authority (competitive strategy).

Practical Implications: In line with the view that the effectiveness of advice provisioning is enhanced when developed in an advisory team setting, it could be beneficial if this practice was more widely applied in the sector. Moreover, advisory networks around other topics of advice could also benefit from fostering an environment that enhances collaboration.

Originality: The extant body of work exploring advisor-advisor interactions is small. In particular, interactions between advisors from different professions that provide advice around a mutual client in a shared realm have not been researched. The topic of FM advice provides an interesting case as it involves different types of rural professionals.

Keywords: Financial Management, advisor interactions, advisor learning, advisory system

INTRODUCTION

Complex issues, like price volatility and changing societal demands in the contemporary agricultural system, pose challenges to different actors involved in farming (Creamer et al., 2002, Shadbolt et al., 2017). These issues are creating greater uncertainty and increasing variability in farm profitability (Shadbolt and Olubode-Awosola, 2016). In this context, it is argued that, in addition to technical production skills, business management skills including financial management (FM) skills (Shadbolt and Bywater, 2005), are essential to the management of a farm (Lans et al., 2013, Nuthall, 2006, Seuneke et al., 2013, Pyysiäinen et al.,

2006, McElwee, 2008). Farmers are shown to be supported and influenced by a wide group of actors in coping with these challenges (Oreszczyn et al., 2010) and agricultural advisors are part of this group. Not only do farmers need to adapt and improve their skills, but it is also argued that farmers' advisors need to constantly innovate in order to cope with the increasing pressures and resulting uncertainty in the contemporary agricultural system to be effective in supporting farmers (Phillipson et al., 2016, Klerkx and Proctor, 2013, Proctor et al., 2012, Nettle et al., 2018).

Interactions between different types of rural professionals around a mutual client have been suggested to be increasingly prevalent and necessary to deal with the increasing complexity of farm management (Hodge, 2007, Phillipson *et al.*, 2016). It is suggested that interactions between advisors from different professions can enhance innovation (Klerkx and Proctor, 2013) and improve the quality of advisors' services to clients (Su and Dou, 2013). Advisoradvisor interactions are important for developing the advisors' technical subject knowledge (Klerkx and Proctor, 2013, Proctor *et al.*, 2011) and, moreover, to develop 'advisory techniques and interaction skills' (Klerkx and Proctor, 2013, pp. 13 - 14) and to improve services to meet clients' needs in solving new problems (Klerkx and Proctor, 2013, Su and Dou, 2013).

In the agricultural advisory literature, relatively little work has explored connections and interactions between different types of agricultural advisors. Previous studies have focused on the skills and strategies agricultural advisors use to interact and cooperate (Proctor *et al.*, 2012, Phillipson *et al.*, 2016, Compagnone and Simon, 2018) and strategies for developing and optimising their knowledge through inter-professional interactions (Klerkx and Proctor, 2013). These studies have explored interactions mainly between specific types of advisors: ecologists, land agents and veterinarians (Phillipson *et al.*, 2016, Klerkx and Proctor, 2013, Proctor *et al.*, 2012) and interactions between advisors from two different advisory organisations about the topic of pesticide use in a certain geographical area (Compagnone and Simon, 2018).

However, interactions between advisors from different professions that provide advice around a certain topic area for a mutual client have, to date, not been studied. In particular, advisor-advisor interactions around the topic of financial management (FM) advice have not been studied. It provides an interesting case as it involves different types of rural professionals (e.g. banks, accountants, specialised advisors, in a shared realm), and this is what this study aims to explore. The study was conducted in the New Zealand dairy sector, and the main research question was: how are interactions shaped between advisors around a mutual client that are associated with farmers' FM?

To focus the analysis, literature that investigates the interactions between agricultural advisors is reviewed in Section 2, followed by the method, results, discussion and conclusion sections.

LITERATURE REVIEW: THE NATURE OF INTERACTIONS BETWEEN AGRICULTURAL ADVISORS AROUND MUTUAL CLIENTS

Scholars have highlighted that, in relationships between agricultural advisors, both competition and cooperation can exist (Compagnone and Simon, 2018, Phillipson *et al.*, 2016). There is a fine line between complementarity and encroaching upon each other's territory (Klerkx and Proctor, 2013, Compagnone and Simon, 2018, Phillipson *et al.*, 2016, Proctor *et al.*, 2012). The concept of 'coopetition' has been used to denote the co-existence of cooperation and competition in interactions between agricultural advisors (Compagnone and Simon, 2018). For example, on the one hand, advisors may work together and, on the other hand they compete for funding. First a discussion of what the literature has reported related to cooperative strategies used by advisors and then a discussion about what is written relating to the nature of competition.

Cooperative strategies used by advisors

The networks and interactions between agricultural advisors are diverse in terms of whom they interact with and there is also variation in the nature of the interaction, the levels at which the interaction occurs and the reasons for the interaction.

Advisor-advisor interactions are often collegial, as opposed to having a formal hierarchy, as advisors interact across the boundaries of different organisations (Compagnone and Simon, 2018) and can include colleagues from the same or other professions (Klerkx and Proctor, 2013). They can, moreover, vary in the closeness of the relationship (Klerkx and Proctor, 2013). Interactions between advisors have been found to occur both on an interpersonal level (e.g. advisory joint meetings around a shared client) as well as at an organisational level (Proctor et al., 2012, Phillipson et al., 2016, Compagnone and Simon, 2018, Höckert et al., 2010, Klerkx and Proctor, 2013). The latter may include, for example, cooperation between extension organisations (Klerkx and Proctor, 2013, Höckert et al., 2010) and a public extension organisation cooperating with commercial organisations involved with advisory services (Compagnone and Simon, 2018). There are different reasons for cooperation and interaction between advisors. Advisors, for example, cooperate to coordinate service provision in situations where the advice from each party is complementary to solving the client's problem (Proctor et al., 2012). This is particularly important where the problem is complex and crosses several knowledge domains or requires a range of expertise (Proctor et al., 2012). Advisors also cooperate to keep abreast of developments in the subject matter field, to produce an informative bulletin, and to provide training and workshops for farmers (Proctor et al., 2012, Phillipson et al., 2016, Klerkx and Proctor, 2013, Compagnone and Simon, 2018).

Advisors employ different strategies in cooperating with other agricultural advisors from different professions. One strategy is that advisors establish networks with other advisors to exchange knowledge and share business opportunities (Phillipson *et al.*, 2016, p. 324). In these instances, the advisors are often proactive and have expertise in selecting with whom to cooperate (Phillipson *et al.*, 2016, Klerkx and Proctor, 2013). This may also mean that they avoid cooperation for more pragmatic reasons, including a reluctance to invest the necessary time in knowledge exchange and doubting the 'validity and legitimacy of the knowledge' of other advisors (Klerkx and Proctor, 2013, p. 22). Another cooperative strategy

used by advisors was to refer clients to other advisors that were more skilled or had more expertise, when an advisor was not skilled or confident in a certain domain (Phillipson *et al.*, 2016, Klerkx and Proctor, 2013).

Competitive strategies used by advisors

Increasingly, in privatised agricultural advisory systems, different types of advisors provide similar services or advice to farmers leading to competition among these different types of advisors (Phillipson et al., 2016). The occurrence of competition between advisory organisations could relate to competing values and goals if the organisations provide advisory services on similar topics and in the same geographical areas (Compagnone and Simon, 2018). Competition also relates to advisors defending their 'professional territory' in knowledge domains in which they feel they have unique expertise (Klerkx and Proctor, 2013). Following Klerkx et al. (2006), competition can be considered to be 'economic' in the sense that advisors compete for market share, but it can also be considered 'substantive' in which they compete in terms of the quality and legitimacy of their advice (see also (Compagnone and Simon, 2018)).

One competitive strategy that has been identified is where advisors emphasise their specialist expertise to distinguish themselves from potential competitors (Phillipson et al., 2016, Albaladejo et al., 2007, Höckert et al., 2010). Another competitive strategy that has been reported in the literature is where an advisor takes on the role of what has been conceptualised as a 'trusted intermediary' for the farmer (Phillipson et al., 2016, p. 328). This intermediary coordinates contact between farmers and other advisors, acting as a gatekeeper who controls, through their trusted position, their farmer clients' access to other advisors and the advice provided (Phillipson et al., 2016, p. 328).

CASE DESCRIPTION AND METHODS

A case study design was employed, as this enabled the researcher to develop a 'holistic understanding' about the phenomenon of interest (O'Leary, 2004). The case is an example of a network of rural professionals associated with Financial Management advice to dairy farmers in New Zealand. The geographical boundary of the case was the Manawatu-Wanganui region. Actors outside the Manawatu-Wanganui region were also included if these actors were involved in the advisory system in New Zealand, but only operated at the national level, outside the Manawatu-Wanganui region. To gain a more complete understanding about how interactions between advisors associated with FM advice are shaped in the New Zealand dairy sector, multiple farmers and advisors from the region were involved in the study.

The empirical research involved two stages of in-depth semi-structured interviews (Brinkmann and Kvale, 2015). The first stage comprised of interviews with 12 dairy farmers. The aim of the first stage was to gain an understanding about from whom farmers receive FM advice. The criteria used to select farmer interviewees were:

- Their main business was dairy farming
- They were the primary financial management decision-makers on the farm
- They had a significant financial stake in the farm (sole owner-operators or farmers who were in an equity share arrangement)

A snowball approach (Boeije, 2010) was used to identify farmer respondents and the size of the farms ranged between 130 and 850 cows (40 and 600 ha respectively).

In the second stage, the types of advisors who were indicated by the farmer respondents as relevant for FM advice were interviewed. A total of 35 advisors were interviewed. The types of advisors included; bankers, accountants, specialised financial advisors (SFAs), industry funded advisors, and farm management consultants (FMCs) (Table 1).

Table 1: Advisor participants

Profession of participant	Number
Banker	10
Rural accountant	10
Farm management consultant	6
Specialist financial advisor	3
DairyNZ employee	6
Total participants (phase 2)	35

Purposive sampling and snowball sampling to select advisor interviewees was used (Boeije, 2010). First, key informants were interviewed to identify selection criteria for advisor participants and then selected advisors with these characteristics from the contacts provided. Mostly customer-facing (front-office) bank employees from four of the five largest rural lending institutions (banks) in New Zealand were interviewed. Rural accountants, farm management consultants and specialist financial advisors were selected on the basis of whether they had dairy farmer clients. Employees from the industry funded organisation were selected on the basis of whether they were involved in projects that were aimed at (upskilling) farmers' financial management capability. In this case, both staff that directly work with farmers (front-office), but also (project) development staff (back-office) were selected as participants. Although none of the interviewed farmers reported employing a specialist financial advisor themselves, specialist financial advisors were also interviewed as most advisor interviewees reported that specialist financial advisors provided advisory services for dairy farmers.

The interviews were recorded and transcribed verbatim. The data analysis followed an iterative process of qualitative data analysis (O'Leary, 2004). During data collection and analysis, the researcher was sensitized by the literature and data analysis consisted of a process of constant comparison of the data (Boeije, 2010). The iterative process of data analysis supported interpretation of the qualitative data in light of theory and, moreover helped sharpen the researchers' theoretical understanding.

In the findings section, interview quotes are used to illustrate the points made in the text and enrich the findings. The coding system used for quotes is an abbreviation of the interviewee type per profession, followed by the number assigned to the individual interviewee. See Table 2 for an overview of the abbreviations per interviewee type:

Table 2: Abbreviations per interviewee type

Interviewee	Farmer	Banker	Accountant	Farm	Specialist	Employee
type				management	financial	of
				consultant	advisor	DairyNZ
Abbreviation	F	В	AC	FMC	SFA	DairyNZ
used						

FINDINGS

This section describes different interaction strategies that FM advisors used in their interactions with different types of advisors. The findings highlight that most interactions between FM advisors occurred around a mutual client and were mostly cooperative in nature. The strategies discerned are maintaining relationships for knowledge exchange intermediation, jointly developing strategies and aligning advice for a mutual client, referrals and negotiation with the banker on behalf of the farmer. Lastly, only one example of competition was found. As there was very limited competition in the advisor-advisor interactions, coopetition was not really evident in advisor-advisor interactions. This will now be explored in detail, illustrating findings with salient quotes.

Maintaining relationships with other advisors for their expertise

Some advisors had a relationship with another type of advisor for the other advisor's expertise. For example, banks required regular financial reporting from their farmer clients to enable monitoring of farmers' finances. This monitoring facilitated the bank to manage its risk exposure and intervene if things went wrong. The farmer's accountant or FMC usually prepared these financial reports. An accountant explains that he cooperates with the banker of most of his clients because of the financial reporting required by their banker:

'Most of my clients, virtually all of them, because I am involved a lot more in the budget side, so I have a direct relationship with their bankers, so I generally help [my farmer clients] provide whatever financial requirements the bankers want.' [FMC3].

Intermediation between the banker and the client

Sometimes, an accountant or FMC intermediated between the banker and a mutual client. The initiative for this intermediation to occur was usually taken by the banker, because the intermediation by an accountant or FMC provided benefits for the banker. In particular, these benefits related to the colleague's relationship with a mutual client, rather than the benefits this colleague's expertise provided.

For example, in situations where the bank decided to stop funding the farm, a banker might ask the accountant to deliver 'the bad news'. This was beneficial for the banker, as the farmer client was expected to be more cooperative if the message was delivered by their accountant who was impartial in this situation. An accountant provided an example of where he was contacted by the bank to act as an intermediary because the bank was going to require the client to sell his farm, as the bank did not see the possibility of a viable future for the farm:

T've got a guy that's in a managed sell down, [...] where the bank has said that you've got to sell your property [...] they haven't made them bankrupt [...], they've just said

to them that they've got to sell their property. Now quite often in this particular case the bank rings me first because if he was to ring that client the client would just go absolutely ballistic at them, because he's forcing them to sell his, yeah. So, they ring me and I act as an intermediary.' [AC8]

A further example of an advisor intermediating between a client and the banker, was when the banker asked a FMC to 'sort out' a farmer in financial hardship and support them in improving their financial position. It was in the bank's interest that the farmer was being 'sorted out', but bankers did not want to sort out a farmer in financial hardship themselves, because then they ran the risk of being held liable if things went wrong. The benefit of this intermediation to the banker was that the FMC was independent. This was a special situation, because even though the farmer paid for the services of the FMC, these referrals were mandatory for the farmer, as the farmer was obligated by the bank to engage with the FMC. The farmer could not avoid engaging with an FMC, because of the consequence that the banker could ultimately stop providing loans to the farmer.

The following quote illustrates that in instances where FMCs were asked to 'sort out' a farmer for the bank, some FMCs experienced dissonance between the bank's expectations of them and their identity as a FMC:

T've had a couple of banks where they've wanted me to go in as their henchman to go and sort this farmer out. Once you've done that once or twice you never do it again. Because it's a horrible place you're put in. That's not my job to sort the farmer out, that's the banker's job.' [FMC6]

Jointly developing strategies to support a mutual farmer client and alignment of advice

Another reason why advisors maintained relationships with other (FM) advisors around mutual clients was to achieve alignment. Advisory interactions in which alignment was central, occurred in different ways. In some instances, advisors interacted to develop and align the advisory group's strategy for supporting a mutual farmer client and, moreover, to align advice to this client. Sometimes, these interactions occurred without the farmer participating in these interactions. For example, if a mutual client was in financial trouble, then the different FM advisors were sometimes in contact to see how they could help the farmer, which is illustrated in this quote by a FMC:

'So, we mightn't have physical meetings but we'll discuss that we have a client there that's in trouble, a mutual client. We'll say okay here's what we're going to do, here's what we should do [...] It's not a bad meeting, it's a meeting where we're actually saying okay we've got a problem we think coming up, why don't we get together and see if we can put things around this guy and help?' [FMC6]

In other instances, a farmer client initiated yearly advisory meetings in which her (FM) advisors and the farmer cooperated in the development of yearly plans for the farm. Advisors reported these interactions were valuable, to ensure alignment between advisors, to enhance advisors' commitment to support the advice for the farmer client, to enhance the quality of

advice and the likelihood of the farmer acting on the advice. An FMC explains that he likes these joint meetings, because it improves advice provision:

'The client really buys into [the advice as a result of joint meetings]. Because he now knows that the consultant has recommended it, the accountant has actually put it into his plan and the bank is actually relying on it. So, everyone is committed. So, when you've agreed in a meeting to something like that, high probability that's going to happen. [...] You get defined outcomes, better expectations and higher probability that the farmer will implement what is agreed to. And the left hand gets to know what the right hand is doing. It takes away the surprises.' [FMC2]

Moreover, sometimes SFAs initiated interactions with some of the other FM advisors around the farmer. These interactions were initiated to achieve alignment between the SFA's advice and the advice provided by the other FM advisors around the farmer client. For example, it was important to check with the accountant whether the advice was not contradictory with (tax) legislation. SFAs, moreover, sought support from the more trusted advisors around farmer clients, which was related to them being relatively new in the advisory network for farmers. As this is a relatively new service in the rural sector, they generally did not have a long-term trust relationship with farmers, unlike the other FM advisors. Rather, they tended to be used by farmers for one-off projects like succession planning. It was important for SFAs therefore to involve the other, trusted advisors in providing advice to their farmer clients to increase farmers' buy-in to the advice.

'I encourage the clients to allow me to speak to [their trusted advisors], and it's vital in some cases. I can't make a recommendation if the bank won't allow that to happen or there are certain tax issues in the way or legal issues. So yeah, and the accountant and the lawyer are nine times out of ten highly trusted individuals of the farmer and they've had a longer relationship than with me.' [SFA3]

These examples also illustrate a duty of care by advisors for farmer clients, because advisors worked together to enhance the quality of advisory services provided to a mutual farmer client.

Referring clients to other advisors in order to maintain their professional identity and integrity

The FM advisors interviewed did not only show a duty of care through aligning advice, but accountants, in particular, also showed a duty of care for clients in the way they referred clients to other FM advisors. For several FM advisors interviewed, it appeared important to maintain their professional identity and integrity, which was also expressed in the reasons for and way of referring farmers to other advisors.

Accountants highly valued their status as an impartial advisor with the client's best interests at heart. In line with this, accountants referred a client to another advisor if they perceived this was in the best interests of the client (who did not ask for a referral). In these instances, accountants avoided providing advice if they perceived themselves to be in a potentially biased position and advised the client to use another advisor. An accountant explains that his position may be biased in the process of succession planning, because of the close relationship with the farm owner (his client) as opposed to other family members involved.

Therefore, he advised his client to engage the services of an independent advisor who would not favour the client over other members of the client's family:

With succession planning, potentially the accountant has a stronger relationship with the farm owner as opposed to the family who may be looking at coming into the ownership. So, our position may be biased, so in all likelihood we may be better to advise the farmer that you need to engage a specialist in succession planning. [...] We may suggest to them that we recommend that you engage an independent third party to do that family meeting and here's some options.' [AC9]

The importance of maintaining their status as an impartial advisor was also expressed in the way some accountants referred clients to other advisors. These accountants were concerned that formalising connections with other types of FM advisors would negatively influence their status as impartial advisor. They provided farmers, asking for referrals, with multiple names of potential candidates from which the farmer could choose the preferred option. An accountant explains that he avoids formalising collaborations with other types of FM advisors, as he would lose his independence and it furthermore potentially decreases the quality of his advice. Additionally, the FM advisor with whom he has a relationship may not be the best fit for the client who is asking for a referral:

Because the moment you say I'll refer you to this person on the basis you're going to get paid something, you've lost your independence. You need to be able to be completely independent [...] and that works really well professionally, because you feel comfortable because you're not bound by oh this is my friend, I'll refer them to them. Or oh this is the person that gives me a voucher every time I refer them a customer. Professionally that's not ethical from our point of view.' [AC2]

Bankers found it important to be perceived as reliable and unbiased, which was expressed in them referring clients to FMCs or accountants for certain advisory services. Even though bankers had the expertise to provide these budgeting services, they decided to refer clients to other types of advisors, to maintain their professional identity and integrity. An FMC explains that bankers recognise they could be perceived as biased if they provide budgeting services alongside their core service of providing loans:

'In the past the banks have done that sort of work themselves but I think there's more self-awareness from the banks that it's a bit of a conflicted position lending them the money and then helping them do the budgets. Because if it all falls over then the client can look at the bank and say well you did the budgets. [...] so I guess they're saying no we need to get an independent person with no vested interest to come in and give an assessment.' [FMC5]

Negotiation with the banker on behalf of the farmer and the nature of competition in advisory interactions

The study found that the majority of competition between advisors was of a substantive nature and not of an economic nature, that is, it was more related to the content of the advice. In particular, the interests of the different advisors did not align. An accountant, FMC

or SFA acted as an advocate of the farmer in negotiations with the bank when the client's interests conflicted with the bank's interests. An example was one of the FM advisors acting as an advocate for the farmer in negotiations with the bank, for example, around interest rates. In the following quote, an SFA explains how he challenged the bank on behalf of the client by stating that the farmer will change banks if the interest rate is not reduced:

'I went and saw a farmer and he was paying eight percent interest on his loan. Eight percent in today's day and age that's just ridiculous. [...] [so I confronted the bank] with the figures. We do all the analysis work, our assets, liabilities, serviceability all of that and I [tell the banker]: well this doesn't stack up, why have you got such a margin on your lending interest rate. Then you put the pressure on the bank and then all of a sudden things start changing. [...] A banker never wants to lose his business. If he doesn't come to the party then we move banks.' [SFA1]

Another example was an accountant acting as an advocate for a farmer client, who was in financial hardship. An accountant explains that she communicates with the bank on behalf of her client in financial hardship, to ensure the farmer knows what to expect from the banker and ensure a good outcome for the farmer:

'If the client is struggling, it's really about having a conversation with the bank to see what they are able to do and what they want.' [AC7]

Apart from instances where there was a conflict between the advisors' interests, there was only one example of competition (over acquiring or maintaining clients) between FM advisors. This example was an SFA differentiating himself from the stable group of key FM advisors around the farmer client. In particular, one SFA interviewee differentiated himself from the other FM advisors, claiming the other FM advisors to be biased and not (entirely) acting in the farmer's best interests. This could be seen as a strategy used by the SFA to gain legitimacy for his advice. In the following quote, an SFA explains that he wants to make farmers aware about the other FM advisors not acting in the farmers' best interests:

'A lot of [supporting farmers] is education, so [the farmers] are generally the ones that are the less financially literate so they need a lot of financial literacy education really. [...] A lot of the things is around the way basically the farm professionals operate. So it's talking about the way that the bank will communicate with you, the way the accountant and a lawyer - the documents that you'd need and things that you don't need, yeah it's more around...just to bring their attention so that when they're using one of them they know that there's always a hidden agenda.' [SFA1]

DISCUSSION

The objective of this research was to explore how interactions between FM advisors in New Zealand are shaped, enriching the literature about advisory interactions by exploring advisor-advisor interactions around a mutual client. Now, a reflection on the broader implications for the literature is provided, that can be derived from our findings.

Reasons for choosing collaborative and competitive strategies: duty of care and professional integrity are main drivers for collaboration

The findings show that FM advice development and provision was mainly a *cooperative strategy* of the different FM advisors acting complementarily to serve a mutual client, resembling earlier findings elsewhere (Phillipson *et al.*, 2016, Proctor *et al.*, 2012, Klerkx and Proctor, 2013).

Working together with other FM advisors was expected by farmer clients and an important part of FM advisors' professional identity and integrity. While scholars have acknowledged that a key component of trust in the farmer-advisor relationship is an advisor's duty of care for the farmer client (Kemp *et al.*, 2000, Fisher, 2013), advisors' duty of care for clients has not been highlighted before as shaping interactions between (agricultural) advisors. Our study highlights that duty of care expressed in advisors working together to enhance the quality of advisory services provided was a major driver in shaping cooperative behaviour in advisor-advisor interactions.

FM advisors were found not to be in direct competition with each other for clients and there was, hence, less negotiation on what was each advisor's professional territory, which was different from the findings of Phillipson et al. (2016), (Compagnone and Simon, 2018). The low level of competition over clients between the different types of advisors involved in FM advice are likely prevalent because most FM advisors were an exclusive provider of a specific service, and advisors were found to acknowledge and respect the exclusivity of each other's expertise. Hence, there seemed to be a clear task division and limited competition in terms of 'economic competition' and 'substantive competition'. This created a safe environment for cooperation and, in some instances, alignment of FM advice for advisors. Advisor interviewees who collaborated and aligned FM advice provisioning with other advisors around a mutual client believed that these practices increased the quality of advice compared to situations in which advice developed and provided to farmer clients by individual advisors separately. While this finding, to some extent, reflects earlier findings that has reported advisors referring clients to other advisors when they did not feel skilled enough in the topic of advice (Phillipson et al., 2016, Klerkx and Proctor, 2013), our current study also highlights a different sort of motivation. In particular, advisors' motivation for referrals can relate to an advisor's motivation to preserve their professional identity and integrity. For example, advisors sometimes acted as an 'honest broker' and referred clients to another advisor when they perceived to have a biased position in providing services and advice to a (potential) client.

An exception to the overall cooperative strategy was a new entrant FM advisor who tried to acquire a position as a FM advisor for farmers by using both competitive and cooperative strategies in interactions with farmers' established key FM advisors. The occurrence of both competition and cooperation between advisors and advisory organisations has been reported in earlier work (Compagnone and Simon, 2018, Proctor *et al.*, 2012, Phillipson *et al.*, 2016, Klerkx and Proctor, 2013). However, the competitive strategies may have to do with this advisor being a relatively new actor in the advisory space, whereas the advisors analysed in earlier studies had an established position as trusted advisors for farmers (Phillipson *et al.*,

2016). This implies that 'disturbances' in the advisory service market by a new entrant, may induce a temporary competition dynamic within an overall collaborative setting.

Authority relationships can induce a shift from collegial to hierarchical advisor interaction: negotiation and representative intermediation in advisor-advisor interactions

Earlier work on advisor interaction has looked at complementary and, to some extent, antagonistic relationships between advisors (Compagnone and Simon, 2018, Phillipson *et al.*, 2016), but has not highlighted strongly cases in which there are dependency and authority in relationships between advisors. Compagnone and Simon (2018) have observed hierarchical relationships as opposed to collegial relationships, but rather within advisory organizations and not in advisory networks. This study highlights that authority relationships of advisors over farmers can translate into a hierarchical relationship within advisory networks. When one advisor in the area has authority over the farmer, then the strategies for advisor-advisor interactions can lead to negotiations in which an advisor acts on behalf of the farmer in the hierarchical relationship with that advisor. Hence, the advisor's relationship turns from a collegial relationship into a hierarchical relationship as well, as they are an intermediary between the advisor with authority over the farmer and another advisor representing the interests of the mutual farmer client.

This occurrence of a strategy involving one advisor negotiating on behalf of the farmer with another advisor, has not been highlighted earlier. In these instances, advisors negotiated the content of advice (competition on a "substantive level"), which related to the advisors' interests not being compatible (one representing, for example, the interest of the bank, the others of the client). The prevalence of competition over the content of advice partly confirms earlier work where different advisors or advisory organisations competed in the provision of advice (Compagnone and Simon, 2018), but also extends earlier work, because it highlights that advisors can have direct confrontations with each other, besides the earlier reported indirect confrontation between advisors (e.g. through opposing messages they directed at clients) (Compagnone and Simon, 2018). These types of relationship can also be considered a form of intermediation, but different from the intermediation reported earlier in the form of referrals (see Section 5.1 and (Phillipson et al., 2016)). This type of intermediation of an advisor between the client and another advisor has the character of negotiation and is not a form of being an 'honest broker' but rather a representative. This representation can also be the other way around, shown by the finding that one advisor may increase information of another advisor about the client. This can be used to influence the client's behaviour in favour of the other advisor (in order to reduce the bank's risk in lending to this client). Hence, there can be forms of representative intermediation which have traits of substantive competition, but also forms of intermediation which have traits of substantive collaboration.

CONCLUSION

The agricultural advisory literature has extensively studied farmers and their interactions with advisors. To a much lesser extent, scholars have explored interactions between agricultural advisors, in particular, between agricultural advisors from different professions in the same realm around a mutual client. The current study enriches the body of literature exploring the interactions between the FM advisors around a mutual dairy farmer client in New Zealand.

There was limited evidence of "economic competition" between advisors in which they try to acquire a client entirely for themselves, but advisors compete in terms of the content and focus of advice. This strengthens arguments that the current view of competition (economic) is too narrow and substantive competition should be included more strongly when studying advisor interactions. Moreover, this study highlighted dimensions shaping advisor-advisor interactions and strategies used in interactions between advisors that have not been described before, such as advisors' duty of care for farmer clients and motivation to preserve their professional identity and integrity. Furthermore, when an advisor has authority over a mutual farmer client, this shaped interactions with other FM advisors to include interaction strategies like negotiations on behalf of the farmer, that is, shifting from collegial to hierarchical relationships. It also shows the occurrence of representative intermediation which is an additional intermediation role to the referral role.

While this study provided valuable insights into the dynamics that shape interactions between FM advisors, it also points to areas for future research. This study has used interview data in which farmers and advisors reflected on their interactions with each other. Future research could study interactions between FM advisors directly, for example, through participant observation. In that way, more insights can be gained in the dynamics shaping interactions between advisors, for example, by using discourse analysis. While it is explored how interactions between advisors are shaped, the content of FM advice has not been studied indepth. Other studies could thus explore complementarities, contradictions and gaps concerning the content of FM advice between the different FM advisors. Advisor interviewees suggested that cooperatively developed advice was more effective compared to advice developed and provided to farmer clients by individual advisors separately. However, it was outside the scope of this research to evaluate the effectiveness and quality of this advice. Future research could therefore explore the process of, quality and effectiveness of advice provision, developed in a team setting compared to individual advisors. Such future work should also include other sorts of advice and other countries, to enhance the external validity of the findings presented here.

In line with the view that the effectiveness of advice provisioning is enhanced when developed in an advisory team setting, it could be beneficial if this practice would be more widely applied in the sector. Moreover, advisory networks around other topics of advice could also benefit from fostering an environment that enhances collaboration.

