

PEOPLE EXPO

Powering
productive
workplaces

Oamaru, Ashburton, Hawera, Hamilton
March / April 2025

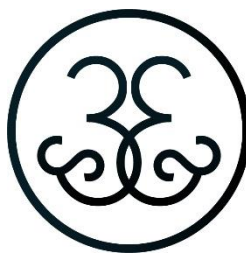
Delivered in partnership with

Dairynz



DAIRY WOMEN'S
NETWORK
success through inspiration

Time	Session	Presenter
10.00 – 10.10	Welcome	Jane Muir and Jules Benton
10.10 – 11.10	The economic context	Shamubeel Eaqub
11.10 – 11.50	The triple edge	Jeremy Duckmanton
11.50 – 12.30	People and productivity	Kim and Will Grayling
12.30 – 1.15	Lunch	
1.15 – 2.05	Agritech and people	James Allen
2.05 – 2.15	Ideas into action	Jane Muir



Economic context

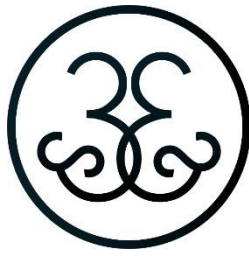
DWN-DairyNZ

Oamaru, Ashburton, Hāwera , Hamilton

March – April 2025

Shamubeel Eaquad, CFA

Shamubeel@eaquad.com



Key points



History has returned



Risks, but economy near bottom



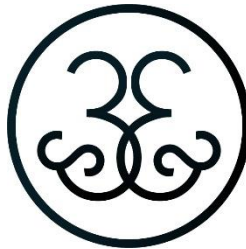
Shaping up to be a good year for dairy



Knowing internal levers of control

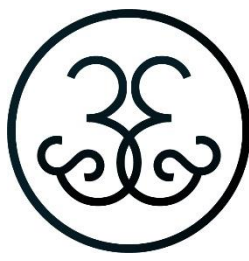


What role will people play?

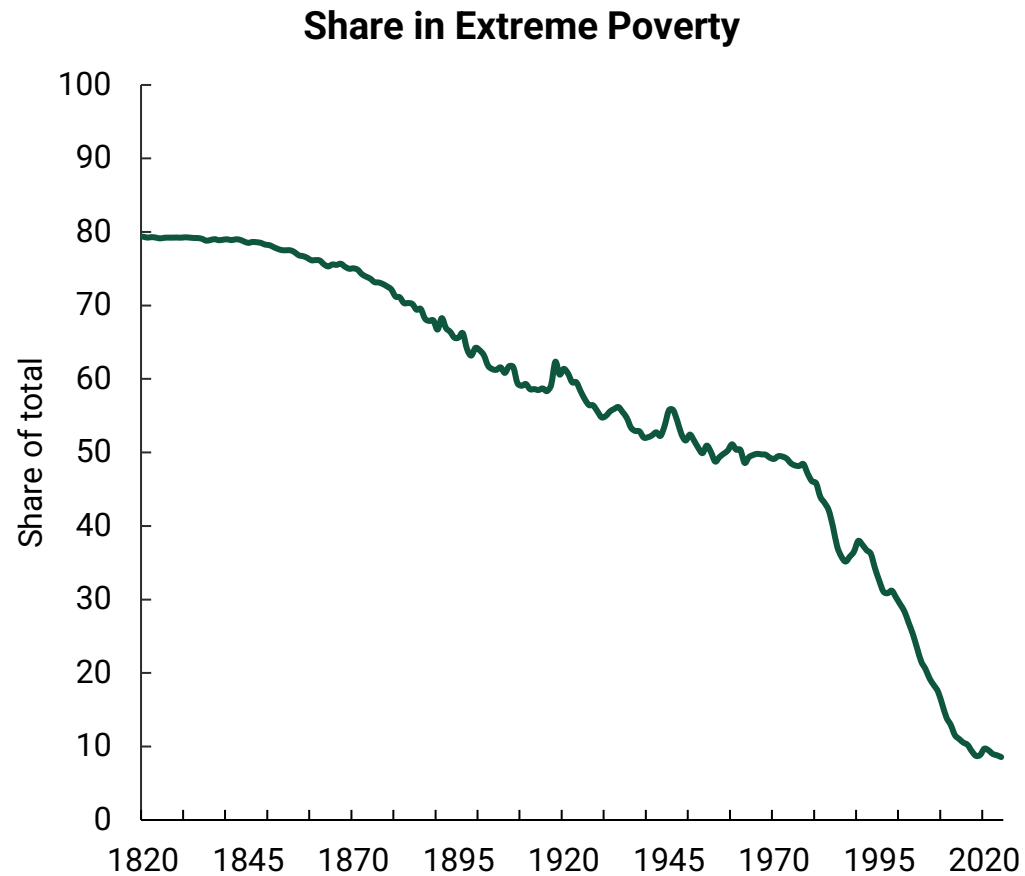


Global context

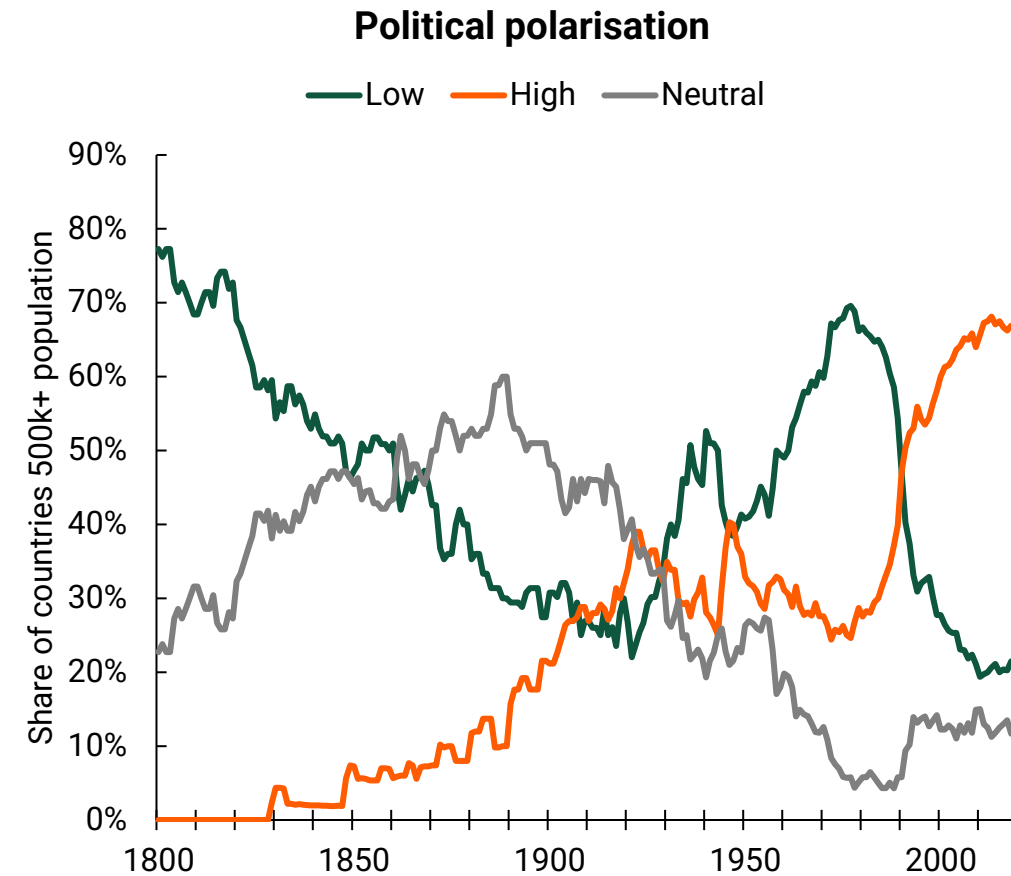
The future is unknown; but we can be prepared



