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Te Ara ki Hikurangi // Te Maunga o Ngāti Purou // Mangatarata Station (foreground)

The Opportunity for KiwiSaver Investment in NZ Agriculture

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I wish to thank the Kellogg Rural Leadership Programme Investing Partners
For their continued support.



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Executive Summary

The alignment between the long-term investment objectives of KiwiSaver and the resilience of New Zealand's food and agriculture supply chain presents a compelling case for increased domestic investment; however, less than 2% of the \$115 billion of KiwiSaver funds have been invested in New Zealand's private markets, with even less allocated to the food and agriculture sectors. Private domestic and foreign investors are experiencing the benefits of exposure to this asset class. At the same time, KiwiSaver providers sit idle on the sidelines to the detriment of their members and an industry that needs investment. This research project aims to identify the barriers inhibiting KiwiSaver providers from investing in Aotearoa's primary sector assets the impetus for this report comes from the need for KiwiSaver funds to diversify their asset bases and an awareness that significant investment in the food and agriculture sector is needed. By understanding the current barriers, is there the opportunity to facilitate greater capital allocation from KiwiSaver providers to the primary sector and enhance the returns of KiwiSaver funds and the resilience of our agriculture and food industries?

Methodology

A literature review was conducted to provide context around global investment themes in agriculture and to highlight the importance of the agriculture sector in Aotearoa. Additionally, 15 qualitative, semi-structured interviews were conducted with key market participants, including fund managers, asset managers, investment managers, bankers/financiers, primary sector professionals, and industry leaders. These interviews aimed to gather direct insights and findings from those actively involved in the market, offering a practical perspective on the barriers and opportunities for KiwiSaver investment in the primary sector.

Key Findings

Analysis of the themes arising from the literature and interviews found:

- Investment in the global food and agriculture supply chain is being influenced by the steadily increased interest from large institutional investors
- Domestic institutional investors (including KiwiSaver providers) find it challenging to make an investment case for primary sector assets over and above other asset classes
- The need for daily pricing and liquidity obligations restricts KiwiSaver providers from investing in private markets
- Investors and Investment managers recognise the opportunity for investment by KiwiSaver into the primary sectors, however, there is a lack of engagement by both parties to help bring this to a head

Recommendations for KiwiSaver Providers and Investors

1. Develop a specific allocation to agriculture or natural capital
2. Advocate for a more strategic approach to Foreign Direct Investment
3. Be open-minded to smaller transaction sizes and minority shareholdings
4. Engage with sector experts to better understand the benefits of the sector
5. Work with industry to develop a roadmap for agriculture investment and the role KiwiSaver can play in providing investment

Recommendation for Manager and Owners

1. Engage with and seek to educate KiwiSaver investors on the benefits of the Agriculture sector
2. Work with industry to develop a farmland index to benchmark returns
3. Develop plans to become investment-ready
4. Advocate for a more strategic approach to Foreign Direct Investment
5. Align agribusinesses with institutional investors to facilitate successful partnerships

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I am grateful to Jeremy Keating for encouraging me to apply for the course and supporting me in completing this report. Thank you to the rest of the team at Arotahi Agribusiness for picking up the workload while I was away during the in-person phases and the late nights completing this report. Thank you to all the interviewees who provided their time and insights, which helped me build upon what I learned. Your insights have aided this report and highlighted the need for a more open and frank conversation about the future and ownership of agriculture in New Zealand. Your openness and honesty were much appreciated. I hope this report provides you with some value.

Thanks to Cohort 51. I have really enjoyed our time together and have learned so much from each of you. This project wouldn't have been possible without the support and encouragement of my friends, family and wife, Renee.

The photograph on page one features Te Ara ki Hikurangi or Mount Hikurangi, the sacred maunga (mountain) of Ngāti Porou, located in the Tairāwhiti region of Aotearoa, New Zealand. The images is credited to Richard Milner of FlyUAV who took this image on behalf of Arotahi Agribusiness.

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1.0 Introduction

The goal of doubling the value of New Zealand's exports within the next ten years was first highlighted in the August 2012 Business Growth Agenda titled "Building Export Markets", and again re-iterated as an objective by the new coalition government in 2024. As the most significant contributor to New Zealand's export revenues, achieving this goal will depend heavily on a thriving and efficient primary sector. Agriculture is capital-intensive and exposed to fluctuations in international commodity markets, with significant ongoing investments needed for Aotearoa to continue to transition its land to the highest and best use, increase production, adopt new technologies and pave the way for a successful transition for the next generation of farm owners through the cycle. Farming is an innovative, dynamic sector with a significant capacity for growth, however, the inflow of financial capital may limit the sector's growth potential.

One of the most perplexing issues in relation to the investment environment for New Zealand agriculture is why the sector is so attractive to overseas investors, but is almost completely shunned by domestic investment fund managers – Australian Farm Institute, 2014

Explored in the ANZ report (Greener Pastures, 2012) indicated the need for New Zealand to attract approximately \$340 billion of new investment between 2012 and 2050 to provide the growth-oriented capital needed and fund business asset transitions to the next generation. These estimates revealed a capital gap of more than \$110 billion by 2025 or more than \$2.8 billion annually. The models used in the report were based on a 2.1% (base rate) compound annual growth rate (CAGR) of export value. More than a decade on, the same goal to double exports now requires a CAGR in the order of 7% plus (Piddock, 2024).

Traditional sources of capital, including bank debt, retained earnings, and external capital (domestic and foreign), have partially met the sector's investment needs over the past two decades. However, these levels are unlikely to make up ground on what is needed to achieve this growth. The availability of bank debt needs to be matched with equity. With cost pressures, including higher borrowing costs, the availability of producers to utilise retained earnings to match debt capital is limited. The other lever we can pull, Foreign Direct Investment (FDI), is restricted (by OECD standards) and hinders foreign investors appetite for investing in the full breadth of Aotearoa's food and fibre sector.

The opportunity to bridge this capital gap may reside in the more than \$115.2 billion currently sitting with KiwiSaver providers (Managed Funds Survey Q1 2024). Enrolment in the scheme, which now sits at 3.3 million members, continues to grow in line with population growth. So, too, will the savings and investment funds be sitting in KiwiSaver. Conservative estimates in 2019 by the Financial Services Council estimated that funds under management (FUM) in KiwiSaver balances will be at least \$671.3 billion by 2050, and could be as high as \$1.23 trillion (Financial Services Council, 2019). KiwiSaver will have a larger part to play in New Zealand's public and private financial markets for decades to come, as the growth of the funds and use of modern portfolio theory (MPT) suggests the need for diversification away from traditional markets and into alternatives such as primary sector assets.

In contrast to our OECD partners, KiwiSaver funds are heavily invested in publicly listed equities (share) and fixed-income (bond) markets. These funds have minimal participation and investment in private markets or alternatives (reference). Some providers partly put this down to the strength of traditional markets and the ability to provide liquidity to members. The ability to value financial assets daily and liquidate investments quickly is embedded in the attractiveness of KiwiSaver as a scheme. Private market investment tends to be illiquid, and despite pension funds being significant investors in illiquid asset classes globally and domestically, it is estimated that less than 2% of KiwiSaver funds are invested in private assets (CFS, 2024). By comparison, 18% of Australian

superfunds are invested in private assets. KiwiSaver investors have long investment horizons (20 years plus), but they have little option to take advantage of their long investment horizon by way of investing in private markets (CFS, 2024).

Various sectors of New Zealand's economy advocate for the government to realign KiwiSaver's goals and provide incentives for domestic funds to access private markets. The primary sector's suitability for this capital extends beyond traditional financial metrics, aligning with national and international ESG and climate change initiatives. As New Zealand's primary sectors transition to lower carbon and 'greener' production methods, it becomes crucial to explore these non-financial aspects within the landscape of New Zealand agriculture. This includes understanding the demands placed on farmers as they strive to build climate resilience into their farming systems.

This research report investigates the barriers impeding KiwiSaver providers from investing in New Zealand's primary sector assets and explores how these barriers can be addressed to facilitate greater capital allocation across the sector.

The findings of this report aim to further the conversation around the role of institutional investment in New Zealand's primary sectors and provide recommendations for asset managers, primary sector asset owners, and rural professionals, including investment managers, to encourage the flow of capital to primary sector assets. The objective of this report is not to advise readers on where this capital is best placed or to 'pick winners,' but rather to explain the opportunities available for these investors in the hopes it helps further the conversation around primary sector assets.

2.0 Purpose

This research project aims to examine the challenges in attracting KiwiSaver funds to primary sector assets if there is a capital gap developing in the sector and to investigate whether institutions have the desire to invest in the sector. The key question guiding this investigation is:

What are the key constraining factors currently impacting the amount of KiwiSaver funds being allocated to New Zealand's primary sector assets?

This project tests the hypothesis that primary sector assets are desirable for long-term institutional investors, including KiwiSaver providers. A lack of external capital in any sector will impede growth. The ability to significantly increase Aotearoa's GDP through investment in our primary sectors is apparent and worth investigating.

The objectives of this research project are to:

1. Provide context around the trends presiding in of food and agriculture investment;
2. Identify what attracts institutional investors to food and agriculture;
3. Understand the importance of agriculture in New Zealand;
4. Identify any issues in the availability of capital flows in the primary sectors;
5. Assess the impact of current regulatory frameworks on capital flows;
6. Investigate if institutional capital and foreign direct investment could contribute to growth and liquidity;
7. Understand why there is little allocation to private markets by KiwiSaver Providers;

By addressing these objectives, the report aims to identify actionable insights and recommendations to increase the flow of KiwiSaver capital into New Zealand's primary sector, ultimately fostering sector growth and enhancing the value of primary sector exports.

3.0 Literature Review

The literature review aims to understand the increased presence of institutional investors in global agribusiness and food supply chains and assess whether these trends are applicable in a New Zealand context. It then examines agriculture's economic contribution to the New Zealand economy, emphasising the sector's strategic importance. It will then explore the necessity of attracting additional economic capital to the sector, which is highlighted by an estimated capital shortage. It will also identify the regulatory and perceived barriers that deter KiwiSaver providers from investing in primary sector assets.

For the purposes of this report, institutional investors are defined as including pension funds, insurance funds, endowment funds, private equity funds, and Sovereign Wealth Funds (SWFs). This definition excludes other privately managed funds and high-net-worth investors or family offices. Domestic institutional investors include the New Zealand Superfund (NZSF), Accident Compensation Corporation (ACC), KiwiSaver providers, National Provident Fund (SPF) and various privately managed pools of capital.

3.1.1 Institutional Interest in Agriculture

Growing institutional investor interest in agriculture was catalysed by the increase in soft commodity prices in the period between 2002 and 2007 (Selby, 2020) and the impacts of the Global Financial Crisis (GFC) on the limited attractiveness in the traditional equity and fixed-income markets. During the GFC, institutional investors sought assets that were not correlated to traditional equity and fixed-income markets, had inflation protection properties, value diversification, strong underlying demand and supply fundamentals, and a large opportunity set where meaningful amounts of fresh capital could be deployed. Between 2005 and 2017, the amount of funds specialised in agricultural land increased from 38 to 436, with US \$73 billion in investments in total (Vitón, 2018). A more recent report published in 2022 by the same author (Vitón, 2022) stated that there were now 800 investment funds specialised in the food and agriculture sector, managing over US \$125 billion.

“There’s a reason high net worth investors in large, long-term sophisticated endowment funds invest in private assets. Over the long term they pay higher returns than listed markets if managed and diversified properly” - John Berry, CEO of Pathfinder KiwiSaver

This asset class has historically provided counter-cyclical returns and a low correlation with traditional investment classes as returns are underpinned by favourable “megatrends”, including upside pressure on the demand through population growth and increase in median incomes, while restriction of supply due to decreasing amount of arable land and availability of fresh water in largely populated geographies (China and India). Institutional Investors anticipate that the increase in global demand for food and limited availability of natural resources will increase the price and earning power of productive land assets. Under these conditions, agricultural land appears to them as a profitable and secure financial asset (Hérault,2022).

While investment in primary sector assets, particularly farmland, by institutional investors, doesn't immediately boost production or always equate with better economic or social outcomes, there are numerous examples of financially successful and socially beneficial investments in primary sectors by institutional investors in New Zealand and abroad. These investors look to generate a financial return by improving the assets (land) they acquire. Investing in fixed assets like buildings and farm infrastructure, including irrigations, water storage, feed storage, and machinery, helps these investors achieve this return, which also adds to the value of the agricultural capital stock. Learning from and replicating these investments may increase confidence in the sector and potentially bring much-needed additional liquidity and opportunities for growth to the market.

3.1.2 Constrained Supply: Loss of Arable land

Research from The World Bank and data provided by the Food and Agriculture Organization of the United States of America (FOA) indicates that the amount of arable land worldwide is declining per capita. It is estimated that arable land per person has halved between 1965 and 2005 and that arable land is being lost at a rate of approximately 4 hectares per minute due to drought and desertification (United Nations Environment Programme, n.d.). This loss of arable land and the ability to grow food will put increased pressure on the global food system and food security. This is particularly the case in developing nations with large populations such as China, which has the daunting task of feeding 22% of the world's population with only 7% of the global arable land (Chaudhury, 2020). Additionally, environmental pollution and the impacts of climate change further exacerbate these challenges (Zhang, 2023).