REFERENCES

Albaladejo, C., Couix, N. & Barthe, L. 2007. Learning in Agriculture: Rural Development Agents in France Caught between a Job Identity and a Professional Identity. *The Journal of Agricultural Education and Extension*, 13 (2), 95-106. Available: DOI 10.1080/13892240701289361

Boeije, H. 2010. Analysis in Qualitative Research, London, SAGE Publications Ltd.

Brinkmann, S. & Kvale, S. 2015. *InterViews Learning the Craft of Qualitative Research Interviewing,* Thousand Oaks, SAGE Publications, Inc.

Compagnone, C. & Simon, B. 2018. Cooperation and competition among agricultural advisory service providers. The case of pesticides use. *Journal of Rural Studies*, 59, 10-20. Available: DOI https://doi.org/10.1016/j.jrurstud.2018.01.006

- Creamer, L. K., Pearce, L. E., Hill, J. P. & Boland, M. J. 2002. Milk and Dairy Products in the 21st Century. *Journal of Agricultural and Food Chemistry*, 50 (25), 7187-7193. Available: DOI 10.1021/jf020711b
- Fisher, R. 2013. 'A gentleman's handshake': The role of social capital and trust in transforming information into usable knowledge. *Journal of Rural Studies*, 31, 13-22. Available: DOI http://dx.doi.org/10.1016/j.jrurstud.2013.02.006
- Höckert, J., Ljung, M. & Sriskandarajah, N. 2010. From collaborative heroes to collaboration as a culture: The importance of internal collaborative skills for sustained collective action. 9th European IFSA Symposium. Vienna.
- Hodge, I. 2007. The Governance of Rural Land in a Liberalised World. *Journal of Agricultural Economics*, 58 (3), 409-432. Available: DOI 10.1111/j.1477-9552.2007.00124.x
- Kemp, E. A., Williams, P., Gray, D. I., Gardner, J. & Kuiper, D. 2000. Rapport building in farm management consultancy: A case study. . *Journal of Applied Systems Studies*, 3 (1), 194-217.
- Klerkx, L., de Grip, K. & Leeuwis, C. 2006. Hands off but Strings Attached: The Contradictions of Policy-induced Demand-driven Agricultural Extension. *Agriculture and Human Values*, 23 (2), 189-204. Available: DOI 10.1007/s10460-005-6106-5
- Klerkx, L. & Proctor, A. 2013. Beyond fragmentation and disconnect: Networks for knowledge exchange in the English land management advisory system. Land Use Policy, 30 (1), 13-24. Available: DOI 10.1016/j.landusepol.2012.02.003
- Lans, T., Seuneke, P. & Klerkx, L. 2013. Agricultural Entrepreneurship. In: Carayannis, E. G. (ed.) Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship. New York, NY: Springer New York. Available: DOI 10.1007/978-1-4614-3858-8_496.
- McElwee, G. 2008. A taxonomy of entrepreneurial farmers. *International Journal of Entrepreneurship and Small Business*, 6 (3), 465-478.
- Nettle, R., Crawford, A. & Brightling, P. 2018. How private-sector farm advisors change their practices: An Australian case study. *Journal of Rural Studies*, 58, 20-27. Available: DOI https://doi.org/10.1016/j.jrurstud.2017.12.027
- Nuthall, P. L. 2006. Determining the important management skill competencies: The case of family farm business in New Zealand. *Agricultural Systems*, 88 (2–3), 429-450. Available: DOI http://dx.doi.org/10.1016/j.agsv.2005.06.022
- O'Leary, Z. 2004. The essential guide to doing your research project, London, SAGE Publications Ltd.
- Oreszczyn, S., Lane, A. & Carr, S. 2010. The role of networks of practice and webs of influencers on farmers' engagement with and learning about agricultural innovations. *Journal of Rural Studies*, 26 (4), 404-417. Available: DOI http://dx.doi.org/10.1016/j.jrurstud.2010.03.003
- Phillipson, J., Proctor, A., Emery, S. B. & Lowe, P. 2016. Performing inter-professional expertise in rural advisory networks. *Land Use Policy*, 54, 321-330. Available: DOI http://doi.org/10.1016/j.landusepol.2016.02.018
- Proctor, A., Donaldson, A., Phillipson, J. & Lowe, P. 2012. Field expertise in rural land management. *Environment and Planning-Part A*, 44 (7), 1696.
- Proctor, A., Lowe, P., Phillipson, J. & Donaldson, A. 2011. Veterinary field expertise: using knowledge gained on the job. *Veterinary Record*, 169 (16), 408-410. Available: DOI 10.1136/vr.d5387

- Pyysiäinen, J., Anderson, A., McElwee, G. & Vesala, K. 2006. Developing the entrepreneurial skills of farmers: some myths explored. *International Journal of Entrepreneurial Behavior & Research*, 12 (1), 21-39. Available: DOI doi:10.1108/13552550610644463
- Seuneke, P., Lans, T. & Wiskerke, J. S. C. 2013. Moving beyond entrepreneurial skills: Key factors driving entrepreneurial learning in multifunctional agriculture. *Journal of Rural Studies*, 32, 208-219. Available: DOI http://dx.doi.org/10.1016/j.jrurstud.2013.06.001
- Shadbolt, N., Apparao, D., Hunter, S., Bicknell, K. & Dooley, A. 2017. Scenario analysis to determine possible, plausible futures for the New Zealand dairy industry. *New Zealand Journal of Agricultural Research*, 60 (3), 349-361. Available: DOI 10.1080/00288233.2017.1351377
- Shadbolt, N. & Bywater, T. 2005. The dimensions of management. *In:* Shadbolt, N. & Martin, S. (eds.) *Farm management in New Zealand*. Melbourne: Oxford University Press.
- Shadbolt, N. M. & Olubode-Awosola, F. 2016. Resilience, risk and entrepreneurship. International Food and Agribusiness Management Review, 19 (2), 33 - 52.
- Su, E. & Dou, J. 2013. How Does Knowledge Sharing Among Advisors From Different Disciplines Affect the Quality of the Services Provided to the Family Business Client? An Investigation From the Family Business Advisor's Perspective. *Family Business Review*, 26 (3), 256-270. Available: DOI 10.1177/0894486513491978



STATEMENT OF CONTRIBUTION DOCTORATE WITH PUBLICATIONS/MANUSCRIPTS

We, the candidate and the candidate's Primary Supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the candidate's contribution as indicated below in the *Statement of Originality*.

Name of candidate:	Aniek Elisabeth Wilhelmina Maria			
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Zealand dairy sector				
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CHAPTER 5 HOW ADVISORS NAVIGATE MULTIPLE DEMANDS AND ACCOUNTABILITIES IN FM ADVISORY PROVISIONING

This chapter is in paper-format and will be submitted for publication as a scientific paper to the Journal of Rural Studies. The chapter constitutes the third results chapter and discusses how financial management advisors navigate the multiple accountabilities and demands placed on their role as advisor. How rural advisors cope with contrasting accountabilities and demands: an institutional logics and bricolage perspective on financial management advisory dynamics in the New Zealand dairy sector

ABSTRACT

Internationally, constant innovation in the dairy sector is seen as necessary to deal with the various challenges it faces. Different types of agricultural advisors provide innovation support to target specific challenges facing the agricultural sector. These innovation support services are, for example, provided in the form of publicly-funded advisory programs. However, the policy intentions of agricultural advisory programs are not always matched by the program implementation. This discrepancy relates to those agricultural advisors operating in a complex institutional environment, in which they have multiple, and often, conflicting accountabilities. Dilemmas have been reported relating to these conflicting accountabilities, but there are limited insights into how, in their day-to-day work, advisors or advisory organisations deal with dilemmas regarding accountabilities and how this influences the provision of advice.

Taking the theoretical lens of institutional logics and bricolage, the current study contributes to the body of agricultural advisory literature by enriching our understanding about how advisors cope with accountabilities and demands conflicts due to different logics, and how they respond to these conflicts in everyday practice. The study is conducted in the New Zealand dairy sector and focuses on advisors who provide financial management advice to dairy farmers.

This study has shown that advisors navigate different accountabilities and demands by following a path characterised by alteration, articulation and aggregation practices in response to the introduction of new formal institutions, actions consistent with the concept of bricolage. The study provides a rich illustration of how advisors craft responses regarding accountabilities and demand conflicts due to different logics in the FM advisory system. It provides illustrations of the types of bricolage practices and distinguishes different strategies employed by advisors from different professions to achieve a particular bricolage practice. It also emphasises that, besides variation in responses for FM advisors from different professions, there was variation in responses among advisors within the same profession. This research, moreover, highlights factors shaping the use of these practices and strategies which have not been reported earlier: 1) how the importance of giving FM advice to the farmer-advisor relationship shapes the use of bricolage practices and strategies 2) the nature of the institution also shapes advisors' responses to the introduction of an institution and 3) advisors' responses depend on the specific combination of different formal institutions that are introduced. This study also highlights that bricolage occurs in different layers in the advisory system and, not only by individual advisory actors, but also actors at the organisational level. In particular, this study illustrates how an advisory organisation develops a formal institution as a form of bricolage to shape an advisory system for a subject area where they are not a dominant provider of advice. This has not been highlighted in previous research.

INTRODUCTION

Internationally, constant innovation in the dairy sector is seen as necessary to deal with the various challenges it faces, including climatic and economic volatility, dynamic global markets, animal health and welfare, food safety and environmental sustainability (Creamer et al., 2002, Shadbolt et al., 2017, Doole, 2014, van der Spiegel et al., 2012). Agricultural advisory services aim to stimulate, or facilitate, innovation processes in the sector (Leeuwis and Van de Ban, 2004, Christoplos, 2010, Rivera and Sulaiman, 2009). These may be delivered by private advisors on an on-demand basis paid for by farmers, however, public or industry funded programs or interventions also exist, targeting a specific challenge or opportunity facing the sector. In some countries, publicly and industry-funded advisory programs aim to stimulate more environmentally sustainable practices by farmers (e.g. Klerkx and Jansen, 2010, Hejnowicz et al., 2016). Other programs target social policy objectives, including rural development (e.g. Mahon et al., 2010, Bebbington and Sotomayor, 1998, Diesel and Miná Dias, 2016, Rivera and Alex, 2004).

Advisors responsible for implementing advisory programs operate in a complex and dynamic environment, with multiple accountabilities from, for example, employers, other funders, farmer clients, legislators and standard enforcers (Klerkx *et al.*, 2006). There are often conflicts between the program' expectations of advisors, and those of farmers' needs from or demands of advisors, in terms of content and the process of advice provision and so on (Bruges and Smith, 2008, Mee, 2007, Leeuwis, 2000, Klerkx *et al.*, 2017, McDonough *et al.*, 2015, Parkinson, 2009, Berglund *et al.*, 2015, Landini, 2016, Paschen *et al.*, 2017, Heffernan and Misturelli, 2011, Minh *et al.*, 2014, Mahon *et al.*, 2010, Dougill *et al.*, 2017, Christoplos, 2012, Albaladejo *et al.*, 2007, Mills *et al.*, 2017, Klerkx *et al.*, 2006).

While most of the aforementioned studies flag that advisors are exposed to multiple accountabilities and demands, they generally do not go deeper into how, on a day to day basis, advisors or advisory organisations 'make do', respond to, and cope with them. Only a limited number of studies (e.g. Mahon et al., 2010, Minh et al., 2014, Parkinson, 2009, Christoplos, 2012) have gone beyond flagging the tensions between these different accountabilities and demands and explored how advisors respond to them, describing the different strategies used by advisors to navigate such tension. These strategies included harmonisation by prioritising advisory activities that were both mandated by the Government and demanded by farmers (Minh et al., 2014) and advisors circumventing the implementation of an advisory program that they thought conflicted with what was best for farmers (Mahon et al., 2010). Another strategy was adaptation by changing the implementation approach of an advisory program because it conflicted with farmers' expectations of advisors (Parkinson, 2009).

Such studies provide interesting insights into how different actors deal with potentially opposing accountabilities and demands on their role in the implementation process of a specific, public, advisory program (Mahon *et al.*, 2010, Minh *et al.*, 2014, Parkinson, 2009). However, there are still limited insights into the actual dynamics of how, in their day-to-day advisory practices, advisors or advisory organisations deal with potentially opposing accountabilities and demands on their role. Hence, different from the extant studies, and rather than focusing on a specific advisory program, the current study enriches our

understanding of the strategies advisory actors employ to navigate different accountabilities and demands on their role in their general advisory practices. The interest of this study is in what logics are steering advisors' advisory practices and how they navigate the multiple and potentially conflicting accountabilities and demands on their role in everyday practice. The concepts of institutional logics (Thornton et al., 2012) and institutional bricolage (De Koning and Cleaver, 2012, Cleaver, 2012) have proved useful for exploring and articulating these practices. These concepts enable a deep exploration of actors' responses in situations with multiple accountabilities and (potential) tensions in demands on their role (Osei-Amponsah et al., 2018, Ishihara et al., 2017, Sidibé et al., 2018, Kajembe et al., 2016). The study was conducted in the dairy sector of Aotearoa or New Zealand², where organisations like the industry-funded advisory organisation, DairyNZ, seeks ways to support dairy farmers improve their Financial Management (FM) capability (DairyNZ, 2016). FM advisors and advisory organisations in the New Zealand dairy sector both develop and have to cope with interventions that introduce new accountabilities and demands on FM advisors' roles. The overall research question guiding our enquiry is: how do New Zealand FM advisors cope with accountabilities and demand conflicts due to different logics in the FM advisory system, and how do they craft responses in everyday practice through bricolage?

The paper proceeds as follows. The concepts of institutional logics and bricolage are introduced and other relevant literature is reviewed in Section 2. After the literature review, the case context and research design are described in Section 3, followed by the findings from the study in Section 4. The paper ends with the discussion and conclusion in Section 5 and 6, reflecting on the theoretical and practical implications from the study, as well as the limitations of the research and recommendations for future studies.

CONCEPTUAL FRAMEWORK: INSTITUTIONAL LOGICS AND BRICOLAGE

In this section, the conceptual framework used to analyse how actors associated with the provision of Financial Management (FM) advice navigate the multiple accountabilities and demands in their advisory practices, is outlined. First, institutions, institutional logics and institutional bricolage is defined.

Institutions and institutional logics

In this study, a definition of institutions as formulated by Merrey (2007, p. 196) is used; 'social arrangements that shape and regulate human behaviour and have some degree of permanency and purpose transcending individual human lives and intentions'. Institutions are often referred to as the formal and informal 'rules of the game' guiding actors' behaviour (Merrey, 2007, Cleaver, 2012, Williams *et al.*, 2017). These may be both formal rules and regulations (e.g. standards, laws), and also informal institutions such as unwritten codes of conduct, norms and values (Williams *et al.*, 2017). It is argued that sometimes institutions are deliberately designed, but they can also evolve unplanned and need to be reproduced by people and organisations to exist (Smith *et al.*, 2001). Institutions are found to be sometimes

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² A country in the south-western Pacific Ocean which is formally known under two names 1) 'Aotearoa', the Te Reo name (indigenous Māori language) and 2) 'New Zealand', the English name

in harmony, but can also be conflicting or incompatible with each other (Estrin and Prevezer, 2011, Tonoyan *et al.*, 2010). Moreover, they are perceived to be dynamic, in that they are constantly emerging, evolving and disappearing (Cleaver, 2012, Merrey, 2007, Rocheleau, 2001). Furthermore, scholars have found variation in how different actors perceive, adhere to, internalise and act on these rules (institutions) (Merrey, 2007, Thornton and Ocasio, 1999). When the word institution is used in this paper, it strictly refers to an institution as defined by Merrey (2007).

The institutional logics perspective was first presented in organisational studies in the early 1990s, but has now been used in a variety of fields and accepted as an important perspective in sociology and organisational studies (Thornton et al., 2012). The institutional logics perspective is a theory focusing on institutions that help explain the seemingly contradictory nature of institutions as both rigid and dynamic (Thornton et al., 2012). In particular, this perspective views 'society as an inter-institutional system' and it is used to explain how 'actors change institutions in the context of being conditioned by them' (Thornton et al., 2012, p. 18). Viewing society as an inter-institutional system, enables scholars to emphasise and demonstrate the pluralistic nature of institutions that are found to operate and vary at different levels (e.g. world, sector, organisation, family) and to vary for different individuals, organisations and other types of groups of people (Ocasio et al., 2017). The institutional logics perspective is 'a framework for analysing the interrelationships among institutions, individuals, and organizations in social systems' (Thornton et al., 2012, p. 2). In this paper, the definition of institutional logics as 'the socially constructed, historical patterns of material practices, assumptions, values, beliefs and rules by which individuals produce and reproduce their material subsistence, organise time and space, and provide meaning to their social reality' (Thornton and Ocasio, 1999, p. 804) is used. In short, institutional logics can be viewed as 'historically built-up and persistent structures and institutional arrangements' (Turner et al., 2016, p. 99).

The nature of institutional logics is argued to vary, with logics prevailing on different levels (Turner et al., 2016, Osei-Amponsah et al., 2018). Institutional logics can be universally accepted on the level of a sector, country, program or association (Mars and Schau, 2017), for example, the identification of a 'technology transfer logic' in the New Zealand agricultural sector (Turner et al., 2016). In other instances, multiple, potentially opposing logics prevail, reflecting the occurrence of different practices (Mars and Schau, 2017). Sometimes, elements of different logics are combined (Mars and Schau, 2017). For example, in the development of partnerships, 'loose coupling' and balancing of the different logics has been found to occur so that actors have enough room to adhere to their own logics (Osei-Amponsah et al., 2018, p. 24). Osei-Amponsah et al. (2018) emphasised that the transformation of institutional logics is a slow process. Sidibé et al. (2018) state that related to the dynamic and rigid nature of institutional logics, opportunities for negotiation, alignment and modification of institutions are to continuously surface. In this study, the concept of institutional logics was found relevant and useful to explore and explain how advisory relationships and interactions are shaped in a FM advisory system as it enables one to unravel how an advisor's agency interacts and sometimes clashes with the institutional structures in which they operate.

Institutional bricolage

The concept of institutional bricolage emphasises the agency actors have in negotiating, aligning and modifying institutional logics (Christoplos, 2012, De Koning and Cleaver, 2012). According to Cleaver (2012, p. 34), the concept of bricolage can be used to explore and understand 'just how institutions are socially formed and practised'. Bricolage is an adaptive process in which people modify existing institutional arrangements (including rules, traditions, norms and relationships) (Cleaver, 2012, p. 34). Actors' agency in this process is not without boundaries, as they are constrained by social structures and, as such, must stay within the boundaries of 'acceptable ways of doing things' (Cleaver, 2012, p. 281). Actors who use their agency to navigate in, and modify complex institutional contexts, have been called 'bricoleurs' (Cleaver, 2012, Carstensen, 2011).

De Koning and Cleaver (2012) have distinguished between different types of institutional bricolage practices local actors perform in response to the introduction of new formal institutions (Table 1). The focus is on bricolage practices performed by actors on whom formal institutions are imposed, rather than the actors introducing formal institutions (De Koning and Cleaver, 2012). Bricolage practices are recognised to include aggregation, alteration and articulation (Table 1). In aggregation practices, the trigger for institutional bricolage is the introduction of a formal institution. The new formal institution is recombined with existing formal and informal institutions like values, traditions and rules and, in this process of recombination, the introduced institution is given additional meaning or purpose (De Koning and Cleaver, 2012). The outcome of the process is a situation in which existing institutions and the newly introduced institution are in harmony (De Koning and Cleaver, 2012).

Different from "aggregation" and "articulation", the second type of bricolage, "alteration" is not necessarily triggered by the introduction of a new formal institution, but it can also relate to changes in informal institutions (Table 1) (De Koning and Cleaver, 2012). An alteration process occurs where actors adjust institutions so that they correspond better with their identities or livelihoods, and the other institutions to which they are adhering. Alteration can range from small through to extreme changes in an institution's meanings. In particular, improvisation 'to ensure social applicability' is an important aspect in alteration practices (De Koning and Cleaver, 2012, p. 285). An example of improvisation is the invention of conditions allowing actors to avoid a formal regulation. Another aspect of alteration practices is the 'adaptation of well-worn practices to new circumstances' (De Koning and Cleaver, 2012, p. 285).

The third type of bricolage identified by De Koning and Cleaver (2012) is "articulation" (Table 1). As with aggregation, articulation practices are triggered by the introduction of a formal institution. If this newly introduced institution is in conflict with the actors' identities or other important informal institutions, the actors are likely to engage in articulation. In these instances, they 'assert' existing identities, norms or other institutions and resist the introduced institution (De Koning and Cleaver, 2012). The 'introduced formal institution bounces off a shield of local perceptions of traditions and identity' and is rejected by the actors (De Koning and Cleaver, 2012, p. 286).

Table 1: Different types of bricolage practices (De Koning and Cleaver, 2012)

Type of	Trigger for bricolage	Process of	Outcome of
bricolage	practice	bricolage	process
Aggregation	Introduction of a formal	Recombination of	The different (formal
	institution	different institutions	and informal)
		in which the formal	institutions are in
		institution is given a	harmony
		new meaning or	
		purpose	
Alteration	Relates to formal or	Adjustment of	Adjusted
	informal institutions	institutions to ensure	institution(s)
		'social applicability'	
		or better fit with	
		actors' identities or	
		livelihoods	
Articulation	Introduction of a formal	Asserting important	The introduced
	institution	existing informal	formal institution is
		institutions to	rejected
		oppose the	
		introduced formal	
		institution	

CASE DESCRIPTION AND METHODS

The current study was conducted in the New Zealand dairy sector. A case study design was employed, as this enabled the researcher to develop a 'holistic understanding' about the phenomenon of interest (O'Leary, 2004). The case is an example of a network of rural professionals associated with financial management advice to dairy farmers in New Zealand. To gain a more complete understanding about the diversity of how interactions between advisors associated with FM advice are shaped in the New Zealand dairy sector, multiple farmers and advisors participated in the study. The geographical boundary of the case was the Manawatu-Whanganui region. Actors outside the Manawatu-Wanganui region were also included if they were involved in the advisory system in New Zealand, but only operated at the national level, outside the Manawatu-Whanganui region.

The research involved two stages of in-depth semi-structured interviews (Brinkmann and Kvale, 2015). The first stage comprised interviews with 12 dairy farmers and the objective was to gain an understanding about from whom farmers receive FM advice.

In the second stage, the types of advisors who were indicated by farmer respondents as providers of FM advice, were interviewed. In the second phase, 35 financial management advisors were interviewed. The advisor interviewees included bankers, accountants, independent financial advisors (IFAs), industry-funded advisors, and farm management consultants (FMCs) (Table 1).

Table 2: Advisor participants

Profession of participant	Number
Retired banker	1
Banker (head of agri-initiatives)	1
Banker (relationship manager)	8
Rural accountant	10
Farm management consultant	6
Specialist financial advisor	3
DairyNZ Project developer	1
DairyNZ Project Leader	2
DairyNZ Regional leader	1
DairyNZ Member of leadership team	1
Freelancer doing contract work for DairyNZ	1
Total participants (phase 2)	35

Purposive sampling and snowball sampling (O'Leary, 2004) were used to select advisor interviewees. First, key informants were interviewed to identify selection criteria for advisor participants and then selected advisors with these characteristics from the contacts provided. Mostly customer-facing relationship managers from four of the five largest rural lending institutions (banks) in the country were interviewed. Rural accountants, farm management consultants and specialist financial advisors were selected on the basis of whether they had dairy farmer clients. Employees from the industry-funded organisation were selected on the basis of whether they were involved in projects that were designed to upskill farmers' financial management capability. In this case, not only staff who directly worked with farmers, but also (project) development staff were selected as participants. Although none of the interviewed farmers reported employing a specialist financial advisor themselves, they were also interviewed as most advisor interviewees reported that specialist financial advisors provided FM advice to dairy farmers.

The interviews were recorded and transcribed verbatim. The data analysis followed an iterative qualitative data analysis process (O'Leary, 2004). During data collection and analysis, the researcher was sensitized by the literature (Boeije, 2010). The iterative process of data analysis supported interpretation of the qualitative data in light of theory and, moreover, helped sharpen the researcher's theoretical understanding (O'Leary, 2004).

The case vignette technique (Jarzabkowski et al., 2014) is used to present the results in this paper. 'Vignettes are vivid portrayals of specific incidents, a critical event or moment in the field, or particular practices or routines—that illuminate a theoretical concept the author wishes to convey' (Jarzabkowski et al., 2014, p. 280). The system of vignette data representation includes both these portrayals, but also more explanatory text (Jarzabkowski et al., 2014). In this research, three case vignettes are described, in which interview quotes are used to illustrate points and enrich the findings. The coding system used for quotes is an abbreviation of the interviewee type per profession, followed by the number assigned to the individual interviewee. See Table 3 for an overview of the abbreviations per interviewee type:

Table 3: Abbreviations per interviewee type

Interviewee	Farmer	Banker	Accountant	Farm	Specialist	Employee
type				management	financial	of
				consultant	advisor	DairyNZ
Abbreviation	F	В	AC	FMC	SFA	DairyNZ
used						

The current study is part of a broader investigation exploring how the provision of FM advice in the FM advisory system in the New Zealand dairy sector is shaped. A paper exploring who farmer's FM advisors are and how farmer-advisor interactions about FM are shaped, has been published (Hilkens *et al.*, 2018).

FINDINGS

From the data, it emerged that two formal institutions that have been introduced in recent times have affected FM advisory provisioning in Aotearoa New Zealand. The first was the introduction of the Financial Advisers Act by the Government in 2008. This was a response to the global financial crisis in 2007 and was designed to protect businesses from those providing both financial services and advice. This was because the advice could be biased towards the sale of the firm's other products or services which could put the client at risk. The second formal institution was the Financial Management Collaboration Agreement (FMCA) that was initiated in 2014 by DairyNZ, an industry-funded advisory organisation. The Agreement was still in development at the time of data collection. The FMCA was set up to build relationships and collaborations with the other FM advisory actors around farmers with the aim of aligning advice about FM. This section first describes FM individual advisors' responses to the introduction of the Financial Advisers Act in 2008, which is a formal institution, a regulation introducing new accountabilities and demands on the role of some of these advisors. Secondly, it describes the different strategies used by an advisory organisation (the industry organisation DairyNZ) in pursuing their agenda to improve farmers' FM skills including the 'Financial Management Collaboration Agreement'. Subsequently, in that section, the targeted individual advisors' responses to the introduction of this intervention are described. Interview quotes are used to illustrate the points made and enrich the findings.

Vignette 1: Alteration practices employed by individual advisors in response to the introduction of the Financial Advisers Act

Initial situation

From the data, two institutional logics were distinguished (Table 4) that shaped FM advisory practices in the New Zealand dairy sector that were relevant to how FM advisors responded to the introduction of the Financial Advisers Act. The first one was the 'sensitivity of finances and farmers' limited interest in FM logic', which has been elaborated on in a paper connected to the same research project (Hilkens *et al.*, 2018). The values underpinning this 'sensitivity of finances and farmers' limited interest in FM logic' were that financial information was personal and sensitive to farmers, and farmers' identities were not strongly associated with FM. Practices associated with these logics were that farmers, in general, did

not openly and freely talk about their financial situations, how they undertook FM and that they rarely pro-actively engaged with advisors to obtain FM advice. The interview data reports that they tend to mainly engage for FM advice (secondarily) with actors with whom they primarily have a relationship for other services (e.g. loans and tax services or technical advice). These advisors were bankers, accountants and, in some instances, an FMC. These farmer-advisor relationships were underpinned by trust and are sometimes intergenerational.

The second logic emerging from the data was the 'duty of care' logic. This logic affected how FM advisors operate with other advisors around mutual clients. Advisors reported to generally work individually with a client, but they also worked in cooperation with other advisors if that was in the client's best interests and required to solve the client's problem. Practices associated with this logic were that advisors worked together with other advisors and for the benefit of the farmer. Interviewees, including farmers, expressed that there was also an expectation from farmers that their advisors worked together in the benefit of the farmer. The values associated with this logic were that advisors exhibited a moral obligation to care for (farmer) clients and work in their best interests. Moreover, advisors were motivated to acquire and retain clients for business reasons. The underlying assumption held by FM advisors was that being known as an advisor or service provider who acts in the clients' best interests is important, not only for retaining existing clients, but also for recruiting new clients. Even in instances where the primary basis of the advisor-farmer relationship was not based on FM advice, advisors regarded providing FM advice to farmer clients when they asked for or needed it as part of caring for their clients.

Table 4: Dominant institutional logics relevant to the introduction of the Financial Advisers Act

Institutional	Sensitivity of finances and	Duty of care
logic	farmers' low interest in FM	
Adhered to or	Farmers	Banker, accountant, FMC, farmers
internalised by		
Values /	Finances are a personal and	Advisors have a moral obligation to
beliefs /	sensitive topic; FM was not part	care for (farmer) clients; being known as
assumptions	of farmers' identity	an advisor / service provider who acts
		in the client's best interests is important
		for retaining / acquiring clients
Rules /	Farmers mostly engaged with	Advisors worked together with other
practices	actors for FM advice with whom	advisors around a mutual client in the
	they already had a long-term	client's best interests; advisors provided
	relationship for other reasons	FM advice to farmer clients when
	than FM advice (banker,	needed or requested
	accountant, FMC); besides that,	
	there was little to no interaction	
	about FM (advice) with others	
	(e.g. peers);	

Newly introduced formal institution - the Financial Advisers Act

The 'Financial Advisers Act' was enacted in 2008. This regulation was a legally binding formal institution introduced to protect individuals and businesses from those providing both financial services and advice, as the advice could be biased towards the sale of the firm's other products or services which could put the client at risk. This law aims to enhance best practice in FM advisory provisioning, including the provision of sound advice by financial advisors and to increase consumers' trust in FM advisors' professionalism and integrity. The Act requires actors who provide financial advice to be officially registered as a financial advisor and to follow a certain code of conduct (authorised financial advisor). The Act, moreover, sets specific operating rules, making financial advisors more accountable for the advice they provide. These rules are designed to ensure FM advisors practise care, diligence and disclose remuneration. The regulations apply to all financial advisers, and these are defined as an individual who provides a financial advisory service. A financial advisory service is defined as a "recommendation or opinion in relation to acquiring or disposing of (including refraining from acquiring or disposing of) a financial product" (financial products include, for example, a bank term deposit) (Parliamentary Counsel Office, 2008, p. s 10(1)). Financial advisory services also include both the provision of investment planning services and discretionary investment management services (Parliamentary Counsel Office, 2008).