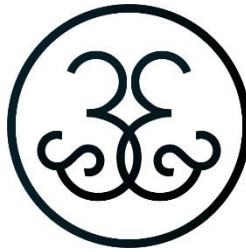
The world is getting better & worse



Source: World Bank, Michalis Moatsos (2021), S Eaqub

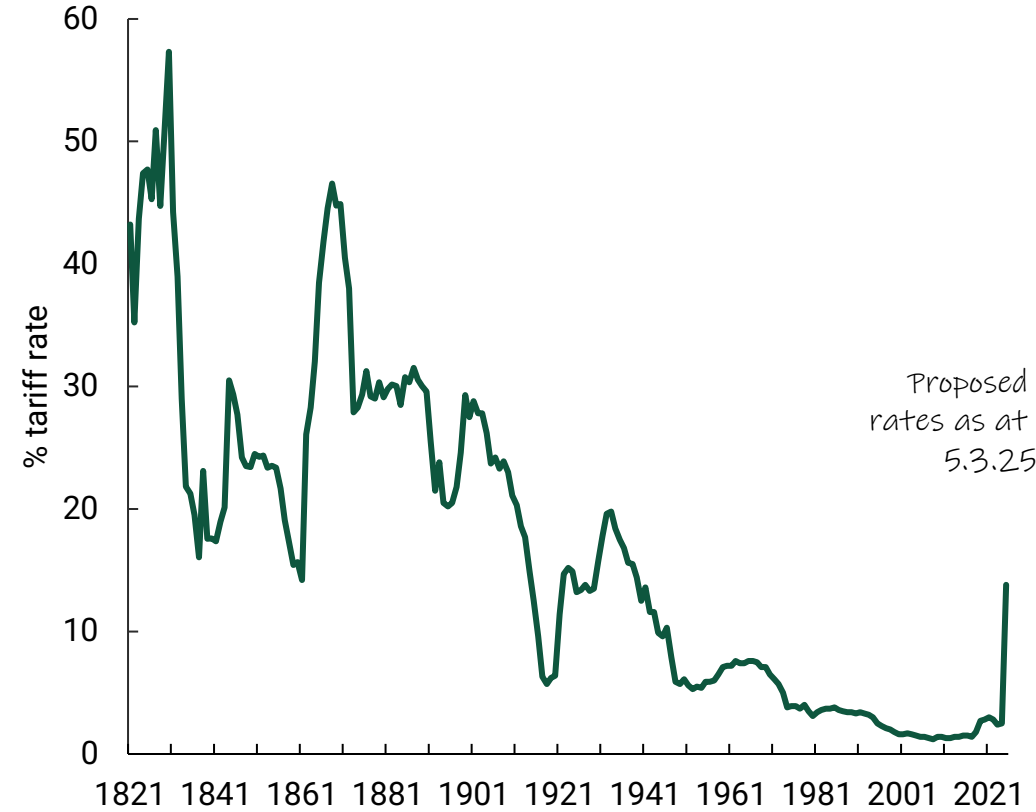


Source: Polity Project, S Eaqub



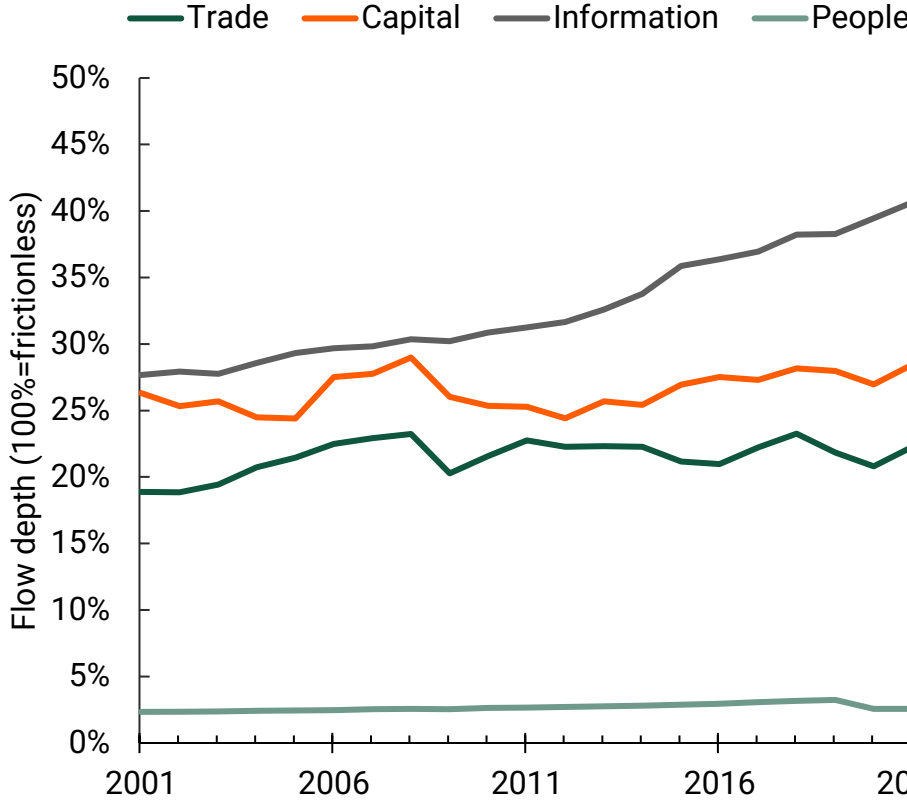
Old tools; watch closely

US Average Tariffs on Imports

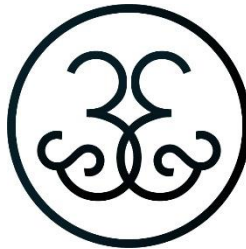


Source: World Bank, Tax Foundation, Simplicity Research Hub

DHL Global Connectedness Index Depth



Source: Altman, Steven A. & Bastian, Caroline R. (November 2024). DHL Global Connectedness Tracker. DHL Group. DOI: 10.58153/w7fak-t4r89, S Eaquib