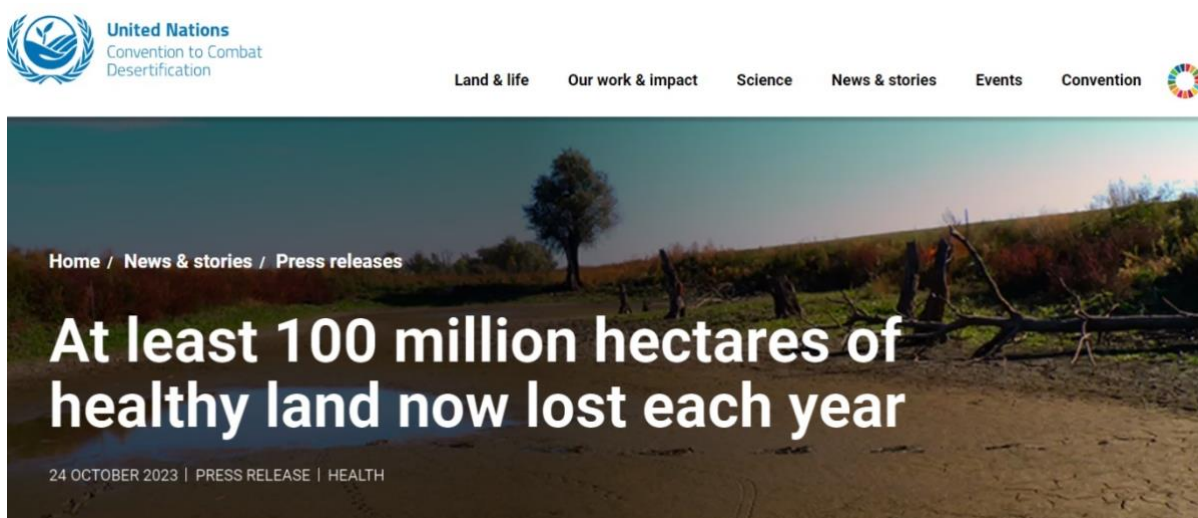
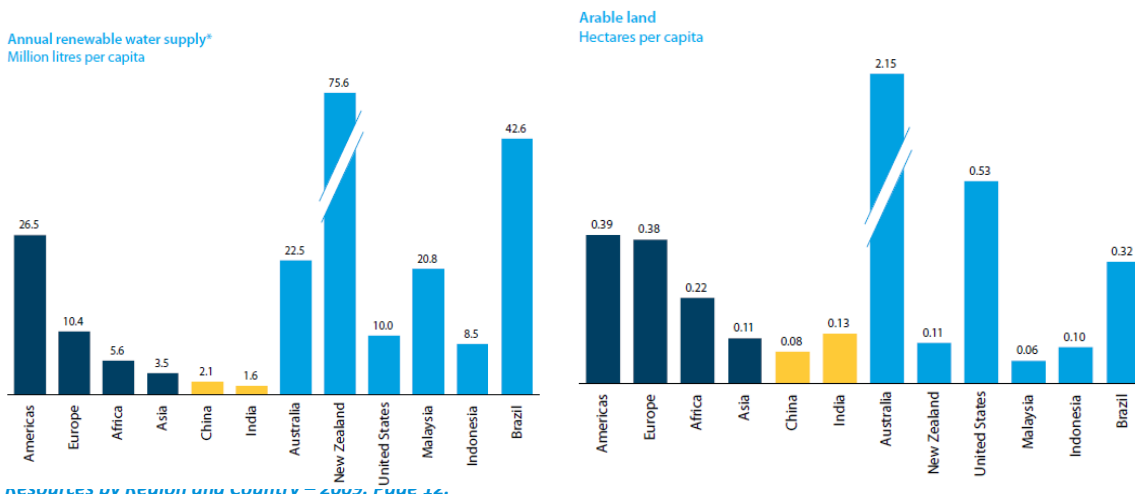


Figure 1: United Nations: Convention to Combat Desertification. Website landing page.

3.1.3 Constrained Supply: Water Scarcity

Agriculture is a significant water user, with estimates that the agriculture supply chain utilises up to 70% of freshwater consumption globally (Ingaro et al., 2023). While not explored in depth within this report, water scarcity impacts some of the largest populations. Several publications report a lack of fresh water available across developing nations, for example, India will need to feed 20–25% of the world’s population with only 4% of the world’s freshwater (World Bank, 2022), and China is facing significant challenges with their limited availability of a clean water supply. Water-intensive activities such as agriculture and a lack of usable or freshwater put pressure on the geography's food supply system and increase the reliance on imported food.



resources by region and country - 2009, Page 14.

3.1.4 Increasing Demand: Population

The world's population is expected to reach 9.7 billion by 2050 and 10.9 billion by 2,100 (United Nations, 2019). The 2023 Global Agriculture Productivity (GAP) report estimates that to meet demand by 2050, agricultural producers must double their output from 2010 levels (Global Agricultural Productivity Report, 2023). Data supplied shows that total factor productivity (TFP) - a measure of inputs vs outputs - within the agriculture food system between 2002 – 2021 rose by an average annual rate of 1.50% per annum. The required level of improved efficiency (TFP) in the food supply chain to meet the demand for food in 2025 is 1.91% per annum (Global Agricultural Productivity Report, 2023). This potential shortfall in production within the food supply system means there won't be enough food produced to meet the daily calorie (Kcal) demands of the population. In the face of population growth and increased demand for food, farms globally must continue to do more with the same resources. This requires significant investment in farm and food supply systems. As a result, there is likely to be continued upward price pressure for arable land.

3.1.5 Increasing Demand: Income Growth

The growth of the global middle class is one of the most important megatrends determining the future economy's market structure and trade requirements over the next two decades (National Intelligence Council, 2012). While the overall global population is expected to grow at approximately 0.9% per annum, the middle class, which constitutes 42% of the global population, is expected to grow to 63% by as early as 2030 (MPI, 2019). The associated income increase is expected to drive demand for calories per day 0.2% above the population growth rate, resulting in the need for 30% more calories by 2030 compared with 2017. Income increases influence the number of calories demanded and the types of foods these calories come from. For example, an increase in middle-income earners in Asia during the early and mid-2000s saw increased demand for New Zealand dairy products. Looking forward to 2030, the global middle-class population is expected to reach \$5.4 billion, with total spending of US \$63 trillion (MPI, 2019).

Consumers will spend an additional US\$4.4 trillion on food over the next 10 years, as massive demographic changes and evolving consumer needs drive up demand for larger quantities and better quality food (PWC, 2023)

3.2.1 Contribution to New Zealand's GDP

The primary sectors, encompassing farming and post-farm gate activities such as milk processing, account for 10.5% of the country's Gross Domestic Product (GDP), 13.1% of total employment and 81.9% of merchandise exports (MPI, 2023). The projected contribution to the New Zealand economy by the primary sectors is estimated to reach \$54.3 billion in export value by June 2024. The dairy sector is forecast to generate \$24.1 billion in the year ending 30 June, while the meat and wool sectors are expected to generate around \$11.6 billion. Horticulture, seafood, and arable sectors are projected to contribute \$7.0 billion, \$2.3 billion, and \$290 million, respectively. Additionally, processed foods and other products, such as vegetable oils and dough mixes, are expected to provide another \$3.3 billion. The forestry sector is projected to add \$5.8 billion to the export economy; however, investors often consider this a separate asset class, termed timberland.

3.2.2 Local Employment

The primary industries provide direct employment and stimulate economic activity in regional communities. Employment in the primary sectors is distributed across the country, with most processing and commercialisation activities being concentrated in major population centres including Auckland, Hamilton, and Christchurch. In 2021, approximately 13.1% of the New Zealand workforce, were involved in the primary sectors (SOPI, 2023). Data from 2019 published by Statistics New

Zealand showed that approximately 30% of people employees in the primary actors were in primary production (on-farm), while an additional 236,502 were engaged in processing and commercialisation (downstream activities) (MPI, 2019).

3.2.3 Demand for New Zealand Agriculture products

Asia has emerged as the largest region in the global food market, with its share increasing from 42% in 2014 to 50% in 2020 (PWC, 2021). The region's affluence is also rising, with projections indicating that 65% of the world's middle-class population will reside in Asia within the next decade (Kharas, 2017). Historically, rising incomes correlate with increased consumption of higher-quality protein. Asian economies face significant challenges in achieving self-sufficiency in food production due to various factors, including geographic constraints and limited availability of arable land. Consequently, New Zealand remains well-positioned to meet the growing demand for high-quality protein in Asia.

3.2.4 New Zealand Comparative Advantage's

Comparative advantage, a fundamental concept in international trade theory introduced by Ricardo (1817), suggests that countries allocate resources to produce goods and services with the lowest opportunity costs relative to their trading partners (MBIE, 2022). New Zealand advantages reflect strong ties to agricultural production (MBIE, 2022) and our proximity to a large marketplace (Asia) whose food supply chains remain reliant on imported goods. For each year from 1995 to 2018, New Zealand sustained comparative advantages across 214 product lines. The export value of these 214 product lines grew significantly between 1995 – 2018, as shown by the increase in the proportion of the New Zealand export value from 69.8% 1995 to 73.9% in 2018. The actual US \$ impact of this was an increase from US \$9.2 billion to US \$29.1 billion in export value in 2018. Research indicates that New Zealand's export growth is primarily driven by scaling and diversifying existing product lines rather than venturing into new ones (MBIE 2022). Ongoing exploitation of New Zealand's comparative advantage will help increase export value.

3.30 Debt and Equity Capital in New Zealand Agriculture

The primary sector requires significant capital to fund innovation, succession, productivity gains, and regulatory compliance (ANZ Blue Notes, 2016). Having access to capital funding provides the critical ability to make a step shift when required (or desired) and allows reinvestment to occur to remain relevant in a fast-paced world (Williams, 2020). Historically, debt capital and retained earnings (internal equity) have been available to fund growth and succession as retiring farmer sell their assets to the next generation. Additional debt needs to be supported with equity capital, the availability of which can come under pressure depending on market cycles and the financial performance of the agribusiness. Recent periods of sustained high borrowing costs, rising input costs, and low commodity prices (lower profitability) have meant that retained earnings can be limited for re-investment.

3.3.1 Capital Gap in the Primary Sectors?

A capital gap or funding gap represents the discrepancy between funds required to maintain ongoing operations or developments of a business, and the funds currently available from cash, equity, or debt (Investopedia). In the context of Aotearoa's primary sectors, the presence and magnitude of a potential capital gap is not well known, nor has it been widely studied.

A 2012 report by ANZ and Port Jackson Partners titled "Greener Pastures: *The Global Soft Commodity Opportunity for Australia and New Zealand*" explore the idea, and concluded that in order to achieve a base case for growth (export value) of 1.3% per annum until 2050, an additional \$210 billion of capital would be needed on the farm and within supply chains along with further \$130 billion to help farmers through succession and the sale of their farms. While some of this investment is expected to be sourced and supported through traditional bank and non-bank debt and retained earnings, a capital gap of approximately \$110 billion, or \$2.8 billion annually, was identified.

While this analysis is dated, real export value growth has been running at around the mid-2% p.a. mark since 2012 (Williams, 2020). Capital has been found to fund growth through this period but suspect general productivity and market conditions (through the record terms of trade) have done more of the heavy lifting to achieve the higher growth rate as opposed to productivity improvement through on farm investments investment. More research into the capital requirements of the sector need to be undertaken to provide an accurate account of the current state of play s identifying the need and then finding and securing appropriate capital to support growth-related capital expenditure and farm turnover is paramount to the sector achieving its goals.

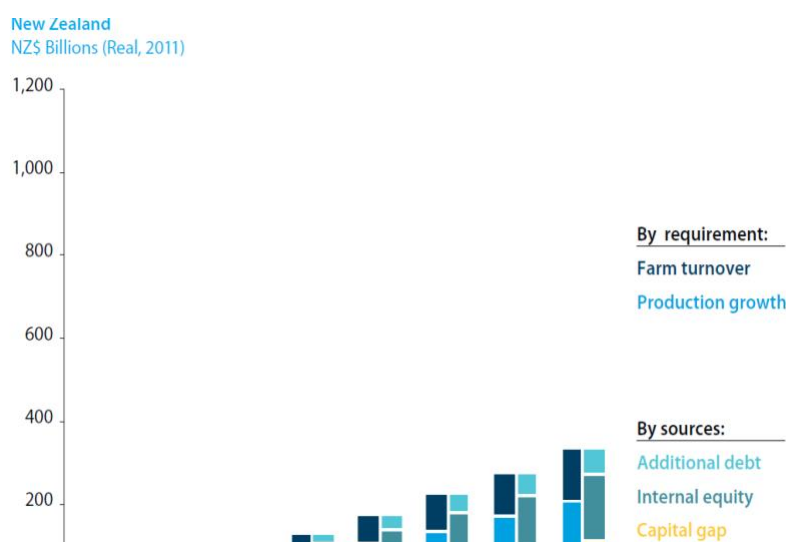


Figure 3: ANZ Insight. Greener Pastures: The Global Soft Commodity opportunity for Australian and New Zealand. Issue 3, October 2012. Page 40.

3.3.2 Debt Capital

Debt capital is used to help fund land use change, intensification, growth and succession and is widely used in modern day farming. According to the November 2023 Financial Stability Report published by the Reserve Bank of New Zealand (RBNZ), the agricultural sector represents 11% of aggregate bank lending at a total of approximately \$62 billion in March 2024 (RBNZ, 2024). The dairy sector takes the predominant share of agricultural lending at around 60% or \$36 billion, with beef and sheep as the second-largest category at 25% or \$15.5 billion. For a variety of reasons, primary sector debt levels have fluctuated but steadily increased over the years. The RBNZ attributes a surge in farm debt in the middle and late 2000s to a rapid increase in land prices, a flurry of dairy conversions (from forestry or sheep and beef use), and additional on-farm investment (RBNZ, 2015).

While debt capital has historically been made available by New Zealand's major banks, difficulty accessing credit has been noted by some commentators. Changes to the capital adequacy requirements introduced by the RBNZ in 2019 potentially made it less desirable for lenders to lend to the primary sectors versus other areas of the economy (personal communication, 2024).

New Zealand's banking sector is highly concentrated, with only four banks holding 90% of total bank assets. To protect the banking system from wide-scale defaults (across all sectors), the capital adequacy requirements introduced meant banks needed to hold more capital against rural loans. The requirement to hold more bank equity against rural loans is a cost for the bank. Comment provided by New Zealand Agribusiness Brokers (NZAB), stated that this means a loan provided to an agribusiness needs to earn at least double the margin of a home loan to achieve the same level of return on equity. In effect, it simply means the banks are passing on the increased costs of this capital to the farmer through increased interest rates. Perversely, the increased cost of borrowing that rural borrowers face under the RBNZ regulations to reflect the increased theoretical risk, now means that farm lenders are paying more for their lending, increasing the likelihood of default given impacts on viability (NZAB, 2022).