Our findings indicate tensions between the introduction of a formal institution, the Financial Advisers Act, and the existing logics in the FM advisory system. The introduction of the Financial Advisers Act partly conflicted with the dominant institutional logics (see Table 5 for an overview). As a result of the implementation of the Financial Advisers Act, bankers, accountants and FMCs were legally restricted in the advice they could give to their clients in specific instances (for example, in the provision of investment advice). However, interview data suggests that an important aspect of the duty of care logic that bankers, accountants, FMCs and farmers had internalised was that bankers, accountants and FMCs provide FM advice to farmers if they asked for it, or needed it. For advisors, this was an important aspect of caring for their farmer clients and most farmers had an expectation that bankers and accountants would provide them with FM advice if they asked for it.

The following quote from an FMC illustrates a tension between farmers' expectations around FM advice provisioning by their FMC and the restrictions on FM advice provisioning by the Act:

'Q: What do farmers expect from you concerning financial management?

A: with some people they would look at their loan structures, whether they fix them or don't fix them and what terms they have over them, variable terms and all sorts of things. So that's another part of it but I can't in theory give advice on that because you'd have to have [an authorisation]' [FMC1]

Table 5: Tensions in institutional logics and bricolage practices related to the introduction of a formal institution (Financial Advisers Act (2008))

Existing	Newly	Tension	Bricolage practices	Bricoleurs
logics	introduced institution			
Sensitivity of finances and farmers' limited interest in FM	Financial Advisers Act (2008)	Farmers expect they can request FM advice from bankers and accountants and in some instances FMCs versus bankers, accountants and FMCs being restricted in the provision of this advice Part of caring for clients was providing FM advice to farmers versus advisors being restricted in the provision of this advice	Alteration 1: obtaining registration as a financial advisor to comply with the regulation Alteration 2: distance themselves from their identity as banker / FMC and thus the accompanying accountability to the regulation; Alteration 3: work with an authorised colleague in providing advice and thus avoid accountability to the	Some bankers and some FMCs (alteration 1); some accountants (alteration 2); FMCs and SFAs (alteration 3)
			regulation	

Alteration practices employed in response to the introduction of the Financial Advisers Act

The interviews revealed the different ways that bankers, FMCs and accountants dealt with the implications of the introduction of this law. This section explains how these actors navigated the accompanying (new) accountabilities and demands that the Financial Advisers Act (2008) placed on their role.

Related to the introduction of the Financial Advisers Act (2008), there was a recognition among banker interviewees that financial advice should not be provided by bankers:

'Advice is a bit of a dirty word in banking. (...) We're not supposed to, we're not qualified to give advice.' [B4]

However, responding to farmers' expectations that they would receive FM advice was important to bankers, because the provision of financial advice was an important aspect of their relationship with farmer clients. The following quote by a banker illustrates the tension between the legal restrictions imposed on bankers and farmers' expectation that bankers would provide them with FM advice:

'So [bankers] have to be very very careful on advice [...] but there again, farmers are looking for advice, they want help, they want discussion. And it can get very awkward, especially for inexperienced staff to know where to draw the line.' [B1] Despite the regulation restricting their FM advisory practices, it became evident that, in practice, bankers, FMCs and accountants remained involved in the provision of FM advice. These advisors were found to respond in ways that could be classified as an 'alteration'.

In response to the introduction of the Act, it was an option for SFAs and FMCs to obtain registration as a financial advisor, enabling them to provide financial advisory services. All SFAs interviewed obtained this registration and some FMCs also reported that they obtained registration as a financial advisor. This is an example of them using an alteration practice (alteration 1), because they changed their routines by now being registered and providing advice as a registered financial advisor. An FMC explains why he obtained registration as a financial adviser to ensure he cannot be held liable for providing financial advice to farmer clients:

'Q: Why did you decide to also become an authorised financial adviser?

A: We have that to protect ourselves, it's a protection thing because if all of a sudden someone comes back and [holds you liable]. [...] It's just so I can discuss things like if they want to buy [company name] shares, is that a good idea' [FMC6]

Some bankers' and FMC's responses to the implementation of the Financial Advisers Act (2008) can be coined as an alteration practice (Alteration 2), because there was evidence of them inventing conditions that allowed them to avoid this formal regulation. In particular, several bankers and FMCs stated that, in advisory interactions with farmer clients, they emphasised that the nature of the advice they were about to provide, was their own personal opinion and unrelated to their role as the client's banker or FMC (Alteration 2) (Table 5). In a farmer client's words, the bankers took 'their banker's hat off' and the FMCs said that they were providing 'a personal opinion'. In this way, bankers and FMCs were able to respond to an advisory demand expected of them by farmers and, at the same time, they were able to get around the legal restrictions imposed on them by the Act and in the case of banks, their own bank's policy in relation to the provision of advice. This alteration strategy enabled advisors to distance themselves from their professional identity as a banker or FMC and, thus, the accompanying accountability to this regulation (also see Table 5). A farmer explains that her banker sometimes explicitly mentions that the advice he provides is personal, to make sure he complies with the regulations restricting bankers' advisory practices:

'And then they take their banker's hat off and give some personal advice. But then they make it very clear that they take their banker's hat off because they are technically not allowed to run our finances. [...] They cannot tell us what to do. But that is a thin line. Because if they turn around and we say, but you told us to do that, they are in trouble.' [F8]

An FMC explains that he explicitly mentions he is not allowed to provide advice if asked for FM advice because of the Financial Advisers Act. He then provides the advice, but emphasises it is his personal advice to ensure he complies with the regulations restricting FMCs' advisory practices:

You just say okay here's what I believe, I'm not authorised to actually recommend it, but personally if I was in this situation here's what I'd be looking at and it's over to you to make your mind up and go with your feeling, but you've asked me for a personal opinion and I'll give my personal opinion. [...] You've got to make it clear that that is not your area of expertise, it's not my area of expertise and I'm legally not allowed to do it. Well I could, anyone is allowed to have an opinion, but I could make my own personal opinion, it's not my business.' [FMC6]

Accountants were also reported to be affected by the Financial Advisory Act and legally restricted in the provision of FM advisory services to farmers. However, in practice, farmers asked accountants for advice and accountants were also motivated to sometimes proactively provide FM advice to farmers in line with 1) the sensitivity of finances and farmers' limited interest in FM and 2) the duty of care logics. The introduction of the regulation restricted accountants from providing FM advice to farmers. The data suggests that accountants' responses were not necessarily stopping the provision of verbal advice, but they employed a strategy that could be classified as an 'alteration' practice (Alteration 3) (Table 5). The strategy can be coined an alteration because accountants adapted their long-established practices to the introduction of the Act. An example of this adaptation was where accountants engaged with an SFA in their FM advisory provision instead of providing the advice themselves. An accountant's firm employed a specialist financial advisor who was allowed to provide FM advice to farmer clients under the regulations of the Financial Advisers Act (2008). In order to comply with the regulations, the accountant started to work together with this authorised colleague (specialised financial advisor) in developing advice for her farmer clients. In this way, the accountant distanced herself from any accountability to the Financial Advisory Act, because the advice is provided in collaboration with an authorised financial advisor. The following quotes from one of the specialist financial advisors in an accountancy firm illustrates this strategy:

Because - this is where the new laws are silly. [The accountant] can't discuss - none of the accountants here can really discuss financial planning matters with clients because they're not an authorised financial adviser. They can talk about the basic things, whether you should buy some shares or sell some shares but they can't discuss that, they're not allowed to under the new laws. So that's where if we want to have a discussion about that I have to be involved because I've got a bit of paper that says I'm allowed to. It's just nutty really, it makes no sense.' [SFA2]

Yeah, but we discuss what [the accountant's] thoughts are and what mine are beforehand [...] and then [we and the client] go and have a chat. [...] But I certainly work very closely with the accountants, especially if it's not just the farming side but if the accounting clients are looking at either buying or selling a commercial property we look at that from a financial planning point of view and the best way of structuring it and whether it should be in a family trust or a company or whatever the best way of purchasing it.' [SFA2]

Vignette 2: Strategies employed in the pursuit of improving farmers' financial management skills and advisors' responses to the Financial Management Collaboration Agreement

In this section, first an explanation is given about the different institutional logics relevant to DairyNZ developing an approach to improving farmers' FM skills, when this organisation cannot put formal requirements on farmers nor farmers' advisors. Subsequently, how advisors responded to the new accountabilities and demands this formal institution introduced to their role is discussed.

Initial situation

Besides the earlier mentioned 'sensitivity of finances and farmers' limited interest in FM logic', the data showed that three other important, dominant logics were important in shaping FM advisory practices. These logics were relevant to DairyNZ developing an approach to improving farmers' financial management skills, introducing new demands on the role of different FM advisors. These logics were 'the advisory team logic', the 'industry good logic' and the 'FM skills for stronger farm businesses logic' (see Table 6).

The advisory team logic relates to how the key FM advisors (bank, accountant and sometimes FMC) collaborated with each other around mutual clients. Interview data suggested that advisors generally worked individually with a client. However, the data reflected that advisors recognise and respect their own and other advisors' particular expertise and that, generally, they do not encroach on other advisors' 'territory of expertise'. Sometimes, advisors physically came together or directly had contact with each other, for example, if it was required to solve a problem for a mutual farmer client or when the farmer made plans for the year. The values underpinning this logic related to the view that a team of advisors working together around a mutual client was more productive and effective than the individual advisors operating in isolation. The underlying assumptions of the advisory team logic were that the different types of advisors did not compete for the provision of services with each other and that they acknowledged the value of each other's expertise. Practices expressing this logic were that the key advisors worked together as a stable group around mutual clients with the advisors fulfilling different, but complementary tasks and roles in supporting them with FM.

The 'industry good logic' emerging from the data relates to a perspective around the existence and function of the industry good organisation. The values underlying this logic were that the industry organisation undertakes activities to improve the sector that are in its best interests. The organisation only provides a service that is not provided by commercial actors in the sector, which is shown in the following quote by a DairyNZ employee:

'That's probably a fundamental principle about DairyNZ, that we can only exist where there is market failure or enough confusion in the market that DairyNZ has to show leadership.' [DairyNZ5]

For example, farmers can engage with FMCs for one-on-one advice about a range of different topics, including FM advice. As such, DairyNZ does not deliver advice one-on-one, rather, it uses discussion groups as its mode of delivering advice to avoid competition with FMCs. All dairy farmers pay a levy to DairyNZ, which is used for research and extension in the dairy sector.

The 'FM skills for stronger farm businesses logic' related to a philosophy around the importance of farmers' FM skills. The assumption underpinning this logic is that robust FM practices are of key importance to ensure farm businesses remain resilient in an increasingly turbulent operating environment due to factors such as environmental regulations, milk price volatility and climate change. Related practices are formal tools used by the various advisors, for example, Dairybase, a financial benchmarking service provided by DairyNZ to dairy farmers (DairyNZ, 2019).

Table 6: Dominant institutional logics relevant to DairyNZ's approach to improving farmers' FM skills

Institutional logic	FM advisory team logic	Sensitivity of finances and farmers' limited interest in FM logic	Industry good logic	FM skills for stronger farm business logic
Adhered to or internalised by	Most bankers, accountants, FMCs	Farmers	DairyNZ	DairyNZ, most bankers, accountants, FMCs
Values / beliefs / assumptions	A team of advisors working together around a mutual client will achieve the best outcome for the client and all parties compared to advisors operating individually; no competition among different advisors and they acknowledged the value of each other's expertise	Finances are a personal and sensitive topic; FM not part of farmers' identity	DairyNZ operates in the best interests of the sector and do not generally provide a service provided by commercial actors in the sector	Farmers' FM skills are important to achieve more resilient farm businesses
Rules / practices	Key advisors worked together around mutual clients, fulfilling different, but complementary tasks and roles in supporting a mutual client with FM	Little interaction about FM (advice) with others; farmers only engage for FM advice (secondarily) with trusted advisors (banker, accountant and FMC) as part of a long-term relationship	Offering education and advisory services that are not commercially available to farmers; e.g. organisation of farmer discussion groups	Encouraging farmers to improve their FM skills
Material / visual aspects	Financial reports (used by bankers and completed by the accountant in collaboration with the farmer); tax forms; budget spreadsheets; cashflow spreadsheets	None identified	Providing a range of material designed to support farmers with their FM, e.g. a reference guide with key facts, figures and financial performance indicators for farms	Dairybase (benchmarking software – a programme that measures farmers' financial performance); online budgeting and cashflow tools

Alteration and aggregation strategies employed by the industry organisation

DairyNZ has an agenda to upskill farmers' FM capability, and has been committed to this since 2007. There were some tensions in the organisation's agenda and traditional advisory provisioning procedures on the one hand, and important institutional logics concerning farmers' engagement with the topic of FM on the other hand (see Table 7 for an overview).

Table 7: Tensions in the different institutional logics and the resultant bricolage practices

Other	DairyNZ	Tension	Bricolage	Bricolage
actors'	logics		practices	by
logics				
Sensitivity of	Industry	Farmers' reluctance to talk about	Alteration	DairyNZ
finances and	good logic	finances in groups / with peers vs.		-
farmers' low		DairyNZ's traditional method of		
interest in FM		service provision is farmer discussion		
		groups		
FM advisory	FM skills	DairyNZ not being part of farmers'	Aggregation	DairyNZ
team	for	key FM advisors vs. DairyNZ's focus		-
	stronger	on wanting to improve farmers' FM		
	farm	skills		
	businesses			

The first tension relates to the sensitivity logic with farmers' reluctance to openly talk about finances (e.g. with peers). In line with the industry good logic, the industry good organisation's traditional approach to engaging with farmers was through discussion groups. DairyNZ interviewees reported that attempts to utilise this mechanism to engage with farmers on FM were not effective. The interview data suggests that this related to farmers not being intrinsically motivated to improve their FM skills and their reluctance to talk about finances in a group situation because of the sensitive and intimate nature of the topic. Moreover, from the interview data with both advisors and farmers, it emerged that most farmers did not use formal tools (e.g. cash flow budgets, Dairybase) provided by advisors to manage their finances. They often used informal procedures in their financial management. An informal procedure could be to measure farm financial performance by calculating the change between the opening and closing bank balances for the year, instead of using formal procedures like Dairybase to assess liquidity, profitability and solvency. As a response to the recognition that a group-based approach was not effective, the industry organisation conducted research with farmers to understand how they could change their approach to improve the effectiveness of their FM advice provisioning to farmers.

As a result of this research, DairyNZ changed their institutional logics about FM advisory services, including changing their delivery of FM advice to farmers (channels used and message framing) to meet their goal of improving farmers' FM capability. A project developer from DairyNZ explains that they did research which helped them with the way they changed their FM advisory approach in the following quote:

'[The research] helped us a lot in terms of our extension team, trying to bring up financial things in discussions groups, it can be really uncomfortable for [farmers].

We're using that research and what it's told us to help shape the way that we engage with farmers. So the channels that we use, the mediums, the messages, the way we word things is based around that so that it will motivate them to be involved but take away some of the scary stuff that makes [farmers] think they shouldn't do it.' [DairyNZ2]

DairyNZ's approach, from a bricolage point of view, is classified as "alteration", because they altered (part of) their industry good logic, by broadening the mechanisms (e.g. wording and channels) for advice provisioning.

The second tension in the institutional logics that emerged from the data was between, on the one hand, the sensitivity and FM advisory team logics and, on the other hand, the FM skills for stronger farm businesses' logic. In line with these logics, farmers engaged with bankers, accountants and FMCs for FM advisory services. DairyNZ was not part of this group of key advisors. However, as part of the 'FM skills for stronger farm businesses' and 'industry good' logics, DairyNZ was motivated to play a role in upskilling farmers in FM. Interview data suggests that DairyNZ recognised that they were not part of the core group from whom farmers obtain FM advice, and that farmers preferred to engage with bankers and accountants about FM, as a project developer from DairyNZ explains:

We recognised that there's a number of organisations, banks, accountants et cetera that farmers will naturally go to when you're making decisions because it's well proven that they are the number one and two just about, or two and three points of contact for advice in that role [FM advice].' [DairyNZ2]

The way DairyNZ was reported to have dealt with this tension was harmonising the different logics (the 'sensitivity of finances and farmers' low interest in FM' and 'FM skills for stronger farm businesses' logics) and this is an example of an aggregation practice (or at least an attempt to aggregate). The initiative to formalise collaboration, was to achieve coherence between, on the one hand, the sensitivity and FM advisory team logics and, on the other hand, the FM skills for stronger farm businesses logic. The aggregation practice was, for DairyNZ, to try to shape farmers' behaviour through farmers' trusted FM advisors. To achieve this, DairyNZ actively built relationships and collaborations with the other FM advisory actors with the aim of aligning advice about FM. These collaborations around FM were formalised in a formal, but non-binding institution, the 'Financial Management Collaboration Agreement' (FMCA). The purpose of the Financial Management Collaboration Agreement as written in the Agreement itself is "to foster effective financial management on farms by creating an increased appreciation of, and demand for, financial management skills among New Zealand dairy farmers" (DairyNZ, 2015, p. 1). The vision articulated in the Agreement is that "Key Partners seek to ensure that, in time, there is increased recognition by farmers of the value of effective financial management practices and, consequently, an increase in the implementation of these practices on farm" (DairyNZ, 2015, p. 1).

DairyNZ believed that efforts to support dairy farmers with FM advice is more effective by engaging the other actors that provide them with FM advice, as illustrated in the following quote from a DairyNZ project developer:

'So our partnerships with the likes of [banks, accountants and others], various others, fertiliser companies et cetera, are imperative for us to have success because we're not the only organisation in the country. So, the partnership is a massive part of what we do but it's primarily about how we, through DairyNZ's channels support partners, how we get all the content and the knowledge or the information that farmers may want or need out to them in a contextualised way - so it's more about packaging it.' [DairyNZ2]

The change in DairyNZ's approach in influencing dairy farmers' FM practices related to the recognition that they are not the main actor farmers engage with for FM advice. This is also mentioned in DairyNZ's 2017 Annual Report:

'Sustained milk price volatility highlights the need for the dairy industry to employ robust cash management practices. Building on research, DairyNZ has been implementing a new way of talking about financial management and engaging with farmers to motivate them to prioritise financial management practices in their businesses. Working jointly with industry partners, this project seeks to support and develop a strong business ethos and foster practice change among dairy farmers through the provision of a collaborative support and resources for dairy farmers' (DairyNZ, 2017, p. 43).

Advisors' responses to the introduction of a non-binding formal institution - the Financial Management Collaboration Agreement

This section describes how some advisors who were targeted by a formal, but not legally binding institution 'the Financial Management Collaboration Agreement' (FMCA) responded to the development and introduction of this agreement.

The process of discussions between DairyNZ and the different actors and the development of the agreement were on-going at the time of data collection. It appeared that there were not only tensions, but also possibilities for alignment between the introduction of the agreement and the different institutional logics adhered to or internalised by the targeted advisors. See Table 8 for an overview of the different institutional logics relevant to the targeted advisors' responses to the introduction of the FMCA. See Table 9 for the tensions between certain institutional logics and the FMCA and the bricolage practices that were applied in response to the introduction of the FMCA.

Table 8: Institutional logics relevant to the introduction of the FMCA

Institutional	FM advisory team logic	FM skills for stronger farm
logic		businesses
Adhered to	Accountants, bankers, FMCs, farmers	DairyNZ, bankers, some
or		FMCs and some accountants
internalised		
by		
Values /	A team of advisors working together around	Farmers' FM skills are
beliefs /	a mutual client will achieve the best outcome	important to achieve
assumptions	for the client and all parties compared to	stronger and more resilient
	advisors operating individually; no	farm businesses
	competition among different advisors and	
	they acknowledged the value of each other's	
	expertise	
Rules /	Key advisors worked together around mutual	Encouraging farmers to
practices	clients, fulfilling different, but complementary	improve their FM skills
	tasks and roles in supporting a mutual client	
	with FM	
Material	Financial reports (used by bankers and	Dairybase software
/visual	completed by accountant in collaboration	(benchmarking programme);
aspects	with farmer); tax forms; budget spreadsheets;	online budgeting and
	cashflow statements	cashflow tools

Table 9: Tensions and alignments in institutional logics and the bricolage practices that were applied

Institutional	FMCA /	Tension OR alignment	Response	Bricolage
logic	introduced		/	by
	logic		Bricolage	
			practices	
FM advisory	FMCA	Tension: Some accountants do	Articulation	Some
team logic		not see the value in educating		accountants
		farmers in FM vs. FMCA wants		
		accountants to upskill farmers in		
		FM		
FM skills for	FMCA	Alignment: Bankers adhered to	Aggregation	Bankers
stronger farm		or had internalised the FM skills		
businesses		for stronger and more resilient		
		farm businesses logic which		
		underpinned the FMCA		

The interview data suggests that there was a tension between DairyNZ's motivation to introduce the agreement, in line with the 'FM skills for stronger farm businesses' logic, and the 'FM advisory team' logic (Tension in Table 9). This tension related to some accountants' perception that DairyNZ expected that the advisors who participated in the agreement (e.g. accountants) would take some responsibility for educating and upskilling farmers in FM. However, following the 'advisory team logic', farmers and advisors have complementary

skills and expertise. Some accountants did not see the value of them providing FM training to farmers, because, as part of their professional identity, they saw it as their (and other advisors') task to monitor and intervene to keep the farm(er) on track concerning FM. These accountants did not see it as part of their job to educate farmers about FM, rather, they perceived themselves as responsible for monitoring the performance of a farm business and providing advice if the business was not performing or to help improve its performance. Related to this tension, there was one example of articulation, in which an accountant rejected an attempt by DairyNZ to negotiate a change in the way they provided advice to farmer clients. This example of articulation was from a rural accountant representative involved in discussions around the FMCA who expressed his doubts about DairyNZ's ideas. His views conflicted with DairyNZ's views, because he challenged the 'FM skills for stronger farm businesses' logic because he thought that farmers do not necessarily need better FM skills to run more profitable businesses. This related to his idea that it's the accountant's responsibility to monitor the performance of a farm business and provide advice if the business is not performing or to help improve its performance. Furthermore, in his opinion, tertiary rural education providers would be better education providers than accountants, as being educated by accountants would be (a lot) more expensive for farmers. These doubts are expressed in the following quotes:

If there is something going horribly wrong with a farming business and I'm aware of it then the client knows that I'll tell them. [...] I just feel a little bit uneasy that organisations out there, [DairyNZ], have this view, that we should be spending farming clients' money in this way [accountants training farmers in FM]. [...] Because [farmers'] role is all about getting the most out of their cows in terms of production at the least cost. [...] That doesn't necessarily mean that they need to understand all the financial management and financial literacy issues around their farming business to enable them to do that.' [AC6]

At the time of data collection, it was unclear how the accountants dealt with these potential new demands on their role which conflicted with the advisory team logic that they had internalised. For bankers, the development of the FMCA aligned with some of the bank's institutional logics, as most bankers also had internalised the 'FM skills for stronger farm businesses' logic. Although bankers adhered to the 'FM advisory team' logic, they generally believed that farmers with better FM skills would also have stronger, more resilient and financially stable farms. Furthermore, the banks had an interest in farmers improving their FM skills. Banker interviewees expressed that they believed that farmers with good money management skills are likely to also have strong financial businesses which reduces the bank's risk in lending money to these businesses. Bankers indicated that they were therefore happy to participate in the FMCA. This is an example of aggregation, because the institutional logics of bankers are aligned with the institutional logics of the FMCA and provided additional purpose for bankers which is explained in the next section. The bankers' response also relates to the introduction of the Financial Advisors Act, which is explained in more detail in the next section.

Vignette 3: Alteration practices by bankers in response to the combination of the introduction of the Financial Advisers Act and the Financial Management Collaboration Agreement

The data suggests that, for bankers, navigating the new demands on their role introduced by the Financial Advisers Act (2008) and the FMCA were interrelated. This section explains how bankers' responses to the introduction of these two institutions were interrelated (see Table 10).

Banks recognised that they had to move away from (official) FM advisory services, because of the introduction of the Financial Advisers Act (2008) that placed legal restrictions on their provision of advice to clients. Moving away from FM advisory services created a tension with the 'FM skills for stronger farm businesses' logic. Bankers had an interest in farmers improving their FM skills, but the Financial Advisers Act (2008) restricted bankers' provision of FM advice.

The FMCA came to the rescue for the bankers. This agreement provided additional purpose to bankers because it potentially stimulated other actors around farmers to take a role in improving farmers' FM skills. The FMCA was an initiative that aimed to improve farmers' FM capability. As other actors were encouraged to take up responsibilities for upskilling farmers, the banks could pass this role over to other advisors as part of the FMCA. In the following quote, a banker explains that it is in the bank's interest that other actors in the industry take up the FM advisory role for farmers:

'Farmers see banks as a source of advice, but legally [banks] cannot provide advice and we shouldn't provide advice. But we're called on to fill gaps that others aren't providing. [...] So it's in our own interest to have the industry provide guidance to farmers to actually take responsibility for their own planning and budgeting.' [B5]

There was also evidence of bankers distancing themselves from practices that associate them with advice provision, besides the alteration strategies that bankers used in response to the introduction of the Financial Advisory Act that enabled them to remain active in advisory provisioning to farmer clients. This distancing is an example of aggregation, because by moving away from providing advisory activities, the different institutions were in harmony. By moving away from providing FM advice, bankers aligned with the Financial Advisers Act (2008). The FMCA logic again aligned with the 'FM skills for stronger farm businesses logic'. An example of aggregation, was where bankers outsourced financial management training to other actors, for example, specialised training organisations. A banker explains in the following quote that a motivation for outsourcing FM training was to avoid being seen as providing financial advice:

Yes, we used to have our own internal programs [for farmer FM capacity building]. (...) We've outsourced most of that to [a training organisation]. (...) we used to have a lot of one-day seminars, doing budgets, goal setting, strategic goals, strategy, two-day strategy. But it's all outsourced now. [...] probably getting away from being seen to provide advice as a bank.' [B2]

The outcome for FM advice provisioning, as a result of using a particular bricolage strategy (alteration or aggregation), was quite different. In the case of alteration (in instances of one-

on-one advisory provisioning), bankers remained active in providing FM advice, whereas, in the case of aggregation (in instances of financial management training), the bank moved away from providing FM advisory services. The data suggest that this difference relates to the importance of responding to FM advisory demands in close farmer-banker relationships for satisfying, retaining and acquiring clients. In contrast, providing FM training to farmer clients was not viewed as significant in maintaining a good client relationship; it could be outsourced without harming the relationship with farmer clients.

Table 10: Alignment and tension between bankers' logics and the introduced formal institutions and associated bricolage strategies used

Institutional	Introduced	Alignment or tension	Response /	Bricolage
logic	institution		bricolage	by
			practices	
FM skills for	FMCA	Alignment: Bankers wanted	Both	Bankers
stronger farm		farmers to upskill their FM	alteration	
businesses		skills as they believed this	and	
		would lead to more resilient	aggregation:	
		and financially stable	Distancing	
		businesses with less	themselves	
		financial risk to the bank	only from	
		and they agree with the	certain	
		intent of the FMCA, which	modes of	
		aims to improve farmers'	advice	
		FM skills	provisioning	
	Financial	Tension: Bankers wanted to		
	Advisers Act	support farmers to upskill		
	(2008)	their FM skills vs. the Act		
		restricting bankers' advisory		
		provisioning		

DISCUSSION

This paper explores how Aotearoa New Zealand FM advisors cope with accountabilities and demand conflicts due to different logics in the FM advisory system, and how they respond to these conflicts in everyday practice through bricolage. This is analysed through three vignettes related to the introduction of two formal institutions (a regulation and an agreement) introducing new or different accountabilities and demands for FM advisors. The main themes emerging from the study, in light of the existing literature on the topic, are discussed hereafter.

Diverse dynamics shaping advisors' responses to formal institutions

This research has described the types of institutional logics shaping farmers' and agricultural advisory actors' practices within the context of FM advisory provisioning. These logics include aspects of the farmer-advisor relationship and both farmers' and advisors' professional identity.

The current study illustrates the existence of different institutional logics of advisers in different professions and how these shape the choice of strategies they employ to provide

advice as individuals and as groups of advisors to a mutual client. Moreover, related to these differences in institutional logics, the current research provides a rich illustration of how advisors respond to multiple accountabilities and demand conflicts. To date, the literature has not reported variation in advisors' responses and how these responses are crafted (e.g. Mahon et al., 2010, Parkinson, 2009, Minh et al., 2014, Christoplos, 2012, Albaladejo et al., 2007). In particular, this paper provides illustrations of the types of bricolage practices and distinguishes different strategies employed by advisors from different professions to achieve a particular bricolage practice. For example, in response to the introduction of a legally binding formal institution (the Financial Advisors Act) three different types of alteration have been distinguished by which FM advisors continued to provide advice to farmers. These three different types comprised firstly, accepting accountability to the institution and adapting routines to achieve compliance. The second was circumventing the binding institution by distancing themselves from their professional identity and the associated accountability to the institution. The third was working with an authorised colleague in providing advice and thus avoiding accountability to the institution and a hybrid strategy of type 1 and 2. Besides variation in responses for FM advisors from different professions, there was variation in responses among advisors within the same profession. This was the case for FMCs, some of whom "took their hat off" (alteration) and others obtained registration (aggregation) in response to a legally binding institution. The identification of different types of alteration practices employed by advisors within and across professions has, not to date, been highlighted in the literature exploring advisors' responses to the introduction of a formal institution targeting the provision of advice (Albaladejo et al., 2007, Mahon et al., 2010, Parkinson, 2009, Minh et al., 2014, Christoplos, 2012).

