



# Farming as Financial Asset

GLOBAL FINANCE AND THE MAKING  
OF INSTITUTIONAL LANDSCAPES

Stefan Ouma

ECONOMIC  
TRANSFORMATIONS





## FARMING AS FINANCIAL ASSET

# ECONOMIC TRANSFORMATIONS

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# FARMING AS FINANCIAL ASSET

*Global Finance and the Making of Institutional Landscapes*

STEFAN OUMA

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## PREFACE

This book seeks to unpack a large-scale phenomenon that has sparked a lively debate in the media, among scholars and in activist circles since 2008: the increasing interest of finance capital in all things agricultural, particularly in farmland and farming ventures. My aim in writing has been to enable non-specialist readers to delve into a subject that is often marred with technical jargon and social complexity. Finance and, by implication, how other people's money is managed are topics too important to be left to specialists, whether they are academics or the finance professionals themselves. "Finance-gone-farming" offers a unique opportunity to study the emergence, evolution and production of a new social space – or "asset class" – through which money is used to create more money on behalf of the "better off" parts of the world, which are able to participate in capital markets. But its study also calls for historical depth, as modern finance has a much longer history in the remaking of agricultural landscapes than is often acknowledged in existing debates.

What follows has a broad interdisciplinary outlook, speaking to debates in geography, heterodox economics, sociology, anthropology, the social study of finance, agrarian studies and political ecology. Although there is a growing literature on the financialization of food and agriculture, none boasts the empirical grounding and unique field access (down to the level of invested farms) that I have negotiated over seven years of global network building. This book will also be of interest to scholars committed to opening the "black box" of investment chains and the asset/wealth management industry, as well as to those who have attempted to develop more practice-oriented understandings of "financialization" and its social and ecological consequences.

Previous work loosely informing this book is listed in the reference list. [Chapter 6](#) in particular draws heavily on parts of that work (Ouma 2020).

A last technical remark. To ensure anonymity, I have changed the names of certain protagonists, withheld the sources of some quotes and slightly altered certain quotes. In all cases, an asterisk is used to indicate this.





## ACKNOWLEDGEMENTS

The fieldwork informing this book took me to many different corners of the world: the United States, the United Kingdom, Germany, Tanzania, Singapore, Australia, Kenya and Aotearoa New Zealand. This journey reflects the globe-spanning networks of modern money management, which touch many sites at once, ever keen to carve out value from a place and redistribute it elsewhere. The connections that made my encounters possible were dependent on the generosity of many people, who, in one way or another, all facilitated my research, the production of the book or a critical review of parts of it.

Many people in the money management industry (asset managers, farm operators, different service providers, pension fund representatives) have shared their scarce time for interviews or field visits, and most of those approached were remarkably open about such requests. Although not all of them may agree with some of the arguments made in this book (which themselves have evolved over time), I hope they gain something from reading it. Among the many asset and farm managers interviewed, a few individuals in Tanzania, Aotearoa New Zealand, Australia, Germany and Singapore were extraordinarily generous with their time, and deserve special thanks. They know who they are.

I also wish to thank many other people who contributed to this project. Peter Lindner of Goethe University (Frankfurt) has been supportive throughout my career, ever since we started working together in 2007. My colleagues Julian Stenmanns, Iris Dzudzek, Alex Vorbrugg, Tim Brückmann and Mara Linden have provided critical feedback on various parts of this book. In the United States, a number of people were very helpful in facilitating my research, including Professor Bruce Sherrick at Illinois State University.

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Christina Berneheim and Wendy Larner. Harvey Perkins and Geoff Lawrence were both extraordinarily generous, providing feedback on several of the draft chapters at an early stage. Tobias Klinge, now a PhD student at the University of Leuven, conducted excellent research on the regulation of foreign investments in Aotearoa New Zealand forestry and agriculture as part of a master's study supervised by me at Goethe University in 2018. His work informs several parts of this book. In Tanzania, Mangasini Katundu of Moshi Cooperative University, a partner in the project funded by the German Research Council that partly informs this book, particularly assisted with fieldwork. Dennis Malele of the same institution provided additional findings on one of the Tanzanian case studies. Many other people had their fair share in facilitating my research there, including Emmanuel Sulle, Brian Cooksey, Martina Locher, Hazel Gray, Andrew Coulson, Faustin Maganga, Esther Towo and the great team at COSTECH.

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A note of extra thanks goes to some very special people. During my research, and the writing of this book, my partner Eva and daughter Adele Akinyi, joined by Amina Luz in October 2019, had to cope with my partial physical and mental absence. I do not take such sacrifices for granted, and would like to thank them for their love and patience.

*Stefan Ouma*  
Bayreuth

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## CHAPTER 1

# INTRODUCTION

Finance has gone farming. Since the financial and food price crises of 2007/8, the world has seen a stark rise in financial investments in farmland and agricultural production by investment banks, sovereign wealth funds, pension funds, private equity funds, insurance companies, family offices, endowment funds and high-net-worth individuals (HNWIs). Indeed, finance has been identified as one of the main drivers of the so-called “global land rush” (Grain 2008; McMichael 2012; Fairbairn 2014; Ouma 2014), in which non-financial entities, such as state-run or parastatal companies or other types of corporate entities, also play a central role. As a result of declining or negative returns on mainstream assets in the wake of the global economic meltdown, a fear of rising levels of inflation caused by counter-cyclical interventions, money printing and quantitative easing in “core countries” such as the United States, low returns on savings and a rise in general distrust in complex financial products, investors searched for new “alternatives” within their “investment universe”. What was suddenly in demand was less “financial engineering” and more “real things”. Farming seemed a perfect match, with parts of the financial industry starting to make a strong case for the sector as an “alternative asset class” that was sustained by a set of strong market fundamentals. A growing world population (passing 7 billion people by the end of 2011); changing dietary preferences towards meat and protein in emerging markets such as China and Indonesia; a rising demand for agrofuels (and carbon sinks) in the light of peak oil and climate change; the limited availability of agricultural land (“peak soil”); and stagnant, or even decreasing, productivity levels in core production regions and climate-change-induced crop failures all seemed to make farming a safe financial bet. The financial industry quickly determined that these factors would shape future demand–supply dynamics along the agri-food chain in crucial ways.

In light of these dynamics, a standard narrative has evolved, which emphasizes that investments in agricultural operations and the underlying

farmland should guarantee stable returns on capital invested. In addition, their “value” is likely to appreciate when growing demand meets growing resource scarcity. Unlike gold, a favourite during times of financial crisis, agricultural production and the underlying land store *and* produce capital. Additionally, investments in farmland and agriculture are said to enhance portfolio diversification and efficiency, thereby increasing the robustness of investment portfolios with regard to external shocks. These promises, which go hand in hand with the relatively low complexity of farmland investment instruments and the tax allowances granted on farmland investments in many countries, have made agriculture a space of “other investment”, rendered as exceptionally secure in a turbulent world. As *The Economist* puts it, “No matter how bad things get, people still have to eat” (*The Economist* 2009). Accordingly, between 2005 and mid-2018 the number of investment funds specializing in food and agriculture assets skyrocketed from 38 to 523, with assets under management (AuM) surpassing US\$83 billion, excluding timber (Valoral Advisors 2018a). During the same period institutional investors, such as sovereign wealth funds, pension funds, insurance companies, asset management companies, investment banks, family offices, endowment funds and HNWIs, have significantly increased their exposure to food and agriculture (Lapérouse 2016: 1). This surge in agri-investments has led to the proliferation of new investment vehicles, relations and practices. Although these numbers seem tiny compared to other “asset classes” – investors had channelled US\$533 billion into natural resources globally as of June 2017 (Preqin 2018a: 56) – one cannot deny that something has happened in the “AG space” (to use the industry vernacular) over the past ten years. Shiny investment brochures, high-profile conferences dedicated to the agricultural investment space and the rise of an agri-focused investment media are further testament to this.

## PLACING THIS BOOK’S APPROACH

The global run on farmland and agricultural production by financial actors has sparked a lively debate in the media, among scholars and in activist circles. The overall tone of these debates is an alarming one, as financiers are blamed for rising land prices, corporate enclosures, the dispossession of smallholder farmers and the expansion of large-scale industrial agriculture around the world. Although this book acknowledges the concerns voiced in these debates, it takes a broader and deeper view on the transformation of farmland, agricultural production and food chains into objects of financial desire. It proposes a middle ground between work that is engaged with theorizing the systemic dynamics of financialized capitalism and its

extension into the world of farmland and agriculture (Russi 2013; Schmidt 2016; Clapp & Isakson 2018) and more practice-oriented approaches to the world of finance. It does so by providing critical entry points for moving in between  $M-M'$  (in analogy to Karl Marx's schematization of the circulation of money, which – when invested – becomes more money). This implies studying the practicalities of agricultural investment chains in their wider historical and systemic context. Investigating the conditions that mediate and limit attempts at financializing land and the commodities it produces, the approach proposed here treats the realization of  $M'$  as an operation that cannot simply be taken for granted. The particular gist of the approach proposed in this book is that it invites us to trace the formation of agri-finance capital across a number of interlinked sites (Schatzki 2016), rather than assuming that it readily hops from place to place. Eventually, such a perspective allows us to develop a “microfounded political economy of the investment chain” (Braun 2016: 6) at a moment when ever more domains of the social and natural world have become captured and transformed through such far-flung relations, as well as the practices of asset and wealth management that underpin them.

The book will unravel and engage these processes in eight chapters and an epilogue. In each, I will first engage with an analytical or empirical problem that we encounter in the existing debates on the global land rush and the role of finance therein. Many of these problems stem from the particular way in which the notion of financialization – the preferred analytical optic of many scholars on the finance-driven land rush – has been mobilized; others are related to certain practical problems that researchers often encounter when trying to uncover the geographies and operations of global finance.

This pedagogical strategy allows for the debunking of some widely held assumptions in the existing debate on finance-gone-farming, and, indeed, the workings of global financial markets more generally.

## INSTITUTIONAL LANDSCAPES AND THE FINANCIAL ASSET CHARACTER OF AGRICULTURE

The connecting tissue of this book is the notion of institutional landscapes. Inspired by a report published back in 1979 on the rise of institutional land ownership in the United Kingdom, titled *The Landscapes of Institutional Landowners* (Worthington 1979), as well as more recent takes on the notion of landscape in critical human geography (Mitchell 2000), institutional landscapes are those parts of the human and non-human world that have become transformed into a financial asset, a property that yields an income stream and that can be resold in the future, as part of portfolio considerations

of institutional investors. These, in turn, serve the needs of the more privileged ones of “us”.

The term “institutional investor” does not have a common standard definition. One feature often mentioned is that these are “not physical persons” but “are organised as legal entities” (Çelik & Isaksson 2014: 95–6), and that they can assume a wide variety of legal forms, from closed-end investment companies to private-equity-like limited partnerships to sovereign wealth funds. They “may act independently or be part of a larger company group or conglomerate” (*ibid.*: 96), such as mutual funds, which are often subsidiaries of banks or insurance companies. At times, the term is used synonymously with “intermediary investors” (*ibid.*) – that is, beneficiary institutions that manage “other people’s money” (Kay 2015) in line with specific performance, risk and maturity goals<sup>1</sup> – but in some cases institutional investors may be the ultimate asset owners (for example, institutions representing wealthy families).<sup>2</sup> These definitional niceties aside, institutional investors now move a staggering amount of money across the globe and are key makers of space in the early twenty-first century.

In other words, institutional landscapes are an expression of the expansion of a “global return society”, in which the reproduction of the better-off people of the Global North (and, increasingly, the Global South) has become tied to the reproduction of finance capital, both “at home” and abroad. Today a wide range of “things” can become part of institutional landscapes (and thus financial resources or “assets”), but, in this book, it is something most closely associated with the term “landscape”: *agriculture*. Bereft of a better word, however, this book mobilizes *farming* as a generic term in order to indicate that finance has become interested in all things related to “the farm” as a production unit (arable crops, livestock, trees, etc.), but also in the pre- and post-farm-gate stages of the agri-food chain. So, although the book heavily focuses on farmland investments, it also repeatedly moves beyond them, and several of its case studies blur the line between production and other domains, with one of them moving beyond it altogether.

In detail, institutional landscapes can be described as follows.

- They sensitize us for the fact that the workings of supposedly higher forces – so-called “financial markets” – are engrained in many things surrounding us.

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1. Maturity goals refer to the planned date of payment – i.e. when a liability, such as a pension or insurance payout, is due.

2. They can be contrasted with retail investors, who are individuals and who can access only certain types of financial products.

- They are characterized by their financial asset character, whose realization requires concrete and future-oriented interventions in the world of farming. It is through such interventions that the latter becomes synchronized with the conventions and capital needs of investors, even though this often remains a frictional endeavour.
- They are not a product of nature but of landscaping practices: space-making social activities we can investigate. Institutional landscaping creates distinct socio-natures reflecting the asset character of the targeted agricultural venture.
- They do not simply overwrite the past, but often incorporate and thrive on older agrarian landscapes in order to generate financial value from the human and non-human world. Like other landscapes, institutional landscapes are a palimpsest, a layered product of multiple histories and determinations, including both the visible and the invisible hand of the state.
- They are, eventually, the product of “global value relations” (Araghi 2003) established between multiple places and the operations that link them. In this way, institutional landscapes can never be thought of without the “imperial” needs of those whose capital has been instrumental in bringing them into being in the very first place. Often the roots of this capital lead right back into the “middle of society”.

The book renders institutional landscapes intelligible, unpacks their political contestation and eventually aims at repoliticizing the spatially extensive operations that lurk beneath them. It does so by offering a number of specific entry points into the global economic connections through which such landscapes are produced. These are often taken for granted, reified in popular and professional discourse or mistaken for what they are not. Thus, the journey that follows covers a range of topics that are pivotal for understanding how institutional landscapes emerge, what knowledge we can produce about them, how we situate these historically and geographically and how these are produced and reproduced as “large-scale phenomena” (Schatzki 2016) on the ground. This clearly sets apart what follows from other, more macro-oriented accounts that take a more orthodox, and less geographically attuned, political economy approach (e.g. Russi 2013; Schmidt 2016; Clapp & Isakson 2018).

## GROUNDING AGRI-INVESTMENT CHAINS

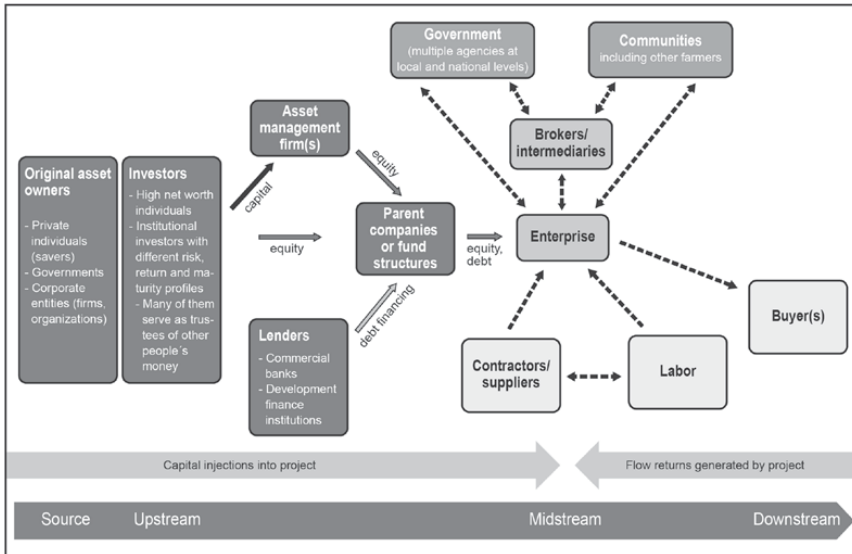
As this book will show, assets as sources of financial income have become so widespread that it is justified to speak about “the age of asset management”

(Haldane 2014; see also Muniesa *et al.* 2017). Therefore, there is an urgent need to understand how assets come into being. Like a commodity (Callon 1998), something is not born an asset, but turned into one. Assetization inside and outside agriculture often happens through spatially extensive investment chains (Arjaliès *et al.* 2017; Cotula & Blackmore 2014) involving many players. As expressions of the fact that the original sources of capital (e.g. depositing employees) are often linked via delegation structures with other intermediaries such as pension funds or asset managers (Clark & Monk 2017), these connect different actors, histories, institutional contexts and material realities with each other and often cut through different legal systems. By combining risk-return-effective geographic localizations and specific extraction strategies, global investment chains become arenas for the redistribution of value, besides becoming the enablers of new, sometimes global, commodity chains. We can trace their making, the actors involved, the links they establish and the glue that underpins these – which is exactly what I have done over a period of six years (2012 to 2018), conducting multi-sited research across five continents. The approach adopted here takes us to investment conferences – sites of group making, where agriculture as an asset class is consolidated through narratives and numbers so that investors become confident enough to bet on farming; it takes us to meetings of asset managers, where they give accounts to their investors and try to raise new capital; it takes us to the headquarters of pension funds and asset managers, where capital allocation and investment decisions are being made; it takes us to the agricultural assets themselves and the surrounding communities in frontier regions, such as Tanzania and Aotearoa New Zealand,<sup>3</sup> where we will witness how agricultural ventures are restructured in such ways that they meet the models, calculations and requirements of the world of money management; and it takes us to the offices of various intermediaries, such as investment consultants, lawyers and market intelligence providers, who provide crucial business services to investors and asset managers alike, and who play an important role in consolidating “agriculture as an asset class”, as well as the state agencies in the frontiers of the finance-driven land rush, where investments are being facilitated. But it also leads us to sites of resistance, where finance-driven investments in agriculture are being criticized, and alternative visions of agriculture are being propagated (as an interesting

---

3. I use the wording “Aotearoa New Zealand” in this book in order to make visible the colonial origin of today’s nation state, a past that continues to shape the present. The addition “Aotearoa” stands for the description of the country in the language of the indigenous Māori population, which is also the second official language of the country (next to English).





**Figure 1.1** The agri-investment chain and its share- and stakeholders

*Source:* Adapted from Cotula and Blackmore (2014: 2) (reprinted with permission).

side note: if time and resources permitted it, it would also take us to exotic places such as Luxembourg, Guernsey and the Cayman Islands, places that are crucial for optimizing the tax structure of some of the agri-investments discussed in this book).

Obviously, the socio-spatial complexity of agri-investment chains poses a challenge for regulators, as well as for political engagement and research. Yet, once investment chains and their underlying actor constellations have been identified and geographically grounded, different “pressure points” (Cotula & Blackmore 2014: 3) can be identified for regulation or activist engagement (see Figure 1.1). Such an endeavour must always keep in mind that it is “ultimately all of us” (Muniesa *et al.* 2017: 133) who are linked to global investment chains, and the production of institutional landscapes, via a giant “network of delegation” (*ibid.*).

## A TALE OF TWO FRONTIERS

Aotearoa New Zealand is regarded as one of the prime agricultural investment frontiers globally. Together with the United States, Brazil and Australia (Luyt *et al.* 2013), the country has accounted for most of the

individual funds and other institutional equity structures invested in primary agriculture. This is at odds with the public and academic perception that most of the financialization of farming has taken place in countries of the Global South. The country adopted neoliberal agricultural policies in 1984, with successive governments supporting foreign investment into agriculture in an effort to recapitalize indebted farms, boost export volumes and enhance efficiency. The result of more than three decades of regulatory and rural restructuring has been an influx of investors, first in forestry from the early 1990s onwards, but later on increasingly in the agricultural sector more generally. Foreign direct investments (FDIs) into farmland have sharply increased since about 2010, with the entry of pension and private equity funds into the country's dairy, beef, wine and deciduous fruits subsectors. The country's strong agricultural potential, well-developed farmland markets, proximity to Asian markets, significant depth in farming expertise and effective legal and contracting processes make it an "institutional-grade" investment destination. Although the state-mediated efforts of granting foreign investors access to farmland and forestry have by no means been uncontested domestically, foreign investment is often normalized in a context in which overseas connections are part of the national history and rural imaginary.

The east African nation of Tanzania is interesting because it is considered to be one of the main "frontier markets" by financiers. Many would go as far as considering it "an ideal country for large-scale agricultural land investments due to its record of liberal economic reforms and high growth rates in the last two decades" (Bluwstein *et al.* 2018: 807). Despite the frenzy, frontier markets such as Tanzania are associated with particular risks that usually keep large Western institutional investors away, but they may attract more risk-taking factions of capital. Thus, the country has seen a number of private-equity-driven investments into large-scale farms over the past 15 years or so. Some of these investments have targeted former state farms from the socialist era, which have been promoted by Tanzanian state players as ready-made sites for investment. The bid to attract investors into farmland is driven by a larger agricultural transformation agenda that aims at modernizing the largely "peasant-based" agricultural sector of the country, which has, however, attracted considerable criticism from civil society organizations within and outside Tanzania. This conflict-ridden transition context makes Tanzania an ideal setting for studying the articulation of global agri-investment chains with local agrarian, economic and political-institutional settings.

## PRODUCING KNOWLEDGE ABOUT INSTITUTIONAL LANDSCAPES

The first part of the research informing this book included participant observation of agricultural investment conferences, the analysis of hundreds of industry intelligence and investment brochures, and interviews with key players in the agricultural investment scene. The second part followed specific investment chains into two main frontier regions of the finance-driven land rush, Aotearoa New Zealand and Tanzania. The grounding of particular investment chains in these distinct geographical contexts also allows us to place the contemporary drive of financial expansion into agriculture into a longer history of metropolitan financial expansion and place making in colonial and settler-colonial contexts. Moving back and forth between the macro and the micro, this book will ground agri-finance investment chains in specific sites, but seeks to “study up”<sup>4</sup> their workings at the same time. Obviously, such a research strategy comes at a price. It not only tends to lose sight of those affected by the workings of the powerful (e.g. workers in farming ventures, adjacent communities, other farmers) but also encounters many challenges in practice owing to the secretive nature of the money management industry. Many of the players involved – especially private equity funds – are exempt from comprehensive reporting because of their private nature (unlike stock listed enterprises) or are bound to confidentiality agreements as a result of their fiduciary duties. These limits to knowledge production will become repeatedly visible in the narrative that follows. The words of an eminent scholar of modern financial markets, sociologist Donald MacKenzie, capture this problem well:

Those who conduct interviews to open black boxes may gain insight but may lose the capacity to condemn, while those who condemn, at the cost of insight, may end up condemning ineffectually, or condemning the wrong things. Certainly, though, the opening of black boxes is no panacea. It is a technique of research, and like all such techniques also a political act, one fraught with ambiguity and with compromise. (MacKenzie 2005: 570)

This said, it has been surprisingly easy to gain access to many informants from the world of money management via a mixture of personal networks, unmediated e-mail contacts, physical contacts at investment conferences and (sometimes) straightforward farm visits. Many of the people interviewed for

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4. “Studying up” implies engaging with “the colonizers rather than the colonized, the culture of power rather than the culture of the powerless, the culture of affluence rather than the culture of poverty” (Nader 1972: 289).

this book were happy to talk about their trade and were supportive of the research. None of them was the “typical investment banker” or interviewee one would have expected after reading the first scholarly engagements with the finance-driven land rush published after 2008. Some of them would proudly claim that they have solid farming backgrounds, conveying a down-to-earthness one would associate with “real farmers”. In total, 90 formal and ethnographic interviews with asset managers, original asset holders, industry experts, market intermediaries, regulators, non-governmental organization (NGO) representatives, farmers and farm/firm operators inform this book.

When direct access was not possible, the nature of the cases selected allowed other complimentary sources to be drawn on, such as the work of NGOs or other researchers, public information (e.g. newspapers, company websites, state registers) or private industry intelligence. For instance, I shall draw on some third-party findings when discussing the potential community impacts of some of the investments studied, since studying global agri-investment chains, their assets on the ground and the communities they are embedded into symmetrically is virtually impossible.

## STRUCTURE OF THE BOOK

In the next chapter, I outline how we can go about studying the finance–farming nexus. The most tempting way would be to research this nexus through the prism of “financialization” (see Ouma 2016), drawing on the wide range of writings across the social sciences and humanities that have deployed this term to make sense of the increasing and systemic power of financial markets in the global economy. I outline some of the limits found in the existing agriculture-focused literature that has worked in that register, and propose a supplementary, more practice-centred approach that allows us to arrive at an operational account of institutional landscapes. Such an approach wants to ground agri-investment chains in the materialities, socialities and spatialities of everyday life in an attempt to bring back what is often talked about in abstract and almost metaphysical terms into the realm of the tangible.

Challenging both the general and agri-focused financialization literatures’ limited historical lens, and the assumption that finance and farming present an unnatural coupling, Chapter 3 shows that farmland as “socially produced nature” in many corners of the world – especially in postcolonial environments – cannot be thought of without taking the transformative, and often-state backed, powers of globalized financial relations into account. Although most of these transformations have been based on the extension of credit to farmers, a new form of investment emerged in the 1960s: farming as part

of modern portfolio management, supported by the rise of institutional investment thinking and practice. At the same time, it will be argued that ideas in and operations of modern finance have been crucially shaped by developments in land-based production.

**Chapter 4** engages with the question of what we do and can know about the contemporary wave of financial expansion into farming and agriculture. It offers an attempt to open the black box of finance-gone-farming: the actors, relations and geographies underpinning farmland investments. It will become clear that finance's run on farmland has been less Global-South-centred than many critical accounts suggest and that agri-finance capital is not a homogeneous entity but made up of various financiers with different investment cultures, fiduciary obligations and liabilities. The chapter then moves on to problematize the opacity and secrecy that characterize many of these investments.

**Chapter 5** interrogates how far investment records of states may provide alternative sources of information on finance-gone-farming. This is ultimately linked to the larger question as to how financial investments into farming are regulated and accounted for. Despite the talk about the retreat of the state in a globalized economy, and the growing power of footloose finance, the state, in all its manifestations and across juridical scales, remains a central figure in the regulation of all sorts of flows critical to rendering farmland, and agricultural production more generally, investable. The regulation and state-mediated "landing" of agricultural investments in Tanzania and Aotearoa New Zealand invite us to shed light on these themes. The countries offer two starkly contrasting examples of a state's role in turning particularly farmland into a global financial resource, exhibiting very different histories and forms of "geopower" (Parenti 2016), but also varied capacities (and willingness) to regulate and account for the new financial flows into agriculture.

**Chapter 6** follows the collective, globally distributed processes buttressing the ontological reconfiguration of farming into an "alternative asset class". It challenges the idea that finance is an amoral force by reimagining the world of asset management as one permeated by shared moral registers, norms and standards. These conventions help coordinate the actions of industry participants in light of the uncertainty attached to the future outcome of their trade and serve as higher common principles against which the legitimacy of investment decisions and the worth of a potential "asset" are assessed. In tandem with legal and technical devices, they help enact the morality of asset management. As will be shown, however, the quest to turn agriculture into an "alternative asset class" has by no means gone uncontested. The conventions structuring the world of money management have also constituted a barrier for those trying to mobilize capital from weighty institutional investors because of the size, risk profile and idiosyncratic nature of farming deals. At

the same time, social forces from outside the world of asset management have challenged its stable framing as a legitimate “alternative asset class” (NGOs, activist-scholars, regulators).

**Chapter 7** follows a number of investment chains into concrete agrarian environments in Tanzania and Aotearoa New Zealand. Since finance capital and investment chains are often imagined as a *fait accompli* in the existing debate, the task of this chapter is to unpack the socio-technical, -legal and -cultural relations and practical operations through which the journey from money to more money via agricultural production (and processing) is organized. It moves the empirical focus from abstract circuits of agri-finance capital – as in much of the structuralist literature on financialization – to the frictional enrolments *for* agri-finance capital formation. This process meanders between the universal aspirations of financiers and the place-based frictions and uncertainties that pose a challenge to their calculative schemes. For instance, re-resourcing agriculture into a financial asset in “emerging markets” such as Tanzania, with a largely smallholder-based economy, entails challenges that investors often do not encounter in countries with highly advanced capitalist agricultural sectors, such as Aotearoa New Zealand.

**Chapter 8** zooms in on different agricultural ventures (including cases of agro-processing) in the research regions, which are part of extended and heterogeneous global investment chains. It unpacks the ontological reconfiguration of farming into a financial asset, which depends on instituting certain material, organizational, legal and technological conditions on the farming ventures acquired, through which these become financially productive. It will become clear that turning farming ventures into financial assets is not a straightforward process, as it encounters a variety of forms of recalcitrance and unforeseen obstacles. Neither is it one that is necessarily always about the maximization of shareholder value (as often posited in existing debates on financialization). In “frontier markets” such as Tanzania, investors are often forced to make a wide range of costly adjustments to their original investment calculus in order to accommodate social demands or political resistance mobilized in adjacent communities. In countries with a highly productive and technology-intensive agricultural sector such as New Zealand, investors often do not reinvent the farming wheel but mimic established industry practices, albeit with a much deeper capital structure. Surprisingly, institutionally backed investments in farmland may have a stronger sustainability ambition and track record than many domestic “family farms”. Although increased demand for farmland has led to rising land prices in many hotspots of the global land rush, some Aotearoa New Zealand farmers are active partners or advisors to foreign financiers, or need them to drive up land prices so that their own speculative endeavours can materialize. This type of farmer can be contrasted with the “Third World peasant” usually making the rounds

in debates on the global land rush, who is usually presented as a victim of foreign investment activities.

Chapter 9 explores whether, despite the criticism that institutional investments in agriculture have received (touted as large-scale, productivist and poor in terms of their social and environmental footprint), the massive amounts of financial wealth accumulated in the present can still be harnessed for greener and more just food futures. It introduces two potential models. One is an enhanced “ESG (environmental, social and governance) model”, accompanied by technological fixes and some regulatory adjustments, which does not evade some core problems characterizing the financial present, however: the opacity of the money management industry; the unsustainable growth imperative engrained into debt-based economies; how value is imagined and produced in financial markets; the homogenizing tendencies of scale-hungry agriculture; and various inequality issues related to financial accumulation. The other model breaks in more radical ways with the temporality, sociality and materiality of modern finance and the return logic inscribed into contemporary institutional landscapes. Each of these models forces us to ask what kind of spatialized value relations are engendered by particular kinds of food futures. The book closes with an epilogue that takes us back to some of the very origins of institutional landscapes.





## CHAPTER 2

# OPTIC: HOW DO WE STUDY THE FINANCE–FARMING NEXUS?

### WHITHER FINANCIALIZATION?

“Financialization” has become a key term in the critical social sciences. Often used to describe a historical condition that is marked by “the increasing dominance of financial actors, markets, practices, measurements and narratives, at various scales, resulting in a structural transformation of economies, firms (including financial institutions), states and households” (Aalbers 2015: 214) over the past four decades, observers have found that almost everything has been financialized: economies, firms, sectors, public services, households, daily life, nature. In the wake of the global land rush, many scholars and activists have used the concept to make sense of finance’s growing appetite for all things agricultural (for critical reviews, see Ouma 2014, 2015b). For them, this growing interest seems to be a textbook case of geographer David Harvey’s idea of the spatio-temporal fix (Harvey 1982): after crises and devaluations in established domains of finance, capital sought greener pastures, extending its operational space into geographies and domains in which it was previously not much interested. Such a reading has gained widespread purchase. It is attractive, because it opens the debate on finance’s penetration of farming to broader questions about the boom and bust cycles of globalized capitalism and their geographical ramifications. Scholars embracing “financialization” as an analytical tool have without doubt contributed to our understanding of the rise of global finance and its implications for the “real economy”. But the reiteration of the concept across the social sciences has not been unproblematic, and some of the problems characterizing the more general debate on financialization (Christophers 2015a) also permeate the land rush debate. This results in a range of analytical and epistemological challenges, which this book seeks to address.

First, much of the literature deploys “a restricted historical optic, ... thus overlooking historic parallels and (dis)continuities” (*ibid.*: 192). After all,

finance has a long history of penetrating farming in different parts of the world. The historical examples discussed in this book will show that we must carefully examine how current phases of financialization compare to earlier operations of finance capital formation in and through farming on a *global* scale. Such an endeavour becomes complicated by the fact that there is not one, but multiple histories of capitalist transitions. But, as we will see, just because the finance–farming nexus has “old roots”, this does not mean that there are no “new shoots” (Sommerville 2018).

Second, owing to a rather restricted structuralist analytical lens, the existing literature has shed little light on how the agri-focused financial industry works in practice (Fairbairn 2014; Gunnoe 2014; Russi 2013; Clapp & Isakson 2018). We are yet to develop a more comprehensive understanding of the evolution and internal architecture of “agriculture as an alternative asset class” and the socio-spatial relations and practices through which these domains are turned into financial assets. The lack of knowledge of these issues is the result of a limited engagement with financial market players among researchers. This is a result of normative and epistemological choices informing existing research strategies, as well as the existence of physical and cognitive entry barriers to a highly secretive and complex industry. With a little bit of luck and the right strategy, however, we may manage to “follow the money” (Christophers 2011) and ground agri-finance, like other trades of finance (Ho 2005), in particular places. It is in this way that we can unravel the mechanisms that bring institutional landscapes into being. Often, capital does not flow smoothly from one place to another.

Third, as I have shown with my colleagues Leigh Johnson and Patrick Bigger elsewhere (Ouma *et al.* 2018), the politics of information and “data” is too often sidelined in research on financialization. It can be agreed with Adeniyi Asiyambi (2018) and Donald MacKenzie (2005) that unpacking the grounded operations of finance can help repoliticize a field that is often shrouded in complexity and technical jargon. Doing so could open spaces for broader debates, generating real answers to socio-ecological crises rather than temporary financial fixes. But how can we practically produce knowledge about the grounded operations of finance when many of its key players – the investment banks, hedge funds, private equity managers, family offices, endowments and pension funds that ought to be the objects of public scrutiny – keep their profiles low and doors closed? Such practices of non-disclosure are supported by the still overwhelming epistemic authority that financial elites command over economic matters and a global legal architecture that is tilted in favour of financial investors. Notwithstanding recent methodological attempts to trace the socio-spatiality of various forms of capital, including finance, in order to make things public (see, for example, Galaz *et al.* 2018), we should not underestimate the barriers to generating

knowledge about finance's operations in and beyond farming. An alternative source of information may be the state, as the ultimate guardian of cross-border flows, investment regulation and national statistics.

Fourth, much of the existing literature has focused on a few selected examples in the core regions of the Global North, particularly in North America (Fairbairn 2014; Sommerville & Magnan 2015; Gunnoe 2014). Even though a few authors have recently offered treatments of the financialization of farming in places such as Australia (Sippel 2015; Larder *et al.* 2015) and Brazil (Fairbairn 2015), we are yet to see more nuanced accounts of “the real life incarnation of finance in the sector by looking at investment arrangements, including connections with the state, and its (regional) variations” (Visser *et al.* 2015: 541). What happens if we start researching the new finance–farmland nexus in Zambia, Tanzania, Romania or Aotearoa New Zealand? Might accounts from “the margins” not requalify existing understandings of “financialization”? Such accounts from the margins are not just ones of capitalist accumulation dynamics produced in a so-called “periphery” (Shivji 2009) but accounts that aim at decentring histories of capitalism written in epistemic centres such as North America or Europe in relation to “other spaces” (Taylor 2010). From such a perspective, even “Northern countries” such as Aotearoa New Zealand or Australia would count as “margins” because they have featured strongly neither in the prominent literature on financialization nor in the literature on its agrarian variant (for exceptions, see Le Heron 2013; Magnan 2015; Sippel *et al.* 2017). As this book will show, expanding the empirical focus in the study of the finance-driven land rush, and utilizing a more contextual understanding of the workings of “global finance”, allows us to unpack how global agri-finance chains materialize within concrete geographical settings with distinct histories. It also helps us shed light on how investors gain access to farming properties in market environments with different agrarian, economic and political-institutional features, and how such contextual features affect the strategies of investors and asset managers. This in turn necessitates coming to terms with both the productive and constraining power of investment and property regimes as well as the modalities of state–investor relations in target regions, since these regulate investors' access to natural “resources” (Bridge 2014). The emphasis on access, defined here as “the ability to derive benefits from things” (Ribot & Peluso 2003: 153), is important, as it implies an “analysis of the constellations of means, relations, and processes that enable ... [finance] to derive benefits from resources” (*ibid.*).

As we shall see for the case studies of Aotearoa New Zealand and Tanzania, relations of access in the frontier regions of finance-driven investments into farming are more complex and contested than often suggested in the current debate. For instance, social forces such as NGOs or the media, from abroad

as well as from within, have questioned the morality or economic reasoning behind farmland investments. In addition, states often play more ambivalent roles than being mere facilitators for financial investors.

Fifth, more structuralist accounts often tend to overlook the fact that economizing farming in a profitable manner often turns out to be a challenging project on the ground. Agricultural production as a localized, biogeophysical and risk-prone venture may pose challenges to any investment plan (Mann & Dickinson 1978). Indeed, there is growing evidence that many investments do not proceed as envisaged by investors (Cotula 2013; Li 2015; Locher & Sulle 2014; Grain 2018). As we shall see in this book, the intended transformation of nature into a financial asset is not a mere technical problem (Li 2014). Often, demands by investors need to be balanced with those of local stakeholders, such as labour, adjacent communities or the state. The extraction of financial value from farming is as much a political process as it is a technical one (Ducastel & Anseeuw 2017).

Sixth, we are yet to examine the financialization of farming for its global value relations (Araghi 2003) and associated inequality dimensions in a more explicit and sustained way. Even though this is a grand topic in its own right, the book tries to partly fill this gap, by connecting current debates on global value relations, inequality and “imperial lifestyles” (Brand & Wissen 2017) to finance’s expansion into the world of farming. The transformation of agricultural ventures into a financial asset ties the reproduction of certain social classes to the circulation of capital in and through nature: the fee-collecting financial elites engaged in money management; the HNWIs, institutions and endowments investing their money in green financial products; the “‘mass affluent’ in national middle classes” (Seabrooke & Wigan 2017: 13) who entrust their money to pension funds and life insurance companies targeting various forms of nature; and the populations in core capitalist countries (including Gulf states and China) more generally, whose huge aggregate ecological foot- and hoofprint (Weis 2013) continues to enlarge despite claims that it is compensated for elsewhere.

Finally, there remains the big question of how other kinds of food futures can be organized. What role should finance play therein at a moment when our social and socio-natural relationships are urgently in need of “‘protection’ from unfettered markets, but, in a significant twist ..., markets, private investors and entrepreneurship are held out as the very means for providing that protection” (Langley 2020: 143)? There is ample evidence that dominant paradigms of agricultural production, which also often materialize in institutionally backed farming ventures, need to be radically rethought in order to create more sustainable and inter-/intra-generationally just food futures (see, for example, Cassidy *et al.* 2013; Grey & Patel 2015; Marsden & Morley 2015; Lawrence 2017). Since the giant amounts of capital administered by

institutions worldwide will not go away anytime soon, and the time left to create more sustainable economic–ecological relationships is quickly slipping away, the possibility of whether such giant amounts of money can be remobilized to that end should be explored (Castree & Christophers 2015; Knuth 2017). Can finance be “smart” (Palmer 2015) in radically different ways?

## TOWARDS AN OPERATIONAL ACCOUNT OF INSTITUTIONAL LANDSCAPES

Unpacking the practical activities of finance *in situ* has been the prime goal of an interdisciplinary field popularized as the social studies of finance (see, for example, Langley 2008; MacKenzie 2005; Preda 2013; Pryke & Du Gay 2007). Insights from this field can breathe fresh air into the study of “finance-gone-farming”. Even though not explicitly rooted in that intellectual tradition, Martin *et al.* (2008: 128) capture the gist of such a programme quite well: “Reckoning finance into a practical activity discloses capital’s own methods such that they might be both reappropriated and redeployed ...” They continue: “[I]t is an effort to specify what capital’s movement does, both to itself and across a whole range of social sites and activities” (*ibid.*: 129).

Embracing more practice-attuned approaches to study the multiple activities of global finance, however, risks denying “analytical validity to the category of capital” (Mezzadra & Neilson 2013: 10) and capitalism more generally (Leyshon & Thrift 2007; Preda 2013). In this regard, the social studies of finance have attracted the same sort of criticism as their related field, the social studies of economization and marketization (see, for example, Fine 2003; Christophers 2014). A useful bridging concept in this regard is that of “operations of capital”, recently developed by Mezzadra and Neilson (2013, 2015, 2019). Speaking from a critical political economy perspective that has had fruitful encounters with practice-oriented thinking, it helps develop a grounded understanding of the historio-geographically variegated operations of “global finance”:

Using the concept of operations of capital ... opens a new angle for the critical analysis of the relation between capital and capitalism. An operation always refers to specific capitalist actors while also being embedded in a wider network of operations and relations that involve other actors, processes, and structures. This gives us two analytical avenues through which to examine the work done by an operation. The first, with its reference to specific capitalist actors, reveals the workings of capital in particular material configurations, shedding light on processes of valorization as well as on the frictions and tensions crisscrossing them in lived and

grounded circumstances. The second focuses on the articulation of operations into larger and changing formations that comprise capitalism as a whole. (Mezzadra & Neilson 2015: 6–7)

Thus, an operations of capital analytics does not solely focus on the everyday practices of finance – finance *as work*. Operations are quotidian and abstract at once, as they speak to the shared legal frameworks, conventions, metrics and rationalities of the global finance industry. These are recursively enacted in the everyday practices of financial economization, invoking a relation between the “micro” and the “macro”. It is through such operations, and the practices they come along with, that institutional landscapes emerge as material effects. In the case of this book, this implies moving back and forth between ethnography and world history (Hart & Ortiz 2014) – between the macro, historically grown, and the micro, accomplished *in situ*.

#### FINANCIAL KEYWORDS UNDER SCRUTINY

A practical account of operations behind the formation of institutional landscapes also implies that we critically engage with how we narrate and represent these markets (Vogl 2015), which inevitably leads us to the question of keywords. Keywords are important empirical terms that are frequently used during everyday language (Williams 1985) but that – at a higher reflexive level – should always receive critical scrutiny. Even in scholarly texts, however, keywords are often taken for granted. Scrutinizing keywords can be done for a number of social fields, but this seems to be particularly pivotal with regard to the financial industry, as it often operates using an opaque language, with many things remaining obfuscated because they are considered too technical and the realm of experts. Here, “complexity is the enemy” (Feroz 2016: 25). Keywords require both cultural and etymological analysis. Ironically, the words of an investment guru help here: in order to understand something you have to know not only what it is and how it operates, but how it came about and what beliefs and other influences operated upon it (Fraser-Sampson 2014: 19).

#### *Financial “markets”*

It is a common narrative in accounts of modern finance that the key function of financial “markets” is the “pursuit of new investment opportunities” (Kay 2015: 136) (“search”) and “the management of long-term assets that have already been acquired” (*ibid.*) (“stewardship”). Yet the abstract market



metaphor not only fetishizes the “flesh-and-blood institutions” (Christophers 2015b: 92) making up financial markets but also conveys “the qualities of dispersion, anonymity and competition” (*ibid.*) when there is in fact centralization, socially dense relations and the “systemic power of large financial institutions” (*ibid.*). What is commonly called the “global financial market” actually more closely resembles a global allocation bureaucracy (Ortiz 2014), populated by players such as institutional investors, including pension funds, private equity firms and insurance companies.

The market metaphor also suggests that financial markets operate like commodity markets. Yet the former are ultimately not about bestowing something with exchange value and trading it as a commodity for a return. Even though tradability – often referred to as “liquidity” – is certainly a desirable feature of many financial products, these markets do not operate according to the same logics as commodity/production markets (Knorr-Cetina 2010). Rather, financial markets are about speculation and investment, and these activities involve claims and commitments exercised over time and oriented to the realization of future income.

### Asset

An important term in this book that the reader will encounter regularly is that of the “asset”, the key pillar of institutional landscapes. Deriving from an Anglo-French legal term (*aver a(s)setz/to have enough*, with roots in the Latin words *ad satis = to be enough/sufficient*) that first surfaced in the middle of the sixteenth century (Murray 1884: 507), it originally denoted “the property of a deceased person that in the hands of his heir or executor is sufficient to pay his debts and legacies” (G. & C. Merriam Co. 1971 [1901]: 131) but quickly passed into a general sense of an “item of value owned” (*ibid.*) that can be converted into ready money, or that “serves as a resource or source of strength” (*ibid.*). This is notable, because, right from the beginning, the term implied that assets have an inherent quality that allows them to serve the cash needs of external parties. Today it is a key notion in economics and the world of investment management, describing “a resource with economic value that an individual, corporation or country owns or controls with the expectation that it will provide future benefit” (Barone 2019). Financial assets, in particular, represent investments in the assets and securities (bonds/stock/private equity) of other institutions, but increasingly also of urban and rural real estate, infrastructure or various forms of “natural capital”. In a more foundational sense, an asset is a “property that yields an income stream” (Birch 2017: 468) and is not meant for immediate sale.

Assets can also be intangible, with intellectual property rights and various forms of legal arrangements constructed around them (e.g. licensing), providing important income streams to financial investors and corporations. The process of turning something into a source of future income should be called “assetization”. It should not be equated with other popular political economy terms, such as “commodification” or “marketization”. Although certain types of assets – especially in their securitized form – can be traded in markets and thus have a quasi-commodity character, the underlying form of value is distinct from a commodity for its income-stream-generating quality. The term “assetization” should also not be used synonymously with “capitalization” (Muniesa *et al.* 2017) – a set of specific accounting techniques for capitalizing the assumed future value of an asset in the present.

The proliferation of assets has also led to a proliferation of professional asset managers, such as private equity funds and wealth management arms of large international banks (Braun 2015: 8). By the end of 2016 these entities, also known as “shadow banks”, managed US\$85 trillion (up from US\$60 trillion in 2007), “with around 80 per cent held on the accounts of institutional and retail investors in Europe and North America” (Gabor 2018).<sup>1</sup>

### *Investor*

Agricultural investment is about investors. Contemporary textbook definitions of the term “investment” as the allocation of capital for the purposes of capital maintenance, revenue generation or capital appreciation distinguish it from “unproductive” economic activities. Thus, today the investor appears as someone (a person, a corporate entity) who is not a speculator (someone who takes high risks in order to achieve high returns), nor a gambler (someone who takes very high risks in order to achieve disproportionately high returns) nor an arbitrageur (someone who exploits interest rate or price differences at the same time in different places for the purpose of profit taking through so-called “carry trades”) but someone who produces *real* value. In practice, however, investment strategies, especially those in the financial sector, often follow less clear lines and often combine all or several of the economic activities mentioned here.

From a radically different perspective, many of the activities taking place in so-called financial markets today need to be understood as capital placements rather than as investments: “Placement means the purchase of titles to debts

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1. Global gross domestic product (GDP) stood at about US\$75 trillion at that time; see [www.statista.com/statistics/268750/global-gross-domestic-product-gdp](http://www.statista.com/statistics/268750/global-gross-domestic-product-gdp) (accessed 1 January 2020).

or shares, which is financed either from savings, from income or from the proceeds of selling other property. In contrast, investment designates using financial resources for creating capital goods” (Robinson 1956: 8; cited in Zeller 2008: 10).

Even though the production of material output is still an important means to the production of financial value for direct investments into farming ventures, the original sources of capital (such as future pensioners) assume the role of rentiers rather than investors. A rentier is someone (a person, a legal entity) who lives from dividends, asset price appreciation, payments of interest, payments of licences or payments of ground rent, with rentiership being fundamentally about securing, operationalizing and exchanging the rights to future income streams from a now bewildering array of underlying assets. We will re-encounter the ghostly figure of the rentier in [Chapter 9](#).