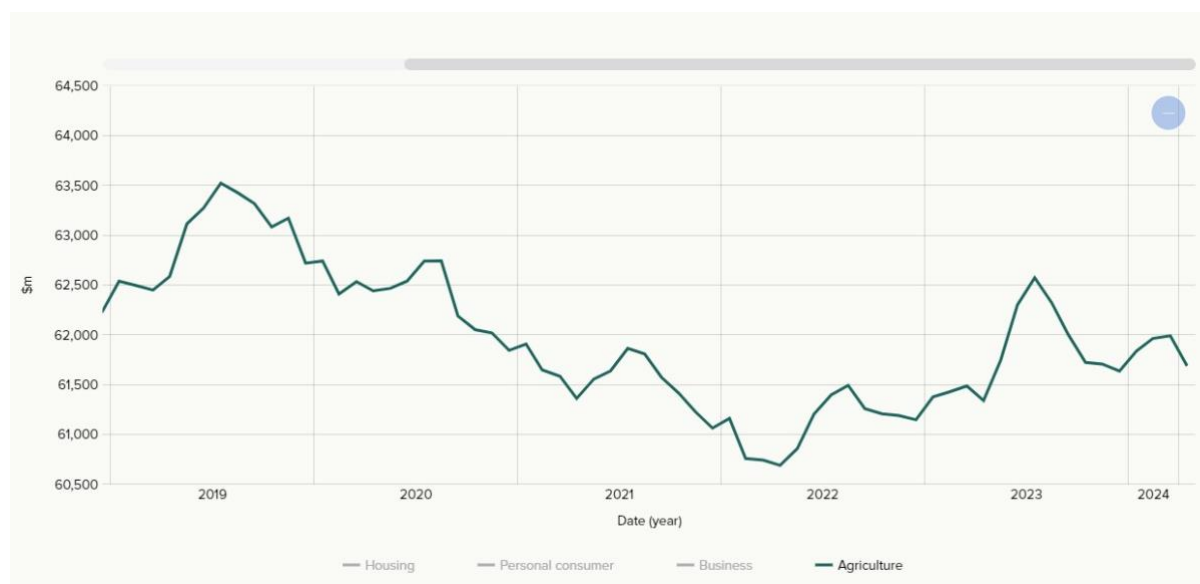


Figure 4: RBNZ, 31 May 2024. Banks: Assets – Loans by Sector Agriculture. Showing 2019–2024.

As a result of the requirements, lending to the dairy sector fell by \$5.5 billion from the peak of \$41.5 billion in July 2019, to \$36.4 billion in March 2024. While aggregate lending for all rural loans initially between 2019 – 2022 as shown in the chart above. Lending to the sector has steadily increased from the low in 2022. \$1.3 billion of new lending between March 2022 and March 2024 has provided to the horticulture sector. This aligns the strong financial performance and increased activity in the Kiwifruit sector).

3.3.3 Are Retained Earnings Sufficient?

In a high interest rate environment, owners with exposure to debt capital will look long and hard at the opportunity cost of any funds not being used to pay down debt. Where profitability has improved, cash is being applied to debt reduction, encouraged by the existing high interest rates (Proudfoot, 2018). Tighter profit margins for farmers mean there is limited retained earnings available for re-investment, as these earnings are a function of post-dividend repayments. Individual farm performance and financial ratios are subject to various of factors, with publicly available information difficult to source. Industry bodies such as Dairy NZ and Beef & Lamb NZ have found large variations in profitability between the top farms and others in their respective industries. In each case, the performance differences were driven by increased abilities to use inputs efficiently and deliver higher yields.



Figure 5: RBNZ, November 2023. Developments in the agricultural sector: Dairy sector debt levels and debt servicing Showing 2009-2023.

Not enough information is known to draw any conclusions in this report about the current profitability of farming systems, nor the availability of retained earnings for re-investment. It simply aims to note the challenges faced by the sector when debt servicing and input costs are high. In many cases, and as reported upon frequently by industries bodies, farm profits have fallen significantly. For example, as reporting in Beef and Lamb NZ's "New Season Outlook 2023-2024" Farm Profit Before Tax is forecast to decrease 31 per cent for 2023-24 and adjusting for inflation, this is the lowest level of farm profitability in 15 years. Farmers in this sector are under immense pressure due to lower profit and cash flow (Beef and Lamb, 2023).

3.3.4 Importance of Iwi

Iwi-owned agribusinesses account for approximately 227,289 hectares of land in pastoral and horticulture production (Perrin Ag, 2024), with value estimates of around \$13 billion in primary sector assets. Of note is the growth of Māori horticulture, which has grown approximately 300% in 12 years (Stuff, 2020). Māori operate these businesses with the principles of kaitiakitanga, sustainability, and authenticity held strongly by Māori are important in both domestic and export markets. As owners of large primary sector assets and with aspirations for growth, Māori will continue to become a significant feature of New Zealand's food and fibre system. Partnerships and joint ventures with Iwi are being explored across New Zealand with great success. The long-term, intergenerational mindset and aspiration of Māori are well suited to that of land holders and for partnering with KiwiSaver providers.

3.3.5 Listed Agribusinesses

Aotearoa's agricultural investment landscape includes large agribusiness which are publicly listed on the New Zealand exchange (NZX). Businesses range from direct ownership and management of physical primary sector assets, through to rural service providers and genetics companies. These businesses serve an important function in the market, as they present a proxy to how well the primary sectors are performing. Listed companies provide access for the public to gain exposure to the primary sectors, which can be an attractive alternative to share ownership in other NZX-listed businesses. The NZX provides daily pricing mechanisms through publication of the company's share price, and availability to liquidity shares in a company at any given time when the market is open.

Recent listings for agribusinesses include New Zealand Rural Land Company (NZX:NZL) and Private Land and Property (NZX:PLP), which acquire productive land assets and lease them to operators. These companies aim to provide investors a stable return through rent payments across a diversified mix of geographies, tenants and sectors. NZL and PLP are currently exposed to the dairy, horticulture (including avocados, kiwifruit, hops, and citrus), pipfruit, and viticulture sectors.

However, it is rare for privately owned agribusinesses to scale to the point of listing on the NZX. The situation is similar in Australia, where only 10 agribusinesses are currently listed on the ASX. Challenges have emerged for listed agribusinesses in the past, as they are exposed to several factors completely beyond the control of management, such as significant weather events. This volatility makes it challenging for agribusinesses to maintain consistent attractiveness in the public markets.

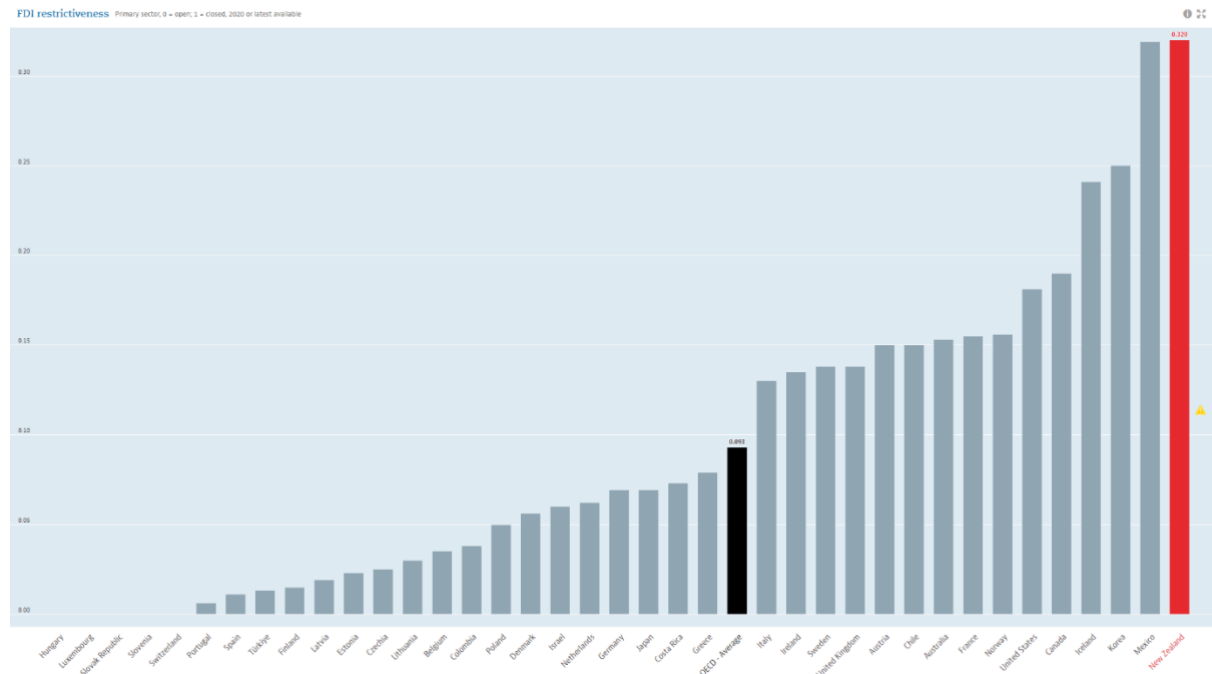
3.3.6 Retail and Unlisted Fund Investments

Privately managed investment schemes (MIS) or asset syndications pool funds from retail investors to invest in high-value assets, including agricultural land or agribusinesses. Retail investors, often referred to as 'Mum and Dad' investors, are typically seeking to diversify their asset base beyond the equity they have accrued in their home or other financial assets they hold. Schemes use a variety of operations modelled depending on the set type and market at that time. These include sale-and-leaseback structures or direct operational participation. Notable examples in Aotearoa's agricultural sector include MyFarm, Silverfin, Origin Capital, and Centuria Capital, offering various ownership and operational investment models. These schemes have provided market access and exposure to primary sector assets for retail and private wholesale investors. A well-known manager in this space is MyFarm, who has invested across a diversified range of sectors on behalf of investors. MyFarm currently manages \$484 million worth of productive primary sector assets and has generated combined cash and capital average net returns to investors of 11.39% per annum (MyFarm.co.nz). Another notable investor in this space, although not technically an MIS, is Origin Capital. Origin Capital Fund 1 was New Zealand's first private equity fund dedicated to the kiwifruit sector, and along with Fund 2, has raised over \$120 million from investors since 2021. These funds focus on the kiwifruit sector but also have a broader mandate to invest in other primary sector assets as opportunities arise. Fund 1 delivered a return of 25% to investors in its first financial year.

3.3.7 Foreign Direct Investment (FDI)

FDI plays a key role in fostering competition and innovation, providing capital, technology transfer, and market access. However, Aotearoa is ranked as the most restrictive country for FDI in the OECD, which has significant implications for potential investment. Since 2010, FDI in New Zealand has average 1.47% of GDP, while our closest neighbour, Australia, has average 3.36% of GDP.

Globally, there are numerous examples of well-managed and sustained FDI that have brought significant benefits to host nations. Ireland opened their doors to increased levels to FDI, which now accounts for 20% of GDP. As such, the nation has prospered as a hub for business and commercial activity. Ireland is now home to 9 of the top 10 Pharma companies, and 14 of the top 15 MedTech companies. FDI is responsible for 463,000 jobs in Ireland (Financial Times, 2021).



FDI restrictiveness is an OECD index gauging the restrictiveness of a country's foreign direct investment (FDI) rules by looking at four main types of restrictions: foreign equity restrictions; discriminatory screening or approval mechanisms; restrictions on key foreign personnel and operational restrictions. Implementation issues are not addressed and factors such as the degree of transparency or discretion in granting approvals are not taken into account. The index here shows the total and nine component sectors taking values between 0 for open and 1 for closed.

Figure 6: OECD, 2023. FDI restrictiveness, Primary sector: OECD average (black) and New Zealand (red). Showing 2019-2020.

Some estimates suggest that the restrictive FDI policies in New Zealand could result in a loss of up to \$70 billion in potential investment (NZAB, 2023). Aotearoa's agricultural sector attracts institutional investors from developed countries including the United States, the Netherlands, Canada, and the United Kingdom. These investors are attracted to Aotearoa due to its relatively low sovereign risk, shared cultural values, opposing seasonal production systems, and globally integrated supply chains. Additionally, our proximity to rapidly growing markets in developing Asia enhances its attractiveness as an investment destination, as this helps to underpin the demand side of the economic equation.

3.3.8 Flow on effects of increased FDI

Australia, like Aotearoa, has abundant, highly productive land and offers investors a politically 'safe' and supportive environment in which to place their capital. Between 2003 – 2023, FDI in Australia rose \$62.8 billion to \$4.65 trillion. Aotearoa's share of net FDI flows during that same time (2002-2022) was a mere \$48 billion. While foreign investors can acquire rural land in Australia, they are still required to seek approval from the regulator, the Financial Investment Review Board or FIRB. The prevalence of foreign investors in the market has provided asset owners' farms with options for liquidity.

An example of a positive flow-on effect of this increased liquidity is the ability for Australian Superannuation funds to buy fully developed assets direct, or partner with rural "property developers". These "rural property developers" seek to acquire undervalued, undercapitalised

agricultural properties throughout Australian, which they invest in to create a more profitable farming enterprise through either changing land use (to highest and best use), investing in farm infrastructure, or aggregation/amalgamation. Once improved, these farms can present an attractive opportunity for foreign purchasers who are seeking sustainable returns and exposure to Australian agriculture. The scale of the Australian landscape, and liquidity marketplace due to more open FDI rules in the ability for foreign investors to purchase and sell (if needed) makes these assets attractive to large institutional investors. One such example is the Costa family-backed GO.FARM. GO.FARM is an Australian owned, high-conviction agricultural investor, developer and manager, underpinned by our purpose to transform Australian agriculture (gofarmaustralia.com.au) who have developed world-class agribusiness assets which they have then successfully sold to foreign and domestic investors. The reason for referring to GO.FARM, is that they recently raised AU \$250 million from domestic institutional investor, Qantas Super, which is the employee retirement fund for Qantas staff. As disclosed in the Qantas Super Annual Report 2022/2023, the scheme had AU \$8.4 billion of assets under management.