Big global themes



Geopolitics

More conflict
Fiscal pressures
Protectionism



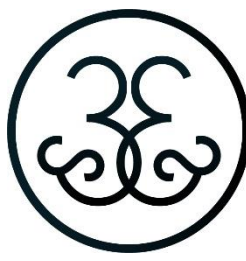
Politics

No centre
Unorthodox policy
Less durable/credible policy
Institutions under attack



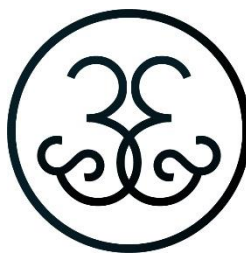
Which will affect

Supply chain
Technology
Transition



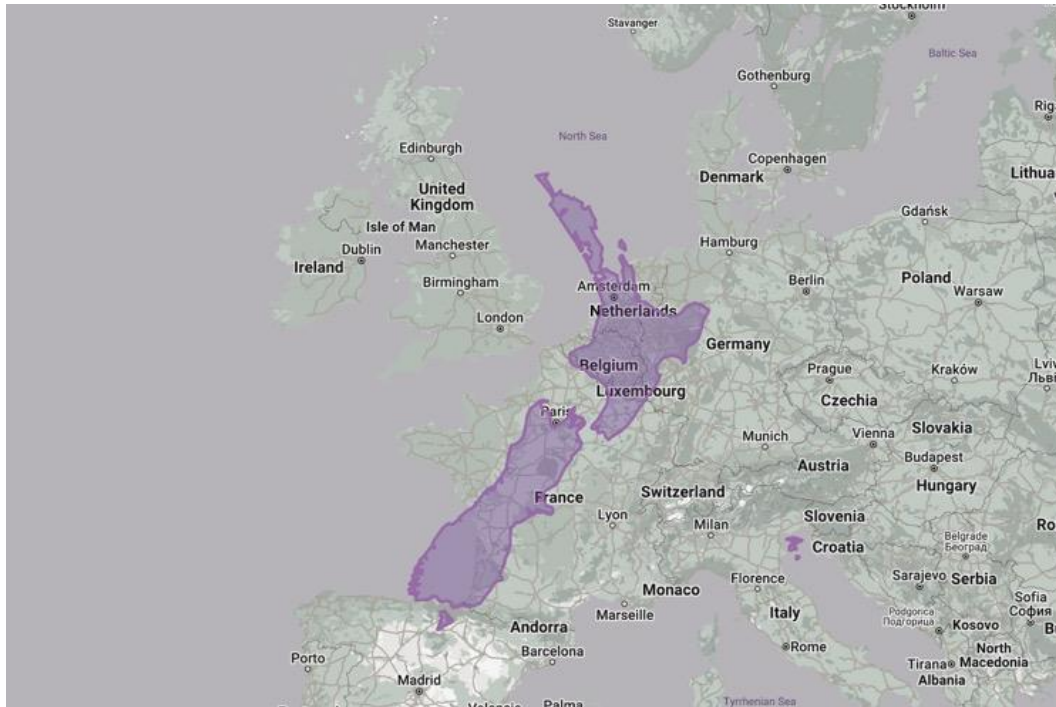
Global connections

We are connected, but remote

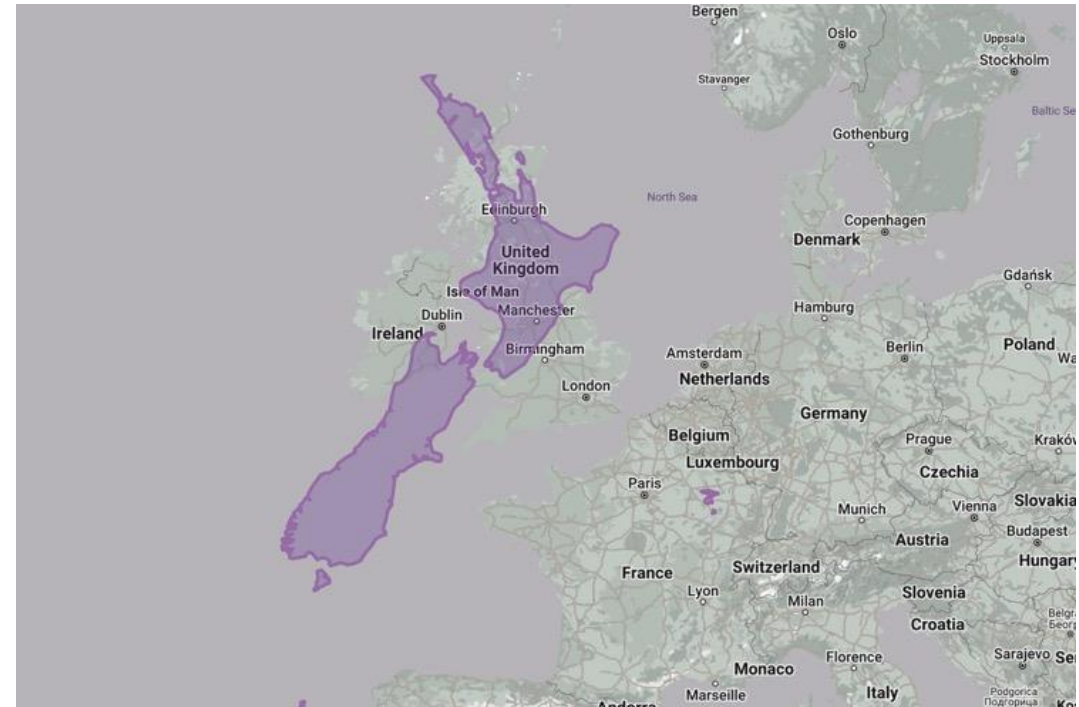


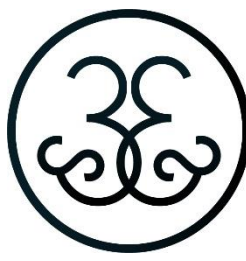
We are a big country...

Overlaid on Western Europe



Overlaid on UK





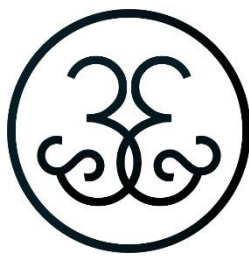
...and far away

2,000kms around Wellington...