### *Private equity*

One of the key “flesh-and-blood institutions” (Christophers 2015b: 92) in the money management world that this book deals with is private equity funds. In agricultural capital placements, this investment structure is used for investing in the share (equity) of a farming venture. This company could have been listed on the stock market (a public company) or bought from its existing owners (a privately held company) (Toporowski 2012: 278; Appelbaum & Batt 2014) in order to resell it at a profit. As part of the non-organized capital market (“non-listed”), private equity funds cater for so-called “sophisticated” investors and are thus subjected to less regulation than vehicles serving the organized capital market (“retail markets”). Private equity structures are now so widespread as the new owners of companies across different sectors that observers have spoken of “private equity ubiquity” (Kelly 2012: 199) as a peculiar historical moment.

Private equity companies collect money from institutional investors by setting up a special legal arrangement called the “limited partnership”, in which the original investor assumes the role of the limited partner (LP) and the private equity firm the role of the general partner (GP). The limited partnership is as much an organizational structure for the extraction and capture of value (Appelbaum & Batt 2014) as it is a legal structure through which large institutions such as pension funds can delegate investment risks and decision-making power to specialized third parties, in order to live up to their legal responsibility to act in the very best interests of the original asset holders (the so-called “fiduciary duty”), while at the same time allowing the investor to reap certain tax benefits (Fraser-Sampson 2010).

## CONCLUSION

In this chapter, I have outlined how this book intends to study the finance–farming nexus. As argued, the most tempting way would be to do this from a “financialization” perspective. Although I have acknowledged the insights from work embracing this optic, I have proposed a complementary, more practice-centred approach that allows us to fill in existing gaps in the literature, including the following: being more attentive to history; scrutinizing the concrete practices of institutional landscape making; interrogating the politics of information and data; extending to epistemic margins as sites of empirical investigation; uncovering material and political frictions in agri-investment chains; and addressing the global value relations behind agri-investment chains and their social and ecological footprints. This helps us arrive at an operational account of the production of institutional landscapes without losing sight of the “historically established, structurally stable attributes of the world” (Kleinman 1998: 285). As I have shown, such an account also implies that we critically engage with how we narrate and represent the financial structures that give rise to institutional landscapes. Thus, this book eventually paves a middle ground between work that is engaged with theorizing contemporary dynamics of capitalism and more praxeological accounts of finance’s “empire of values” (Orléan 2014).

## CHAPTER 3

# HISTORY: HOW OLD IS THE FINANCE–FARMING NEXUS?

Historically, finance capital has adopted many forms in promoting change in both farm structure and landowning relations.

(Munton 1985: 156)

In September 2014 the Queensland Art Gallery and Gallery of Modern Art in Brisbane hosted an exhibition called “Harvest”, which engaged with the history, geography, production and politics of food in the Australian state. The exhibition featured a collection of photographs by Richard Daintree, one of the first Britons to explore the region. A geologist and photographer, he took some impressive pictures of the region’s landscape (such as [Photo 3.1](#)), which he presented, together with geological maps, at the 1862 International Exhibition in London in a bid to attract immigrants and investors to the colony (entry in field diary 2014). Across the Tasman Sea, some 40 years earlier, whaling and shipping interests began to pitch Aotearoa New Zealand as a new frontier for British colonization. A proposal for a military colony in the North Island from 1823 sketches a promising investment case, highlighting its “delightful climate ... uncommon fertility of soil, [which gives] ... all the necessaries and most luxuries of civilized life ... [T]here is no country on earth more favourably circumstanced for the operations of agriculture than New Zealand” (McAloon 2013: 86). Back then, pictures and some text were enough to mobilize capital for agricultural ventures from abroad.

These snapshots can be juxtaposed with the investment prospectuses of capital-raising agricultural fund managers some 150 years later. Speaking to potential investors, these similarly pitch promising landscapes across a range of geographies, albeit now backed up with hard figures and fancy graphs. When placed into that historical lineage, a phenomenon that many media, research and activist reports have hyped as the outcome of the financialization of the economy starting in the 1970s (Harvey 2007; McMichael 2012), suddenly



**Photo 3.1** Imperial landscape in Queensland

*Source:* Richard Daintree, England/Australia 1832–1878, “Volcanic downs country” (no. 7 from “Images of Queensland” series), c.1870

appears less novel. Metropolitan finance has a long history of helping to transform nature into property in different parts of the world, producing and reshaping agrarian landscapes via the provision of both debt and equity capital. As David Graeber (2011: 346) puts it in his historical masterpiece *Debt: The First 5,000 Years*,

Starting from ... [the] baseline date of 1700, then, what we see at the dawn of modern capitalism is a gigantic financial apparatus of credit and debt that operates – in practical effect – to pump more and more labour out of just about everyone [and everything: *my addition*] with whom it comes into contact, and as a result produces an endlessly expanding volume of material goods.

Such a *longue durée* perspective (Edelman *et al.* 2013: 1528) on expansionist moments in metropolitan finance suggests that the coupling between finance and farming is less “unnatural” (Gosh 2010) than many existing accounts admit. Industry players are quick to even argue that farmland was the “oldest asset class in the world” (Lapérouse 2016: 4), which is a claim we should critically scrutinize but which nevertheless reminds us of the need to employ a broad historical optic.

The problem of many existing takes on the financialization of farming is not just that they often employ a narrow historical view (Christophers 2015a). Even the accounts more attuned to history are carried away by the presumably spectacular fact that finance now increasingly asserts direct ownership (via the acquisition of equity stakes in agricultural ventures) over the agricultural production process. Such a privileged focus on direct equity investments neglects the role that debt and stocks (as less direct forms of equity) have historically played in the making and remaking of agricultural landscapes in many parts of the world, particularly during imperial-colonial times. Moreover, during much of the twentieth century national governments around the world supported “agricultural transformation” via the provision of credit and mortgage schemes, often with tight links to both domestic and foreign sources of finance. Even the managed institutional investments in agriculture we have read so much about after the food and financial crises of 2007/8 have a surprisingly long history, as we shall see.

The historical examples discussed in this chapter show that we must carefully examine how current phases of “financialization” compare to earlier operations of finance capital formation in and through agriculture on a *global* scale. Yet, just because finance has had a long (but by no means straight-forward) relationship with agriculture, it does not mean that there is not something new about finance’s run on all things agricultural. Eventually this chapter will do justice to this newness by outlining some of the novel features that characterize the contemporary financial economization of farming.

## FRONTIERS INTO ASSETS: IMPERIAL LANDSCAPES AND THE QUITE EARLY GLOBALIZATION OF FINANCE

In agricultural economics, assets are conventionally defined as all the wealth that is at the disposal of a farmer. But, in many cases, there is a hidden story to that wealth, a history of appropriation, enclosure and transformation, and, historically, “finance” has played a significant role in that story. Indeed, a *longue durée* perspective reveals that both private and public forms of finance were playing a crucial role in the production of capitalist agricultural landscapes from at least the late seventeenth and early eighteenth centuries in different parts of the world (see Table 3.1). The colonial companies that turned indigenous territories in the regions of Australia, Aotearoa New Zealand, Indonesia, India, the United States, South Africa and Argentina (to name a few) – often classified as “empty”, “idle” or “underutilized” lands – into “imperial assets” had tight links to investors and stock exchanges in the colonial metropolises (Kocka 2013: 52). These companies usually acquired lands through a variety of means, including brute force.



**Table 3.1** Examples of territory occupied and main land use, 1650–1917

| <i>Approximate dates</i> | <i>Region</i>   | <i>Latitude</i> | <i>Main usage in period</i>       |
|--------------------------|---|-----------------|-----------------------------------|
| 1690–1830                | Cape Colony   | 30–34° S        | Grazing<br>Pockets of viticulture |
| 1750–1820                | Old (US) Northwest  | 38–41° N        | Grazing<br>Grain                  |
| 1750–1850                | Buenos Aires province   | 35–40° S        | Grazing                           |
| 1785–1860                | US public domain east of Great Plains and north of river Tennessee  | 37–42° N        | Mixed farming                     |
| 1785–1840                | US federal and state public domain in the south                     | 30–34° N        | Grazing                           |
| 1785–1850                | Upper Canada  | 42–45° N        | Cotton<br>Mixed farming           |
| 1803–1830                | Van Diemen's Land (Tasmania)  | 41–43° S        | Timber<br>Mixed farming           |
| 1788–1840                | South-eastern Australia   | 27–38° S        | Grazing                           |
| 1820–1850                | Texas   | 26–32° N        | Grazing<br>Cotton                 |
| 1836–1860                | Boer republics and Natal  | 23–30° S        | Grazing                           |
| 1865–1890                | US West: high plains and Great Basin                                | 32–49° N        | Grazing                           |
| 1846–1890                | California  | 32–42° N        | Grazing<br>Grain                  |
| 1840–1860                | Aotearoa New Zealand  | 36–46° S        | Grazing                           |
| 1870–1914                | Canadian prairies   | 49–54° N        | Grain<br>Minor grazing            |
| 1890–1900                | Zimbabwe (Southern Rhodesia)  | 15–22° S        | Grazing<br>Tobacco<br>Cotton      |
| 1900–1914                | Highlands of Kenya  | Equatorial      | Grazing<br>Coffee                 |
| 1885–1917                | Northern and north-eastern Tanzania (German East Africa/Tanganyika) | Equatorial      | Coffee<br>Sisal<br>Grazing        |

*Source:* Updated after Weaver (2003: 89) (reprinted with permission).

Much of this land was held for speculation, but also for exploiting natural resources such as timber. Examples were the New Zealand Company, the Natal Land and Colonization Company in South Africa, the Mexican Land and Colonization Company and the Santa Fe Land Company in

Argentina. In 1913 there were 130 British companies of this type holding 25 million hectares of land, largely in Africa and Latin America, but also in North America and Oceania. This compares with 746 companies that held 5.6 million hectares engaged directly in agriculture through plantations, and 40 companies that held 14.2 million hectares for ranching. A further 11 companies held 2.7 million hectares through railway concessions, most of which would eventually be sold off for settlement (Byerlee 2013: 23).

Many of the overseas investments during this period went into only six commodities – sugar, palm oil, rubber, bananas, tea, and food staples, all of which should play an important role in the production of agrarian landscapes up to the present. Sugar and palm oil even received “a new life” (Byerlee 2013: 23) as agrofuel inputs. Except for food staples (and wool), all these commodities were usually produced on plantations or large-scale estates, as these were amenable to economies of scale and vertically integrated production, thus making such operations attractive to scale-hungry financiers. In contrast, food staples such as grains, dairy or meat and wool were largely produced by family farms, particular in the settler colonies of the Americas, Australia, New Zealand and eastern and southern Africa. These would buy land from colonial governments or companies. Some argue that it was only more recently that financial investors would target food crops *directly* because of advancements in crop/animal husbandry, technologies and farm management and the increasing consolidation of farms in different parts of the world (Byerlee 2013). But a closer look reveals that even these petty colonialists had often tight links to (high) finance, connecting metropolitan credit, land speculation and enclosure (Weaver 2003: 194). With the advancement of credit, mortgage, farm insurance and agricultural futures schemes (Martin & Clapp 2015), these became enmeshed in “giant chain[s] of debt-obligations” (Graeber 2011: 347) and contractual entitlements.

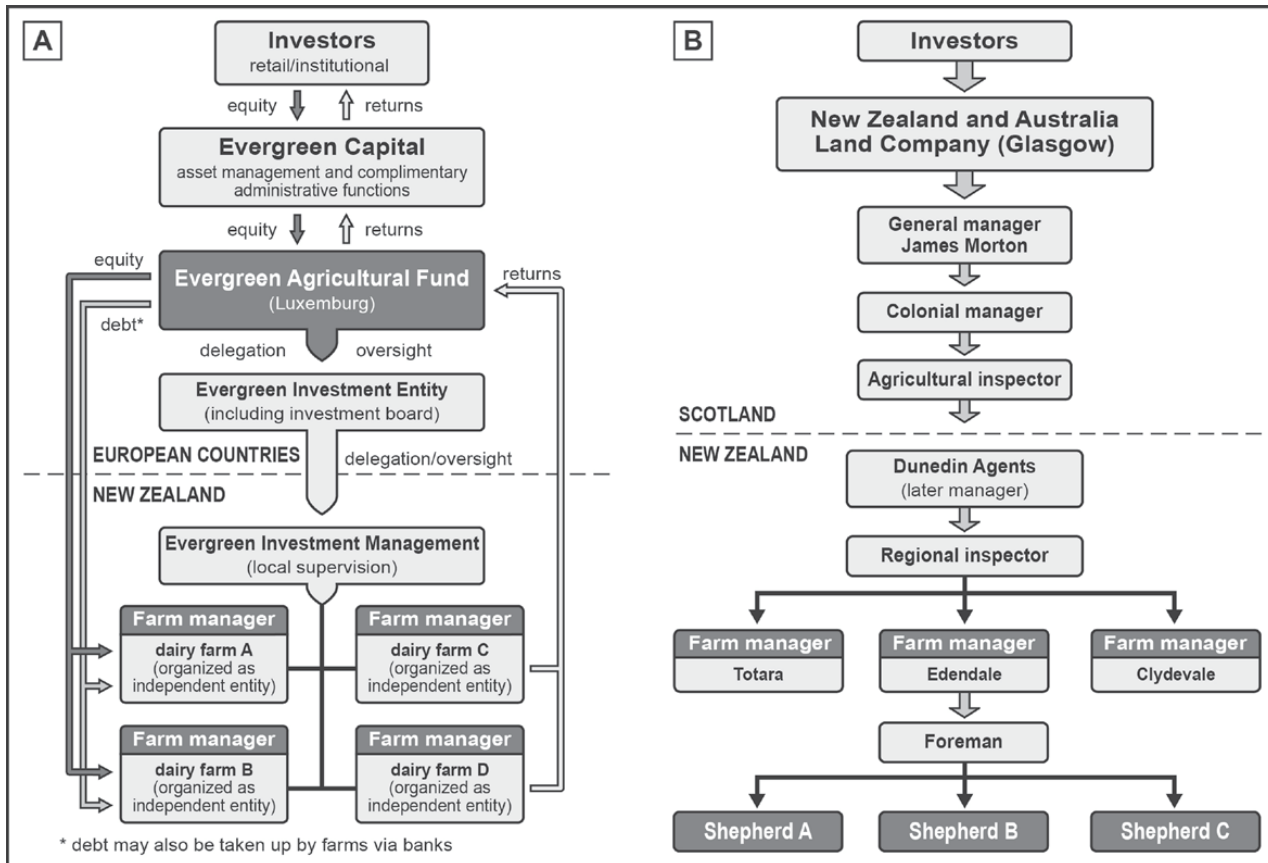
This can be vividly illustrated using the example of Aotearoa New Zealand, where “[f]rom early times farmers insisted on securing the freehold of their land, which alone created demands for heavy doses of capital” (Pryde 1987: 6-1). Just 45 years later, after James Cook as the first European had landed in Aotearoa (as the local Māori tribes would call it), the first cattle were brought to the country in 1814, once the colonizers had realized that “the local climate allowed for year-round pasture growth and that wool, meat and dairy produce could be produced in New Zealand with very few resources” (Wynyard 2016: 63). As elsewhere, the sporadic trading activities backed by merchant capital soon gave way to more direct forms of colonization, spearheaded by large colonial companies and a few land-hungry individuals. Even though these forces were not always successful in their agricultural ventures (Fairweather 1985), they were still quite effective in dispossessing the autochthone Māori populations through a mixture of purchase, theft,

fraud and coercion. Millions of acres of land, particularly in the South Island (Wynyard 2016), were thus appropriated. Early settlers would engage in speculative runholding practices, whereby livestock herds, often financed by loans from overseas or larger runholders, would be moved around. After the colonial government signed the Treaty of Waitangi (1840) with local Māori tribes, the leasing of Māori land became illegal, as the Crown was given “a complete pre-emptive right to all land purchases” (Fairweather 1985: 441) in order to “shield” Māori lands “from unscrupulous land jobbers” (Wynyard 2016: 76). Runholders therefore became a crucial force in pushing for the autonomy of the colony, so that they could establish full property rights over the best lands. The squatting mode of production increasingly reached spatial limits in the years to come, which led to the emergence of larger ranching estates (Fairweather 1985). Contrary to the runholding, with its links to more short-term-oriented sources of finance, domestic and overseas alike, estates had tight financial connections to private persons and investment trusts in both England (London) and Scotland (Edinburgh).<sup>1</sup> One of these companies was the New Zealand and Australian Land Company, founded by Scottish financier James Morton in 1865/6 (Tennent 2013). The company acquired dozens of properties in the Southland and Otago Regions, turned them into “British farms” by introducing European flora and fauna and established the first frozen meat exports to the colonial motherland in 1882. In later years it also leased out and sold land to settlers. The company “established a managerial structure which linked specific places on both sides of the world and allowed directly for the transfer of financial capital, technology, skills and raw materials” (*ibid.*: 91). This structure, when juxtaposed against contemporary financial investments in Aotearoa New Zealand agriculture, looks all too familiar (see Figure 3.1). In the case of the Land Company, as well as other estates backed by metropolitan finance, a shareholder value gaze “penetrated the production sphere of pastoralism” (McMichael 1987: 431) at a surprisingly early juncture, “institutionalising the managerial goals of closely supervising production, enhancing productivity and rationalising the enterprise with various technical developments involving fixed capital investment” (*ibid.*).

The estatization of Aotearoa New Zealand agriculture was also supported by several legislative acts passed from 1863 onwards. Passed amidst a series of wars with Māori related to the control of the highly productive regions of

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1. Individuals, banks and – with the establishment of the Foreign Government and Colonial Investment Trust in 1863 and the First Scottish American Investment Trust in 1873 – institutional vehicles were increasingly active in providing money to overseas extractive endeavours during that time. Between 1860 and 1873, in London alone, over 150 foreign government loans were issued (Hutson 2005: 442).



**Figure 3.1** Comparison between the architecture of a contemporary dairy fund (A) and the New Zealand and Australian Land Company (B, New Zealand branch only)

Sources: A: own research\*; B: redrawn from data provided in Tennent (2013: 86).

Waikato, Taranaki, and Eastern Bay of Plenty in the North Island (where Māori tribes were better placed to resist European colonization and runholding, and estates could not spread accordingly), these provided the basis for the confiscation of millions of acres of additional Māori land (Wynyard 2016: 75). With these acts at hand, all the colonial government had to do was to claim that an *iwi* (the traditional family unit of the Māori), or a significant number of members of an *iwi*, had risen against the Crown. In addition to war and “punishment”, state-led land purchasing and the establishment of a Native Land Court in 1865, intended to “modernise” the Māori communal land tenure system by individualizing it, further redistributed land or access to it in favour of Pākehā (the Māori name for white colonialists) settlers. At the same time, the land inequalities between settlers would grow tremendously. As a consequence, many of the South Island’s large land holdings were broken up through a series of Land Acts between the late 1870s and early 1890s. Crucial here was the small-farmer-oriented politics of John McKenzie, the agriculture minister of the Liberal Party government from 1891 to 1900 (Wynyard 2016). Although this laid the foundation for different farm structures and land ownership relations, it was the rise of the government-mediated credit and mortgage industry that was the tipping point in the country’s agricultural history. Via the Advances to Settlers Act of 1894, the Liberal government of the time obtained funds in London and made loans to farmers below current market rates of interest, thereby providing “the credit necessary to establish small intensive farms ... and stimulate the dairy industry ..., remov[ing] the barrier which had been preventing New Zealand from recovering from the long depression ..., [and] organis[ing] and systematis[ing] the market for rural long term credit” (Quigley 1989: 51).<sup>2</sup> This system was to prevail almost unchanged until the 1980s, with the public Rural Banking and Finance Corporation (RBFC) serving as the most important lender, but also other institutions such as stock and station companies, insurance companies, commercial and trading banks, investment and finance companies, and solicitors, families and trusts generously extending credit to Kiwi farmers (Le Heron 1991). The RBFC-backed system of credit provision was abandoned only during the neoliberal restructuring of the 1980s, which led to a further globalization of the finance–farming nexus in Aotearoa New Zealand (Argent 2000). Against the backdrop of rising interest rates, the burdening nature of farm debt and the restructuring of the farming sector according to free market principles (Wallace 2016), experts argued that farmers should open up to new forms of capital, such as equity, so that non-farm investors would have “greater opportunities to purchase shares in large farms” (Pryde 1987: 6-13).

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2. By 1900 90 per cent of all public debt originated in London (McLintock 1966).

It was at this time that business-savvy farmers rolled out new organizational structures such as syndication and equity partnerships as part of a more corporate-oriented farming model (Wallace 2016). Although some individuals had already experimented with syndication in the 1970s (Hawke 1985), a model in which the ownership and management of farms is split and thereby allows the entry of other (non-farming) investors, it became more widespread in the 1980s. For instance, a group of entrepreneurial farmers helped set up the New Zealand Rural Property Trust, opening up Aotearoa New Zealand farmland to passive investment by superannuation funds from Australia. By the late 1980s the trust held 34 farming properties across Aotearoa New Zealand (Le Heron 1991: 164). Interestingly, its key architect would also become one of the crucial players in the new finance-driven land rush in the late 2000s (see Chapters 7 and 8).

The case of Aotearoa New Zealand tells us that finance capital was crucially involved in the transformation of imperial “frontiers into assets” (Weaver 1999), but how this advanced varied significantly from frontier to frontier. The work of Rudolf Hilferding (1981 [1910]), writing at the height of the colonial frenzy, allows us to connect these various imperial frontiers. He argued that “[t]he export of capital and the struggle for economic territory” were tightly interlinked during the age of empire. Yet neither the export of capital nor the conquest of new territory was as straightforward as in this case (or Australia, Argentina or Canada, to name a few other dominion states). This is exemplified by the example of modern-day Tanzania. Like Aotearoa New Zealand, it is an example of capitalism’s expansionary drive to tap into new markets, export its internal social or environmental contradictions (e.g. “surplus people” or “environmental destruction”) and appropriate new human and non-human resources. But it is also an example of how local factors may change that project, and how each postcolonial government has tried to correct its respective colonial heritage, albeit with often limited or short-lived success.

The coast and some hinterland parts of mainland Tanzania (the island of Zanzibar is another part of it) had been profoundly influenced by the slave, ivory and spice trade, backed by Arab, Chinese, Persian and Indian merchant capital for centuries, when it became the focus of organized merchant capital from the West in the 1830s (Coulson 2013 [1982]). When the region was proclaimed as German East Africa in the 1880s, this was spearheaded by the Society for German Colonization (Gesellschaft für deutsche Kolonisation: GfdK), rather than by the state itself, which was reluctant to spent taxpayers’ money on the colonial project. Like similar outfits to follow, the society had various shareholders, with all of them betting on the colonial ventures of its notorious director Carl Peters (Peter 1990: 199). After having negotiated access to land with a number of local authorities in

the north-east of the country, the GfdK managed to get state backing and was renamed the German East Africa Company (Deutsche-Ostafrikanische Gesellschaft: DOAG) in 1887 (*ibid.*). The DOAG set up plantations as the first “major institution” (Rodney 1983: 1) of German colonialism, but also rented out land to settlers. Altogether, the company was involved in at least 24 other companies spanning different sectors. Later, Deutsche Bank and other banks were also crucial providers of credit to support the building of the colonial space economy (Slater 1977). Some of these “did good business in that they were able to declare high dividends” (Peter 1990: 208). Since the Germans wanted to turn Tanganyika into a settler state, the DOAG also provided credit to white settlers, although this provision seems to have been quite limited. This plan was soon abandoned by the colonialists after they faced local resistance to the expansion of large-scale farms from the 1890s onwards. In 1891 the state took over territorial control from the DOAG, and proclaimed all land occupied or unoccupied as Crown land, except for that land already in private ownership or owned by chiefs, who were often collaborators in the colonial project (*ibid.*). Despite this adjustment, settler estates and plantations cultivating sisal, coffee, tea, tobacco, rubber and cotton numbered around 700 in the Usambara and Kilimanjaro regions of the north-east and north, and a few other places, by 1912.

Even though not all were set up by German investors (the Germans restricted the involvement of other nations), they marginalized local populations and significantly altered existing agricultural practices (Sunseri 2005: 1540). When the Germans saw that a settler-colonial project akin to the Aotearoa New Zealand venture was not possible, they tried to expand cash crop production by imposing taxes on smallholders, which thereby were forced to join the export economy. Credit provision to local farmers was extremely limited, however, and even restricted by law (Coulson 2013 [1982]). It served the extractive need of the colonial economy rather than allowing local farmers to transform their farms. As in Aotearoa New Zealand, local people were locked out of colonial credit markets, but, contrary to there, they largely kept their *de facto* power over land, despite some large-scale appropriations in the north and north-east of the colony. This would initially remain the case under the British, who took over Tanganyika after Germany’s loss in the First World War as part of a League of Nations mandate in 1922. Under these political restrictions, the British moved away from the alienation of local land to the promotion of African cash crop production (Aminzade 2013), espoused by the Colonial Development Act (1930) and Colonial Welfare Act (1940) respectively.

After the Second World War, Britain shifted to a more transformative approach that was meant to promote “modern farming” in order to serve the rising food and foreign exchange needs of the empire. The infamous groundnut



scheme, supported by public money via the Overseas Food Corporation, but also the extension of private credit to large-scale farming settlers via commercial banks, particularly the Land Bank (founded in 1947), was indicative of this shift (Mittelman 1981: 190). By 1959 1,284,647 hectares of land had been alienated for commercial agriculture (Aminzade 2013: 35).<sup>3</sup> Additionally, the Colonial Development Corporation (now called the Commonwealth Development Corporation: CDC), founded in 1948 and widely considered to be the first development finance institution, became an important provider of loans to large-scale plantations and food enterprises across Africa. It reinvented itself as a private-equity-focused institution in the late 1990s (and will reappear later as a backer of one of the Tanzanian investment cases).

When Tanganyika became independent, in 1961, it quickly embraced an Afro-socialist path of development. After 1967 many large export-oriented estates, plantations and businesses in other sectors were nationalized. Although foreign capital, both private and public, was still backing some farming projects, the institutional and political features of the time limited foreign capital's penetration of agriculture. The main transformative effort of the time was focused on rural collectivization, and rural farmers were serviced by national banking institutions, whose access to foreign private finance was restricted, however. This would change after the demise of socialism towards the end of the 1980s (Aminzade 2013). After Tanzania subscribed to the structural adjustment plans of the World Bank and International Monetary Fund (IMF) in 1986, the financial sector and virtually all other domains of the economy were liberalized (Lwiza & Nwankwo 2002). In the 1990s this also led to the privatization of former state assets (Temu & Due 2000), including many agricultural enterprises (one of which we shall encounter later as a "financial asset"). As we shall see in [Chapter 8](#), the privatization of former state farms, and the rise of associated market-oriented agricultural policies in the new millennium as an apex to the neoliberalization of the Tanzanian economy, would provide a window of opportunity for the entry of large-scale overseas investments (Chachage & Mbunda 2009). At the same time, the rural population's overall access to credit did not improve and sometimes even got worse compared to the era of state-backed credit provision (Bee 2009).

The historically limited expansion of credit in earlier periods paired with the restrictions put on large-scale private farming during the socialist period (other than state farms and a few other plantations) would provide

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3. In 1963 Tanganyika, before it united with Zanzibar to become Tanzania in 1964, boasted a total land area of 88.22 million hectares, out of which 16.18 million were classified as "agricultural land" (Singleton 1964: 8).



opportunities for the entry of global finance in the 2000s. On the one hand, friends of the market could argue that smallholders – still the majority of the country’s population – did not produce enough to feed the nation and posed no viable development future (Collier & Dercon 2014). On the other hand, the country, despite the fact that it still presented significant barriers to foreign investment in agriculture (e.g. a quite restrictive land tenure system), inherited a number of large-scale farming pockets that had the scale that institutional investment needed.

This brief account of imperial frontier making shows that finance, even structured transnational investments, had tight connections to the production of agricultural landscapes in many parts of the world. In certain geographical regions, such as modern-day Tanzania, a number of structural barriers prevented finance from penetrating agriculture more thoroughly, while in others it faced far fewer obstacles. In some contexts finance proceeded through genuine equity investments and direct ownership chains, but in the majority of cases it advanced through the provision of credit. Credit is central to the (re)production of capitalist relations and “facilitates structural change in agriculture” (Green 1987: 69) and, by itself, is a way of extracting surplus from production (*ibid.*: 62). Across the globe, for sustained periods of time, it was the vehicle of choice for money flowing into agriculture. Credit not only links savers and borrowers, who would use it in the creation of new “assets”, including agricultural ones, but also serves as “a mechanism for increasing the turnover rate of capital” (*ibid.*: 29). Depending on the context, however, the “terraforming” power of credit was limited or even restricted (such as in colonial and socialist Tanganyika/Tanzania), or at least heavily regulated, as part of a wider state-interventionist project of economy making (as was the case in Aotearoa New Zealand).

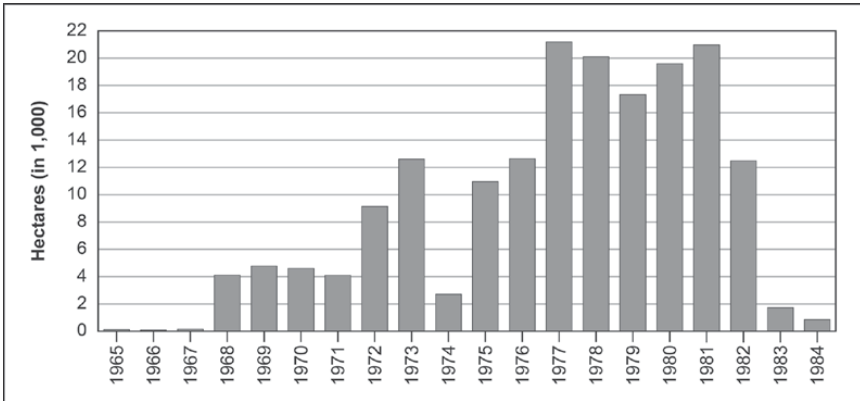
After the demise of empire, financial thinkers and practitioners soon discovered new ways of capitalizing on farming. By the mid-1960s attempts were made to reimagine agriculture as a genuine object of modern asset management. This manifested itself in the rise of institutional farmland investment thinking in the United States, and a first wave of institutional farmland investments in the United Kingdom in the 1960s. Although, in the United States, it would take until the farm crisis of the 1980s before finance could legitimately enter farming more directly, backed by finance-mathematical claims about how it could add value to an institutional investor’s portfolio, the flow of finance into farmland in the United Kingdom was born out of more practical considerations on the part of the institutional investment managers of the time. After all, the Crown, Church, aristocracy and gentry had put their monies into land and forestry for centuries, so why should they not do so as well?

## FROM INDIVIDUAL TO INSTITUTIONAL ASSET: THE RISE OF FARMLAND INVESTMENT THINKING IN THE UNITED STATES AND UNITED KINGDOM

The rise of modern forms of farmland investment thinking dates back to the United States of the 1960s. It evolved against the backdrop of increasing land consolidation (reaching a scale interesting to financial investors), such that average farm sizes “ballooned between 1910 and 1970, from 138 to 390 acres” (Axelrad 2014: 6; see also Weis 2007: 83), as well as the increasing influence that financial institutions had gained in agricultural lending and mortgages. The first attempts to make a case for farmland investments were made by a number of economists working at the land grant universities of the Midwest in the mid-1960s (Barry 1980; Kaplan 1985; Kost 1968). Based on these thoughts, Merrill Lynch and the Continental Bank of Illinois tried to set up a farmland fund in the late 1970s, which did not materialize because resistance from “an unusual alliance of government, Congressional, labor, farm, consumer and religious forces had denounced the plan as likely to lead to domination of agriculture by huge tax-exempt investors and to threaten the future of family farming” (*New York Times* 1977; see also Chapter 6). What instead took off without much resistance was institutional investment into timberland (Gunnore & Gellert 2011), as “[v]ertically integrated US timber companies, facing increasing market pressure, began to view their land holdings as deadweight on their balance sheets” (Fairbairn 2014: 788). Their lands were either bundled in real estate investment trusts (REITs) or managed on their behalf by a timberland investment management organization (TIMO). The full-blown entry of institutional investors into farmland was sparked one decade later by the great farming crisis that ensued in the 1980s, which left many owner-operated farms bankrupt and saw some formerly solely insurance companies, such as Prudential Travellers and John Hancock, take direct ownership of indebted farms. These and other institutional investors moved beyond timberland interests, with the TIMO serving as an important template for the newly emerging farmland investment management organizations (FIMOs) (Gunnore 2014; Fairbairn 2014). In the mid-1980s the most important players owned almost 3.5 million acres of farmland across the United States (Green 1987: 74). Today Hancock, now as Hancock Agricultural Investment Group, and Prudential, now as Prudential Agricultural Investments, are still important players in the agricultural investment industry.

Interestingly, by the early 1980s the United Kingdom had already experienced two decades of institutional farmland investing, a boom that ended when the one in the United States was about to start. Albeit less explicitly guided by the principles of modern portfolio management, this was a

significant moment of financial expansion. Although insurance companies already held by 1875 “between two-thirds and three-quarters of the long-term debts secured on landed estates’” (Northfield Committee Report; cited in Munton 1985: 157), and had supported the colonial enterprise, up to the 1960s these players had not invested in domestic farmland “because private owners were prepared to pay 45 per cent on borrowed capital with rental yields at only about 21 per cent” (*ibid.*: 158). After government policies such as the promotion of credit and mortgage expansion and support for owner-occupier farming had led to the increasing commodification of land rights between the First World War and the 1960s (Whatmore 1986), pension funds, insurance companies and property unit trusts overcame the traditional “city antipathy” (Munton 1977: 31) towards agriculture and started to acquire farmland in England and Scotland. Combined with some macroeconomic drivers (discussed below), the preceding “transformation of land rights into financial assets and the development of the land market as a specialised investment sector” (Whatmore 1986: 117) created the necessary conditions for finance to take direct ownership of farms. This takeover “formed the basis for some of the more dramatic political debates in Britain during the 1970s” (Duncan & Anderson 1978: 249), and sparked a series of critical investigations into the workings of the “property machine” (Ambrose & Colenutt 1975). Two observers at the time noted that “[i]nvestment by financial institutions had been particularly obvious during the 1971–4 boom and again from 1976” (Duncan & Anderson 1978: 249). Drawing on a comprehensive survey of 40 funds that had a stake in farming properties, Richard Munton (1985) – probably the leading scholar on the assetization of farmland in the United Kingdom at that time – notes that, between 1966 and 1982, finance-driven investments in farmland saw a significant expansion (see Figure 3.2). By the end of 1984 financial institutions owned 286,517 hectares of lease land and a further of 48,341 hectares with vacant possession. This was “equivalent to 1.9 per cent of the total agricultural area and 3 per cent of the area of crops and grass in Great Britain” (Munton 1985: 160). Although this seems small, the large-scale properties controlled by these institutions commanded a much larger share of total food output, and often owned prime land in the targeted regions. “Financial landowners” (Massey & Catalano 1978: 122) were also thought to have a significant impact on land price volatility, as they could acquire and dispose of relatively large land holdings “overnight” (Munton 1985; Whatmore 1986). In addition, the dramatic shift that financial institutions were credited with driving lay less in their land market share and more in their creation of new land tenure arrangements. Most of the institutions opted for a sale/lease back model, whereby a farmer sells his or her land and then leases it back from the financial institution, which wants to benefit from both capital gains and rental income. Others worked



**Figure 3.2** Annual net acquisitions of let agricultural land, 1965–1984: sample of *c.*40 financial institutions

*Source:* Redrawn from data provided in Munton (1985: 161).

with “manager-tenants” (Munton 1977: 35) through partnership agreements or took land “in hand” and managed it through a subsidiary farming company (Whatmore 1986: 119). Suffice it to say, we will encounter the former model again later, as it is one of the preferred models in the United States, the main investment destination of financial flows into farming today, while the latter two models have been reborn in some of the operational strategies we encounter in Aotearoa New Zealand and Australia.

Surprisingly, the drivers of the 1970s wave of finance-gone-farming in the United Kingdom were similar to those that would take precedence almost 40 years later: a fear of rising levels of inflation; ever-growing liabilities derived from the savings boom during this period; and the poor performance of traditional long-term investments, such as government bonds. Combined with government restrictions on overseas investments, and strong government support for the agricultural sector, this led to a rush on rural farming properties (Whatmore 1986: 118). Even though urban land acquisitions far outstripped the acquisitions of rural land, the latter were considered particularly controversial, with the then minister of agriculture admitting publicly that he was “scared as hell” by what was going on (cited in Duncan & Anderson 1978: 251). This even led to the establishment of a commission, the so-called Northfield Commission, which presented its rather futile attempt (Leftwich 2010 [1983]: 212) to establish patterns of institutional land ownership in the United Kingdom in a report in 1979.

In retrospect, the boom in farmland investments in the United Kingdom would be over in less than two decades. When inflation declined, agricultural futures looked increasingly bleak, UK tenant laws proved to be too restrictive, restrictions on overseas investments were lifted and other asset

classes looked more promising in the early 1980s, so fund managers started to place their capital elsewhere. As we will see in [Chapter 6](#), back then the same rule of investment applied as today: “Investment in farmland was a matter of comparative returns and the return from agricultural property would be continuously compared with returns from other assets” (Munton 1985: 159). Suddenly the city antipathy towards farmland was back. It would last until the late 2000s. Nevertheless, even though the boom in farmland investments in the United Kingdom seems short-lived, this relatively early financial economization of farmland formed an important antidote to the contemporary finance-driven land rush, and is still remembered by some industry veterans as a “first attempt”. It led Sarah Whatmore (1986: 113) to a conclusion that reads like an excerpt from a recent paper in the *Journal of Peasant Studies* (one of the leading outlets for “land grab debates”) but is backed up by research that is rarely discussed in these circles: “The social and economic relations of modern agricultural land ownership have thus become thoroughly enmeshed in the sphere of finance or banking capital in which fictitious capital circulates.”

## FINANCE FROM FARMING

“Finance” is often positioned as antithetical to farming or other domains of the real economy, as if it had developed a life of its own completely delinked from it. Modern finance, with its high-speed mode of operation and lust for disruption, seems to be the complete opposite of the world of agriculture, which is often portrayed as conservative, slow-paced and unpretentious. Often, modern finance is also presented as a child of late, deregulated capitalism, a historical formation in which agriculture in many places (at least, in the Global North) seems to occupy only a marginal social and economic position. Indeed, as capitalism has advanced, the economic role of agriculture in many countries of the Global North, reflected by its changing share in GDP and the total labour force, has declined (see Roser [n.d.](#) for a current incarnation of this argument). Yet such binary positioning of finance and farming makes us forget the crucial role that agriculture has played in the development of modern finance and some of its practices. Indeed, these roots even transcend the age of “modern” capitalism and the age of “global finance” often associated with it, and have a pre-capitalist history:

It would seem that almost all elements of financial apparatus that we have come to associate with capitalism – central banks, bond markets, short selling, brokerage houses, speculative bubbles, securitization, annuities – came into being not only before the

science of economics (which is perhaps not too surprising) but also before the rise of factories, and wage labour itself.

(Graeber 2011: 345)

A few snapshots may illustrate how modern finance evolved via a domain that is often placed far away from it.

- As already outlined in the Introduction, the notion of “asset” can be historically traced back to the idea of an estate that produces enough output to satisfy one’s obligations (e.g. debts, legacies). It soon passed into a general sense of “property” that can be converted to ready cash as early as the 1580s, way before the rise of modern capitalism. When bearing this in mind, it becomes clear why an asset in the craft of modern portfolio management is not only something of value to someone but also something that allows potential obligations to others to be satisfied.
- The efficiency-seeking and highly calculative approach of management that private-equity-minded financiers like to instil into acquired companies in and beyond agriculture was first developed on slave plantations in the Caribbean and the antebellum South – prior to the rise of “scientific” management principles in the factories of the American Northeast. Benchmarking productivity levels across different farm units was a crucial part of this calculative regime (Rosenthal 2018). Ever since then benchmarking has become a crucial tool of firms and investors to assess the performance of subsidiaries, branches or portfolio companies.
- Slave plantations in the Caribbean and the American South were also among the first sites where separation between the management and the distant ownership of an asset – a very important model of operation in contemporary capital placements in agriculture – was first established. For some historians, separation of the ownership and the management of an asset represented a “landmark in the history of capitalism” (Caitlin Rosenthal; cited in Johnston 2013).
- The development of future contracts and options, now widely used financial tools, as well as the development of early stock exchanges, such as the Amsterdam Stock Exchange in 1602 and the Chicago Board of Trade in 1865, can be historically linked to trade in agriculture (Clapp 2011; Bernstein 1998). As the historian William Cronon (1992) has shown, hedging has firm agricultural roots.
- The discounted cash flow (DCF) model, now a widespread tool for asset valuation in the financial industry, was first developed in forestry. Estimating the current value of an asset by estimating its future income-generating capacity, “discounted by a certain factor based on length of time and, if applicable, the uncertainty of their occurrence and size”

(Muniesa *et al.* 2017: 37), the DCF model allows one to establish how much one should pay for an asset at the point of sale, and allows one to structure investment among “several scenarios involving different types of ... [assets]” (*ibid.*: 43).

- Even the idea of “capital value”, which underlies the notion of “asset” as a property whose value is underpinned by its future income earning capacity, has firm agrarian roots. Economist Irving Fisher was instrumental in shifting the prevalent thought of the time. For him, “[t]he orchard produces the apples; but the value of the apples produces the value of the orchard ... We see, then, that present capital wealth produces future income-*services*, but that future income-*value* produces present capital-*value*” (Fisher 1907: 13–14, emphasis in original).

But Fisher was not the first to underline that agricultural land is a very special “asset” that possesses both a capital and an income-generating value, from which financial gains can be derived:

Years before he wrecked the French economy with his scheme to colonize and monetize the Mississippi territories, notorious gambler and financier John Law captured the allure of financialized land in his 1705 pitch for a land mint, where he contended that “land conveyed by paper” loses nothing of its natural qualities, but rather, because it “serves the uses of money and produces at the same time,” it “will receive an additional value from its being applied to the uses of money.” ... The obvious, “real” productivity of land makes the productivity of notes (or securities) based on it equally obvious and real. (Yates 2018)

## CONCLUSION

This chapter has shown that agriculture as socially “produced nature” in many corners of the world cannot be thought of without taking the transformative, and often state-backed, powers of globalized financial relations into account. The production of settler-colonial agrarian landscapes in contemporary land rush frontiers such as Aotearoa New Zealand cannot be discussed without considering the far-flung financial networks that linked “the city” (metropolises such as London) and “the countryside”. If space permitted it, similar accounts could be provided for places such as the United States, Australia, Brazil, Canada, Uruguay or South Africa, where “within three generations, during the nineteenth century, some of the best lands



[were] secured, surveyed, apportioned, registered and drawn into finance capitalism” (Weaver 2003: 89). Russian economist Alexander Chayanov came to a similar conclusion as early as 1925 when comparing different regional pathways of capitalist transitions in agriculture:

If to this we add in the most developed capitalist countries, such as those in North America ... widely developed mortgage credit, the financing of farm circulating capital, and the dominant part played by capital invested in transport, elevator, irrigation and other undertakings, then we have before us new ways in which capitalism penetrates agriculture. [...] They convert agriculture, despite the evident scarred and independent nature of the small commodity producers, into an economic system concentrated in a series of the largest undertakings and, through them, entering the sphere controlled by the most advanced forms of finance capitalism. (Chayanov 1966 [1925]: 262)

The places where finance helped transform nature into landed property, people into (enslaved) labouring subjects, and animals into livestock were often “global countrysides” (Woods 2007) from the very onset of colonial encounters. In these places, finance had its own ways of extracting surplus from farming. Although stock-listed or shareholder-based private enterprises were crucial drivers of colonization, generating both dividends and rent for shareholders (e.g. by leasing it out to settlers), the provision of credit was an equally crucial element in the “terraforming” of the planet. Although, in the age of nation states, credit was often provided by national governments, even these would often borrow from international markets or financial institutions to provide agriculture credit. The owner-occupation of farms first established during colonial times, and later flourishing in many state-backed credit agricultural economies across the globe, veiled the fact that such credit relations – at the very core – would often qualify as rent relations (Whatmore 1986) as much as contemporary institutional investments in farming (see also Chapter 9), even though the mode of rent production from agriculture has profoundly changed. As we shall see later, paradoxically, the ongoing expansion of credit in a country such as Aotearoa New Zealand over the past 130 years or so not only transformed agricultural landscapes but also created an opportunity for new forms of capital to enter farming, as a result of increasing debt levels among local farmers. In contrast, in Tanzania it has been precisely the absence of credit for smallholder farmers – a condition with firm roots in the colonial era – that has justified the search for new forms of financing agricultural transformation.



This chapter has also shown that “modern finance” has, in part, firm agricultural roots. Many of the practices and organizational forms now taken for granted in financial markets have origins in agricultural production and trade. This improbable history needs to be acknowledged. My detailed historical account of the finance–farming nexus does not deny that something is new about the contemporary finance-driven land rush, however. The unparalleled financial power of institutional investors such as pension and insurance companies, the more general acceptance of financial practices and rationalities, the emergence of an unseen globality of finance because of regulatory convergence, the “massification of finance” (French *et al.* 2011: 801) in many countries of the Global North, the proliferation of investment standards, the crises of established asset classes such as stocks and bonds and the increased demand for food, agrofuels and carbon sinks are all new developments shaping the context for agricultural investments. Financiers increasingly extract value – or, better, rents – by acquiring direct ownership of farmland and control of the production process in order to transform an agricultural asset into a financial one.

To be fair, this book is not the first one to note this shift. As early as 1978, during the rise of financial landowners in the United Kingdom, Doreen Massey and Alejandrina Catalano (1978: 161) concluded that “landownership is undergoing a further change”, and agricultural production was becoming “yet more ‘adapted’ to the capitalist mode of production, and ... [was] doing so under the direction of banking capital”. Contrary to the radical political economy analyses of the time, however, this book will show that assetization is not as straightforward as imagined and promised by those tasked with it. Such an insight can be generated only when finance, and the people who work on it, are followed on their journey into farming, rather than letting deductive assumptions be made about them from above. Data could provide some orientation here, but the journey quickly ends in muddy waters, as the next chapter shows.

## CHAPTER 4

# NUMBERS: WHAT WE KNOW (AND DO NOT KNOW) ABOUT FINANCE-GONE-FARMING

In 2013 I travelled to a large farm comprising several thousand hectares in northern Tanzania that was part of an agriculturally themed fund set up by a leading European bank. After obtaining a local research permit, asking my way around, introducing myself to the relevant authorities and making an appointment with the farm management, my Tanzanian colleague, Mangasini Katundu, and I finally managed to speak to the farm manager and minority shareholder. We had a pleasant chat. Some weeks later I met the asset managers entrusted with the bank's fund management at an investment conference in south-east Asia. Personal contacts helped me forge a link with one senior manager, with whom an interview had been planned after the conference. At the event itself I accidentally bumped into another senior manager of the firm. We also had a pleasant chat, until I mentioned that I had visited the firm's Tanzanian asset a few weeks beforehand. He was not pleased, telling me that I should have asked the company head office for permission. It dawned on me that I had been rather naïve. From previous research projects in Ghana and Kenya, I had become accustomed to knocking at farm gates to learn more about what went on there (Ouma 2015a). Getting access to and producing knowledge about farms backed by institutional investors was a different story, however. Whereas, in the past, you could normally carry out research on farms (or agribusiness companies) if the local managers approved, you now needed to get clearance from head offices in London, Singapore and the like. This was not without reason, as the general partners entrusted with managing the farms on behalf of limited partners could be accused of creating undue risk. After all, "financial instruments are ... legal contracts" (Knorr-Cetina 2010: 334), so when a third party enters a farm without the consent of the GP/asset manager, one is in fact interfering with this legal relationship by introducing an element that may put value at risk. With all the controversy surrounding land grabbing in Africa, and the associated risks to reputation,

it turned out to be rather difficult to gain access to some of the institutional landscapes in Tanzania and acquire knowledge about them. Other scenarios may involve more mundane reasons, as fund managers are often first-timers still in the process of raising capital for their ventures. Why should they take the risk of letting you in?