Moreover, the current study highlights the types of factors shaping the usage of bricolage practices and strategies which have not been reported earlier.

Firstly, the study emphasises that the strategies and practices used by the FM advisors reflect the particular stake they have in the relationship with farmers. In this research, the stake was often related to the primary relationship between the farmer and key actor providing FM advice to farmers which was, in most cases, not the provision of FM advice. In particular, this paper emphasises how the importance of advice provisioning to the farmer-advisor relationship shapes the use of bricolage practices and strategies, particularly when the provision of advice is not the primary foundation for the relationship. If a particular mode of advisory provisioning (one-on-one advice) was a contributor to the quality of the farmeradvisor relationship, advisors tended to circumvent the restrictions on advisory practices imposed on them through a formal institution. In particular, some advisors acted in line with the practice of alteration, because the condition they invented enabled them to ignore the formal institution by distancing themselves from their professional, non-advisory identity when giving FM advice. Advisors acted in this particular way, because they did not want to compromise their relationship with farmers by complying with the regulation, but also did not explicitly wish to be seen to be challenging the formal institution. This response is similar to what has been reported in earlier research about how advisors craft responses to a nonlegally-binding institution (participatory advisory program), which aimed to get advisors implementing participatory advisory practices (Mahon et al., 2010). Advisors used a similar strategy in both instances. This likely relates to the importance advisors in both studies placed on their accountability to farmers, but also possibly because they were in a position to "make do" in a way that did not expose them professionally to sanctions or discredit their professional identities. In instances that a mode of advisory provisioning was not a contributor to the quality of the relationship with farmers, for example, for group-based FM advisory services, advisors tended to use practices of aggregation and directly or indirectly complied with the institution.

Another factor shaping advisors' usage of bricolage practices and strategies was the extent to which FM advisory provisioning is a component of the professional services provided by the FM advisor. For example, SFAs, for whom FM advisory provisioning was a main and official component of the services provided to clients, responded differently to the introduction of a legally binding institution (Financial Advisors Act) than accountants, for whom FM advisory provisioning was not a main component of the services provided to clients.

Moreover, the findings have highlighted differences in advisors' responses to binding and non-binding institutions. These findings suggest that the nature of the institution also shapes advisors' responses to the introduction of an institution. Literature to date has identified bricolage practices associated with the introduction of formal institutions without differentiating between the types of formal institutions. This research shows that for a legally binding institution, advisors responded with alteration strategies compared to articulation and aggregation strategies in response to an institution in which compliance or participation was voluntary.

Furthermore, the data also suggests that responses depend on the specific combination of different formal institutions that are introduced. Advisors' responses varied to binding and non-binding institutions that targeted the provision of FM advice. Similar to the responses reported by van Mierlo and Totin (2014) for farmers, advisors' responses to formal institutions and accompanying accountabilities were shaped by the particular combination of different formal institutions introduced. Moreover, this research particularly highlights that tensions between advisors' institutional logics and an introduced formal institution can be neutralised or harmonised by the introduction of another formal institution, which has not been reported earlier. In particular, compliance with a binding formal institution (Financial Advisers Act) was in conflict with some advisors' (bankers) institutional logics, but the FMCA gave them a mechanism to resolve this conflict.

Layers of bricolage: individual and organisational

This study highlights that bricolage practices (as defined by (De Koning and Cleaver, 2012)) were evident amongst advisors and advisory organisations. Other scholars also found practices consistent with bricolage in the adaptation of an advisory program at an organisational level (e.g. Parkinson, 2009, Minh et al., 2014). Bricolage practices by the advisory organisation included formalising institutions which enabled this organisation to shape an advisory system in a subject area where they are not a dominant provider of advice, which has not been reported previously. The advisory organisation responds to informal institutions and institutional logics adhered to by key advisors in this system through

practices of alteration and aggregation. Alteration was achieved through modifying their own institutions, their mode of advisory provisioning, to obtain a better fit with the existing dominant institutional logics of the advisory system they seek to shape. The particular strategy of aggregation of the advisory organisation in this research was the development of a non-binding institution to shape the practices of the key FM advisors in the FM advisory system in the New Zealand dairy sector. An organisation developing advisory programs trying to create an institutional fit between their agenda and important institutional logics in the sector reinforces extant work reporting a similar approach by an organisation introducing a demand-driven advisory approach in Vietnam (Minh *et al.*, 2014). This research highlights that developers harmonise (bricolage practices of aggregation) between their agenda and the logics adhered to by advisors who are expected to implement the program. This extends earlier work, that has also reported on harmonising practices, but found harmonisation between the program's logics and regulatory context in which implementing advisors operate (Minh *et al.*, 2014).

CONCLUSION

There are limited insights into how, in their day-to-day advisory practices, advisors or advisory organisations deal with potentially opposing accountabilities and demands on their role. The current study enriches our understanding about the strategies advisory actors employ to navigate different accountabilities and demands on their role in their general daily advisory practices.

The current research clearly illustrates that advisors navigate different accountabilities and demands by following a path characterised by alteration, aggregation and articulation, actions consistent with the concept of bricolage. Moreover, the study has extended and refined our knowledge about the nature of advisors' responses to the implementation of formal institutions. In particular, it highlights how factors such as farmers' and advisors' institutional logics, including the importance of advice provisioning to the farmer-advisor relationship and, moreover, the nature of the institutions which shape these responses. The study also highlights specific strategies by which bricolage practices are enacted by different types of advisors. Furthermore, this study found that not only individual advisory actors, but also organisations developing advisory programs can act in accordance with what has been defined as bricolage.

The main implication from this study is that the design of an advisory programme must take into account the broader institutional dynamics into which this new institution is to be implemented. This, in turn, has implications for studying advisors' responses in relation to the implementation of formal institutions that place additional accountabilities and demands on their role. When studying these phenomena, it is important not to isolate advisors' responses to a single institution, but take into account the broader institutional dynamics in which these new institutions are implemented. This is important, because the current study has highlighted that several factors in the broader institutional context shape advisors' responses to the introduction of a formal institution that introduces additional accountabilities to their role.

This study also has practical implications. Owing to the institutional complexity and, in particular, variations in which logics and how these logics shape responses to the introduction of advisory programs, it would advise against the implementation of standardized advisory programs. Rather, this research suggests to design programs that give agency to advisors to adopt and tailor their approach and practices in line with their knowledge of farmers and their relationships with farmers. This is in line with earlier work that has criticised the trend of pushing standardized 'one-size-fits-all' agricultural advisory programs (Birner et al., 2009). Owing to the complexity of institutional logics, it can be difficult to anticipate advisors' responses to additional accountabilities and demands on their role. Therefore, it is important that the introduction of formal institutions which are designed to shape the advisors' behaviour is an adaptive, as opposed to, a one-off process. This study stresses that there is a need to monitor the interaction of the project aims and procedure with the institutional logics of the farmers and the different types of advisors, leaving room for bricolage activities and using these activities as an input to program adjustment. This research sheds some light on why advisory programs that rely on the translation and implementation by advisors often fail to achieve the expected outcomes. In particular, it suggests that an advisory program which is counter to farmers' institutional logics is unlikely to achieve the desired outcomes, if advisors do not support the agenda of this advisory program.

While this study provides valuable insights into strategies used by FM advisory actors in navigating different accountabilities and demands on their role, the study also points to areas for future research. Future research could further explore the development process of advisory programs, in particular, whether and how the "back room" contemplate institutional logics, and what this implies in terms of bricolage responses. Furthermore, future research could explore which bricolage strategies are more likely to be used by organisations that do not have the formal authority to place binding requirements on advisors. Moreover, future research could explore and compare the nature of advisors' responses in relation to the introduction of different types of formal institutions, for example, binding and non-binding institutions. Further work could be undertaken to determine the means by which formal institutions are considered binding (e.g. legal or employer-employee) and how these shape advisors' responses to the introduction of these institutions.

REFERENCES

- Albaladejo, C., Couix, N. & Barthe, L. 2007. Learning in Agriculture: Rural Development Agents in France Caught between a Job Identity and a Professional Identity. *The Journal of Agricultural Education and Extension*, 13 (2), 95-106. Available: DOI 10.1080/13892240701289361
- Bebbington, A. & Sotomayor, O. 1998. Demand-led and poverty-oriented ... Or just subcontracted and efficient? Learning from (semi-) privatized technology transfer programmes in Chile. *Journal of International Development,* 10 (1), 17-34. Available: DOI doi:10.1002/(SICI)1099-1328(199801)10:1<17::AID-JID427>3.0.CO;2-I
- Berglund, B., Hallgren, L. & Aradóttir, Á. L. 2015. Stakeholder Interaction in Participatory Land Restoration in Iceland: Environmental Officers' Challenges and Strategies. *Environmental Management*, 56 (2), 519-531. Available: DOI 10.1007/s00267-015-0506-0

- Birner, R., Davis, K., Pender, J., Nkonya, E., Anandajayasekeram, P., Ekboir, J., Mbabu, A., Spielman, D. J., Horna, D., Benin, S. & Cohen, M. 2009. From Best Practice to Best Fit: A Framework for Designing and Analyzing Pluralistic Agricultural Advisory Services Worldwide. *The Journal of Agricultural Education and Extension*, 15 (4), 341-355. Available: DOI 10.1080/13892240903309595
- Boeije, H. 2010. Analysis in Qualitative Research, London, SAGE Publications Ltd.
- Brinkmann, S. & Kvale, S. 2015. *InterViews Learning the Craft of Qualitative Research Interviewing,* Thousand Oaks, SAGE Publications, Inc.
- Bruges, M. & Smith, W. 2008. Participatory approaches for sustainable agriculture: A contradiction in terms? *Agriculture and Human Values*, 25 (1), 13-23.
- Carstensen, M. B. 2011. Paradigm man vs. the bricoleur: bricolage as an alternative vision of agency in ideational change. *European Political Science Review*, 3 (1), 147-167. Available: DOI 10.1017/S1755773910000342
- Christoplos, I. 2010. *Mobilizing the potential of rural and agricultural extension*. Rome: FAO. Available: http://www.fao.org/docrep/012/i1444e/i1444e00.htm.
- Christoplos, I. 2012. Climate advice and extension practice. *Geografisk Tidsskrift-Danish Journal of Geography*, 112 (2), 183-193. Available: DOI 10.1080/00167223.2012.741882
- Cleaver, F. 2012. Development through bricolage: rethinking institutions for natural resource management, Abingdon, Oxon; New York, NY: Routledge, 2012.
- Creamer, L. K., Pearce, L. E., Hill, J. P. & Boland, M. J. 2002. Milk and Dairy Products in the 21st Century. *Journal of Agricultural and Food Chemistry*, 50 (25), 7187-7193. Available: DOI 10.1021/jf020711b
- DairyNZ 2015. Financial Management Collaboration Agreement.
- DairyNZ. 2016. Annual Report 2015/16. Hamilton: DairyNZ.
- DairyNZ. 2017. Annual Report 2016/17. Hamilton: DairyNZ.
- DairyNZ. 2019. *DairyBase* [Online]. DairyNZ. Available: https://www.dairynz.co.nz/business/dairybase/ [Accessed 03/02 2019].
- De Koning, J. & Cleaver, F. 2012. Institutional bricolage in community forestry: an agenda for future research. *In:* Arts, B., van Bommel, S., Ros-Tonen, M. & Verschoor, G. (eds.) *Forest-people interfaces: Understanding community forestry and biocultural diversity.* Wageningen: Wageningen Academic Publishers. Available: DOI 10.3920/978-90-8686-749-3_17.
- Diesel, V. & Miná Dias, M. 2016. The Brazilian experience with agroecological extension: a critical analysis of reform in a pluralistic extension system. *The Journal of Agricultural Education and Extension*, 22 (5), 415-433. Available: DOI 10.1080/1389224X.2016.1227058
- Doole, G. J. 2014. Least-cost greenhouse gas mitigation on New Zealand dairy farms. Nutrient Cycling in Agroecosystems, 98 (2), 235-251. Available: DOI 10.1007/s10705-014-9608-y
- Dougill, A. J., Whitfield, S., Stringer, L. C., Vincent, K., Wood, B. T., Chinseu, E. L., Steward, P. & Mkwambisi, D. D. 2017. Mainstreaming conservation agriculture in Malawi: Knowledge gaps and institutional barriers. *Journal of Environmental Management*, 195, 25-34. Available: DOI https://doi.org/10.1016/j.jenvman.2016.09.076
- Estrin, S. & Prevezer, M. 2011. The role of informal institutions in corporate governance: Brazil, Russia, India, and China compared. *Asia Pacific Journal of Management*, 28 (1), 41-67. Available: DOI 10.1007/s10490-010-9229-1
- Heffernan, C. & Misturelli, F. 2011. Is demand the answer? An exploration of pro-poor, demand-led research. *Livestock Science*, 138 (1), 109-117. Available: DOI https://doi.org/10.1016/j.livsci.2010.12.011
- Hejnowicz, A. P., Rudd, M. A. & White, P. C. L. 2016. A survey exploring private farm advisor perspectives of agri-environment schemes: The case of England's

- Environmental Stewardship programme. *Land Use Policy*, 55, 240-256. Available: DOI https://doi.org/10.1016/j.landusepol.2016.04.005
- Hilkens, A., Reid, J. I., Klerkx, L. & Gray, D. I. 2018. Money talk: How relations between farmers and advisors around financial management are shaped. *Journal of Rural Studies*, 63, 83-95. Available: DOI https://doi.org/10.1016/j.jrurstud.2018.09.002
- Ishihara, H., Pascual, U. & Hodge, I. 2017. Dancing With Storks: The Role of Power Relations in Payments for Ecosystem Services. *Ecological Economics*, 139, 45-54. Available: DOI https://doi.org/10.1016/j.ecolecon.2017.04.007
- Jarzabkowski, P., Bednarek, R. & Lê, J. K. 2014. Producing persuasive findings: Demystifying ethnographic textwork in strategy and organization research. *Strategic Organization*, 12 (4), 274-287. Available: DOI 10.1177/1476127014554575
- Kajembe, G. C., Vedeld, P., Babili, I. H., Silayo, D. S. & Mosha, D. B. 2016. Institutional Sustainability in the Face of Climate Change: Empirical Insights from Irrigation Institutions in the Iringa Rural District, Tanzania. *In:* Lal, R., Kraybill, D., Hansen, D. O., Singh, B. R., Mosogoya, T. & Eik, L. O. (eds.) *Climate Change and Multi-Dimensional Sustainability in Agriculture: Climate Change and Sustainability in Agriculture.* Cham: Springer International Publishing. Available: DOI 10.1007/978-3-319-41238-2_3.
- Klerkx, L., de Grip, K. & Leeuwis, C. 2006. Hands off but Strings Attached: The Contradictions of Policy-induced Demand-driven Agricultural Extension. *Agriculture and Human Values*, 23 (2), 189-204. Available: DOI 10.1007/s10460-005-6106-5
- Klerkx, L. & Jansen, J. 2010. Building knowledge systems for sustainable agriculture: supporting private advisors to adequately address sustainable farm management in regular service contacts. *International Journal of Agricultural Sustainability*, 8 (3), 148-163. Available: DOI 10.3763/ijas.2009.0457
- Klerkx, L., Seuneke, P., de Wolf, P. & Rossing, W. A. H. 2017. Replication and translation of co-innovation: The influence of institutional context in large international participatory research projects. *Land Use Policy*, 61, 276-292. Available: DOI https://doi.org/10.1016/j.landusepol.2016.11.027
- Landini, F. 2016. Unfolding the knowledge and power dynamics of the 'farmers-rural extensionists' interface in North-Eastern Argentina. *The Journal of Agricultural Education and Extension*, 22 (5), 399-413. Available: DOI 10.1080/1389224X.2016.1227050
- Leeuwis, C. 2000. Learning to be sustainable. Does the Dutch agrarian knowledge market fail? *The Journal of Agricultural Education and Extension*, 7 (2), 79-92. Available: DOI 10.1080/13892240008438809
- Leeuwis, C. & Van de Ban, A. 2004. *Communication for rural innovation*, Oxford, Blackwell Publishing LTD.
- Mahon, M., Farrell, M. & McDonagh, J. 2010. Power, Positionality and the View from within: Agricultural Advisers' Role in Implementing Participatory Extension Programmes in the Republic of Ireland. *Sociologia Ruralis*, 50 (2), 104-120. Available: DOI 10.1111/j.1467-9523.2010.00505.x
- Mars, M. M. & Schau, H. J. 2017. Institutional entrepreneurship and the negotiation and blending of multiple logics in the Southern Arizona local food system. *Agriculture and Human Values*, 34 (2), 407-422. Available: DOI 10.1007/s10460-016-9722-3
- McDonough, C., Nuberg, I. K. & Pitchford, W. S. 2015. Barriers to Participatory Extension in Egypt: Agricultural Workers' Perspectives. *The Journal of Agricultural Education and Extension*, 21 (2), 159-176. Available: DOI 10.1080/1389224X.2014.927374
- Mee, J. F. 2007. The role of the veterinarian in bovine fertility management on modern dairy farms. *Theriogenology*, 68, S257-S265. Available: DOI 10.1016/j.theriogenology.2007.04.030

- Merrey, D. J., Meinzen-Dick, R., Mollinga, P. P., Karar, E., Huppert, W., Rees, J., Vera, J., Wegerich, K., Van Der Zaag, P. 2007. Policy and institutional reform: the art of the possible. *In:* Molden, D. (ed.) *Water for food, Water for life: A Comprehensive Assessment of Water Management in Agriculture.* London: Earthscan.
- Mills, J., Gaskell, P., Ingram, J., Dwyer, J., Reed, M. & Short, C. 2017. Engaging farmers in environmental management through a better understanding of behaviour. *Agriculture and Human Values*, 34 (2), 283-299. Available: DOI 10.1007/s10460-016-9705-4
- Minh, T. T., Friederichsen, R., Neef, A. & Hoffmann, V. 2014. Niche action and system harmonization for institutional change: Prospects for demand-driven agricultural extension in Vietnam. *Journal of Rural Studies*, 36 (0), 273-284. Available: DOI http://dx.doi.org/10.1016/j.jrurstud.2014.09.008
- O'Leary, Z. 2004. The essential guide to doing your research project, London, SAGE Publications Ltd.
- Ocasio, W., Thornton, P. H. & Lounsbury, M. 2017. Advances to the Institutional Logics Perspective. *In:* Greenwood, R., Oliver, C., Lawrence, T. B. & Meyer, R. E. (eds.) *The SAGE Handbook of Organizational Institutionalism.* London, UNITED KINGDOM: SAGE Publications.
- Osei-Amponsah, C., van Paassen, A. & Klerkx, L. 2018. Diagnosing institutional logics in partnerships and how they evolve through institutional bricolage: Insights from soybean and cassava value chains in Ghana. NJAS Wageningen Journal of Life Sciences, 84, 13-26. Available: DOI https://doi.org/10.1016/j.njas.2017.10.005
- Parkinson, S. 2009. When Farmers Don't Want Ownership: Reflections on Demand-driven Extension in Sub-Saharan Africa. *The Journal of Agricultural Education and Extension*, 15 (4), 417-429. Available: DOI 10.1080/13892240903309678
- Parliamentary Counsel Office 2008. Financial Advisers Act. *In:* Ministry of Business, I., and Employment, (ed.).
- Paschen, J.-A., Reichelt, N., King, B., Ayre, M. & Nettle, R. 2017. Enrolling advisers in governing privatised agricultural extension in Australia: challenges and opportunities for the research, development and extension system. *The Journal of Agricultural Education and Extension*, 23 (3), 265-282. Available: DOI 10.1080/1389224X.2017.1320642
- Rivera, W. M. & Alex, G. 2004. The continuing role of government in pluralistic extension systems. *Journal of International Agricultural and Extension Education*, 11 (3), 41-52.
- Rivera, W. M. & Sulaiman, V. R. 2009. Extension: object of reform, engine for innovation. *Outlook on Agriculture*, 38 (3), 267-273.
- Rocheleau, D. 2001. Complex Communities and Relational Webs Uncertainty, Surprise and Transformation in Machakos. *IDS Bulletin*, 32 (4), 78-87. Available: DOI doi:10.1111/j.1759-5436.2001.mp32004010.x
- Shadbolt, N., Apparao, D., Hunter, S., Bicknell, K. & Dooley, A. 2017. Scenario analysis to determine possible, plausible futures for the New Zealand dairy industry. New Zealand Journal of Agricultural Research, 60 (3), 349-361. Available: DOI 10.1080/00288233.2017.1351377
- Sidibé, A., Totin, E., Thompson-Hall, M., Traoré, O. T., Sibiry Traoré, P. C. & Olabisi, L. S. 2018. Multi-scale governance in agriculture systems: Interplay between national and local institutions around the production dimension of food security in Mali. NJAS Wageningen Journal of Life Sciences, 84, 94-102. Available: DOI https://doi.org/10.1016/j.njas.2017.09.001
- Smith, R. C., Pinedo, D., Summers, P. M. & Almeyda, A. 2001. Tropical Rhythms and Collective Action Community-based Fisheries Management in the Face of Amazonian Unpredictability1. *IDS Bulletin*, 32 (4), 36-46. Available: DOI doi:10.1111/j.1759-5436.2001.mp32004005.x

- Thornton, P. H. & Ocasio, W. 1999. Institutional Logics and the Historical Contingency of Power in Organizations: Executive Succession in the Higher Education Publishing Industry, 1958– 1990. *American Journal of Sociology*, 105 (3), 801-843. Available: DOI 10.1086/210361
- Thornton, P. H., Ocasio, W. & Lounsbury, M. 2012. The Institutional Logics Perspective: A New Approach to Culture, Structure and Process, Oxford, Oxford University Press. Available: DOI 10.1093/acprof:oso/9780199601936.001.0001.
- Tonoyan, V., Strohmeyer, R., Habib, M. & Perlitz, M. 2010. Corruption and entrepreneurship: How formal and informal institutions shape small firm behavior in transition and mature market economies. *Entrepreneurship theory and practice*, 34 (5), 803-832.
- Turner, J. A., Klerkx, L., Rijswijk, K., Williams, T. & Barnard, T. 2016. Systemic problems affecting co-innovation in the New Zealand Agricultural Innovation System: Identification of blocking mechanisms and underlying institutional logics. *NJAS* Wageningen Journal of Life Sciences, 76, 99-112. Available: DOI https://doi.org/10.1016/j.njas.2015.12.001
- van der Spiegel, M., van der Fels-Klerx, H. J. & Marvin, H. J. P. 2012. Effects of climate change on food safety hazards in the dairy production chain. *Food Research International*, 46 (1), 201-208. Available: DOI https://doi.org/10.1016/j.foodres.2011.12.011
- van Mierlo, B. & Totin, E. 2014. Between Script and Improvisation: Institutional Conditions and Their Local Operation. *Outlook on Agriculture*, 43 (3), 157-163. Available: DOI 10.5367/oa.2014.0179
- Williams, N., Vorley, T. & Williams, C. C. 2017. Entrepreneurship and Institutions: The Causes and Consequences of Institutional Asymmetry, London, Rowman & Littlefield International.



STATEMENT OF CONTRIBUTION DOCTORATE WITH PUBLICATIONS/MANUSCRIPTS

We, the candidate and the candidate's Primary Supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the candidate's contribution as indicated below in the Statement of Originality.

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CHAPTER 6 CONCLUSION: OVERALL THEORETICAL, PRACTICAL AND POLICY CONTRIBUTIONS OF THE THESIS

INTRODUCTION

In this final chapter, the findings are brought together and linked to the research questions. This study explored how the provision of financial management advice in the financial management advisory system in the dairy sector in Aotearoa is shaped. The main research question was: How is the provision of Financial Management advice shaped in the FM advisory system in the dairy sector in Aotearoa?

This main question was answered by looking at three areas of the system (see also Chapter 1, introduction).

- Area 1: How farmer-advisor interactions about FM are shaped
- Area 2: How advisor-advisor interactions about FM around a mutual client are shaped
- Area 3: How FM advisors navigate the multiple accountabilities and demands placed on their role

The following section links the main findings to broader debates in the agricultural advisory systems literature, distilling theoretical implications. This thesis makes a specific and more generic contribution. The specific contribution of this research explores and enriches, with an empirical focus, the literature on the role of advisory services in relation to farmers' financial management. To date limited research has been undertaken to combine research on farm business management, including financial management (Lans et al., 2013, McElwee, 2008, Pyysiäinen et al., 2006, Seuneke et al., 2013), and the advisory services to innovation in the agricultural sector, despite their recognised importance. It is here that this thesis makes a key contribution. Beyond the specific context of financial management advice, this thesis also enriches the literature on farmers' interactions with advisors, the role and complementarity of different advisors around a mutual client, and tensions that arise in privatized and pluralistic advisory systems.

CONCLUSION AND THEORETICAL CONTRIBUTIONS

First, the implications for the debate on farmer-advisor interactions will be discussed (area 1), then we will reflect on the contributions to thinking around advisor-advisor interactions, and lastly we show theoretical contributions to debates around how advisors navigate the institutional context in which they operate. Subsequently, practical implications of this study are given, followed by reflections on research design and lastly areas for future research are described.

Theoretical implications in area 1: advisory network crafting to navigate sensitivities and dependencies

A substantive body of agricultural advisory systems literature explores farmer-advisor interactions (e.g. Ingram, 2008, Bergea et al., 2008, Proctor et al., 2012, Sutherland et al., 2013, Oreszczyn et al., 2010). This literature highlights the importance of trust between advisor and farmer, the range of prescriptive to more facilitative relationships between

farmers and advisors, and the diversity of advisors that farmers engage with to fulfil different advisory needs. By exploring advisory interactions in the domain of financial management, this study enriches this literature in the following ways:

1) by highlighting the influence of the sensitivity of the topic:

The sensitivity of the topic and how this topic relates to farmer's identity, influences whom farmers seek advice from, as well as the nature of that advice. Financial Management for some dairy farmers in Aotearoa is both a sensitive topic and not linked to their identity. Farmers did not tend to pro-actively seek advice on financial management. In instances where farmers did seek advice from an actor, interpersonal and/or professional trust was an element of the relationship they had. Moreover, they already had a pre-existing relationship with these actors based on the provision of services in the same topic area as the advice. The actors were not principally FM advisors and providing FM advice was not their job. This suggests the importance of farmers' trust in an actor rather than the actor's advisory expertise as a requirement for seeking advice from an actor. Trust emerges as having multiple dimensions when the topic is sensitive and when it is not linked to a farmers identity. When an advisor who has competency in an area shows a duty of care for the client and has shared values, this research suggests, farmers trust these people as providers of advice on a sensitive topic. For FM, these actors were mainly bankers and accountants and sometimes FMCs. For other topics of advice that are also sensitive, for example animal welfare (Croyle et al., 2019), farmers are also expected to only use and seek advice from people they trust and in particular has shared values with the farmer and exhibits a duty of care. However, farmers are expected to be more proactive in seeking advice if this topic relates to their identity, different from FM. These findings enrich the existing body of literature exploring farmer-advisor interactions (e.g. Ingram, 2008, Fisher, 2013, Sutherland et al., 2013, Garforth, 2015), by showing that the topic of advice can be sensitive and how that shapes advisory interactions and configurations, which has not been reported for more technical and production specific topics. Moreover, whereas farmers' reluctance to share data about sensitive topics has been reported (Jansen et al., 2010), this doctoral research extended these findings, by showing that farmers were more likely to open up in one-on-one encounters with trusted advisors.

2) by highlighting the role of authority and dependencies in farmer-advisor relationships:

The content and form of farmer-advisor interactions was observed to be shaped by the presence of an authority dimension in the relationship between advisor and farmer. The banker and farmer connection is facilitated in large part through a loan the farmer has with the bank. This arrangement gave the bank authority to put certain requirements on the farmer, which can be termed "binding advice". The current study has extended previous work, by adding the "authoritative type" of encounter to existing categorisations of farmer-advisor interaction types (Ingram, 2008). The authoritative type of encounter is unique and different from the other categories, as the farmer has little options other than complying with the 'advice' provided, because of the severe consequences non-compliance could have.

This thesis establishes that in commercial relationships, advice provided to a farmer may include a dimension of authority. Other scholars have also found authority in farmer-advisor

relationships, but this authority was in political settings and exercised by public advisors (Berhanu and Poulton, 2014).

Even though the motives were different, the way in which advisors were found to express their authority was similar. Authority was in the possibility advisors had to favour or deny the allocation of resources to achieve compliance. Another similarity was that non-compliance has severe consequences (ultimately not being able to continue farming) in instances that advisors have authority in the relationship. It is thus found that power dynamics also play out in privatised advisory systems, but these relate to different motives than these power dynamics in public advisory systems.

How sensitivity and authority shape the relationship between farmers and the actors from whom they seek advice: the role of network crafting

As has been highlighted in other research (see e.g. Cofré-Bravo et al., 2019) farmers engage in different networks for advice. This research provides detailed insights into how the sensitivities of the topic of advice and mandatory elements in the relationship between farmers and actors they use for advice shape the configuration of a farmer's advisory network.

With the changes in legislation regarding financial advice that occurred in Aotearoa, farmers find themselves in an ironic situation, where the actors they seek advice from, are restricted in their advice provisioning (bankers). Farmers engage with these actors, because there is interpersonal and/or professional trust in their relationship with these actors which is imperative given the sensitivity of the topic for farmers. Likewise, advisors find themselves in an ironic position: financial advice is an important component of the advisors relationship with farmer clients but legally they are now restricted in giving this advice. For this reason, advisors employ strategies to circumvent the restrictions in order to maintain the relationship with their client by continuing to give advice. Whether an actor is used by a farmer for advice on a (sensitive) topic, is not so much about the expertise this actor has in the topic of advice, but relates more to the nature of the relationship between the farmer and the advisor. This relationship may not be based primarily on advice provisioning, but is more importantly characterised by interpersonal (and professional) trust.