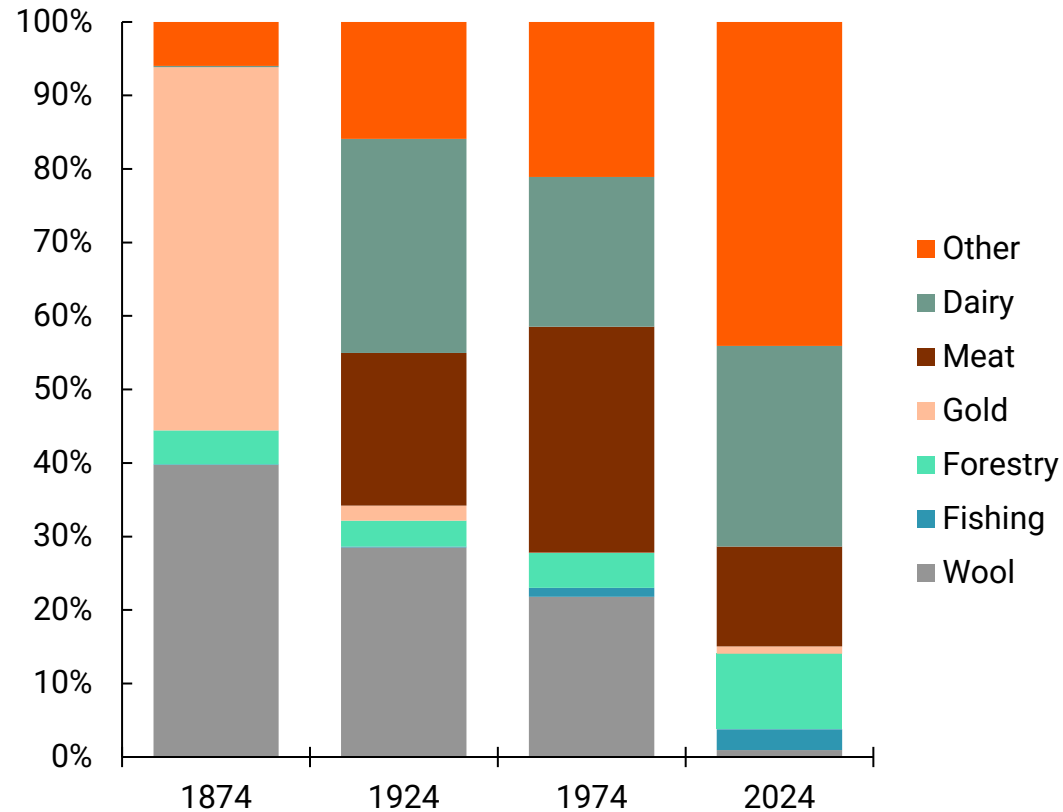
...vs Berlin





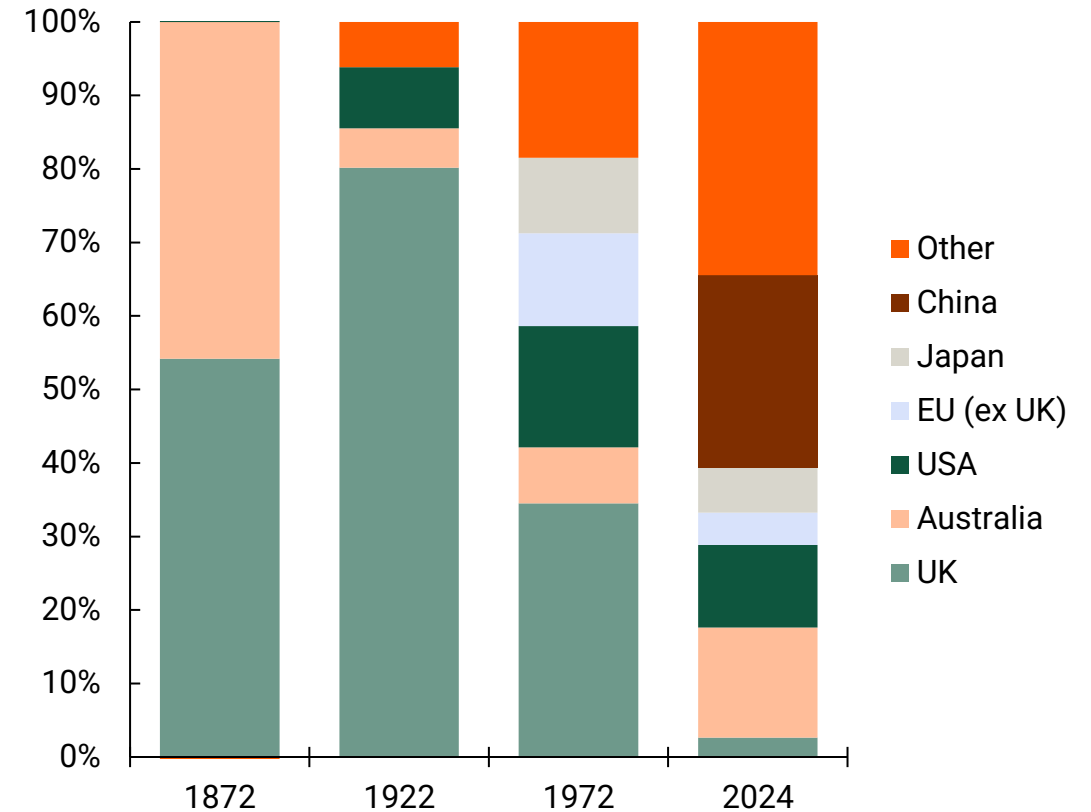
NZ is safer, but still exposed

NZ mix exports: selected commodities

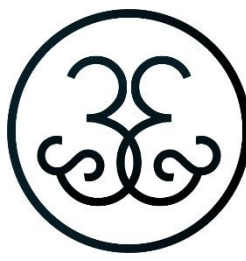


Source: Statistics NZ, S Eaqub

NZ mix of exports: selected countries