If we wanted to trace the operations of the very same fund manager in Aotearoa New Zealand (the firm also has farms there), it would, fortunately, be much easier to get access to on-the-ground information. Although we may still have to ask for permission from the head office, there is some public information available on the land deals in which the manager has been involved, including the locations of such farms. All this data is provided by Aotearoa New Zealand's Overseas Investment Office (OIO), the mandated state agency, on its regularly updated home page. Across the Tasman Sea, we might be even luckier. The said asset management firm has recently launched a publicly listed broadacre farm investment product in Australia, which legally requires – unlike the private equity investments in Tanzania or Aotearoa New Zealand – the publication of annual performance reports and other kinds of informational material\*. Although Australia, like many other countries, does not provide detailed information about investments on a state website, the government launched a comprehensive foreign land registry in 2016, providing the grounds for claims about dynamics and the size of foreign land ownership. Who would have thought that, in 2017, 2 per cent of all foreign-owned agricultural land – more than 1 million hectares – would be owned by investors from Jersey, the well-known Channel Island tax haven (Australian Taxation Office 2017)?

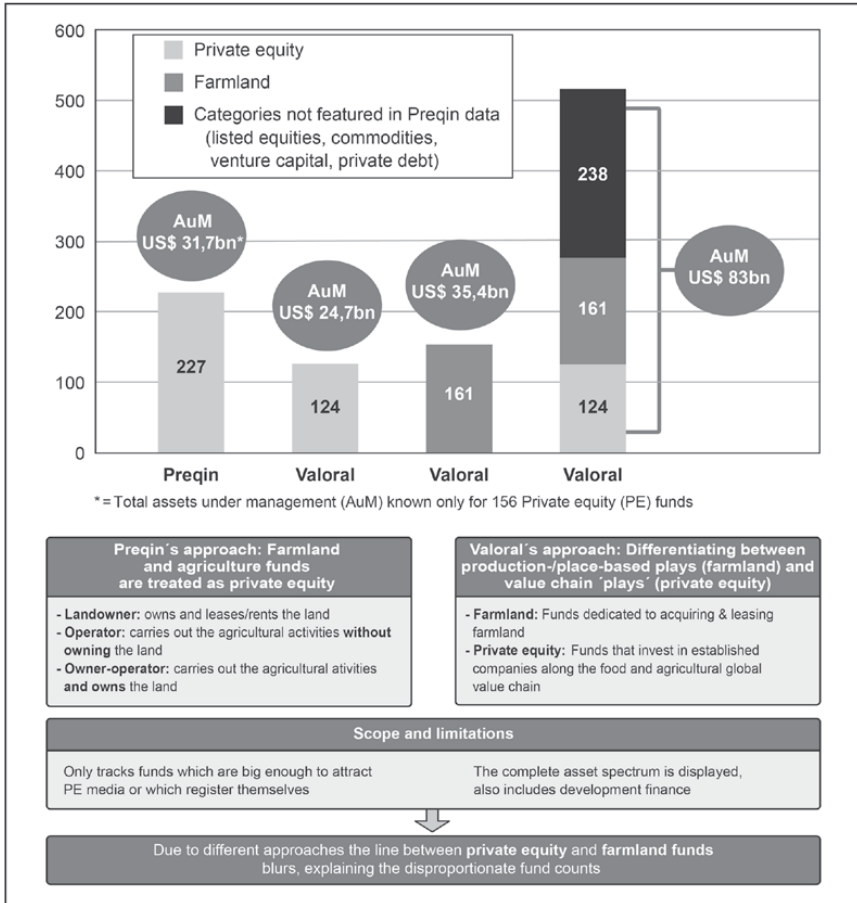
The examples mentioned here point to some larger issues. What do – and, equally importantly, *can* – we know about institutional landscapes and the global investment chains through which they emerge? Where is the money going and through which kinds of channels, and to what extent can we follow it? What sources of data can be harnessed for these efforts? Might a daring knock at the farm (or company) gate still work in some places, or would we definitely have to resort to an even more daring knock at some posh upmarket address in one of the world's financial centres? As will be shown in this chapter, the challenge to produce knowledge about the genesis, socialities, geographies and dynamics of institutional landscapes, and the underlying ownership issues, is not as such a new story. The Northfield Commission (mentioned in [Chapter 3](#)), established in the United Kingdom in the late 1970s to shed light on the state of financial land ownership, admitted somewhat helplessly in its 1977 report that it “was hampered by the lack of detailed information on many topics” (cited in Leftwich 2010 [1983]: 212). It encountered an age-old problem, which applies in many places:

All attempts to obtain a detailed and accurate picture of land ownership and usage in Britain have been met with powerful resistance from land-owning groups who do not seem to believe the facts of ownership should be open and public information ... Such a lack of information, and the associated secrecy about ownership and distribution of key national resources, raises questions about how democratic a society is and how democratic it can be.

(Northfield Commission; cited in Leftwich 2010 [1983]: 212)

## THE BASIC DATA PROBLEM

In the case of institutional landscapes, the opacity of land markets meets the opacity of global finance. Contemporary agricultural investments are often channelled through far-flung chains of delegation cross-cutting several jurisdictions, including ones of secrecy; are protected by non-disclosure agreements or hidden from the public because the channels used (for example, private equity structures) are not listed publicly and are therefore exempt from legal requirements, such as annual public reports; or cannot be easily separated from ordinary (so-called “strategic”) agribusiness investments. Furthermore, in many countries of the Global South there is an insufficient level of reporting, and even institutions of the same state may report different figures due to vested interests or a lack of coordination (Cotula 2013). Moreover, asset managers or companies looking for future investors may inflate numbers, making their investments larger than they actually are. The popular data bank Land Matrix ([www.landmatrix.org](http://www.landmatrix.org)), a leading source on global farmland investments, does not adequately represent agricultural investments in broader terms and is biased towards the Global South, even though much of the agri-finance buzz is found in countries in the Global North. Sources that might shed some light on these trends, such as investment conferences, specialist industry intelligence or expert opinions, are obstructed by certain entry barriers, which need to be grappled with by any research into finance. At the same time, the means of gaining information on the state of the world have radically changed when compared to the late 1970s. Besides drawing on primary fieldwork, this book can, fortunately, draw on the work of numerous colleagues, NGOs such as Grain and FIAN, and several multi-stakeholder initiatives, such as [farmlandgrab.org](http://farmlandgrab.org), in order to assemble a more comprehensive picture of the global land rush and its finance-driven variant. Moreover, I participated in four major agri-investment conferences in Europe, Asia and Australia and had access to three leading sources of proprietary market intelligence.



**Figure 4.1** Comparison of two leading sources of agri-finance market intelligence  
*Source:* Based on data provided by Valoral Advisors (2018a) and Preqin (2018a).

Nonetheless, even when broader access to different kinds of sources is available, the accounts we can derive may expose considerable differences. For instance, the leading agri-finance intelligence service providers – Preqin, Agri-Investor and Valoral Advisors – provide significantly different numbers on the rise in finance-driven agricultural investments over the past 15 years, owing to differences regarding data availability, historical depth and investment focus. Figure 4.1 highlights these differences for the two most detailed databases. The agricultural investment space may radically change if we include timber, water rights or even aquaculture in our frame of analysis. Differences may also be attributed to divergences in classification: is private equity used as a generic category for investments in land-based production, as well as for more classic “plays” in pre- and post-production (as Preqin

Spectrum of asset strategies across the global food and agriculture value chain

| PUBLIC STRATEGIES |   |  | PRIVATE STRATEGIES  |   |   |  |   |  |
|-------------------|---|--|---|---|---|--|---|--|
| Listed equities   | Fixed income  | Commodities  | Liquid alternatives   |   | Illiquid alternatives & real assets                               |  |   |  |
| Key themes        |   |  | Hedge funds   | Private debt  | Farmland  | Forestry   | Private equity  | Venture Capital  |
|                   | <ul style="list-style-type: none"> <li>• Developed markets</li> <li>• Emerging markets</li> </ul> | <ul style="list-style-type: none"> <li>• Investment grade</li> <li>• High yield</li> </ul> | <ul style="list-style-type: none"> <li>• Agricultural</li> <li>• Soft</li> <li>• Livestock</li> <li>• Biofuels</li> </ul> | <ul style="list-style-type: none"> <li>• Equities</li> <li>• Commodities</li> </ul> | <ul style="list-style-type: none"> <li>• Trade finance</li> </ul> | <ul style="list-style-type: none"> <li>• Row crops</li> <li>• Permanent crops</li> <li>• Cattle</li> </ul> | <ul style="list-style-type: none"> <li>• Wood</li> <li>• Pulp</li> <li>• Biomass</li> </ul> | <ul style="list-style-type: none"> <li>• Growth capital</li> </ul> |

**Figure 4.2** The many entry points for finance in global food and agriculture asset classes

Source: Modified after Valoral Advisors (2018b: 13) (reprinted with permission).

does), or do we treat it as a separate category from farmland (as Valoral Advisors do)? Is farmland/agriculture a fund’s primary strategy, or only one among many? Finally, do the statistics in use reflect, or can they capture, complex ownership patterns among agricultural ventures? On the latter question, one brief example should illustrate the underlying problem. The Kenyan agricultural cultivation and manufacturing company Kakuzi Ltd is listed on both the Nairobi and the London Stock Exchanges. Its majority shareholder is quoted on the AIM market of the London Stock Exchange and incorporated and domiciled in England and Wales, and has several asset management and pension funds as co-owners, including Alcatel-Lucent Bell Pensionfonds, which owns a 13 per cent stake.<sup>1</sup>

In what follows, I will largely stick to the data from Valoral Advisors, but complement and contrast this with other data when applicable. Their database is the most comprehensive in the marketplace, going back to the mid-2000s, when agri-finance was mainly about listed equities, commodities and a few farmland vehicles, with very little involvement by institutional investors. This also helps decentre the existing focus on farmland, showing that finance has many entry points for penetrating the world of farming. As one asset manager interviewed said: “Why make all the fuss about farmland? The real money is to be made elsewhere” (interview, 2014).

The agricultural investment space constituted by this extended perspective includes both public and private strategies across a range of crops, sectors and geographies, with different risk, return and liquidity profiles (see Figure 4.2). In the world of investment, “liquidity” describes the degree to which an asset can be converted into ready cash at any given time. Certain assets, such as farmland, infrastructure and private equity stakes in companies, lock in capital for a relatively long time, making it difficult to withdraw

1. See [www.camellia.plc.uk/investors](http://www.camellia.plc.uk/investors) (accessed 12 December 2019).

for investors at any given time. Thus, they are called “illiquid” assets. Yet liquidity is not a natural quality but one that may change depending on social, technological and institutional arrangements (Orléan 2014). There are other, more macroeconomic takes on liquidity that often pop up in monetary policy debates (for example, a liquid market is one in which a lot of money flows around; the monetary policies embraced in the wake of the global financial crisis in 2007/8 in the United States and Europe were all about ensuring the liquidity of markets).

MACRO-TRENDS

Although they are not exclusively a thing of the recent past (see Chapter 3), the world has seen a sharp increase in agricultural investments in both “mature” and “emerging” markets since at least 2005, the earliest year for which such data is available. According to the broader view on the food and agriculture asset class espoused by Figure 4.3, the number of agricultural funds rose from 45 (with 23 farmland-focused), to 523 by the second quarter of 2018 (with 161 of these funds having direct exposure to farmland and 124 being more classic private equity plays), plus another 35 under formation. According to Valoral Advisors, by that time some US\$83 billion had been invested in food and agricultural funds or other types of institutional platforms. Although a high number, this was only about half the size of all global timber investments at that time, and a tiny fraction of the US\$533 billion invested in natural

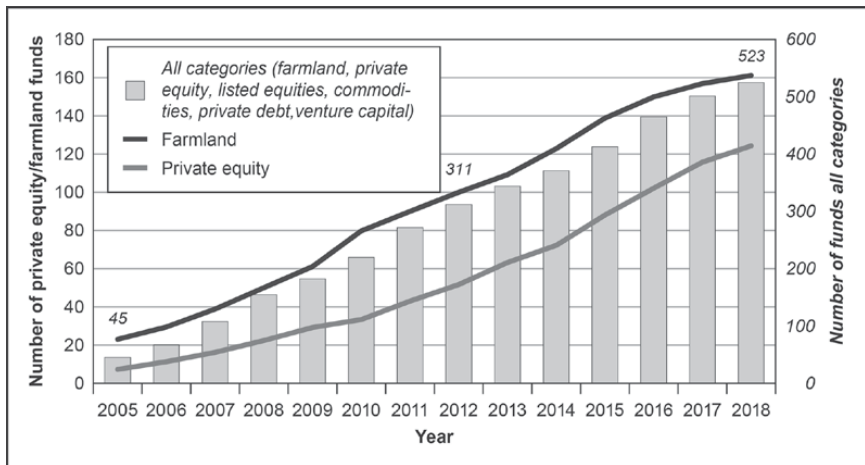
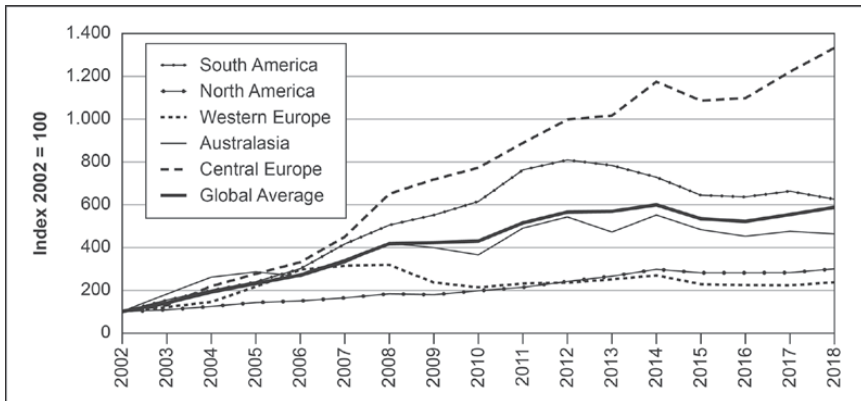


Figure 4.3 Evolution of investment funds specialized in food and agricultural assets, 2005–2018

Source: Based on data provided by Valoral Advisors (2018a).



**Figure 4.4** Development of the Global Farmland Index, 2002–2015

*Source:* Redrawn from Savills (2019: 3) (reprinted with permission).

resources in 2017 (Preqin 2018a: 56). Together, both farmland/agriculture and timberland represented 2.2 per cent of all alternative assets (such as private equity, hedge funds, real estate, infrastructure and commodity funds) under management in 2016, or 0.3 per cent of all global assets (= US\$69 trillion) under management (Valoral Advisors 2018b: 8). Consequently, we have seen a rising demand for farmland in major crop-producing regions such as North America, South America, Australia, Aotearoa New Zealand, different parts of Europe and Russia (Lapérouse & Vitón 2017). This rising interest in farming by financial investors is also well reflected in the evolution of the Global Farmland Index, launched by the UK real estate firm Savills in 2012 (see Figure 4.4).

This shows a significant upwards movement since 2002, even though several key regions have experienced (commodity) market-induced volatilities or even declines in values since 2012. The green gold rush also is reflected in the performance of the US-focused NCREIF (National Council of Real Estate Investment Fiduciaries) Farmland Income Index, one of the few sources documenting institutional farmland returns. This index increased dramatically from US\$1.1 billion to US\$8.1 billion (= values of property) between 2008 and 2017 (Conrad 2018).

These trends have translated into rising land prices on the ground. In one of the frontier states of domestic institutional investments in farming, Iowa,<sup>2</sup> per hectare prices rose from slightly over US\$2,000 in 1958 (inflation-adjusted, in 2015 US dollars) to more than US\$8,500 in 2013 (Zhang *et al.* 2018). In the period from 2000 to 2012 alone farmland prices in Iowa

2. Note that in Iowa, as in some other US states, foreign land ownership is restricted.



quadrupled (Luyt *et al.* 2013: 19). Although prices dropped again between 2013 and 2017, because of a commodity slump, this increase was significant.<sup>3</sup> More is yet to come. With an ageing farming population, the United States “is then years away from the largest land transfer in history”, with more than “600 million of the 900 million acres currently in production ... expected to change hands in the next couple of decades” (Carolan 2018: 55), much of it said to be passing into the hands of financial investors (Keiffer 2017). Similar structural shifts are reported from other frontier regions of the finance-driven land rush, such as Aotearoa New Zealand and Australia. Even in the land-scarce and asset-pricey United Kingdom, competition between wealthy individuals and pension funds for farmland led to a doubling of land prices from 2010 to 2015, outstripping the price increases on the London property market since the financial crisis (Meads 2015). At the same time, it should be said that rising land prices and structural change in some frontiers, such as Tanzania and Zambia, are more driven by domestic, non-corporate forces and are related to the increasing entry of urban and educated elites in farming (Wineman & Jayne 2018).<sup>4</sup>

## THE FLESH-AND-BLOOD INSTITUTIONS BEHIND FINANCE-GONE-FARMING

When the rising financial interest in farmland first made headlines in 2008, it was often presented as if Wall Street bankers themselves had moved out to “grab” some foreign land (Badgley 2014; Funk 2010). Yet abstract and disembodied narratives about Wall-Street-gone-farming obscure the internal heterogeneity of “finance capital” and the culturally diverse flesh-and-blood institutions that constitute the money management industry at large. To gain a better understanding of the concrete dynamics, investment chains and practical operations through which institutional landscapes emerge, we need to come to terms with the question of which actors are investing in the farming sector, into which kinds of socio-institutional relations they are embedded, which kinds of investment mechanisms they employ and where they eventually place their money.

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3. By 2014 non-operator property owners, such as trusts, corporations, partnerships and individuals, owned 31 per cent of all agricultural land in the United States, with corporations accounting for 9 per cent, or 31.5 million acres (Bigelow *et al.* 2016). The Agricultural Economics and Land Ownership Survey 1988 found that, back then, only 4 per cent was owned by corporations and 85 per cent by individuals and families, albeit with no information reported on trusts (Bureau of the Census 1993).

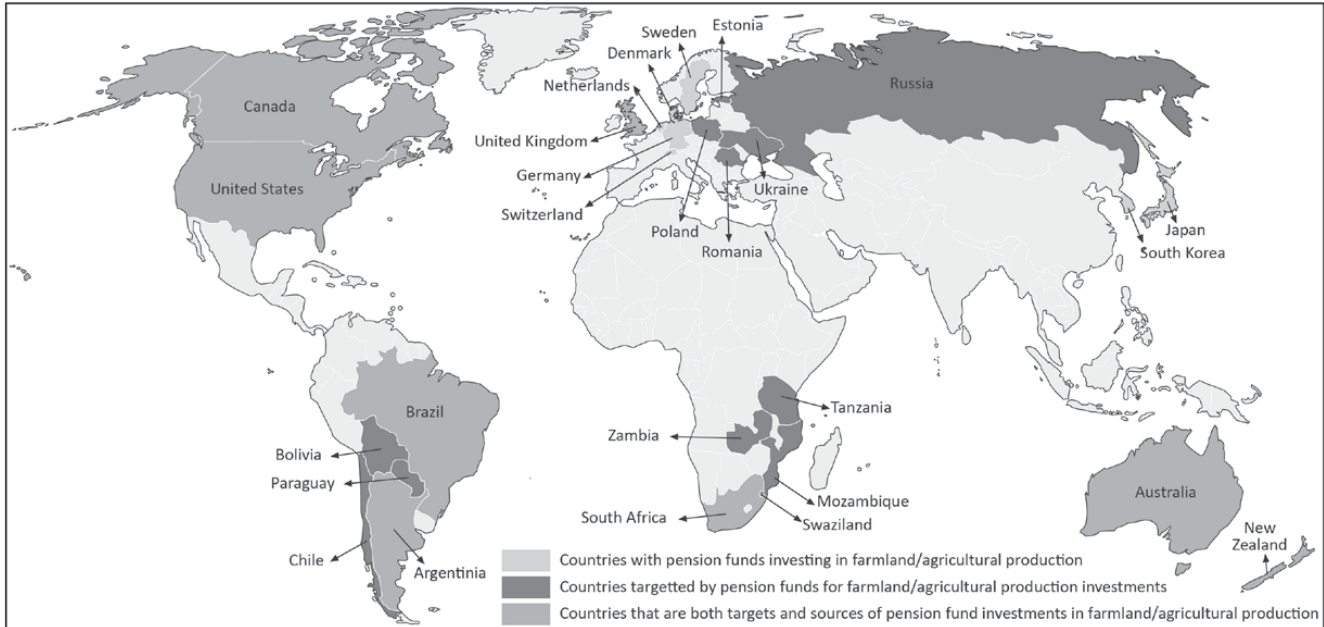
4. This also suggests that a sole focus on foreign land acquisition when it comes to engaging with contemporary processes of rural change, at least in the Global South, does not do justice to the often “interlocking nature of land alienation” (Bluwstein *et al.* 2018: 824).

When it comes to agricultural capital placements, pension funds and insurance companies are undoubtedly the most important players. By mid-2018 at least 76 public and corporate pension funds had invested an estimated US\$14.83 billion in farmland and agricultural ventures,<sup>5</sup> managed either in-house or by external fund managers (Grain 2018). Whereas most of these funds are located in countries in the Western Global North, such as the United States, the United Kingdom, Germany, Sweden and Denmark (see Figure 4.5), we have recently also seen South African and Japanese pension funds enter the game. Pension funds have also gained exposure to the farming domain through other investment themes, including, more recently, “digital agriculture” (Finistere Ventures 2018). Exact data on insurance companies is less easy to come by, but some of the leading global players, such as Allianz and Munich Re, have ventured into both timberland and farmland.

In addition, investment banks, university endowments, family offices, sovereign wealth funds and high-net-worth individuals have come to populate the “AG space”. Many of these players have different “risk appetites” and investment philosophies from pension funds and insurance companies. Yet what unites them is the use of a variety of investment instruments, such as private equity fund structures and holding/private investment companies, to channel capital into agriculture. Unlike a fund with a definite lifetime, the latter are private, immortal entities (Ducastel & Anseeuw 2017) in which investors can buy private shares, offering more liquidity than a closed-end fund. Several institutional investors have shown interest in this more direct model in past years. These deals have been increasingly organized as co-investments or club deals, whereby several investors, acting as LPs, join forces. This structure may offer less diversification than a fund, but has a clear advantage: “No fees, no limited time frame and high transparency on the direct investments it makes” (Burwood-Taylor 2014a). Besides guaranteeing a more “efficient deployment of capital” (Valoral Advisors 2018b: 41) it also allows for greater control of the asset itself. In light of a more general spirit of “disintermediation” (Monk 2012) sweeping through the post-global financial crisis world of money management, the Teachers Insurance and Annuity Association (TIAA), the leading retirement provider in the United States for people working in the academic, medical, cultural, governmental and research fields, and the largest global farmland investor today, launched two agricultural funds, in 2012 and 2014. Managed by its subsidiary, Westchester Global Investment Management, these were also opened to other institutional investors, turning the pension giant itself into an asset manager (or so-called general partner).

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5. By the end of 2018 the largest 22 pension markets in the world managed assets worth a whopping US\$40,173 billion (Thinking Ahead Institute 2019).



**Figure 4.5** The geography of agri-investment-focused pension funds

*Source:* Modified after Grain (2018: 7).

Regardless of whether a fund structure is adopted or not, for taxation purposes, and when legally applicable, the players involved often adopt a limited partnership model known from other private equity domains to structure the relationship between investors, asset managers and the farms or agricultural companies themselves. As part of these deals, asset managers as GPs would also often invest their own money in order to align their interests with those of the LPs (see also [Chapter 7](#)). All these players may also invest in funds of funds, which are specialized institutional investment structures through which funds may invest in other funds, such as private equity or hedge funds, rather than in individual companies. [Table 4.1](#) lists the largest agricultural funds in the market in late 2018.

Another trend in the institutional domain has been that large, land-owning agrobusiness companies or trading houses, such as Archer Daniels Midland, Bunge, Cargill and Louis Dreyfus (the so-called ABCD companies), have set up private equity subsidiaries. The most prominent of these is probably the commodity-trading giant Cargill's Black River Asset Management LLC (Salerno [2014](#)), from which three fully fledged agricultural private equity funds emerged in 2016. The rationale here is to capitalize on existing in-house information and access to land, as well as further strengthening to gain control of the whole agri-food chain. More recently much of the dynamic in the trading house domain has been fuelled from the East, with investments, particularly in South America, coming from large Chinese, Japanese or Singaporean trading houses (Valoral Advisors [2018b](#)).

State-backed players are also in the agri-food game. Sovereign wealth funds, such as Singapore's Temasek or the Chinese Investment Corporation, increasingly target investments along the food chain, moving beyond their initial focus on primary production in order to vertically integrate their operations for both food security and financial reasons. They are joined by national and multilateral development finance institutions, providing risk insurance and/or debt and equity. For instance, out of the 54 agri-focused private equity funds targeting African agriculture in 2013, 27 were backed by development finance institutions (Silici & Locke [2013](#): 9). The latter increasingly see themselves as providers of "patient capital" (Palmer [2010](#)) to private sector players in regions where infrastructural, political or other types of risk may act as barriers to (institutional) capital (Brooks [2016](#)). One of the main players here has been the Commonwealth Development Corporation, which we encountered in the previous chapter. It underwent a controversial financial revamping in 2004, when it spun out an emerging markets private equity fund manager (Actis Capital), and now increasingly finances private equity ventures under the "smart aid" agenda of the UK Department of International Development (its sole shareholder) (Mawdsley [2018](#)). In development finance, the fund of funds structure has become particularly

**Table 4.1** Largest closed funds in the market, 2018

| <i>Fund</i>  | <i>Asset manager</i>                            | <i>Head offices</i> | <i>Fund size (mn)</i> | <i>Fund close date</i> | <i>Geographic focus</i>      |
|--|---|---------------------|-----------------------|------------------------|------------------------------|
| <b>TIAA-CREF Global Agriculture II</b>               | TIAA Asset Management (Nuveen)                  | US                  | US\$3,000             | Jul. 15                | Global                       |
| <b>TIAA-CREF Global Agriculture</b>                  | TIAA Asset Management (Nuveen)                  | US                  | US\$2,000             | May 12                 | Global                       |
| <b>NCH Agribusiness Partners</b>                     | NCH Capital                                     | US                  | US\$1,205             | Dec. 07                | Central and east Europe      |
| <b>Paine &amp; Partners Capital Fund III</b>         | Paine Schwartz Partners                         | US                  | US\$1,204             | Apr. 08                | Global                       |
| <b>Teays River Investments</b>                       | Teays River Investments                         | US                  | US\$1,175             | Dec. 10                | United States                |
| <b>Altima One World Agriculture Development Fund</b> | Altima Partners                                 | UK                  | €756                  | Nov. 08                | Global                       |
| <b>Mahaseel Agricultural Investment Fund</b>         | Kenana Agriculture                              | Sudan               | US\$1,000             | Nov. 12                | Middle East and north Africa |
| <b>Paine Schwartz Food Chain Fund IV</b>             | Paine Schwartz Partners                         | US                  | US\$893               | Dec. 14                | Global                       |
| <b>AMERRA Agri Fund III</b>                          | AMERRA  | US                  | US\$820               | Sep. 16                | Americas                     |
| <b>Macquarie Pastoral Fund</b>                       | Macquarie Infrastructure and Real Assets (MIRA) | UK                  | A\$700                | Apr. 11                | Australia                    |

*Notes:* Lists funds mentioned by Preqin (2018b) with a primary farmland/agriculture strategy. At the time of writing (Nov. 2018), one firm was raising capital for a considerably large fund: Paine Schwartz Food Chain Fund V, with a target size of US\$ 1.2 billion and with its main geographic focus on the United States, managed by Paine Schwartz Partners. One fund, Laguna Bay's Agri Fund I, had a target size of A\$750 million (and would have made it into the ranking), but closed in 2016 with only A\$313 million raised.

*Source:* Own design, with data provided by Preqin (2018a).

popular. For instance, FOCIR, Mexico's investment fund for the rural sector, announced in 2017 that it was seeking to back agtech-focused firms through a fund of funds managed by independent asset managers (Favas 2017a).

The world of so-called sophisticated investors, defined by their professional knowledge of financial markets, can be contrasted with that of retail investors. A product of the massification of financial investments among middle classes over the last decades in many countries around the world (French *et al.* 2011), these “mom and pop” investors may join the food and farmland race on a number of tracks. First, they might gain exposure to the “AG space” through publicly listed mutual funds. Mutual funds are specialized, sector-focused funds that usually invest in stock-listed companies. As part of a more generic capitalization of food industries, agriculture-oriented mutual funds often place their capital along the full agricultural value chain. In such cases, the goal is to maximize “efficiency at every stage of the food supply chain – from farm to fork” (DWS Investments 2010: 7). Even though many of these funds also invest in the pre- and post-production nodes of the agricultural value chain, they often place considerable sums into companies that directly depend on farmland. For instance, out of the US\$3.4 billion invested into Deutsche Bank's DWS Investments' agriculture-themed mutual funds in 2009/10, 8.2 per cent were directly placed into companies that cultivated land or acquired farmland on a large scale (Herre 2010). One alternative is the acquisition of shares in listed agribusiness companies, which nowadays may also be featured in agri-focused exchange-traded funds.<sup>6</sup> These are funds investing in several companies involved in agricultural or livestock production. Some of the single-listed agricultural companies, such as Sweden-listed Black Earth Farming, operating in eastern Europe, or the broadacre farming investment product mentioned earlier, have been established solely to capitalize on the rising interest in farmland. By 2013 there were around “15–20 ‘pure play’ publicly listed farmland companies globally, of which 12 [were] ... invested in CEE and the CIS” regions (Luyt *et al.* 2013: 45). Some of the publicly listed structures may also adopt the form of a real estate investment trust, “a mutual fund-like structure that distributes at least 90 per cent of its income to investors and is generally exempt from corporate income taxes” (Fritz 2010). The “pioneer” of these trusts (which may also be called exchange-traded farmland trusts: ETFTs) was Gladstone Company, going public in 2011. Bonnefield in Canada and Farmland Partners in the United States would soon follow. These schemes represented the first attempts at securitizing farmland in order to solve the asset's class “equity puzzle” (Sherrick *et al.* 2013: 27) (as the quoted authors put it: “There is no agreed

6. See, for example, <https://etfdb.com/etfdb-category/agricultural-commodities> (accessed 5 December 2018).

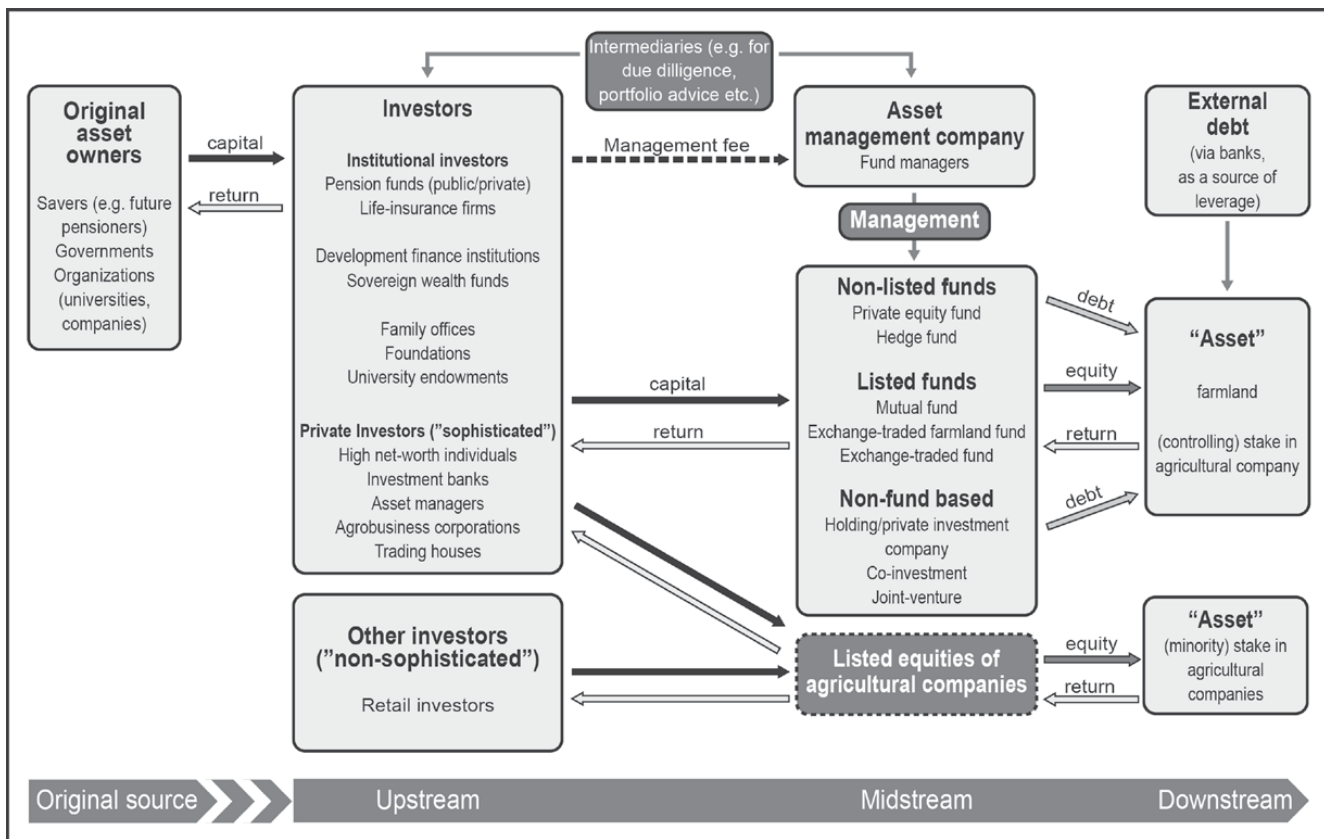
upon and tradable unit of farmland, nor a way to standardize across specific parcels or to fully homogenize shares”: *ibid.*: 27–8). These innovations promised to bundle income streams from the leasing out of several individual farming properties into a single vehicle that can be listed publicly and into which investors can buy in and out, as they please (Stevenson 2014). It was hoped that this would make farmland more tradable, like other liquid assets such as securities, and make it accessible to the masses. In February 2017 Farmland Partners merged with American Farmland Company, “creating the largest and most diverse public farmland REIT with prime US farmland assets spanning 144,000 acres across 16 US states” (Valoral Advisors 2018b: 48). Figure 4.6 provides an overview of potential investment channels and actors in the “AG space”.

As we shall see in Chapter 6, in order to understand the actions of all these different players in the “marketplace”, one has to understand how an object acquires financial value, or, better still, financial worth. This in turn requires an understanding of the investment rationalities and relations shaping the money management industry. In this regard, it is particularly important to remember that institutional investors such as pension funds act as trustees only for the original asset owners, and usually delegate the management of certain asset class allocations to specialized asset managers in order to outsource legal risk and harvest external operational expertise (Clark & Monk 2017).

## WHERE CAPITAL LIKES (NOT) TO GO

Looking back over the past ten years or so, it is striking that many scholarly, NGO and media accounts have described the finance-driven land rush as a “total phenomenon”, identifying a structural coherence, global integration and effective assetization of farming and agriculture where one is yet to emerge (see, for example, Buxton *et al.* 2012; Fairbairn 2014). Financiers, with their global ambitions and inherently optimistic outlook, have equally contributed to this Promethean narrative. When we zoom in, however, we arrive at a more complex and geographically variegated story. In the early land rush literature, it appeared as if investors were mainly pursuing large-scale land acquisitions in Africa, South America and the central and eastern European (CEE) and Commonwealth of Independent States (CIS) regions. Africa, in particular, was frequently featured as the prime frontier region of the global land rush, including its finance-driven version (Grain 2008; Cotula 2013; Funk 2010). It soon became clear that this was a misrepresentation of actually existing dynamics. Today a more differentiated picture is emerging. It is clear that at least large Western institutional investors looking for

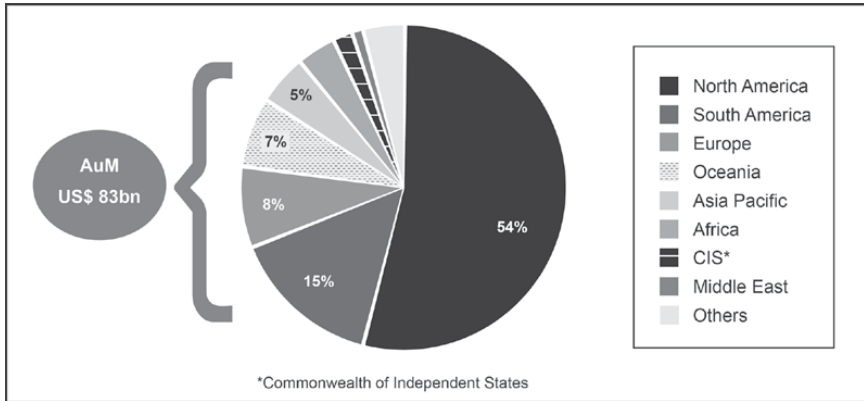




**Figure 4.6** Actors along the agri-investment chain

Source: The author.



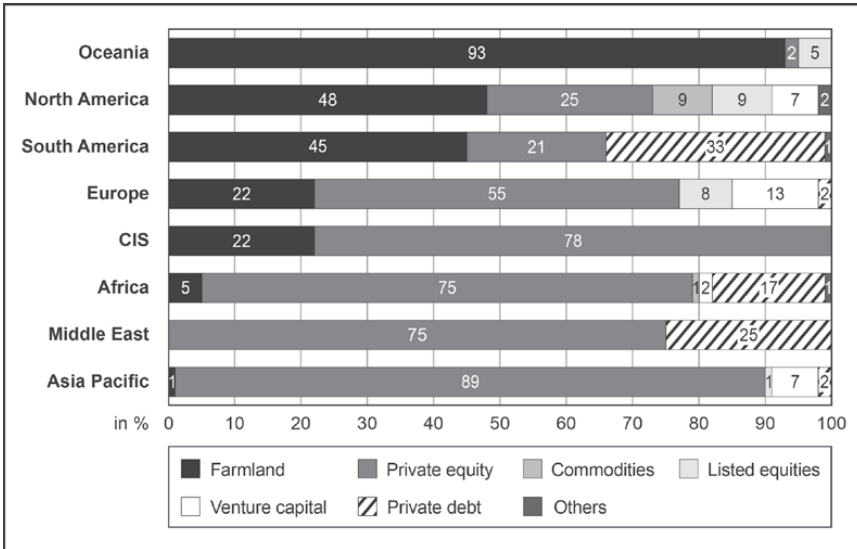


**Figure 4.7** Investment funds specialized in food and agriculture by main region  
 Source: Based on data provided by Valoral Advisors (2018a).

large-scale agricultural investments tend to focus on North America, South America (particularly Brazil), Australia and Aotearoa New Zealand, four regions that account for “about 65–70 per cent of the currently investable market in farmland globally” (Luyt *et al.* 2013: 32) (see [Figure 4.7](#)).

What these regions have in common is a strong agricultural potential, well-developed farmland markets, a significant depth in farming expertise and effective legal and contracting processes, with each of them being a net food-exporting region. These are “institutional-grade” investment geographies, because they match the risk–return horizons of large beneficiary institutions, among which US institutional investors in particular seem to be more comfortable staying on their own turf, where they know the risks and feel confident about the legal environment. One asset manager interviewed for this book, for instance, eventually declined a deal with a large North American retirement provider because the latter demanded the contract terms to be subjected to the jurisdiction of the state where it was headquartered (interview, 2018).

If it is further broken down, this data contains some interesting details (see [Figure 4.8](#)). Aotearoa New Zealand and Australia are the regions with the highest share of purely farmland-based investments, followed by North America and South America, which already expose a sizable share of more classic private equity-based investments along the food chain. What becomes further evident is that financial placements into African farmland make up only a small share of the total number of funds targeting African food and agricultural sectors. This goes against the grain of headlines about African land being sold out to greedy Wall Street bankers, popularized in the global land rush debate. Although Africa has been hailed as the “final frontier of



**Figure 4.8** Agri-focused investment funds by target region and strategy  
 Source: Based on data provided by Valoral Advisors (2018a).

commercial market development” (James Cairns, an international agent at property group Savills; cited in White 2014), said to give “investors the chance to buy in at a low entry price and pioneer the creation of new farmland and develop large-scale operations from an early stage” (*ibid.*), the reality of at least institutional land acquisitions and ownership looks quite different. As one investment manager from South Africa noted: “Although there is a whole lot of discussion and a whole lot of noise, the actual amount which is being invested [in Africa] is fairly limited” (interview, 2014). Even though there are some specialized asset managers, who often would work for investors with a certain risk appetite or impact-oriented family offices or endowments, most (Western) institutional capital has shied away from agricultural investments on the continent owing to potential reputational, regulatory, political, operational or market risks:

One of the biggest ironies unfortunately that the do-gooders of the world have achieved that has actually backfired is that institutional investors are too scared to go into the frontier markets because if anything goes wrong they will be accused of exploiting people. That the easiest thing for them to do is never ever to go into a country like Tanzania whereas those are the countries that most need those types of investors with their ethical roots and framework to go there. But they will never go there because they can’t bear the scrutiny of

being asked questions in a Swedish or English or German parliament about something that has gone wrong.

(interview, asset manager, 2018)

The representative of an Africa-focused asset manager confessed in a moment of sober reflection that “the ‘African AG space’ is so particular, because you need to be able to speak so many different languages, and in the end it is not credited ... because in the end they are only interested in numbers that matter to them” (interview, 2018). This did not just include plain numbers on returns, but returns that would compensate the investor effectively for the extra risk undertaken by investing in Africa (so-called risk-adjusted returns).

The lack of institutional-grade investments in Africa points to the larger problem of barriers to institutional farming in certain parts of the world. As one asset manager explained:

Southern Sudan, Ethiopia and so on, Pakistan, Bangladesh. Again and again projects appear, and it is not at all to be denied that some of them work. Even in Ukraine, there are some that work very well. There are success stories in Russia. There are also success stories in all these geographies. Only that these are success stories which are not replicable, and which are not suitable for an institutional investor. These are success stories because people go there with their own Kalashnikov and take a local lover or marry in there and assimilate and play by local rules. And these are other rules by which we can invest.

(interview, asset manager 1, 2014)

The greater institutional focus seems to be on the less political value chain nodes of pre- and post-production, where investors, some of them with an impact orientation, see a potential to disrupt existing transactional arrangements (e.g. by cutting out the middlemen so common across Africa), capture or nurture new markets or get involved in smallholder agriculture (e.g. via giving loans to cooperatives).<sup>7</sup> South African institutional investors have started to venture into the sector, however, and, recently, South Africa’s Public Investment Corporation (PIC) – the trustee of pension funds for government employees and a domestic, black-owned and -managed agricultural investment firm – acquired a majority stake in Karan Beef Pty Ltd for US\$360 million. The largest cattle company in Africa, this is also

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7. Out of 226 impact investors surveyed in a recent Global Impact Investing Network report, 57 per cent had some allocation to food and agriculture, more than any other sector, although it accounts for just 6 per cent of total asset allocations (total US\$228.1 billion AuM) (Mudaliar *et al.* 2018: 26).

a significant landowner (Kiernan 2018). In other places, re-regulation or a redirection of government policies have opened the doors for domestic institutional investments in farming and agriculture, in line with the emerging mantra that African pension funds need to be “unlocked” for private equity (Ashiagbor *et al.* 2014). In Kenya, the Capital Markets Authority allowed pension funds to invest up to 10 per cent of their portfolio in private equity and venture funds in 2015 (Mwaniki 2016). In neighbouring Tanzania, a similar regulation allows for up to 5 per cent (KPMG & EAVCA [East Africa Venture Capital Association] 2017). The government has pushed local pension funds to finance large-scale sugar estates as part of its ambitious agro-industrialization agenda (Kamagi 2018). Although it can be doubted that most African pension funds, notorious for having bypassed domestic agriculture in favour of less risky investments, such as real estate or infrastructure, for a long time, have the right in-house expertise, help is readily at hand. When interviewed in 2014, the representative of the largest agricultural fund manager from South Africa, today with existing agricultural assets in western, eastern and southern Africa, said that the firm was keen on capitalizing on domestic pension funds willing to venture into a sector virtually right on their doorsteps.

#### FROM HYPE TO SOBERNESS: THE AG INVESTMENT SPACE, 2008–2018

The AG investment space has undergone a complex set of dynamics over the past ten years. What appeared to be the safest bet in 2008, in the wake of the food price and financial crises, was met with a great degree of soberness in 2018. This is nothing unusual. Indeed, the workings of global finance gain traction through an “economy of appearances” (Tsing 2005), by which capital is mobilized on the basis of promises about the developments of future values (see also Chapter 6). In the early days, optimistic voices promised that farmers were “going to be driving the Lamborghinis; stock brokers are going to be driving tractors” (investor Jim Rogers; cited in Harding 2012), all backed up by solid “mega trends” and “market fundamentals”. Return projections were fantastic, reaching up to 25 per cent or more a year (for owner-operated ventures) in some of the more adventurous cases.<sup>8</sup> Asset managers and market intelligence providers would predict increasing institutional allocations to the farmland/agriculture class, with the greatest

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8. What makes it somewhat difficult to assess such promises is the fact that exits have not occurred on a large scale or – if they have – are rarely talked about. This may still allow us to assume that some investments may have been less successful than envisaged, and that a release of such data may potentially spoil the market.

optimists envisaging a new optimum of 3 to 5 per cent of all assets under management. REITs were hoped to provide more liquidity to the sector and make the asset class accessible to retail investors, and supposedly dormant and undervalued lands in Russia, eastern Europe, Africa and South America were heralded as the next frontiers.

These visions had not been realized by 2018, however. Although those with a commercial interest in the sector have been quick to emphasize that the asset class has matured (Conrad 2018), and all that remained now was to give it some definition (Janiec 2018a), it appears as if “farmland investments often led to headaches alien to those who stick to plain-vanilla stocks and bonds” (McDonald 2018). Accusations of land grabbing, as well as (geo)political risks, have deterred institutional investment in many parts of Africa, Ukraine and Russia.<sup>9</sup> In 2011 countries such as Argentina and Brazil became tougher on regulating foreign investments in farmland, and the North American investment haven of Saskatchewan started a review of its land investment regime in 2015 (Saskatchewan government n.d.). Even “all-time favourites” and supposedly liberal countries such as Australia and Aotearoa New Zealand tightened their foreign investment regimes in 2016 and 2017 respectively. After years of growth, commodity prices for row crops and dairy slumped from 2014 onwards, dwarfing the incomes of farmers and investors alike, and threatening the latter’s bets on land appreciation. In the largest farmland market in the world, the United States, row crops such as maize and soy with relatively modest returns were considered an alternative when quantitative easing hit the market and ten-year US Treasury bills – until then a favourite among many institutional investors – started to have a “bad rep”. The low-interest environment, combined with the global demand for both agrofuels and agri-food, made the agricultural investment space attractive.