Earlier work (Proctor et al., 2012, Phillipson et al., 2016, Compagnone et al., 2018) has identified there is variety in the compositions of advisors around a mutual client. The main drivers shaping these compositions identified in these studies were competition and collaboration. The current study nuances these findings and provides insights into other dynamics shaping the composition of advisors around a mutual client. The authority of an advisor in the relationship with a farmer influences the composition of the financial advisors around that client. In particular, the composition of financial advisors around a farmer includes advisors with whom contact is initiated by an advisor with authority in the farmer-advisor relationship. This finding has extended our understanding of the dynamics shaping the composition of advisors around a mutual farmer client.

A further contribution this research makes is to highlight that the provision of advice in relationships between farmers and advisors is both deliberately crafted and can also be less

intentional. As highlighted above, advice provisioning is used to enhance the quality of the relationship with the farmer. Less intentional is the advice embedded within devices (e.g. end of year accounts, budgets) as part of the primary services provided in the relationship between farmer and advisor. This extends earlier work, as it makes explicit that the role of devices as sources of advice, whereas earlier work tends to assume that advice is explicitly asked for or given (e.g. Ingram, 2008, Bergea et al., 2008). Advice can thus be the sole basis of the relationship (specialist advice) or a component of a relationship based on other services (embedded advice) or a combination of these. This refines earlier work that has differentiated only between embedded and specialist advisors (e.g. Klerkx and Jansen, 2010).

Theoretical implications in area 2: how advisory network crafting is supported by a 'duty of care' but also influenced by non-voluntary relationships

Within the agricultural advisory systems literature, there is a limited body of literature exploring advisor-advisor interactions. The current research extends understanding about advisor-advisor interactions, by exploring the nature of interactions between advisors around a mutual client. This research adds specifically to this body of literature by providing deeper insights on what drives and shapes coordination among agricultural advisors.

This research shows that duty of care is a coordinating mechanism in the relationships among advisors. In particular, duty of care facilitates collaborative behaviour between advisors around a mutual client. To date, scholars have only acknowledged duty of care as a dimension between advisors and farmers (e.g. Kemp *et al.*, 2000; Fisher, 2013).

Authority and advocacy are also found to be coordinating mechanisms in the relationships among advisors. While existing studies (e.g. Klerkx and Proctor, 2013, Phillipson et al., 2016) predominantly have shown relationships between advisors for the purpose of knowledge sharing and complementary advice, this thesis shows that there are other dimensions that shape these interactions and relationships among advisors, including one advisor's authority over a mutual client and client advocacy. The theoretical implication is that the relationships have multiple driving forces, including for example authority and advocacy and therefore these relationships are not just about knowledge sharing or reaching complementarity in advice.

Theoretical implications in area 3: The politics of the financial management advisory system

This study contributes empirical insights to discussions about the relationship between formal advisory agendas or normative ideas about the nature, aims and possibilities of agricultural advisory activities on the one hand and, on the other hand, the reality of agricultural advisory programs. Scholars have acknowledged that policy intentions of agricultural advisory programs are often at odds with the program implementation by advisors (e.g. Mahon et al., 2010, Parkinson, 2009). In order to better understand this disconnect, it has been argued that there is a need for more empirical studies exploring agricultural advisory provisioning (Christoplos, 2012, Bartlett, 2010), which is where this study contributes.

Scholars acknowledge that an important reason that agricultural advisory programs are not implemented as intended, relates to advisors having contrasting demands on their role (e.g. Mahon et al., 2010 Albaladejo et al., 2007, Christoplos, 2012). Scholars have shown that advisors are exposed to multiple accountabilities and demands on their role as an advisor (Bruges and Smith, 2008, Parkinson, 2009, Berglund et al., 2015, Landini, 2016, Paschen et al., 2017, Mahon et al., 2010, Dougill et al., 2017, Christoplos, 2012, Klerkx et al., 2006). However, to date there has been little focus on how advisors and advisory organisations respond to these accountabilities and demands in their day-to-day advisory practices. This doctoral research enriches this work by providing a detailed illustration of the complex institutional context placing contradictory demands and accountabilities on advisors and how these advisors navigate these in their everyday practices. This detailed illustration was enabled by the concepts of institutional logics and bricolage, concepts that are relatively new to the field studying agricultural advisory systems. The study highlights that there is variation in how advisors respond to the introduction of a formal institution targeting the provision of advice and introducing additional accountabilities on the advisor's role. Responses varied both between advisors with different professions, but also between advisors with the same profession. Identifying different strategies employed by advisors within and across professions has, not to date, been reported

Whereas earlier studies have described ways agricultural advisors circumvent the implementation of an advisory program, they did not explore the reasons for circumvention by advisors (e.g. Mahon et al., 2010, Parkinson, 2009). In particular, the current study provides illustrations of how informal institutions relating to farmer-advisor and advisor-advisor relationships can outweigh (the intended impact of) formal institutions aiming to shape FM advisory provisioning, like advisory programs. One example is the significance of FM advisory provisioning by FM advisors to their relationship with farmer clients. This in large part outweighed the intended impacts of a regulation aiming to protect farmers from getting advice from advisors who have a vested interest in the financial decisions of the farmer, and which restricted FM advisory provisioning. It is highly likely that the reason the advisory interviewees in this study have been able to retain advisory services as part of their relationship with farmers is because FM advice is not an explicit component of this relationship. Another example is that advisors' perceptions of practices associated with their professional identity which were in line with farmers' expectations of them, partly outweighed the expectations an advisory program had from them.

PRACTICAL IMPLICATIONS

Stimulating collaboration among advisors to improve the quality of advice

The importance of individual advisors providing advice with an understanding of the farm as a whole is well known (e.g. Höckert and Ljung, 2013, Vanclay, 2004, Sutherland et al., 2013). This study highlights that this does not necessarily mean that each individual advisor needs to have full knowledge of the farm, as long as advisors who work together have an holistic knowledge of the farm as a team. This study showed that complementary services and expertise in the FM advisory system enabled different types of advisors to work as a team around farmers. This finding implies for practice that the quality of advice can

potentially be optimised through these individual advisors working as a team. This is possible when there is limited competition between the different types of advisors around a topic of advice, for example where different advisors provide exclusive and complementary services. For other topics of advice, for example around farmers' uptake of practices to reduce water pollution, there is evidence that the different advisors around mutual clients do not always work as a team (e.g. Vrain and Lovett, 2016). A recommendation for policymakers to improve the quality of advice around this topic, is to stimulate collaboration between the different advisors providing advice to farmers around the topic. One way of stimulating collaboration could be to develop policy that protects the professional domains in such a way that certain services remain the exclusive territory of one type of professional. A 'reflection forum' in which the profession reflects on its roles and translates that into more explicit professional standards could also be an option, based on the findings of this thesis.

This research moreover illustrates the challenges of developing a policy to target an aspect of a service that is implicit to a professional relationship between farmer and advisor, but is a dimension that is implicitly valued and fundamental to the trust between an advisor and farmer. Any policy that is developed will only be followed and adhered to if it does not compromise or curtail dimensions of the relationship that are valued by the advisor and farmer, and these dimensions are multiple and not always explicitly linked to the services provided.

Moulding farmers' identity through incentivising financial management practices

This study has found that most of the farmers did not relate FM practices to their identity. As such, the farmers were not motivated to do FM or upskill themselves in FM. A culture shift in which farmers' institutional logics also include doing FM (e.g. actively doing financial budgets and financial benchmarking) in their understanding of a "good farmer", would make it more likely that farmers are motivated to improve their FM skills. Changing norms related to identities is possible, as the different institutional logics an actor adheres to, have potential to change and can potentially be directed (e.g. McGuire et al. 2013). A potential strategy would be to change existing FM education to better reflect how farmers undertake FM or how they make decisions that lead to financial success of their businesses and integrate this into what outsiders and experts construe to be FM for farmers. Another strategy could be potentially even regulating the FM space, for example by requiring farmers to have certain financial structures in place (5 year financial farm plans), like whole farm plans, farm environmental plans. It could also be worthwhile to introduce incentives, for example to increase the importance of the business and FM component in farm awards, for example the New Zealand dairy industry awards. Another option could be to provide for example free 'financial health checks'.

Mechanisms to protect farmers' against bad financial advice

The Financial Advisors Act was introduced to protect clients from bad or biased advice that could get them into financial distress. This act limits certain actors in the provision of financial advice to farmers. The current research has shown that in some situations, some advisors (e.g. bankers) circumvented the restrictions on advisory practices imposed on them by this Act, because these advisory practices enhanced the quality of the relationship they

had with farmer clients. This points to an apparent challenge around regulating advice provisioning by certain actors if advice provisioning by these actors is implicit (provided along with other services in the same topic area) and farmers have the expectation that these actors will provide them with advice. In order to protect farmers, it could be advised to policymakers to consider other mechanisms to protect farmers from bad advice, for example through education.

Supporting farmers with sensitive topics through their trusted advisors

This study emphasises that supporting farmers around a sensitive topic like FM is difficult, because farmers do not like to discuss their financial situation with other parties. In particular for sensitive topics of advice, for example mental health, animal welfare or (environmentally) sustainable farming practices, it is important that the advice is provided by a trusted advisor. It is therefore vital that in developing an advisory program, it is researched whom are the trusted advisors for the topic of advice and that these actors are included in the program. Moreover, collaboration should be encouraged between the advisors who are the trusted advisors on the topic of advice and professionals with expertise in the field. If advice is provided by the 'wrong' actor (i.e. an actor who may have most advanced expertise on the topic but is not the trusted advisor for the topic of advice), an advisory program is unlikely to be effective. This recommendation is particularly relevant from an advisory organisation's perspective in instances that they want to influence an area that is sensitive. In those instances, rather than developing their own programme, an advisory organisation needs to identify who the trusted advisors are in the domain and then develop a programme in collaboration with these advisors, tailored around them and their advisory services.

In particular for the topic of mental health, it could be worth including agricultural professionals and in particular accountants, in initiatives aiming to support farmers with mental health issues, which is in line with what Stanley-Clarke (2019) has argued. Mental health issues are becoming more prevalent among farmers (Schirmer, 2015) due to increasing environmental and financial volatility (Vayro et al., 2019) This study shows that FM advisors, specifically accountants and FMCs have a duty of care for farmers, including their mental health. Moreover, these advisors reported to recognise signs of the emergence of mental health issues among farmers. There was also some evidence that farmers trusted these advisors to open up about mental health issues they are dealing with and that advisors then support farmers. These findings confirm recent work by Stanley-Clarke (2019) that specifically shows the role of agricultural professionals in supporting farmers with mental health issues in Aotearoa. The current study adds accountants to the type of professionals these researchers had identified. For professional unions / organisations and government institutions, for example the Ministry for Primary Industries, it is also important to ensure appropriate support is in place for these professionals whom farmers turn to when facing mental health issues. It is important that these professionals have access to appropriate support and education to protect their own mental health and ensure their ways of dealing with their farmer clients is appropriate.

METHODOLOGICAL LIMITATIONS

The nature of this study was exploratory, as only limited research was done in the FM advisory system and also limited studies have looked at different aspects in advisory systems and linkages between those aspects. Qualitative methods were chosen, so in-depth understanding about the FM advisory system in the dairy sector in Aotearoa could be gained. The drawback of using qualitative methods and for example not surveys that could be distributed among a large and diverse group of farmers and advisors, is that findings cannot be generalised for the whole FM advisory system in the dairy sector in Aotearoa.

Regarding the strategy for participant selection, the number of participants was limited and further diversity could be achieved in including more participants in the data collection. Farmer participants were selected on the basis of their role in financial decision-making, their financial stake in the farm and that dairy farming was their main business. Not all types of farmers were included and a richer understanding of how the FM advisory system in the dairy sector in Aotearoa shapes FM advice provisioning could have been obtained by including more and a more diverse group of (farmer) participants. Further diversity could exist in the dynamics in farmer-advisor interactions in terms of different farm(er) characteristics, for example farm size, value of loans, including farmers who have participated in FM training.

The same goes for advisory participants, as the number and type of advisor participants included in the study was also limited. In particular, only a very limited amount of back-office advisors was included. Back-office advisory actors do not directly work with farmers, but are involved in the development of advice or policy making activities around advice, as opposed to the front-office advisors (who directly work with farmers) who made up most of the advisor participants in the research (Labarthe and Laurent, 2013). A richer understanding of how the FM advisory system in the dairy sector in Aotearoa shapes FM advice provisioning could have been obtained by including more and a more diverse group of advisors.

Further insights in the area of study could moreover be yielded through field observations of the actual interactions between farmers and their FM advisors and the content of this advice. The data gathered mainly consists of documents and participants' reflections on interactions and relationships with other actors. Direct observations of interactions between farmers and advisors or between advisors could provide deeper insights on complementarities, contradictions and gaps concerning the content of FM advice between different FM advisors. More specifically, direct field observations could provide in-depth insights in the power dynamics between farmers and advisors. The current study has shown that these power dynamics exist, but direct observations of interactions are needed to get an in-depth understanding about these dynamics.

FUTURE RESEARCH

An obvious area for future research is the use of surveys for both farmers and also FM advisors which could provide insights into how and whether the findings can be generalised for the whole FM advisory system in the dairy sector in Aotearoa. Other areas for future research are discussed below.

Future research on a wider group of advisors in terms of identities and the moldability of farmers' identity

As mentioned in the section discussing the theoretical contributions of this study, it is highlighted that FM does not resonate with farmers' identity, which limits their demand for FM advice. It is important to better understand what constitutes farmers' identity to potentially tailor approaches better to farmers' identity. For example, farmers are found to view themselves as 'stewards of their land' (e.g. Hyland *et al.*, 2016, McGuire *et al.*, 2013), to which efforts of motivating farmers to become active in performing environmentally friendly practices have been linked. Likewise, research could explore whether there are aspects in farmers' identity or in identities of certain types of farmers that can be linked to FM practices.

This research has shown that interviewed farmers are reluctant to learn about FM as they do not relate it to their identity. This is an avenue that could be further explored with a different and diverse group of farmers. This also relates to a methodological limitation of this research, that the number of participants was limited and further diversity could be achieved in including more participants in the data collection. Future research could thus include a wider variety of farmer participants. Diversity could be achieved by selecting farmers with different farm sizes and value of loans. It would also be interesting to specifically include farmers who proactively engage with specialist financial advisors, farmers who have undertaken FM training and explore their interactions with FM advisors. Presumably these farmers are more likely to include FM as part of their identity and the nature of their engagement with advisors for FM advice is likely to be different to what was found for most farmers in the current study.

In particular, it would be worth exploring whether younger farmers are more interested in FM or whether they link FM to their identity. This group may be more open to building their FM skills – as they are young and impressionable. This research could explore how FM links to their identity and whether FM education could equip farmers with better skills that would enable them with the knowledge to distinguish biased / bad advice.

Future research on the nature of authority in advisory interactions

There is potential for more research in advisory relationships that are characterised by dimensions of authority. For example, research could explore the influence of authority dynamics in relationships between farmers and advisors, where these advisors are both involved in advisory provisioning, but also monitor farmers' practices. Examples of these actors in the farming context in Aotearoa are regional councils who provide both advice and monitor farmers' environmental practices. Moreover, methods like direct field observations could be used to provide different and richer insights in the power dynamics between farmers and advisors.

Future research on advisory programme dynamics

The results from this study suggest that extension researchers should not be asking the question 'why do extension programs not achieve their intended outcomes', rather they should be asking 'how do we design advisory programs that account for the different institutional logics and other factors that are actually influencing the provisioning of advice?'

Interesting avenues for future research are to increase our understanding of the institutional logics of farmers and interrelationships between these. Moreover, future research could explore how institutional logics and the interrelationships between these play out in the implementation of advisory programs.

Future research could also include a wider variety of advisor participants, specifically back-office advisors, to gain more insights into how institutional logics shape the development and implementation of advisory programmes.

REFERENCES

- Bartlett, A. 2010. An introduction to real-world extension. Rural Development News, 1 (2010), 7-14.
- Bergea, H. L., Martin, C. & Sahlstrom, F. 2008. "I Don't Know What You're Looking for": Professional Vision in Swedish Agricultural Extension on Nature Conservation Management. *The Journal of Agricultural Education and Extension*, 14 (4), 329 345.
- Berglund, B., Hallgren, L. & Aradóttir, Á. L. 2015. Stakeholder Interaction in Participatory Land Restoration in Iceland: Environmental Officers' Challenges and Strategies. *Environmental Management*, 56 (2), 519-531. Available: DOI 10.1007/s00267-015-0506-0
- Berhanu, K., & Poulton, C. 2014. The political economy of agricultural extension policy in Ethiopia: economic growth and political control. *Development Policy Review*, 32(s2), s197-s213.
- Bruges, M. & Smith, W. 2008. Participatory approaches for sustainable agriculture: A contradiction in terms? *Agriculture and Human Values*, 25 (1), 13-23. Available: DOI 10.1007/s10460-007-9058-0
- Christoplos, I. 2010. *Mobilizing the potential of rural and agricultural extension*. Rome: FAO. Available: http://www.fao.org/docrep/012/i1444e/i1444e00.htm.
- Christoplos, I. 2012. Climate advice and extension practice. *Geografisk Tidsskrift-Danish Journal of Geography*, 112 (2), 183-193. Available: DOI 10.1080/00167223.2012.741882
- Cofré-Bravo, G., Klerkx, L., & Engler, A. 2019. Combinations of bonding, bridging, and linking social capital for farm innovation: How farmers configure different support networks. *Journal of Rural Studies*, 69, 53-64.
- Compagnone, C. & Simon, B. 2018. Cooperation and competition among agricultural advisory service providers. The case of pesticides use. *Journal of Rural Studies*, 59, 10-20. Available: DOI https://doi.org/10.1016/j.jrurstud.2018.01.006
- Croyle, S. L., Belage, E., Khosa, D. K., LeBlanc, S. J., Haley, D. B., Kelton, D. F., 2019. Dairy farmers' expectations and receptivity regarding animal welfare advice: A focus group study. *Journal of Dairy Science*, 102, 7385 7397.
- Dougill, A. J., Whitfield, S., Stringer, L. C., Vincent, K., Wood, B. T., Chinseu, E. L., Steward, P. & Mkwambisi, D. D. 2017. Mainstreaming conservation agriculture in Malawi: Knowledge gaps and institutional barriers. *Journal of Environmental Management*, 195, 25-34. Available: DOI https://doi.org/10.1016/j.jenvman.2016.09.076

- Fisher, R. 2013. 'A gentleman's handshake': The role of social capital and trust in transforming information into usable knowledge. *Journal of Rural Studies*, 31, 13-22. Available: DOI http://dx.doi.org/10.1016/j.jrurstud.2013.02.006
- Garforth, C. 2015. Livestock Keepers' Reasons for Doing and Not Doing Things Which Governments, Vets and Scientists Would Like Them to Do. *Zoonoses & Public Health*, 62, 29-38. Available: DOI 10.1111/zph.12189
- Höckert, J. & Ljung, M. 2013. Advisory Encounters towards a Sustainable Farm Development—Interaction between Systems and Shared Lifeworlds. *The Journal of Agricultural Education and Extension*, 19 (3), 291-309. Available: DOI 10.1080/1389224x.2013.782178
- Hyland, J.J., Jones, D.L., Parkhill, K.A., Williams, A.P., 2016. Farmers' perceptions of climate change, identifying types. *Agriculture and Human Values* 33 (2), 323–339.
- Ingram, J. 2008. Agronomist–farmer knowledge encounters: an analysis of knowledge exchange in the context of best management practices in England. *Agriculture and Human Values*, 25 (3), 405-418. Available: DOI 10.1007/s10460-008-9134-0
- Kemp, E. A., Williams, P., Gray, D. I., Gardner, J. & Kuiper, D. 2000. Rapport building in farm management consultancy: A case study. *Journal of Applied Systems Studies*, 3 (1), 194-217.
- Klerkx, L., de Grip, K. & Leeuwis, C. 2006. Hands off but Strings Attached: The Contradictions of Policy-induced Demand-driven Agricultural Extension. *Agriculture and Human Values*, 23 (2), 189-204. Available: DOI 10.1007/s10460-005-6106-5
- Klerkx, L. & Jansen, J. 2010. Building knowledge systems for sustainable agriculture: supporting private advisors to adequately address sustainable farm management in regular service contacts. *International Journal of Agricultural Sustainability*, 8 (3), 148-163. Available: DOI 10.3763/ijas.2009.0457
- Klerkx, L. & Proctor, A. 2013. Beyond fragmentation and disconnect: Networks for knowledge exchange in the English land management advisory system. *Land Use Policy*, 30 (1), 13-24. Available: DOI 10.1016/j.landusepol.2012.02.003
- Labarthe, P. & Laurent, C. 2013. The Importance of the Back-office for Farm Advisory Services L'importance des activités de 'back-office' dans les systèmes de conseil à l'agriculture Die Bedeutung des Back Office für die Agrarberatung. *EuroChoices*, 12 (1), 21-26. Available: DOI 10.1111/1746-692X.12015
- Landini, F. 2016. Unfolding the knowledge and power dynamics of the 'farmers–rural extensionists' interface in North-Eastern Argentina. *The Journal of Agricultural Education and Extension*, 22 (5), 399-413. Available: DOI 10.1080/1389224X.2016.1227050
- Lans, T., Seuneke, P. & Klerkx, L. 2013. Agricultural Entrepreneurship. In: Carayannis, E. G. (ed.) Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship. New York, NY: Springer New York. Available: DOI 10.1007/978-1-4614-3858-8_496.
- Mahon, M., Farrell, M. & McDonagh, J. 2010. Power, Positionality and the View from within: Agricultural Advisers' Role in Implementing Participatory Extension Programmes in

- the Republic of Ireland. *Sociologia Ruralis*, 50 (2), 104-120. Available: DOI 10.1111/j.1467-9523.2010.00505.x
- McElwee, G. 2008. A taxonomy of entrepreneurial farmers. *International Journal of Entrepreneurship and Small Business*, 6 (3), 465-478.
- McGuire, J., L. Morton, and A.D. Cast. 2013. Reconstructing the good farmer identity: Shifts in farmer identities and farm management practices to improve water quality. *Agriculture and Human Values* 30 (1), 57–69. Avalable: DOI <u>10.1007/s10460-012-9381-y</u>.
- Oreszczyn, S., Lane, A. & Carr, S. 2010. The role of networks of practice and webs of influencers on farmers' engagement with and learning about agricultural innovations. *Journal of Rural Studies*, 26 (4), 404-417. Available: DOI http://dx.doi.org/10.1016/j.jrurstud.2010.03.003
- Parkinson, S. 2009. When Farmers Don't Want Ownership: Reflections on Demand-driven Extension in Sub-Saharan Africa. *The Journal of Agricultural Education and Extension*, 15 (4), 417-429. Available: DOI 10.1080/13892240903309678
- Paschen, J.-A., Reichelt, N., King, B., Ayre, M. & Nettle, R. 2017. Enrolling advisers in governing privatised agricultural extension in Australia: challenges and opportunities for the research, development and extension system. *The Journal of Agricultural Education and Extension*, 23 (3), 265-282. Available: DOI 10.1080/1389224X.2017.1320642
- Phillipson, J., Proctor, A., Emery, S. B. & Lowe, P. 2016. Performing inter-professional expertise in rural advisory networks. *Land Use Policy*, 54, 321-330. Available: DOI http://doi.org/10.1016/j.landusepol.2016.02.018
- Proctor, A., Donaldson, A., Phillipson, J. & Lowe, P. 2012. Field expertise in rural land management. *Environment and Planning-Part A*, 44 (7), 1696.
- Pyysiäinen, J., Anderson, A., McElwee, G. & Vesala, K. 2006. Developing the entrepreneurial skills of farmers: some myths explored. *International Journal of Entrepreneurial Behavior & Research*, 12 (1), 21-39. Available: DOI doi:10.1108/13552550610644463
- Schirmer, J., D. Peel and M. Mylek (2015) Farmers and agriculture: the 2014 regional wellbeing survey (Canberra: The University of Canberra) Retrieved from: https://www.canberra.edu.au/research/faculty-research-centres/ceraph/regional-wellbeing/survey-results/2014-survey-results/Farmers-and-agriculture_LR.pdf 1 December 2019
- Seuneke, P., Lans, T. & Wiskerke, J. S. C. 2013. Moving beyond entrepreneurial skills: Key factors driving entrepreneurial learning in multifunctional agriculture. *Journal of Rural Studies*, 32, 208-219. Available: DOI http://dx.doi.org/10.1016/j.jrurstud.2013.06.001
- Stanley-Clarke, N. 2019. The role of agricultural professionals in identifying, mitigating and supporting farming families during times of stress: Findings of a qualitative study. *The Australian Journal of Rural Health*, 27, 203–209.
- Sutherland, L.-A., Mills, J., Ingram, J., Burton, R. J. F., Dwyer, J. & Blackstock, K. 2013. Considering the source: Commercialisation and trust in agri-environmental

- information and advisory services in England. *Journal of Environmental Management*, 118, 96-105. Available: DOI http://dx.doi.org/10.1016/j.jenvman.2012.12.020
- Vanclay, F., 2004. Social principles for agricultural extension to assist in the promotion of natural resource management. *Australian journal of experimental agriculture*, 44 (3), 213-222.
- Vayro, C., Brownlow, C., Ireland, M. and March, S. 2019. 'Farming is not Just an Occupation [but] a Whole Lifestyle': A Qualitative Examination of Lifestyle and Cultural Factors Affecting Mental Health Help-Seeking in Australian Farmers. *Sociologia Ruralis*. Available: DOI 10.1111/soru.12274
- Vrain, E. & Lovett, A. 2016. The roles of farm advisors in the uptake of measures for the mitigation of diffuse water pollution. *Land Use Policy*, 54, 413-422. Available: DOI http://dx.doi.org/10.1016/j.landusepol.2016.03.007

APPENDICES

APPENDIX 1A INTERVIEW BLUEPRINT PILOT STUDY: FARM MANAGEMENT CONSULTANT KEY INFORMANT

Introduction

Introduction Aniek: link with this sector, own background

Background and aim of this research

The aim of this interview is to gain an understanding about:

- What financial management means to different actors and what the issues concerning financial management are according to different actors in the New Zealand dairy sector
- What actors have a stake or play a role in financial management in the dairy sector in New Zealand and what role these actors exactly play
- How these actors relate to each other
- What measures and interventions specifically exist that aim to inform or support farmers with financial management

As this interview is used for exploratory purposes and getting an overall feel for the situation, I will not explicitly use the data gained from this interview in my report. The information from this interview will thus be used anonymously. I will not mention your name in the research report.

Voice recorder

I brought a voice recorder. I would like to record the interview. Then it is possible to listen to the interview again, which makes analysing it easier. It is difficult to talk and write at the same time. Is it okay if I use the voice recorder?

Time

The interview will approximately take 1 - 1.5 hour. Is that OK for you?

Interview Topics

A: Meanings of financial management and issues concerning FM according to different actors

- Perspective on / definition of FBM What is farm business management / financial management?
 - O Just to be really clear about what you mean: Can you give examples of what it is and what it is not?
 - Differences between FBM and financial management for you? // what exactly do you mean?
- Do you think it is important? What is the relevance of FBM / financial management compared to other practices on the farm?
 - Priorities
 - Are there differences between farmers concerning FBM / financial management practices?
 - What, according to you, do farmers do now (concerning FBM / financial management) and what would they do in the ideal situation?
 - What formal practices?
 - What informal practices?

B & C: What actors play a role in FM, what role do they play and how these actors relate to each other

- Can you describe your role in this space? Do you support farmers in FBM / financial management? How?
- In general, what type of service is provided that you think is useful for farmers?
- Who else is important in this space?
 - O What are the different roles for these others?
 - O What are they doing now?
 - O What is good and what could be done better?
- How do you cooperate with others in this?
 - o Who? Can you give examples?
 - o Do all consultants interact the same with ...?
- Is there a demand from farmers concerning financial management / FBM support? What exactly do they demand? Are there differences in needs?
- How do you gather knowledge about FBM / financial management yourself?
- How do you keep yourself up to date?

For all these questions: HOW IS THAT FOR OTHER CONSULTANTS? Do they do the same?

- O What are the differences / similarities (in services they provide, etc.)?
- O Who is doing a great job / who is not?
- o Can you give examples?
- What were the big changes in advice to farmers?
- Does research exist that is significant for you?

D: measures and interventions that support farmers with financial management

- Do you work with tools for supporting decision-making concerning FBM / financial management?
 - o How?
 - o What type of tools?
 - o Why these tools?
 - o Are you satisfied with the available tools? Why (not)?

Can you think of somebody who did a practice change / innovated in financial management?

Where did significant change / innovation occur in this space?

Closing of the interview

The interview has come to an end now. Do you have something to add? Who else do you think I should talk to? Thank you! - Can I contact you if I forgot to ask something?

APPENDIX 1B INTERVIEW BLUEPRINT PILOT STUDY: ACADEMIC KEY INFORMANT Introduction

Introduction Aniek: link with this sector, own background

Background and aim of this research

The aim of this interview is to gain an understanding about:

- The history and current focus of research concerning financial management
- What financial management means to different actors and what the issues concerning financial management are according to different actors in the New Zealand dairy sector
- What actors have a stake or play a role in financial management in the dairy sector in New Zealand and what role these actors exactly play
- How these actors relate to each other
- What measures and interventions specifically exist that aim to inform or support farmers with financial management

As this interview is used for exploratory purposes and getting an overall feel for the situation, I will not explicitly use the data gained from this interview in my report. The information from this interview will thus be used anonymously. I will not mention your name in the research report.

Voice recorder

I brought a voice recorder. I would like to record the interview. Then it is possible to listen to the interview again, which makes analysing it easier. It is difficult to talk and write at the same time. Is it okay if I use the voice recorder?

Time

The interview will approximately take 1 - 1.5 hour. Is that OK for you?

Interview Topics

Could you tell me about your current role in the university and links with the industry and Farm Business Management / financial management?

A & B: FBM Research history

- Perspective on / definition of FBM What is farm business management / financial management to you?
 - o How would you define it?
 - O Why did it become an issue and why is it important?
 - o What are the different research streams / topics in FBM? What departments in universities / research institutes dedicate research in this field?