NEWS

Australian agricultural manager GoFarm secures A\$200m from Qantas Super

By Florence Chong | 2 May 2024

Capital would unlock value by converting 5,000ha of land into high-yielding, water-efficient horticultural crops



Figure 7: IPRE Real Assets, 01 May 2024. Australian agricultural manager GO.FARM secured A\$200m from Qantas Super.

3.3.9 Chapter Summary

The long-term demand for food and agricultural products, which are fundamentally important to the global economy, underpins the investment attractiveness of assets in the primary sector. Foreign investors, who have been the prevailing investors in large-scale agribusinesses in New Zealand, with long-term investment horizons, benefit from these themes as they can weather market downturns through portfolio and asset diversification.

KiwiSaver providers are uniquely positioned to gain exposure to these opportunities. The long-term nature of primary sector investment not only aligns with KiwiSaver's goals of long-term growth and sustainable, defensive returns, but it also strengthens the local economy through increased employment and resources in local communities. By investing in New Zealand's primary sector, KiwiSaver providers can benefit from the robust demand for food and agricultural products while contributing to the prosperity of the nation's agricultural and social landscape.

3.4.1 Domestic Sources of Institutional Capital

Institutional investors include pension and superannuation funds, investment companies, mutual funds and unit trusts, insurance companies, banks, and charitable foundations. Institutional investors are a permanent feature of the financial landscape, and their growth will continue at a similar and perhaps faster pace. Domestic sources of institutional capital include the New Zealand Superannuation Fund (NZSF), Accident Compensation Corporation (ACC), various KiwiSaver providers and other smaller corporate and public sector funds. Other than NZSFs holdings in rural land and timber and ACC's investment in dairy and forestry holdings, these investors are noticeably absent from the agricultural investment market in New Zealand. This has been noted in OECD comparisons of national pension sectors, which have identified that Australian superannuation fund managers have the highest level of exposure to the share market of any pension sector globally, as the following graph highlights.

3.4.2 New Zealand Superannuation Fund (NZSF)

The New Zealand Superannuation Fund (NZSF), also known as the New Zealand Super, is a sovereign wealth fund established help reduce future taxpayer burdens by covering part of the superannuation costs via investment returns. NZSF employs a diversified investment strategy across asset classes including equities, fixed income, property, infrastructure, and private equity. The funds direct investment have a minimum transaction size of \$200 - \$300 million (Treasury, 2024), which is expected to rise over time as NZSF grows. Additionally, the fund contributes to the Aotearoa's economy by investing in local infrastructure and businesses, fostering economic growth with 12% of the NZ Super Fund's total investments by value, or \$7.5 billion, is invested in New Zealand assets (Financial Report, 2023). Of this \$7.5 billion, approximately 34% of that is in rural land and timber or approximately \$2.6 billion, all located within New Zealand. NZSF holds direct investment in rural land and timber via managers FarmRight and Kaiangaroa Timberlands. Additional global investments are held with portfolio companies including Global Forest Partners (GFP) Timber Investment Group (TIG).



Figure 8: New Zealand Superannuation Fund, \$75,600,000,000 "Fund Size", per nzsuperfund.nz landing page as at 16/06/2024.

3.4.2 Accident Compensation Corporation

The Accident Compensation Corporation (ACC) is New Zealand's Crown entity providing universal no-fault injury coverage. Funded through levies and government contributions, ACC offers injury prevention programs, rehabilitation services, and financial compensation for personal injuries. Its diversified investment portfolio ensures long-term financial sustainability and supports New Zealand's economy by funding local projects and businesses. ACC's activities help reduce injury incidence, aid recovery, and bolster economic stability by supporting the workforce. ACC manages a diversified investment portfolio to fund its obligations, ensuring long-term sustainability and

financial health. The corporation employs robust risk management practices to safeguard its investments and ensure consistent returns.



Figure 9: Accident Compensation Corporation, \$47,000,000,000 “The amount under management in the investment fund for the year to June 2023” per acco.co.nz/about-us/our-investments as at 16/06/2024.

3.4.3 KiwiSaver

KiwiSaver has transformed New Zealanders' savings and investment patterns since the scheme first began accepting contributions in July 2007. The scheme was designed to encourage a long-term savings habit and asset accumulation by individuals who are not in a position to enjoy standards of living in retirement similar to those in pre-retirement (Heuser et al., 2015).

Almost two-thirds (3.6M) of all New Zealanders are now enrolled in KiwiSaver, and cumulative net assets managed by KiwiSaver funds as at May 2024 as approximately \$115 billion (RBNZ, 2024) which is an increase of 18.6% to the previous year. \$47 billion of these funds are invested domestically, while the balance (\$68 billion) is invested offshore – the vast majority of which are invested into cash and deposits, fixed income, equities and other financial assets. 73% of KiwiSaver members are between 18 and 44 years old, meaning that most current members have at least 20 years or more of contributions before they reach the retirement age of 65 years. The Financial Services Council (FSC) estimates that combined KiwiSaver balances would nominally be worth \$911 billion (or \$498.4 billion in real terms), with a low estimate of \$671.3 billion and a high estimate of \$1,239.4 billion by 2050.



Figure 10: Reserve Bank of New Zealand. Managed funds Survey – Q1 2024. \$115,200,000,000 “KiwiSaver net assets” per <https://www.rbnz.govt.nz/-/media/project/sites/rbnz/files/statistics/series/shared/t40-41/2024/managed-funds-q1-2024.pdf> as at 28/05/2024.

3.5.1 KiwiSaver Investment in Private Markets

The Centre for Sustainable Finance Toitū Tahua or CFS in 2023 stated that minimal exposure to private assets among KiwiSaver funds contrasts global patterns where pension funds in many countries are substantial investors in illiquid asset classes. Indeed, institutional investors, such as pension funds, are projected to double their allocation to private market assets over the next five years, with a notable increase in non-listed infrastructure investments. As of March 2023, the Reserve Bank of New Zealand (RBNZ) reported that a mere 0.18% of KiwiSaver funds were allocated to direct investment. By contrast, in Australia, AFSA reports that in the June 2023 quarter, for entities with more than six members, the NZD \$2.3 trillion in investments included an allocation of 4.9% in unlisted equities and 15.6% in property and infrastructure investments. As of October 2023, only four KiwiSaver funds reported an allocation to alternative assets, which represented only \$43.9 million of the more than \$93.6 billion funds held in KiwiSaver balances at that time (Melville Jessup Weaver, 2023). There is little to suggest the situation is significantly different today.

Figure 3: KiwiSaver funds – private assets

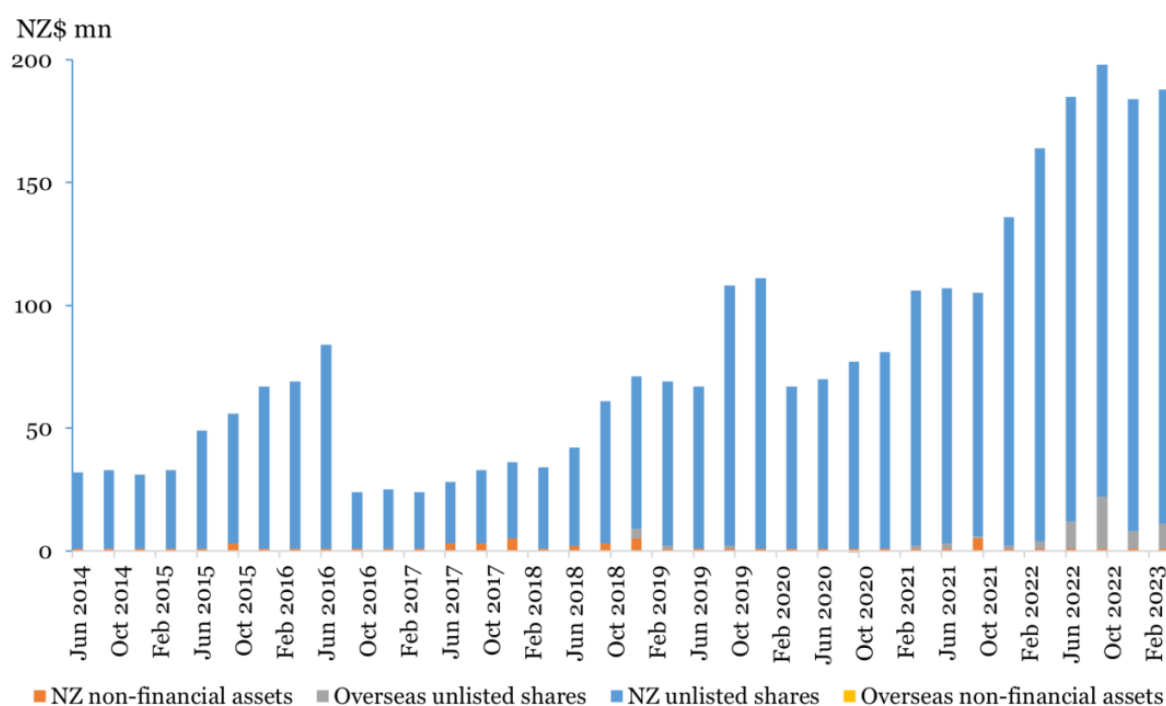


Figure 11: CFS. Investing in Private Assets. Page 21.

3.5.2 Policy Setting and Liquidity

MinterEllisonRuddWatts (MERW) and Chapman Tripp (CT) provided the Centre for Sustainable Finance : Toitū Tahua (CSF) a joint legal opinion on the legislative and regulatory barriers that may be contributing to KiwiSaver low rates of investment into private assets. These included the necessity to liquidate assets to cover account portability obligations and member withdrawal entitlements, need for daily pricing (valuation) and unclear definition of the 'reasonable fee requirements (Financial Market Conduct Act, 2013).

1. Liquidity is particularly important in agriculture given the unique risks. The requirement for liquidity, as touched on above, is ever more pressing in the case of KiwiSaver. These liquidity demands make it challenging for KiwiSaver providers to invest in private markets, as they must balance the need for accessible funds with the potential long-term returns of less liquid

assets. This dynamic necessitates careful liquidity management to meet portability obligations and maintain member confidence in the scheme's flexibility and reliability.

- a. In the past year, KiwiSaver members withdrew \$4.2 billion, up 11.7% year-on-year (KiwiSaver Annual Report, 2023). Unlike NZSF or ACC, KiwiSaver members can withdraw funds from their scheme at any point, with providers obligated to process these withdrawals within 10 working days. While this flexibility is essential for the scheme's attractiveness, it presents challenges when investing in private markets.
- b. The largest category of withdrawals by value was from members aged 65 and older, who collectively withdrew more than \$2.8 billion, a 46.3% increase year-on-year. Withdrawals for first home purchases fell 35.6% to \$925.6 million, a level last seen in 2018–19, influenced by steep mortgage interest rate rises, with the Official Cash Rate climbing from 1.5% in April 2022 to 4.75% by February 2023 (RBNZ, 2023). Significant financial hardship withdrawals rose 36.7% to \$144.9 million, matching levels seen during the economic impacts of COVID-19 in 2020–21.
- c. Fund "switching," where members change their balance to a less or riskier fund within the same provider, also requires providers to maintain sufficient liquidity. In 2023, net fund flows out of conservative funds amounted to \$25.7 million (KiwiSaver Annual Report, 2023).
- d. Permanent exits from KiwiSaver are another critical factor, with the largest group being those aged 65-plus. In 2023, 36,121 retirees fully exited KiwiSaver, a 68.3% increase year-on-year and the highest number ever recorded. Typically, exits have totalled around 20,000 annually, with the previous highest being 23,458 in the year to March 2019. Although this year's number may be an anomaly, it still represents only about one-fifth of all members aged 65-plus, indicating that the remaining four-fifths are comfortable leaving at least some savings in their KiwiSaver scheme.

3.5.3 Lack of information/transparency

There is limited return performance relating to direct institutional investment in New Zealand's primary sectors. Limited verified financial and performance information could deter analysts and investment committees from fully or accurately pricing investments in a sector with which they are not familiar. For example, the NCREIF Farmland Index in the US provides investors with a set of returns against which these investors can benchmark their performance. This benchmarking helps give investors a track record of performance they can leverage when seeking additional funding or investment. Investors may shy away from investments with limited credible data in favour of more familiar assets with clearly defined benchmark returns. The relatively low level of investment in agriculture and agribusiness by superannuation funds suggests that specific factors deter large-scale investment. These factors can be specific to fund investment strategies (SIPOs) and sector-specific, contributing to the sector's relative unattractiveness to large institutional investors.

3.5.4 Benchmarking Returns

Benchmarks compare the fund's performance against a chosen set of indices. Private market investments, including those in the primary sectors, pose a challenge in providing benchmark data as this is not often made publicly available. While investment bankers, research groups, financial consultants and company analysts can do the heavy lifting to sort and find this data, there remains an element of risk that an investor is deciding with "all of the facts being known". Due to the lack of readily available benchmark indexes and the inability to attain daily pricing. Without appropriate benchmarks for private market assets, managers cannot devise a Benchmark Asset Allocation (BAA),

making it difficult to align or adjust their investment thesis during the investment hold period. This lack of benchmarking complicates the integration of agricultural investments into traditional investment portfolios, limiting the appeal for KiwiSaver managers.