When pension funds fearing that the low interest rate policy in the United States would come to an end in 2018, however, they started to expect more for their money. Some seem to have stopped making allocations to the classic own/lease back (also known as own/lease out) model for row crops (Janiec 2018b) and started to target other asset classes, such as infrastructure and real estate, for higher returns. In other cases, key players spectacularly downsized their asset allocations or even withdrew from certain geographies altogether. In some cases, it all depended on individuals within a certain investment team who thought “agri” was a good idea but, when they left, the portfolio strategy was readjusted. Apparently, this was the case with the Harvard Endowment Fund, which until 2016 was the largest endowment landowner in the world,

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9. “Bad news stories stick to a new asset class,” as one asset manager interviewed put it in when looking back in 2018.

with capital placements in New Zealand, South Africa, Brazil and North America. As part of a readjustment, the new senior manager wrote down the value of its farming and timberland portfolio by more than US\$1 billion, from 13 per cent of its US\$39 billion endowment to 6 per cent (McDonald 2018). In other cases, fund managers would succumb to public pressure and withdraw from the space, as recently seen in the case of the Canada Pension Plan Investment Board, which in 2017 announced that it would stop making further allocations to farmland and that it was open to selling its existing portfolio in North America, after it faced resistance from local farmers who feared farmland price hikes and being locked out from land markets (Tilak & Scuffham 2017).

As we shall see in the next chapter, a range of other factors, from fees and failed attempts at large-scale farming in certain geographies to “bad apples” among fund managers all created additional barriers to institutional capital. Moreover, at least one of the US ETFTs has recently shown a rather troubling performance, raising the critical question of whether something that was hailed as a long-term play, as a kind of counter-product to conventional financial schemes, should ever become exposed to the volatility of the stock market.

Crises can be opportunities, however:

What we saw at our flagship event was ... we had a record attendance, and we realised that there were a lot of initiatives to raise capital, and that was against a backdrop of four years low because of commodity slump, which had a depressive impact on farmland values, so crop prices were softening in the US, but those attracted to the macro theme realised that this could represent a buying opportunity. We also see investors looking at other markets they had not been previously focused on, like Chile, South America, speciality crops there, and just a broadening of crops investors consider investing in. At the beginning, it was focused at row crops. Investors are now also looking at investing in the agricultural value chain, looking into production systems, animal proteins, etc.

(interview, organizer agri-investment conferences, 2018)

The falling land prices in the United States and the potential failure of farmers to pay back their mortgages or take up new ones create opportunities for institutional investors to take over indebted farms. Asset managers have adjusted their strategies, and now target permanent crops such as avocado or macadamia (e.g. in California or Western Australia), with higher risk premiums, or target integrating different sites of the agricultural value chains

in order to create superior returns (so-called “alpha”). Others look at new geographies, such as Chile or Peru, or rediscover good old Europe, where farms in the Mediterranean can be converted to high-value olive farms or vineyards.

## THE MERITS AND LIMITS OF PUBLIC RECORDS

It is one thing to have aggregated data about macro-trends in the agricultural investment space, and another to accurately know who is buying up farmland and stakes in agricultural companies in specific places, on which terms and through which kinds of relationships. Although the macro-data presented above stems from players with privileged access to the agri-focused world of money management, answering the question of what goes on “on the ground” can quickly turn into an empirical nightmare. Accounts are often partial, as a result of the situated positions from which researchers produce knowledge or the “implicit epistemology” (Edelman *et al.* 2013) they adopt. Existing place-focused databases often contain “preliminary, anecdotal, unverified and moribund cases” (Scoones *et al.* 2013: 475), whereby “sources and reports of unknown reliability are opportunistically combined” (Oya 2013: 506). For instance, reports on Tanzania have often produced stunning figures about foreign land acquisitions since the mid-2000s, reaching up to 2,000,000 hectares in some reports (2.3 per cent of Tanzania’s terrestrial area, excluding main water bodies) (Anseeuw *et al.* 2012; Bluwstein *et al.* 2018).<sup>10</sup> Such claims are seldom matched by the realities on the ground. As two fellow researchers argue, the “spreading of inaccurate data threatens the legitimacy of activists relying on those data to campaign against land deals, and ... also the legitimacy of the research community and institutions publishing such data” (Locher & Sulle 2014: 571). So, what sources might we tap into to unpack what goes on “on the ground”? Might the good old state, with its panoptical gaze and its quality as the guardian of national statistics and regulator of cross-border flows, not be of help here? This question will be further pursued in the next chapter, but it is organically tied up with the larger questions of how such investments are regulated, how states help co-produce assets as part of projects of institutional landscape making and how they account in public for these practices.

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10. Putting it in the top seven of the most targeted countries in the Global South (Anseeuw *et al.* 2012: 9). This figure came down to 281,777 hectares in 2014 (Locher & Sulle 2014) and saw further reductions by 2018.



## CONCLUSION

The politics of information is too often sidelined in research on financialization. As Adeniyi Asiyani (2018: 544) has recently argued, unpacking the grounded operations of finance “can help unsettle the pretence of complexity that continues to subsume the political to the technical in debates on the operations of global finance”. Doing so could open spaces for wider, more informed debates and political decision-making. But how can we practically produce knowledge about the grounded operations of finance when many of its key players keep their profiles low and doors closed, and are not legally required to make their investments public? One potential source of information harvested here and used to ground finance-gone-farming is specialized industry intelligence, but access to this information often requires considerable resources. As we shall see in the next chapter, one alternative source of information may be the state itself. The kind of information on (foreign) investments in the farming sector that states provide, however, is linked to the more general question of whether states have the capacity and willingness to make finance’s footprints and operations visible. As we shall see for the cases of Tanzania and Aotearoa New Zealand, in some cases, the state – for example, via public records about financialized farms – may allow us to gather information of use for political deliberation and decision-making. In other cases, the state may systematically obscure what is going on, or may simply be ignorant about such data. Even when information is available, however, its unearthing alone is insufficient. As [Chapters 6](#) and [7](#) will show, such information must be wielded in order to place the concrete operations of agri-finance investment chains in the larger world of money management, and to illuminate how these cut through and rework specific places. Before we turn to these situated operations, however, we engage with “the state”, still the ultimate clearing house for financial capital.



## CHAPTER 5

# STATES: HOW ARE FOREIGN INVESTMENTS IN FARMING REGULATED AND ACCOUNTED FOR?

Despite the widespread narrative that, in the age of financialized capitalism, the state has been rolled back, with its remnants somewhat helplessly watching how restless capital hops from place to place, it still plays an important role in the regulation of foreign direct and portfolio investments into agriculture and other domains. The regulatory capacity of the state is, of course, highly uneven, but, more importantly, it appears in varied and sometimes surprising ways. In many countries the state has been central in giving rise to the asset management industry that we know, and the capital flows the latter administers cannot be thought of without the productive powers of the former (Bryan & Rafferty 2017). To name but a few examples: state regulation deeply shapes the fiduciary and delegation practices underpinning global investment chains; the state often acts as a grantor of land and the property rights that are so central to the making of institutional landscapes inside and outside agriculture (Wolford *et al.* 2013); and state regulation also shapes how much value can be extracted from agricultural labour and nature, and how much of this is being redistributed domestically as part of taxation arrangements. Others have gone even further, to argue that the state is a way of organizing nature in and of itself (Parenti 2016). Although financiers may encounter the state acting in ways palatable to their own activities (e.g. the existence of freehold land, such as in Aotearoa New Zealand), in other cases state power is less supportive of the quest for assetization (e.g. in countries with land tenure systems without freehold, such as Tanzania and Ghana).

Nevertheless, even in cases where agrarian structures on the ground are less favourable for the production of institutional landscapes, the state remains the major clearing house for capital (Green 1987). Theoretically, the data produced during the clearing process can be harnessed to make claims about both the actor networks behind global financial flows and the asset landscapes they produce, but the quality of such information depends

on the state's capacity and willingness to record such information in the first place. Regardless of quality issues, it is a different story altogether whether such data is accessible to the larger public. What goes on on the ground is often veiled by confidentiality agreements, bilateral investment treaties or a lack of accountability on the part of investors and states (Galaz *et al.* 2018).<sup>1</sup> Often only bits and pieces are available. For instance, foreign investments in US farmland need to go through a special process under the Agricultural Foreign Investment Disclosure Act (AFIDA), passed in 1978. This data is accessible via the Freedom of Information Act and allows some claims about the state of foreign farmland ownership, such as shown by a recent platform created by the US Midwest Centre for Investigative Reporting,<sup>2</sup> although the data being provided is quite limited and often outdated. It is also difficult with this data to differentiate between financial and other kinds of investors, or to reconstruct the economic geographies of investment chains from it. The US Department of Agriculture also performs regular surveys of the state of land ownership and tenancy in the country (Bigelow *et al.* 2016). This data at least allows us to make claims about the extent of partnership, corporate and trust ownership (which potentially qualify as vehicles for institutional investments), but it does not feature institutional investors as a separate category. In fact, if one searched the Department of Agriculture's last report, from 2016, the terms "pension fund" and "institutional investors" do not appear one single time, despite the fact that these are major landowners in the United States.

Australia also implemented a foreign farmland register as part of the Register of Foreign Ownership of Water or Agricultural Land Act, passed in 2015, after the government at that time had faced increasing public pressure on foreign capital flows into farmland and agriculture. Although the register is useful for making detailed claims about foreign land ownership in the country at an aggregate level,<sup>3</sup> it is equally opaque on the transnational microstructures behind farmland investments. Consistent with Australia's broader foreign investment screening regime, the details of investors are not

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1. The story is not as straightforward it appears, however. Although the largely private-equity-based investments in Aotearoa New Zealand agriculture are not formally required to produce public annual reports, those studied for this book were surprisingly accommodating and open, as much as their fiduciary duty and confidentiality agreements permitted. Because of the involvement of European pension funds, they also shared more information than usual on their public webpages. Three of them would even publish their farm locations and names on the internet (not of their investors, though).

2. See <http://apps.investigatamidwest.org/afida> (accessed 16 December 2018).

3. In 2017 50.5 million hectares, or 13.6 per cent of all agricultural land, was foreign-owned (Australian Taxation Office 2017: 3).

made publicly available. The taxation law also restricts the release of information that could identify, or be used to identify, an individual or entity (Australian Taxation Office 2017: 3).

The question of how states account for foreign direct investment is inexorably linked to the nature of political regulation shaping foreign investments in farmland and agriculture, as well as the property regimes and agrarian structures associated with them. Thus, the remainder of this chapter not only comes to terms with both the productive and constraining power of investment and property regimes, as well as the modalities of state–investor relations in Tanzania and Aotearoa New Zealand that have helped finance to access land and derive financial benefits from it, but also how they account for these practices.

It will become evident that the two countries represent starkly contrasting approaches for the state’s role in turning farmland into a global financial resource, exhibiting very different histories and forms of “geopower” (Parenti 2016), but also varied capacities (and willingness) to regulate and account for the new financial flows into agriculture. In investment circles, land markets in the Global South are often described as being “thin” on account of their low degree of formalization and the lack of property data, whereas those in the Global North are described as “thick” because of their greater level of formalization and transparency (Colvin & Schober 2012). Although such an opposition is somewhat simplified, and by itself deserves critical scrutiny, we can creatively extend these notions to think through the emergence and graspability of institutional landscapes. The variegated regulation and state-mediated “landing” (Le Billon & Sommerville 2017) of agricultural investments in Tanzania and Aotearoa New Zealand invite us to shed light on these themes. In this regard, it should be noted that, at least in the latter case, domestic investors have also played a role in institutional landscape making, but, since these do not have to go through the same regulatory agency as foreign investors, they leave other statistical footprints and will not be subjected to further scrutiny in what follows.

## GRAPPLING WITH FOREIGN INVESTMENT REGIMES IN AOTEAROA NEW ZEALAND AND TANZANIA

### *A country built on “foreign investment”*

As we already have seen in [Chapter 3](#), Aotearoa New Zealand has had strong ties to overseas capital ever since its very inception as a settler-colonial economy. The relationships engendered by overseas capital connections, first within the British Empire and later within the Commonwealth, were

central in shaping agricultural landscapes, modes of production, patterns of accumulation and land tenure regimes. Until the 1970s the country's structural dependence on the colonial "motherland" for its agricultural exports was so strong that it was labelled Britain's "imperial farm" (Armstrong 1978), a status pursued politically by all postwar governments. During this time "taxes skewed against large property holdings" (Rolleston 2016: 99) and "restrictions of foreign ownership of land entered the statutes through an amendment of the Land Settlement Promotion and Land Acquisitions Act" in 1968 (*ibid.*). Then the United Kingdom joined the European Economic Community (EEC) in 1973, a move that seriously disrupted this metropole–satellite relationship. When both the agricultural sector and the economy more generally had slid into severe crisis by the 1980s, Aotearoa New Zealand's farming sector was subsequently restructured by one of the most radical neoliberal overhauls experienced anywhere in the Organisation for Economic Co-operation and Development (OECD) countries to date (Boston & Eichbaum 2014). The ensuing story of agricultural restructuring is well documented (Cloke 1989; Le Heron 1991, 1993; Smith & Montgomery 2004; Wallace 2016). Many indebted farms closed, while others managed the transition with varying success; new subsectors opened up, such as dairy, where farm and herd sizes quickly increased; land in general became more concentrated, and multiple farm ownership held together by corporate structures became more widespread. All this has led to the decline of the "family farm" since the late 1980s (interview, industry observer, 2018). Rural land was opened up to a new wave of investment partly because of the privatization of state forests in the early 1990s, even though some long-standing restrictions on investment continued to exist (Kelsey 1995). With more liberalization ensuing from 1995 (Rolleston 2016), foreign investment into dairy, horticulture, vineyards and fruit orchards increased. Although some of these investments were mainly driven by market-oriented family farmers from overseas (such as dairy and horticulture, where migrant farmers from Ireland, South Africa and the Netherlands played a certain role), many investors into vineyards and fruit orchards had genuinely corporate backgrounds and often sought to integrate existing properties into their operations and branding strategies. A few cases that hit the news and frequently sparked a controversial debate were also lifestyle acquisitions, particularly in the scenic high country of the South Island, such as when singer Shania Twain bought the 4,731-hectare Motatapu and Mt Soho stations for US\$21.5 million in 2004 (Carroll 2011).

Although the foreignization of forestry and agricultural spaces has had a long prelude in Aotearoa New Zealand, a new wave of agricultural land purchases began from 2009 onwards, with an increasing number of agribusiness multinationals and institutional investors entering primary production

(dairy, beef, sheep and viticulture). Some of the former arguably had the intention to secure food supplies for sizable and/or net food-importing overseas populations (e.g. China), but the latter were seeking greener financial pastures in the wake of the financial crisis. Aotearoa New Zealand provided compelling market fundamentals, a welcoming regulatory environment, boosterish agricultural policies under the National Party government of John Key and promises of significant capital gains, as land prices had been rising rapidly for some time, particularly in the dairy industry. Its reputation as a “rock star economy” that had fared relatively well through the global financial crisis, far away from the turmoil of Anglo-Atlantic capitalism but close to the rising economies of Asia, also attracted investors’ interests. Add to this that Aotearoa New Zealand has no capital gains tax (a tax that has to be paid on the sale of assets such as shares in property or companies), and you have an investment Eldorado (Gow & Lockhart 2016).

The Overseas Investment Office, established via the Overseas Investment Act of 2005, plays a central role in this story. All foreign investors in the country are legally required to obtain approval by the OIO, which publishes at least basic information on most investment consents online. These accounts can be subsequently used to develop a fairly good understanding of the scale, geographies and temporal patterns of foreign investments into the farming sector (and forestry), with the OIO itself – thanks to its role as the ultimate clearing house – providing an empirical entry point for capturing an instance of “the state” in a central regulatory site. Its concrete existence and operations need to be embedded into the larger political economy of the post-1984 era, whereby the dominant governing parties Labour and National may have differed here and there, but both have “courted foreign investment” (interview, journalist, 2018) to such an extent that many investors would think “both parties run the same” (interview, industry expert, 2018). Free-market thought has also deeply infiltrated society, thus constructing a novel “common sense” surrounding “reasonable” economic policy, both generally and with particular reference to farming (Cloke 1996; Lewis & Moran 1998; Boston & Eichbaum 2014; Wallace 2016). The so-called “New Zealand experiment” (Kelsey 1995) not only led to the demise of family farming, and to increased land consolidation and concentration, but also gave rise to a new class of business-oriented farmers backed by private credit and equity, a new culture of productivism and a more diversified and highly competitive agricultural sector, which had dairy, viticulture and horticulture added to – and sometimes even surpassing – its traditional exports: sheep and beef (Le Heron 2013; Roche & Argent 2015). With farms getting bigger and bigger, especially in dairy, the “capital climate was getting bigger”, too, as one observer put it (interview, journalist, 2018). This also involved new business models, such as equity partnerships, whereby investors (farmers and non-farmers)



acquire land, and hire a farm manager who co-invests with them.<sup>4</sup> This model breathes the spirit of private equity, and has been practised by domestic and foreign investors alike. At least for many domestic dairy corporate investors and family farmers, this has also often involved the practice of “leveraging themselves into growth”, as one observer put it (interview, representative asset manager, 2018; see also Kelsey 2015).

In the section further below, I will make use of some of the OIO data to make sense of how the global land rush articulates itself in New Zealand. Unfortunately, this is impossible for the case of Tanzania, where the state does not provide access to this kind of data, and one has to rely upon other sources.

### *From money as an outcome to money as the basis of development*

Africa has been heralded as the “last frontier’ in global food and agricultural markets” (World Bank 2013: 2). Here, it is said that large reservoirs of “underutilized” land can be valorized for food/agrofuel production and carbon sequestration; “yield gaps” can be closed; hidden value can be “unlocked”. Many African governments have responded to this new global interest in all things agricultural as part of a market-oriented agricultural policy agenda that has been on the rise since at least the mid-2000s. This agenda no longer fits smoothly with the so-called Washington Consensus, with its free-market credo, for it wants to actively intervene in the economy in order to build national, regional and global market connections. The rise of value-chain agriculture and the renaissance of contract farming have to be seen in this context (McMichael 2013). More recently, however, this debate has been tilted in interesting ways. Although most major development organizations – including the World Bank – have usually based their market-oriented agenda on a faith in smallholders, it is now increasingly being questioned whether smallholders can feed the world (Collier & Dercon 2014). Consequently, agribusiness and (large-scale) commercial farms have climbed to the top of African agricultural policy agendas since at least 2010.

Tanzania relates in interesting ways to these developments. After its independence, the country embarked on a socialist development path (called Ujamaa) that resulted in the so-called Arusha Declaration in 1967. The latter resulted in a dual agricultural strategy, which sought to transform agrarian

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4. This is different from the so-called “sharemilking” model, which until recently had offered defined career pathways for young farmers without land. According to this arrangement, a sharemilker owns the cows and equipment, while another party owns the land and the farm infrastructure. Returns are split according to an agreement (Wynyard 2016), often on a 50:50 basis.

structures through the villagization of rural households as well as through the development of large mechanized state farms (Coulson 2015). With the withering away of socialism from the mid-1980s onwards, agriculture was at first largely neglected as a domain of structural transformation by successive governments. It was only in the late 1990s that the government started to give “agricultural modernisation” greater attention in its Vision 2025, which envisaged that “the economy will have been transformed from a low productivity agricultural economy to a semi-industrialised one led by modernised and highly productive agricultural activities” (Ministry of Finance and Planning 1999: 2). The Agricultural Sector Development Strategy (ASDS), launched in 2001, and the Agricultural Sector Development Programme (launched in 2006), the practical implementation of the former, encapsulate this transformative vision. Both emphasized a public-sector-based and smallholder-oriented development agenda that aimed at enhancing productivity through increased investments in irrigation and agricultural services (Cooksey 2013). In the wake of the recent global financial and food crises, however, Tanzania’s agricultural policy landscape experienced a notable transformation when the then president, Jakaya Kikwete, launched the Kilimo Kwanza (KK: “Agriculture First”) vision at a splendid hotel in Dar es Salaam in 2009. Even though the Tanzanian government subsequently launched a set of other policy frameworks, and developed a new agricultural policy in 2013, it was actually KK that made headlines as the *de facto* agricultural vision for Tanzania until there was a change in government in 2015.

Authored by the Tanzania Business Council (TBC), a body made up of both public and private sector organizations (rather than the usual government or donor agencies) and chaired by the Tanzanian president, KK was significant in that it pushed the more public-sector-driven, productivist and smallholder-oriented agenda of the existing policy mix “towards the market” (Maghimbi *et al.* 2011: 46). Its goal was to transform the country’s “agriculture into a modern and commercial sector” (Tanzania Business Council 2009). Its focus on large-scale farming, capital-friendly land legislation, agricultural finance and potential joint ventures with foreign capital “reflected the emergence of a national commercial farming lobby” (Cooksey 2013: 25). KK was soon followed by the launch of the Southern Agricultural Growth Corridor (SAGCOT) strategy at the regional World Economic Forum held in May 2010 in Dar es Salaam (AgDevCo & Prorustica 2011). Advancing a now familiar trope in the land rush context, the growth corridor concept seeks to incorporate areas with “yield gaps” or “idle”/“unused” land into modern market relations.<sup>5</sup> The material realities of land tenure and ownership have often been sidelined in such discourses. For instance, in the context

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5. Lorenzo Cotula (2013: 38–9) shows that this is a highly problematic trope with colonial roots.

of SAGCOT, government and state officials have repeatedly claimed that Tanzania had 44 million hectares of arable land, but that only 24 per cent was being used.<sup>6</sup> Much of this “idle” land is said to be in the SAGCOT corridor.

For many critical observers, the rise of KK and SAGCOT represents just the latest phase in Tanzania’s shift from peasant-oriented African socialism to capital-oriented neoliberalism (Chachage & Mbunda 2009; Mwami & Kamata 2011). Although the time after the demise of Julius Nyerere (the country’s first president), from 1985 to 1995, was a transition period with proto-neoliberal character, neoliberalization was rolled out under the administration of Benjamin Mkapa (1995–2005). Embracing globalization, entrepreneurship, land law reforms, the privatization of state enterprises and farms and the promotion of foreign direct investment into the mining and tourism sectors was the economic ethos of the time. These have become highly contested issues in Tanzania, and the agricultural policy programmes in question are deemed to have further entrenched this model of development. For critical observers, such as Tanzanian law professor Issa Shivji (2006), the years of market-oriented restructuring had turned the old mantra of the Arusha Declaration upside down, in that money (including foreign capital) was the outcome of development, not its basis.

Nevertheless, although such an interpretation raises important questions about the political economy of transition in Tanzania, it tends to forget that the governmental rationality engrained in SAGCOT, the underlying problematization of subsistence agriculture and the call to modernize agriculture have a long history, which stretches back through the early postcolonial period to the colonial state’s agricultural policies (Coulson 2015; see also [Chapter 3](#)). The socialist Tanzanian state operated with a modernizationist ethos similar to that of SAGCOT (Schneider 2007), envisaging a space of social and economic transformation based on simplifying assumptions about both the population and agricultural systems “therein”.

The family resemblance between SAGCOT and a socialist modernizationist ethos becomes clearer if we take the example of a grain project, which we will re-encounter in [Chapter 7](#) (as Case 2). When one goes into the office of the company that has taken over this former socialist friendship farm, one can still see a painting of the farm produced a long time ago (see [Chapter 7](#)). Although it is doubtful if the farm ever looked like that in the past, the painting nevertheless encapsulates the modernizationist rationale associated with parts of the Tanzanian socialist project. In an interesting twist of history, it is only

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6. This number is highly problematic, not only because it seems to date back to a report from 1991 (personal information provided by Emmanuel Sulle) but also because it downplays the increasing pressure on land that many parts of the country have seen over the past decades (Coulson 2015: 56).

now that the reality matches the vision, after North American private equity and European development finance have taken over the farm, which covers several thousands of hectares. What appears as an irony of history is, rather, a confirmation of James Scott's thesis that high modernism may be engrained in *both* state-socialist and capitalist agriculture, with the latter having been heavily influenced by the former (Scott 1998: 200). The state farm structures that Tanzanian socialism left behind seem attractive for financial investors, for whom scale is an important feature in shaping their investment decisions. Although scalability is often an objective in its own right – for example, when it comes to assessing the market potential of certain business models – it is often also desired because large institutional investors have minimum investment thresholds in order to keep transaction costs low. For large beneficiary institutions, it is often easier to invest US\$20 million than US\$2 million.

Of course, these insights should not downplay the fact that several contextual factors (see next section) and the orientations and aspirations of economic policy-making in Tanzania have radically changed over the past two decades (Ibhawoh & Dibua 2003).<sup>7</sup> The more intrusive, or even dictatorial, forms of high modernism that Scott describes for a variety of historical contexts, including the Ujamaa period in Tanzania, in fact rested not only on the “aspiration to the administrative ordering of nature and society, raised to a comprehensive and ambitious level” and a “the power of the modern state as an instrument for achieving these designs” (Scott 1998: 88–9) but also on “a weakened or prostrate civil society that lacks the capacity to resist these plans” (*ibid.*: 99). Since 2015, when John P. Magufuli was elected the new president of Tanzania, the country seems to be at least partly back on track to these times. His government has tried to advance a state-centred development model with an authoritarian face and has privileged the promotion of “factories” (i.e. industrialization) over that of agriculture. Its highly interventionist and often unpredictable actions have turned off many potential investors and scared those who already had invested in Tanzania, the more so since land was repossessed from at least two large-scale agriculture investment cases (*Africa Confidential* 2017; Collord 2019). It also recently resulted in a significant downscaling of SAGCOT after the Tanzanian government cancelled a US\$70 million loan facility of the World Bank linked to the project (Mirondo 2019).

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7. Although we can trace the continuity of the modernizationist ethos with which the Tanzanian state goes about re-engineering agriculture, it needs to be emphasized that Nyerere's political project, with its focus on *kujitegemea* (self-reliance), anti-imperialism, pan-Africanism, nation building, social equity and distributive justice, had very different sources of inspiration and aspirations from many of the contemporary Tanzanian developmental programmes.

EXAMINING THE RISE OF INSTITUTIONAL LANDSCAPES IN AOTEAROA  
NEW ZEALAND AND TANZANIA*Thick institutional landscapes*

In the Aotearoa New Zealand case – despite some limitations – we are in a unique position to put numbers to agricultural investments and the landscapes they have helped produce. All foreign investors in the country are legally required to obtain approval by the OIO, which publishes some surprisingly detailed information on the cases it recommends for approval by the respective ministers, the minister of finance and the minister of lands. Although certain information may not be made public at the request of the investors, and approval does not necessarily mean that these deals eventually materialize, these accounts can still be used to develop a fairly good understanding of the scale, geographies and temporal patterns of foreign investment into farmland, agriculture and forestry. Thus, the OIO itself provides us with empirical access to a key regulatory site of that giant machinery we usually call “the state”. Via the regulatory practices of the Overseas Investment Office, foreign direct investments are rationalized and turned into legitimate overseas investments. It is a key political moment in the operations of capital (Mezzadra & Neilson 2019).

Building on the work of my former student Tobias Klinge (now at the University of Leuven), the analysis presented here is based on a unique set of secondary data that covers most investments into land and agriculture between 2001 and 2017 ( $n \approx 1,200$ ). The dataset also includes information gathered by the non-governmental organization Campaign against Foreign Control of Aotearoa (CAFCA) from the organization pre-dating the OIO (which was established only in 2005), the Overseas Investment Commission, and thus stretches back to 2001. This is important to note, as foreign capital, including institutional money, had ventured into the countryside before 2007/8, the landmark period for much of the global land rush debate. To the best of my knowledge, no other such detailed dataset on foreign acquisition of rural assets exists globally. The dataset includes only transactions involving rural land (agriculture and forestry) with more than 25 per cent foreign equity ownership involved, however, and also includes the acquisition of agricultural companies in other stages of the agri-food chain. This relatively high threshold deviates from more common classifications of foreign direct investments (i.e. > 10 per cent equity ownership) and is therefore in itself significant.

In order to give a brief overview of selected trends, four aspects of the development of FDIs in rural “assets” since the turn of the century will be

highlighted. First, as becomes clear from the OIO's decision summaries, land sales from Aotearoa New Zealand parties to overseas interests, so-called net sales (gross sales include all transactions, including between foreign investors), reach back many years. It has only been since 2008, however, that these sales have exceeded 10,000 hectares over a sustained period, culminating in 2013 (see [Figure 5.1\(a\)](#)). Between 2001 and 2017 a total 800,000 hectares (net) of rural land (forestry and farmland) changed hands, accounting for about 6 per cent of Aotearoa New Zealand's productive land (12.1 million hectares).<sup>8</sup> Much of this was forestry, however, which has been traded among global investors since the 1990s (Kelsey 1995: 107). Between 2001 and 2017 146,000 hectares of freehold and leasehold farmland (net) have been transferred to foreign investors from Aotearoa New Zealand parties, with 60 per cent of all freehold land (125,000 hectares) being transferred in the period from 2011 to 2016 (Klinge 2018: 74). Thus, it is evident that global interest in Aotearoa New Zealand farmland has received a significant boost with the financial and food price crises of 2007/8. At the same time, it seems as if the identified wave has largely run out of steam, for a variety of reasons (see next section), as indicated by the downward trend since 2016.

Second, another noteworthy trend is the increasing presence of institutional investors, as opposed to classic agrobusiness interests, timber companies or individuals. In the sample period, these players have acquired 79,700 hectares (net) at a value of over NZ\$1.01 billion, out of which some 64,000 hectares (net) were freehold (some figures were withheld by the OIO, however). Unlike in the forestry sector, financial actors had been largely absent from the "farmland scene" until 2009, yet came to dominate overseas investments into rural resources between 2013 and 2015 (see [Figure 5.1\(b\)](#)). Just as with the general wave of investment described above, more recent numbers cast doubt on the sustainability of this trend. The collapse of prices that hit dairy markets in 2015 (because of overproduction in key regions), deteriorating land prices, increasing environmental controversy over the effects of dairy farming and a changing regulatory environment under the new left-nationalist Labour Party, Green Party and New Zealand First coalition government from 2017 onwards have made it increasingly difficult for fund managers to raise funds. Several of the established players have adjusted their operational strategies, venturing into organic dairy processing, organic dairy production or horticulture and vineyards, while others have withdrawn applications estimated to be around NZ\$200 million in total from the OIO (Underhill 2018). In an interview from early 2018, one of the largest agricultural asset managers in the country said that the institutional investment

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8. The gross figure stood at 1.9 million hectares.

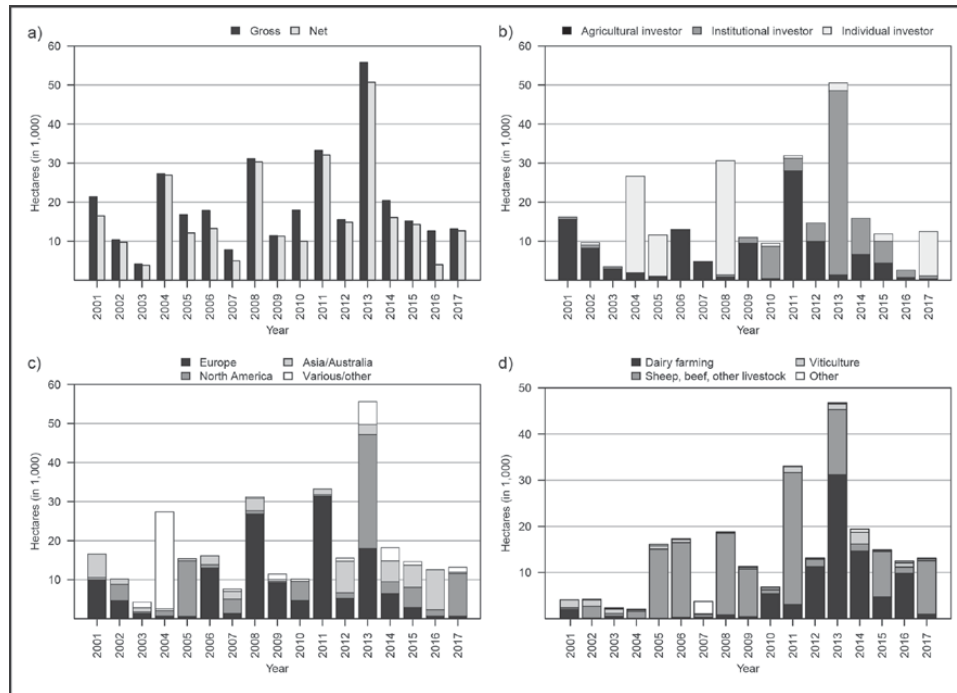


space was virtually dead because of the tightened investment regime: “But it hasn’t actually attracted too many new investors, which is surprising, because, in theory, if you’d asked me the question five years ago I would have said there was a wall of money waiting to come in – but it hasn’t.”

Third, a closer look at the distribution of ownership of farmland investments in terms of national references reveals some interesting details. Contrary to what is often depicted in much of the land rush literature (and in much of the Aotearoa New Zealand press), actors from Asia (including China) or the Gulf states, for example, account for only a small portion of all farmland investments (see [Figure 5.1\(c\)](#)), with the latter being virtually entirely absent. This is also contrary to the experience of neighbouring Australia, where the latter have been major investors (Sippel *et al.* 2017). Some Chinese investments did indeed proceed between 2012 and 2016, but their scope is not nearly as large as investments from the United States or the EU-15 countries. Thus, the focus on Chinese investments in the debate within the Aotearoa New Zealand public, particularly in the period from 2010 to 2013 (when a few major intended deals hit the news), clearly indicates a “selection bias” (Scoones *et al.* 2013: 475), sometimes underpinned by xenophobic undertones (Pollard 2011). In contrast to these investment flows, Australian investments also rank at a much lower level, even though these are the primary source of FDI in other sectors of the country. It therefore seems conclusive to argue that, even for the case of Aotearoa New Zealand, a prime frontier of institutional landscape making, the land rush seems to be less expansive in scale and prolonged than many academic, media and industry discourses tend to suggest.

Fourth, despite an unprecedented boom in overseas investment into farmland used or intended to be used for dairying between 2010 and 2016, there are two trends of overseas investment into farmland regarding their targeted sectors. Sheep and beef, which historically became key pillars of Aotearoa New Zealand agriculture from the late nineteenth century onwards, remained surprisingly popular among overseas investors throughout most of the analysed years (see [Figure 5.1\(d\)](#)), notwithstanding the fact that there has been a general decline of these subsectors since the 1980s, with many of those farms in the South Island having been converted to parcels of “white gold”. The conversion from sheep/beef to dairy farms has undoubtedly been “the most dramatic shift in pastoral use” (Smith & Montgomery 2004: 113) in the country’s recent history, which has fundamentally changed. As Eric Pawson and the Biological Economies Team (2018: 31) report, in 1999 “the North Island had 3,453,611 cows, the South 862,788.” By 2016 the North Island had “74 per cent of New Zealand’s dairy herds, 60 per cent of its dairy cows (2,985,992 in number), and 58 per cent of New Zealand’s milk solids” (*ibid.*). In contrast, the “South Island, with 26 per cent of herds, ha[d] 40 per cent

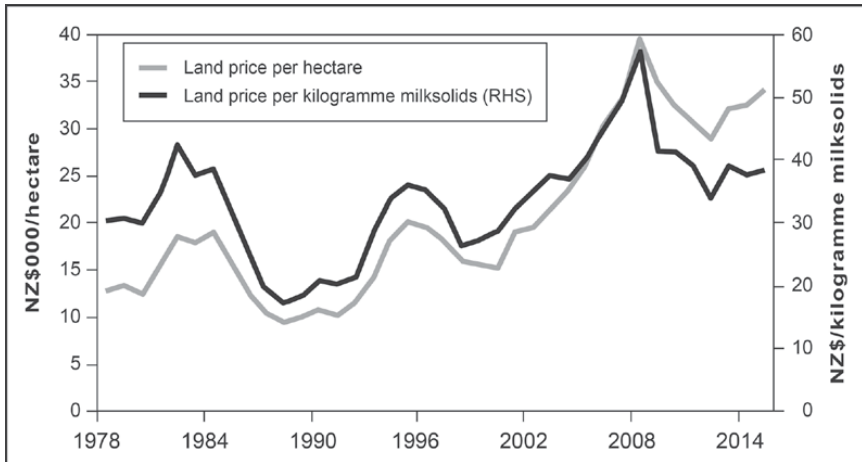




**Figure 5.1** Data snapshot, agricultural investments New Zealand, 2001–2017

(a) Total hectares of approved applications concerning the acquisition of farmland classified by gross and net area (n = 623); (b) Gross hectares of approved applications concerning the acquisition of agricultural land classified by type of investor (n = 623); (c) Gross hectares of approved applications concerning the acquisition of agricultural land classified by origin region (n = 620); (d) Gross hectares of approved applications concerning the acquisition of agricultural land classified by sector (n = 540)

*Note:* Land that is rented, such as winter pastures in the case of dairy, is not accounted for by the underlying statistics. This is significant, because this land is virtually under the control of investors, even though it is not owned by them.



**Figure 5.2** Dairy farm land valuation in time

*Note:* Kilogram milk solids are an indicator of the productivity of a dairy cow.

*Source:* Redrawn from [www.rbnz.govt.nz/financial-stability/financial-stability-report/fsr-may-2016/dairy-farm-land-valuation-an-examination-based-on-price-multiples](http://www.rbnz.govt.nz/financial-stability/financial-stability-report/fsr-may-2016/dairy-farm-land-valuation-an-examination-based-on-price-multiples) (accessed 2 August 2019).

of all cows (2,011,819) and produce[d] 42 per cent of all milk solids” (*ibid.*). Consequently, for many years dairying, with its strong cash flow,<sup>9</sup> global competitiveness (thanks to a largely grass-fed system) and promise of asset price appreciation (see also Figure 5.2), was a favourite for both domestic farmers (family and corporates) and overseas investors (this also included migrant farmers from countries such as Ireland, the Netherlands and South Africa). Institutional overseas investors in particular were on a buying spree after a significant deleveraging of farms because of significant debt loads led to many distress sales, and a drop in land prices in the range of 20 to 40 per cent in the period from 2008 to 2011 (Elworthy 2013).

On top of this, the largest dairy exporter in the world, Fonterra (in which supplying dairy farmers are also shareholders), accounting for roughly 30 per cent of all global dairy exports, has provided a relatively secure platform through which milk was supplied to the rest of the world (Pawson and the Biological Economies Team 2018).<sup>10</sup> The “white gold fever” (Gow & Lockhart

9. One prominent New Zealand fund manager advertised his dairy investments in 2014 by suggesting people “think of a cow’s udder as an ATM”: anytime you needed money, it would be at your disposal.

10. Although it is still the largest dairy company in the country, Fonterra’s market dominance has been challenged in recent years with the emergence of smaller milk-processing firms, some of which have ventured into value-added products (e.g. organic dairy) or markets that Fonterra has sidelined.

2016) is also reflected in the geographical patterns found in the investment data, with the four regions of Nelson/Marlborough, Canterbury, Otago and Southland accounting for 76 per cent of all agricultural land sold or leased out during 2001 and 2017 (but only 50 per cent of Aotearoa New Zealand's agricultural land, which stands at 14.3 million hectares: see Rolleston 2016: 111). These have also been hotspots for farm conversions (Pawson and the Biological Economies Team 2018), as indicated by one expert during an interview in the city of Dunedin:

So we had a big influx down to [here], farmers coming into the South Island predominantly and a lot of capital flew in ... So we had a lot of the whole landscape change. You have come down from Christchurch today? [...] All that area you would drive down, you would not see a dairy cow 20 years ago. Now that's all you see is dairy cows. And it is the same with the south [of the South Island] now. (interview, journalist, 2018)

The local state, via environmental regulation, and particularly via the allocation of water rights in areas such as the Canterbury plains, where rainfall patterns are not sufficient to guarantee perennial grass production, has played a central role in the expansion of dairy. In the case of Canterbury, it even faced central government action in an attempt to remove “regulatory roadblocks to water storage and irrigation” (John Key, then prime minister, speaking in 2010; cited in Wynyard 2016: 280; see also Espiner 2010) so that dairy could further flourish. Despite this, the persisting popularity of sheep/beef farming among foreign institutional investors can be explained by the fact that, even though these sectors have a lower cash flow than the recent “investment favourite” of dairy, they are also less capital-intensive and more stable in terms of market demand, and thus less risky. It all depends on your cash flow needs and investment strategy!

One could extract other data from the Overseas Investment Office, such as detailed profiles of the top foreign financial investors in farmland, agriculture and forestry, including their names, domiciles, investment vehicles, number of applications, year of application, subsectors targeted, regions targeted and the benefits investors claimed to add to the land (a regulatory requirement). At the same time, despite this relative wealth of public data, its “thickness” has its limits. It is hard to know for sure whether the deal approvals published have materialized in the way indicated, and the kinds of ownership landscapes that have emerged from this, because the country has no central register for foreign-owned farmland. Although all land in the country is registered with Land Information New Zealand, this data is very costly to retrieve, and it is virtually impossible to identify even the ultimate

domestic owners of farms, owing to issues such as multiple farm ownership or the use of opaque instruments such as family trusts.<sup>11</sup> Even local property experts struggle with that issue. As one expert argued: “There is no way of checking where the owners/purchasers of the land come from” (personal e-mail communication, 2018). This eventually reinforces what critical observers have remarked for other hotspots of institutional landscape making (such as the United Kingdom and the United States): “Property ownership continues to be a taboo subject in terms of published, publicly accessible data. There is a better chance of getting details on CIA black sites” (Walker & Schoenberger 2018: 152). In order to shed more light on these still relatively opaque structures, an overseas land ownership register, following the path of Australia and to be compiled and maintained by the OIO, has been frequently discussed in media and parliamentary debates in recent years (Gibson 2012; Kalderimis 2013). As it turned out during the research of Klinge (2018: 64), however,

in its current state ... the OIO is in no position to reasonably guarantee the quality of such a register as it, fundamentally, does not know in each case whether an approved transaction actually took place, whether the owning individual or entity is still considered to be “overseas”, or whether the land has been sold on to any New Zealand interests since its approval!

As one expert noted: “Without additional legislation and competences, therefore, a register would be a fairly easy thing to establish ... but it’s going to be meaningless” (interview, 2017; cited in *ibid.*; see also Cumming 2014).

### *Thin institutional landscapes*

After adopting a series of market-oriented reforms under the auspices of the World Bank and IMF in 1986, Tanzania managed to attract considerable foreign investment into its resource-based sectors from the 2000s onwards. Although many of these investments went into mining, agriculture also attracted some notable investments (Gray 2018). Besides strategic investments into sectors such as tea, coffee and horticulture by classic agrobusiness interests, the country saw an increasing inflow of largely speculative capital into agrofuel production from the mid-2000s onwards (Nelson

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11. Via the latter, family land can be registered separately from the associated farming operation, thus locking in capital gains associated with the land in an independent, “tax-efficient” structure.

*et al.* 2012). The boom was short-lived, however, and had largely ended by 2018 because of the demise of the global biofuel bonanza. In fact, the country has seen a number of spectacular failures within biofuel investments, including an investment of over US\$50 million on its northern coast that saw a Swedish investor's land title revoked by the government in 2016 (*Africa Confidential* 2017; Chung 2017).

Since 2007 we have also seen an increasing number of private equity investments flowing in, attempting to capitalize on the food and financial crises of 2007/8. Unlike Aotearoa New Zealand, however, the state in this case has not been of much help when it comes to deciphering such investment deals, or the agrarian landscapes produced by them. The Tanzania Investment Centre (TIC), established in 1997 as an investment facilitator and reincarnation of the investment promotion centre, founded in 1990 (Peter 1991), and the Business Registration Agency (BRELA), are major bottlenecks for foreign investors (Food and Agriculture Organization [FAO] 2011). In theory, the TIC, as a “as a one-stop agency”, also facilitates access to land, as it presides over a land bank filled with land “ready for investment”, but the realities of land occupation in the country meant that investors usually went for land that had been already used by some sort of business entity or to which the government had the title (Gray 2018). Even so, both these institutions serve as major clearing houses for foreign investors. Although they may be able to provide information on investors and investee companies, they do not provide easy public access to such information, however. Moreover, neither institution is in a position to tell one how many private equity funds have acquired farms in Tanzania, since different categories of investors are usually lumped together under the meta-category of “foreign investor”, be it a private equity fund, an agrobusiness company or an individual.

Obtaining data on farm asset ownership is equally challenging, as “[l]and is politics in Tanzania” (Chung 2017: 110). In the country only 10 per cent of land has been surveyed and titled, as a result of insufficient funds and staff and outdated, paper-based systems (Locher & Sulle 2014). In 2012, after receiving public pressure from the opposition and in the wake of biofuel investments failures (Luhwago 2012), the state commissioned local researchers to find out how many large farms (those above 20.23 hectares) were owned by foreign companies and individuals, but this report has not been officially released to this day (Department of Economics 2013). Foreign players were found to own 31 farms with an average size of 2,550 hectares, while foreign individuals owned 14 farms with an average size of 1,031 hectares, adding up to 93,484 hectares. Like the TIC data, the study lumps together different foreign entities without further specification. Other available public data, such as the Land Matrix data ([www.landmatrix.org](http://www.landmatrix.org); see Chapter 4), is equally opaque, with many cases missing or containing only limited information

on the investment chains behind the deals. Land Matrix data in late 2018 listed only ten concluded transnational land deals in the period from 2010 to 2018, with many other previously listed investments, especially those for agrofuels (many of these projects were announced from 2005 to 2008 but never materialized), having disappeared from the databank in the meantime. This stands in sharp contrast to former estimates of both the number and size of large-scale land deals in Tanzania (Herrmann 2017; Schoneveld 2014; Locher & Sulle 2014).

My own fieldwork suggests that, between 2004 and 2018, there were 14 cases of non-agrofuel-oriented land acquisition by foreign investors, who either had private or public equity backing, with the investment being driven by *financial* concerns rather than by *strategic* agrobusiness concerns (there have been other large-scale acquisitions, but executed by classic agrobusiness firms with interests in sugar, coffee or tea).<sup>12</sup> In total, these deals comprised 92,717 hectares, out of which almost 70 per cent was accounted for by carbon offset forestry projects. As such, “only” 26,366 hectares remain for genuine financialized agricultural production.<sup>13</sup>

Although this may seem tiny, some of the deals involve investments of US\$10 million or more. In addition, until recently the Tanzanian government claimed that another 25 former state farms, all titled and amenable to mechanization and economies of scale, and covering a whopping 388,528 hectares (Development Partners Group Tanzania 2013), were ready for investors. In addition, a few other private equity players, as well as impact investors involved in debt financing, have targeted companies or farming cooperatives at other nodes of the agricultural value chain. Many of the corporate targets have been small and medium-sized enterprises, but there was one grand exception: in 2012 US private equity giant Carlyle paired with two South African private equity funds to acquire a US\$210 million stake in a large Tanzanian commodity-trading company, but sold that stake again in 2015 back to the management (PitchBook 2015). Only one of the funds involved in agriculture has been set up in Tanzania (interview, private equity expert, 2018), indicating the very nascent nature of domestic private equity (contrary to neighbouring Kenya, where local private equity funds are quite active in agrobusiness). All in all, the claims of two fellow researchers that “[a]cademics and policymakers must realise that the knowledge about the land deal situation in Tanzania is still less clear than suggested by certain

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12. Existing sugar estates, for instance, accounted for almost 60,000 hectares up to 2016, when the Swedish investor mentioned earlier had its title for 20,000 hectares of land revoked by the Tanzanian government.