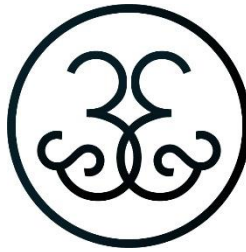


Source: Statistics NZ, S Eaqub

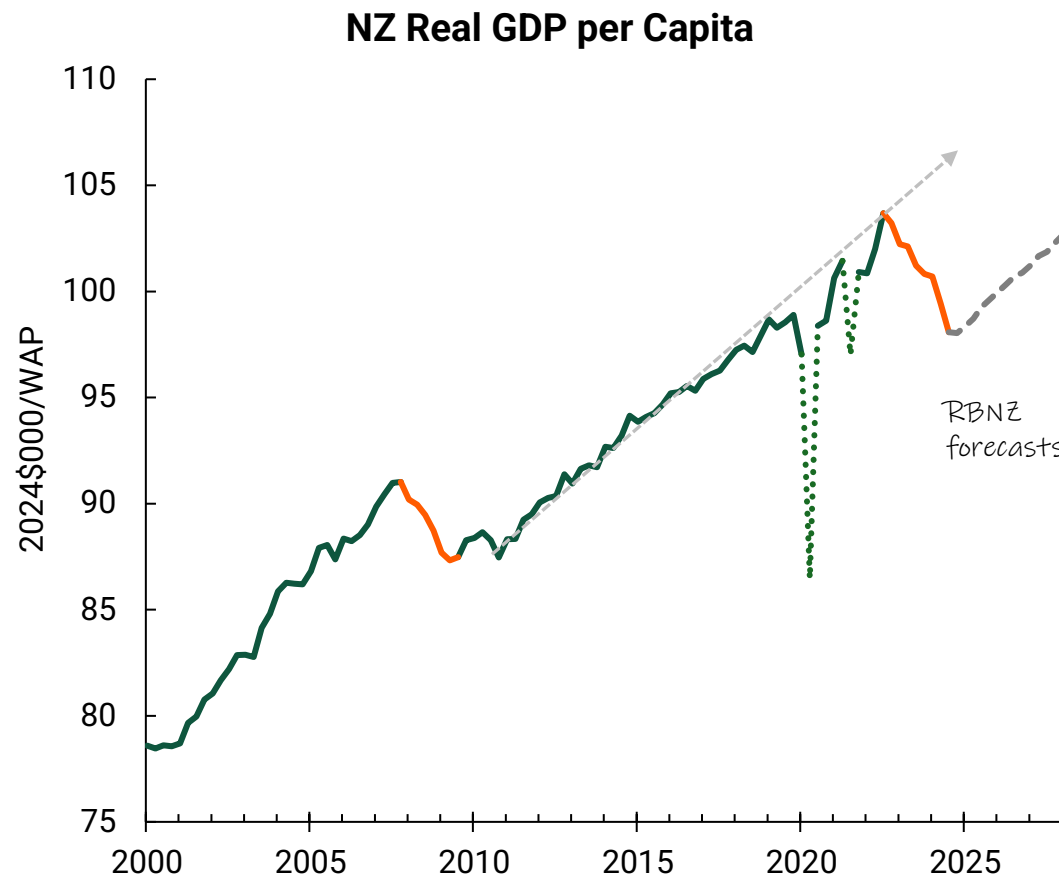


Local context

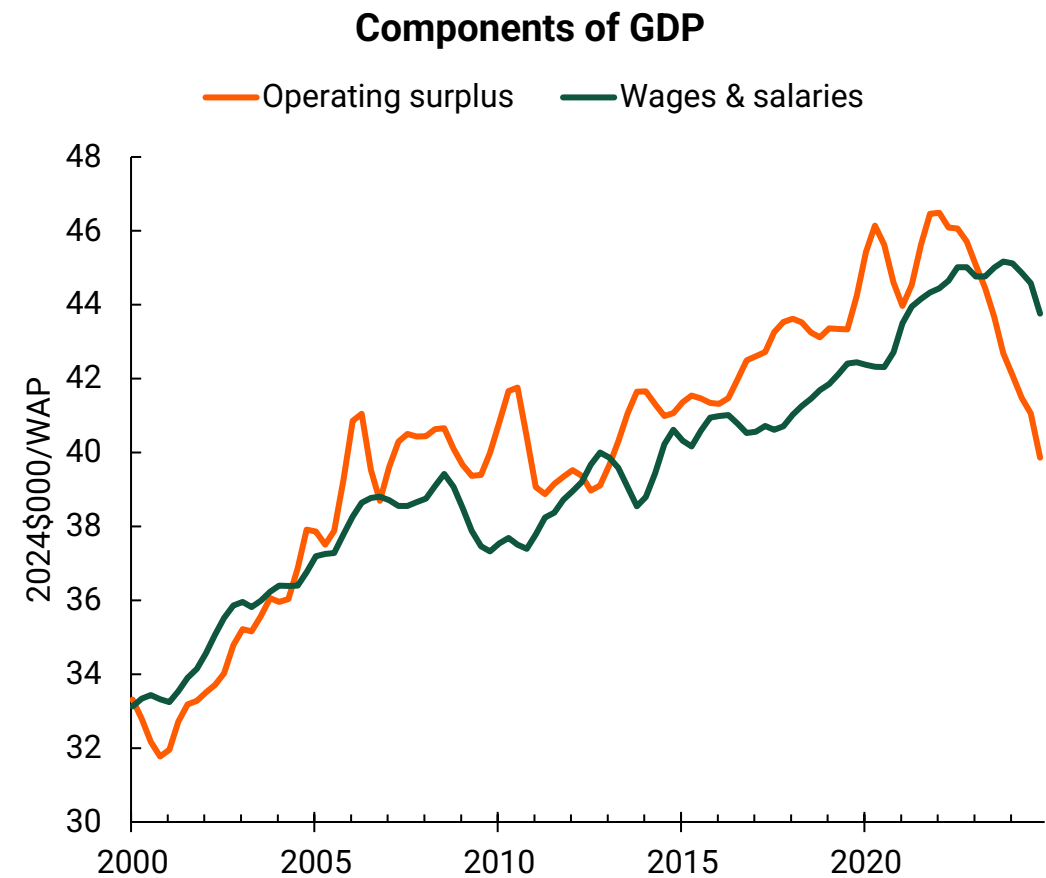
Recession; recovery in prospect



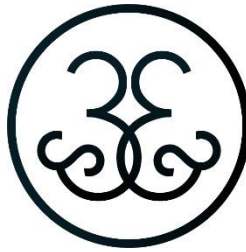
Recession; nearly done



Source: Statistics NZ, S Eaqub