C & D: WHAT ACTORS PLAY A ROLE IN FINANCIAL MANAGEMENT, WHAT ROLE THEY PLAY AND HOW THESE ACTORS RELATE TO EACH OTHER

- What actors are active in supporting farmers with FBM?
 - How do these actors support farmers with FBM / financial management? (especially DairyNZ?)
 - O How do these actors cooperate / relate to each other?

E: MEASURES AND INTERVENTIONS THAT SUPPORT FARMERS WITH FINANCIAL MANAGEMENT

- What tools are there to support farmers?
 - o How do they support farmers?
 - o Who develops them?

Closing of the interview

The interview has come to an end now. Do you have something to add? Are there people you know you think I should interview as well?

Thank you! - Can I contact you if I forgot to ask something?

APPENDIX 1C INTERVIEW BLUEPRINT PILOT STUDY: ACADEMIC KEY INFORMANT 2 Introduction

Introduction Aniek: link with this sector, own background

Background and aim of this research

The aim of this interview is to gain an understanding about:

- The history and current focus of research concerning financial management
- What financial management means to different actors and what the issues concerning financial management are according to different actors in the New Zealand dairy sector
- What actors have a stake or play a role in financial management in the dairy sector in New Zealand and what role these actors exactly play
- How these actors relate to each other
- What measures and interventions specifically exist that aim to inform or support farmers with financial management

As this interview is used for exploratory purposes and getting an overall feel for the situation, I will not explicitly use the data gained from this interview in my report. The information from this interview will thus be used anonymously. I will not mention your name in the research report.

Voice recorder

I brought a voice recorder. I would like to record the interview. Then it is possible to listen to the interview again, which makes analysing it easier. It is difficult to talk and write at the same time. Is it okay if I use the voice recorder?

Time

The interview will approximately take 1 - 1.5 hour. Is that OK for you?

Interview Topics

Could you tell me about your current role in the university and links with the industry and Farm Business Management / financial management?

A & B: FBM Research history

- What is farm business management / financial management for you?
 - O Just to be really clear about what you mean: Can you give examples of what it is and what it is not?
 - O Differences between FBM and financial management for you? // what exactly do you mean?
 - o How did FBM become a discipline?
 - O Why is it important? What are the issues in this space according to you?
 - o What are the different research streams / topics in FBM? What departments in universities / research institutes dedicate research in this field?

A: OneFarm: Being part of OneFarm

- Why was the Centre formed? And how?
- How do you determine your topics of research and focus?
- What kind of requests do you get for research? From whom?
- What is the influence of DairyNZ / MPI (funders) and others on what is done in OneFarm?

C & D: WHAT ACTORS PLAY A ROLE IN FINANCIAL MANAGEMENT, WHAT ROLE THEY PLAY AND HOW THESE ACTORS RELATE TO EACH OTHER

- Who is important in this space?
 - o What are the different roles for these actors?
 - o What are they doing now?
 - O What is good and what could be done better?
- Who supports farmers with FBM / financial management?
 - O How do these actors support farmers with FBM / financial management?
 - O How do these actors cooperate / relate to each other?
- In general, what type of service is provided that you think is useful for farmers?
- What were the big changes in support for farmers?
- What research is significant for you?

E: MEASURES AND INTERVENTIONS THAT SUPPORT FARMERS WITH FINANCIAL MANAGEMENT

- What tools are there to support farmers?
 - o How do they support farmers?
 - O Who develops them?
 - O Are you satisfied with the available tools? Why (not)?

Can you think of somebody who did a practice change / innovated in financial management? Where did significant change / innovation occur in this space?

Closing of the interview

The interview has come to an end now. Do you have something to add?

Who else do you think I should talk to?

Thank you! - Can I contact you if I forgot to ask somethin

APPENDIX 1D INTERVIEW BLUEPRINT PILOT STUDY: BANKER KEY INFORMANT Introduction

Introduction Aniek: link with this sector, own background

Background and aim of this research

The aim of this interview is to gain an understanding about:

- What financial management means to different actors and what the issues concerning financial management are according to different actors in the New Zealand dairy sector
- What actors have a stake or play a role in financial management in the dairy sector in New Zealand and what role these actors exactly play
- How these actors relate to each other
- What measures and interventions specifically exist that aim to inform or support farmers with financial management

As this interview is used for exploratory purposes and getting an overall feel for the situation, I will not explicitly use the data gained from this interview in my report. The information from this interview will thus be used anonymously. I will not mention your name in the research report.

Voice recorder

I brought a voice recorder. I would like to record the interview. Then it is possible to listen to the interview again, which makes analysing it easier. It is difficult to talk and write at the same time. Is it okay if I use the voice recorder?

Time

The interview will approximately take 1 - 1.5 hour. Is that OK for you?

Interview Topics

A: MEANINGS OF FINANCIAL MANAGEMENT AND ISSUES CONCERNING FINANCIAL MANAGEMENT ACCORDING TO DIFFERENT ACTORS

- Perspective on / definition of FBM What is farm business management / financial management?
- Do you think it is important? What is the relevance of FBM / financial management compared to other practices on the farm?
 - o Priorities
 - Are there differences between farmers concerning FBM / financial management practices?
 - What, according to you, do farmers do now (concerning FBM / financial management) and what would they do in the ideal situation?
 - What formal practices?
 - What informal practices?

B & C: WHAT ACTORS PLAY A ROLE IN FINANCIAL MANAGEMENT, WHAT ROLE THEY PLAY AND HOW THESE ACTORS RELATE TO EACH OTHER

- Can you describe your role in farmers' financial management? Do you support farmers in FBM / financial management? How?
- Is there a demand from farmers concerning financial management / FBM support? What exactly do they demand? Are there differences in needs?
- How do you gather knowledge about FBM / financial management yourself?
- How do you keep yourself up to date?
- Do you cooperate with others? (others who support farmers with financial management? How?)

D: Measures and interventions that support farmers with financial management

- Do you work with tools for supporting decision-making concerning FBM / financial management?
 - o How?
 - o What type of tools?
 - o Why these tools?
 - o Are you satisfied with the available tools? Why (not)?

Can you think of somebody who did a practice change / innovated in financial management?

Closing of the interview

The interview has come to an end now. Do you have something to add? Who else do you think I should talk to? Thank you! - Can I contact you if I forgot to ask something?

APPENDIX 1E INTERVIEW BLUEPRINT PILOT STUDY: ACCOUNTANT KEY INFORMANT Introduction

Introduction Aniek: link with this sector, own background

Background and aim of this research

The aim of this interview is to gain an understanding about:

- What financial management means to different actors and what the issues concerning financial management are according to different actors in the New Zealand dairy sector
- What actors have a stake or play a role in financial management in the dairy sector in New Zealand and what role these actors exactly play
- How these actors relate to each other
- What measures and interventions specifically exist that aim to inform or support farmers with financial management

As this interview is used for exploratory purposes and getting an overall feel for the situation, I will not explicitly use the data gained from this interview in my report. The information from this interview will thus be used anonymously. I will not mention your name in the research report.

Voice recorder

I brought a voice recorder. I would like to record the interview. Then it is possible to listen to the interview again, which makes analysing it easier. It is difficult to talk and write at the same time. Is it okay if I use the voice recorder?

Time

The interview will approximately take 1 - 1.5 hour. Is that OK for you?

Interview Topics

A: MEANINGS OF FINANCIAL MANAGEMENT AND ISSUES CONCERNING FINANCIAL MANAGEMENT ACCORDING TO DIFFERENT ACTORS

- What is farm business management / financial management for you?
 - O Just to be really clear about what you mean: Can you give examples of what it is and what it is not?
 - O Differences between FBM and financial management for you? // what exactly do you mean?
- Do you think it is important? What is the relevance of FBM / financial management compared to other practices on the farm?
 - Are there differences between farmers concerning FBM / financial management practices?
 - What, according to you, do farmers do now (concerning FBM / financial management) and what would they do in the ideal situation?
 - What formal practices?
 - What informal practices?
 - What are the issues concerning FBM / financial management according to you?

B & C: WHAT ACTORS PLAY A ROLE IN FINANCIAL MANAGEMENT, WHAT ROLE THEY PLAY AND HOW THESE ACTORS RELATE TO EACH OTHER

- Can you describe your role in this space? Do you support farmers in FBM / financial management? How?
- In general, what type of service is provided that you think is useful for farmers?
- Who else is important in this space?
 - What are the different roles for these others?
 - O What are they doing now?
 - O What is good and what could be done better?
- How do you cooperate with others in this?
 - o Who? Can you give examples?
 - o Do all accountants interact the same with ...?
- Is there a demand from farmers concerning financial management / FBM support? What exactly do they demand? Are there differences in needs?
- How do you gather knowledge about FBM / financial management yourself?

• How do you keep yourself up to date?

For all these questions: HOW IS THAT FOR OTHER ACCOUNTANTS? Do they do the same?

- O What are the differences / similarities (in services they provide, etc.)?
- O Who is doing a great job / who is not?
- o Can you give examples?
- What were the big changes in advice to farmers?
- Does research exist that is significant for you?

D: measures and interventions that support farmers with financial management

- Do you work with tools for supporting decision-making concerning FBM / financial management?
 - o How?
 - O What type of tools?
 - o Why these tools?
 - o Are you satisfied with the available tools? Why (not)?

Can you think of somebody who did a practice change / innovated in financial management?

Where did significant change / innovation occur in this space?

Closing of the interview

The interview has come to an end now. Do you have something to add? Who else do you think I should talk to? Thank you! - Can I contact you if I forgot to ask something?

APPENDIX 1F INTERVIEW BLUEPRINT FARMERS Introduction

- Introduction Aniek
- Background and aim of this research:
 - A better understanding of how advisory services influence practice change and innovation in the New Zealand dairy sector and
 - o It will inform the sector about how to foster and support this
 - o The focus is financial management
 - This study aims to understand the financial management practices of farmers, who they go to for financial management advice and how they draw on advisors and other individuals for such advice. It is also explored how advisors, the broader sector and context shape and influence dairy farm financial management
- The aim of this interview is to gain an understanding about:
 - o To find out what farmers' believe financial management encompasses
 - o To describe the process of financial management the farmer uses
 - o To find out who farmers go to for financial advice
 - To find out how farmers draw on professionals and others for financial management advice and why

The information from this interview will be used anonymously. I will not mention your name in the research report. However, among the participants I cannot guarantee full confidentiality, because someone I know selected you as a good potential participant for the research.

Voice recorder

I brought a voice recorder. I would like to record the interview. Then it is possible to listen to the interview again, which makes analysing it easier. It is difficult to talk and write at the same time. Is it okay if I use the voice recorder?

Time

The interview will approximately take 1 - 1.5 hour. Is that OK for you?

Interview topics

Background

Could you tell me something about the history of your farm?

How it developed?	
-	
Farm size?	
- Area	
- Cows milked	
Stage of development?	
Could you tell me a bit about your own background	?
How long in farming?	

How long in farming?

How did you become a dairy farmer?

Education in farming?

- University / polytech / AGITO courses / DairyNZ courses

Education in financial management?

- University / polytech / AGITO courses / DairyNZ courses

- Are you aware of any courses in financial management?

DEFINING FINANCIAL MANAGEMENT

Topic / Objective	Guided questions	Answers in
		key words
Farmers'	If someone asked you to talk about your financial	
perspective on	management, how would you describe what this	
financial	encompasses?	
management		
Farmers' financial	How do you manage your farm finances?	
management		
process	- Can you give an example of what you do?	
	- What are you obliged or required to do?	
	- What else do you do?	
	What kind of practices does this management entail?	
	- Examples?	
	- Frequency?	
	- Is it different for different types of	
	decisions?	
	 Monthly monitoring 	
	o Investments?	
	How do you know how your farm is performing	
	financially?	
	- Weekly, monthly, yearly	
	Changed anything in your financial management	
	practices over the years?	
	- How and why?	
	- Do you think it has become more	
	important? Why?	

ADVISORS AND OTHER INFLUENCERS ON FM

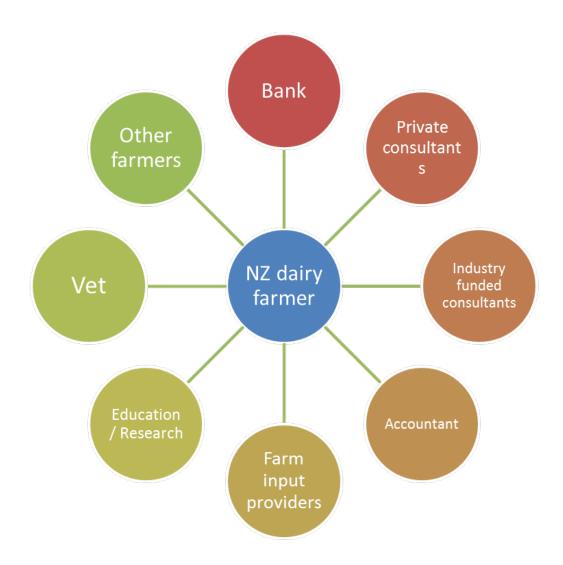
Topic / Objective	Guided questions	Answers
		in key
Farmers' 'advisors' for	With whom do you talk about financial	words
	management?	
financial advice		
Actors / web of influencers	Who supports you in financial management?	
	Do you consult professionals about your financial management? Why? How do they support you? Can you describe / give an example?	
	Did you change advisor / consultant / accountant / bank manager? Why?	
How farmers draw on professionals and others for financial management advice and why	Why do you talk to these people specifically? And how does this help you? Can you give an example?	
- Implementation stage of a change	Did the way you consult people / professionals about finances change over the years? Can you describe how?	
- FM Practices develop over time	Can you describe whether changes occurred over time in relation to which people / professionals you consult about financial management? Why?	
- Relationships F + A develop over time	What did you find most useful in advice you received on financial management?	
	What would you find most helpful?	
	Who initiates the contact with advisor X?	

Nature of these interactions Worldviews in interaction per advisor	Can you describe how advisor X gives you advice? When you have a meeting with advisor X, can you describe what you talk about?	
- Shared understanding of encounter's goals	What services does advisor X provide you with? Why this one as opposed to others?	
- Language issues / shared language	What services are available by advisor X that you are not using? And why?	
- Shared ideas financial management	In general, are you satisfied / happy with the support you receive around financial management? Why (not)? What would you like to change?	
	If you could change anything, what would it be?	
	Is there anyone who provides financial management advice in a way that you particularly like? How and why?	
Trusted / respected advisors, potent. shaped by:	With whom would you talk openly about finances?	
- Frequency encounter	Who would you explicitly not talk to about farm finances? Why not?	
Longevity relationshipOrganisation advisor is part of	What kind of financial information do you share (and what kind of information do you not share)?	

FORMAL TOOLS / SOFTWARE

Only if the farmer talks about formal tools used for financial management:

- 1. Can you describe how and for what purpose you use this tool?
- 2. Do you think you have an influence on how these tools are developed? Why (not)? Can you describe how?
- 3. And how useful are these tools for you? / Are you satisfied with them? What improvements could be made to them?



I did interviews in an earlier phase of the research. On the basis of these interviews, I came up with the above picture of farmers' advisors. Does this make sense to you? Does it surprise you? Are there people / organisations missing? Would you leave people / organisations out?

Who else is important in this space? Why? What do they do?

Closing of the interview

The interview has come to an end now. Do you have something to add?

Who else do you think I should talk to?

Thank you! - Can I contact you if I forgot to ask something?

APPENDIX 1G INTERVIEW BLUEPRINT BANKER KEY INFORMANTS Introduction

- Introduction Aniek
- Background and aim of this research: This research aims to contribute to the innovativeness of the New Zealand dairy sector. Important actors in the sector suggested that there is a need for change and innovation in farm financial management. Therefore, the aim of this research is to gain insights that will assist the advisory system of the New Zealand dairy industry to support innovation in financial management.
- The aim of this interview is to gain a better idea of the structure of banks and how they engage with dairy farmers and how and whether they support them in financial management / provide them with financial management advice. This will enable me to decide on which criteria I will select banks and bank employees as participants for my research.

The information from this interview will be used anonymously. I will not mention your name in the research report. However, given the small number of people in certain positions in this field, full confidentiality cannot be guaranteed.

Voice recorder

I brought a voice recorder. I would like to record the interview. Then it is possible to listen to the interview again, which makes analysing it easier. It is difficult to talk and write at the same time. Is it okay if I use the voice recorder? These recordings will be treated confidentially.

Time

The interview will approximately take 1 hour. Is that OK for you?

Topics and Questions

General

According to you, what are the differences between the 5 main rural lenders in New Zealand?

Structure bank

- What are the different departments in the bank? What do they do?
- Decisions made on different levels
 - O What decisions are made on the level of this branch?
 - O What other levels exist?
 - O What decisions are made on these other levels?
 - O Different for different banks?

Clients

- Client base
 - o % farmers
 - o % dairy farmers
 - o What are the differences between the dairy farmers?
- Reasons for being with ... bank
 - O As clients of this bank, what are the reasons farmers engage with the bank?
 - Do you specifically target dairy farmers?
 - Why (not)?
- Recruitment
 - o How do you get clients?

Services

- Different types of services
 - O What services does the bank offer / provide to dairy farmer clients?
 - Farmers mentioned mortgage, loan / debt, how does that exactly work?
 - Any other services?
 - Is there any specific financial management advice / support?
 - Tools?
 - Financial management capability building?
- Process
 - o How are these services organised / developed?
 - Regional / national / ...
 - When a client comes in for a loan, what happens / is the procedure?
 - O How is that different from if someone comes in for investment?
 - O Who are the staff that deal with service X?
- Type of client per service
 - O Does everybody have access to all these services?

- o Farmers told me about parameters their bank uses for rating their farm 'red flags' on these parameters may have consequences, for example paying higher interest / having to sell parts of the farm / ... Do you have a similar policy within your bank? Can you tell me more about that?
- O How do services offered vary across farmer clients and on what basis?
- o Who decides what services are provided to whom?
- Relationships with clients
 - o How are relationships with dairy farmers maintained?
 - By whom?
 - How does it develop? How does it start / end?
 - Some farmers told me they meet their bank manager once a month, others once a year. Is that also like this at your bank? Why do some meet more often than others?
 - Where?
- What has influenced the nature of interactions between banks and dairy farmer clients over the years?
- How does the bank distinguish itself from competitors?

Which persons to contact about

- Nature of relationships between bank and dairy farmer
- Process of policy development, specifically around relationships
 - With dairy farmers
 - o Internal in the bank about financial management support
 - o External about financial management support
- Development and implementation of advice / services
- Cooperation internally / externally about (developing) financial management advice / supporting farmers with financial management

Closing of the interview

The interview has come to an end now. Do you have something to add? / Do you have any remarks?

Who else do you think I should talk to?

Thank you! - Can I contact you if I forgot to ask something?

APPENDIX 1H INTERVIEW BLUEPRINT BANKERS Introduction

- Introduction Aniek
- Background and aim of this research: to gain insights that will assist the advisory system of the New Zealand dairy industry to support innovation in financial management.
- The aim of this interview is to gain an understanding about:
 - O How advisors interact with farmers about finances
 - With whom advisors interact about supporting farmers in their financial management and how; and
 - How advisors stay up to date with financial management information and developments
 - To find out whether, why and how changes occur and have occurred in supporting dairy farmers in financial management

The information from this interview will be used anonymously. I will not mention your name in the research report. However, among the participants I cannot guarantee full confidentiality, because someone I know selected you as a good potential participant for the research.

Voice recorder

I brought a voice recorder. I would like to record the interview. Then it is possible to listen to the interview again, which makes analysing it easier. It is difficult to talk and write at the same time. Is it okay if I use the voice recorder? These recordings will be treated confidentially.

Time

The interview will approximately take 1 hour. Is that OK for you?

Interview topics

Background

Could you tell me something about your role in the bank? How and why did you become a bank manager?

How long have you already been working in this field?	
Education?	

Interactions with farmers about financial management

Guided questions	Answers in keywords
(How) Do banks support farmers? What kind of services do you provide?	Reywords
What do farmers expect from bank managers / you?	
Can you describe an encounter with a dairy farmer? How does that go?	
How would you differentiate between your (dairy farmer) clients?	
Are there differences in how you support different sorts of farmers?	
	(How) Do banks support farmers? What kind of services do you provide? What do farmers expect from bank managers / you? Can you describe an encounter with a dairy farmer? How does that go? How would you differentiate between your (dairy farmer) clients?

Innovation in advisory services

Topic / objective	Guided questions	Answers in keywords
Could occur in:	Has the way banks support farmers changed?	•
Competences,	Why? And how?	
Interactions farmer -	Can you give an example?	
advisor	What has influenced these changes?	
Information	How you interact with them?	
treatment	Maybe use of software / e-mail?	
Knowledge		
treatment /		
production		
1	What is going especially well, considering	
	supporting farmers?	
	For bank managers, what are challenges?	
	In supporting farmers?	
	Can you give examples?	
	, 0 1	
	In general, do you think over the years changes	
	have occurred in the relationship between bank	
	managers and farmers?	
	Can you describe? / give an example?	
	Specifically in your organisation?	
	1 , , , , , , , , , , , , , , , , , , ,	

Actors around advisors

Topic / objective	Guided questions	Answers in keywords
Actors around advisors, influencing their	Who else (than banks) supports farmers with their finances according to you?	Reywords
behaviour	How do you distinguish bank managers from these others?	
Innovation in knowledge	Do banks / bank managers talk or collaborate with others about supporting farmers?	
production / treatment	In your organisation? Outside your organisation? Who?	
	Why do you talk to them? What do you talk about?	
	Can you give an example? / Can you describe?	
	Did changes / developments occur in the services you provide to clients? How? And why?	
	What triggered the change?	
	Can you describe how these changes were implemented?	
	Who do you talk to? About what exactly? Why?	
	Can you give an example?	
	Is there something that you found especially helpful?	
	Did the way you consult people / professionals about finances change over the years?	
	Can you describe how?	
	How does your organisation stay up to date? Where do you get info from?	
	Did this change over the years? How?	
	What do you think about that development?	

Dual allegiance / Back-office - front-office / Role conflicts

Topic /	Guided questions	Answers in
objective		keywords
Back-office/ front-office	Are there specific / official projects / efforts targeted to supporting farmers in their financial management?	
	If yes: are you involved in those?	
	Do you think these initiatives are important?	
	How do you implement them?	
Role conflicts	What are challenges for bank managers in meeting farmers' expectations?	
Dual allegiance	What do you talk about with others? / What would you explicitly not talk about?	

Closing of the interview

The interview has come to an end now. Do you have something to add? / Do you have any remarks?

Who else do you think I should talk to?

Thank you! - Can I contact you if I forgot to ask something?

APPENDIX 11 INTERVIEW BLUEPRINT BANKERS BACK-OFFICE EMPLOYEES Introduction

- Introduction Aniek
- Background and aim of this research: to gain insights that will assist the advisory system of the New Zealand dairy industry to support innovation in financial management.
- The aim of this interview is to gain an understanding about:
 - O How advisors interact with farmers about finances
 - With whom advisors interact about supporting farmers in their financial management and how; and
 - How advisors stay up to date with financial management information and developments
 - To find out whether, why and how changes occur and have occurred in supporting dairy farmers in financial management

The information from this interview will be used anonymously. I will not mention your name in the research report. However, among the participants I cannot guarantee full confidentiality, because someone I know selected you as a good potential participant for the research.

Voice recorder

I brought a voice recorder. I would like to record the interview. Then it is possible to listen to the interview again, which makes analysing it easier. It is difficult to talk and write at the same time. Is it okay if I use the voice recorder? These recordings will be treated confidentially.

Time

The interview will approximately take 1 hour. Is that OK for you?

Interview topics

Background

Could you tell me something about your own background in banking? What is your role in the bank exactly?

How long have you already been working in this	
field?	
Education?	
Could you tell me about the organisation you work	for?
Development / history	
Size	
Structure of organisation	

Interactions with farmers about financial management

Topic / objective	Guided questions	Answers in keywords
Advisors' advisory practices for farmers on financial management	(How) Do you support farmers? What kind of services do you provide? What do farmers expect from you? Can you describe an encounter with a dairy farmer? How do you go about that? How would you differentiate between your (dairy farmer) clients? Are there differences in how you support different sorts of farmers?	

Innovation in advisory services

Topic / objective	Guided questions	Answers in keywords
	Has the way the bank supports farmers changed? Why? And how?	
	 What kind of changes? What has influenced these changes? Can you describe the process of implementation of these changes? Who is involved? At what stages? What is your role? What do you think about these developments? 	
	What is going well / what are challenges in supporting farmers? Can you give examples?	
	In general, do you think over the years changes have occurred in the relationship between banks and farmers?	
	Why?Can you describe? / give an example?Specifically in your organisation?	

Actors around advisors

Topic / objective	Guided questions	Answers in keywords
	Who else (than banks) supports farmers with their finances according to you?	
	Relationships between these organisations / people	
	Comparisons between these organisations / people	
	Communication & collaboration internally and externally about supporting farmers: connection developers & customer facing people	
	How does your organisation stay up to date? Where do you get info from?	
	Did this change over the years? How?What do you think about that development?	

Back-office - front-office

Topic / objective	Guided questions	Answers in keywords
	- Connection back-office & front-office	
	o Frequency	
	 Reasons for communication 	
	o Formal / informal	
	- Any specific official projects / efforts targeted	
	to supporting farmers in their financial	
	management?	
	 Whose initiative 	
	o Aim	
	o Content	
	 Who involved 	
	 How is your organisation 	
	involved?	
	How are you involved?	
	o Important?	
	o Process of implementation?	
	What is going well / challenges?	

Closing of the interview

The interview has come to an end now. Do you have something to add? Do you have any remarks? Should I ask certain questions differently maybe?

Who else do you think I should talk to?

Thank you! - Can I contact you if I forgot to ask something?

APPENDIX 1J INTERVIEW BLUEPRINT REPRESENTATIVE OF RURAL ACCOUNTANTS AND RESERVE BANK

Introduction

- Introduction Aniek
- Background and aim of this research: to gain insights that will assist the advisory system of the New Zealand dairy industry to support innovation in financial management.
- The aim of this interview is to gain an understanding about:
 - o How advisors interact with farmers about finances
 - With whom advisors interact about supporting farmers in their financial management and how; and
 - How advisors stay up to date with financial management information and developments
 - o To find out whether, why and how changes occur and have occurred in supporting dairy farmers in financial management

The information from this interview will be used anonymously. I will not mention your name in the research report. However, among the participants I cannot guarantee full confidentiality, because someone I know selected you as a good potential participant for the research.

Voice recorder

I brought a voice recorder. I would like to record the interview. Then it is possible to listen to the interview again, which makes analysing it easier. It is difficult to talk and write at the same time. Is it okay if I use the voice recorder? These recordings will be treated confidentially.

Time

The interview will approximately take 1 hour. Is that OK for you?

Interview topics

Background

Could you tell me something about your own background in banking and accounting?

Innovation in advisory services

Topic / objective	Guided questions	Answers in keywords
	Has the way accountants support farmers changed? Why? And how? - What kind of changes?	
	- What has influenced these changes?	
	What is going well / what have been challenges in supporting farmers? Can you give examples?	
	In general, do you think over the years changes have occurred in the relationship between banks / accountants and farmers?	
	Why?Can you describe? / give an example?Did financial advisors act change something? How?	

Actors around advisors

Topic / objective	Guided questions	Answers in keywords
	Who supports farmers with their finances according to you? Comparisons between roles of these organisations / people Relationships between these organisations / people Communication & collaboration internally and externally	
	about supporting farmers: connection developers & customer facing people Reserve bank has 3 functions (1) operating monetary policy to maintain price stability; (2) promoting the maintenance	

of a sound and efficient financial system; and (3) meeting the currency needs of the public.	
 Can you give an example of 1, 2 and 3 (How) does the reserve bank influence / shape relationships between banks and clients? 	

Back-office - front-office

Topic / objective	Guided questions	Answers in keywords
	Rural advisory committee - Why / when set up? - Role? - Examples? - Any changes in role?	
	- How does it impact accountants?	
	Any specific official projects / efforts targeted to supporting farmers in their financial management? Did you hear about the Financial Management	
	Collaboration Agreement? - Whose initiative - Aim	
	 Content Who involved O How is your organisation involved? O How are you involved? Important? 	
	Process of implementation?What is going well / challenges?	

Closing of the interview

The interview has come to an end now. Do you have something to add? Do you have any remarks? Should I ask certain questions differently maybe?

Who else do you think I should talk to?

Thank you! - Can I contact you if I forgot to ask something?

APPENDIX 1K INTERVIEW BLUEPRINT KEY INFORMANT FARM MANAGEMENT CONSULTANTS Introduction

- Introduction Aniek
- Background and aim of this research: to gain insights that will assist the advisory system of the New Zealand dairy industry to support innovation in financial management.
- The aim of this interview is to gain an understanding about: the structure of consultancy firms, how they engage with dairy farmers and how and whether they support them in financial management / provide them with financial management advice. This will enable me to decide on which criteria I will select consultants as participants for my research.

The information from this interview will be used anonymously. I will not mention your name in the research report. However, among the participants I cannot guarantee full confidentiality, because someone I know selected you as a good potential participant for the research.

Voice recorder

I brought a voice recorder. I would like to record the interview. Then it is possible to listen to the interview again, which makes analysing it easier. It is difficult to talk and write at the same time. Is it okay if I use the voice recorder? These recordings will be treated confidentially.

Time

The interview will approximately take 1 hour. Is that OK for you?

Topics and Questions

General

I would like to select consultants for my research, but I don't have a good overview of what the differences are between consultants that have dairy farmer clients. I would like to interview a diverse group of consultants that provide services to dairy farmers. Do you have an idea about the main differences between consultants that provide services to dairy farmers?

- Type of services they provide?
- Do (rural) consultants usually work individually or in a firm?
- Is there anything known about the variety in consultancy firm's size?
- Are they different in how they interact with clients / tools they use / ...?

How would you go about selecting different consultants?