13. This data stems from personal knowledge of the existing situation, in addition to a careful mining of several published research papers and company websites.

databases and needs further investigation” (Locher & Sulle 2014: 588) still seems to carry much validity.

## THE POLITICS OF CAPITAL PLACEMENTS IN AGRICULTURE

In Aotearoa New Zealand and Tanzania, as elsewhere, there have been heated debates over foreign agricultural investment. For the Tanzanian case, this can be described in detail for a specific political situation observed in 2013, when I attended the “Land Justice for Sustainable Peace in Tanzania” conference in Dar es Salaam. There, former president Benjamin Mkapa, as well as the then prime minister and minister for lands, Anna Tibaijuka, encountered a critical public, which accused them of selling the nation’s land to foreigners. The former president, known to be a friend of the private sector and market-led development, tried to appease the sceptical public, emphasizing that “we are not misallocating land to foreigners, but we are underutilizing land”. The minister for lands played a similar tune, emphasizing that she wanted to discourage a “rural romanticism, because that won’t help Africa feed itself ... Rural development is about people moving out of agriculture, and we need to attract capital and investment. We must make a transition from subsistence to commercial farming. We must review our impression what a commercial farm is.” The discussion that followed was heated, and panellists were accused “of actively discouraging the theme of the conference”. It culminated in a children’s choir performing a song asking the stunned leaders what Mwalimu [Nyerere, the former president and a staunch socialist and anti-imperialist] would think about giving away “our lands to foreigners”.<sup>14</sup>

The children’s performance included a crucial diacritical practice that frequently appears when critical observers engage with foreign investments in Tanzania: they contrast a nationalist and at least rhetorically smallholder-farmer-oriented state of the past, for whom (foreign) capital was not the base but the outcome of development, with a neoliberal-authoritarian state of the present (Shivji 2006; Mwami & Kamata 2011), which makes space for capital by utilizing the state machinery and the resources it had acquired during “primitive socialist accumulation” (Gray 2018: 98). The protest has not been limited to the situation described, as the rhetoric of land grabbing played a crucial role up to the general election in 2015, with the new government promising to curb harmful land deals, revoke titles of contested investments and draft a new land policy that promised to toughen conditions for foreign investors (Schlimmer 2017). Under the regime of John Magufuli, from 2015

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14. All quotes from field diary, entry Dar es Salaam, 10 September 2013.



onwards the issue of how to utilize the country's national wealth, including land, has become as political as in the old anti-imperialist days (Jacob & Pedersen 2018). This was less driven by a well-organized farmers' or other civil society movements, however, and more by the top-down approach of a government that sought to appeal, in a neo-Nyerereist manner, to popular sentiments about growing inequalities, corruption and dispossession across the country.

In Aotearoa New Zealand, there have also been concerns about foreign land acquisitions and that "Kiwis" might "become tenants in their own country", as John Key, the then National Party prime minister, put it in 2010 (cited in Rolleston 2016: 106).<sup>15</sup> This sentiment is not shared by all farmers. For instance, the Federated Farmers (the powerful farmers' association traditionally aligned with Aotearoa New Zealand's conservative National Party) has emphasized repeatedly that it welcomes foreign investors, because they will bring knowledge and capital and stabilize land values, as long as they do not aggregate too much land in one area and as long as they do not target vertical integration of the agro-food chain (interview, former Federated Farmers president, 2018).<sup>16</sup> As one long-term observer noted:

At the governance management level, Federated Farmers are supportive of foreign investment, it would be suicide if they weren't, because, you know, if you've got a farm and you're wanting to get out and a foreign investor is offering, you know, 20 per cent more than you can get elsewhere, I mean, they would not be popular. So I think that they've always taken the view that, if that's what members want, then that's what they should get. And, I mean, they are traditionally aligned to the National Party, so they sort of toe their political line as well. (interview, journalist, 2018)

This finding gives support to the assertion that, in some contexts, not only are farmers no mere passive victims of the financialized food system, but may act as crucial co-producers of institutional landscapes as well (Williams 2014: 410).

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15. For details on some of the high-profile controversies, mainly related to intended or approved Chinese investments, see Rolleston (2016).

16. This was a slight change from the earlier position espoused as late as 2009, which had been fairly "permissive" on the overseas ownership of farmland (Rolleston 2016: 104). It was a reaction to the looming land concentration and vertical integration that even Federated Farmers could not deny.

On account of mounting public pressure, however, there was a re-regulation of the foreign investment regime in 2017, to the great dismay of many existing and potential financial investors. This brief excerpt from an online debate in 2017 captures some of the diverging sentiments at play.<sup>17</sup> As mentioned earlier, critics often single out large Chinese investments as problematic, despite the fact that these have been surpassed by investments in farming sector from North America and Europe, and pitch the hard-working “Kiwi family farmer” against the “malign foreign corporate entity”:

Is it really in NZ's best interest to allow a foreign company/govt-backed to buy large farms and production facilities and control their entire supply chain? Wouldn't it be better at least to lease the land to them? Freehold land, large holdings, are worth far more to the citizens of NZ as a whole long term, than the current market dollar value. You have to differentiate between types of foreign buyers too, from benevolent semi-absentee owners, through to investors who intend to control and own an entire agri-supply chain. Some of the most productive use of horticultural land in provincial areas was developed after being allotted via govt ballot to ex-servicemen who returned from WW2, showing how some govt intervention can kickstart NZ entrepreneurial use of rural land, though sadly these are now being bought & joined up by large corporate concerns. (web commenter 1)

Nothing is wrong with FDI investment, many countries try to attract as much as possible. NZ is a small country, our saving is very low or negative, without foreign money we can't survive. Maybe the Chinese factor is sensitive for you commenters. Look at what we are using every day in NZ, shopping, banking ... almost all owned by foreigners, Australians. Chinese investment itself is not a big deal, only one different thing is that we sell our farmland indefinitely while many other countries just lease the land up to e.g. 50 years. (web commenter 2)

Although these voices are critical of large-scale land acquisitions by foreign corporate entities, they still incorporate a widely taken-for-granted assumption, namely that Aotearoa New Zealand has been built on foreign investment – an assertion that until recently ranked among the most

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17. For details, see web comments under Chaston (2017).

powerful arguments persistently repeated in parliamentary debates about foreign investments in the country:<sup>18</sup>

Sadly, overseas investment invokes some of the worst sentiments in some of our people and some of our political parties. Xenophobia, which is the intense dislike of foreigners and foreign investment [!], has no place at all in this modern world. [...] New Zealand needs foreign investment. [...] [I]t was founded totally on foreign investment. [...] Capital is a scarce resource in this country. Capital is a scarce resource in this world. If New Zealand wants to progress and prosper, we must attract foreign investment to this country. If we establish rules that make it simply too hard for investment in New Zealand, then we will be setting rules that will be the poorer for this country.

(National Party MP; cited in New Zealand Parliament 2004: 18025–6)

Under the new government, lead by the Labour Party and headed by Jacinda Ardern, however, this truism seems to have become challenged. Both inside and outside the new government critical voices have made calls that concerns over well-being and environmental integrity should override the decades of super-productivism at the core of the imperial farm model (Roche & Argent 2015), as well as its later rejuvenations. The contestedness of asset making is something that critical scholars should grapple with. It reminds us that something is not born an asset, but turned into one. The next chapter will give further substance to this claim.

## CONCLUSION

State actors and modes of regulation continue to play a major role in the expansion of global investment chains within and outside the farming sector, despite all the rhetoric about the withdrawal of the state in neoliberal capitalism. This is also increasingly acknowledged in the global land rush debate. How foreign investment regimes – themselves a product of historical struggles – interact with global agri-investment chains often remains unaddressed, however. Arguing that the state and its associated institutions still act as the major clearing house for capital, and that the operations of global investments chains are themselves saturated with political moments

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18. Only a very few political players have historically challenged this “common-sense” narrative (e.g. CAFCA).

(Mezzadra & Neilson 2019), this chapter has shown how particular institutional landscapes have emerged from the state–capital nexus in different regions, zeroing in on Tanzania and Aotearoa New Zealand in particular. I have shown that we need to be wary not to imagine the state as a relatively homogeneous broker for global capital. Rather, we should think of it as a contested terrain of a multiscalar land rush regime that often plays into the hands of investors (Hadjimichalis 2016: 66) but that, in many cases, has changed its modus operandi because of public pressure. The routine regulation of foreign investment chains in the cases studied is more intricate than one would first have assumed when sighting the spectacular news reports emerging between 2008 and 2015. The everyday politics of foreign financial investments in farming complicates this narrative. In the early days of the debate one could easily get the impression that land in Aotearoa New Zealand, and particularly in Tanzania, was sold out to foreigners – something that, obviously, has still not materialized today.

What has also become clear in this chapter is that states may display varying willingness and power not only with regard to the regulation of (foreign) financial investments in the farming sector but also with regard to how they make these flows of money public and visible. It is a political choice to do so, or not to do so. As we will see in the next chapter, it is not only the state that is a clearing house for capital. Capital has to be cleared by capitalists themselves, who, in turn, often need to justify their activities against a critical public.



## CHAPTER 6

# VALUE(S): WHY HAS THE ROAD TO “GREENER PASTURES” BEEN SO BUMPY?

When entering the “Euro Finance Week” conference in Germany’s financial hub Frankfurt back in November 2013, something was different. A group of 30 protestors from the Blockupy movement had organized a “Spalier der Schande” (“cordon of shame”), welcoming participants to this stable of the financial industry by reminding them of the “immorality” of their activities. Specifically, their protest accused financial institutions of being involved in “food speculation” and “land grabbing”. Deutsche Bank was one of the most prominent targets of their protest, but it was global finance more generally that attracted the ire of the protestors, as the Euro Finance Week for the first time hosted an “Executive Roundtable on Agrifinance”. The panel was a manifestation of finance’s new love for all things agricultural, which had steadily developed in the wake of the financial and food price crises of 2008. As can be seen from the protest described above, not everyone has been fond of this new relationship. The demonstrators outside the Euro Finance Week are only part of a wider movement that has contested the acquisition of farmland and agricultural ventures by financial actors around the globe, particularly in regions of the Global South. Webpages such as [farmlandgrab.com](http://farmlandgrab.com), the Land Matrix project (the databank recording and visualizing all global land acquisitions since 2000) and many critical news and NGO reports are indicative of this.

Activists have not been the only critics. The finance-driven land rush has also given rise to critical views on the part of academics, the media and, at times, law-makers around the globe. As we have seen in [Chapter 2](#), most early academic interpretations have mobilized the notion of financialization to make sense of the issue. These interpretations considered in particular finance’s run on farmland as yet another example of the relentless extension of financial market forces, potentially leading to the dispossession of local communities from their ancestral lands through the advancement of

shareholder farming (Clapp 2014; Fairbairn 2014; Gunnoe 2014; McMichael 2012; Russi 2013). Critics have also argued that financialization reduces land's "multiple affordances" (Li 2014: 10) to the quality of exchange value: when farmland was being treated as a "pure financial asset" (Fairbairn 2014: 281) – akin to its urban counterpart – speculation and rent-seeking would reign over productive investment. More recent interventions problematize the notion of "asset" itself in the context of farmland investments (Ducastel & Anseeuw 2017; Larder *et al.* 2017). Formulated in response to more structuralist readings of the finance-driven land rush, such studies have cautioned us against taking for granted "the asset" as a stable social formation that exists a priori, arguing that it is something that is the outcome of a particular operation of capital: assetization (Birch 2017; Muniesa *et al.* 2017; Ward & Swyngedouw 2018).

What has been largely absent from this and the more general debate on assetization, however, is an investigation into its moral dimensions (for exceptions, see Kish & Fairbairn 2018; Sippel 2018). Such an endeavour seems to be justified for at least four reasons. First, in existing debates on financialization and the operations of modern finance, "'morality' and 'finance' are often presented as antithetical to one another" (Ouma *et al.* 2018: 504). The criticism that many NGOs have levelled against the financial industry – accusing them of immoral and unproductive activities, such as land and food speculation – is indicative of this (see, for example, Grain 2008; Herre 2013; Hawkes 2016).

Second, asset managers often insulate themselves against criticism by resorting to the turf of the "economic", underlining the legal duty they have to serve the interests of original asset owners (i.e. savers, wealthy individuals, organizations) and their legal representatives (i.e. pension funds, insurance companies, family offices, endowments). By doing so, they fetishize the fundamentally normative and thus malleable character of their trade.

Third, at a time when the planet seems to overflow not just with commodities but also with assets (Haldane 2014; Muniesa *et al.* 2017), there is an urgent need to unpack and problematize the normative foundations of assetization. This is even more imperative against the backdrop that, with regard to the treatment of economic institutions and practices, more often than not "[w]hat was once a matter of legitimacy becomes simply a matter of how things are" (Sayer 2007: 264). The case of agricultural investments provides a unique opportunity to document the moral struggles surrounding the legitimization of an asset class in situ, since the asset class is still in the making.

Fourth, there is an increasing acknowledgement across the social sciences that markets more generally should be considered moral projects, "saturated with normativity" (Fourcade & Healy 2007: 299–300), and that the process of



turning things into exchangeable commodities (i.e. marketization) is often a morally and politically contested one (Çalışkan & Callon 2010; Zelizer 1979). If the latter holds true for markets and marketization respectively, then this must also apply to assets and assetization.

Based on these insights and my own fieldwork, this chapter argues that central to the assetization of farming is the globally distributed effort to bestow it with a legitimate financial worth. Although many financial actors paint the picture that farmland has an absolute or intrinsic value, and that this value can be “unlocked”, this chapter demonstrates that farmland gains its financial worth only through collective yet contested practices of classification, valuation and valorization. This process has an internal dimension (related to the financial industry) and an external dimension (related to “society”). Within the finance industry, this involves its positioning of farmland as an “asset” in the relational investment universe of the world of money management (Ortiz 2013): agriculture becomes a legitimate asset class only if it can be meaningfully set in relation to other asset classes, and if the underlying “assets” generate legitimate returns for investors. Assetization involves the production of a specific form of financial knowledge about the world of farming through which its social, material and temporal qualities are aligned with the moral conventions governing the money management industry.

Furthermore, I shall demonstrate that the legitimization of “agriculture as an asset class” has been thwarted by attacks from social forces such as NGOs, as accusations of immorality (i.e. speculation, land grabbing) have become major reputational risks for institutional investors. This notwithstanding, “capital” and its enablers have worked hard to overcome these internal and external barriers to accumulation. Ultimately, the cases presented here allow us to problematize the often invisible morality of finance, which is as much about “value” as it is about “values”.

## RETHINKING ASSETS AND ASSETIZATION: A MORAL ECONOMY PERSPECTIVE

One theoretical perspective that lends itself particularly well to such an endeavour is convention theory and its application to financial markets, particularly through the work of French economist André Orléan (2012, 2014) (using the example of the stock market). Broadly anchored in a moral economy approach to the economy, convention theorists have argued that all economies, even the most unsocial and profit-seeking ones, are moral economies: “All economic institutions are founded on norms defining rights and responsibilities that have legitimations (whether reasonable or unreasonable),

require some moral behaviour of actors, and generate effects that have ethical implications” (Sayer 2007: 4).

A conventionalist take on modern finance starts with the premise that activities of financial economization, including assetization, “are interlinked and tied to an uncertain future and its yield risks” (Vogl 2015: 117). Under conditions of uncertainty, it is only through “a shared way of interpreting future economic developments” (Orléan 2012: 325), as well as shared practices of (e)valuation (*ibid.*: 336), that financial players can coordinate their actions and bestow them with broader legitimacy. These are as much a matter of “instituting” (Polanyi 1992 [1957]) as they are of “instrumenting” (Diaz-Bone & Hartz 2017).<sup>1</sup> Although conventions coordinate social affairs across a wide range of fields, financial conventions govern valuation, classification and capital allocation practices in the world of money management. They serve as “higher common principles” (Boltanski & Thévenot 2006 [1991]: 28) against which the legitimacy of investment decisions and the financial worth of an object of capital’s desire are assessed. An asset not only needs to have a future labouring capacity from which value can be capitalized at any given moment; it also must have a certain degree of liquidity and comparability vis-à-vis other assets. In tandem with legal and technical devices, financial conventions enact the specific morality of assetization.<sup>2</sup> Thus, “[m]orality does not refer here to some universal ethical standard; rather, it means what a society, or a group, defines as good or bad, legitimate or inappropriate” (Fourcade & Healy 2007: 301).

This insight helps us question the peculiar idea of fundamental value (Bryan & Rafferty 2013; Orléan 2014; Ortiz 2014), which many financial market players and economists believe to be inherent in an “asset”. A conventionalist perspective suggests that such values are “not natural, but are produced by particular actors or groups of actors in a specific social environment” (Ducastel & Anseuw 2017: 203).

The existence of uncertainty in the future-oriented endeavour of turning money into more money is a crucial factor, yet it is not enough to explain the conventional universe of the world of money management. Three concomitant developments have been crucial to the moral evolution of modern finance. Flanked by both regulatory and organizational restructuring, these have transformed the sociality, spatiality and materiality of the money

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1. For economic historian Karl Polanyi, “instituting” denotes the vesting of economic processes “with unity and stability; it produces a structure within a definite function in society” (Polanyi 1992 [1957]: 34).

2. This is not to deny, of course, that, despite the existence of overarching moral principles, the reality of investment practice is often made up of compromises between different conventions and that financial actors may draw upon different orders of worth to justify their actions (Kish & Fairbairn 2018).

management industry at large. First, there is the transformation of finance from vice to force for good. Historically, financial industry representatives and finance economists have tried hard to reframe their trade – at various points in time frowned upon as mere speculation, rent-seeking and extraction (Aitken 2007; Christiansen 2016; Goede 2005) – into a socially useful activity (Ortiz 2014). The idea that finance is useful and productive moralizes even the most profit-seeking financial activities as still representing a service to society (Mishkin 2007: 3). It reimagines financial actors as moral agents and wealth creators rewarded for their risks and waiting time before their money is returned with interest (Sayer 2007). As Joseph Vogl (2015: 80) succinctly puts it: “Like no other social invention before it, the intricate network of innovative financial products is said to ensure the realization of ‘distributive justice’ across all life situations.” More recently, in an attempt at moral rejuvenation, new forms of social, responsible or impact investment have emerged that seem to alter the moral fabric of the world of money management (see section ‘Responses from industry players’), but do not fundamentally break with the expansionist logic of capitalist accumulation (Kish & Fairbairn 2018; Langley 2020). In addition, such attempts clash with prevailing liberal understandings of fiduciary duty in mainstream finance (Lydenberg 2014).

Second, there is the strong influence of financial theories such as the efficient market hypothesis, the shareholder value conception of the firm and modern portfolio management theory (MPMT) on the praxis of investing (Appelbaum & Batt 2014). In addition to the cognitive influence these have had over financial actors’ decision-making, such theories became engrained in public regulation (Lydenberg 2014). For instance, until the 1960s investment managers in the United States were only allowed to invest in low-risk assets such as government bonds,<sup>3</sup> based on the so-called prudent man rule. Buttressed by developments in finance economics and law since the 1970s (Appelbaum & Batt 2014; Lap erouse 2016), money managers such as pension funds were subsequently allowed to invest in riskier products. As a result of the influence of MPMT, the “decision whether or not to invest in a particular security (company stock or government bond) was replaced with [a scientifically grounded: *my addition*] assessment of the risk profile of asset classes and how those summed-up to the entire portfolio” (Clark & Monk 2017: 39). At the same time, the notion of fiduciary duty came to be defined in economic terms as the duty to generate returns for shareholders according to the shareholder theory of the firm (Fama & Jensen 1983). Potential moral hazards linked to principal–agent problems between asset owners and managers were

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3. This was similar to the United Kingdom, where pension funds were only to invest in property (shares of property companies) for the first time in 1955 (Massey & Catalano 1978: 124).

meant to be tackled by strict guidelines on investor responsibility and liability. This led to new forms of contractual relationships in the money management industry, as many investment managers contracted out vital services such as asset management, investment advice and data provision, and at times have even been legally obliged to do so (as, for example, in the case of investment advice: see Arjaliès *et al.* 2017). This provides substance to a claim made in the next chapter, namely that most of the investments channelled via financial markets today, including agri-focused ones, occur through extended chains of delegation. Even though we have seen a trend of “disintermediation” emerging among large institutional investors in the wake of the financial crisis in order to curb external management costs (Appelbaum & Batt 2014), many pension funds and other institutional investors “have abandoned their own strategies and rely almost entirely on external portfolio managers who claim proprietary advantage in terms of their information processing over the bulge bracket investment houses” (Clark & Monk 2017: 55).

Third, quantification and data technologies are to be considered. In tandem with the scientification of finance, these have been instrumental not only in “taming risk”, by rebalancing information asymmetries in financial markets, but also in helping money managers justify and rationalize their investment decisions in an “objective” manner. Haunted by the fiduciary imperative, numbers appear to be the most effective way to turn investment into a rational activity, free of any subjective impulses or other kinds of “animal spirits” (Akerlof & Shiller 2010) that would go against the idea of efficient markets. Even though the financial crisis and many scholarly accounts have demonstrated that investment in practice can follow quite different scripts, the trust in and importance of numbers is part and parcel of the “finance-specific order of knowledge” (Vormbusch 2012: 314) that regulates the allocation of capital into existing and new asset classes. Historically, the scientification-cum-quantification of finance has contributed significantly to legitimizing its operations (Goede 2005). It has turned certain financial activities deemed as outright gambling at various points in history into a rational endeavour, in which money managers are equipped to fulfil their fiduciary duty towards other people’s money. Quantitative comparisons between the risk–return profiles of different assets and asset classes and various techniques of risk and return management are expressions of the new moral order, which these developments have produced.

The emergence of institutional landscapes can be evaluated in light of these developments. According to the discourse actively nurtured by the financial industry, finance’s role in farming is not only a profit-seeking one but also a redeeming one: “Investing in agriculture can help diminish impending shortages while it shows a substantial profit for the investor!” (Black Earth Farming n.d.). Investments into food production are said to

create a win-win situation for both investors and target countries, while at the same time closing the food, yield, energy and generational gaps of this world.<sup>4</sup> Investors would reap relatively secure returns, but target countries would benefit from investments, employment effects, technology transfers and the diffusion of a new managerial culture in the agricultural sector. Here, the historically cultivated image of finance as a giant “problem-solving machine” is mobilized to give its workings social legitimacy (Andrew Palmer; cited in Langley 2020: 143). Although this may be a good story for “society”, arguments mobilized within the specialist circles come along with a more technical tone. Given that institutional investors and delegated asset managers constantly have to weigh the future worth of existing investments vis-à-vis the potential future worth of alternative investments, university-based economists and “economists in the wild” (Çalışkan & Callon 2010) have tried to scientifically back up why farmland has a superior inflation hedge quality and risk–return profile compared to other asset classes (see Figure 6.1). For instance, a prominent economist in the field and his co-authors note that, for the top US states, from 1970 to 2010,

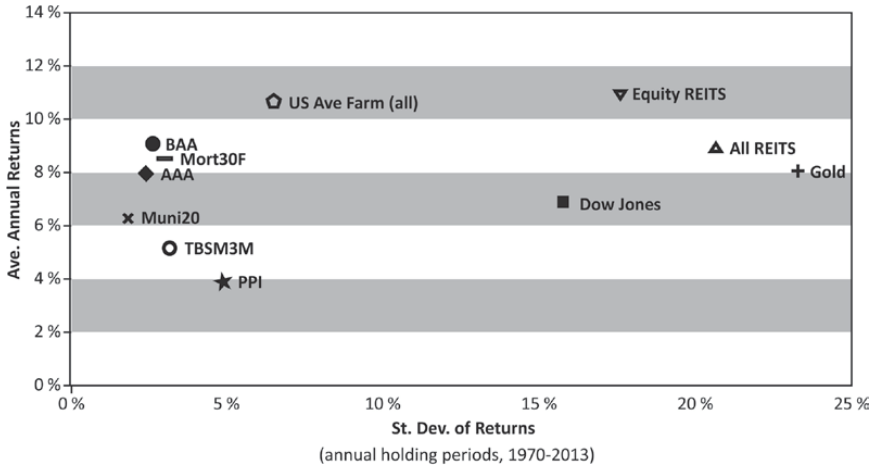
the current income component [of farmland] has been remarkably stable, though declining slightly through time as a share of value, while the capital gains have been positive except for a period in the 1980s when farmland responded to an export crisis that was accelerated through lending market stresses, and a minor blip in 2009 that many see as driven by tax uncertainty related concerns.  
(Sherrick *et al.* 2013: 10)

On top of this, much of the argument for farming as an investment opportunity indeed invokes the basics of MPMT, which stipulate that “diversification increases expected portfolio returns while reducing volatility” (Cumming *et al.* 2013: 21); add farmland to your portfolio, and you will be able to diversify away the risk! Although farmland investment thinking rooted in MPMT is not new – it can in fact be traced back through to the 1960s (Barry 1980; Kaplan 1985; Kost 1968) – and a few US institutions have targeted the sector since the late 1970s (Koeninger 2017; Lapérouse 2016), the recent hype for agriculture as an alternative asset class has propelled farmland investments from obscure specialist journals to a much larger public.<sup>5</sup>

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4. Capitalizing on the fact that farmers in countries such as the United States and Australia struggle to find heirs to take over farms.

5. According to Sherrick *et al.* (2013: 7), “Barry (1980) formalized the notion of farmland as an investment class in an equilibrium capital market.”



**Figure 6.1** Risk–return profile of Illinois farmland compared to other asset classes, 1970–2013

*Notes:* AAA = triple-A-rated bonds; BAA = BAA-rated bonds; MORT30F = fixed-rate 30-year mortgage; Muni20 = long-term municipal bond; PPI = Producer Price Index; TBSM3M = 3-month Treasury bill. The figure shows that farmland in Illinois (a frontier state for financial investments in farmland in the United States) has historically outperformed many other asset classes at much lower volatility (i.e. risk of return, measured as standard deviation, 1970–2013). Even though this point is often made only for contexts, where data is available – such as parts of the United States – it has been quickly universalized as an inherent feature of farmland in general.

*Source:* Redrawn from data provided in Sherrick (2014).

## LEGITIMIZATION STRUGGLES: FROM WITHIN

### *Internal barriers to assetization*

Despite the hype about farmland investments, the conventions structuring the world of money management have, paradoxically, been a problem for those trying to mobilize capital for these investments, with the indeterminate financial worth and politically contested nature of farmland being the main “off-putters” for institutional investors such as pension funds. Because of the enormous amounts of capital under the management of the latter – one interviewee described them as “supertankers” in an analogy to the world of shipping (interview, asset manager 2, 2014) – these are asset class makers in their own right.

The indeterminate financial worth of farmland is constituted at three levels: the level of the asset class, the level of the underlying asset (farmland) and the level of investment performance (see also Knight & Sharma 2016).

First, at the level of the asset class, institutional investors have struggled to classify farmland in a meaningful way. The words of a leading farmland asset manager are indicative of this:

It's always tricky, when you meet the institutional investors; at the beginning they actually do not know where farmland fits in. It starts with the problem that you do not know with whom to talk to. "Who is responsible for that new domain farmland in my institution against the backdrop that we have a private equity space, an alternative investment space and a real estate space?"

(interview, asset manager 3, 2014)

Since different subclasses have different risk and liquidity profiles, and fund managers – according to regulations – usually cannot pass a certain threshold with a particular risk category, it matters where a manager places farmland in his or her portfolio.

Moreover, as noted in [Chapter 5](#), many land markets around the world are rather "thin", often with far less institutionalization than large institutional investors can handle. Even in "institutional-grade" countries such as the United States, farming property deals often become public only with a significant time lag, and some of the best properties never hit the market but are sold among peers. This makes it difficult not only to access farmland but also to assess its spatially variegated liquidity.<sup>6</sup>

It has also been a challenge to synchronize the seasonal operations of farming with the temporalities of fund management, as one interviewee illustrates for the US case:

The natural window for agriculture is one year, right, so we plan the spring harvest and fall, so we think of things as annual returns, annual incomes, like, it's an annual process. And then we have to deal with fund managers who need to report the forms, the portfolio, at least quarterly to the investors if not weekly to their managers or advisers or something.

(interview, farmland investment researcher, 2015)

In addition, there is the relatively small size of such farming deals compared to deals in other "asset classes". As many portfolio managers have

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6. In real estate, the time, or "days on market", of a property is used as a measure for the liquidity of a market. Because of the opacity of farmland deals even in markets such as the United States, "measuring that transaction cost or liquidity cost is difficult because of limitations of data" (interview, farmland investment researcher, 2015).



minimum investment thresholds owing to the high transaction costs of their dealings (search costs, due diligence, etc.), this poses a serious problem. As *The Economist* puts it, “Unlike skyscrapers or pipelines, farming offers few of the multi-billion-dollar deals that are needed to entice mega-investors” (*The Economist* 2014).

The final set of challenges relate to the historical record of the “agriculture asset class”. Although farmland investments have existed in the United States as a niche investment product since the 1980s, many of the existing funds have not yet exited their investments or keep them confidential, making it difficult for potential new investors to assess the risk-adjusted returns on these funds after management fees. Especially in farming deals structured around private equity principles, the latter have been major concerns for institutional investors. Pioneering funds charged fees that were more or less a direct application of the common private equity 2/20 fee model,<sup>7</sup> whereby a manager charges an annual management fee of 2 per cent, and takes home a carried interest of 20 per cent of the profit at the end of a fund’s lifespan (interview, investment advisor, 2014). The lack of a track record has also posed a problem for those fund managers who, because of regulations, are not allowed to invest with other first-time fund managers. On top of this, some early and rather dubious agricultural investment products promoted by investment bankers (e.g. for biofuels) tilted “the market ... with the result that no one trusted each other anymore” (interview, placement agent, 2014):

We saw that many entered the game, especially hedge funds. People think that you can do farming in front of your computer. And that is not true. It is something totally different. It is not about financial engineering, about “flipping”, as we know this from private equity sectors and segments. Everyone thinks, “I will buy farmland and sit on it and then it will explode. I don’t need to do anything.” This is a highly complex business. It is really difficult to find the good farmers, and these are partly scientists, partly artists. You need to have the right feeling. And, on the other hand, you need the corporate backbone. The structuring side. Both need to come together. (interview, asset manager 3, 2014)

In conclusion, some industry observers compared the indeterminate worth arising from the asset class’s opacity with “real estate and infrastructure 20 years ago” (*The Economist* 2014). Owing to “finance’s limited knowledge of agriculture” (Williams 2014: 422) and the difficulty “to translate the world of crops and farms into frames, calculations and codifications

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7. See Appelbaum and Batt (2014) for the details of this model.

that make sense to finance” (*ibid.*), agriculture still lacks a more widespread legitimization and structural coherence as an “alternative asset class”. “Legitimization” here refers to the act of successfully aligning something with the moral fabric underpinning a certain economic field (such as asset management), while the coherence of an economic field is the outcome of a successful legitimization in so far as actors evaluate an object of investment or exchange as “good”, without major frictions such as dissonances, uncertainty, disagreements or contestation (Boltanski & Thévenot 2006 [1991]; Tarim 2012; Zuckerman 2004).

Obviously, some time has passed since the origination of the interviews and reports quoted. Some optimistic observers (usually with a commercial interest) claim that “investors today are more educated and have a better understanding of the sector” (Koeninger 2017) and that, by 2018, the industry had become “well placed to attract increasing capital flows globally” (Valoral Advisors 2018b: 2). The issues described still cast a shadow over the asset class, however. At the same time, players in the industry have worked hard to increase the structural coherence of the asset class.

### *Responses from industry players*

In response to these internal limits to capital, multiple, often transnational epistemic spaces have emerged in which financial players have been working on endowing the agriculture asset class with coherence and legitimacy. In more abstract terms, these are spaces in which the world of farming has been reframed “such that it is brought further into alignment conceptually, semi-otically and materially with capital” (Sullivan 2013: 213). This includes farmland investment conferences, which have mushroomed and “helped enhance the profile and credibility of the sector as a large and attractive destination for institutional capital” (Conrad 2018). These conferences double as sites of sociality and calculation. There, the distant and uncertain future is made tangible through “storytelling” (Tarim 2012), rich in numbers, and face-to-face meetings between potential investors and asset managers. Although some asset managers interviewed emphasized that these conferences nowadays largely serve as networking events rather than educational spaces, one cannot deny that the institutionalization of agricultural investment conferences put “AG investing” on a different track. As one industry observer remarked for the US “frontier market”, in the early days of farmland investment in the 1990s, “the best one could hope for would be an opportunity to speak or present during a small breakout session at a real estate conference ... For the breakout session speaking opportunities, the sizes of the audiences could vary greatly, with sometimes as few as five people in the audience” (Conrad 2018).

Education also emerges, through specialized industry intelligence that provides tools to make agriculture legible in financial terms on a larger scale. One example is the development of the Savills Global Farmland Index, featured in Chapter 4, which helps compare historical farmland values for different geographical regions (interview, company representative, 2015). Another example is the TIAA-funded US\$5 million Center for Farmland Research at the University of Illinois, which generates “sophisticated research needed to drive long-term and sustainable practices by institutional investors, businesses and farmers.”<sup>8</sup> Its director is a pioneer of farmland-focused finance economics and a much-sought-after speaker at global investment conferences, and was recently involved in helping extend the US NCREIF Farmland Property Index to Australia. A final example is the Map of Agriculture Project, a “Bloomberg for agriculture” sponsored by an Aotearoa New Zealand agricultural fund manager (interview, project manager, 2015). Founded in 2012, the project aims to make agriculture legible (“getting the measure of agriculture”) in financial terms from the macro (regional geographies) to the nano level (subunits of individual farms). For instance, its platform enables the comparison of the productivity of a dairy cow in a particular region of the country with that of a cow in a particular region in Ireland. Although it also targets farmers and farming advisors as clients, it was explicitly developed to make farming more “granular” and thus amenable to the calculations required by MPMT in the institutional investment domain (interview, project manager, 2015). The project is only one of the many recent attempts to make farming part of the big data revolution (“agriculture 4.0”). In 2016 it merged with a leading farm data and research firm.

## LEGITIMIZATION STRUGGLES: OUTSIDE FORCES

### *External barriers to assetization: “society” fights back*

Reminiscent of Polanyi’s “double movement” (Polanyi 2001 [1944]) – the social forces that attempted to reign in the commodification of land and labour flourishing at the height of the nineteenth-century laissez-faire capitalism in the United Kingdom – NGOs have criticized the rising interest in farming (and food trade) among financial investors since 2008. Their claims have had a profound impact on the evolution of agriculture as an “alternative asset class”, creating troubles for several large institutional investors and banks. The US pension giant TIAA, the leading investor in farm- and

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8. See <http://farmland.illinois.edu/about> (accessed 10 May 2018).



**Photo 6.1** NGO campaign for pension funds' divestment from farmland and agriculture

*Source:* Grain (2017).

forestland globally, recently even became the target of a divestment campaign (Friends of the Earth 2016; see also Photo 6.1). On top of this, activists in a variety of geographical contexts have become increasingly interested in the question of “who owns our land”.<sup>9</sup> Thus, reputational risk associated with particularly farmland-based investments poses the number one risk, especially for institutional investors such as pension funds. Which teachers’ union’s money manager really wants to be involved in an ugly land grab posse in, say, Tanzania or Cambodia in which smallholders have been displaced? The land grab discourse poses a dilemma for asset management firms that want to raise capital for deals but face the challenge of encountering institutional investors who anticipate reputational risks: “Concerning reputational risk, personally, I consider that as one of the biggest risks, as one of the biggest entry barriers. Basically, we overfulfil the criteria in that domain, but that was something we needed to learn” (interview, asset manager 2, 2014).

At an investment conference in 2013, one industry pioneer remarked that what was urgently needed was to “de-risk” and “demystify” agriculture as an asset class: “Particularly in Germany, you have this stigma over the asset class.

9. See, for example, [www.inclusivedevelopment.net/follow-the-money-to-justice/](http://www.inclusivedevelopment.net/follow-the-money-to-justice/) or <http://apps.investigatamidwest.org/afida> (accessed 10 September 2018).

Here we are discussing how many billions of dollars we need for agriculture and you have all this talk about land grabbing and sustainability” (entry in field diary, 2013). The industry pioneer not only referred to the challenge of managing reputational risks, but also hinted at the more general problem of legitimizing the “asset class”. As soon as you leave the popular institutional-grade contexts of the United States, Australia or Aotearoa New Zealand, risks multiply. Although reputational risk is not the only risk that investors may encounter when placing their capital in parts of Africa, Asia or South America,<sup>10</sup> it is a crucial one. It can even lead to situations in which doors previously open for research have suddenly been closed. When revisiting a large private equity project in Tanzania in 2017, a senior manager wanted to make sure that I had not joined a prominent US “anti-land-grab NGO”, which had previously attacked their investment with a controversial report – putting a final round of capital raising at stake.

Contestation with regard to agricultural investments is a multiscale phenomenon, however. Much of what has been described here has been triggered by NGOs with a global reach. When it comes to specific settings, contestation often follows place-based scripts, reflecting the histories, political economy and politics of particular places, as we also saw in the previous chapter.

### *Responses from industry players*

So, given the conventional architecture of the money management industry and the role of reputational risk in a future-making endeavour that seems to rest on fragile grounds, how have investors, banks and asset managers dealt with the land grab discourse that threatened a legitimate framing of their “asset class”? First, some have reviewed their internal economic, social and governance criteria. For instance, the press spokesperson of an asset manager who was attacked for supporting “land grabs” in south-east Asia during an NGO campaign in 2010 admitted during an interview that the attack had hit the company when it was unprepared and that it was not particularly focused on sustainability issues around that time. It subsequently reviewed its ESG criteria to incorporate more social aspects. His organization would not use the term “sustainability”, however, but preferred to use “responsibility”, because, at the end of the day, it was a “trustee” and had to act in the very best interests of its clients: “When we would talk of sustainability, the NGOs would not buy into it anyway.” The prime goal of his organization remained “economic”, and this was why it had a “communication problem”

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10. Others include commodity, political, macroeconomic and operational risks.

**Table 6.1** Example of an ESG framing in an Africa-focused asset manager's annual report

| <b>Compliance against the fund's responsible investment code</b> |               |               |               |               |                 |
|--|---------------|---------------|---------------|---------------|-----------------|
| <i>Areas of compliance</i>                                       | <i>2013 %</i> | <i>2014 %</i> | <i>2015 %</i> | <i>2016 %</i> | <i>% change</i> |
| Governance   | 69            | 87            | 91            | 96            | 5 ↑             |
| ESG management systems   | 57            | 71            | 80            | 87            | 7 ↑             |
| Animal welfare   | 90            | 100           | 100           | 100           | –               |
| Environment  | 49            | 69            | 68            | 79            | 11 ↑            |
| Social   | 86            | 94            | 90            | 98            | 8 ↑             |
| Health and safety  | 40            | 78            | 60            | 93            | 33 ↑            |
| Other social matters   | 52            | 76            | 62            | 92            | 30 ↑            |
| <b>Overall</b>   | <b>63</b>     | <b>82</b>     | <b>79</b>     | <b>92</b>     | <b>13 ↑</b>     |

*Source:* Own research.

with NGOs, because “we simply speak different languages” (interview, company representative, 2013).

Indeed, becoming more “responsible” by reviewing ESG criteria has become a more generic approach in the industry (Burwood-Taylor 2015), especially among asset managers serving large pension funds, who are now being pressurized to make public their ESG footprint (Table 6.1).

As institutional investors have become increasingly wary of public backlashes, some larger ones (including TIAA, the Swedish pension fund AP2 and six other institutional investors) took their commitment to ESG to a higher level in 2011 by launching the “Principles for Responsible Investment in Farmland”, which set out general guidelines for institutional investors, farmland asset owners and managers. Others have subscribed to principles launched by multilateral organizations, such as the “Principles for Responsible Agricultural Investment” launched by the World Bank, FAO, United Nations Conference on Trade and Development and International Fund for Agricultural Development in 2010 (Stephens 2013) or the FAO’s “Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security” (Seufert 2013). Additionally, separate roundtables for popular “assets” such as soy, biofuel and palm oil have been launched. Even though such agreements have attracted criticism from NGOs, in that they represent watered-down, voluntary frameworks in which value still trumps values, these frameworks have had an important function as legitimization devices in the world of finance. For instance, when asked about ESG criteria in the agricultural investment space – obviously before being hit by the recent divestment

campaign – the then president of global real assets at TIAA confidently responded:

We partnered with a group of institutional investors to establish the “Principles for Responsible Investment in Farmland”. These principles provide guidelines to responsible investment and management of global farmland. We ensure consistency with the principles by employing a rigorous investment approach that includes a number of policies, procedures and checklists that assess, mitigate and manage risks. (Burwood-Taylor 2014b)

Other industry players are convinced that, over time, there will be “a race to the top”, underpinned by a grading system of asset owners and managers that rewards good environment and social stewardship (Maimbo & Zadek 2017). Furthermore, development finance institutions and impact investors have made calls for creating business models that are developmental, not targeting large-scale farming operations as much as other entry points in the agricultural value chain in the countries of the Global South, such as small-holder production.<sup>11</sup>

The strategies outlined above represent crucial steps in bestowing agricultural investments with more legitimacy and protecting them against criticism from “outside”. The aggregated risk of such investments still puts off many institutional investors, however, and the recent controversy around TIAA’s investment – linked to problems of “false intermediation” and a “land chain” that was “not clean”, as one investment advisor interviewed in 2018 put it – has sent shockwaves through the industry. As pointed out in the previous chapter for the case of the Canada Pension Plan Investment Board’s recent withdrawal from farmland investments in the United States, although the reputational risks associated with potential criticism from the public are only one element of the risk equation, it is enough for some actors not to move into or to move away from certain geographies.<sup>12</sup>

At the global level, the response to this climate of “investment angst” has been that some asset managers have teamed up with specialist intermediaries to develop more structured investment approaches through which deals, risks and returns are managed more methodologically. This includes managing reputational risks. Potential land grabs or potentially adverse social, ecological or economic impacts usually do not enter the equation as moral

11. See, for example, <https://navigatingimpact.thegiin.org/smallholder-agriculture> (accessed 20 May 2018).

12. See Ducastel and Anseeuw (2017: 207) for a detailed case of US investors withdrawing from an investment in South Africa.



questions, however, but as threats to value creation. An industry narrative has emerged that maintains that investing responsibly fits with the fiduciary imperative of the investment management industry because ESG “makes financial sense” (Janiec 2016) and “should be looked at as a value creation tool, not just a risk management mechanism” (Burwood-Taylor 2015). Recent amendments to US retirement management legislation have buttressed this shift (Fitzpatrick n.d.). In this emerging narrative, moral and social questions are largely reframed as economic ones, and finance maintains a certain autonomy from society. As Zenia Kish and Madeleine Fairbairn (2018: 584) note succinctly, by citing Ananya Roy (2012), such claims – both with regard to the responsible or impact investment variant – are part of “the ‘ethicalisation of market rule,’ in which global finance makes human suffering visible as a means to justify expanded capitalist solutions”.

## CONCLUSION

In this chapter, I have provided novel insights into the moral grounds on which the legitimacy of capital placements into the world of farming are negotiated. This effort is connected to the critical projects of other scholars who have called for an unpacking of the concrete operations of capital, “in particular material configurations, shedding light on processes of valorisation as well as on the frictions and tensions crisscrossing them in lived and grounded circumstances” (Mezzadra & Neilson 2015: 6; see also Braun 2016; Vogl 2015). We can specify the preconditions for finance capital’s operations and their resulting footprints, however, only if we understand the moral fabric that holds these together. This, again, requires abandoning the ontological divide between the “economic” and the “moral” – between “value” and “values” – that is as much a part of popular discourse as it is of neoclassical economics. It risks reifying the popular conception of finance as an autonomous sphere that colonizes the lifeworld but is out of reach for most of us. This distinction is often drawn by the finance industry and its critics alike. Although money managers argue that they are, first of all, committed to satisfying investors because of their fiduciary duty (and thereby relegate criticism to the realm of the “political,” “social” or “moral”), critics often accuse finance of economizing something that should not be economized – at least, not according to a financial market frame of worth. In contrast, I have shown here that assetization is itself firmly entangled with culture, morals and values. Acknowledging this is pivotal for better understanding what goes on inside the agri-investment chain, and on/in the “assets” incorporated into these. The following two chapters will address this issue.



## CHAPTER 7

# DELEGATION: WHAT HAPPENS INSIDE THE AGRI-INVESTMENT CHAIN?

Somewhere in a pension fund office in central Europe in 2008 an external consultant presented Mr B with an opportunity he could not turn down. The world had just been shaken by the subprime crisis, threatening the entire global financial system. This was a unique situation, as it “simultaneously involved problems in money, credit, banking, property, equities, and sovereign and corporate bonds” (Arjaliès *et al.* 2017: 121). With a real estate investment crisis quickly turning into a sovereign debt crisis across Europe, one of the mainstays of institutional investors – fixed income (e.g. from government bonds) – was at particular risk, threatening to compromise the ability of large financial institutions to service their future commitments. As liability-oriented asset managers,<sup>1</sup> these needed to achieve a return of between 4 and 8 per cent on capital per annum to be able to pay future beneficiaries their promised yield. When governments, particularly in the United States and some European countries, not only bailed out banks too big to fail but also lowered interest rates through quantitative easing policies, the market was suddenly awash with “hot money” looking for greener pastures. Mr B’s thought process was: “Why not invest in *real* greener pastures? After all, rich families in his country had invested in forests for centuries. Such investments may require you to lock in your capital for some time, but you will be compensated for the risk with a premium.” Mr B can clearly remember how the decision was made to turn to agriculture:

We saw we were running into problems on the fixed-income side. We had made the decision to start with agriculture in 2009, 2010, in Australia and Brazil. In the short term, after the financial

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1. On the concept of liability-driven investment among financial institutions, see Arjaliès *et al.* (2017: 62–6).

crisis, opportunities arose in that investment space, especially in the corporate space. However, it was already clear that this would not last for long. The fact that these interest rate reduction trends would continue and that at some point we would have also fallen below the actuarial interest rate, which at that time was still at 4 per cent across all our investments. And, for us, the topic of real assets coupled with perhaps the second label, liquidity and liquidity premium, came in very early on. [...] And then we said that, when we do agriculture, we only do it in regions where I am not dependent on subsidies. [...] I think the next investment we made in the agricultural sector ... was already New Zealand – dairy. [...] Then, after the dairy investment in New Zealand, we had a long look at the classic annual crops in eastern Europe. We dealt intensively with a fund that would have targeted Ukraine and Russia. And we were very close to really doing that to ourselves. But then the upheaval in the Ukraine started. Thank God we didn't go there. (interview, 2018)

After putting some money into a pioneering fund targeting Australian and Brazilian agriculture (which did not perform as expected), his office soon ventured into Aotearoa New Zealand dairy, apparently a much more promising growth story. Another European pension fund had already been an “anchor investor”, providing the faith needed in a nascent market. If that fund had allocated many millions, why not his, too? Dairy had been a popular investment among many Aotearoa New Zealand farmers (and some non-farmers) since the late 1990s, because it generates relatively predictable income streams that can be capitalized. Some farmers overdid it, however, loading their farms with so much debt in an attempt to leverage returns that they (or their banks) had to make distress sales or calls. The availability of distressed, or sometimes simply undervalued, assets in a market with a bright future<sup>2</sup> seemed like a promising “value play”. Agricultural investments in other world regions, including permanent crops in the United States, would follow – just not in Ukraine, or Russia, as you can imagine. In these countries, geopolitics spoiled the party.