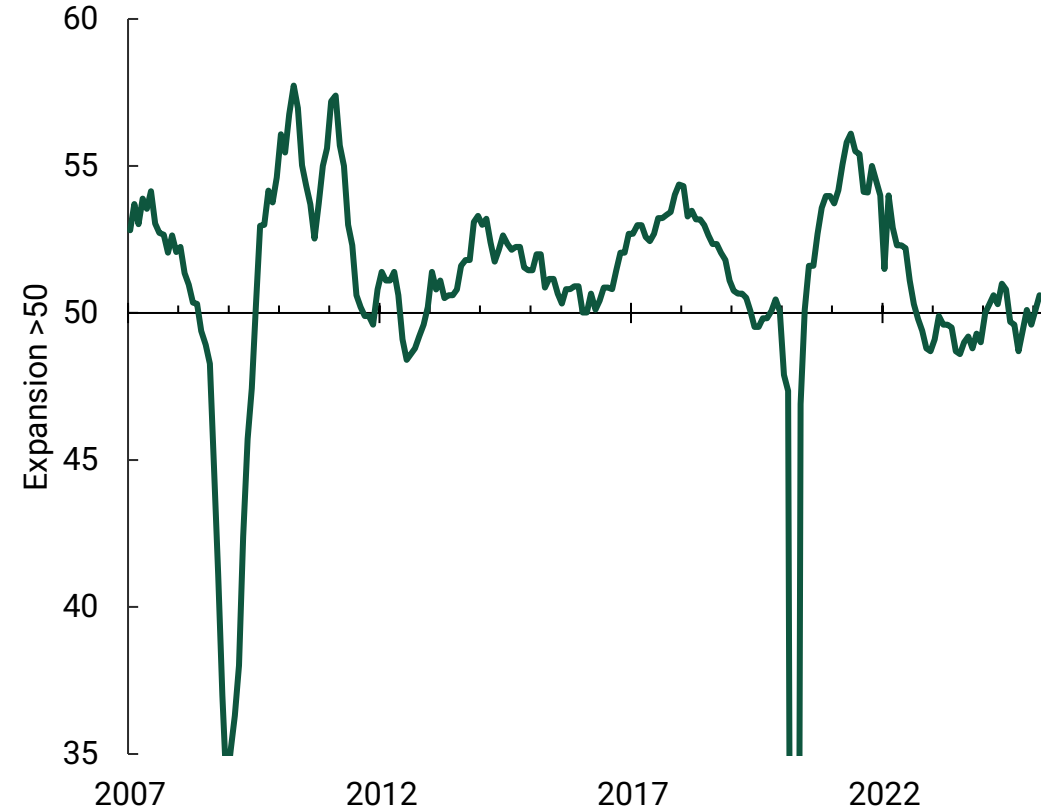


Source: Statistics NZ, S Eaqub



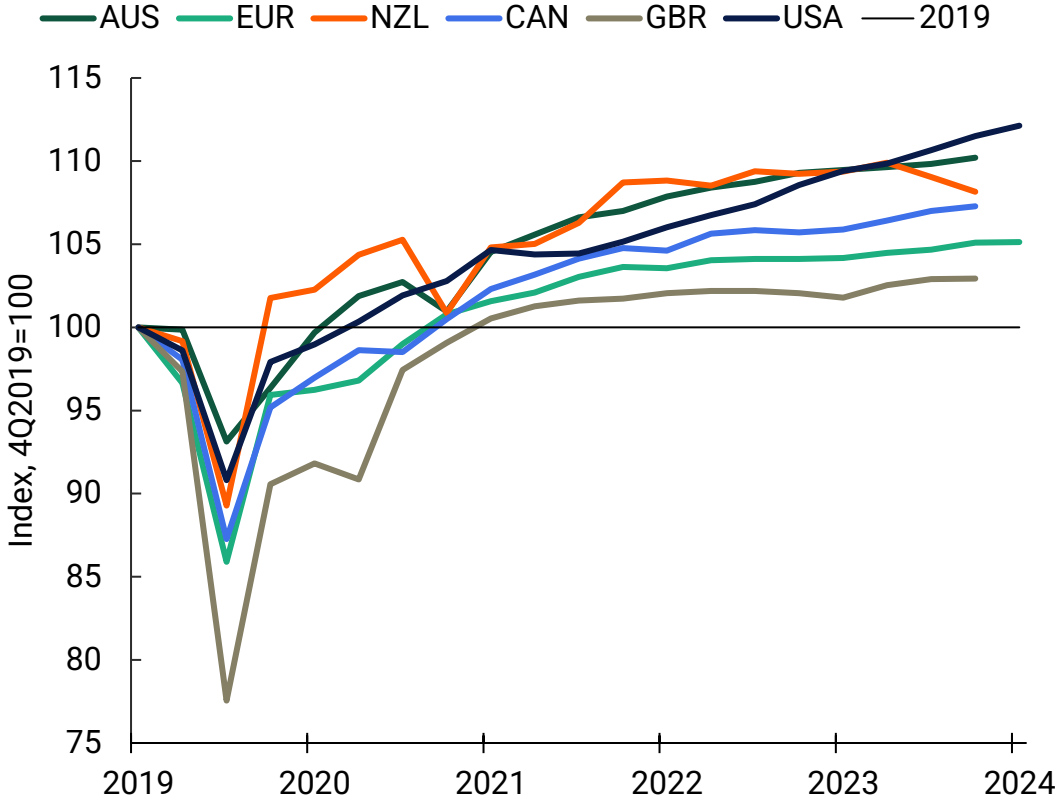
It's global

JP Morgan Global PMI

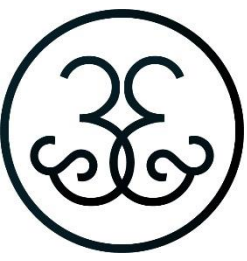


Source: S&P Global, MacroBond, S Eaqub

Real GDP

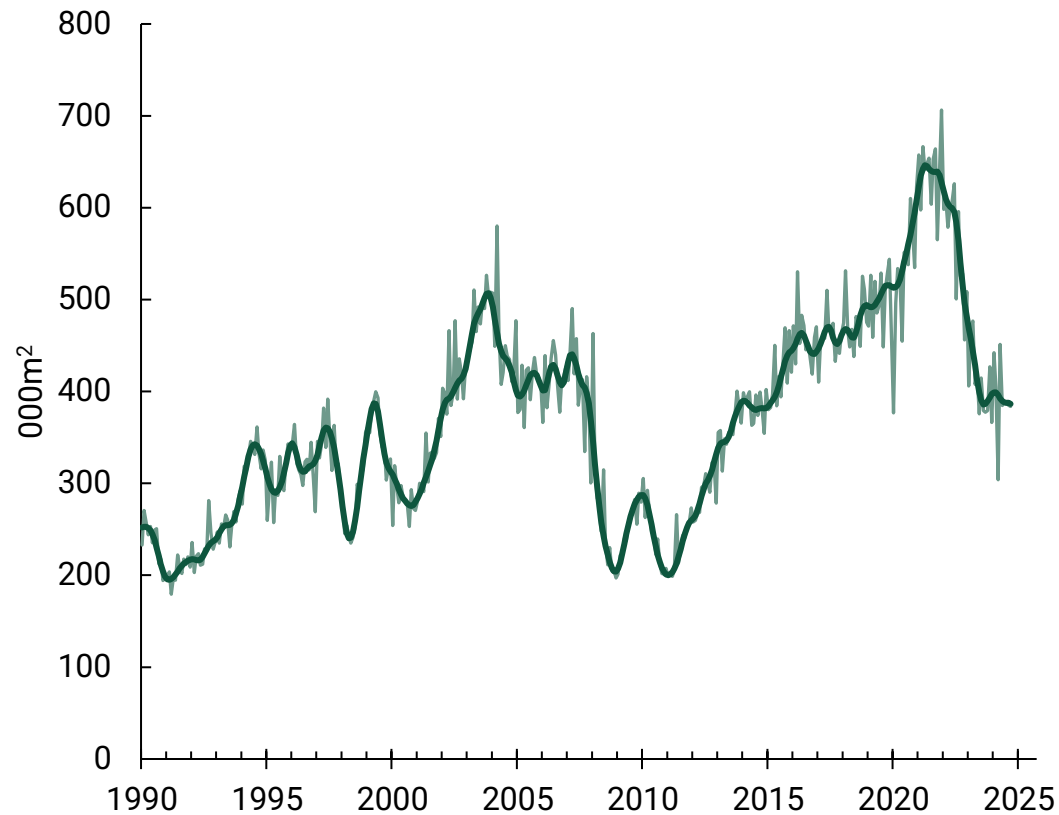