Is there a list / database of rural consultants? How else could I find them? Are they organised in any way?

Structure accountancy firms

- What are the different departments / functions in consultancy firms? What do they do?
- Decisions made on different levels
 - O What decisions are made on the level of this branch?
 - o Do other levels exist?
 - o What decisions are made by different people in the firm / on these other levels?
 - O Different for different firms?

Clients

- Client base
 - o % farmers
 - o % dairy farmers
 - O What are the differences between the dairy farmers?
- Reasons for being with your consultancy firm?
 - O As clients of this firm, what are the reasons farmers engage with it?
 - o Do you specifically target dairy farmers?
 - Why (not)?
- Recruitment
 - o How do you get clients?

Services

- When a client comes in for the first time, what happens / is the procedure?
- Different types of services: What services does the consultant offer / provide to dairy farmer clients?
- Is there any specific financial management advice / support?
 - o Tools?
 - o Financial management capability building?
- Process

- o How are these services organised / developed?
- o Ever changed anything in the services you provide?
 - What
 - Why
 - How
- O Who are the staff that deal with service X?
- Type of client per service
 - O Does everybody have access to all these services?
 - O What services are mainly used? Are there differences among farmers? How do services offered vary across farmer clients and on what basis?
 - o Who decides what services are provided to whom?
- Relationships with clients
 - o How are relationships with dairy farmers maintained?
 - By whom?
 - How does it develop? How does it start / end?
 - How often do you meet with dairy farmer clients?
 - Where?
 - O What has influenced the nature of interactions between consultants and dairy farmer clients over the years?
- How do consultants collaborate / communicate with other people / organisations around the farmer?
- What has influenced the nature of interactions between consultants and dairy farmer clients over the years?
- How do you distinguish yourself from other competitors?

Which persons to contact about

- Nature of relationships between consultant and dairy farmer
- Development and implementation of advice / services
- Cooperation internally / externally about (developing) financial management advice / supporting farmers with financial management
- Process of policy development, specifically around relationships
 - o With dairy farmers
 - o Internal in the firm about financial management support
 - o External about financial management support
- Laws around financial advice provision to (farmer) clients
- Do you know any consultants or others you think I should talk to?

The interview has come to an end now. Do you have something to add? / Do you have any remarks?

Who else do you think I should talk to?

Thank you! - Can I contact you if I forgot to ask something?

APPENDIX 1E INTERVIEW BLUEPRINT FARM MANAGEMENT CONSULTANTS Introduction

- Introduction Aniek
- Background and aim of this research: to gain insights that will assist the advisory system of the New Zealand dairy industry to support innovation in financial management.
- The aim of this interview is to gain an understanding about:
 - O How advisors interact with farmers about finances
 - With whom advisors interact about supporting farmers in their financial management and how; and
 - How advisors stay up to date with financial management information and developments
 - To find out whether, why and how changes occur and have occurred in supporting dairy farmers in financial management

The information from this interview will be used anonymously. I will not mention your name in the research report. However, among the participants I cannot guarantee full confidentiality, because someone I know selected you as a good potential participant for the research.

Voice recorder

I brought a voice recorder. I would like to record the interview. Then it is possible to listen to the interview again, which makes analysing it easier. It is difficult to talk and write at the same time. Is it okay if I use the voice recorder? These recordings will be treated confidentially.

Time

The interview will approximately take 1 hour. Is that OK for you?

Interview topics

Background

Could you tell me something about your own background? How and why did you become a consultant?

- How long have you already been working in this field?	
- Education?	

Could you tell me about the organisation you work for?

- Development / history	
- Size	
- Structure of organisation	

Interactions with farmers about financial management

Topic /	Guided questions	Answers in
objective		keywords
Advisors'	(How) Do you support farmers? What kind of services do	
advisory	you provide? In particular concerning financial	
practices	management / finances?	
for		
farmers	What do farmers expect from you? Specifically financial	
on FM	management?	
	Can you describe an encounter with a dairy farmer? How	
	does that go?	
	How would you differentiate between your (dairy farmer)	
	clients?	
	Are there differences in how you support different sorts	
	of farmers? And with financial management?	

Innovation in advisory services

Topic / objective	Guided questions	Answers in
,	1	keywords
Could occur in:	Has the way consultants support farmers	
- Competences,	changed? Why? And how? And specifically with	
- Interactions	financial management?	
farmer -	- Can you give an example?	
advisor	- What has influenced these changes?	
- Information	- How you interact with them?	
treatment	- Maybe use of software / e-mail?	
- Knowledge		
treatment /	What is going especially well, considering	
production	supporting farmers? And in financial	
	management?	
	For consultants / you, what are challenges?	
	- In supporting farmers?	
	- In supporting them with financial	
	management?	
	- Can you give examples?	
	Gair you give champies.	
	In general, do you think over the years changes	
	have occurred in the relationship between	
	consultants and farmers?	
	- Can you describe? / give an example?	
	- Specifically in your organisation?	

Actors around advisors

Topic /	Guided questions	Answers in
objective		keywords
Actors around Who else (than consultants) supports farmers with their finances according to you?		
influencing their behaviour	How do you distinguish consultants from these others?	
/ Innovation in knowledge production / treatment	, ,	
	over the years? - Can you describe how?	
	How does your organisation stay up to date? Where do you get info from? - Did this change over the years? How?	

- What do you think about that development?	

Dual allegiance / Back-office - front-office/ Role conflicts

Topic / objective	Guided questions	Answers in keywords
Back-office/ front-office	 Are there specific / official projects / efforts targeted to supporting farmers in their financial management? If yes: are you involved in those? Do you think these initiatives are important? How do you implement them? 	
Role conflicts	- What are challenges for consultants in meeting farmers' expectations?	
Dual allegiance	- What do you talk about with others? / What would you explicitly not talk about?	

Closing of the interview

The interview has come to an end now. Do you have something to add? / Do you have any remarks?

Who else do you think I should talk to? Other consultants / financial advisors? Which consultant does things totally different to you?

Thank you! - Can I contact you if I forgot to ask something?

APPENDIX 1G INTERVIEW BLUEPRINT DAIRYNZ

Introduction

- Introduction Aniek
- Background and aim of this research: to gain insights that will assist the advisory system of the New Zealand dairy industry to support innovation in financial management.
- The aim of this interview is to gain an understanding about:
 - O How advisors interact with farmers about finances
 - With whom advisors interact about supporting farmers in their financial management and how; and
 - How advisors stay up to date with financial management information and developments
 - To find out whether, why and how changes occur and have occurred in supporting dairy farmers in financial management

The information from this interview will be used anonymously. I will not mention your name in the research report. However, among the participants I cannot guarantee full confidentiality, because someone I know selected you as a good potential participant for the research.

Voice recorder

I brought a voice recorder. I would like to record the interview. Then it is possible to listen to the interview again, which makes analysing it easier. It is difficult to talk and write at the same time. Is it okay if I use the voice recorder? These recordings will be treated confidentially.

Time

The interview will approximately take 1 hour. Is that OK for you?

Interview topics

Background

Could you tell me something about your own background? What does your job entail?

- How long have you already been working in this field?	
- Education?	

Could you tell me about DairyNZ?

- Development / history	
- Size	
- Structure of organisation	

Interactions with farmers about financial management

Topic /	Guided questions	Answers in
objective		keywords
Advisors'	(How) does DairyNZ support farmers? And specifically in	
advisory	financial management? Who's responsible for what?	
practices	- Examples / describe	
for	-	
farmers	What is your role exactly? / In supporting farmers with	
on FM	financial management?	
	- Examples / describe	
	What do farmers expect from DariyNZ and from you	
	specifically?	
	How would you / DairyNZ differentiate between (dairy	
	farmer) clients?	
	Are there differences in how you support different sorts	
	of farmers?	
	- Examples / describe	

Innovation in advisory services

Topic / objective	Guided questions	Answers in
		keywords
Could occur in:	Has the way DairyNZ support farmers	
- Competences,	changed? Why? And how?	
- Interactions	- Can you give an example?	
farmer -	- What has influenced these changes?	
advisor	- How you interact with them?	
- Information	- Maybe use of software / e-mail?	
treatment	•	
- Knowledge	What is going especially well, considering	
treatment /	supporting farmers?	
production		
_	For DairyNZ, what are challenges?	
	- In supporting farmers?	
	- Can you give examples?	
	In your job, what are challenges?	
	- In supporting farmers?	
	In general, do you think over the years changes have occurred in the relationship between DairyNZ and farmers? - Can you describe? / give an example? - What do you think about that?	

Actors around advisors

Topic / objective	Guided questions	Answers in keywords
Actors around advisors, influencing their behaviour / Innovation in knowledge production / treatment	Who else (than DairyNZ) supports farmers with their finances according to you? How is DairyNZ different from these others? How do you collaborate with others in DairyNZ about supporting farmers in finances? - Why? - Can you give an example? Does DairyNZ talk or collaborate with others about supporting farmers in finances? - Why do you talk to them? What do you talk about? - Can you give an example? / Can you describe? - All accountants / banks / lawyers / consultants? How do you differentiate? Did changes / developments occur in how DairyNZ supports farmers with financial management? - What triggered the change? - Can you describe how these changes were implemented? - Who do you talk to? About what exactly? Why? - Can you give an example? - Is there something that you found especially helpful? - Did the way you consult people / professionals about finances change over the years? - Can you describe how? How does DairyNZ stay up to date? Where do you get info from? - Did this change over the years? How? - What do you think about that development?	

Dual allegiance / Back-office – front-office/ Role conflicts

Topic /	Guided questions	Answers in
objective		keywords
Back-office/ front-office	- Are there specific / official projects / efforts targeted to supporting farmers in their financial management?	
	- If yes: are you involved in those?	
	- Do you think these initiatives are important?	
	- Who develops them?	
	- How is it decided that they should be developed?	
	- How do you implement them?	

Closing of the interview

The interview has come to an end now. Do you have something to add? / Do you have any remarks?

Who else do you think I should talk to?

Thank you! - Can I contact you if I forgot to ask something?

APPENDIX 1H INTERVIEW BLUEPRINT SPECIALIST FINANCIAL ADVISORS Introduction

- Introduction Aniek
- Background and aim of this research: to gain insights that will assist the advisory system of the New Zealand dairy industry to support innovation in financial management.
- The aim of this interview is to gain an understanding about:
 - o How advisors interact with farmers about finances
 - With whom advisors interact about supporting farmers in their financial management and how; and
 - How advisors stay up to date with financial management information and developments
 - To find out whether, why and how changes occur and have occurred in supporting dairy farmers in financial management

The information from this interview will be used anonymously. I will not mention your name in the research report. However, among the participants I cannot guarantee full confidentiality, because someone I know selected you as a good potential participant for the research.

Voice recorder

I brought a voice recorder. I would like to record the interview. Then it is possible to listen to the interview again, which makes analysing it easier. It is difficult to talk and write at the same time. Is it okay if I use the voice recorder? These recordings will be treated confidentially.

Time

The interview will approximately take 1 hour. Is that OK for you?

Interview topics

Background

Could you tell me something about your own background? How and why did you become a financial advisor?

- How long have you already been working in this field?	
- Education?	

Could you tell me about the organisation you work for?

- Development / history	
- Size	
- Structure of organisation	

Interactions with farmers about financial management

Topic /	Guided questions	Answers in
objective		keywords
Advisors'	(How) Do you support farmers? What kind of services	
advisory	do you provide? In particular concerning financial	
practices for	management / finances?	
farmers on		
financial	What do farmers expect from you? Specifically	
management	concerning financial management?	
	Can you describe an encounter with a dairy farmer? How does that go? How would you differentiate between your (dairy farmer) clients? Are there differences in how you support different sorts of farmers? And with financial management?	

Innovation in advisory services

Topic / objective		Guided questions	Answers in
1	,	1	keywords
Could	occur in:	Has the way financial advisors support farmers,	
-	Competences,	changed? Why? And how? And specifically with	
-	Interactions	financial management?	
	farmer -	- Can you give an example?	
	advisor	- What has influenced these changes?	
-	Information	- How you interact with them?	
	treatment	- Maybe use of software / e-mail?	
-	Knowledge		
	treatment /	What is going especially well, considering	
	production	supporting farmers? And in financial	
		management?	
		For financial advisors / you, what are	
		challenges?	
		- In supporting farmers?	
		- In supporting them with financial	
		management?	
		- Can you give examples?	
		In general, do you think over the years changes	
		have occurred in the relationship between	
		financial advisors and farmers?	
		- Can you describe? / give an example?	
		- Specifically in your organisation?	
		- Specifically iff your organisation?	

Actors around advisors

Topic / objective	Guided questions	Answers in keywords
Actors around advisors, influencing their behaviour	Who else (than financial advisors) supports farmers with their finances according to you? How do you distinguish financial advisors from these others?	,
Innovation in knowledge production / treatment	Do you talk or collaborate with other professionals about supporting farmers? - In your organisation? Outside your organisation? Who? - Why do you talk to them? What do you talk about? - Can you give an example? / Can you	
	describe? Did changes / developments occur in the services you provide to clients? How? And why? - What triggered the change? - Can you describe how these changes were implemented?	
	 Who do you talk to? About what exactly? Why? Can you give an example? 	
	 Is there something that you found especially helpful? Did the way you consult people / professionals about finances change over the years? 	
	 Can you describe how? How does your organisation stay up to date? Where do you get info from? Did this change over the years? How? What do you think about that development? 	

Dual allegiance / Back-office - front-office/ Role conflicts

Topic / objective	Guided questions	Answers in keywords
Back-office/ front-office	- Are there specific / official projects / efforts targeted to supporting farmers in their financial management?	Reywords
	- If yes: are you involved in those?	
	- Do you think these initiatives are important?	
	- How do you implement them?	
Role conflicts	- What are challenges for financial advisors in meeting farmers' expectations?	
Dual allegiance	- What do you talk about with others? / What would you explicitly not talk about?	

Closing of the interview

The interview has come to an end now. Do you have something to add? / Do you have any remarks?

Who else do you think I should talk to? Other consultants / financial advisors? Which consultant does things totally different to you?

Thank you! - Can I contact you if I forgot to ask something?



Innovation in financial management in New Zealand's dairy sector

PARTICIPANT CONSENT FORM - INDIVIDUAL

I have read the Information Sheet and have had the details of the s	study explained to me. My
questions have been answered to my satisfaction, and I understa	and that I may ask further
questions at any time.	
I agree or do not agree to the interview being soun	d recorded.
I agree to participate in this study under the conditions set out in	the Information Sheet.
Signature:	Date:
Full Name - printed	



The advisory system and innovation in financial management in the New Zealand dairy sector INFORMATION SHEET

Researcher(s) Introduction

My name is Aniek Hilkens and I am undertaking this research as part of my doctoral research studies. The academic supervisors of this research are Dr. Janet Reid (main supervisor); Dr. David Gray (co-supervisor), both from the Institute of Agriculture and Environment at Massey University, and Associate Professor Laurens Klerkx (co-supervisor Wageningen University, Netherlands).

Project Description and Invitation

This research will contribute to a better understanding of how advisory services influence practice change and innovation in the New Zealand dairy sector and it will inform the sector about how to foster and support this. The focus of the study is financial management. This study aims to understand the financial management practices of farmers, who they go to for financial management advice and how they draw on advisors and other individuals for such advice. It will also explore how advisors, the broader sector and context, shape and influence dairy farm financial management.

Participant Identification and Recruitment

I am seeking your input into this research because you are a dairy farmer or a key informant. Therefore, you have a professional position in the industry and you have knowledge and experience that is likely to be of value to the research.

Project Procedures

With your agreement the interview will be digitally recorded to ensure accuracy in data collection and to assist the data analysis process. The digital interviews will be summarized. The recordings and summary will be stored as digital files. Unless consent is given, your name and identity will not be stated explicitly in the research. However given the small number of people in certain positions in this field, full confidentiality cannot be guaranteed. Interviews will be undertaken at a time and location that is agreed to by you. Interviews will be a maximum of 90 minutes.

Participant's Rights

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

• decline to answer any particular question;

- withdraw from the study (specify timeframe);
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded;
- ask for the recorder to be turned off at any time during the interview.

Project Contacts

If you have any questions about the project, please contact the researcher and / or the supervisors:

Aniek Hilkens a.hilkens@massey.ac.nz

Dr. Janet Reid

J.I.Reid@massey.ac.nz

06 3505268

Dr. David Gray

<u>D.I.Gray@massey.ac.nz</u>

"This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Dr Brian Finch, Director (Research Ethics), email humanethics@massey.ac.nz".

APPENDIX 4 LOW RISK NOTIFICATION



13 March 2015

Aniek Hilkens



Dear Aniek

Innovation in Financial Management in New Zealand's Dairy Sector Re:

Thank you for your Low Risk Notification which was received on 6 March 2015.

Your project has been recorded on the Low Risk Database which is reported in the Annual Report of the Massey University Human

You are reminded that staff researchers and supervisors are fully responsible for ensuring that the information in the low risk notification has met the requirements and guidelines for submission of a low risk notification.

The low risk notification for this project is valid for a maximum of three years.

Please notify me if situations subsequently occur which cause you to reconsider your initial ethical analysis that it is safe to proceed without approval by one of the University's Human Ethics Committees.

Please note that travel undertaken by students must be approved by the supervisor and the relevant Pro Vice-Chancellor and be in accordance with the Policy and Procedures for Course-Related Student Travel Overseas. In addition, the supervisor must advise the University's Insurance Officer.

A reminder to include the following statement on all public documents:

"This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Dr Brian Finch, Director (Research Ethics), telephone 06 356 9099, extn 86015, e-mail humanethics@massey.ac.nz".

Please note that if a sponsoring organisation, funding authority or a journal in which you wish to publish requires evidence of committee approval (with an approval number), you will have to provide a full application to one of the University's Human Ethics Committees. You should also note that such an approval can only be provided prior to the commencement of the research.

Yours sincerely

Brian T Finch (Dr)

Chair, Human Ethics Chairs' Committee and Director (Research Ethics)

Dr Janet Reid

Institute of Agriculture and Environment

PN433

Prof Peter Kemp, HoI Institute of Agriculture and Environment PN433

Dr David Gray Institute of Agriculture and Environment PN433

Massey University Human Ethics Committee Accredited by the Health Research Council

Research Ethics Office, Research and Enterprise

Massey University, Private Bag 11222, Palmerston North 4442, New Zealand T 06 3505573; 06 3505575; F 06 350 5622 E humanethics@massey.ac.nz; animalethics@massey.ac.nz; gtc@massey.ac.nz www.massey.ac.nz

APPENDIX 5A THEORETICAL CHECKLIST

Interview farmer

- Actors / Web of influencers (actors are perceived to be key to innovation from AIS perspective): who is included in the group of actors influencing farmers' financial management, which may be influenced by:
 - o Implementation stage of a change
 - o Financial management practices are found to develop over time
 - o Relationships between F + A are argued to develop over time
- Worldviews in interaction: if differences between F + A (concerning for example language, encounter's goals, financial management, etc.) are not made explicit, it may hinder learning
 - o Shared understanding of encounter's goals
 - o Language
 - o Ideas about financial management
- If individuals / advisors are **trusted and respected**: they are more likely to enhance learning / practice change in / after interaction with farmers. Factors influencing trust could be:
 - o Frequency encounters
 - Longevity relationship
 - o Organisation advisor is part of
- From an AIS perspective, **institutions** are perceived to shape interactions:
 - o Formal rules: of organisation
 - o Informal rules: norms, values

Interview advisor

- Actors / web of influencers (actors are perceived to be key to innovation from AIS perspective): who is included in the group of actors influencing advisors' financial management advice provision / knowledge gathering, which may be influenced by:
 - o Implementation stage of a change
 - o Financial management practices are found to develop over time
 - o Relationships between F + A are argued to develop over time

• Worldviews in interaction:

- Advisors' ideas about how to provide advice (traditional top-down vs. interdisciplinary approach)
- O Differences between F & A in interaction not made explicit → may hinder learning
 - Shared understanding of encounter's goals
 - Talk the same language
 - Ideas about financial management
- Innovation in advisory services could occur in:
 - o Competences
 - o Methods
 - o Info production and communication
 - o Knowledge production
 - o Interactions farmer advisor
- **Dual allegiance** could influence knowledge sharing between advisors (loyalty towards firm vs. collaboration); influenced by:
 - o Cultural norms
 - o Leadership practices
 - o Coordination of individual incentives
- Back-office and front-office: alignment between back and front office is argued
 to be important as back-office knowledge is likely to be most effective when
 tailored to issues identified in front-office
- Role conflicts experienced by advisors could hinder optimal advice provision
 - o Potentially employer vs. farmer demands conflict
 - Potentially formal requirements conflict with facilitating an optimal environment for learning

APPENDIX 5B INITIAL CODING EXAMPLE



- But to the older generation is indeed not, yeah. O
- There's still perception in the older generation that the government will keep it and they won't give it back to you, there's always the odd person who thinks that. But I think the sooner they make it compulsory the better.
- Why do you think it's better if they make it compulsory? Q
- Because then I'll show you some examples. If you're starting at \$25 and putting Α three percent of your salary away for the next 40 years you're probably talking about a million dollars when you retire and you haven't really done anything and you haven't missed out on anything.
- Yeah, if you put just a small amount every month it can build up. Q
- When I started at the BNZ they at that time had a compulsory superannuation scheme in seven percent of your salary and they matched it. Because it was from day one, my first pay packet, I thought it was a huge pay packet but it was already missing seven percent and I didn't know, well I did know but because I'd never had it before you don't care.
- Q You don't miss it, no.
- When I left the bank after 13 years I got a decent sized cheque that I would never have Α saved otherwise. So they have those benefits.
- Even if you make it compulsory then from day one you're just used to, everybody's Q used to just having that small portion. But if you had that portion maybe for 10 years and then you missed the seven percent you think...
- Yeah, all of a sudden a chunk disappears out of your weekly wage and you think oh Α that's not fair. But if you haven't had it to start with you don't know what you're missing.
- Exactly yeah, ah yeah so that would be [the advantage]. Maybe these questions are Q repeatable but anyway I'll just ask them.
- Α That's fine.
- What do dairy farmers expect from you? \circ

A lot of them the discussions I have with dairy farmers around interest rates and what we think interest rates are going to do. Because obviously most of the dairy farmers have large debt loading and a small movement in the interest rate has a huge impact. It's an extremely difficult question because the economists don't know. I don't know if you've heard of Tony Alexander, he was the BNZ's chief economist for a number of years. He came us years age had a graph and he said, "This is what interest rates are going to do for the next three years, but I could be wrong and withey'll do this." Because New Zealand is very small, we're impacted hugely by what...

The rural market does

The rural market does

The rural market does. formers, and small marmore a interest rates to Yeah, the United States said they're going to raise their interest rates and that had a first flow-on effect straight away to the exchange rate here. They didn't actually raise them, economists don't have impair)

they just said they were thinking about it.

- difficult though?

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Exactly, speculation is already, yeah. But a lot of the discussions are around interest rates and working out whether it's better to fix or keep it on floating rates. Again a lot of farmers, especially at the moment they want the certainty so they prefer to fix in, and rates are so low compared to what they have been. So we spent a lot of time discussing interest rates. Okay that's one of the big things. fix / flour interest rates. she probably told you she does quite a lot on if they're looking at The likes of buying new farms or increasing the size and what not, does cash flows and those type of things. I don't actually do that type of stuff anymore, I look more at what's an interest rate movement going to do to their... Q Okay so you don't do the planning for a farm like oh can you, how you say, if you want to buy a farm? Yeah, she does the budgets and the cash flows and I try and find out what the feeling is around what interest rates are going to be doing over the next six, 12, 24 months. Because half a percent movement on a couple of million dollars, it's got to hurt. Interest rates go up and the payout keeps going down. Do you also actually work together with or the others on... Yeah. How does that work? How does that go? Because - this is where the new laws are silly. can't discuss - none of the accountants here can really discuss financial planning matters with clients because they're not an authorised financial adviser. They can talk about the basic things, whether you should buy some shares or sell some shares but they can't discuss that, they're not allowed to under the new laws. So that's where if we want to have a ാമ്രിiscussion about that I have to be involved because I've got a bit of paper that says I'm allowed to. It's just nutty really, it makes no sense.

So sometimes if farmers want to know about these things or want to discuss that then says hey can you... Yeah, I need to come and have a talk. Do you then talk with the three of you or is it then... Yeah well I usually have a talk with first and then the three of us go and have a chat. But she is not allowed to be seen to be... Yeah, to be doing any... Yeah, but we discuss what her thoughts are and what mine are beforehand. But I 51 certainly work very closely with the accountants, especially for it's not just the farming side but if the accounting clients are looking at either buying or selling a commercial property we look at that from a financial planning point of view and the best way of structuring it and whether it should be in a family trust or a company or whatever the best way of purchasing it. beforehand lot of wollable ention whis + augustant whis + augus.

Sorry, that's together with the accountant? Q

Α Yes.

Are there any other professionals around farmers that you worked with, like bankers

to talk alor

Yeah, I know all the banks now have specialised people that come out and see clients. I quite often get rung up from an accounting client or one of my clients saying business or rural manager is coming out to have a chat because interest rates are coming due. So I think the banks now work very closely with their actual customers a lot more than they used to be. It used to be if you wanted to borrow money you went in and talked to the bank manager and had big long meetings. Now the bank managers are out on the farms all the time, they don't sit in their office anymore so they're a lot more proactive in getting involved and having a look around what these people are actually trying to do.

It's very hard to work out, you know, if you just look at a bit of paper and it says they want to buy such and such a farm it's going to make X amount of dollars. Where it's a lot better to go out and actually look and see what they're trying to do.

Positive wour So you say that that's a good development for...

I think it's great, I think the bank manager is getting out and actually seeing what's going on. I know the bank managers at the moment, obviously with the Fonterra payout being so low they're spending a lot more time out talking to the farmers. Because the banks can't just put a line in the sand and say look you're not making any money, what are you going to do about it? Because if they all do that everything's going to fall apart. They have to manage it through, because what did I read the other day, 60 or 70 percent of the farms at the moment aren't making any money, they've got negative cash flows and will have for another year or so probably.

So the banks have to manage that through, they can't just say we're not lending you any more money because then they can't all up and force sales on people because the

any more money because then they can't all up and force sales on people because the whole place would fall apart. So they're being a lot more proactive, you're seeing them Jethen it's a good sen to give a loan to france if arthally sury farm

Do you also in your work in advising clients on finances, do you also work with their

Yeah we keep in touch with them, work out how we're trying to structure it and get their thoughts. Because there's products and stuff that quite often they're new and we don't fully know about them.

fully know about them.

to structure things because not always

Okay, so you get information. op to dote with products / stuff

Α Yeah.

Q

So you would talk with bankers about what kind of products they have?

Yeah, there's the bank, there's the accountant or me, there's the lawyer and the customer, you have to work really closely to get things working right. I presume a lot of the farms now have farm advisers as well that they work with. You'd probably know that far more than I would.

of other around the

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- Q Oh yeah well it depends on the farmer. Some do, some don't, some will use a farm consultant for feed, some...
- A Yeah there's all sorts, there's someone out there for everything now.
- Q Did anything change in how you [unclear 29:53] not that many farmers you work with, but did anything change in how you support them or how you provide services in the years you've worked with farmers?
- A I think they are working more closely with accountants now. It used to be they're bringing their box of receipts and invoices at the end of the year, get a set of accounts done, give it to the bank. That was it, it was just a transaction type industry. Where now the accountants are doing budgets, cash flows, some of the bigger farm entities will be having two monthly sets of accounts so they can monitor exactly how they're doing. So they're not waiting 12 months to find out if they made any money or not.

or company or she port here

But the farmers themselves are a lot more clued up on how well they're doing. They ean tell you what the milk production from each cow was these days and they know exactly what level of debt they've got and what income they've got, which they have to because their debt levels are so big. They can't afford to have a month or so where things aren't going quite right because...

No, and also for your own work do you also see that something has changed in how you support the farmers?

you support the farmers?

Not a lot, things haven't changed very much from what I do.

So you get the similar type of questions over years?

- A Yeah.
- Q What you indeed said like people who have a lot of money or people who...
- A It's still fairly well broken down into that, they've either sold something and they've got a lot of money and they need to find out what to do with it or want some advice on what to do with it. Or people who want to make sure by the time they get to retirement age they've got enough money. Technology has helped a lot in that because you can do modelling of if you put X amount away every week what will that look like when you're 65? Then if you want to spend X amount a week from then how long will that money last? If it runs out too shortly here you have to make sure you're putting more down in this bit.
 - The people who ask you about interest rates, is that the people who want to save for later? Or is it...

reflex A les

No it's more people who are borrowing money who are more worried about interest rates because it has more impact on them. It certainly does with investors as well because five years ago if you had \$100,000 in the bank you'd be getting probably eight percent, now you're getting three. So if you're retired you were getting a reasonable income, now you're getting very little. So the low interest rates hurts people who have got money in the bank. Because of that they tend to then want to look at riskier investments to try and generate more income. But there's a downside of that...

Because it's more risky.

Tropart or Villeria

6

APPENDIX 5C SUMMARY OF INITIAL THOUGHTS (EXAMPLE 1)

How do advisors and their broader organisations shape advice and advice provision and why?