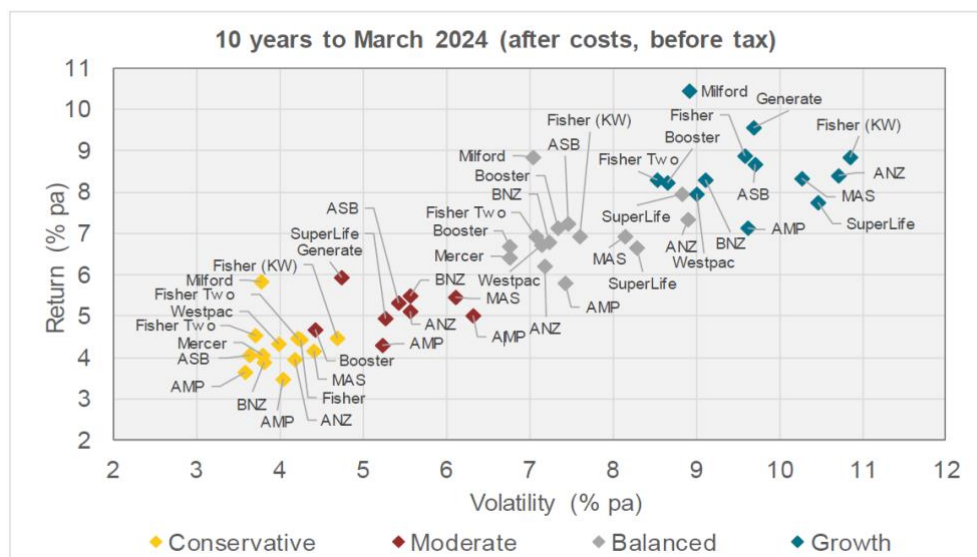
3.5.5 Skills and knowledge gap

The prevalence of owner-operated models necessitates specialist skills and a deep understanding of benchmark performance in each area for informed investment decisions to be made. Farmers possess intimate knowledge of their farms, creating a significant knowledge gap for external investors who aren't as familiar with the asset or geography. This gap, coupled with the difficulty of benchmarking return profiles without expert knowledge, complicates the investment decision-making process (Personal Communication, 2024). This knowledge cap (perceived or real) can provide too much of a barrier for an institutional investor and can lead to limited interest. Assets that have well-documented financial performance and present as 'investment ready' are more likely to attract capital from institutions. The ability to wind out risk for an investor throughout the provision of accurate and audited vendor due diligence helps support the investment case. This is necessary if that investor does not have a track record of investment in the sector.

3.5.6 Scale and diversification

The size of New Zealand's institutional agriculture asset class is extremely small relative to the size of the fund industry as well as relative to other asset classes. It is unclear if the underlying opportunity set in agriculture is large enough to support the substantial increase in size the asset class would experience were superannuation funds to invest a meaningful amount of capital. These funds are typically looking to investment a minimum transaction size in the \$50 - 100 million range in order to make it efficient for management prioritises to be given. Due to the small size of the institutional grade agriculture asset class, it is challenging for an investor to achieve the required level of diversification, hence portfolios may become concentrated. This is a problem because a key approach to managing risks is to diversify exposures so in the event of any single risk materialising, only a small part of the portfolio is impacted. Diversification comes from geographic, sector, asset type, part of the value chain etc which can be difficult to achieve in a small market like New Zealand.

KiwiSaver Results – Risk versus return (after fees, before tax)



Our KiwiSaver survey covers selected funds from the largest 17 KiwiSaver schemes by assets under management as at 31 March 2023. These schemes accounted for approximately 95% of the total KiwiSaver assets under management as at 31 March 2023 ([source](#)).

Figure 12: Melville Jessup Weaver, Quarterly Performance Report, May 2024.

3.5.7 Nature of expected returns

Returns and total performance of a primary sector investment can come from two sources. These are capital appreciation through growth in land value, or cash returns generated from the land. Some of these are under the control of the asset manager, while others are a result of broader market forces. Many strategies within agriculture, and particularly farmland, generate a significant amount of return from land appreciation, which is a function of location, climate and replacement cost (i.e market sales and transactional evidence which are supportive of a higher value). All expected models for returns are subject to changes and fluctuations in market dynamics. However, an institutional investor's preference is to provide the fund with sustained cash flows, which can either be re-invested or provided to members. Hence, there is a preference for returns to be driven by factors under the control of asset managers (operational returns). Additionally, agricultural investments' risk and return profiles are unconventional and often difficult for analysts to rationalize and explain effectively.

3.5.8 Compensation

KiwiSaver managers must ensure their fees or compensation for investment activities are not "unreasonable" and that members receive 'value for money'. As touched on elsewhere in this report, the complexity of investing into and the ongoing managing of primary sector assets, has the potential deter providers from investing in these markets as the fee basis may not be there to support the additional efforts. Fees charged by managers are typically comprised of the base management fee, a membership fee and another fee. The average fee basis across Aggressive KiwiSaver funds is 1.01% per annum. This is far less than that charged for managers of agricultural assets, where fees can range anywhere from 2-4% per annum with a performance bonus component (carry) and various other fees relating to ongoing management, capital raising and brokerage of debt. KiwiSaver managers should justify higher fees for funds allocated to private assets if those investments are expected to earn returns that warrant the extra costs (MinterEllisonRuddWatts, Chapman Tripp). The challenge is identifying an appropriate benchmark for fees and performance for primary sector investments, which should differ from those used for publicly traded investments. This distinction is crucial to ensure fair assessment and appropriate fee structures, reflecting the unique complexities and achieving returns in the agriculture sector. It is more difficult to achieve and therefore should be incentives as such.

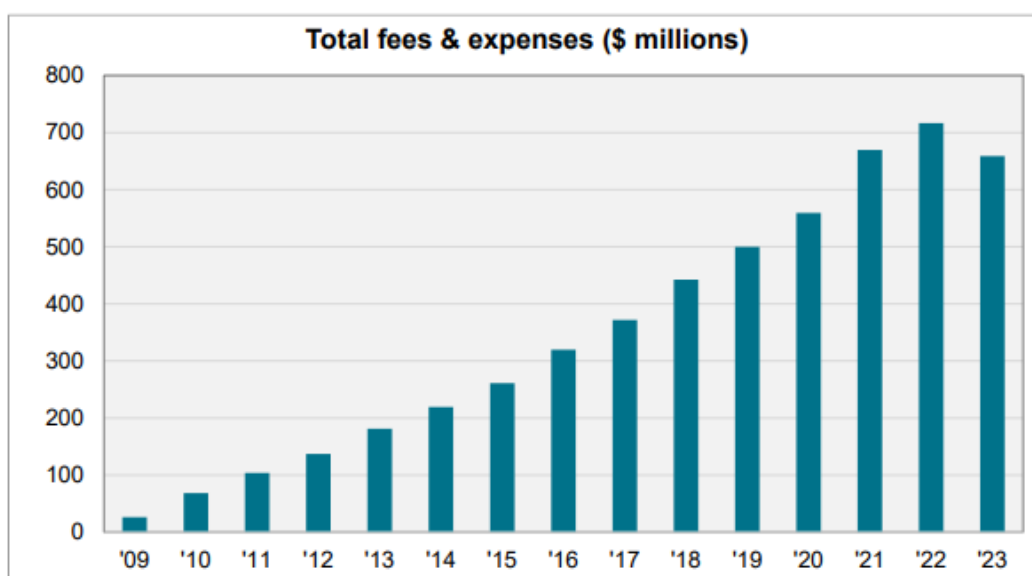


Figure 13: Melville Jessup Weaver, Quarterly Performance Report, May 2024.

3.6.1 Agriculture in an Institutional Portfolio

Agriculture as an asset class is not reported separately by the Financial Markets Authority – Te Mana Tātai Hokohoko (FMA) regulated funds, nor within the reporting requirements of KiwiSaver members. Instead, it is categorised as ‘Other’ or ‘Alternative Assets’, which doesn’t provide the granularity needed to determine the actual proportion of investment held across the funds. An examination of the marketing material used by some of the world's largest agricultural asset managers reveals a consistent set of messages aimed at attracting institutional investment to the sector.

3.6.2 Correlation/diversification

A key metric employed is the diversification benefits granted by exposure to this asset class. Various mathematical equations, including the Sharpe ratio, which measures the performance of an investment such as a security or portfolio compared to a risk-free asset, after adjusting for its risk ([Investopedia](#)), can be used to measure the relationship two asset classes have to one another. Agriculture has low correlations with most other asset classes. This makes sense as the performance of the agriculture sector is not as closely linked to broader macroeconomic factors (such as economic growth) as is the case with other asset classes, but rather it is linked to factors that specifically impact agriculture, such as weather. The table below shows asset class correlations between 2001 – 2021 for Australian assets and agriculture as reported by Warakiri. This shows the low correlation between Australian agriculture (as measured using the ANREV Farmland Index) and more traditional asset classes.

Market indexes	Aust. equities	Global equities	Property	Infrastructure	Growth alts	Defensive alts	Aust. bonds	Agriculture
Aust. equities	1.00							
Global equities	0.60	1.00						
Property	0.14	0.01	1.00					
Infrastructure	0.68	0.48	0.56	1.00				
Growth alts	0.68	0.58	-0.01	0.61	1.00			
Defensive alts	0.66	0.55	0.09	0.54	0.96	1.00		
Aust. bonds	-0.20	-0.01	-0.71	-0.34	0.19	0.20	1.00	
Agriculture	0.01	0.06	-0.06	-0.06	-0.01	0.11	-0.32	1.00

Figure 14: Warakiri Asset Management, sourced from Fronier, *Super in the Economy*, November 2022.

The ANREV Australia Farmland Index offers insights into the financial performance of 61 properties, collectively valued at over AUD 2.1 billion (ANREV Farmland Index Q1 2024). The ANREV Australian Farmland Index debuted in 2015 and was set up by the US’s NCREIF, and like the NCREIF the index tracks the returns of institutional-grade farmland assets, focusing on both income and capital growth. This index aims to enhance transparency regarding the financial performance of farmland assets. The data is derived from institutional-grade farmland management investments, which undergo external audits and independent valuations at least every three years. The index provides detailed quarterly reports on each farmland asset, including information on income and capital movements (acquisitions and disposals). Since being transferred to ANREV in 2020, the index has been published 10 weeks after the end of each quarter. According to the latest quarterly Australian Farmland Index Q1 2024, Australian farmland's total annualised return since inception, from 31

March 2015 to 31 March 2024, was 10.86%, with contributions from income return of 5.10% and capital growth of 5.57% (ANREV, June 2024).

3.6.3 Farmland Indices

Well organised agribusiness can offer investors attractive potential returns. As a reference from the chart above, the same report by Fronter Advisors noted that farming-focused strategies for institutional investors (in Australia) target returns up to 10% p.a. net of fees (Frontier, 2022). The National Council of Real Estate Investment Fiduciaries (NCREIF) Farmland Index provides financial performance data for US farmland. The index comprises 1,377 individual farms with a US \$15.3 billion market value as of 2022. The financial performance of US farmland (as measured by the NCREIF Farmland Index) has demonstrated strong absolute returns, with average total returns (income and price appreciation) of 11% between 1992 and 2023 (Farm Together).

3.6.4 Note on Farmland indices

While these indices offer insights into the recorded returns from farmland assets in different geographies and markets, their relevance to the potential performance of farmland in Aotearoa is limited. The NCREIF index, which is frequently cited by fund managers and investors, tracks the total performance of US row (annually harvested) and permanent cropland (income and appreciation) across properties held by institutional investors for investment purposes only. It has a significant weighting to row crops (particularly corn), which is a commodity crop we produce very little of domestically. The ANREV index is also relatively new and only covers 61 properties across the broad Australian farming landscape. While the performance of the indices may provide somewhat of a benchmark for assets in those geographies, more work would need to be done in New Zealand to develop a similar benchmark index.

3.6.5 Land Appreciation

Over the long term, agricultural land generally appreciates in value. The main drivers of this value are the scarcity with which land becomes available and population growth (urban sprawl). The value of farmland may increase as urban developers seek new land for construction. Land also provides an owners with option value, and the ability to take advantage of changes in the market conditions. For example, in the past decade, owners of New Zealand hill country could (if the land was suitable to do so) source revenues from the grazing of sheep and beef cattle, honey from the establishment of manuka (beehive placement revenue), carbon credit from establishment and registration of native and exotic forestry in the ETS, and future timber returns. These landowners may soon be able to access biodiversity and soil credit should the market support it. Similarly, the ability to remove and replant different varieties of wine grapes provides a landowner with option value as tastes and preferences change. Having capital on hand is necessary to take advantage of those changes.

3.6.6 Inflation Protection

Farm profits tend to rise strongly in times of inflation. The linkage between inflation and the agricultural sector underscores the potential of agricultural assets as a hedge against inflation. Inflation is a measure of the overall changes in the price of goods and services that erode the purchasing power of consumers (Baral & Mei, 2023). As food prices rise with inflation, the value of investments in agricultural assets tends to increase, offering a protective measure for investors. This characteristic makes agricultural investments an attractive option for those looking to mitigate the adverse effects of inflation on their purchasing power and portfolio returns.

3.6.7 Food and Agribusiness Opportunity Set

There are different ways an investor can gain exposure to real food and agricultural assets. The opportunity set has grown significantly over the last two decades (Vitón, 2022), with investment opportunities running from upstream to downstream processing, and land mile logistics.

- **Upstream investment** opportunities include direct ownership of farm equipment and machinery (including robotics), fresh water (tradeable allocations and irrigation infrastructure), land and physical agriculture (i.e. farmland including row crops, permanent, timberland and grazing), and industrial buildings (controlled environment agriculture, glasshouses, vertical farms etc.).
- **Midstream investment** opportunities relate to flow on uses from agriculture production, such as industrial processing (feedlots, packhouses, processing plants), transportation infrastructure (grain silos, mills, wineries) and bio-based product products processing (biochar, wood fuels, food and agriculture waste utilisation, compost), as well as renewable energy systems (solar and wind farms, biogas and ethanol).
- **Downstream investment** opportunities typically relate to the products prior to being in the hands of end consumers. These include cool stores, dry stores and waste management. Investment opportunities within the food and agriculture supply chain are extensive, with investors able to gain exposure to more traditional assets (such as industrial processing under a sale-and-lease-back model, which is more aligned to property), which are intrinsically linked to the growing demand for food and fibre and underpinned by population growth.