Source: MacroBond, S Eaqub



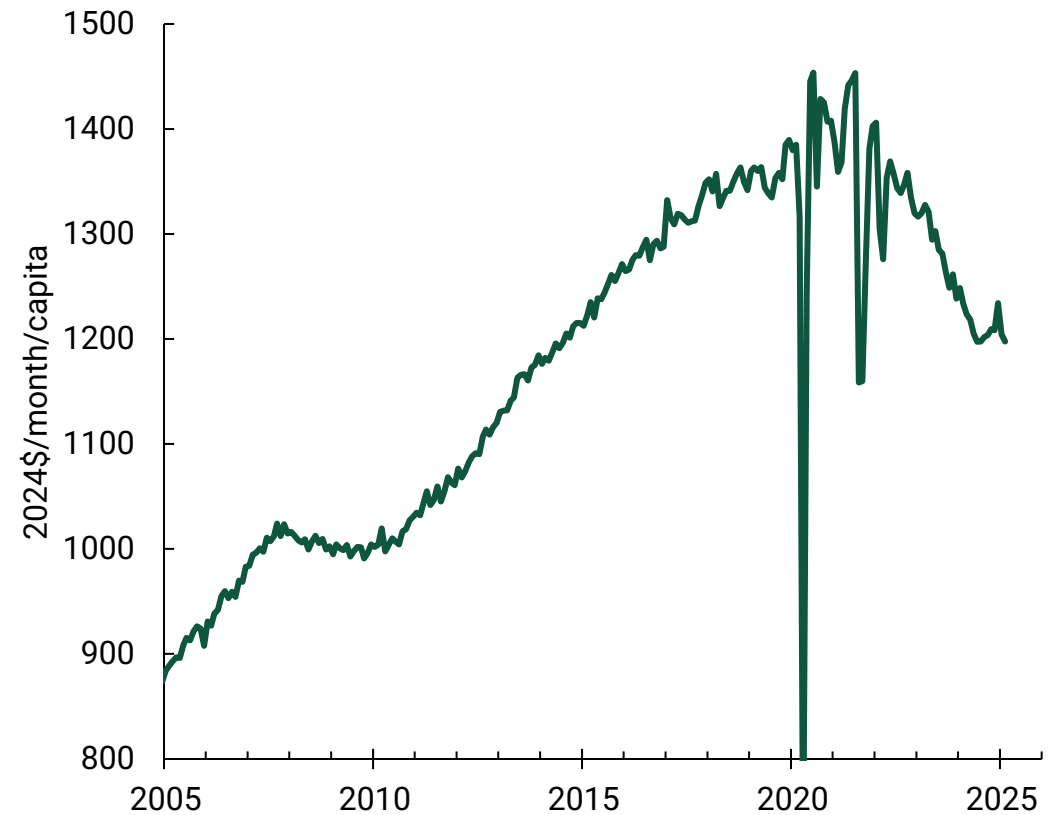
Domestic slump; but stabilising

Residential Consents

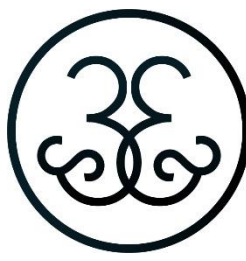


Source: Statistics NZ, S Eaqub

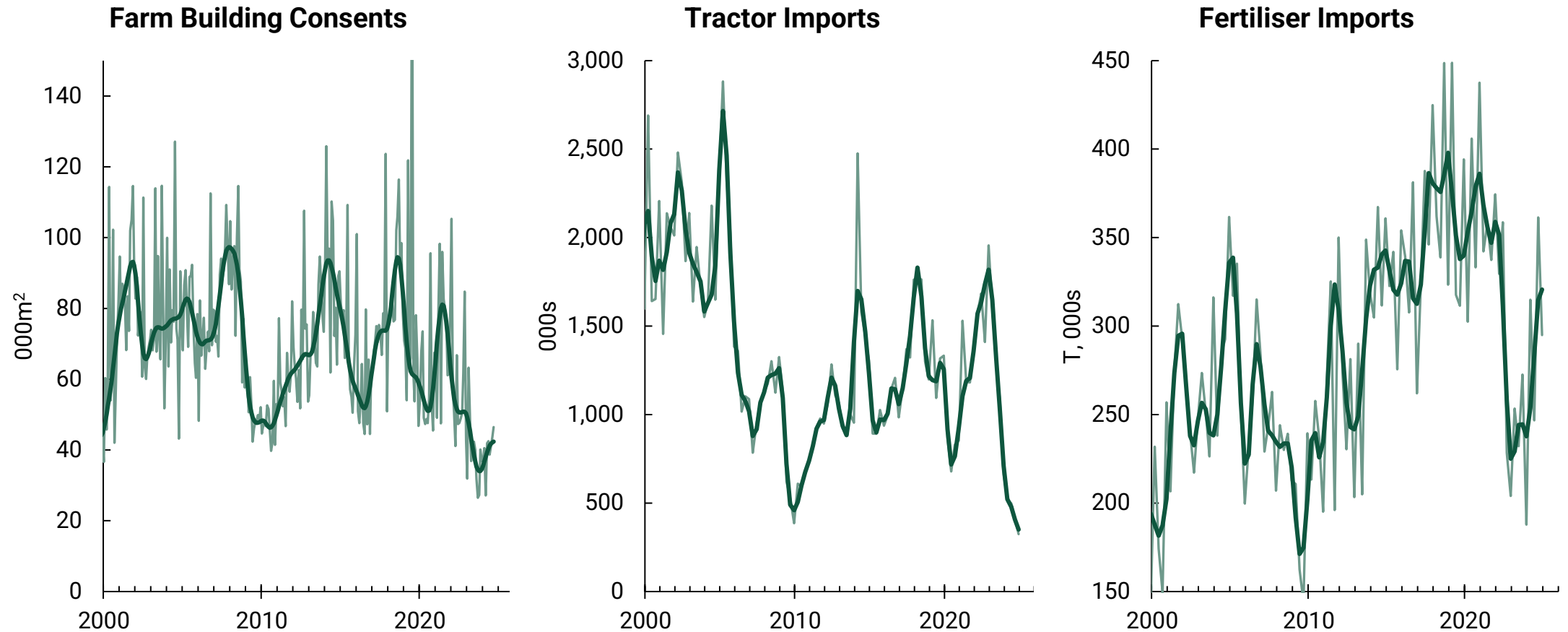
Retail spend on cards