- 1. According to B1, accountants have a 'rear mirror vision', they look historically. Financial advice requires forward thinking and forward planning. 'Good accountants' (according to B1), look forward and look how future situation may look and what the implications are. PG 1
- 2. AWESOME QUOTE: 'it's a cost benefit to the bank in that, if you were a farmer and you only owed the bank 200,000 dollars, you haven't got enough what we call, skin in the game. There is not enough investment in the bank, the bank is not getting enough profit from that customer to be able to justify personalised service. PG 2
- 3. > the more debt (> farmer owes more to bank), is > more personal service. Service levels are lower for people with lower debt levels. Bank managers work with a group of farmers with a certain level of debt. The bank manager that deals with farmers with lowest debt levels, deals with most farmers. The bank manager that deals with farmers with highest debt levels, deals with least farmers. The bank manager with least customers, can be more pro-active (e.g. bank will be more aware for higher debt level customers whether they might be interested in buying more land than with lower debt level customers) in advice giving than the one with most customers. PG 2
- 4. Related to above: More time and effort is put in client who's buying compared to client who's not. Maybe not as much time in someone who's not buying something versus someone who is. PG 9
- 5. Banks do the same stuff: only different packaging the difference is in the individual bank manager: how this manager relates to client and clients' confidence in your ability to actually manage their business personal relationship PG 2
- 6. Bank managers should be careful / take care in their personal relationship with clients. 'You should make sure not to be seen to be doing favours and saying maybe, when the interest rate should be 7%, you've trimmed it to 6,75 or 6,5, you know because he's a good mate. You've got to be very very careful and very honest about that.' PG 3
- 7. Decisions about 'exposure' (how much lending is done in a certain sector) are made on a high level. PG 3 Managing exposure is done by: either increase or not decrease interest rates in an area they want to decrease exposure. 'Pricing themselves out of market' PG 3
- 8. Bank's priority is to maintain a strong balance sheet, which is measured by customers' risk grading / maintained by managing customers' risks. Risk grading is done by measuring 1) the ability to repay interest and 2) bank's risk of losing money if customer defaults PG 4. Higher risk grade => customer pays more interest PG 5
- 9. IF the customer's risk grade gets high, the business is brought into contact with other persons in the bank: credit management. They put more effort to work with these people and work a lot more closely with those clients to try and resolve the

issue. PG 4 / 5 If a farmer is in a bad financial situation, the change of manager is also for psychological reasons PG 5

How is the advisory system shaped by its context?

- 1. Issues with SWAPS: SWAP is where you exchange interest rate risk. It allows you to manage interest rate. You can manage the rate up and down, by shortening or lengthening the term. Because someone is going to buy that trade on the other side. SWAPS movements rely on movements in interest rates. In 2007, 2008, movements were very very small. Interest rates were down and low, the swap couldn't be restructured, because there was no volatility. Some farmers lost a lot of money because of trading in SWAPS that led to a lot of mistrust among farmers / customers in banks. PG 7 + 8
- 2. In the earlier days, banks and clients would have a kind of 'principal student relationship'. The farmers would come into the bank, clean their shoes, put a collar and a tie. Now, the other way around: if there is a hint or knowledge that a farmer is looking to perhaps buy the farm next door, then his banker should be out there, he'll be in his car out there and visiting and arguable there'll be a couple of other bankers go up his driveway and ask the same questions as well. Bankers are thus more pro-active now. Competition caused this (a more pro-active banking sector). PG 10
- 3. There are two golden rules in banking: 1) is duty of care and 2) is lender liability: there is a perverse incentive / tension for bankers, as they get bonuses if they sell more or higher loans. PG 10 + PG 11 As a result of this: bankers have to be careful with giving advice to clients. It's not always what you say necessarily, but HOW you say it. PG 10

APPENDIX 5D SUMMARY OF INITIAL THOUGHTS (EXAMPLE 2)

How do advisors and their broader organisations shape advice and advice provision and why?

- 1. Different levels of qualification exist among accountants in AC8's practice. PG 2
- 2. Services AC8 provides to her clients are compliance work (GST returns, farmer's payrolls, work out and pay wages for farmers, preparation of financial statements and tax returns) and preparing budgets and reporting against them, DairyBase, strategic type planning (exit farming / selling down / succession). PG 2 + 3
- 3. There is variation between farmers in demands they have concerning services from accountants. PG 3
- 4. Accountant believes that more contact with clients leads to a better relationship with clients, with the result that the accountant knows better what is happening in their business and can be more pro-active in giving advice (instead of being reactive) (e.g. client came in who's thinking about selling a tractor and buying a new one, accountant could make him aware about the tax implications which helped him to decide being more informed) PG 4
- 5. Contact is usually initiated by the farmer, and is done over the phone / face to face / .. PG 4
- 6. Accountant makes sure to have more contact with clients that are vulnerable financially for example, so their mental health state might not be as good. PG 4
- 7. The accountant talks with the client on a yearly basis for annual accounts (makes written commentary with: profit = ... dairy production = ... and comparison last year, livestock ... + what happened: bought, sold and effects of changes and values, costs per kg of milksolid, what happens to bank's overdraft). This conversation is mainly about future. PG 5
- 8. During the annual meeting with clients, it is also discussed whether accountant needs to take action / talk with bank or lawyer. PG 5
- 9. Accountant liaises clients sometimes to lawyers (for example in succession processes if structure of business has to change) PG 6 or if client is looking for a consultant always gives multiple options for multiple consultants: link this to what AC2 and other accountants said! PG 11
- 10. Services are tailored to clients' needs. PG 6
- 11. This accountant uses DairyBase to explain stuff: look at what's behind the figures. Helps to estimate what people spent is within a normal range. PG 7
- 12. Challenging for accountant is that some clients do not ask for advice when they actually should. E.g. go out and buy a farm without asking advice. Risk of this is that no critical questions are asked by an independent party, no one there that guided process and made them think through everything PG 8 + 9
- 13. As an accountant AC8 tries to guide client's processes and make sure they've thought of everything PG 9
- 14. Accountant is seen as trusted advisor according to many studies. Trusted advisor because: people ask about all sorts of things: supermarket budget, doing on farm practices and mental health problems. PG 9

- 15. Accountant also has contact with the bank at request of the farmer PG 9 + PG 14
- 16. Bank sometimes contacts accountant instead of clients in case contacting the client 'could be a bit problematic': e.g. managed sell-down -> accountant is the messenger / intermediary (accountant remarks that a tragedy can be prevented by the bank having contact with accountant instead of client. Other occasions that bank and accountant have contact without client is: some banking covenants require 2-monthly reporting to the bank, so they don't bother to go through the client. PG 10
- 17. Relationship building with bank is important for accountant, so if any problems they can ring each other. Open communication with bank is important for accountant: sometimes the bank calls the accountant about a client, after they had a meeting and bank is worried. PG 11
- 18. Accountant sometimes encourages client to have contact with the bank if clearly in financial difficulties PG 11, PG 15 or with lawyer if e.g. will have to be changed. PG 15 = pro-active advice no?
- 19. Accountant stays up to date with farming by talking to family / husband, doing courses, seminars, magazines, community involvement. PG 12
- 20. This accountant feels responsible about supporting farmers whose mental wellbeing may get affected by financial pressure PG 12
- 21. Accountant does more than only compliance work: also counselling type of services PG 13
- 22. Accountant perceives that clients know that sensitive information is safe with accountant. People tell all kinds of confidential / sensitive things / things that usually wouldn't be discussed, to accountant PG 13 / 14
- 23. Accountant sometimes helps people under (extreme) financial pressure to learn budgeting / get a system in that (without charging them) = an exception to the \$/t rule that usually goes for accountancy services PG 14

How is the advisory system shaped by its context?

- 1. Cashmanager made it possible to support clients more in real-time as you can follow in real-time data that people are inputting.
- 2. Changes over the years are that earlier there was only once per year contact between the accountant and client, whereas now, every 2 months (GST?). So accountant has access to data in real time. So a big change is that as a result of technology = timeliness of advice is possible and responding to things in real-time. PG 7
- 3. Also farmers ask more questions since cashmanager exists. A consequence is that the accountant looks at farmers' numbers in cashmanager if they ask a question, so can immediately make sure everything is alright (e.g. what is profitability looking like) PG 8

APPENDIX 5E SUMMARY OF INITIAL CODING PER INTERVIEWEE GROUP

Bank and accountant

'Or if we're talking to a client, it's pretty important that we talk to the accountant. Just find out who the key decision makers are, talk to them, involve them in the whole process. And more and more that is becoming, including the accountant and the solicitor.' PG4B4

Accountants and bank managers have frequent contact / interactions, as bank needs info from accountant to do credit ratings to the businesses. The loan agreement requires that business performance is evaluated and the info for that is provided by the accountant. PG 8+9~B5

Bank and accountant are key source of financial advice (survey NZ farmers), however bank is supplier, so accountant is critical in this. PG8B5

Bank meets with accountant to discuss 'a deal' (when farmer wants to buy a farm?); discusses with solicitor on a more structural basis; discusses with a farm consultant the more practical side of the business plan. PG5B6

Bank manager refers clients with questions about tax, business structure, insurance to accountant / solicitor / insurance agent. PG6B8

Contact / collaboration with accountant / solicitor: is e.g. on seminars (e.g. succession planning, debt budgets) and around clients (e..g issues, changing business structures) PG 7 Contact with accountant about interpreting accounts and transactions PG 17 Also if making plans with client, it is important to talk to their accountant and solicitor: 'it's trying to get buy-in from all quarters'. (e.g. in succession planning: also talk to accountant and lawyer to get their opinion / buy-in) PG17B8 Related to point above: the process of getting an opinion from accountant and lawyer is interesting: 1st talk to client, 2nd ask client whether it's OK to talk this through with accountant / lawyer, if client agrees to that: banker talks to accountant (as opposed to client), 'as client does not always fully understand the concept / plan in the first instance. PG17B8

Contact with accountants : are usually referrals (clients needing a bank or an accountant) PG7B8

If business is not viable, the banker also expects the accountant to step in and have discussions with the farmer. PG15B8

Bank talks with accountant 1) about client 2) briefing on what we're seeing in the dairy industry PG7B9

QUOTE page 9: 'We never see an accountant without a client, it's just a general catch up about the industry. We wouldn't ever talk about specific clients without them being there'. Compare this to pg 7: 'I'm going to see an accountant at 12:30. We've got to talk about a client, but he also just wants me to give him a briefing on what we're seeing in the dairy industry.' PG9B9

Information sharing around finances is delicate. Always 1st OK from client before contact with accountant about client. PG9B9

Criticism

According to B1, accountants have a 'rear mirror vision', they look historically. Financial advice requires forward thinking and forward planning. 'Good accountants' (according to B1), look forward and look how future situation may look and what the implications are. PG1B1

Banker perception of accountants: only few really do a good job – some are just compliance people, they just do the books and tax and stuff, but some of them actually do some advisory, a little bit more of advisory stuff (= the 'good' accountants). (...) Heaps of them have good relationships with their clients, but that's just because heaps of them have had them for ages. Farmers trust them but if you look at the advice that they give them sometimes it's a bit average. PG5B2

Critique B5 towards accountants: accountants have typically been historically-minded, but increasingly moving to a more advisory type role. Bank encourages that trend: by providing resources: e.g. business plan template that they can complete with customers, run seminars in which accountants are involved. PG8B5

Critique towards accountants: Accountants are usually looking in the 'rear vision mirror': crunching numbers from the past and probably lack to see what's coming in the future. PG5B6

B8: some accountants don't do a lot of interpretation of accounts for farmers. Therefore B8 / other managers sometimes do some interpretations for farmers. I suppose this can't be said for every accountant, because some accountants do very good jobs but..' PG6B8

Bank & DairyNZ

[NAME BANK] cooperates with DairyNZ: DairyNZ will run seminars and we support those (food and beverage and time, barbecues). Field days B2

Relationship with DairyNZ: managers try to attend Field Days; [NAME BANK] sponsors barbeques; DairyNZ is a good referral source for clients. PG10B6

Sometimes the bank supports DairyNZ with seminar / workshop: gives a presentation PG8B8

[NAME BANK] 'has a strategic relationship with DairyNZ': reinforcing the message: maximize grass growth. [NAME BANK] supports DairyNZ and they provide info through Dairybase and have a good relationship with local DairyNZ team (lot of time in discussion groups). PG4B9

Bank & DairyBase

Dairybase: provides hard numbers which can be adapted / complemented with local knowledge of bank. PG5B9

Bank & others

Bank meets with accountant to discuss 'a deal' (when farmer wants to buy a farm?); discusses with solicitor on a more structural basis; discusses with a farm consultant the more practical side of the business plan. PG5B6

A good bank manager will have a good understanding of practically what's happening in the farming business community; should therefore have a good contact with consultants, as they have better analytical analysis of the physical side of the business ('how many kilos can you do per ha and how many cows do you need, how is this going to work?') PG 5 'The farm consultant will say if you use this farming model, so if you run this stocking rate you'll need this amount of supplement, you'll need to feed them this amount and you'll get this amount of milk out the other end. So then we get that plan and go okay well does that make sense? How does that compare to what they've done in the past? Does the plan actually stack up? So that's more the relationship with a consultant'. PG6B6

Bank has run training days on Cashmanager: how to use the program and understand business. PG 7 Interesting relationship Cashmanager and bank: data feed automatically communicates / loads from [NAME BANK] to Cashmanager. [NAME BANK] is one of the firsts to make this possible (of banks in New Zealand) PG8B6

BankLink is another software program that is used in which transactions get automatically fed through to accountant – where the client gives permission to that. PG8B6

[NAME BANK] also has contact with property valuers about: what's the actual value of what we've got a mortgage over. So [NAME BANK] internally values those, but wants to know what property has sold, for how much, how does it work. PG10B6

Bank meets with accountant to discuss 'a deal' (when farmer wants to buy a farm?); discusses with solicitor on a more structural basis; discusses with a farm consultant the more practical side of the business plan. PG5B6

Bank manager refers clients with questions about tax, business structure, insurance to accountant / solicitor / insurance agent. PG6B8

Contact / collaboration with accountant / solicitor: is e.g. on seminars (e.g. succession planning, debt budgets) and around clients (e..g issues, changing business structures) PG 7 Contact with accountant about interpreting accounts and transactions PG 17 Also if making plans with client, it is important to talk to their accountant and solicitor: 'it's trying to get buy-in from all quarters'. (e.g. in succession planning: also talk to accountant and lawyer to get their opinion / buy-in) PG17B8 Related to point above: the process of getting an opinion from accountant and lawyer is interesting: 1st talk to client, 2nd ask client whether it's OK to talk this through with accountant / lawyer, if client agrees to that: banker talks to accountant (as opposed to client), 'as client does not always fully understand the concept / plan in the first instance. PG17B8

Some consultants are 'more hungry for quality information' than others. The ones that are, can add more value to customers. PG7B9

Team approach

The thing that has changed with big businesses is the key advisors. Meetings nowadays are often team-approach: accountant, farmer, bank manager. PG13B4

The bank manager encourages his clients to use specialist advisors and a team approach. PG8B7

B8 never had team meetings with accountant, client and himself, he perceives it to be a rarity – different for other accountants and bank managers PG7B8

Team-approach, so meeting with farmer and all advisors together is favourable as: optimal information is most likely achieved by having everyone around the same table / at same meeting: leads to optimal information, so better decision-making towards best outcome to meet the most needs of the business PG7B9

The value in having a relationship where everybody (all professionals) are involved is better as more info is better (see earlier points) PG8B9

Higher debt is higher service level by bank

AWESOME QUOTE: 'it's a cost benefit to the bank in that, if you were a farmer and you only owed the bank 200,000 dollars, you haven't got enough what we call, skin in the game. There is not enough investment in the bank, the bank is not getting enough profit from that customer to be able to justify personalised service. PG2B1

> the more debt (> farmer owes more to bank), is > more personal service. Service levels are lower for people with lower debt levels. Bank managers work with a group of farmers with a certain level of debt. The bank manager that deals with farmers with lowest debt levels, deals with most farmers. The bank manager that deals with farmers with highest debt levels, deals with least farmers. The bank manager with least customers, can be more pro-active (e.g. bank will be more aware for higher debt level customers whether they might be interested in buying more land than with lower debt level customers) in advice giving than the one with most customers. PG2B1

More time and effort is put in client who's buying compared to client who's not. Maybe not as much time in someone who's not buying something versus someone who is. PG9B1

The higher the debt level of the client, the less clients per manager, the more personal the service gets. SO: in [NAME BANK] just like [NAME BANK]: 'corporate agri': portfolios are 200 – 600 million and manage around 15 clients. P1 partner, service 40 - 50 clients approximately and look after 120 – 200 million. P2 look after 50 – 120 million and have around 80 clients. All these managers service clients face to face. Then centralized managers (100% phone service) look after 0 – 1 dollars of lending and have approximately 200 clients each. PG1B2

Frequency of meetings between bank manager and customers: more frequent for bigger clients than smaller clients PG6B5

Level of service / type of service the bank provides to clients, depends on level of debt of clients. More debt = more personal service: e.g. back-office support for lower debt level customers is 0800-number. Also: Back office support for higher debt level customers: is account manager and rural banking assistant. PG1B7

Frequency of meetings between bank and client: there are more meetings with large scale clients than with small scale clients. Reasons: big scale have more dynamic funding needs and also depending on customer's preference. PG1B9

Higher debt is higher level / more persons in bank responsible

Lending: up to a certain amount, the manager can sign off him or herself. Higher, they need a credit person to say yes or no on the basis of an advice the customer facing person writes: the case for >1 million dollar, then for 25 million dollar or higher, it goes up a level in the bank, so 2 more people look at it to decide, etc. So the higher the loan, the more people in the bank involved in deciding on it. PG 10 + 11 B3

Personal relationships

Bank managers should be careful / take care in their personal relationship with clients. You should make sure not to be seen to be doing favours and saying maybe, when the interest rate should be 7%, you've trimmed it to 6,75 or 6,5, you know because he's a good mate. You've got to be very very careful and very honest about that.' PG3B1

Banks do the same stuff: only different packaging – the difference is in the individual bank manager: how this manager relates to client and clients' confidence in your ability to actually manage their business – personal relationship PG2B1

Bank managers: try to be trusted advisors, if farmers try to do something, they ring the bank manager first – first person to ring. PG5B2

A personal relationship is very important in banking. 'If the customer enjoys dealing with that manager, generally speaking, they will stay with the bank. If they don't enjoy dealing with that customer, they probably risk moving to another bank'. PG 7 Building a relationship by the manager is done by phone calls, e-mails, face to face, invitations to e.g. rugby games. PG11B3

Services / nature of contact depends a lot on the individual client. The manager has a very rigid relationship with some clients, and a very personal relationship with others. You've just got to be one of those people that can meet a whole raft of different needs of different customers. With some of my customers I'm very rigid, I'm the bank manager, they only want me to talk about the numbers. And for some of my customers, they ask me whether they should have the next baby. It's that sort of relationship (...) What they are actually asking is, will the budget look after it, what are the implications of having another child?

You get really close to them.' PG 8 Also: decisions about meetings frequency depends on: customer preference and bank's concerns around how risky lending is PG11B3

New clients: referrals from intermediaries, accountants and solicitors, existing clients. [NAME BANK] reasonably new in New Zealand, so also customers came with existing employees (they brought their clients with them from other banks). PG3B4

Banks all do the same thing (services), but it comes down to the people, the relationships PG5B4

Bank prefers client to be pro-active in contact and asking for funds: banker links this to trust and relationship building PG7B7 QUOTE that goes with this point: 'So if someone just writes out the cheque and waits for the bank.. well it's not a very good feeling is it? You'd rather have a client ring you and say, listen I'm going to need temporary stock. But it will clear from X, with my dairy cheque I still have some stock. That's the sort of conversation you want, and building up that relationship with the client. So they will ring you, you don't want to ring.. If you're ringing the client and chasing the client, the relationship gets a little bit strained.' PG7B7

Trust is how you build a relationship with clients. PG7B7

Building relationships is about adding value, e.g. done by: facilitating that customers can bring products on and market products in tent Field Days. PG2B8

Importance of relationship building: 'We want our customers to be moving forward and doing the best they can and that's better for us in the long run anyway. In the short term we might make more money but it's about a long term relationship really'. PG3B8

Risk aversion

Bank's priority is to maintain a strong balance sheet, which is measured by customers' risk grading / maintained by managing customers' risks. Risk grading is done by measuring 1) the ability to repay interest and 2) bank's risk of losing money if customer defaults PG 4. Higher risk grade => customer pays more interest PG5B1

IF the customer's risk grade gets high, the business is brought into contact with other persons in the bank: credit management. They put more effort to work with these people and work a lot more closely with those clients to try and resolve the issue. PG 4 / 5 If a farmer is in a bad financial situation, the change of manager is also for psychological reasons PG5B1

Every customer is risk-graded. Risk grades dictate the height of interest grades allocated to customers. Customers risk grades can change over time of being a customer of the bank. Risk grading is also used to stimulate behaviour change, as also farmer's behaviour influences risk grade. Risk grade is not 100% computer issued, so there is still room for interpretation of individual bank manager. For every client, the same model is used. However for new clients (to the bank), more conservative calculations are made, as the

bank does not have history with the client and the bank is thus more conservative with lending. PG 3 + 4 B3

Every bank does risk grading: it's generally how well clients' accounts perform. People factor and the security. It's the same factors across the banks, just different models will have different ratings (e.g. importance in model allocated to last year's accounts). PG9B4

Farm debt is risk graded. The stronger the risk grade, the less capital the bank has to set aside. Stronger risk rate = stronger client position. With low pay-out, risk rates become weaker of dairy farmer clients. PG4B7

PRO-ACTIVE ADVICE?

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Bank encourages farmers always to plan and budget and track budgets and report. Inevitably they don't have the skills and resources to take responsibility and ownership for their affairs and require support of professionals which is encouraged by banks. PG9B5

Bank has been encouraging people to understand their own business better: volatility has gone up, so clients have taken on some tools to manage that volatility (e.g. different loan products and contract options) PG9B9

There are two golden rules in banking: 1) is duty of care and 2) is lender liability: there is a perverse incentive / tension for bankers, as they get bonuses if they sell more or higher loans. PG 10 + PG 11 As a result of this: bankers have to be careful with giving advice to clients. It's not always what you say necessarily, but HOW you say it. PG 10B1

You just got to be careful about giving advice when you've got lender liability. Lender liability is, we're kind of assessed to be in proxy kind of running or hoping to run the farm or whatever. PG5 Lender liability is only a real massive concern if things go.. Nobody is worried about advice if things go well. (...) It's sort of we comment or provide our thoughts on it, but at the end of the day any decision they make they are really their decisions to make. We are just providing some additional info, commentary. PG6B2

'We try and stay away from giving advice. Advice is a bit of a dirty word in banking. (...) We're not supposed to, we're not qualified to give advice. We can give a point of view, but we cannot give advice, we're not advisors.' PG6B4

Research suggests that farmers see banks as a source of advice, but legally banks are not allowed to provide advice. However, banks are 'called on to fill gaps that others aren't providing' -> so it's in the bank's own interest to have industry provide guidance to farmers to take responsibility of own planning and budgeting PG2B5

[NAME BANK] outsourced programs with financial management to [THIRD PARTY] – first provided it themselves, but now outsourced. Reason: benefits of outsourcing outweighed costs of it. 'And probably getting away from being seen to provide advice as a bank'. PG6B2

In agriculture, banks are asked to do things that typically don't happen in commercial banking (e.g. typically assisting customers to budget and plan – there is no objective research done in this, but this support tends to be more given by banks / needed by farmers compared to other types of businesses) PG5B5

In the earlier days, banks and clients would have a kind of 'principal – student relationship'. The farmers would come into the bank, clean their shoes, put a collar and a tie. Now, the other way around: if there is a hint or knowledge that a farmer is looking to perhaps buy the farm next door, then his banker should be out there, he'll be in his car out there and visiting and arguable there'll be a couple of other bankers go up his driveway and ask the same questions as well. Bankers are thus more pro-active now. Competition caused this (a more pro-active banking sector). PG10B1

If things are not going to plan and client goes outside bank's requirements: bank and client interactions will get to a more formal discussion and more formal conditions to loans. Also a formal letter will be sent that says 'hey we don't think your business is viable'. PG15B8

Impact low pay-out

A lot of talking about cashflow and budgets in meetings with farmer in the low pay-out environment: to work out how much more capital facility farmers need, restructuring existing capital. PG1B9

Farmers in the last years: with low pay-out are trying to be more productive and analyse their business more PG4B9

SWAPS

Issues with SWAPS: SWAP is where you exchange interest rate risk. It allows you to manage interest rate. You can manage the rate up and down, by shortening or lengthening the term. Because someone is going to buy that trade on the other side. SWAPS movements rely on movements in interest rates. In 2007, 2008, movements were very very small. Interest rates were down and low, the swap couldn't be restructured, because there was no volatility. Some farmers lost a lot of money because of trading in SWAPS – that led to a lot of mistrust among farmers / customers in banks. PG 7 + 8B1

Ownership: Bank wants farmers to take more ownership of their farm as a business

QUOTE: 'Commodity prices are pretty variable, and we want to encourage farmers to take responsibility for their businesses to a greater extent. And rather than the alternative is leaving the banks responsible for both understanding their business, encouraging them to take options to improve the situation and then provide funding when there are shortfalls.'

This shows that bank / B5 now perceives that bank has this responsibility now in certain cases – to understand business, encourage them, etc. PG3B5

Bank encourages farmers always to plan and budget and track budgets and report. Inevitably they don't have the skills and resources to take responsibility and ownership for their affairs and require support of professionals which is encouraged by banks. PG9B5

Clients need to take ownership of business; control the controllables; understand their business. Earlier this was different; then rural managers thought they were farmers and had to run farms PG 7 QUOTE that goes with this point: 'See I would never prepare a budget. I always would want the accountant, the client to prepare it, or the client and their accountant to prepare a budget. Because it's their thing, they have to own it. PG7B7

Bank has been encouraging people to understand their own business better: volatility has gone up, so clients have taken on some tools to manage that volatility (e.g. different loan products and contract options) PG9B9

Bank managers receive bonuses for lending money

Tricky balance for banks: how to incentivise frontline people, when you want them to sell and get more customers, but at the same time want them to have a very critical look – it's hard because you get compensated on your salesmanship. You lend more money, you get a bigger bonus. You don't get a bigger bonus for saying this guy is failing and we should move him off the.. PG9B3

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Lender liability & advice: Bankers are not qualified to give advice /

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Exposure

Decisions about 'exposure' (how much lending is done in a certain sector) are made on a high level. PG 3 Managing exposure is done by: either increase or not decrease interest rates in an area they want to decrease exposure. 'Pricing themselves out of market' PG3B1

The bank has a strategy concerning where it sees its growth / decline, which is very confidential. This strategy is developed by CEO and divisional management and then delegated down to frontline staff. PG6B3

Getting new clients

Banks get clients via referrals from other professionals or other clients and cold calls PG4B2

New clients: referrals from intermediaries, accountants and solicitors, existing clients. [NAME BANK] reasonably new in New Zealand, so also customers came with existing employees (they brought their clients with them from other banks). PG3B4

New clients usually come in via bank managers' / customer facing employees' contact: the manager may have prospected them (e.g. on Field Days, bank functions, etc.) PG7B6

Informal network

The network of professionals around banker is informal, 'you just build you own personal'.. PG5B2

You know other professionals in industry 'just because you know them' and via clients. PG7B9

Generational shift: younger people do more financial management

Over the years, people do more financial management: more people do budgets, and you get more budgets to actuals, which is probably the generational shift. You've got more people going to university and understand all of how budgets and reporting and all that works. (...) It's a natural thing anyway, but it's been accelerated by the down turn, because people have to make some pretty big decisions at times. So they need some sort of structure. (...) There has been put more of a spotlight on it from a bank point of view. PG8B2

Tailored advice / services

Services / nature of contact depends a lot on the individual client. The manager has a very rigid relationship with some clients, and a very personal relationship with others. 'You've just got to be one of those people that can meet a whole raft of different needs of different customers. With some of my customers I'm very rigid, I'm the bank manager, they only want me to talk about the numbers. And for some of my customers, they ask me whether they should have the next baby. It's that sort of relationship (...) What they are actually asking is, will the budget look after it, what are the implications of having another child? You get really close to them.' PG 8 Also: decisions about meetings frequency depends on: customer preference and bank's concerns around how risky lending is PG11B3

Frequency meetings banker and farmer depend on what clients want and the situation in the sector: now liquidity issues in dairy, so catch up between bankers and dairy farmers is more, as farmers need more money temporarily. PG10B4

Senior managers deal with the more challenging and bigger clients. 'I'm probably more of a senior manager, so some of the larger accounts or some of the more challenging accounts. Challenging people, they may have a problem with their business, too much debt, their business isn't sustainable.PG 2 + 'I've been around for longer than other people so it's not the business that you'd give to a graduate or somebody new to the business.'(...)' PG3B6

Type of support provided by bank is more driven by customer: some have better info about what's happening on farm: farmers that actually budget and cashflow have better information share and communication, so also better outcomes of interactions with bank manager. Suboptimal info and communication leads to suboptimal outcomes as bank is not exactly sure what farmer needs. PG2B9

Difference agricultural customers vs. other sectors

In agriculture, banks are asked to do things that typically don't happen in commercial banking (e.g. typically assisting customers to budget and plan – there is no objective research done in this, but this support tends to be more given by banks / needed by farmers compared to other types of businesses) PG5B5

Benchmarking

B5: benchmarking is not about comparing averages, but about looking at a farm and examining its potential PG7B5

Bank wants no surprises

Bank prefers client to be pro-active in contact and asking for funds: banker links this to trust and relationship building PG7B7 QUOTE that goes with this point: 'So if someone just writes out the cheque and waits for the bank.. well it's not a very good feeling is it? You'd rather have a client ring you and say, listen I'm going to need temporary stock. But it will clear from X, with my dairy cheque I still have some stock. That's the sort of conversation you want, and building up that relationship with the client. So they will ring

you, you don't want to ring. If you're ringing the client and chasing the client, the relationship gets a little bit strained.' PG7B7

Most financially successful clients know financially what they're going to need on the short term from bank, and what they've got available to repay debt / reinvest into farm. PG6B9

Sensitivity around financial information

Information sharing around finances is delicate . Always 1st OK from client before contact with accountant about client. PG9B9

Financial management collaboration agreement

Financial management collaboration accord aims to take a consistent view on financial management industry-wide PG 1 and put in place training and resources and common approaches that are happening. PG2B5

Supporting resources for collaboration accord are e.g., by ANZ: business plan templates and DairyNZ: benchmarking and budgeting tools. PG4B5

Collaboration agreement does not change a lot in B5's eyes: it's probably more evidence of the work that is done in the dairy industry: important players in the industry agreed to make collaboration more effective PG5B5