Mr B was not alone. Around that time many pension funds were contemplating what to do with their asset values that were at risk. Pension funds saw their asset values drop by over US\$5 trillion, from US\$27 trillion, during the global financial crisis (Keeley & Love 2010). They were joined by other wealthy individuals, insurance companies, endowment managers and

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2. Given the rise in dairy consumption in Asia, as well as the free trade agreement that China, as *the* rising milk consumer, and Aotearoa New Zealand had signed in 2008.

sovereign wealth funds, which had similar concerns and suddenly thought that real assets, especially farmland and agricultural companies, could be a viable bet. Often, however, it was not these parties who ultimately placed capital in the farming sector. Although many of today's agricultural investments are bankrolled by large financial institutions serving as trustees for original asset owners such as future pension or insurance beneficiaries, in many cases it is specialized asset managers – or, more precisely, the operators they frequently employ – who lay out and plough institutional landscapes on behalf of these parties. As we saw in the previous chapter, the whole capital placement process in agriculture is structured by a set of complex socio-spatial relationships that often stretch across many sites, and eventually link sources of capital *somewhere* to land and agricultural ventures and practices of value extraction *elsewhere*.

The remainder of this chapter takes the reader through some of these chains, and the deal cycle in which they are anchored.<sup>3</sup> The latter is more than a technicality of an “exotic” industry. The deal cycle is the transmission belt through which money ( $M$ ), via the production of agricultural commodities ( $C$ ) from land, is transformed into more money (or  $M'$ , as a famous political economist once put it) from which interest, dividends or other financial payouts can be derived.<sup>4</sup> Yet we should treat  $M'$  “as an empirical question to be answered rather than a starting assumption” (Ouma *et al.* 2018: 502). How is it ultimately assembled? Besides the case mentioned above (let us title it “*Case 1: pension funds have long-term liabilities*”), in which a pension fund's money – via an Aotearoa New Zealand dairy fund – eventually ended up in more than a dozen or so dairy farms across Aotearoa New Zealand (with solid plans to harvest additional returns from vertically integrating milk production and processing), this includes the following.

*Silicon Valley goes farming (Case 2)*: the endowment fund of a super-rich, US-based former tech economy executive, whose managers saw an opportunity to create “impact” in African agriculture. Although they were “first and foremost ... seeking to generate superior returns over the long run”, as the managing director once put it in an interview, “[for] appropriate portions of the portfolio” they also looked for “great, long-term businesses that are viable and sustainable, and positively impact the environment and the community in which they operate” (interview, 2010\*). Joining hands

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3. The deal cycle (or flow) is a central trope in the world of money management, and students (as I have seen myself, having attended such a course at my own institution – back then Goethe University, Frankfurt) are familiarized with it in private equity 101 courses.

4. The inspiration here is Marx, who emphasized the centrality of money in the process of accumulation. This centrality is often obliterated in common understandings of capital circulation, whereby, after interest-bearing capital has been issued, it appears as if “the money itself has generated the surplus that the interest represents” (Christophers 2011: 1072).

with several development finance institutions (and a few high-net-worth individuals, who would provide equity as “patient capital”, as well as less patient debt), the investors injected tens of millions of US dollars into a former state farm in Tanzania’s Southern Highlands. The farm had been successfully pitched as a private equity growth opportunity by a witty foreign businessperson, with just the right networks in Tanzania and global finance alike. It is one of the more daring schemes of assetization featured in this book – a flipped “undervalued” state farm whose history goes way back into the socialist era (and whose future was unclear at the point of writing, as we will see).

*The delegated fund mandate (Case 3):* a mutual fund of over US\$100 million of the wealth management arm of a large European bank, launched in 2007, servicing the needs of investors with less deep pockets. Managed by an external asset manager based in Asia (but staffed with some former employees of the bank), and seeking “value for investors in emerging markets”<sup>5</sup>, the fund has acquired majority stakes in agricultural operations in several countries of the Global South, including a 3,845-hectare grain-farming operation in northern Tanzania. The capital placement on the slopes of Mt Kilimanjaro was made in a region once favoured for its agricultural potential by colonial settlers, Germans and British alike. The new investors were fortunate in that the previous co-owner of the farm was seeking some high-risk-taking equity partners who would help him realize his growth vision in an environment in which local debt was (and still is) notoriously expensive.<sup>5</sup>

*The impact-oriented family office (Case 4):* an impact-oriented family office from Europe, which targets promising medium-sized enterprises, including agricultural ones, across east Africa. Since dairy processing represents a promising growth opportunity in the region, the office acquired a considerable equity stake in a dairy processor co-owned by the smallholder cooperative supplying the facility. It is the only case sampled here that is a more classic private equity story, whereby “private equity firms acquire small and midsize companies that typically want to grow, but do not have enough capacity, resources to shift to a qualitatively different level of size or competitiveness” (Appelbaum & Batt 2014: 139). It is also a reminder of the fact that the “agri-investment space” is not just about production but also about pre- and post-farm-gate appropriations of value.

*Leveraging the family farm (Case 5):* an offspring of a successful farming dynasty in Aotearoa New Zealand rediscovers his farming roots after a successful career in the financial sector, trying to capitalize on investors’ increasing appetite for forestry and agriculture. Combining his knowledge

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5. Banks in many African countries, even agricultural ones, often have double-digit interest rates on agricultural loans, making such loans basically a no-go for many farmers.

of the financial industry with strong networks in Aotearoa New Zealand, his firm's funds offer opportunities in forestry, beef and dairy as well as permanent crops, now catering for more than 20 pension funds, HNWI's and family offices. The MBA farmer's own family trust money is invested, too. With additional stakes in the agricultural technology business, the asset manager is at the cutting edge when it comes to the digitally mediated monitoring and control of farms "at a distance".

*Disrupting the Tanzanian poultry sector, carefully (Case 6):* a multi-farm asset that is part of an Africa-themed agricultural fund of over US\$100 million managed from Europe, backed by European pension funds, HNWI's and development finance institutions. The asset manager, founded by a well-connected white businessman from southern Africa, and its investors wanted to capitalize on the growing Tanzanian poultry market, which they found to be underserved with "modern" broiler chicken and high-protein animal feed. The capital placement aims at building a "first-class", vertically integrated industrial operation that links feed production with the raising of day-old chicks later sold on to local farmers. Small in comparison with industrial poultry production in the Global North, or even emerging economies such as Thailand or South Africa, it is nevertheless unmatched in scale in Tanzania.

*A dairy play for deep and less deep pockets alike (Case 7):* a diversified real assets manager from Europe, who caters for both retail and institutional investors. Having launched several agricultural funds that target different geographies and commodities (alongside other funds for "real assets", such as shipping or infrastructure), the manager is one of the largest capital brokers in Aotearoa New Zealand dairy. Hit by successive slumps in the global dairy market in 2014 and 2015, the terms of one of its funds and the operations on the underlying farms had to be changed. The asset manager subsequently shifted from conventional to organic dairy production on some of its farms. The case is a good example for how market dynamics can mess up the return scheme of investors and asset managers alike, and how strategies of "value creation" may shift during the lifetime of a fund.

*Not all agricultural capital placers are foreign (Case 8):* an Aotearoa New Zealand asset manager, whose founders have been pioneers in the syndication of farms in Aotearoa New Zealand, a practice that has become more widespread since the 1990s. First developed to allow enterprising farmers (and non-farmers) with deep pockets to acquire equity stakes in other farms (while sparing them the worry about the management of these, as the company would cater for that), such local intermediaries are now sought-after partners for institutional investors. In the country's highly professionalized farming sector, foreign and domestic investors alike can rely on these third parties for the management and monitoring of farms.

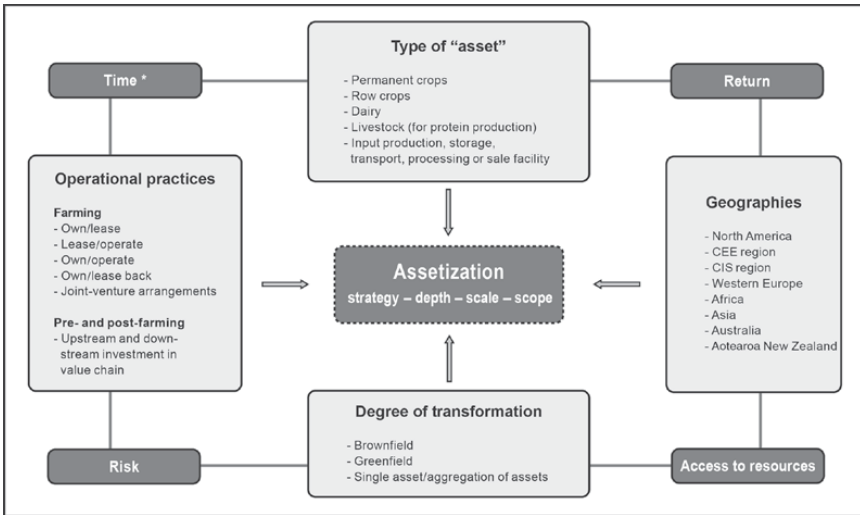


The different actor configurations exemplified by the case studies represent more than mere “market heterogeneity” in a context in which the subject matter – the financial industry – is often presented as a homogeneous entity. As we shall see, the type and maturity of liabilities that investors possess, as well as their degree of “regulatedness”, crucially shape the kinds of connections that are made, on what terms and with what impact. Such factors exert pressure on the investment chain (Arjaliès *et al.* 2017), which, in articulation with specific local asset histories and geographies, produce spatially variegated institutional landscapes. This also means that the investment vehicles and operational models applied express more than mere sectoral diversity. They reflect the specific “portfolio needs” of investors, and thus cater to different investment cultures. Even so, “capital” has its own generic methods derived from a more systemic investment calculus.

## INSIDE THE PLACEMENT CALCULUS

Before we get to the investment deal cycle itself, we need to understand how assetization decisions are made. How this process unfolds depends on a range of factors. Investors and delegated asset managers calculate their actions in a frame marked by four pillars: time, risk, returns and access to “resources”. Concerning the latter, both players take into account factors such as: the availability, location and structure of land; soil, climatic and macroeconomic conditions; property and investment regimes; the quality of regional infrastructure; and the distance to and size of commodity markets. The configuration of these pillars, embedded into the interaction of investors with potential intermediaries such as asset management firms, results in different operational strategies, types of assets, investment geographies and agricultural enterprise structures (see [Figure 7.1](#)).

Although this represents a highly stylized and rationalized account that sidelines issues such as gut feelings, herding behaviour, ignorance and lack of expertise (many investors are guided by investment consultants rather than being “AG investment experts” themselves), it nevertheless captures some of the key aspects of the assetization process. How money managers relate to these factors ultimately conditions the strategy and depth of – along with the scale of and scope for – the assetization of farming. For instance, thanks to the availability of skilled farmland operators, many investors/asset managers in the United States opt for an own/lease back (also known as own/lease out) approach, where farmland is bought and leased out to farmers. This yields stable but low returns (Colvin & Schober 2012). If investors/asset managers are willing to take higher risks for the sake of higher returns, they adopt an own/operate approach. All the Aotearoa New Zealand capital placements



**Figure 7.1** Inside the investment calculus

*Notes:* CEE = central Europe, south-east Europe and eastern Europe; CIS = Commonwealth of Independent States; aquaculture and water rights excluded as “assets”.

\* Time is related to the investment strategy of investors, which, *inter alia*, has to consider potential obligations to third parties (e.g. pensioners) and liquidity needs.

*Source:* The author.

under scrutiny for this book followed such a pathway, even though the asset managers involved would employ farm managers or farm managing equity partners<sup>6</sup> to run the farms acquired. In other regions, such as many parts of Africa, where foreigners cannot own land on a freehold basis, investors/ asset managers actually lease land and operate it themselves. Particularly in Africa, this often involves substantial greenfield investments because of the limited availability of large-scale farms. Even in cases when large-scale farms are available (such as former settler or state farms in Tanzania), potential assets are often so dilapidated that assetization projects are more similar to greenfield than brownfield projects. This was the case for one capital placement in Tanzania, when an entrepreneur managed to get hold of a 5,818-hectare derelict state farm at a “discount price” of US\$2.5 million, and then managed to persuade a US endowment fund, several HNWIIs and development finance players to back the venture, with the Tanzanian

6. This arrangement is usually found in dairy. Equity partners co-own a share in the farm, which may extend to the underlying land.



**Photo 7.1** From “Third World solidarity” to private equity: a large-scale grain farm in central Tanzania

*Source:* The author.

state, as the former owner of the land, remaining a minority shareholder.<sup>7</sup> Curiously, a former socialist ally state helped set up the farm in the 1980s, but the project collapsed in the early 1990s, and the land was then taken back

7. Crucial aspects of Tanzania’s land law are regulated by the Land Act no. 4 and the Village Land Act no. 5 passed in 1999. These outline three categories of land (village land, public land, reserve land), whereby all land is eventually vested in the president as the trustee of the Republic. Only public land, which includes state land, can be leased to foreigners. This means that village land needs to transform its status in order to be accessible to investors (for legal details and an outlook, see Sulle 2015; Massay 2016). A new national draft land policy that was circulating in 2016 has not yet come into effect.

by the smallholders who once had been dispossessed of their lands through acts of primitive socialist accumulation. The land title would remain in the hands of the state, however – something on which the investors could later capitalize. From “Third World solidarity” to private equity, US style; what a journey (see [Photo 7.1](#))!

In countries without freehold for foreigners, such as Tanzania, benefiting from “asset price appreciation” (which rests on the premise of having secure and inalienable property rights over those assets) is not a straightforward affair. This explains why only a few institutional investors from the Global North have invested in agricultural production in the country, and private equity firms have often looked beyond production to venture into the agricultural sector in east Africa and other parts of the continent. The family office in Case 4, for example, would rather venture into milk processing, finding it simply too risky to get involved with land-based production. Nevertheless, even if investors/asset managers cannot simply sell the land underlying the farming asset, they can still sell the lease right and the operations sustained by the land (Cotula 2013). This was the calculation in all three private equity investments into land-based production in Tanzania, whereas those in Aotearoa New Zealand did not have to worry about such intricacies, as freehold had been firmly entrenched in the country’s legal system as part of settler-colonial landscape making (Hawke 1985).

The type of asset to be acquired is also an important factor in the investment calculus of money managers. Crops may be sold in domestic, regional or global markets – spaces shaped by different demand–supply dynamics and different currency and trade regimes. Investors targeting “Kiwi agriculture” usually aimed at the world as their market (but “rising Asia” in particular), treading on the path of export-oriented super-productivism that emerged from the “New Zealand experiment” of the 1980s (Kelsey 1995; Roche & Argent 2015). Investors in Tanzania mainly targeted national markets characterized by high volumes of imports for food staples such as rice, grains and dairy.<sup>8</sup> Some asset managers and their investors move beyond production and place capital across the whole agricultural value chain, such as in Cases 1 and 6, where vertical integration was seen as a means to generate “post-farm-gate alpha”<sup>9</sup> by the asset managers involved. Moreover, row crops such as maize and rice usually generate stable income and capital returns, whereas permanent crops such as fruit trees offer higher returns

8. Somewhat unexpectedly, given that in the land grab debate investors have usually been accused of exporting food that could feed local populations.

9. The notion of “alpha” is a blurry one in the investment industry. One authoritative source calls alpha an “excess return [outperforming risk-adjusted benchmarks: *my addition*], attributable to manager skill”, contrasting it with “beta, attributable to market return” (Afyonoğlu 2013: 55).

and employment generation potential but at a greater risk, since they have long gestation periods and lock in capital over a considerable time. Livestock, again, has a different materiality and temporality.

All these concerns eventually shape how capital is ultimately placed, and geography plays a significant role since it shapes financiers' risk–return calculations and how much value they can extract from agriculture. During an investment conference I attended in 2013, industry experts reported expected risk-adjusted returns ranging from 8 to 12 per cent in North America (low risk, low return) to 20 to 30 per cent in Africa (high risk, high return), all before tax and fees. Since then a more sober take on returns has emerged, and the typical private-equity-style returns of around 25 per cent or more are expected only in “industry-changing agtech, from those focused on fertilizers to drones to genetics” (Barbarino 2017). Many of the players examined in detail aimed at low double-digit returns before taxes and fees, if double-digit at all.

## THE INVESTMENT STRUCTURE: THE GLUE THAT HOLDS EVERYTHING TOGETHER

In a social field in which disruption and convention sit side by side, it seemed most natural to start with an investment structure that most players already knew: the generic private equity (PE) model, either executed at a fund level or via a direct investment. All the investments screened here in one way or another adopted variants of the model, even though other forms of investment structures exist (Table 7.1).

Although this model has subsequently been adjusted to serve the diverse needs of different investors in the sector, its core elements still feature widely in capital placements across the agricultural value chain. The private equity model links investors as LPs with an asset management firm that acts as the GP. The latter provides specialist expertise in order to acquire and manage investments (Appelbaum & Batt 2014). As opposed to an ordinary partnership, the liability of an LP is limited to the value of the LP's capital contributions. The investors commit capital – usually above US\$1 million<sup>10</sup> – to a limited partnership for a given period. As in other established private equity domains, this capital is drawn on by the GP in order to acquire and manage farming ventures, usually at a majority share. This allows the GP

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10. There might be exceptions to this, such as in those cases when retail investors are targeted. One of the agricultural funds operating in Aotearoa New Zealand had a minimum commitment of €15,000, while the agricultural mutual fund of the large European bank that purchased a farm in northern Tanzania also targeted investors with less deep pockets.

**Table 7.1** Different types of agricultural investment structures

| <i>Type</i>                                    | <i>Ownership</i>      | <i>Investment horizon</i>                    | <i>Liquidity/ease of exit strategy</i>            |
|--|-----------------------|--|---|
| Private equity fund – closed-ended             | Private/may be listed | 10–15 years, but increasingly 15+            | Non-liquid, subject to realization of investments |
| Private equity fund – open-ended               | Private               | Open   | Liquid  |
| Privately owned primary agricultural companies | Private/public        | Open/may be defined by shareholder agreement | Non-liquid, subject to investment documentation   |
| REITs  | Private/public        | 5–7 years                                    | Generally liquid                                  |
| Fund of funds                                  | Private               | 5–7 years                                    | Non-liquid, subject to realization of investments |
| Publicly listed primary agricultural companies | Public                | Open   | Liquid  |

*Source:* Redrawn from data provided in Luyt *et al.* (2013: 39).

to actively intervene in the management of an agricultural venture, which might itself be organized as a limited partnership. This arrangement has the advantage that it reduces the legal liability of the asset manager and the funds allocated to the partnership to the companies/farms under management (*ibid.*). The asset management firm makes all decisions about which agricultural ventures to purchase, how to manage them and how to exit, with the LPs usually having no say in these processes. Undrawn capital, so-called “dry powder”, needs to be returned to the LPs at the end of an investment period. Often the managers of asset management firms also commit their own capital to the partnership in order to align interests between the “principal” and the “agent”. The strong influence of the shareholder value conception of the firm, as described in [Chapter 6](#), is very visible here. At the level of the farming venture, a similar alignment of interests between the asset management firm and the agricultural venture’s management may take place. Here, the managers of farms (sometimes called “operators”) or other agricultural ventures receive bonuses when they reach certain targets. Some have even been made equity partners by asset managers so that they have “skin in the game” (interview, asset manager, 2018).

Besides specifying particular responsibilities for the purposes of money management, limited partnerships also enjoy another benefit. As an investment advisory firm notes for the case of Aotearoa New Zealand:

A New Zealand Limited Partnership (NZLP) is a partnership registered in New Zealand under the Limited Partnerships Act 2008. [...] NZLP's provide a flexible business structure that offers limited liability protection to its partners and a flow through tax treatment. NZLP's have become popular amongst foreign investors due to their flexibility and discretionary tax treatment of foreign sourced income in the hands of the non-resident investors. (Covisory n.d.)<sup>11</sup>

The limited partnership model is obviously considered an effective structure for specifying responsibilities in line with the principles of fiduciary management and is often tied to a fund structure. Beyond this, a few other types of investment structure are possible. These include private holding and investment companies when a non-fund-based model is desired (as is the case with direct investment: see [Chapter 4](#)) or when the limited partnership is legally not established. This is still the case in Tanzania, for instance, despite intensive lobbying (Malanga 2018). All investors there used other investment structures, such as private holding or limited liability companies, yet even there the private equity philosophy – “acquire an undervalued or distressed asset, enhance its income-stream capacity, then sell it (or a stake in it) at a higher price at a later stage” – shaped their operations. Investors in Aotearoa New Zealand were luckier. There, the LP model had already been introduced in 2008 in an effort to appeal to global investment standards. For a comparison of what structure investment chains may take depending on the geographical setting and the origin of the capital, see [Figure 7.2](#).

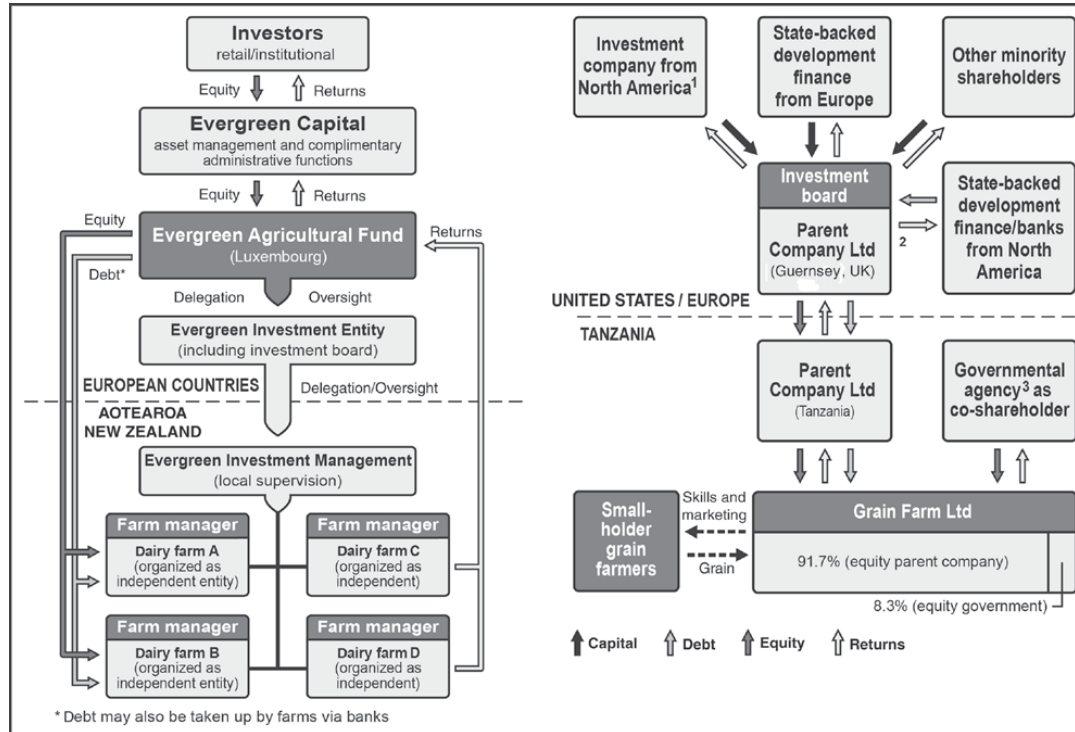
## THE DEAL CYCLE FOR CAPITAL PLACEMENTS IN FARMING

After having acquired a basic understanding of fundamental aspects of the operations of agri-finance capital formation, we can now delve into the deal cycle itself (again, sticking to the private equity model). The generic model usually starts with a period of fund-raising by asset managers, followed by a deal flow and due diligence phase, the actual capital placement (investment period), the development of the asset/portfolio of assets and an “exit” (see [Figure 7.3](#)).

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11. For a detailed NZLP structure, see the webpage of the cited firm.





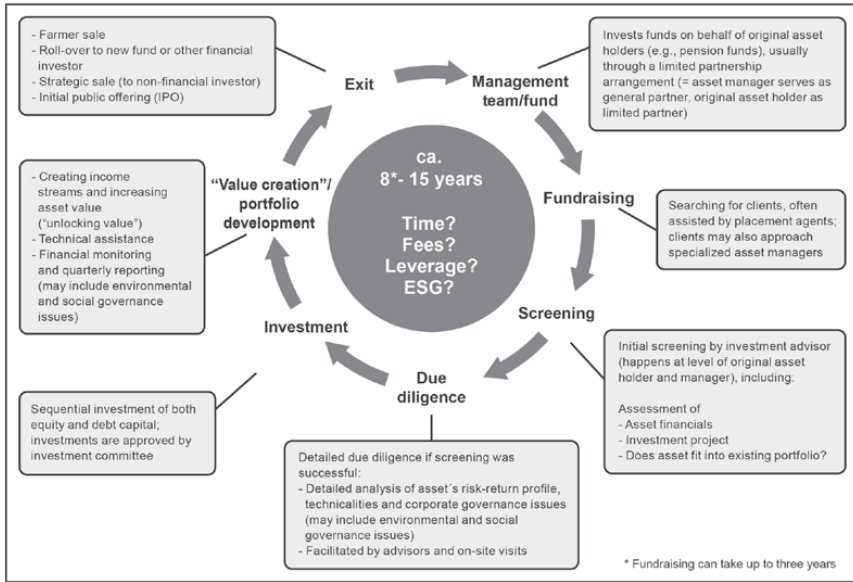
**Figure 7.2** A comparison between two investment chains touching down in Aotearoa New Zealand (Case 7) and Tanzania (Case 2)

Notes: 1 Part of the investment group of a tech entrepreneur.

2 Repayment with interest.

3 Provided land in exchange for equity share; share diluted over time because of increased equity investment of other parties.

Source: Author's research\*.



**Figure 7.3** The deal cycle

Source: Author's research.

For capital placements in agricultural ventures, this cycle works slightly differently. In some cases, fund managers already have assets at hand that they pitch to investors, such as in one of the Tanzanian cases, when a well-connected businessman with an NGO background managed to persuade a Silicon Valley endowment fund and several development institutions to invest in an “undervalued” single farming asset. In other cases, asset managers would approach potential investors with pipelined deals and a potential fund structure. The marketing of such investment opportunities may take place through the services of so-called placement agents, who help to sell these to investors on behalf of their clients. With larger institutions, they have to go through investment consultants, who advise institutions on portfolio allocation strategy and screen and assess fund managers. Thus, as in other investment domains (Clark & Monk 2017), they act as important gatekeepers to the supertankers of the industry.<sup>12</sup> As shown in the previous chapter, investors may also connect with asset managers at investment conferences.

12. As of June 2015 the five largest consultancy firms in the money management industry advised on investments worth US\$22.2 trillion (Arjaliès *et al.* 2017: 71). Besides catering for information and search problems, they are popular because they help redistribute responsibility away from the original trustees – e.g. pension fund managers.

After capital commitments are made, investors usually trust asset managers to select the right farming properties. The sourcing of investible agricultural ventures usually follows a bottom-up approach, whereby asset managers use local networks of different intermediaries to gain access to farms.<sup>13</sup> Although the bottom-up nature of agricultural capital placements makes them different from more liquid and transparent markets, such as real estate or stocks – for which investors can deploy a more structured asset selection approach across a wide range of geographical settings – the logic of selection in most cases still follows established metrics and “best practices” in the world of money management. The words of a New Zealand asset manager (Case 5), stated during an investment presentation in 2015, are indicative here\*:

- We focus only on areas/crops where we have operational expertise and scale
- Within NZ just those regions where we can build scale
- Within chosen regions, we use research to identify:
  - (i) low-cost producing regions (climate/hydrology risk analysis);
  - (ii) high-quality soils ...

[...]

- Identify sub-regions and farms that need capital (growth opportunities; leveraging; or both)
- We then “rank” projects for (i) cash flows, (ii) IRR,<sup>14</sup> (iii) volatility
- Within NZ, we have found the most opportunities in:
  - irrigated pastoral dairy
  - irrigated grazing
  - non-irrigated grazing/dairy in high-rainfall areas
  - horticulture
  - Sheep/beef purchased for land use change
  - Seek efficiency through purchase of “clusters” of farms.

Not all asset managers operate with the same calculus, however. In an interview, the CEO of a more impact-oriented family office investing in Tanzanian dairy underlined:

13. Having well-connected board members or a former farmer in the firm can do wonders! In at least two of the New Zealand case studies, farmers became asset managers themselves, bringing with them a pile of local contacts and other tacit knowledge to the table.

14. The internal rate of return (IRR): “The compound return of a series of cash flows over a specified period (usually several years), used as one of the two main measures of Private Equity returns” (Fraser-Sampson 2014: 247; see also Appelbaum & Batt 2014: 166).

We need to share vision and values of the founder of the company, and then we look at the business and its scalability and profitability. This is not really for our own gain, but also for sustainability reasons. [...] [W]e have never had a conversation with our board where they would say “You put an 18 there and it should be a 19.2”, which would be an issue in mainstream finance.

(interview, 2018)

If the screening of a selected farm or agricultural firm is successful, a detailed due diligence process follows. This incorporates not only a detailed analysis of an asset’s risk–return characteristics but also getting environmental, social and governance issues (see below) and the capital structure right. In the cases studied, this involved finding the right balance between debt and equity, as well as the right legal structure and domicile for the investment vehicle. In at least four cases, two from Tanzania and two from Aotearoa New Zealand, the investors used a so-called “blocker corporation” “in a no- or low-tax jurisdiction [such as Guernsey, the Cayman Islands or Luxembourg: *my addition*] to enable the non-profit entity to avoid paying taxes that arise from the debt financing of investments by the private equity fund” (Appelbaum & Batt 2014: 79).<sup>15</sup>

Most of the capital placements in the farming space are so-called “growth plays”, whereby either land without or only a substandard existing operation (so-called greenfield investments or development farms) or an existing agricultural operation/business (brownfield investments) are acquired and improved, before they are sold.<sup>16</sup> Indeed, all investments sampled here were “brown-field” projects, albeit at different stages of development: a derelict large-scale mechanized grain farm in Tanzania that had been revived; two farms in Tanzania whose previous owners had looked for greener pastures and sold these to an asset manager poised to make them part of a vertically integrated poultry-feed mill business; a medium-sized enterprise that saw only slow growth, and was seeking a partner to help transform the business but care for it at the same time; a foreign resident farm owner who looked for more daring business partners in order to shift his grain farm to a zero-tillage system<sup>17</sup> because his existing corporate partner – a large Tanzanian beverage firm – was interested in the farm’s output but did not want to put capital at risk; several Aotearoa New

15. Beneficiary institutions such as pension funds are usually exempt from income tax unless this income was generated via debt financing (debt is external and thus not the equity of the beneficiaries).

16. The exception here is the “AG tech” investment space, for which venture capital often targets start-up companies (Finistere Ventures 2018).

17. Zero tillage is a way of growing crops or pasture without disturbing the soil through ploughing.



**Photo 7.2** Aggregated assets (*left panel*: a new dairy mega-farm in Aotearoa New Zealand, monitored via helicopter; *right panel*: a vertically integrated poultry-feed complex in Tanzania)

*Source*: The author.

Zealand dairy farms that once were forests or sheep farms, but eventually were put on sale, either as distress sales or because the previous owners wanted a cash-out; an established beef farm that was sold by the previous family owners to an Aotearoa New Zealand asset manager specializing in syndication; and a finance whizz with an agricultural background using his own family farm to leverage himself into the world of agricultural investment before his funds acquired many other assets, from forests to fruit trees.

In the case of land-based production, brownfield investment can also involve the aggregation of smaller farms into larger units to harvest economies of scale and reduce transaction costs related to pricy issues such as due diligence, farm servicing and monitoring. One asset manager in Aotearoa New Zealand dairy aggregated a dairy mega-farm of over 1,000 hectares from two neighbouring units (Case 7), while the investor in Tanzanian poultry (Case 6) got hold of two adjacent farming units, which allowed him to create an integrated feed production feed-milling complex with “day chick” hatching units (Photo 7.2). There are many other ways to extract financial value from agricultural ventures, as we shall see in Chapter 8. At this stage it suffices to say that, unlike private-equity-style investments in the service or manufacturing sectors, those in agriculture, at least in land-based production, involve no “asset stripping” (see Burch & Lawrence 2013). This somewhat contradicts the public image of such capital placements as being pursued by “agrarians at the farm gate” (Janiec 2017), in analogy to the finance bestseller *Barbarians at the Gate*, the first book to discuss the machinations of highly leveraged private equity buyout funds in the 1980s.<sup>18</sup>

18. The famous US food company RJR Nabisco was the most prominent victim of these “corporate raiders” (Burrough & Helyar 1989). This debate is not over, as a look into a major German newspaper in December 2019 would confirm (Kaufmann 2019).

The deal cycle is closed with the so-called exit. Investors do not stay around forever. One day, the future envisaged has to be capitalized:

What will happen if what we all predict for the macro trends happens? [...] [T]here will also be a very severe shortage of food in the future. Simply because of that ... higher demand, change of diets, population growth, and so on. That is exactly what is going to happen. And then these opportunities arise. Because, when there suddenly is an immense demand and that has changed, there is a completely different kind of dynamism in this market. And then we also have completely different exit opportunities.

(interview, asset manager 2, 2014)

Despite the importance of the exit as a key moment in the deal cycle, it is difficult to come to terms with its operational details, since many of the agricultural investment schemes have not reached the exit date (or asset managers have been tight-lipped about the performance of their assets under management). As interviews revealed, the people working on the ground, even senior managers, often have no exact knowledge of what the money managers in the background have planned for the business. The standard narrative at the beginning of the agricultural investment boom was that assetized farming ventures would be rolled over into another fund, sold to other institutional investors or agrobusiness companies (*trade sales*), or made available to the public through stock listing (*initial public offering*: IPO). One asset manager drew a completely different picture of what was often the most practical solution, however:

So, the standard exit is the sale to farmers. At least 98 per cent of the world's agricultural sector is still run by farmers. In other words, by family farms, with varying equity resources, but in some cases very wealthy families. This means that the situation would be fatal if you had to rely on any trade sale or IPO or any financial engineering variant at exit. Especially, one should plan in such a way that one can sell individual farms to individual farmers – what we have always done so far. Which doesn't mean you can't get a bundle. But that shouldn't be the strategy from the beginning. So, the existing cases show that big investors, who are on the move with 100, 120 million tickets for their farm clusters, in Brazil or wherever, they've been trying to sell those for four years because the target group for such large parcels is so small that it's highly dangerous.

(interview, 2014)

Based on the above, his own firm opted for dairy farming systems that are scalable into different modules, which allowed his firm to slice farm sales according to the appetite of incoming investors.

In some regions, such as many parts of Africa, public selling strategies (“underdeveloped” stock markets!) and resale to farmers are both unlikely options (there are few local farmers with such deep pockets!). In such environments, trade sales may be more likely. Investors dream of capitalizing on the fact that food-importing governments, food-processing companies, commodity traders and/or supermarkets are increasingly concerned about securing their supply chains, but want to avoid the risk of entering into primary production directly, or, at least, try avoid entering such “frontier markets” as pioneering investors. This was exactly the play of the three investors targeting land-based production in Tanzania, who wanted to cash out by “selling assets with enhanced and proven income-stream-producing qualities” (interview, farm manager, 2014) to large agrobusiness enterprises, or sovereign wealth funds from the Arabian Peninsula. They were rather agnostic about *who* the buyer was (and, indeed, needed to be, if they ever wanted to recover their multi-million-dollar investments). Capitalizing on the investment as originally envisaged was the main agenda. It was only the family office (Case 4) investing in dairy processing that was more careful in this regard, arguing that potential buyers needed to align strongly with their corporate values, thus eliminating the possibility of selling to just any other dairy corporation out there. One large, notoriously cut-throat dairy company was already waiting across the border in Kenya, and, according to a senior investment manager, “it would have been a smart thing [to sell them], but the board would have never approved it” (interview, 2018).

For the asset managers interviewed, successful exits were very much an issue of timing, given the associated currency issues (one needs to worry about this if the fund is listed in one currency and asset purchase and expenses are listed in another) and demand-related side issues in markets (will there be enough potential buyers in the market at a given time?). With the placements studied, there was only one case in which some of the investors had exited the farming venture, while the remaining intended to exit in the next few years. In two cases investors had extended their involvement twice. In the Tanzanian case, one farming enterprise went into receivership just at the time of writing, with the investors preparing a distress sale. In some other cases not studied in detail, exits were final in the true sense of the word. The Canada Pension Plan Investment Board exited its US\$520 million US farmland investments in 2017, selling to an investment company associated with Microsoft founder Bill Gates. Although this was also driven by the fact that the investment manager responsible for the farmland push at the institution



a few years earlier had left it, public pressure on institutional land ownership in some of the Canadian states in which the institution operated also played a significant role (Janiec 2017).

## CONTROVERSIES ALONG THE CHAIN

Like global commodity chains and global production networks, global investment chains “resemble contested organizational fields in which actors struggle over the construction of economic relationships, governance structures, institutional rules and norms, and discursive frames” (Levy 2008: 946). Thus, during the deal cycle, a number of issues emerge that can become a matter of controversy. The pressure for this may come from within (usually from powerful institutional investors) or from outside the chain (governments, local communities, activists and NGOs, the media). In the following, three such controversies are engaged with.

### *The investment horizon*

“Finance works within the confines of time,” says private equity guru Guy Fraser-Sampson (2014: 72). Yet the scope of these confines differs considerably across asset classes, investment cultures and investment structures. In addition, there has been an evolution in what is considered “normal” and appropriate, and therefore metrics published at a certain time may have changed at another. Although many private equity funds started as closed-end funds with definite exit times,<sup>19</sup> over the years many in the industry now view the typical ten-year lifespan of private equity funds as problematic: “Why should I spend time accumulating a valuable portfolio of assets only to liquidate them ten years later and start again?” (Moghadam, cited in Burwood-Taylor 2014c). Or, as the New Zealand asset manager with a long-term view put it (Case 1):

Well, for our investors with the cash return they will be getting from the fund, why would they want to exit? Because, in the end, what they need is cash to be paying their pensioners, and, if the cash returns are better than what they can get elsewhere, why would they want to exit? So that’s where they’re coming from, that’s why this becomes part of their permanent allocation.

(interview, 2018)

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19. This also means that the fund issues a fixed number of shares, which are not redeemable from the fund (unlike open-ended funds).

Investors in the asset manager's own fund extended their minimum commitments for many years, and he was not alone. One of the key architects of the dairy capital placement targeting retail investors (Case 7) now advocates "evergreen structures" rather than the "acquire, create value and resell" private equity model. The evergreen model has no specific fund end but only a minimum capital lock-in time (e.g. five years), with specified liquidity windows for investors (Favas 2017b). The increasing push away from funds towards direct investments or separate accounts (when an asset manager serves only a single client) also means that agricultural investments, particularly when more patient family offices are involved (see, for example, Daniel 2012), may adopt a longer investment horizon than previously assumed in the critical literature, resulting in an average of eight to 15 years: "You need three to five years for getting things going, then three to five years of peak operations, then you need two years to sell it" (interview, investment advisor, 2018).

At the end of the fund or asset's life (in case it is a direct investment), the "asset(s)" under management will be sold and investors have their capital returned, ideally with a profit from both sales of crops and sales of assets. What investors expect at the end differs according to the operational model. As one investment advisor put it in 2018, there are those who are mainly interested in "coupons" (i.e. cash returns), such as TIAA and the Canada Pension Plan Investment Board, and then there are those who are interested in capital appreciation *and* coupons. The latter group of investors usually targets an IRR of 10 to 15 per cent over the lifespan of an asset, and this often breaks down to about one-third income and two-thirds capital appreciation, but, depending on the business model, crop and market context, this relationship can tilt towards the income side.

### *Leveraging as usual?*

If capital has its own methods, then building a capital structure – deciding on the right mix of debt and equity – is one of its most important ones. Private equity investments, especially those occurring before the financial crisis, had been notorious for taking on up to 70 per cent debt in order to maximize returns, as "difference[s] in transparency and shareholder accountability allow private equity to take on substantially more debt than public companies" (Appelbaum & Batt 2014: 3). The effect of this had been that GPs lost only a small amount when investments failed but, leveraged via debt, could realize huge returns when they were successful (on how leveraging works in detail, see Table 7.2).

Surprisingly, unlike private equity investments in service or manufacturing sectors (Burch & Lawrence 2013), especially those taking place before

**Table 7.2** How leveraging works**Investment A**

Buy a US\$1,000 farming venture with US\$1,000 in cash

Sell the farming venture for US\$1,200 in cash after one year

$US\$1,200 - US\$1,000 = US\$200$

$(US\$200/US\$1,000) \times 100 = 20$  per cent return on investment (ROI)

**Investment B**

Buy a US\$1,000 farming venture with US\$500 in cash and US\$500 debt at 10 per cent interest

Make one interest payment of US\$50

Sell the farming venture for US\$1,200 in cash after one year

Repay US\$500 loan

$US\$1,200 - US\$50 - US\$500 - US\$500 = \$150$

$(US\$150/US\$500) \times 100 = 30$  per cent ROI

**Investment C**

Buy a US\$1,000 farming venture with US\$250 in cash and US\$750 debt at 10 per cent interest

Make one interest payment of US\$75

Sell the farming venture for US\$1,200 in cash after one year

Repay US\$750 loan

$US\$1,200 - US\$75 - US\$250 - US\$750 = US\$125$

$(US\$125/US\$250) \times 100 = 50$  per cent ROI

*Source:* Redrawn and modified based on information provided in Appelbaum and Batt (2014: 48).

the financial crisis, creating “value” through leverage/debt is usually kept to a minimum for farmland-/agriculture-oriented PE structures. This is because agriculture has a longer investment horizon and the fact that many institutional investors, after the great crash, prefer alternative fixed-income schemes over risky, highly leverage-based schemes of financial engineering. This is not to suggest that debt is not being used. In two of the Tanzanian cases, fund managers made extensive use of debt provided by development finance institutions, which have more preferable lending rates than commercial banks (but which, of course, also helps gearing returns). This still did not insulate them from financial pressures, and one of the cases studied had to declare bankruptcy in early 2019 after failing to repay a multi-million-dollar loan granted by a several international and national financial institutions. In one case, taking on debt had a surprising twist. For the capital placement in a Tanzanian dairy operation (Case 4), the impact-oriented investor tried to avoid a further equity dilution of his smallholder partners and therefore financed the expansion of the underlying operation by taking on additional debt rather than injecting more equity (quite a noble gesture, which nonetheless can be

read as a strategy to avoid further risk of a capital lock-in).<sup>20</sup> In one of the Aotearoa New Zealand cases, the asset manager sought permission from the investors to take on additional debt to increase returns after slumps in commodity prices in 2014 and 2015 had led to lower milk prices, and thus lower returns than envisaged. Surprisingly, all Aotearoa New Zealand asset managers interviewed claimed that institutionally backed investments in dairy “geared” their farms to a far less degree than local corporate or even family farmers, among whom leverage rates – fuelled by cheap credit provided by Aotearoa New Zealand and Australian banks – have reached dangerously high levels.<sup>21</sup> For these farmers, critical observers had no kind words:

Given that dairy land prices continued to rise, driven by the demand for land as opposed to its productive worth, much of the industry could be forgiven for looking like a massive real estate play through conversion, selling and reselling in which the tradable commodity for dairy farmers became a hectare rather than a kilogram of milk solids. What, then, sits behind the face of New Zealand dairy is an array of ownership structures and multiple levels of gearing – often in anticipation of rising land values to provide much-needed equity – that arguably have much in common with either the Ponzi schemes or synthetic derivatives that have plagued the financial crisis elsewhere.

(Gow & Lockhart 2016: 50)

This view was reiterated in an interview with two experts in 2018, except that they would also include the foreign investors venturing into dairy in the “Ponzi-scheme”. According to them, this was facilitated by the fact that the limited partnership model exempts asset managers from being liable for potential losses (Appelbaum & Batt 2014), even though the asset managers interviewed downplayed this issue. Nevertheless, although the latter possibility holds true for any investment case, there are still differences with regard to whether investors are interested in quick returns with a real estate touch (such as Case 8) or have been adopting a model whereby they would develop and hold an agricultural asset over a considerable period of time as “intergenerational investors”, as claimed in Case 1.

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20. It was also unclear how much of this was convertible debt that could later be transformed into an equity stake.

21. Kelsey (2015: 70) reports that “[v]irtually all the increased agricultural debt in the 2000s was for dairy – accounting for two-thirds of it by 2014”. In early 2017 agricultural debt stood at NZ\$60 billion (Galloway 2017).

## Fees

As already hinted at in [Chapter 6](#), asset management fees have become a controversial issue in the world of money management, and a considerable amount of money from the original asset owners may be siphoned off by other parts of the chain performing capital management duties. The rise of exchange-traded funds (ETFs), funds that promise low management fees thanks to the automation of asset management (which means getting rid of highly paid asset managers), has been a reaction to this (Braun 2016). Private-equity-based investments have been particularly prone to fee sprees, as GPs may collect advisory and management fees from either the portfolio companies or the investors, in addition to other payments that may accrue to these managers during the lifetime of a fund (Appelbaum & Batt 2014). Performance-related fees are usually shunned by asset managers (Clark & Monk 2014: 536). Yet, in the post-crisis environment, the issue of fees, once considered a technicality among investment experts, has moved centre stage to discussions about the future of money management (Smith 2014). Practitioners and critical academics alike have called out fees as major sources of the redistribution of value from the investing public to global financial elites (Appelbaum & Batt 2014; Arjaliès *et al.* 2017; Braun 2016; see also [Chapter 9](#)). This also applies to the agricultural investment space. As already noted in [Chapter 6](#), when the first post-crisis funds were launched in 2008, pioneering fund managers would get away with extending the established 2/20 model to agriculture, whereby they would be compensated by getting 2 per cent of the total capital invested annually, and another 20 per cent of “carried interest” from the profits accruing from the sale of the agricultural venture. In most jurisdictions, carried interest is taxed as capital gains (rather than income), and therefore attracts a much lower taxation rate. It has turned out, however, that the 2/20 fee model of a “classic” private equity play cannot be smoothly transferred to agriculture, prompting many institutional investors to move away from it: “‘Investing in funds rather than directly involves a fee drag on the return. Agriculture offers lower return than private equity, for example, and hence cannot sustain the same fee level,’ said Charlotte Antonsen Dalgas, portfolio manager at Danske Capital Alternatives” (cited in Burwood-Taylor 2014d). When interviewed, the asset managers scrutinized would strongly claim that their fees were below the standard private equity model, and that they also needed to achieve certain hurdle return rates for them to enjoy double-digit carried interest.

## CONCLUSION

This chapter has provided a well-grounded account of capital’s own methods. Capital does not simply flow from A to B but is, rather, extended through

these methods. Depending on the source of capital, different kinds of institutional landscapes emerge, which carry the imprint of different risk–return calculations, liquidity considerations and social and environmental concerns. Yet, despite notable differences between particular institutional landscapes, each of the cases presented here relates to a more generalized financial rationality. The operations of the global agri-investment chains scrutinized are quotidian and abstract at once, as they speak to shared legal standards, conventions, heuristics and rationalities of a “global return society”, in which the reproduction of the better-off people of the Global North (and increasingly the Global South) has become tied to the reproduction of finance capital both “at home” and abroad. These “universals” are recursively enacted in the everyday practices of assetization, invoking a “relation between moment and totality” (Giddens 1979: 79) when agricultural farms/firms are screened, acquired, worked upon and sold. Thus, the structures described here, particularly those held together by the limited partnership model, are more than mere legal constructs that shape roles and the flow of money along the agri-investment chain. Rather, they are highly structured socio-spatial relations through which the “promissory engagements” (Knorr-Cetina 2010: 333) lying at the core of institutional landscape making are performed and managed. By no means a straightforward endeavour, institutional landscape making does not simply overwrite the past, but often incorporates and thrives on older asset histories in order to generate financial value from the human and non-human world. Although the operations between  $M$  and  $M'$  may seem to be too “micro” for those scholars who have deployed “financialization” as a concept in ways to overcome “thick description” (Lapavitsas 2011: 617), they matter as the glue that keeps a large-scale phenomenon together. When they remain opaque and technical, as has happened so often, it has anti-political effects. I now focus on *the* key site of institutional landscape making: the farming venture itself.