3.6.8 Operating and Investment Models

A particular investor's desire to be invested at various parts along the supply chain will relate to their investment objectives, which can be dictated by the timing of their funds, return hurdles, governance considerations and requirement for liquidity. While the sector is becoming a more mainstream asset class, the availability of investment vehicles and managers can be limited across certain themes or regions, limiting the availability of options in terms of investment models (Vitón, 2022). Operating models are tailored to specific assets and the commodities produced. A example of some of the operational model is shown below.

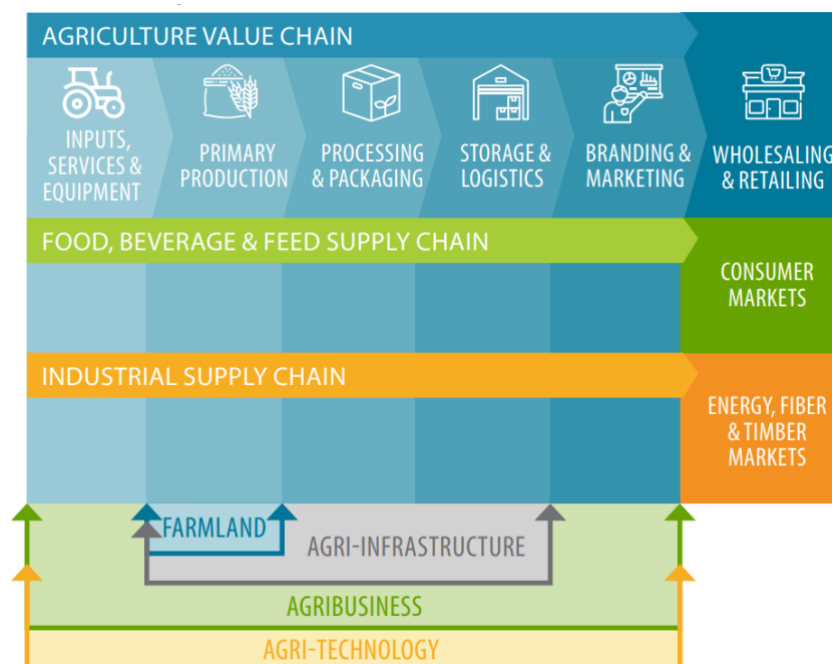


Figure 15: Valoral Advisors, *Investing in the pillars of global agriculture*. May 2022.

- **Owner-Operator:** Investors or investment managers (on behalf of investors) purchasing and directly operating farmland to achieve/generate cash and capital appreciation returns (increase in land value). This is the prevalent model among New Zealand farmers. Capital is directed to purchasing a property with additional investments in farm infrastructure, equipment modernization, process optimization, and sustainable practices aim to maximize output and ensure long-term viability and profitability. and investing in. This may lead to opportunities to acquire additional property with which provides additional of scale, enhanced efficiency, reduced costs, and boosting productivity through advanced machinery and technology.
- **Sale-Leaseback:** This strategy involves purchasing farmland or downstream assets (e.g., processing plants, cool stores) and leasing them to a third party who operates the asset. Leasing revenue can be more stable than those provided from the owner-operator model, and therefore suit more passive ‘hand-off’ investors. A key risk in this model is the tenant risk (or tenant covenant), the ongoing value of the lease, and the value of the underlying physical asset. Entities such as New Zealand Rural Land Company, Booster Private Land and Property, MyFarm, Silverfin, and Centuria Capital utilise this strategy to reduce risk for their investor and provide stable, ‘bottom drawer’ returns.
- **Permanent Plantings:** Permanent plantings involve investing in long-term crops such as fruit trees including kiwifruit, pipfruit, stone fruit and citrus. The kiwifruit sector in particular has seen significant value growth in the past decade, with prices paid for SunGold orchards eclipsing \$2 million per hectare (Stuff, 2022). Average orchard gate returns per hectare for the 2022/2023 year across the varieties have been between \$41,063 and \$133,548 (Zespri Annual Report, 2023). Sustained demand for kiwifruit and orchard gate returns brought about interest in the sector from external capital sources and saw the investment into and aggregation of orchards by well-capitalised investors.
- **Agribusinesses:** Downstream (post-farmgate) investments focus on businesses providing goods and services that support the agriculture supply chain. These investments are more akin to traditional private equity or quasi-property investments rather than direct agriculture. New Zealand's private equity market, while smaller compared to some global counterparts, has been increasingly active with private equity investments (excluding venture capital) reaching \$2.6 billion in 2021 (Wheeler, 2023). Post-farmgate companies can benefit from investment and operational enhancements or vertical integration with farmland assets. Unlike pre-farmgate investments, which concentrate on land ownership, post-farmgate companies emphasize production and outputs.

3.6.9 Chapter summary

The essential nature of food production which ensures stable demand, preservation of capital value and providing steady ‘non-inflation affected’ returns, even during economic downturns. Additionally, agricultural assets serve as a hedge against inflation, as rising food prices enhance investment value. Additionally, KiwiSaver providers have a strategic advantage in the New Zealand market. Without the approval of the Overseas Investment Office (OIO), providers can access a broader range of asset types than their likely competition (foreign institutional investors). By including agriculture in their portfolios, KiwiSaver providers can tap into a sector characterized by inherent stability, resilience to economic fluctuations, and the ability to capitalize on global trends in food consumption and resource scarcity. These factors collectively contribute to a balanced, robust investment strategy supporting long-term growth and risk management.

4.0 Methodology

4.1.1 Interviews and Thematic Analysis

Semi-structured interviews were conducted with a range of investment and primary sector participants. These included representatives of large institutional investors (portfolio managers, analysts), investment/asset managers, industry leaders, and people who are heavily involved in the primary sector in a consulting, governance/advisory, or banking role. A total of 15 individuals were interviewed, as summarized in the table below. To preserve anonymity, each participant is referred to by a generic classification. Collectively, these participants represented tens of billions of dollars of investment funds and have a track record of deploying capital into primary sector assets across hundreds of transactions and a range of sectors. They are known to be leaders in their fields.

The focus of these interviews was to understand from market participants the barriers and opportunities they foresee for increasing institutional, particularly KiwiSaver, involvement in the primary sector. The interviews were guided by key questions (provided in Appendices 1 and 2) to structure the discussions while allowing flexibility to explore ideas in greater detail where appropriate (Gill et al., 2008).

The data collected from these interviews were analysed using thematic analysis, a method for identifying, analysing, and reporting patterns within data (Braun & Clarke, 2006). Interview conversations were transcribed using either an AI-assisted tool (Tactiq) or manually for in-person interviews. The transcriptions were then reviewed in their entirety, with recurring patterns or high-level themes noted verbatim as concise sentences. These phrases provided insights into the interviewees' perspectives on specific topics. This initial review was conducted after each interview to identify emerging themes and assess whether the questions allowed sufficient flexibility for interviewees to express their opinions.

Following the completion of all interviews, a second review was conducted where similar phrases were grouped together for coding. Coding distilled the phrases into concise words or phrases that encapsulated key themes. While the data were collected from a series of interview questions, the themes outlined in the report emerged organically from the conversations. Following the thematic analysis process, thematic maps were developed to illustrate the high-level themes arising from the interviews (refer to Appendix 4 and 5).

Summary of Interviewees	
Sector Investment	
Investment/asset manager	6
Investor	3
Analyst	1
Sector Professionals	
Banker/financier	2
Governance/advisory	2
Consultant	1
Total	15

4.1.2 Potential bias

Most people interviewed held positions as investment managers. These interviewees, along with many others, expressed a genuine concern for the future of the primary sector if additional capital does not become available. These managers may have an inherent incentive to attract capital to the sector (as it enables greater capital-raising and fee-earning potential for their businesses). While this

may be the case, the tone and how the questions were answered gave the interviewer confidence they were being genuine in their responses and their concern for the lack of available capital in the sector. Several interviewees acknowledged past negative press and setbacks related to failed agricultural investments, noting that the sector can be challenging to navigate successfully. The shared concerns among interviewees highlight a collective desire to channel capital into the primary sector to support its growth and development. This alignment underscores the commitment within the investment community to contribute positively to the future of the sector.

4.2.1 Limitations of Research

Given the report length constraints, the findings attempt to highlight the interesting or insightful themes found during the literature review or comments made throughout the semi-structured interviews. While these findings are indicative only given the qualitative sample size, they provided valuable insight into how investors, investment/asset managers, and sector professionals are assessing the current state of investment into Aotearoa's primary sector assets, and what they feel should be done to accelerate growth. Discussions have been refined for the readability of the report, and quotes provided have not been written verbatim. Interviewees were chosen on based on being prominent within the industry and available to interview. The views put forward are not representative of the whole industry.

Private asset owners (other than the investors and investment managers who have direct exposure to the agriculture assets within their portfolios), have not been interviewed, nor have no have KiwiSaver providers themselves. This is a large limitation on the report. Both demand and supply side of the equation need to be involved in this discussion to further a conversation about potential alignment.

5.0 Analysis and Results

This section analyses and discusses the key findings and trends compiled from the semi-structured interview. Thematic analysis of the transaction of the interviews is discussed in the methodology. Using thematic analysis to create the mind map which provides a visual insight into key themes.

5.1.0 Key Themes: Attracting investment in Agriculture

Participants were asked a series relating to the need for additional capital in the sector, the role and alignment of institutional capital with primary sector assets, the opportunities to place this capital within the supply chain, and the sectors that may most benefit from this additional investment. Discussions also covered the availability of debt capital, historic investment outcomes, current investment forms, and observations from overseas markets.

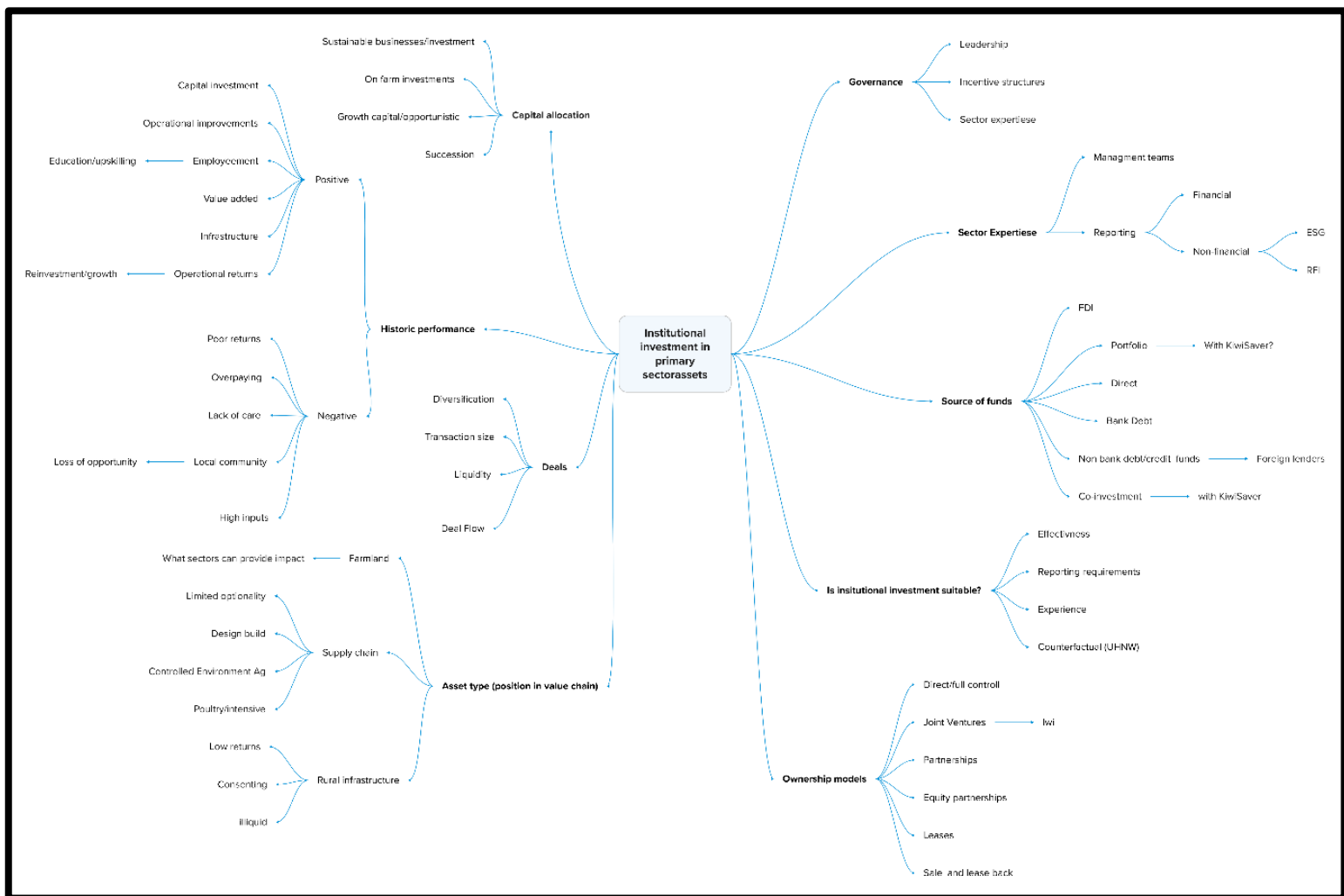


Figure 16. Thematic ‘Mind Map’: Investment in Primary Sector Assets. Provided as full-page Appendix Four

5.1.1 Need for additional capital

13 out of the 15 (86%) of the participants were overwhelmingly positive and supportive of additional involvement of institutional investors in the sector, with many considering it "well overdue". Some participants have been publicly advocating for improved access to this asset class for KiwiSaver providers, as they see it as an extremely pressing issue. It was acknowledged that bank debt remains the most easily accessible and cheapest form of capital for producers, however participants

highlighted the growing challenges in securing credit and the potential shortfall (capital gap) due to lack of profitability and willingness for some producers to invest in their farming system to keep up with regulations. When seeking investment, the managers interviewed tended to forgo KiwiSaver providers as they have successfully secured investment from retail and/or wholesale investors (including high net worth). KiwiSaver providers have a strategic advantage over foreign purchasers as they don't require OIO approval, allowing them to access a larger range of asset types, including fully improved/passive investments. Fully developed assets are cost-intensive and require a skilled management team to create. Returns are also not a certainty, which has prevented some of the managers from participating in the development activity. Investors interviewed showed an interest in providing capital for development activities. However, there didn't appear to be an agreed upon view as to what sectors to target.

5.1.2 Placement of Capital

Interestingly, all three of the participants interviewed representing institutional investors demonstrated a greater appetite for 'riskier' agriculture assets than previously anticipated and expressed a keen interest in providing capital for land use changes (for example, greenfield development) and the creation of 'fully' developed assets. The strategy would be to divest these assets upon completion to achieve a return rate in a short period of time (<5 years). This view was also shared by four of the investment managers who had clients who had an interest in being active owners of agriculture assets through the development phase, over and above being passive holders of agriculture assets where they may earn 'single digit' returns. As asset classes within a portfolio are effectively competing for funds within a portfolio allocation, the asset class needs to provide compelling returns or complement the total fund's performance to attract funds or increase the allocation. This is why these investors are interested in development opportunities as opposed to long-term passive holds.

There was hesitancy regarding the depth of the market for 'fully' developed assets as the OIO regime currently excludes foreign purchasers from being able to buy these assets (need to add additional and measurable benefit to New Zealand). The sectors that offered the most promise to these investors were large-scale dairy aggregations and forestry and horticulture development (including kiwifruit, pipfruit, hops, and cherries). Downstream businesses and private equity investments were also of interest.

5.1.3 Management Expertise

The importance of well-supported, credible, and capable managers was a recurring theme in the interviews as noted by twelve of the interviewees. As previously discussed, ownership and operation of primary sector assets require an active investment strategy. Deploying capital and/or acquiring developed assets was considered the "low-hanging fruit," and it was noted the real challenge lies in finding and cultivating the right management teams to drive operational excellence and generate above-market cash returns. Specialist teams are essential to the operation of agribusiness. Participants felt that investments from KiwiSaver providers' would be well received in the marketplace as long as they were paired with the 'right assets and management teams'.

5.1.4 Incentive Structures

Participants had differing views on whether past poor results for investors was due to misalignments in incentive structures, however, failed investments feed into the negative perceptions of the instability of the sector. Ensuring that all stakeholders are incentivized to maintain and enhance the value of assets over the long term is essential for the sector's sustained success and ability to attract more capital. Ultimately, this comes down to the reputations and professionalism of the

managers involved and/or the reliance on thorough third-party due diligence during the investment cycle.

5.2.0 Key Themes: Barriers to KiwiSaver investment

Participants were asked to expand upon any conversations they have had with KiwiSaver and other domestic institutional investors in the past including what challenges or barriers arose. Some participants either hadn't engaged with either of these types for several years or hadn't at all. The feedback from these conversations was mixed. Interest in the sector from KiwiSaver providers was noted as being very limited. Managers tended instead focus on funds from private sources such as high net worth investments which they were more familiar with. Some progress has been made through initiatives like Booster's PLP vehicle and Tahi fund, which were reflected on as being a good start. Overall, providers' interest was noted as tepid, and that it wasn't a source of capital any of the interviewees put much time or effort towards developing.

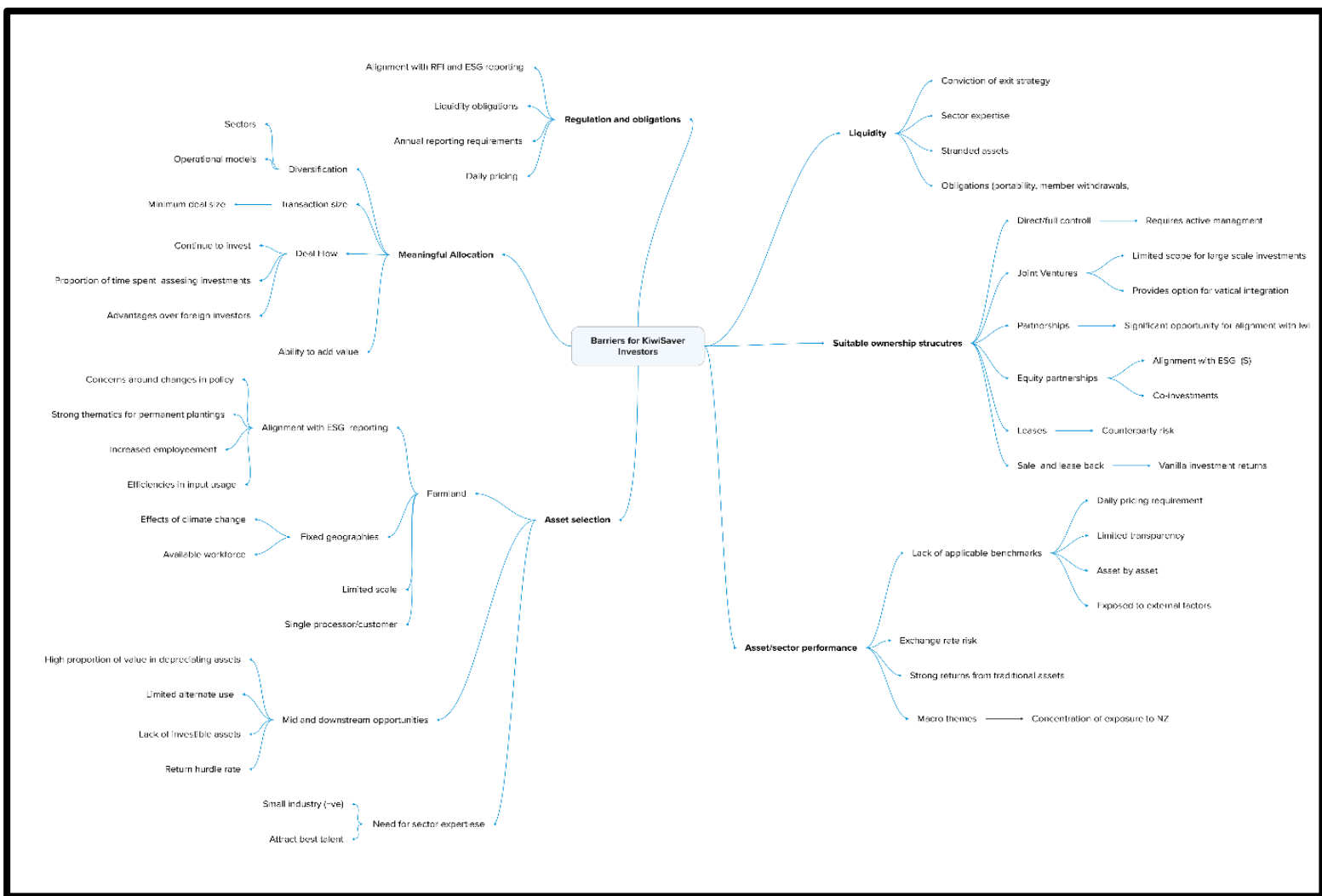


Figure 17. Thematic 'Mind Map': Barriers for KiwiSaver Investors. Provided as full-page Appendix Five

5.2.1 Liquidity Obligations

The main barrier identified during the interviewees is the lack of liquidity obligation of KiwiSaver providers. The inability to meet these almost entirely limits providers' capacity and willingness to

invest. Liquidity risk arrangements are being explored and may be applicable to investment in the sector. As a result, more liquid asset classes receive the lion's share of asset allocation from providers. Initiatives such as Syndex, which allows unit holders of syndicated assets to sell and trade on the secondary market, offer a potential liquidity mechanism for KiwiSaver investments. However, the initial barrier of knowledge and understanding in the sector must be overcome to employ such mechanisms effectively.

5.2.3 Market Liquidity

A willingness to take on more risk, such as greenfield development in the horticulture sector, by the investors interviewed was an interesting and unexpected insight. A develop and sell strategy may generate short term returns for the fund, which were attractive compared to longer more stable returns. Hesitancy in this strategy related to the depth of the market when the asset(s) would be sold. Under Aotearoa's current Overseas Investment Office (OIO) regime, foreign investors must demonstrate additional benefits to New Zealand to acquire a property under the "Benefits to New Zealand Test" (non-urban land >5ha, excluding forestry). This means it is particularly difficult to sell a fully developed asset (such as a kiwifruit orchard or dairy farm) to a foreign owner which limits the pool of capital and liquidity of the asset. Greenfield developments, particularly in the horticulture sector, take several years to become operational with the developer carrying the risk through that period. OIO rules and regulations can change quickly, which as explained during these interviews, leads to hesitancy in employing this strategy.

5.2.4 Competition in a Portfolio

Investments are regularly evaluated for their performance within the portfolio. Capital may be reallocated if other investment opportunities present better potential returns or strategic advantages. Unlike shares and bonds, the value of private investments such as rural and timber assets is determined by independent valuers rather than the marketplace. The valuation process makes it more difficult to quickly balance the portfolio and assess the real-time value of assets. Interviewees noted that it becomes challenging to justify maintaining or increasing allocations to these investments unless they are exceptionally compelling. All three of the investors interviewed and eight of the other interviewees noted that this was a barrier for participation.

5.2.5 Fee incentives

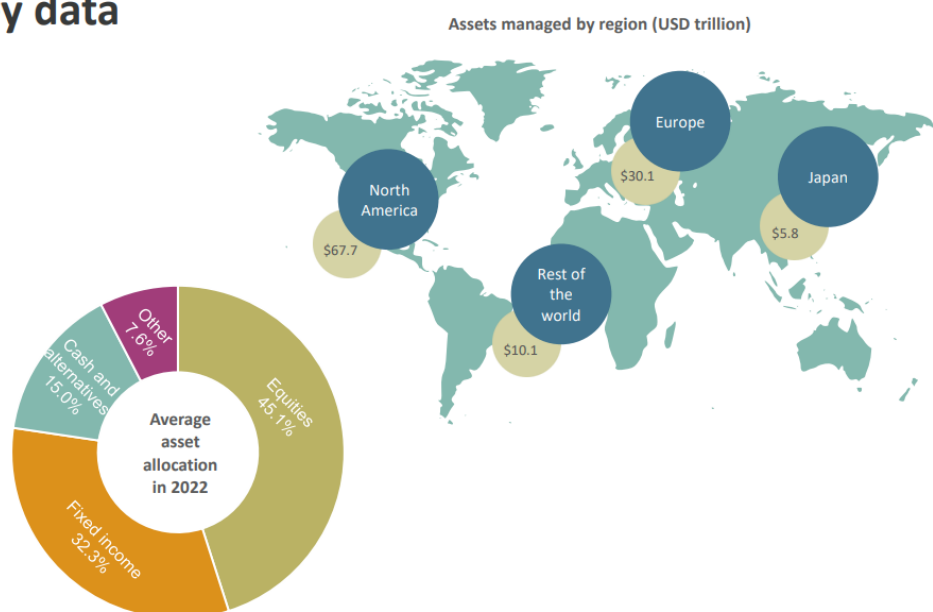
Calculating an appropriate fee basis for an asset class, which can have an unpredictable return profile, poses challenges for managers. While it is accepted by the market that above-market returns should equate to a higher performance fee, KiwiSaver providers may require higher fees to account for the additional effort and resources needed to manage these investments. While these higher fees can be justified by benchmarking against privately managed investment schemes (MIS), they are subject to scrutiny by the Financial Markets Authority (FMA), which monitors fees to ensure they provide Value for Money (VfM) to members. However, the current standards for VfM are unclear, and there is a lack of transparency on how fees for actively managed funds are compared, making it difficult for KiwiSaver providers to justify higher fees. Establishing a clear, transparent benchmarking system for fees related to actively managed funds, including those investing in the primary sector, is crucial to ensure compliance with regulatory requirements and to meet VfM standards, helping investors understand and accept the rationale behind the fee structures.

6.0 Key Findings and Discussion

The findings and discussion section of this report brings together the findings from the literature review and the insights obtained from the semi-structured interviews.

The literature review highlighted the increasing popularity of the food and agriculture asset class internationally. Megatrends affecting the sector, such as rising global food demand and diminishing arable land supply, and suitable and politically stable regions to invest in underpin investor interest in developed markets such as New Zealand.

Key data



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Figure 18: Thinking Ahead Institute and Pensions & Investments joint study. *The world's largest 500 asset managers. Assets Managed by Region (USD Trillion). Slide 7.*

International markets like the United States and Australia have documented agricultural return and performance data for assets held by institutional owners. In the US and Australian agriculture sectors, row crops, large cattle grazing, and permanent plantings are prevalent, which may be more easily 'benchmarked' than in New Zealand. In contrast, New Zealand agriculture is weighted towards livestock farming (sheep, beef, and dairy), with varying production and performance metrics. This makes direct comparisons challenging. There is a need for better, more nuanced data to be supplied to the market place to help inform opinions on the attractiveness of any one industry or asset.

Indices such as the NCREIF and ANREV Farmland Index provide valuable insights into the performance of agriculture assets in the US and Australia, despite their relatively small sample sizes. These indices highlight the potential returns and stability of agricultural investments. Similar data may be able to be sourced from large family, corporate, and foreign-owned agribusinesses in New Zealand to provide a benchmark for large local investments.

As noted during the interviews, primary sector managers have been frequently successful in raising funds from retail and wholesale investors. While new capital is welcome, there is a limited

opportunity set (\$100m+ opportunities) available. Due to the size of KiwiSaver balances and the preference for 'known assets' such as equities, opportunities in the primary sector need to be highly compelling to warrant further investigation. Managers also noted the relative ease of dealing with private investors and have therefore not incorporated out investment from KiwiSaver or other institutional sources.

The investors and managers interviewed recognised the potential for using KiwiSaver investment to develop larger-scale or integrated agricultural assets. This aligns well with the need to investors to deploy substantial capital, as managing these investments may justify the internal resources and oversight required. Opportunities involving \$50 million or more could attract direct investment from institutional investors. However, the ambition to chase these deals would increase should they be given more confidence in the market's liquidity if they ever needed to sell.