## CHAPTER 8

# GROUNDING: WHAT DOES ASSETIZATION LOOK LIKE FROM BELOW?

In 2018 Ernst & Young, the prominent accountancy firm, published a summary of a larger study on the travails of private equity in Africa, titled “From origination to exit, how much value can your capital create?” (see Awadh 2019). In a way, the brief’s title espouses a key question that this book has also been concerned with, that of what happens between M and M’? The space “in between” these moments within “the genealogy of capital” (Martin *et al.* 2008: 122) is not just filled with speculation and the production of “fictitious value”, as frequently claimed in the more critical literature. Many “alternative assets” gain financial worth only if they produce real output and income. Although certain activities of finance are not dependent on generating material things (e.g. the trade of arbitrage), this is not true for capital placements in agricultural ventures, including farmland. For financiers, the value of “land ... is a multiple of its expected cash flows” (Elworthy 2012), an assertion that holds also true for businesses-turned-financial-assets further up- and downstream in the agricultural value chain.

This chapter offers a grounded understanding of how institutional landscapes are created. Rather than abstracting from the case studies and risk losing touch with the inner lifeworld of capital (and the processes that occasionally disrupt its reproduction), I present a range of “diagnostic events” (Moore 1987) drawn from Cases 3, 5, 1 and 2. These are a series of thick descriptions, which allow the reader to gain a more intimate understanding of how investors “prepare the ground” for assetization, as well as how the logics of financial value extraction gradually become grounded in particular places. These will be complemented by more cursory insights from the remaining case studies. I will show how, despite being part of particular investment chains and place-specific “asset histories”, each of the cases presented here plugs itself, more or less coherently, into the structures of the private-equity-oriented money management industry, which, in and beyond

the “AG investment space”, often operates along similar lines. Engaging willingly in strategic essentialism for a moment, we can summarize the steps of agricultural assetization as follows.

- First, buy an undervalued, distressed asset or one with a sound growth opportunity;
- aggregate land to achieve economies of scale;
- capitalize on market gaps (e.g. import deficits), growth opportunities or niches;
- when applicable, reduce input costs through input pooling;
- enable your boardroom to know where the asset stands (“dashboard farming” enables market synchronicity);
- align interests between GPs, LPs, operators and workers;
- de-authorize costly farm investment decisions (“the investment board decides over capital expenditures, not the farm manager”);
- enhance input efficiencies (e.g. fuel or water consumption);
- monitor and incentivize labour productivity;
- make infrastructural and operational improvements, including the optimization of input–output ratios;
- enhance the free cash flow of your portfolio firm/farm;
- vertically integrate, where possible, to capture additional value along the agri-food chain;
- optimize your tax structure (e.g. by using blocker corporations or the right sequencing of debt and equity);
- leverage when useful and not too risky (e.g. by tapping into both commercial and development banks);
- time your exit well, as the state of currency markets, exchange rates and commodity/asset market dynamics of the day matter;
- go for scalable investments; and, finally,
- do good prudently; it betters the world and also enhances your asset’s value, but you still have to make money.

## THE WORK OF INSTITUTIONAL LANDSCAPES I: DIAGNOSTIC MOMENTS IN AGRY-INVESTMENT CHAINS

### *Securing the future (Case 3)*

Visiting a finance-backed grain farm in northern Tanzania in 2013, my colleague, Mangasini Katundu, and I met the farm manager, who also acted as the local representative of the Asian-based financial intermediary managing the “asset” on behalf of a European bank. During the interview, in a

moment of reflection about his daily routines and his “mandate to realize the greatest potential for investors”, the manager emphasized that much of his job was about accountability – producing numbers for investors. He would carry his phone with him all day, so that he was always contactable by the asset manager entrusted with the project. A satellite link had been installed on the farm for this purpose. Ten years previously this would not have been possible, because of technology gaps in this part of the world. Such connections were necessary, however, to meet the strict reporting standards of large institutional investors, who themselves were subjected to a fiduciary imperative. Regularly, huge amounts of information had to be reported, and he spent several hours every day administering Excel spreadsheets, and not working on the farm itself. There was a lot to be reported. In addition to several full-time managers, 36 permanent workers, 40 contract workers and some 50 casual staff worked on the over 3,800-hectare grain farm, two-thirds of which was used for barley and wheat farming (with the rest dedicated to livestock and infrastructure). Since the asset manager acquired a majority share in 2008 they were all working towards one goal: to increase the planted area – converting bush to cropland – and to improve farm infrastructure in order to achieve both revenue growth and significant capital gains. Thanks to increased yields, as well as increased input efficiency (such as fertilizer and diesel consumption), asset values had tripled only three years after investments began in 2009 (according to information published elsewhere by representatives of the firm\*). All this had needed to be implemented quickly, because they planned to exit the investment after only seven or eight years.

Besides this being a great example of the “wormhole” of globalized capitalism (Sheppard 2002: 323), it was striking that the property was fenced by a sophisticated livestock fence, guarded 24/7 by a patrol car. The fence was meant to keep out local pastoralists, who would often send in their cows after fields had been harvested. This interfered with the zero-tillage cultivation method introduced by the management, however – a way of growing crops or pasture without disturbing the soil through ploughing. Although the farm manager was quick to point out that “this was a livestock and not a security fence”, it was, nevertheless, part of a larger security apparatus put in place to tame risk by annihilating contingency. It helped align the material time of farming (its seasons, daily rhythms, etc.) with the specific temporality of the world of money management. For an investor or asset manager to know where an asset stands, it must be possible to presentize its future value. The less contingency impedes this process, the better. In particular, pension funds, which often promise pension plan members guaranteed minimum returns on capital, are interested in securing that the future value projected can be capitalized at any given moment. Therefore, turning farming into a

financial asset is about more than simply investing with a profit. It is about establishing the territorial power to secure future returns.

### *Command and control farming, and its limits (Case 5)*

Whereas the first case is very much about controlling for contingency and farming-by-numbers to fulfil the trustee mandate, performing accountability in the name of capital starts even earlier than that. In late 2018 an Aotearoa New Zealand asset manager, who manages farming and forestry assets across the country, worth hundreds of millions of US dollars, invited his existing and potential clients, a range of institutional investors and family office representatives to a private club in London with “imperial character” to brief them on investment opportunities related to a new permanent crop fund. Established in 2016, and complementing earlier funds that targeted forestry, dairy and red meat, the fund offered capital placements in horticulture and silviculture – some of the country’s fastest-growing agricultural subsectors. For instance, Aotearoa New Zealand kiwi fruit exports hit a record high of NZ\$1.9 billion in 2018 (Allan 2018), increasing from 82.3 million trays sold globally in 2005/6 to 117.1 million in 2015/16 (New Zealand Kiwifruit Growers Incorporated n.d.).<sup>1</sup> During the pitch the asset managers presented diversification into permanent crops as a sustainable offer that could not be refused, given the collapse of dairy prices in 2014 and 2015 and the environmental backlash that Aotearoa New Zealand dairy had faced at home in past years. When well managed, permanent crops have a much better environmental track record (carbon sequestration, top soil protection, reduced erosion and nutrient leaching than livestock, increasing biodiversity) and a higher per-hectare employment effect. In rural Aotearoa New Zealand, characterized by stark patterns of inequality and deprivation, especially among the Māori population, this envisaged impact must not be underestimated (the presenting manager underlined that dairy required only 0.03 labour units per hectare; apples needed 0.72 labour units per hectare). The manager was also keen to emphasize that the venture had a “NZ-controlled and -managed general partner”, with a strong background in farming, and took sustainable stewardship principles (*kaitiaki*, in Māori) particularly seriously. He and his colleagues were long term-investors, not speculators or rent-seekers.

But investors need not only have trust in the value creation scheme proposed by asset managers to allocate capital to an asset class that is often new to them; they also need to be educated on how value creation works

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1. The growth story of Aotearoa New Zealand wine and apple exports is well documented (Pawson and the Biological Economies Team 2018).

in farming. As one high-ranking manager of the firm put it in an interview before the meeting in late 2018:

In our conversation or communications with our investors, with our LPs, we put in a huge amount more effort than most people would do. Because, except for a very small minority, our LPs are unfamiliar with the asset class, but they sort of understood the story at the point of decision-making. But, unless you're looking at something all the time, it becomes quickly unfamiliar again. And so we over-communicate with our LPs, we want them to have the ability to grow their understanding and develop their understanding of what they've invested in and why and what's meaningful.

The surveillance architecture and accounting practices that asset managers set up on the ground can be far more comprehensive than putting up a simple fence and installing a satellite link. In the words of the chairperson of the fund, it requires a specific operational structure, which needs “to make 21 decisions every day and get 20 of them right”\*. Such structures should help ensure productivity growth by transforming “underperforming domains”, such as pastures, soils, irrigation, machinery, stock fences and livestock genetics, into valuable components of the farming asset. Yet these are “not the stuff of some ‘command and control’ centralized system”\*. Distributed responsibility is key. To achieve it, the firm engages in quarterly corporate reporting, monthly market reporting and yearly valuations carried out by independent valuers, all backed up by a sophisticated accounting system for real assets to make farm accounts comparable with other asset classes. What better way to enrol institutional investors – people who are “very data-driven” (interview, asset manager, 2018) – than to have a “database of actual farmland productivity, financial cost and returns data, for over 170 crop types, across the surface of the Earth”\*. This spin-off of the firm, building heavily on three decades of farm management professionalization and datafication in Aotearoa New Zealand and other productivist countries, seemed to pay off quickly. It not only enabled a new decision-making style (“dashboard and boardroom farming”) that allowed asset managers to effectively calculate where they stand in the asset management game (which farm has been performing well and which one has not? How does it benchmark with other farms? Is crop A or animal B still a good bet?) and create numerical trust with investors. It quickly became a private-equity-backed venture in its own right. “Data seems to be the new oil” (*The Economist* 2017), and the world of farming has not been left untouched by this trend.

But technology is only one way to streamline operations so that agricultural assets create the value investors desire. The “real hero in the model”, as the CEO once put it, are people – matching “the capital invested in farms with the best farm managers”\*. What better way to achieve this than giving them a share in the farms? Allowing farm managers to have “skin in the game” is not new per se in Aotearoa New Zealand (it is also practised in Case 1), and historically evolved as a counter-model to contract manager and sharemilker models, as these can maximize cash returns at the expense of long-term sustainability. Although this model might also be found in other parts of the world, it is in Aotearoa New Zealand that it probably fits most organically into the meritocratic career progression philosophy that has come to define the dairy industry in particular, with farmers often gradually working their way up from farm assistants to farm owners, via the positions of herd manager and sharemilker. The so-called equity partnership, whereby farm managers may also own a share in the animals, equipment, grass, infrastructure or even the land itself, seems to be the “natural” evolution of this. It came in handy for foreign investors and asset managers alike, who could capitalize on it. The key question is: are you in the game for a “push job” or not?

### *Beyond “push job” economics? (Case 1)*

Mr Peter\* was so generous as to fly from his home base in the South Island to meet me in an old forestry town in the Waikato region. Much of the land surrounding the town had been planted by the government with forestry as early as in the 1920s, which had been a big employer in the area for several decades. Several private companies also managed to acquire large swathes of forestland from the 1970s onwards, and one of them, in the late 2000s, converted some of the best land to dairy farms to capitalize on the dairy boom in the 2000s. Time was imperative, as a moratorium on farm conversions – which had progressed rapidly – hung over them. As part of the new Kyoto Protocol –which came into effect in 2008 and to which Aotearoa New Zealand was a signatory– a NZ\$25,000/hectare tax had been introduced on forestry-to-grassland conversions, and the bulldozers of the firm stopped at 10:00 a.m. on the day the moratorium began.

It is in this transformed landscape that Mr Peter’s firm purchased several dairy farms and one support farm, besides the several properties it had acquired in the Canterbury Plains on the South Island. Thanks to the excellent networks of the company’s senior managers, the portfolio was assembled ahead of schedule, and some of the farms in question never really entered the market. Before we move on to one of the firm’s portfolio farms, we met Tim\*, the “cluster manager”. Having an engineering background, he had worked

in forestry before he ventured into dairy himself. He owned three farms, which he staffed with sharemilkers, typical for some more business-savvy “Kiwi farmers”, who often wear multiple hats. Tim\* marvelled at the foggy morning landscape, which seems to be particularly attractive to some of the overseas investors. A beautiful asset is a more valuable one. Aotearoa New Zealanders call this hilly region “rolling country”. For dairy farming, this means less grass, and greater difficulty in farming on an industrial scale. But the “beauty factor”, the “discount prices” offered by the previous owners and the somewhat higher rainfall here made up for this. Tim\* is also the liaison officer with the Waikato Regional Council, and in the preceding year it had agreed an environmental management plan, several years after it had been granted the acquisition consent by the Overseas Investment Office (it is a requirement of the OIO that investors tick certain “improvement” boxes).<sup>2</sup> He emphasized that these bodies were notoriously slow, but that did not mean that their own farms were simply “rubber-stamped” by the OIO, as is sometimes purported in the Aotearoa New Zealand media. They reported to the OIO annually, and the council kept track of their environmental performance and visited from time to time to follow up. During our meeting both managers were very keen to stress their environmental management (such as Riparian fencing and cow effluent management), probably because there had been considerable negative reporting on the environmental impact of intensive dairy farming (Collins 2017).

Against the backdrop that, in the critical discourse on foreign investments in farming, “good” local farmers are often placed vis-à-vis “bad” foreign investors, a closer look reveals that the asset manager discussed here seemed to do more than many local farmers in terms of environmental stewardship and intergenerational investing. Since the farms in the Waikato cluster had originally been set up as development farms, the previous owners relied heavily on palm kernel, which, despite its negative environmental footprint (much of it comes from Malaysia and Indonesia), was still widely used as fodder in Aotearoa New Zealand dairy. Since the asset manager had acquired the farm on behalf of both foreign and local investors with a concern for the environment, the firm had reduced the use of palm kernel by 50 per cent, and had planted lucerne for silage. The goal was to generate a “wall of feed” to cover the food deficit during springtime. The firm wanted to be as self-reliant and self-sufficient as possible and in a cost-effective way. The managers had managed to obtain certified palm kernel from Malaysia, as they had been keen to further reduce its use. At the time of our interview one of the cluster farms was being converted to organic, which further restricted the use of palm kernel, and the firm had just acquired an organic dairy processor in

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2. On the details of this process and some of its practical intricacies, see Klinge (2018).



order to reap a more sustainable post-farm-gate “alpha”<sup>3</sup> outside the Fonterra-dominated conventional dairy regime.

What we can read from this diagnostic event is that the asset manager of Case 1 has adopted a more holistic approach to sustainability, which differentiated this model from the “asset-flipping” approach that some of its Aotearoa-New-Zealand-focused competitors or local corporate farmers have adopted. The latter was more about acquiring land and scaling up quickly than about a robust and long-term sustainability agenda (“clicking the ticket and reselling the farm”, as the managers interviewed put it). Although the work they were doing was not that different from the ordinary top 10 per cent of dairy farms (though the scale, availability of resources and information flow were), Mr Peter\* also clarified that they would not even want to match these top 10 per cent across all indicators, because that position “comes at a [sustainability] cost”. Even so, as discussed in Case 5, sound economics mattered. The managers were closely monitoring the farms 365 days a year. For instance, the cluster manager received daily dashboard updates on issues such as performance per cow per hectare, milk solids per cow, underspending and overspending, grassing and calving rates and even how much grass was converted to milk solids. The approach was to be “scientific, but all working with nature”.

After our meeting we moved to one of the cluster farms, using one of the private roads that the forestry company had turned into tarmac road when they converted the forest to farmland. It is an example of how rapidly landscapes can change in Aotearoa New Zealand (well documented in Pawson & Brooking 2013), and what appears as either natural hilly grassland or forest is in fact the product of world market forces. Up there, rainfall is higher, so there is less drought risk and less need for irrigation than in the Canterbury Plains. A farmer and his wife, who had also been hired by the “forestry people” to operate the previous farm as sharemilkers, ran the farm, of over 1,000 hectares, as equity partners. Four workers from India and Fiji could be seen working on the cows, a reflection of the fact there is a serious shortage of “willing” labour in Aotearoa New Zealand dairy (Stringer 2016). The manager welcomed us enthusiastically. He was genuinely excited about the asset manager’s model. Under the previous owners, as is the case with many other corporate dairy farmers, running the farms was a “push job”. They “wanted to sell the thing as fast and high as possible”. With excitement, he told me that the current owners had a more holistic approach. Smart soil management techniques were used to enhance carbon retention and build up more fertile top soils. Effluents from the milking pad were stored in a newly built basin. The cows needed to pass a regular “condition score”

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3. On the notion of “alpha”, see the previous chapter.

to ensure animal welfare, and the firm was working on ways to drastically reduce the use of antibiotics. Although the stocking rate of 2.93 cows per hectare was close to the New Zealand average (2.84) (Livestock Improvement Corporation & DairyNZ 2018), it was still better than that of many corporate firms (this figure dropped further on the company's neighbouring organic farm). On average, cows lactated for five years (in the United States it is only 2.5 years), and the cows were "retired" afterwards. The farm had a 22 per cent annual replacement rate of stock, which was roughly the equivalent of organic dairy farms in the United States. If one accepted the basic premises of intensive dairy farming (which, from the viewpoint of a more radical animal ethics, is by no means an easy ride), then these figures would confirm that institutional farming with concerned investors in the driving seat can be surprisingly "green". At the same time, the investors were eagerly awaiting whether the returns promised during investor pitches and the proposition to build up post-farm-gate "alpha" would work out. After all, the fund was a pure dairy fund and was hard hit by the slump in commodity prices in 2014 and 2015.

### *A plan gone wrong (Case 2)*

Mchele\* is a busy place: "Kuna hela hapa [There is money here]," our driver exclaimed in Kiswahili as he took us through the village in late 2017. Indeed, when passing through this village somewhere at the feet of Tanzania's Southern Highlands, one quickly got the sense that this was a busy town. Rice sacks were loaded in several places, a Sheraton had just opened recently and workers wearing the overalls of the investment company that had taken over a former state farm bordering the village were ubiquitous. Even a National Microfinance Bank ATM machine could be spotted at the office of the former headquarter of the state-owned farm. There was no doubt – at least, at first sight: private equity seemed to have brought a lot of employment and economic activity to the area and had become a defining feature in village life. Money was circulating. But whose money, and on what terms?

When driving to the farm, we passed the giant irrigation pumps the company had completed in 2016. Tapping the local river, the system helped irrigate some 3,000 hectares of the over 5,000-hectare property. It ended the multi-million-dollar capital expenditure that had overshadowed the local management for several years. The road up to the main office of the company was dotted with hundreds of casual labourers, waiting to be recruited or paid for menial jobs such as weeding. They supplemented the more than 250

permanent jobs the project had created, albeit under very different contractual conditions. Loads of villagers could be seen in the farm, doing menial jobs. This remote place in central Tanzania, like many of the other farms featured in this book, is actually a global place, linked by its own airstrip to Dar es Salaam. Sometimes investors from Europe or the United States would fly in, or the company's senior management and investment board, who largely operated out of London. The economic buzz was treacherous, however. Building "an asset with proven capabilities", as one manager described the objective, from the ruins of socialism 450 kilometres away from the country's largest city and market has been more challenging than the project's masterminds had envisaged. From village politics related to the company's contested land acquisition and the resettlement of "illegal squatters" (see the section below) that followed in its aftermath to market, infrastructural and environmental challenges, many things happened that the architects of the project could (or would) not factor into the investment plan.

Had these risks been adequately captured at the planning stage, it would have been even harder to raise capital for the project. That institutional money would end up in Tanzania's Southern Highlands was due to very peculiar circumstances: the pitching entrepreneur, a man with no prior grain farming record but equipped with the qualities of a great networker and storyteller, and some supporters of the project who had credible records in the financial industry or in agriculture in Tanzania enticed a large US endowment fund to support the project. Otherwise being "quantitative people", keen on financial returns from predictable environments, one powerful executive at the fund decided to give African agriculture a chance; he also thought this potentially risky case could be hidden in a well-performing portfolio:

It's a greenfield agricultural project, and people tell you that can't be done. It's in Africa, which is far outside the risk spectrum for most people. Besides, a fundamental issue that you're trying to make a viable business in a sector where today it's uncompetitive. If you succeed, you look really smart and everyone says it's obvious, but most of the time you don't, and then you look really, really dumb. This sort of thing can only really be done if you're an angel and doing it yourself, or it's buried inside a very successful, liquid portfolio.\* (interview, CEO endowment fund, 2010)

The anchor investors had a plan and hoped that, after ten years, there would be a "very valuable company", and they would "all look like heroes"\* at the time of exit. Subsequently, other investors joined the project, enticed both by the faith of the anchor investors and by the prospect of contributing to the commercialization of African agriculture. The equity investors, backed

by loans from several national and multilateral financial institutions, injected millions US dollars of equity and debt into the project.

These investment dreams did not materialize. In 2019 the company declared bankruptcy, because of a variety of factors, but two events seemed to be particularly consequential. Even though the company was one of the key partners of SAGCOT (see [Chapter 5](#)), it suffered dearly when the Tanzanian government decided to waive import duty on 120,000 tons of imported rice, of which 80,000 made it into the country (interview, farm manager, 2015). With this move, elements of the ruling party, the Chama Cha Mapinduzi (Party of the Revolution), hoped to appeal to urban voters by enabling cheap imports before the general election due in 2015, as well as pleasing some of the well-connected domestic traders (key financiers of the ruling party; on the underlying dynamics, see [Gray 2018](#)). This resulted in cheap rice imports from Pakistan, depressing the market for two years in a row and directly undermining the goals of SAGCOT (see [Chapter 5](#)) and the country's National Rice Development Strategy. Tanzania had a compound tariff of the 75 per cent ad valorem rate or US\$200/tonne, whichever was higher, in line with the East African Community's tariff regime in order to protect domestic markets against cheap imports. The investors had relied on that provision, but things fell apart when the imported rice flooded the Tanzanian market. The company and other large-scale producers in the country incurred huge financial losses. Since the company had also started a smallholder rice programme to build community relations, it had to pay farmers on prices agreed before the market conditions changed, adding a further financial burden to its balance sheet.

Although the new government elected in 2015 promised to be more supportive on rice matters, history repeated itself in the case of maize, the company's second crop, in 2018 – this time with an environmental twist. Rainy season floods in 2016 and 2017 destroyed maize crops and road infrastructure across Tanzania, followed by extreme dry seasons that caused higher irrigation bills (personal information, senior manager, 2019). To make it worse, the harvests produced under these conditions could neither be exported, because of an export ban in 2018, nor sold at projected prices, because of cheap maize imports from southern Africa (which had seen a record maize harvest in 2017 that had helped push maize prices to an 11-year low in 2018). This dire situation was further stressed by a plague of fall armyworm (*Spodoptera frugiperda*), a pest native to the Americas, which since early 2016 has spread across Africa ([FAO 2018](#)). Loaded with millions of US dollars in debt from international and national financial institutions alike, which was used to finance risky capital expenditures (such as the large irrigation system or the dryers installed on the farm), the company simply could not pay it off.

Was the eventual collapse of the project surprising? Even though one could blame external forces for much of it, a cursory review of the literature on bottom-up investment cases reveals that many of these projects have not taken off (Cotula 2013; Funk 2010; Li 2015) particularly in Africa. In addition, my previous visits to the farm had already revealed the managers' strong doubts about the long-term sustainability of the project. The production manager admitted during an interview that, after 2013, the company had a real cash flow problem and that, basically, it was always insolvent ("The money generated from sales is supposed to go back into the system but there is a real problem, because returns are not good enough. We constantly have to adjust our initial model"); he wondered what the investors were "really up to" and "why they would still pump money into the project" (although the worst was yet to come, the venture had already suffered from low productivity and several other management challenges).

These early concerns were also raised by a neighbouring commercial rice farmer. He wondered how the rush to upscale quickly to build a "farm for sale" seemed to take precedence over productivity and marketing concerns. As late as late 2017 another senior manager conceded that the premise of the whole project – namely capitalizing on the country's gap in food staple self-sufficiency under protected market conditions (the 75 per cent Common External Tariff on rice imports into the East African Community), establishing the largest rice and maize producer in the country and turning the business with these food staples into a "producer market" (not controlled by commodity traders but by "farmers") – had failed. Thus, meeting the project's financial model had been a "constant juggling" act. The managers had been constantly trying to "chop off the fat", weeding out all unnecessary costs and inefficiencies (e.g. by trying to push farm-gate sales to avoid the horrific cost and stress of transporting from the farm to urban markets). How much "fat" would be there was not clear at the beginning of the project, and the senior manager admitted that he and his colleagues would never attempt a project of this size again.

The previous state-run rice enterprise had already had troubles realizing its goal of large-scale mechanized rice farming (for a historical account, see Monson 2011), but at least it had the "luxury" of socialist state ownership, under which management and production problems could be buried. Not so in a market environment, in which its private-equity-backed successor owed more than US\$25 million in outstanding debt to several financial institutions. What the collapse of the farm meant for workers, the farm itself and the communities is unclear at the time of writing. What is clear, however, is that the project now joins the ranks of other "stranded farming assets" across the Global South, where things often have just not worked out as planned and investments have literally gone to ground.

## THE WORK OF INSTITUTIONAL LANDSCAPES II: A VIEW FROM THE OTHER CASES

### *Eyeing up the exit through “careful” vertical integration (Case 6)*

The other cases studied provide some interesting insights complementing those offered by the diagnostic events featured above. Take the large-scale, multi-million-dollar investment in a poultry-feed mill complex in central Tanzania, built on land already titled and previously owned by other commercial farmers (including a powerful politician) and Greek settler farmers, who managed to evade nationalization in the wake of the Arusha Declaration. Part of a much larger Africa-themed fund, this investment has been fuelled by development finance, including the Commonwealth Development Corporation (see [Chapter 3](#)), philanthropy money and – a rare case for this part of the world – European pension fund money. The spatial diversification across southern and eastern Africa came across to overseas investors as a less risky venture than a single greenfield project. As in the case of the grain operation (Case 3), the project’s architects promised to close a market gap: previously there had been no industrial-scale feed-producing and -milling operations in Tanzania making use of soy as a protein-rich feed,<sup>4</sup> and only a few other commercial poultry producers had set up operation in the country. At the same time, demand for modern poultry varieties was projected to surge in the near future, as a result of rising incomes and changing diets (as had happened in other African countries, such as neighbouring Kenya and South Africa). Coupled with the idea that local farmers could not only produce part of the feed (the rest would come from the company’s other large-scale farming operations, in the south of the country) but also raise chicks in modern hatching units, this proposal suggested sufficient transformational potential for investors with “developmental concerns” to join the project.

As in Case 3, development money has been an important source of patient capital in the course of the assetization project. The partial similarities to Case 3 lie not only in the investor configuration and the size of the project but also in the transformative vision and temporality of investment. With the exit planned to happen after nine to ten years upon investment, upscaling quickly became of the utmost importance for the asset manager in order to realize the returns promised to investors. Interestingly, at the time of research, this had not resulted in a further vertical integration of

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4. Soy is a common ingredient in conventional industrial-scale meat production operations, and thus part of what has come to be known as the “industrial grain–oilseed–livestock complex” (Weis 2013). The company also processed maize as animal feed.

the operation, which might have been considered to be the natural progression when considering how poultry sectors had developed in emerging markets and advanced capitalist economies (Weis 2007). There, poultry firms have seized control of different parts of the value chain, reaping massive profits. During a visit the manager of the project explained that, for the time being, this was not the aim, as it did not align well with the “impact concerns” of the European pension funds:

Our intention here is to be a Tanzania company for the Tanzania farmers. There is a social side to it, and that is how the investors see it. A lot of the investors are happy to see that; they do not want us to come in as a big corporation and just take over the poultry industry completely with our facilities. As I said, at the end, if we cannot meet the capacities required to keep the mill full, then we need to look at other methods for doing it, but this is not our strategic goal at the moment. At the moment ... it is working with the small farmers to get the maize and soy required for the chicken and give them out to farmers.

What is not mentioned here, however, is that potential buyers would be free to integrate the business vertically and cash in on economies of scale and accumulated market power. This would enhance the attraction for strategic buyers, such as transnational poultry firms, who might factor this into their purchase calculations. Although the business aligned well with the new industrialization agenda of President Magufuli (*viwanda*: Kiswahili for “factories”), as it was farming on an industrial scale, its potential for monopoly power and the fact that the asset was being “built to be sold” – using millions of dollars of debt and risk insurance from development finance institutions (in addition to philanthropy money) as leverage to reach the projected internal rate of return of over 20 per cent\* – were usually glossed over in celebratory discourses on agro-industrialization.

#### *When private equity and smallholder cooperatives meet (Case 4)*

Upscaling operations has also been the goal of the family office investing in a Tanzanian dairy processor. Skipping land-based production, which was considered to be too risky by the asset-manager-cum-investor (there is no separate asset manager involved in this case), fresh dairy products proved to be an important market niche in a country in which a large proportion of milk consumption is met either through informal market channels or by imported milk powder. The capital needs of the dairy processing plant,



co-owned by a smallholder cooperative and built up over many years with dairy expertise and development finance from Europe, fitted well with the impact goals of the company, which usually provides between US\$250,000 and US\$4 million of growth capital to investee companies. When the factory was first opened in the late 1990s it had an intake of 360,000 litres per annum. By 2017, after the investor had injected equity into the project and facilitated access to external debt to upgrade its infrastructure, annual milk intake stood at 12.8 million litres, resulting in US\$4.1 million in payments to the 6,000 or so farmers supplying the facility (up from about US\$1.2 million in 2007, before the investor had entered). When the company saw that seasonality and the perishability of fresh milk proved to be major challenges in the Tanzanian environment, they invested in a modern, ultra-high-temperature processing facility, which allowed for better storage and enabled the company to market the milk much further afield.

Contrary to the other investors featured here, the family office – which recycles all profits back to a UK-registered foundation – does social “impact first”. As an investor targeting businesses in east Africa, it would “do things that no one else would” (interview, CEO family office, 2018). This means that the office’s management first needed to share the vision and values of the target company’s management, and then look at the business and its scalability and profitability. As the CEO underlined in an interview in 2018, and contrary to the more mainstream investments featured above, “IRR is not a driver in our decisions, even though we do model because we need to understand the prospects and needs of the business”. Having rejected several purchase offers by larger competitors from neighbouring Kenya, as well as from more mainstream private equity funds, the CEO emphasized that, “if we cared more about shareholder value, then I would have structured this very differently”. This did not mean, however, that the investor would not apply basic private equity principles:

We work with management to improve the financial management of the company by harnessing the data. We provide access to a network of global and local partners who can provide management, operational and technical assistance. We also insist on the establishment of sound internal systems, and appropriate corporate governance, control and reporting structures. These factors not only create value in our investee companies, they also prepare the business to be able to attract additional funding in the future.\*

(interview, senior manager, 2014)

Despite the rather conventional private equity gaze transpiring here, the impact ethos shaped the timeframe of the investment and the use of debt

and equity. Until recently equity had been balanced in favour of the smallholder farming cooperative, which owned a majority share in the processor. Although the family office investor had recently acquired a majority share thanks to a fresh injection of equity, voting rights were structured in such a way that the investor needed the consent of the cooperative leadership on major structural decisions.

In conclusion, Case 4 is one of the few examples in which a private equity investor became more directly involved with smallholder cooperatives, an area that is notoriously risky for its politics. Although many African countries boast agricultural cooperatives, and several impact funds, such as Belgium-based Alterfin or Switzerland-based AlphaMundi, have become interested in them because they provide volume and numbers, they usually provide loans only. Nevertheless, the strategy described here, especially when put in a larger context, comes across as more akin to private-equity-as-usual than it appears at first sight. In neighbouring Kenya the investor has invested in a trading company with a highly disruptive business model and the opportunity to gain a monopoly in the agri-food chain, a familiar move in controversial platform economy deals executed elsewhere (Rotz *et al.* 2019c). This gives some credit to the claim that impact funds often have “multiple legs” (interview, investment advisor, 2018), when returns from more mainstream and potentially controversial activities support impact investing.

### *Organic dairy as a crisis response (Case 7)*

In an interview with a pioneer in the agri-investment space in Aotearoa New Zealand, the interviewee underlined that there had been a lot dynamism in the “dairy space” before the soft commodity slump in 2014. Thereafter, a lot of activity was put on hold. Although it did not affect committed or called capital, fund managers found it more difficult to raise new capital. Existing funds had to adjust, and tried to raise productivity and cut their costs. Within the better capital structure, and when there was less need to generate a constant cash flow (to service debts), investments in technology, genetics and grassing were possible. “You could pull some strings here and there,” one industry observer put it in 2018. This is exactly what seasoned dairy-focused asset managers did. Having set up several dairy funds with lifespans of about five to seven years (a local manager described the underlying “assets” as “fixed farms”), the company decided to convert a part of its existing operations to organic dairy, eventually milking more than 5,000 cows in Southland on EU-certified farms. Although this was not driven primarily by concerns for sustainability as such (even though it was a nice by-product), the asset

manager has since become a prominent point of reference in debates on how to “green” dairy in Aotearoa New Zealand. Interestingly, it was not some local family farmers who hit the headlines with how dairy farming could be done differently in the country but overseas asset managers who were catering for many “mom and pop” investors in Europe, in addition to a few larger investors. Nevertheless, whereas in Case 1 the transition to higher-value-added activities based on organic production and processing was part of a larger philosophy of intergenerational investments, here it was much more a crisis response to capture price premiums offered by organic dairy. During the two-year conversation process many farm management processes had to be changed to meet certification requirements. This also resulted in a significant restructuring of farm labour arrangements, which previously had been tailored to the high-octane cash flow machinery of conventional dairy. As the manager explained to me during a farm visit in 2018 (I already had visited the property in 2014), the previous operational model, managed in cooperation with a local asset manager, had

utilized contract milkers who are businesspeople, and they run the farming business and supervisors who support them. So, the supervisors are employed by [the local asset manager], and contract milkers are self-employed and contracted to the farm. That model leaves, I guess, some autonomy to certain layers. It usually requires less time of the supervisors, so you should be able to run a lower-cost supervision model given that the other entity you’re dealing with is a business person in their own right. With the organic conversion, there is a high need for quality data that has to be accurate. We need to get it right, tighter controls around organic compliance, and quick decision-making. So, some of those decisions could possibly impact on a partner business like a contract milker ... So, really, this decision was made very early on that we need to take farm managers who are employed, and we get a direct reporting line. So that, if there is a decision on the farm for the business to change direction, and it impacted some milk flows, it wouldn’t be impacting negatively someone else’s business. So, it’s really to reduce conflict and just to provide tighter control.

So, why was the company in a position to push for organic conversion, and why has this not been pioneered by more local farmers in the same region? One reason may have been that the market demand for conventional products had been stabilized by many dairy processors, including the giant Fonterra, to which many farmers delivered. The other reason pertains to the

capital structure, which, surprisingly, puts even rather short-term institutional investments in a better sustainability and social impact position.<sup>5</sup>

I think with a foreign-owned structure there is probably more opportunity to invest in some of these challenges ... There is probably a range of reasons, but some of it is ... They've [local farmers] leveraged themselves into a position, and quite often I believe that financial leveraging ... limits the amount of capital that can be utilized for some of these great causes that we'd like to spend on. Foreign investment model is usually very lowly leveraged and more readily available funds to do some of this work.

(interview, representative asset manager, 2018)

Speaking from a post-crisis position with several lessons learnt, the interviewed manager was keen to emphasize, however, that the previous investment strategy focusing on conventional dairy had put too much emphasis on capital gains and external debt as sources of value creation, rather than nurturing “a revenue return model that would underpin a good business in most countries”.

#### *Taking syndication to the next level (Case 8)*

Case 8 teaches us that a spectacularizing focus that ties the financial asset character of farmland in Aotearoa New Zealand exclusively to the more recent influx of foreign institutional investments risks losing sight of how, in the years after the radical market-oriented reforms of 1984, agriculture was already becoming a highly calculative, entrepreneurial and often speculative business. Neither farming for capital gains nor the separation of farm ownership and management is an invention of foreign investors and their asset managers. As early as 1987, in the wake of the great farming crisis of the 1980s, an observer from one of the country's most prestigious universities found that “[t]he New Zealand farming industry has more than its share of entrepreneurs willing to change their methods of farming, to take risks and to adopt new systems of financing their enterprises” (Pryde 1987: 6-11). A 2018 interview with an entrepreneurial farmer reinforced this assertion: “New Zealanders are pretty canny when it comes to working out new opportunities,” he told me.

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5. Lower leverage rates also mean, theoretically, that more equity could be invested into improving labour conditions (e.g. farm housing) and other amenities. It is no coincidence that poor labour conditions on some dairy farms are related to extreme leveraging practices among certain dairy farmers (Stringer 2016).

A bunch of seasoned “Kiwi farmers” who encapsulate this spirit have perfected the model of syndication by targeting wealthy individuals in Aotearoa New Zealand (alongside providing asset management services to foreign investors). The business grew out of the activities of an entrepreneurial farmer, who over the span of his career had bought more than 100 farms across the country, 60 of which were rolled over during his time as a co-owner of the Rural Property Trust between 1986 and 1990, when he and his associates raised more than NZ\$50 million from Aotearoa New Zealanders wanting to co-own a farm\*. This early model of syndication, whereby farmers and non-farmers could acquire a share in a farming venture, was later expanded with new partners, and paved the way for a sheep and beef farming investment vehicle. A look at their webpage entices potential investors with attractive figures, and the farmer-asset managers promote sheep and beef, “classics” in the country’s agrarian history, as “investments that stand the test of time”\*. The potential is set out from the beginning: potential clients are informed about what a typical New Zealand sheep and beef farm investment produces in terms of value (NZ dollars per kilogram) and that it generates a return on capital of around 5.4 per cent. It is further explained that this will be achieved by selecting farms with the ideal location, soil, rainfall and contour, and by employing committed managers who will oversee farm transformation so as to maximize forage, wool and meat production per hectare, while minimizing the costs of production per kilogram of meat produced. To make this a sensible investment, investors are advised to own at least a 25 per cent farm share, valued at NZ\$5 million or more, for a minimum of five years.

During a visit to a farm in 2018 the person co-managing the beef and sheep syndication business explained that, although dairy was more “clinical and routinized”, and “easily scalable”, “meat production” was more market-oriented, and depended a lot more on “individualized decisions” (such as the timing of sale). Beef and sheep provided fewer returns, but also offered more opportunities to less capitalized farmers. In dairy, one needed to have at least 150 cows to be viable, and you could end up paying NZ\$25,000 for one hectare, whereas a beef farm allowed investors to enter the game at NZ\$4,000 per hectare. Unlike intensive dairy farming, which could see stocking rates of up to four cows per hectare with external feed, sheep and beef consumed almost no supplements. Especially after the dairy slump of 2014 and 2015, beef and sheep became a viable value proposition for the firm’s investors, the majority of whom were Aotearoa New Zealanders and farmers themselves: with a large Muslim market bordering the Indian Ocean, from Indonesia to the Arabian Peninsula, sheep and beef had a modest but stable future. Some leveraging could further gauge returns (quite high in some cases, but usually it was kept to low double-digit number across the portfolio).

When the company purchased the farm, it was already “in pretty good shape”. Not much had to be done, except for some regrassing. The previous owners had put in a lot of work, and moved on to their next farm. Moreover, the new owners had made more intensive use of a helicopter for controlling straying animals and planting grass. Operating the farm was pretty “efficient” from an output-per-labour-unit point of view. A single person and his dogs ran the place. Labour was contracted as needed: sometimes individual men from the region, sometimes from specialized firms. But the farm manager did not have to worry about such managerial intricacies. A human resource manager working for the syndication company would deal with that.

## THE SOCIAL, ECONOMIC AND ENVIRONMENTAL FOOTPRINTS OF INSTITUTIONAL LANDSCAPES

Demonstrating an environmental, social and governance agenda has become something of *sine qua non* for many larger investors in the wake of the financial crisis of 2007/8. For capital placements into farming, this general turn to ESG has been further stressed after agricultural investors faced accusations of land grabs in different parts of the world (see [Chapter 6](#)). All fund managers with pension fund backing were quick to highlight their strong ESG credentials (namely responsible treatment of workers, engagement with local communities, promotion of sustainable agricultural practices, contributing to help feed the world, etc.), with most of them arguing that what their investors requested from them naturally aligned with their view of sustainable agricultural production. Regardless of what one makes of such claims, it was observable that investors driven more by matching their liabilities than by maximizing absolute returns gave asset managers more space to deepen ESG agendas. As part of the ESG agenda, two of the asset managers (Cases 1 and 6) studied also prepared publicly available annual reports, in which they stated their impacts, with some of them allowing for a degree of public exposure rather unusual in the world of money management. The senior figures of two Aotearoa New Zealand asset managers (Case 5 and 8) were regular bloggers on their investment schemes, open about what they were doing and where they were doing it (one asset manager even posted a map of all his farm locations on the internet). Only in the case of the “mutual fund farm” managed for a European bank (Case 3) were the asset managers rather agnostic about ESG and more opportunistic in their investment approach. For many other investment mandates they claimed – like many others – that they had signed up to various multilateral frameworks on responsible investments in farmland. In two Tanzanian case studies, supporting small-holder grain farmers (Case 2 and 6) and poultry farmers (Case 6) via outreach

programmes and marketing arrangements was part of the ESG approach. In these cases, ESG may be quickly associated with the investors inclination to “do good”, but it can, likewise, be regarded as part of a symbolic value creation process and a legitimization strategy of fund and farm managers in order to pacify the resource politics of the present (Ducastel and Anseeuw 2017: 207 report a similar story for South Africa). It was also not clear whether future investors would buy into such “benevolent” and “do-good” arrangements. As an interview with a manager in 2018 revealed, in the case of the poultry-feed mill complex, the investors did not rule out further vertical integration of the poultry business or moving into the rearing and slaughtering of chickens if market conditions required doing so. This would eventually cut off smallholder farmers as potential multipliers of the business model, and any potential buyer could do so too. The two Tanzanian mega-projects were also ones against which considerable criticism had been levelled by other researchers and NGOs, who quoted members of adjacent communities accusing investors of either enclosing farmlands and pathways (Cases 2 and 6), bringing in non-local migrant labour (rather than employing locals) (Case 2) or using a disproportionately high amount of local water resources for irrigation (Cases 2 and 6)\*. In Case 2, some locals also accused the company of the careless use of pesticides and a deeply flawed resettlement of the farming families who had occupied the land beforehand. In the other large-scale farming case (Case 3), interviews by a Tanzanian student researcher with local communities revealed a complete absence of support from the investor beyond employment, probably reflecting the more aggressive investment approach of the asset manager.<sup>6</sup> The company with the largest aggregate economic impact was probably the impact investor targeting dairy, which claimed to employ more than 100 staff at its facility, and reaching out to 6,000 smallholder dairy farmers in two regions of Tanzania in 2018.<sup>7</sup> But even in the “best of all cases”, such as the impact investor in Tanzania or the long-term Aotearoa New Zealand asset manager who partially ventured into organic dairy and thought of investment in intergenerational terms, “doing good” had its limits. As one of the senior managers of the latter firm emphasized during a farm visit in 2018, although they tried to adopt as many best practices as possible, “leading edge” (in terms of social or environmental performance) often translated into “bleeding edge”. After all, the expected IRR for the fund was still to be met. This fits well with the description of Arjaliès *et al.*

6. I am grateful to Denis Malele, Moshi Cooperative University, for this information (December 2019).

7. In 2018 the company claimed to have employed or reached out to 14,576 employees and 57,565 smallholder farmers across their east African investments, having paid €50.3 million in income and €1.9 million in taxes\*.



(2017: 144), who cite a European pension fund official who conceded that rates of return prevented his organization from implementing a more robust ESG agenda: “The problem is that we are obliged to ask for 15 per cent to give our beneficiaries more than the inflation rate.”<sup>8</sup> Although impact investors such as certain family offices may have lower return expectations, and do things other investors will not do, they still maintain certain key principles of private equity.

These few lines should suffice to problematize the question of ESG agendas in agri-investment chains, and whether these can be aligned in a robust way with the concerns of workers, communities and the environment so that sustainable, inclusive and poverty- and inequality-reducing development trajectories are carved out.<sup>9</sup> Other studies, with research designs better able to capture the impact of agri-investment chains on labour, nature and communities in a horizontal sense (such as Cochet 2018; Rotz *et al.* 2019a), are of much help in further qualifying the regional social, economic and ecological footprint of finance-gone-farming (see also the section further below). Table 8.1 gives a cursory overview of the strong variation in labour impacts of the sampled investment chains, one of the most common measurements to attest economic impact.

## THE PRE-LIFE OF “ASSETS”

A question that has been addressed only cursorily so far is where the assets that investors and asset managers sought to valorize originated. These farming ventures had a pre-life, and eventually *became* financial assets. This is a process. A piece of land or any other domain envisaged as an asset needs to undergo an ontological reconfiguration in order to display the character of a financial asset. This can be broken down into nourishing its income stream and its capital-appreciation-generating qualities. Of course, the latter can be realized only if buyers can detach themselves from the assets as and when they please. In some cases that are more favourable to investors, they might already have had a financial asset character, as with the Aotearoa New Zealand case of a forestry company carving out several dairy farms from

8. The authors state that 15 per cent is “regarded the minimum return on investment necessary in order to provide adequate benefits on retirement, particularly in the case of defined benefit schemes”. In an e-mail exchange, one of the co-authors of the book further clarified: “Of course, it is almost impossible to achieve, but this is also why they speak about it – a bit like an impossible ROI to achieve all the time” (personal communication with Diane-Laure Arjaliès, December 2019).

9. Public coffers could be added here. How private equity plays are taxed is subject of a critical debate (Appelbaum & Batt 2014; Toporowski 2012).