Learning from the Australian market and the increasing involvement of superannuation funds in their successful agricultural investments could provide a compelling model. Strategic planning, robust investment opportunities, and clear communication of the benefits are crucial to overcoming the limited track record and paving the way for increased institutional investment in New Zealand's primary sector.

Unfortunately, no KiwiSaver providers were interviewed for this report. However, commentary from online sources provides insights into the barriers these investors face when considering private market assets. The "Investing in Private Assets" Joint paper by the Centre for Sustainable Finance outlines how the KiwiSaver regime prioritises savings with higher exposure to overseas assets and limited exposure to private markets.

Recommendations made by CFS throughout the report include increased advertising and messaging about the benefits of investing in private markets, proactively encouraging the establishment of long-term investment funds, creating a market mechanism such as an information repository, and requesting more granular disclosure of information for private market assets. Implementing these suggestions could enhance transparency and KiwiSaver providers' participation in the private market space, benefiting the primary sector. A steady shift in KiwiSaver interests and a more balanced portfolio, like the New Zealand Superannuation Fund (NZSF), could lead to significant allocation to the primary sectors.

7.0 Conclusions

The purpose of this research report was to explore the potential for KiwiSaver investment in New Zealand's primary sectors. Currently, opportunities for such investments appear limited due to restrictions within the KiwiSaver regime and a lack of understanding about the sector's investability.

The research revealed that despite a clear appetite from investors, investment managers, and industry professionals for increased participation by KiwiSaver providers, little is being done to foster and enhance these relationships. There doesn't appear to be a cohesive approach advocating for the primary sector's capital needs and the benefits that flow from large-scale domestic institutional investment. Apart from privately managed funds like MyFarm and Origin Capital, most investments and transactions are made between private individuals (farmer-to-farmer transactions), single-asset investments, or limited foreign investment, with no significant changes expected in the short to medium term. While this is not necessarily a 'bad thing', participants expressed concern that the more traditional sources of investment, including debt, particularly at the individual farmer level, may begin to run thin as older generations seek retirement off the farm and regulations impact what agribusinesses banks are willing to lend against.

Foreign investment regulations, administered by the Overseas Investment Office, were noted as a limiting factor for interest in the sectors. The presence of keen foreign investors in the market provides all market participants with liquidity options, which may increase a farm owner's desire to invest in their farming system and make it more attractive for an incoming investor (foreign and domestic). These investors typically seek larger-scale, efficient, and highly productive assets or those they can develop to generate financial returns.

Opening the ability for KiwiSaver funds to flow to the private markets, including the primary sectors, may see significant benefits for the New Zealand economy. Managers, investors, owners, and service providers involved in the primary sector have an opportunity. Efforts are underway to unlock KiwiSaver funds for use in private markets. Initial private sector investments have included multiple build-to-rent housing opportunities and direct placements to private equity and venture capital firms. As KiwiSaver membership and funds grow, so will the demand for diversified investments.

8.0 Recommendations

Recommendation for KiwiSaver Providers and Investors

1. Develop a specific allocation to agriculture or natural capital
2. Advocate for a more strategic approach to Foreign Direct Investment
3. Be open-minded to smaller transaction sizes and minority shareholdings
4. Engage with sector experts to better understand the benefits of the sector
5. Work with industry to develop a roadmap for agriculture investment and the role KiwiSaver can play in providing investment

Recommendation for Manager and Owners

1. Engage with and seek to educate investors on the benefits of the sector
2. Work with industry to develop a farmland index to benchmark returns
3. Develop plans to become investment-ready
4. Advocate for a more strategic approach to Foreign Direct Investment
5. Align agribusinesses with institutional investors to facilitate successful partnerships

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Note: OpenAI Chat GPT4.0 was used in the planning and preparation of this report (2024). ChatGPT4.0 was used to prompt ideas for interview questions, to direct the author to sources of information, and to provide refinements for headings and titles.

10.0 Appendices

10.1.1 Appendix One: Interview questions for Managers and Sector Professionals

I've chosen to examine the following research question: "What are the key constraining factors currently impacting the amount of capital being allocated to KiwiSaver investors to NZ primary sector assets?"

KiwiSaver and the Primary Sector

1. What are investors' primary concerns or reservations when evaluating primary sector assets?
2. How do investors view, or approach investments based on your experience?
3. What have been the top five challenges in raising funds from KiwiSaver investors?
4. Are there specific strategies that could be employed to attract more investment from KiwiSaver sources?
5. How do you perceive the attractiveness of investments in the primary sector?
 - a. What factors contribute to this perception?

Suitability for Institutional Investment

1. Where would you rank direct primary sector investment on a scale of 1 to 10 in terms of returns, risk and relativity compared to publicly listed agribusinesses?
2. Are there any sub-sectors that suit institutional ownership?
3. How do you foresee the primary sector evolving over the next decade?
4. Based on your observations, what strategies have been most influential in establishing economically sustainable agribusinesses?
 - a. Can you provide an example of an agribusiness that successfully established, scaled and divested? What factors contributed to its success?
5. What role do alternative debt providers play in the primary sector?
 - a. How is this debt typically utilised?

Supplementary

1. What big ideas or game changers could significantly impact New Zealand's primary sector over the next decade?
2. Are there any other questions you believe should have been included in this interview?

10.1.2 Appendix Two: Interview questions for Investors

I've chosen to examine the following research question: "What are the key constraining factors currently impacting the amount of capital being allocated to KiwiSaver investors to NZ primary sector assets?"

Investing in Private markets

1. Do you currently have, or plan to, have an allocation to private markets?
 - b. If not, why not, if so, why so?
2. What criteria do you employ when evaluating private market investments?
3. What challenges do you have when investing in private markets?
4. Are private markets an attractive proposition for your Fund?
5. Do you intend to increase your allocation to private markets
 - a. Why?
6. Are there specific strategies that could encourage greater investment in private markets from your fund?

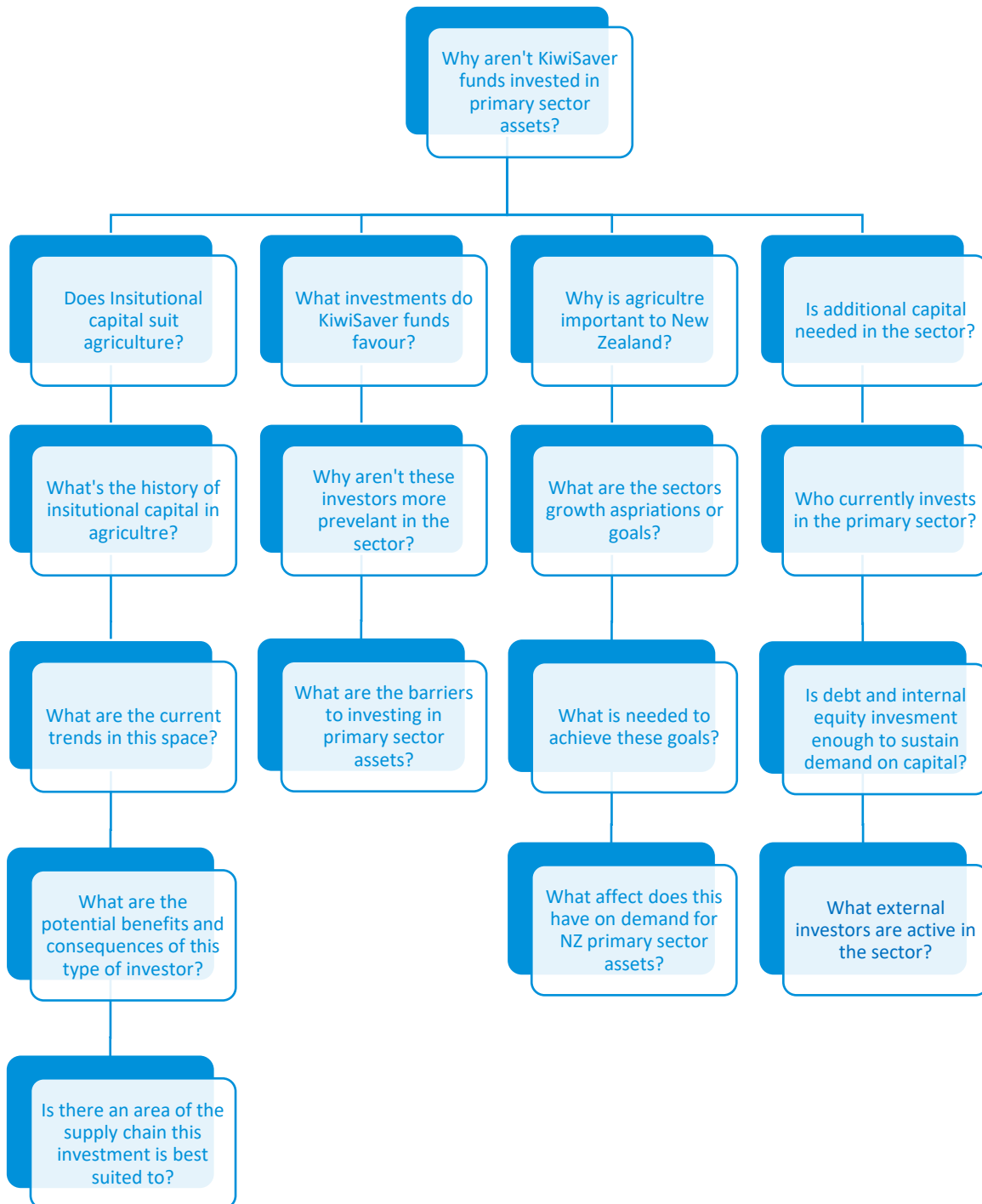
Investment in the Primary Sector

7. Considering risk, returns and relativity, how do you rank investments in the primary sector?
 - b. Why?
8. Do you currently have exposure to listed agribusinesses?
9. Is there any intention to develop (or increase) your exposure to the sector?
10. What are the key risks and opportunities you see within the primary sector?
11. Does ESG, climate reporting or UN alignment to climate initiatives drive any part of your investment thesis?
12. What importance does the primary sector have for New Zealand over the next decade?

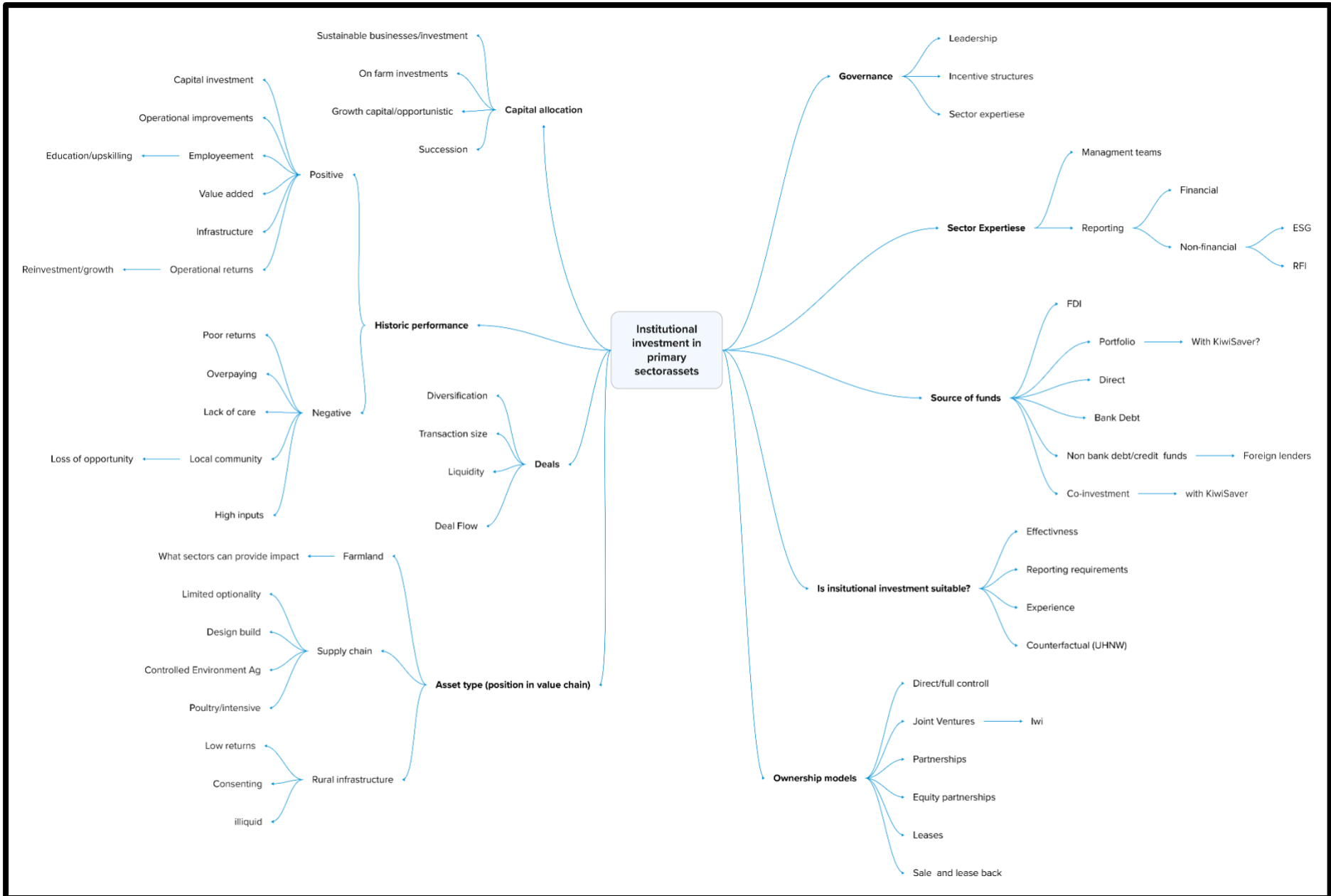
Supplementary

13. What big ideas or game changers could significantly impact New Zealand's primary sector over the next decade?
14. Are there any other questions you believe should have been included in this interview?

10.1.3 Appendix Three: Question Tree



10.1.4 Appendix Four: Mind map of Themes - Attracting Investment



10.1.5 Appendix Five: Mind map of Themes – Barriers for KiwiSaver Investors