**Table 8.1** Labour impact of investment chains sampled

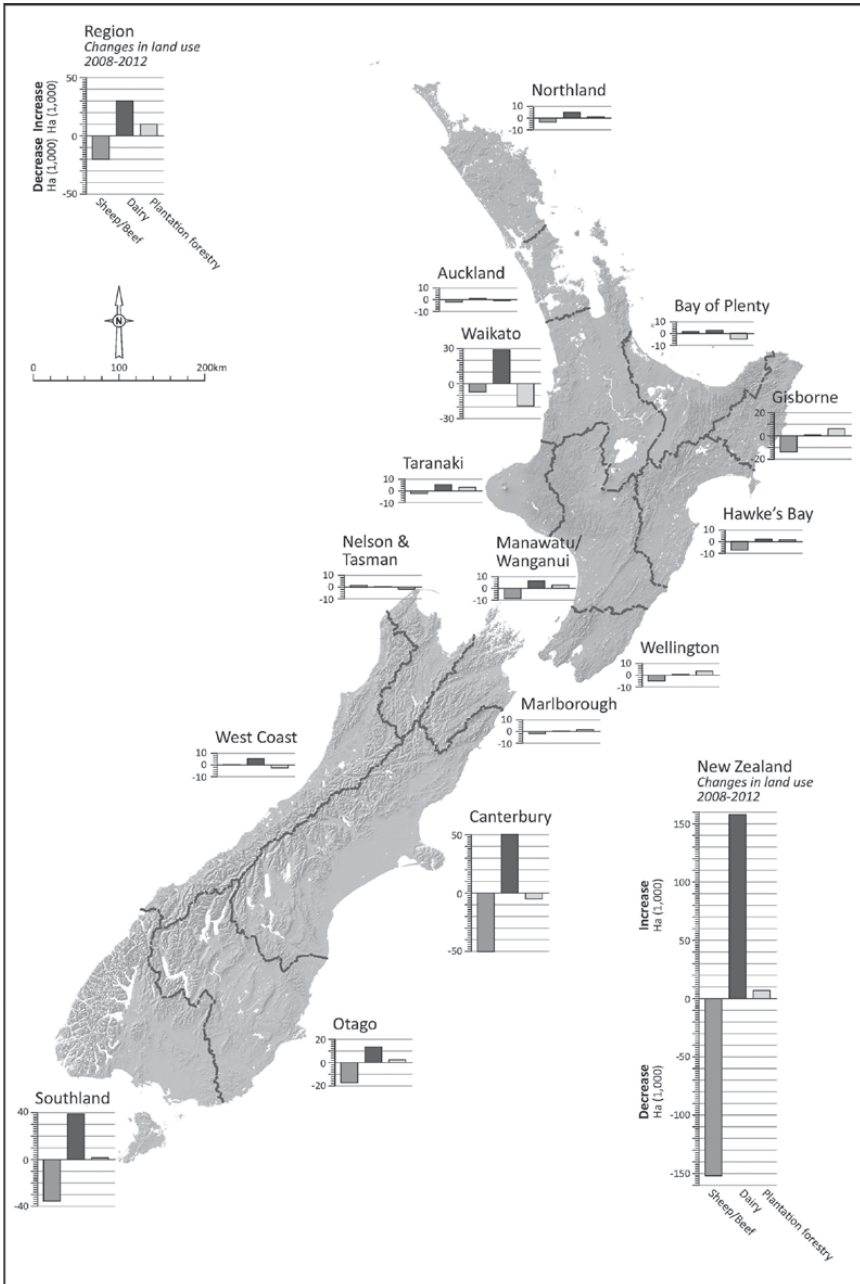
|   | <i>Case 1</i>               | <i>Case 5</i>  | <i>Case 7</i>  | <i>Case 8</i>  | <i>Case 2</i>   | <i>Case 3</i>   | <i>Case 4</i>                                       | <i>Case 6</i>   |
|---|-----------------------------|--|----------------|----------------|---|---|---|---|
|   | <i>Aotearoa New Zealand</i> |  |                |                | <i>Tanzania</i>   |   |   |   |
| Labour impact at asset featured as a case study           | 6 FTEs                      | No farm visit, but assets in fund range from 2.4 additional FTEs per farm to 105 for another | No data        | 1              | c.250 permanent jobs; several hundred day labour jobs   | 36 permanent workers, 40 contract workers, and some 50 casual staff | 150   | 684 (labour categories not specified)   |
| Labour impact across portfolio companies during operation | 80 FTEs                     | Estimated 150 FTEs for new permanent crop fund   | 11.75 FTEs     | No data        | Not applicable (no fund)  | Unknown   | 14,576 across all company investment in east Africa | 6,983 for two Africa-focused agricultural funds   |
| Labour change compared to pre-entry                       | Unknown                     | Unknown  | Unknown        | Unknown        | Unknown   | Unknown   | + 95  | + 436   |
| Linkages to smallholder farmers                           | Not applicable              | Not applicable   | Not applicable | Not applicable | 8,500 smallholder farmers reached via rice-growing support programme; but unknown how many delivered to the company | Not applicable  | 6,000 smallholder farmers; cooperative union        | c.10,000 small-scale farmers as suppliers of animal feed; several thousand farmers as customers |
| Years of data   | 2018                        | 2017   | 2013           | 2018           | 2018  | 2017  | 2011  | 2017  |

*Note:* In full-time employment equivalent (FTE), when known.

*Source:* Own databank.

its vast forest estates in the Waikato to make a quick profit and sell it on to investors. In other cases, investors could count on family or corporate farmers, who had converted sheep farms to dairy and who had to make sales under duress because of huge debt loads, or as a logical progression (e.g. as part of a retirement strategy) to sell on the farm they had helped build up to capital-rich foreign buyers. Such assets might have come in a shape and size that investors did not always find optimal, but aggregation and other types of improvement operations were the means to create the value that investors desired. “Value creation”, a term used widely in the world of venture capital and private equity, should not be taken for granted. As Fabian Muniesa *et al.* (2017: 128) put it, “It is about valuation in the sense of establishing value, but also in the sense of achieving it, of producing it in one particular direction.” Although “the particular direction” can be understood as the goal of assetization and is a key dynamic of institutional landscape making, it also has to start somewhere. Therefore, it is important to address the question: where do financial assets come from? The answer to this is longer than space permits. In the Aotearoa New Zealand case studies, much of the work that turns agricultural ventures (and the underlying land) into financial assets had already been laid out, often stretching back far into the colonial period, when the country’s land tenure system, legal machinery and agrarian structure were set up (see [Chapter 3](#)). Although the history of the country is one of recurring world-market-induced land conversions (Hawke 1985; Pawson & Brooking 2013; Wynyard 2016), the land conversions from sheep to dairy farming between 2008 and 2012, when many financial investors flocked to Aotearoa New Zealand, seem to be particularly striking ([Figure 8.1](#)).

In Tanzania, a country with a history of socialist development until the mid-1980s, and a very different infrastructural base and different agrarian structures, assetization in the cases studied was very much about creating something new, even though investors often built on the inherited landscapes of the past. These contextual factors would profoundly limit the speed and scale at which investors could acquire and rework agricultural enterprises into financial assets, but – paradoxically – also provided some foundation for it. Take the former socialist friendship farm that later was acquired by US and European private equity interests. As a former state farm, it had the scale, layout and property title in place. The intermediary state agency administering the farm after it had collapsed in the early 1990s also became a minority shareholder in the deal in an “land for equity” trade. All that was left was to repossess the land from local villagers (who had occupied it after the collapse of the state farm in the 1990s). The company spent US\$1.5 million to “reactivate” the property title, as a manager put it in 2015, but this re-enclosure remained contentious in local communities and among critical observers until the bankruptcy of the firm in 2019.



**Figure 8.1** Changes in land use per region in Aotearoa New Zealand, 2008–2012  
*Source:* Pawson and the Biological Economies Team (2018: 30) (reprinted with permission).

A similarly sized farm in northern Tanzania faced fewer problems with “reactivation.” The farm dates back to British colonial times, made up of land that was given to British Second World War veterans. It was nationalized after the 1967 Arusha Declaration, then privatized in 1994, when many former state assets fell into private hands, often through opaque processes. A large Tanzanian beverage company then bought the land and looked for a joint venture to grow a grain variety for its beverage business. A well-connected agricultural professional, born to British parents in southern Tanzania, then came on board in 2000. It took three years to transform the farm, which had become overgrown with bush, using 30 old Ford tractors, but a few years down the line both parties saw that decreasing rainfall in the area (related to climate change) would require significant additional investments into dry-farming techniques. Considerable capital was needed, which the beverage company was not willing to provide, so the professional brought in new investors, who were thrilled because the farm had a clear land title, no encumbrances, a proper registration and no “squatter issues”, in addition to its value creation potential. All that remained was to manage grazing conflicts with local Maasai communities, but political connections to the regional commissioner, a livestock fence and a tight security apparatus proved valuable “allies”.

Finally, consider the impact investment of dairy processing in Tanzania. On the face of it, it looks like quite a risky investment into smallholder-based supply chains and cooperative structures, but the investors could build on more than 20 years of development aid and pro bono work (which a dairy cooperative from Europe had invested into the project from the mid-1980s onwards), which in turn built on the ruins of the former National Ranching Corporation (which had unsuccessfully experimented with large-scale dairy production in north-eastern Tanzania up to the 1980s). The project was further supported in the late 1990s by the Commonwealth Development Corporation via the Tanzania Venture Capital Fund, which allowed for the construction of the dairy processing plant. All that the new investor needed to do was to streamline the supply, expand the market share of the company, invest in infrastructure and other operational systems at factory level and expand its processing capacity.

These brief insights should sensitize us to the fact that layers of the past often shape the potential of assets and the trajectories of institutional landscape making in crucial, albeit sometimes unexpected ways.

## INSTITUTIONAL LANDSCAPES AND QUESTIONS OF RURAL WELFARE AND RESTRUCTURING

Opening the black box of global investment chains provides some unique insights into the inner life world of global capital flows organization. Critical

voices have also argued, however, that, despite these merits, such an approach often fails to deliver on the big questions of financialized capitalism (Preda 2013). For some, the most disempowering outcome might be to open the black box only to “find ... it empty” (Winner 1993) – emptied of power, culture, interests, inequality, class, race, development, gender, exploitation, surplus value, and so forth. Although some of these issues have been featured in this book to some extent, others have not, or could be touched upon only in a superficial fashion. As was the case with the study of globalized production chains (Bolwig *et al.* 2010), the logical step for future research should be to address the horizontal aspects of agro-investment chains that together affect patterns inequality, poverty, marginality and sustainability. Therefore, it is important to revisit Figure 1.1 (p. 7), which embeds assetized agricultural ventures in their broader regional and relational context. If “[c]apital markets, rather than commodity markets, appear to be the ultimate determinants of rural welfare as well as rural social, and economic, structures” (Flora 1990: 157; cited in Gunnoe 2014: 500), then these welfare and regional structural questions require further scrutiny.

Despite the limits of the approach embraced in this book, we can make some careful conclusions with regard to these questions. The relationship between finance-gone-farming and rural welfare and restructuring is not as straightforward as it first appears, however.

First, despite notable differences in operational models and investment cultures, institutional investors favour productivist, scalable investments over smaller scale, and socio-ecologically more diverse production models. This can have huge ecological effects, as in the case of the Brazilian soy frontier (Galaz *et al.* 2018) or conventional dairy or beef farming in the United States, Aotearoa New Zealand or Australia. Even though investors may also opt for production models with better environmental track records (e.g. permanent crops such as nuts or apples or organic dairy), even these cases cannot escape some of the structural imperatives and metabolic ramifications of modern money management. In addition, organic production does not necessarily mean improved labour conditions. These issues all require further research.

Second, in all the case studies examined in this book, and also in other cases studied, investors and asset managers try to instil a new form of dashboard and boardroom farming, in which the rhythms of farms are synchronized with the rhythms of money management, via the intermediation of data-driven governance structures. Yet, as the case of Aotearoa New Zealand shows, the datafication should not be tied exclusively to the increasing influence of financial investors but is also owed to the professionalization of productivist agricultural practices in different regions of the world over the past 20 years. Even so, the use of monitoring and accounting technologies is further intensified in farming ventures transformed into financial assets, with

potentially significant implications for the future of farming in such areas (Rotz *et al.* 2019b).

Third, financial investments in farming have the potential to further exacerbate rural inequalities and diminish local social cohesion owing to new spatial patterns and distanced forms of farm ownership. For instance, it was estimated for the United States in 2017 that, within the next five years, some 92 million acres would “change hands, with much of it passing to investors rather than traditional farmers” (Keiffer 2017), reinvigorating the fears that even Republican politicians voiced when the first farmland fund was proposed in 1977 by the Continental Bank of Illinois and Merrill Lynch.<sup>10</sup> Similar trends are reported from Aotearoa New Zealand and Australia, where the increasing corporatization of dairy and other agricultural subsectors increasingly seems to lock out aspiring farmers. Although the country will definitely not go back to the 1890s, when “422 individuals and companies (less than 1 per cent of all land owners) controlled eight million of the total twelve and a half million acres of freehold land in 1890” (Wynyard 2016: 89), land concentration has become a major concern for young Aotearoa New Zealand farmers.

Aotearoa New Zealand is also a good example of why we should be careful not to exclusively tie these trends to the increasing interest of genuine financial investors, however. Aotearoa New Zealand dairy, one of the main domains of foreign financial investments, has experienced an increasing concentration of land and a rise in land and herd prices since at least the 1980s, and farming for capital gains has been an integral part of agricultural biographies since the colonial age (Hawke 1985). With the average dairy farm size nationwide standing at 147 hectares in 2018, a young farmer in the popular farming region of Taranaki, where the average price per hectare of farmland was NZ\$38,025 in the same year, would have to spend NZ\$6 million for that farm. With the average cost of NZ\$1,000 per cow, and average herd size of 419 in 2018, sharemilking arrangements (whereby someone else would own the land and infrastructure) have become equally exclusive (Macdonald 2018). In the Waikato, prices could shoot up as high as NZ\$60,000 per hectare, as one farmer interviewed in 2018 reported (interestingly, the same person also estimated that about 25 per cent of his own land’s value, standing at NZ\$45,000 to 50,000 per hectare, was not matched by productive capacities). Foreign investors surely play only a part in this story, alongside domestic corporate farmers and family farmers, as well as wealthy migrant farmers from overseas.

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10. Back then, Illinois Republican senator Paul Findley was cited as having fears that “the fund with its large resources could outbid young farmers for land, would drive up farm prices, and could lead to concentration of control of the nation’s food supply in the hands of a few bankers” (Lyons 1977).



To further complicate things, those who have worked their way up into farm ownership, those who come from landowning families or those who are able to subsidize farm purchases from other sources of wealth and income have often been profiteers of the contemporary land rush, since additional demand increases, or at least stabilizes, land prices (and many farmers taking on debt have speculated on that). As one farmer interviewed in 2018 put it, “We operate in a free-market economy and foreign investment is part of the package” (he also noted that local buyers would often successfully compete with foreigners for land, and, for him, the anti-foreigner stance was mostly driven by urbanites removed from the realities of rural life, as with other issues too, such as environmental concerns about dairy). In addition, the Aotearoa New Zealand case shows that it is not just foreign money that increasingly flows into farming via equity investments but local money as well. This complicates narratives in which local farmers are often being presented as mere victims or bystanders to the finance-driven land rush (Williams 2014).

In other contexts, such as Tanzania, the real inequality driver in rural communities is not the few institutional investment cases. A recent study has found that a significant driver has been well-connected and educated urbanites. With access to salaries, credit and other forms of capital, they have been significant drivers of the expansion of the capitalist farming frontier (Jayne *et al.* 2016). These actors are key to understanding new patterns of rural inequality related to resource access and ownership.

## CONCLUSION

The rationale behind this chapter was to provide a grounded understanding of what happens in and on a firm-/farm-turned-financial-asset, and how this is intertwined with more general investment rationalities, conventions and value regimes. Despite a whole range of possible “asset trajectories” shaped by a range of national (e.g. property and investment regimes), local (e.g. local agrarian relations; place-based asset histories) and transnational factors (e.g. source of capital), the case studies examined here, and the additional analysis of the global agricultural investment space, suggest a more general script of “assetization” and “value creation”. As a practical operation, the “value creation” processes that ties M and M’ together, embedded into far-reaching and future-oriented contractual relationships, rest on establishing specific territories of financial economization, carved out from the “web of life” (Patel & Moore 2017), and heavily policed thereafter. It is through such territories that “the raid of the future on the rest of time” (Vogl 2015: 3) is organized, an endeavour that faces all kinds of drawbacks and breakdowns, and sometimes fails altogether, as the case of the bankrupt grain investment in Tanzania

has shown. It is also a process by which asset managers, depending on the ultimate source of capital and the terms of its administration, may end up balancing the need to generate returns for investors with demands from other local, national or transnational players. In the better cases, this can result in more long-term and economically impactful development trajectories, as the cases of the intergenerational investor in Aotearoa New Zealand and the family office investing in Tanzanian dairy have shown, but often short-termism, the imperative to scale up quickly (and opt for scalable production systems in the very first place) and the uncertainties related to what happens to an “asset” after the exit cast shadows over the value generation process.

It should go without saying that the geographical settings discussed here in detail were peculiar for their historical and institutional context, which sets certain limits to how aggressively investors could extract value from agriculture. Examples from other world regions abound, where financial extraction seems to have been much more harmful in environmental or social terms (Cochet 2018; Galaz *et al.* 2018; Grim 2019; Hawkes 2016), often – but not only – related to more clandestine nature of the capital flows involved. Finally, this chapter has also self-consciously engaged with the limits of the “opening the black box approach” when it comes to engaging with questions of rural welfare and changing social, ecological and economic structures in the light of “finance-gone-farming” – questions to which we now turn.

## CHAPTER 9

# RADICES: FOOD FUTURES, WITH OR WITHOUT FINANCE AS WE KNOW IT?

In March 2018 the activist group Save Our Water staged a “poo protest” in the south of New Zealand’s Southland and dumped cow effluent drawn from regional rivers at the feet of dumbfounded councillors of Environment Southland, in an effort to protest against the massive environmental impact of dairy farming in the country. As one of the hotspots for sheep-to-dairy conversions over the past years, the site seemed perfect for it, the more so as some councillors were seasoned dairy farmers themselves. The group claimed that, contrary to 2012 plans by the council to improve water quality by 2020, things had actually become worse. It wanted “action including a ban on stock getting to rivers and streams, a ban on the draining of wetlands, a ban on new dairy conversions or extension, a phasing out of intensive winter grazing, and active support for farmers to transition away from intensive agriculture” (Bonthuys 2018). Interestingly, when interviewed later, one of the organizers of the protest referred to one of the asset managers sampled here (Case 7) as a good example of environmental stewardship, because he had converted several of their farming properties to organic status. The protestors espoused the idea that more optimistic scholars and activists display from time to time, namely that institutional finance as “smart money” and “patient capital” can be used to catalyse more sustainable futures.

Intensive agriculture is a major driver of global environmental change (climate change, land cover and use change, biodiversity loss, depletion of freshwater resources and pollution of aquatic and terrestrial ecosystems through nitrogen and phosphorus run-off from fertilizer and manure application), which often also comes at a great social cost, such as the uneven distribution of environmental goods and bads or the processes of exclusion, dispossession, deprivation and violence that result from or underpin agricultural production in different parts of the world. A recent pioneering study entitled “Options for keeping the food system within environmental limits” found that

between 2010 and 2050, as a result of expected changes in population and income levels, the environmental effects of the food system could increase by 50–90% in the absence of technological changes and dedicated mitigation measures, reaching levels that are beyond the planetary boundaries that define a safe operating space for humanity. (Springmann *et al.* 2018: 519)

Obviously, the globalization of Western diets (an increase in the consumption of meat, dairy and grain), which is linked to rising income levels in different world regions, is not just a huge investment opportunity for financiers but also a main driver of global environmental change. It is thus particularly striking that most farmland funds have invested in row crops, animal protein and dairy (with only two out of 145 funds sampled in a recent study having an organic focus: see Valoral Advisors 2018b), as these investment categories appear to have the highest environmental footprint (Springmann *et al.* 2018: 520). For the latter authors, dietary changes towards more plant-based diets, improvements in technologies and management and reductions in food loss and waste are the way to mitigate this, but, surprisingly, they leave out what makes the world go round: *finance*. Especially if a broader view is adopted that includes the whole range of financial instruments in agriculture – from commodity derivatives over public equities to private equity investments in farmland and agricultural companies (see Chapter 4) – the “terraforming” power of finance, and the social and environmental costs attached to it, can be huge (Galaz *et al.* 2015; 2018). Just take the cases in which private equity giant Blackstone Group (Grim 2019) and the US pension giant TIAA appear to be linked to gross environmental destruction and social upheaval in the Brazilian Amazon and Cerrados regions (Romero 2015), which by now has resulted in serious social backlash for the asset manager. For example, right before the meeting of the Association of American Anthropologists (AAA) in November 2019, the following call for papers made it into my e-mail inbox:

Do you think our retirement investments should fund industrial agribusiness in Brazil, contributing to widespread fires and deforestation and taking land from local communities? Should our retirement savings fund corporate farming that is squeezing out family farmers in the United States, Chile, Eastern Europe, Australia and New Zealand? We need strong attendance at AAA business meeting at 6:15pm Friday evening to pass a resolution telling TIAA “No thank you!”, and that we need them to repair the damage they have already done.

Given these concerns about “mal-finance”, could that “force” still help co-construct very different kinds of food futures? Although the large-scale farming stories from Tanzania featured in this book actually further entrench models of industrial, fossil-fuel-hungry and productivist agriculture, whereby investors are interested in rather quick returns (albeit ticking some ESG boxes too), some of the Aotearoa New Zealand cases studied here provide food for thought. A more intergenerational investment approach targeting organic products, and incorporating the traditional Māori principles of *kaitiaki* (guardianship), as at least two Aotearoa New Zealand asset managers (claim to) have done, could make a difference if it was adopted in a robust way. Still, even these case studies were part of a sector that contributed 46 per cent of the country’s emissions in 2016 (Harris 2017: 208).

This chapter takes these findings as an opportunity to engage with the question as to what ethics should inform our financial relationships with food production and, by implication, a much wider range of issues. It introduces two potential models. One is representative of the “taming capitalism” (Wright 2019: 44) approach – an “enhanced ESG model”, accompanied by technological fixes and some regulatory adjustments, which does not, however, evade some core problems characterizing the financial present. The other model breaks in more radical ways with the temporality, sociality and materiality of modern finance and the return logic inscribed into contemporary institutional landscapes. Each of these models forces us to ask what kind of spatialized value relations are engendered by particular kinds of food futures.

## MODEL 1: RECALIBRATING FINANCE WITHIN EXISTING GLOBAL VALUE RELATIONS

The main forces behind the production of institutional landscapes, institutional investors, “occupy a place of exceptional influence given their size, their access to political decision-makers, the cross-border nature of their portfolios and their long-term investment horizon” (Parfitt 2018: 69–70). Somewhat counter-intuitively, the idea that finance could indeed be a socializing force goes back as far as Marx and his forebears, who would argue that corporate stock – now a much-loathed thing for critical financialization scholars – “provided a template for both the socialisation of ownership and redistribution of income” (Davis 2019). This ethos has gained traction again, with financiers, activists and even staunch socialists hoping “to spur changes in areas as diverse as climate justice, money in politics, gender and racial inclusion, and economic inequality” (*ibid.*). Not only does this relate to the power of the stock market, but it may even extend to private equity capital

(New Socialist 2019), a form of finance that has often been attacked for its extractivist management style (Appelbaum & Batt 2014). So, although many have argued that food production must be definancialized to curtail potential negative societal and environmental effects, others have maintained that we should explore the possibilities in terms of how the massive amount of financial wealth commanded by, in particular, institutional investors might be harnessed for more sustainable and less extractive futures (Castree & Christophers 2015). Could these often public institutions be transformed from trustees of other people's money to guardians of the planet? We have already seen large investors divesting from fossil fuels and making the case for green transitions (Knuth 2017). Of course, one could argue that in these cases less caring motives were at work and it eventually made financial sense to withdraw money from an industry at odds with the world's future, or to capitalize on the greening of capitalism. But one cannot deny that such developments provide food for thought on whether this gigantic pool of institutional money could radically change the economic landscape for the better. When it comes to food production, Cases 1, 5 and 7 in particular, from Aotearoa New Zealand, seem to align well with Tom Worthington's (1979) assertion that institutional investors could be model landlords – an idea first voiced before the first institutional farmland frenzy came to an end in the United Kingdom in the early 1980s. This idea could be expanded to incorporate “caring” investments into other stages of the agri-food chain, such as the capital placement by an impact investor in Tanzanian dairy processing.

So, can finance as we know it bring about more sustainable futures in which the planet eats both well and justly? After almost eight years of research in the “investment space”, my take on this quite straightforward: Although I acknowledge that many asset managers and their operators on the ground often strive to better the world (and make some money at the same time), even the better cases of agricultural investment (and responsible and impact investment more generally) must be scrutinized for the deeper logics and principles of the landscape making they embody. A more intergenerational approach to institutional investment would be a viable mid-term strategy (which already would need a great deal of financial market restructuring and a willingness on the part of future pensioners and other types of financial beneficiaries to change their return expectations and lifestyles), but this does not necessarily transcend a range of problems that currently shape or are a product of “modern finance”. In the Anthropocene we must think in more substantial terms about our contemporary states of being, and the potential futures that could emerge from them. This potentiality is often closed down in finance-driven renditions of the future in favour of a neo-Malthusian “techno-solutionism” via which the world is to be fed. Bringing that potentiality to the fore could happen within the epistemic confines of

the contemporary *modus operandi*, or by embracing a more radical imagination that moves beyond the expansionist logic of the current economic system, which is very much shaped by operational logics first developed on and through colonial plantations (Davis *et al.* 2019). In what follows, I outline a few pillars that make the “global value relations” (Araghi 2003) enacted by modern money management so problematic, before briefly concluding on the question of how finance may be put to work for radically different food futures. Feeding a growing world population is important. What to feed it and how it is financed are too.

#### FOUR PROBLEMATIC ELEMENTS OF CONTEMPORARY GLOBAL VALUE RELATIONS IN AGRICULTURAL FINANCE

##### *The opacity of modern money management*

Modern money management has a built-in opacity that no system of such “terraforming” power should possess. Despite the fact that most of the players interviewed for this book were quite accessible (some even posted their farm locations on their webpages – something that a real estate fund would probably never do), with only two asset managers being more secretive about their operations, it is still hard to get more detailed information about those who manage other people’s money, under what terms and with what geographical footprint. This is not only because financial and property market regulation is often tilted in favour of financial investors (particularly in the realm of private equity) but also because those who are supposed to regulate the world of investment “often share the same finance-centred view of the economy” (Foroohar 2016: 317). Thus, the ambition to make the genesis and operation of institutional landscapes a matter of public debate is fundamentally tied to the project of technical democracy (Callon *et al.* 2009). At a time when a staggering US\$74 trillion is in the hands of asset managers (Fages *et al.* 2019), unearthing their operations seems even more pertinent: who are the makers of institutional landscapes? On whose behalf do they administer the monies? Under what terms is capital placed and multiplied? Does the delegation model, often leading to complex and far-stretching investment chains, align itself well with concerns for more holistic, as well as spatially and intergenerationally more just, notions of sustainability?

The capital that drives these chains may to some extent derive from “fiat money”, especially when debt issued by commercial banks is involved (Mellor 2010), but it does not come from *nowhere* “in toto”. The volumes and unseen globality of capital remaking both rural and urban landscapes across the planet are the result of economic and regulatory choices of many



governments around the world over the past four decades. Public assets have been increasingly converted into private ones, and more and more people have been made participants of capital markets as pension plan subscribers, agricultural producers (as insurance takers), health and life insurance takers, loan takers and “mom and pop” investors.

Engaging with the capital placement structures that have emerged from such choices in any meaningful way requires us to no longer treat the economy

merely as a machine that sometimes breaks down, but as a complex set of relationships between people, and between people and nature, increasingly stretched around the world, in which they act as producers of goods and services, investors, recipients of various kinds of income, lenders and borrowers, and as taxpayers and consumers. (Sayer 2015: 291–2)

Surely, agriculture is only a tiny part of the money management “universe”, but it is connected to other investment domains and places by a common logic with old roots. “Assets” from their very beginning were defined by their ability to service external debts, and quickly mushroomed into the colonies from their European origins. Credit–debt relations, mediated by money, have an even longer history. In this regard, it is not only complexity that “is the enemy” (Feroohar 2016: 25) but the longevity of financial opacity too!

*Money as a claim on the future states of the human and non-human world*

For the past six centuries planetary life has been shaped by the power of money, “the power to command life, work and resources” (Patel & Moore 2017: 67). Although this claim would be backed by other authors who would normally disagree on almost everything (such as market-friendly historian Niall Ferguson [2009] and anarchist anthropologist David Graeber [2011]), the current age is no longer about the “elastic creation of money by means of readily transferable debt” (Ingham 2004: 108) but about using money to actively create and manage “value”, often – and here I differ from many interpretations of financialization – with some sort of link to commodity production or service provision. Money, “more fundamental and ubiquitous than any institution on the planet” (Ament 2019: 13), is not simply a claim on society, as German sociologist Georg Simmel once argued, but also a claim on nature: you could use it either to purchase the product of human labour or nature directly (“commodities”) or to buy a claim on the future income generated from these. This makes money both a socio-legal and

socio-ecological “relation of debts and credits” (*ibid.*: 14). Issued debt often does not originate from actual down payments but often contains a “fiat” (virtual) element when commercial banks create additional money (Mellor 2010) – which, despite its partially “virtual” character, still requires “real” repayment. Even pension fund savings are a result of the debt repayment configuration, as wages paid into pension accounts come from the often credit-financed expansion of the economy writ large. If they are combined in pension funds and mobilized as an equity investment, in, say, agriculture, and then enriched with fresh credit, there is even more “virtual” money involved in what at first sight appeared to be “real” productive activities. Thus, “money creation based on repaying debt with interest must imply constant growth in the money supply. If this is achieved through increasing productive capacity, there will inevitably be pressure on natural resources” (Mellor 2019). It is not money that works for you, as Deutsche Bank put it in an ad some time ago, but nature and labour. No matter how responsible or inclusive an operation in “modern” finance is, this expansive moment is not eclipsed.

### *Scale and upscaling*

Tightly associated with how modern finance constructs value is its intrusive futurity. Key to the assetization of farming and other economic domains is that future expectations about value exert operational pressures on the present; the present becomes conditioned on the imagined future. Even with more robust ESG agendas this would be the case, especially if a range of intermediaries chained together need to be paid for their connective work. Scale, in a double sense, plays an important role in this constellation. Upscaling is an important practice in the world of venture capital and private equity, and all the cases featured in this book were in one way or another driven by the need to upscale quickly in order to realize the promises made in investment proposals. Upscaling also plays a crucial role in achieving economies of scale (increasing output to lower fixed costs), both because transaction costs decline with the “ticket size” of an investment deal and because the pooling of supply, farm and market infrastructure may further bring down costs when farms are purchased within the same geographical region. Economies of scale are certainly not a new feature of finance-driven agriculture. Historically, these have been linked to the plantation model of production, whose existence is tightly entangled with the category of asset itself. This model builds on the “the global circulation of people and plants, the simplification of plantation landscapes, and the role of long-distance capital investments in such processes of homogenization and control” (Davis *et al.* 2019: 4). The history of Aotearoa New Zealand is a perfect example of this (Pawson & Brooking

2013), despite the fact that it is not immediately associated with the plantation model, which evolved in other “land rush” frontiers, such as Brazil, the Caribbean, the United States and different parts of Africa and Asia. What is lost in scale-hungry agriculture in an attempt to make farms and agricultural firms amenable to efficiency-seeking management practices, even in cases when investors and asset managers are attentive to more substantial ESG criteria, is the often complex socio-ecological relations that are a feature of more regenerative, agro-ecological farming systems (Gonthier *et al.* 2014). Although some argue that modern finance lends itself well to unleashing the powers of “regenerative agriculture” (Avery 2019), there is a difference in quality between regenerative and agro-ecological agriculture (Grey & Patel 2015), and the latter can be far less easily aligned with finance-as-usual. This explains also why one of the key books on the need to transcend the super-productivist model that has come to define Aotearoa New Zealand agriculture (Pawson & the Biological Economies Team 2018) makes a case for scaling *across* rather than scaling *up* – that is, building intergenerational relationships across people and nature that result in a deeper form of “added value” in both the material and imaginative sense. Scaling across calls for “seeking success beyond growth” (*ibid.*: 261). But this ethos clashes with the *need* to grow in order to service lenders or shareholders’ claims on the surplus generated (in case investments materialize), which, in the case of global investment chains, help reproduce “imperial modes of living” (Brand & Wissen 2017) elsewhere.

### *Global return society and the problem of inequality*

It is now increasingly recognized that the accumulation of wealth through financial channels and the growing inequalities within and between a number of countries are firmly entangled (Piketty 2014; Rothenberg 2019). More recently, breath-taking numbers on this abound. Kate Donald and Jens Martens (2018: 41–2) note that “the bottom half of the global population own less than 1 per cent of total wealth, while “the richest 10 per cent hold 88 per cent of the world’s wealth, and the top 1 per cent alone account for 50 per cent of global assets”. Since wealth, when put into further circulation, produces additional income, existing inequalities are even further exacerbated. According to the same source, in “2014, 67.4 per cent of the pre-tax income of the top 0.1 per cent in the USA was income from wealth (capital gains, interest, dividends, etc.)” (*ibid.*). In the United States, 10 per cent of households own 84 per cent of corporate stock outstanding (Davis 2019), and, as in some other countries with a weak welfare state, access to pension funds is highly uneven across different social groups. Executives in the money

management industry are often part of the top 0.1 per cent. A recent study for the United States found that, in 2013, there were more private equity managers earning at least US\$100 million a year than all investment bankers and professional athletes put together (Kaufmann 2019). Although the “AG space” players interviewed for this book were often relatively humble in their sayings and doings, with one even claiming that they were only “playing in the third league” (compared to the top Wall Street cohort), it is still worth noting that many agricultural investment managers do quite well with even a revision of the 2/20 compensation model (see Chapter 6 for details), especially when capital gains are taxed as income. This is the case in many countries – if they are taxed at all (as in Aotearoa New Zealand).

If we “extend out” (Burawoy 1998), the assetization of farming, even though it is a rather nascent case, provides an opportunity to link debates on global inequality with the concrete operations of the global money management industry. The production and distribution of rents as income derived from the ownership of property, and the claims on income associated with it, are central to this (Andreucci *et al.* 2017). This is not simply a story about fictitious forms of value or capital based on speculative bubbles, as critics sometimes claim, because the materiality of nature and economic life still form an important base for the extraction of value from farming. Although those investing capital on behalf of the ultimate asset owners often capture a huge share of the rent relative to their capital contributions (Godechot 2016; Arjaliès *et al.* 2017), they often still engineer and supervise “real” productive activities. They are not the “rentiers 101”, who John Stuart Mill (1885 [1848]: 630) famously described in the middle of the nineteenth century as people who grew “richer, as it were, in their sleep, without working, risking, or economizing.” It is the ultimate asset owners – “the people themselves” – who “grow rich while they sleep” (*ibid.*: 603), albeit often without knowing it.

As in other investment domains, it is through the establishment of rent relations that value is transferred geographically from sites of farming to sources of capital, represented by both “Wall Street” (the money management industry) and “Main Street” (the original asset holders). Although “rents derived from the ‘free gifts’ of the earth that go with land, [which] have always been central to the enrichment of investors, the dynamism of capital and the geographical expansion of capitalism” (Walker & Schoenberger 2018: 158), the pervasive establishment and proliferation of rent relations via the vast allocation bureaucracy of asset management is unmatched in history. It amounts to a new mode of society making – the German term *Vergesellschaftung* fits much better here – beyond the nation state (Urry 2000). It is a society in which citizens’ status is redefined as money managers, shareholders, property owners and insurance scheme and pension plan participants, albeit in highly stratified ways. Even though they are

heterogeneous in nature – from individuals worth millions or even billions of dollars to the better-off middle-class segments of different “national societies” – these social groups have become integrated into tightly governed, transnational societal relations organized around the asset form. These relations chain the reproduction of affluent lifestyles in one place to value extraction in another: the fee-collecting money managers on the one hand, and the HNWI, family offices, endowments and mass affluent in national middle classes on the other (Seabrooke & Wigan 2017). If left unchallenged in farming (and many other domains), these further exacerbate national and global inequalities by advancing a variety of disjunctures: between the places where rents are produced and wealth is allocated; between places of land/farm ownership and location; between surplus allocated to capital and surplus allocated to labour and nature; and between different social groups with uneven access to such schemes of wealth generation, as well as the underlying “assets” – land.

More recently, many of these disjunctures have become contested with regard to their inequality dimension, from the fees that fund managers charge (Rothenberg 2019) to the recalibration of land markets because of the growing appetite for land among well-endowed institutional investors. The United Kingdom even saw the “return” of nineteenth-century radical Henry George, whose ideas have been mobilized to “take back control” (Shrubsole 2017) (obviously, this involves more than “institutional farm land”). Although fees have quickly come down in the “AG investment space” over the past decade as part of a new realism (“agriculture is not your typical private equity play”: see Chapter 6), and investors have become more sensitive about their regional footprint in some contexts, a leading industry intelligence platform probably still got it right when it concluded that, with “agriculture already in the sights of the political left, investors would be wise to attempt to shape its role within the debate on how to reform capitalism and address economic inequality” (Janiec 2019).

## MODEL 2: A RADICAL FINANCIAL ETHICS FOR “DOUGHNUT AGRICULTURE”

In 2013 I attended a workshop on agro-ecology that some protestors had organized only a few kilometres from a big agri-investment conference in Frankfurt. The agriculture they portrayed was the antithesis of the large-scale projects often discussed in this book. Food production was regional, scale modest, its form heterogeneous, ecology considered important beyond an assigned monetary value, and financing patient and short-chained. An important discursive performance was happening. The future was wrested from the hands of finance as we know it. Praxis should follow. But how?

A first start would be to acknowledge that more sustainable food and agricultural futures require more than technological or regulatory fixes or finance-as-usual with an enhanced ESG mandate. It actually requires radically different imaginations of how we live and retire well. In other words, the financial ethics buttressing this imagination would be one that allows for

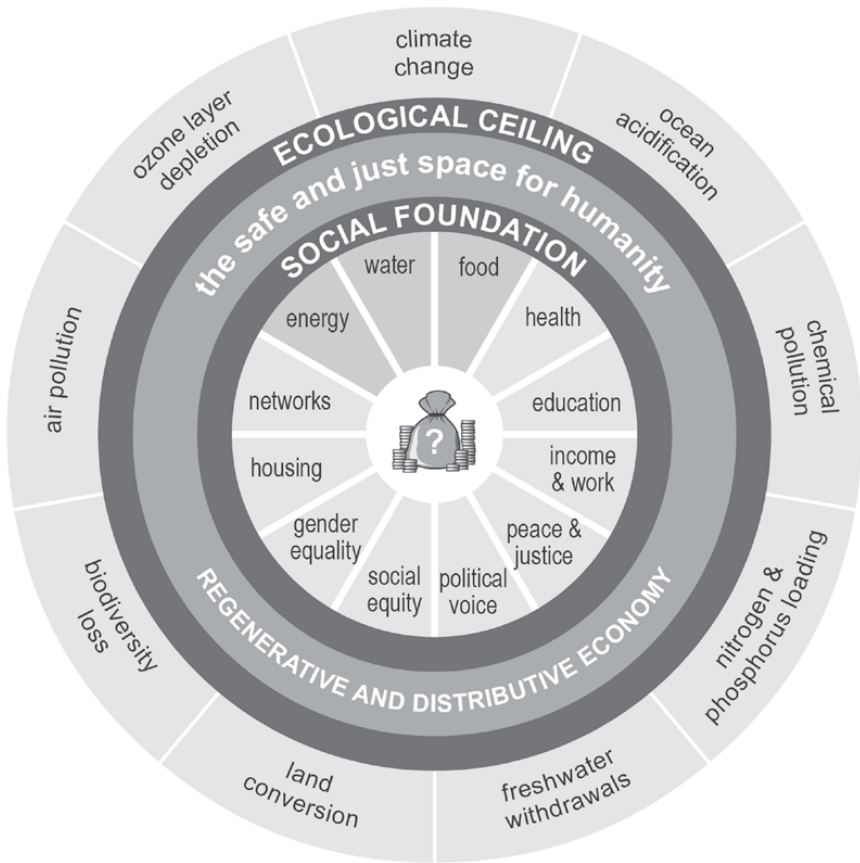
thinking and acting in the economy with concern for others along with ourselves. It means thinking in terms of “we,” “us,” and “our.” It means not putting an end to personal choice, responsibility, or freedom but rather acknowledging that our individual decisions affect others, just as their decisions and actions affect us. As much as anything else, ethical action is a practice of adopting new habits – habits of reflecting on our interconnections with others, approaching the new with an inquiring mind and an appreciative stance.

(Gibson-Graham *et al.* 2013: xviii)

Obviously, this is larger than food! Ideas abound and complement or enrich the post-capitalist politics envisaged by the authors just cited above. They obviously go beyond this book (see, for example, Mason 2015; Wright 2019), but this should not make us shy away from a bit of radical imagination. “Radical” as an ethos needs to be reclaimed from its common association with being unjustifiably “extreme” or simply “utopian”: going to the roots – “radical” derives from the Latin word *radix* (“root”; plural *radices*) – of the problem of modern finance means acknowledging that a model built on imperial claims on the future and in need of constant expansion does not serve us well to get into the core of the “doughnut” (Raworth 2017) (Figure 9.1).

Economist Kate Raworth – who recently toured Aotearoa New Zealand and provoked quite a public debate – came up with the concept of the doughnut model of economy, which serves us well by meeting a range of basic needs globally while making sure that we do not transcend the ecological limits or “planetary boundaries” of the Earth system (Rockström *et al.* 2009). Although Raworth could be challenged on the grounds that she promotes a “new idealism”, rooting all our economic-ecological malaise in flawed economic theory (and, indeed, more radical roadmaps to a world beyond capitalism exist), the doughnut probably still provides the most powerful visual model of how systemic, target-oriented and transformational knowledge can be brought together to carve out other kinds of food futures.

The realization of a “doughnut agriculture” hinges on a whole variety of other interventions by governments, companies, grassroots movements and individuals aiming at reshaping how we live, consume, produce, organize technology, distribute, care and retire. This ranges from stranding assets such as fossil fuels to rethinking the ways money is generated, circulated and taxed,



**Figure 9.1** How to get into the doughnut, and the forms of finance that may help  
*Notes:* Dark grey shaded areas in the inner circle are tightly connected to farming; the question mark indicates that an ethics for the Anthropocene must re-engage with the questions of how these domains are to be financed and on what terms. Within and beyond food production more viable futures must also include non-monetary investments, such as the provision of commons or practices of reciprocity (e.g. in the case of time banking).

*Source:* Modified after Raworth (2012).

and to new forms of property (both material and intellectual) and corporate equity that are in line with a doughnut economy in which the relational ethics mentioned above can flourish. This would also imply drastically reducing the volumes of interest-bearing capital roaming the globe (various forms of debt, including pension-to-be-money), and, indeed, moving beyond an economic system based on the amassment of spatially extensive return claims. For agriculture, this could mean reinvigorating some of the ethics that cropped up in some of the Aotearoa New Zealand case studies. I am saying this in the



full knowledge that these often served in a more instrumentalist way as a value proposition for investors. Such an agriculture would, rather, thrive on short investment chains – “community investments and relationship-based lending” (Stephens *et al.* 2019). The notions drawn from Māori philosophy such as *kaitiaki* (guardianship) and *whanaungatanga* (kinship), if adopted in a robust way, offer some interesting entry points in overcoming an “economy as machine” ethos. They could inform a more meaningful financial ethics that aims at ensuring there is “balance, collective custodianship or guardianship and respect for the spirit or the force of the natural world” (Harris 2017: 200). Reducing the physical and relational distance not just between investors and investees but also between food consumers and producers within an agricultural system that harnesses accessibility, diversity, multifunctionality and intergenerational care could be an outcome of this.

## CONCLUSION

Investment chains do not extend smoothly, encircling the globe as if there was no resistance. Resistance to the assetization of farming has occurred both in the regions where investments take place and in many other sites of political struggle, where alternative visions of agriculture are being promoted. This chapter has argued that, although it is important to problematize and criticize how capitalist agriculture is being practised around the world and how novel ways of financial extraction fit into this story in order to create more liveable and sustainable global food futures, we should still explore the potential for harnessing the massive amounts of financial wealth accumulated in the present for greener and more just food futures. At least some of the Aotearoa New Zealand cases discussed here lend themselves well to exploring how institutional money could be mobilized for such causes, on account of the deeper philosophical principles they appear to embrace – intergenerational investment and environmental stewardship being two of them. Although we must take this question seriously, it will become clear that working towards such futures eventually requires radically different imaginations of the relationship between the future and the present, places of capital export and places of capital placement, “value” and “values” and the private and the common.



## EPILOGUE

In 2018 something remarkable happened to Mr and Mrs Scheper, two retired medical doctors from Germany. They had discovered that their retirement provider was co-invested in a fund in South America, whose farming operations had been accused of gross social and environmental misconduct (Schwab 2018). As decades-old supporters of indigenous struggles in Brazil (with personal experience in the field), they were particularly shocked at what seemed to have happened to their retirement savings. This discovery was remarkable, because they got a glimpse of capital's own methods, the transnational circuits of money that evolve from it and the potential local impacts of these flows – a rare moment in the world of distanced and delegation-based investment chains. Although the case of the fund under scrutiny remains hotly debated, this real-life story returns us to a key concern of this book: to open the black box of finance's role in farming, to engage critically with the institutional landscapes that have emerged from this trend in different historio-geographical settings and to explore how this has affected the structure, management, control and ownership of different agricultural ventures. In pursuing this goal, I have also aimed to fill some gaps that are rarely talked about in the existing debate, such as engaging with the data problem related to the finance-driven land rush, the role of the state as a regulator and potential source of investor information, the layered moral struggles related to the assetization of farming and the question of what role “finance” – broadly defined – can play in achieving more sustainable and just food futures. Well aware that the assetization of farming is more than just about farmland, this book has often reached out to assetization dynamics at the pre- and post-farm-gate stages, and provided the intellectual resources to understand the emergence, operation and internal universe of “agriculture as an alternative asset class” in broader terms. This broader view is also important against the backdrop of more recent dynamics. With

the increasing entry of financial investors into the “AG tech” sector in recent years, finance now increasingly touches farming from two sides: the ownership of land and other farm assets, and the technologies used to control and manage production across time and space. It is likely that this will cause a shift of funds away from risky land-based production to the less risky income and capital gains that are promised by companies controlling “automated pastures” (Rotz *et al.* 2019b) (and other technologized parts of the agri-food chain). The potential for disruption (one industry expert from Aotearoa New Zealand lauded it as “the real solution for farm transformation”), fast scalability and promises of monopoly power in the “AG tech” economy appear to be particularly enticing to large investors, who need to put their money somewhere. These parts of the agri-food chains are also less risky in terms of reputational issues. This points to a larger issue: an account solely centred on the supposedly spectacular “financialization of agriculture” may lose sight of the fact that, in 2018 alone, private equity funds had some US\$1,300 billion under management. In 2019 private equity giant Blackstone opened a US\$22 billion fund, slightly less than 25 per cent of the US\$83 billion of agricultural investments in 2018 (Kaufmann 2019). The “terraforming” power of these funds goes far beyond agriculture. That is why it is so important to underline that institutional landscapes should be considered a generic term, to capture and problematize finance’s increasing power over the human and non-human world.

Finally, despite this book’s focus on how private-equity-based capital placements help produce institutional landscapes, a sole focus on these risks shifts attention away from the continuous and more impactful power of credit. The historically oriented parts of this book have already hinted at this problem, but it is worth re-emphasizing. Linked to the quality of money mobilized as interest-bearing capital (see also the previous chapter), the landscape-making power of credit dwarfs the power of contemporary, largely equity-oriented investments in the farming sector. For instance, agricultural debt of around NZ\$60 billion (Galloway 2017), two-thirds of which were accounted for by dairy farming, significantly helped change much of the younger agrarian landscape of the country. That money must have come from somewhere. This is why “following the money” is a prerequisite for understanding the production and operation of capitalist agricultural landscapes more generally.

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