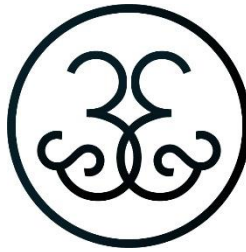
Source: Statistics NZ S Eaqub



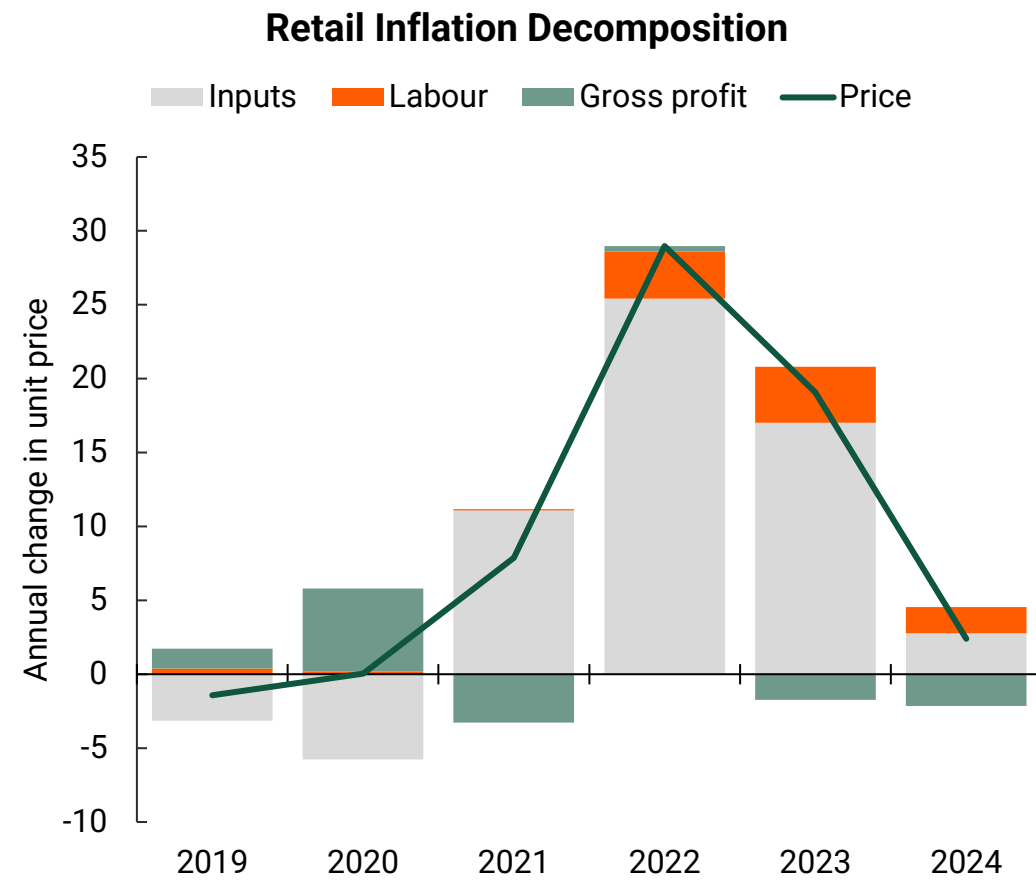
Farming disrupted; recovery signs



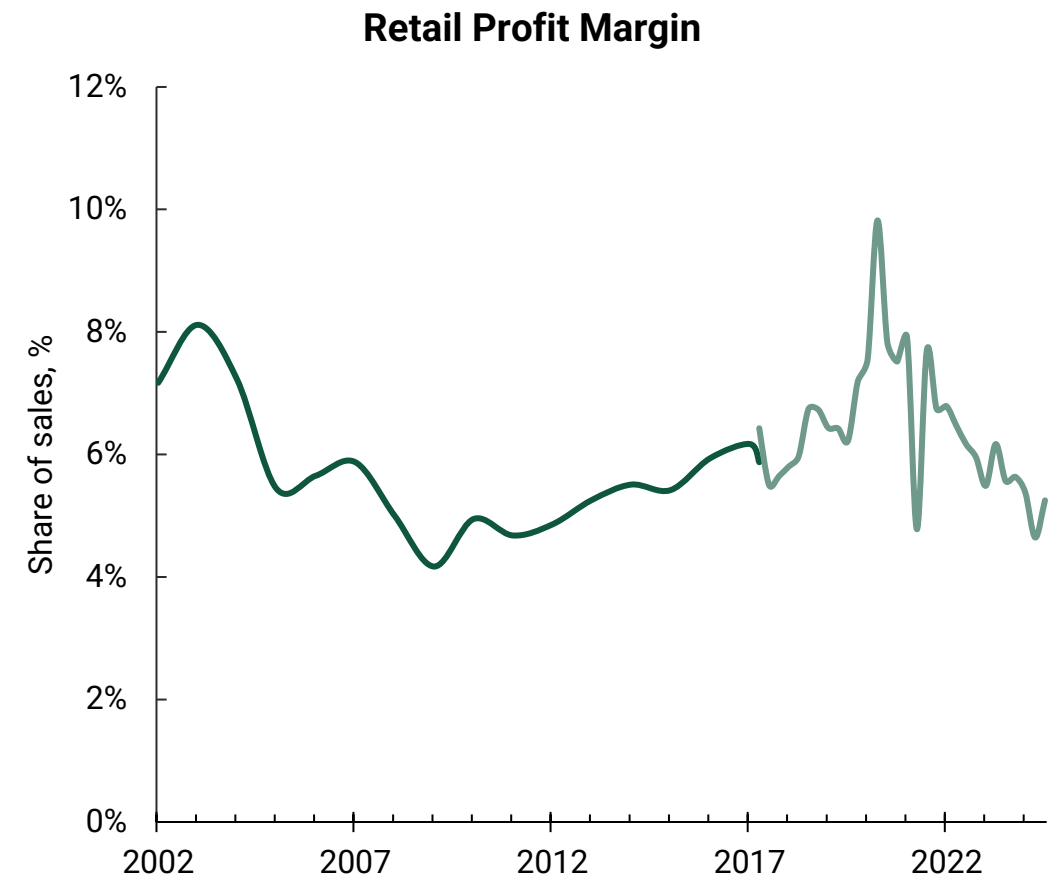
Source: Statistics NZ, S Eaqub



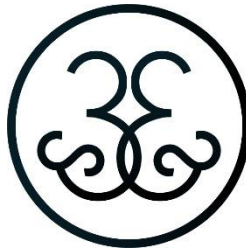
Cost shocks have passed



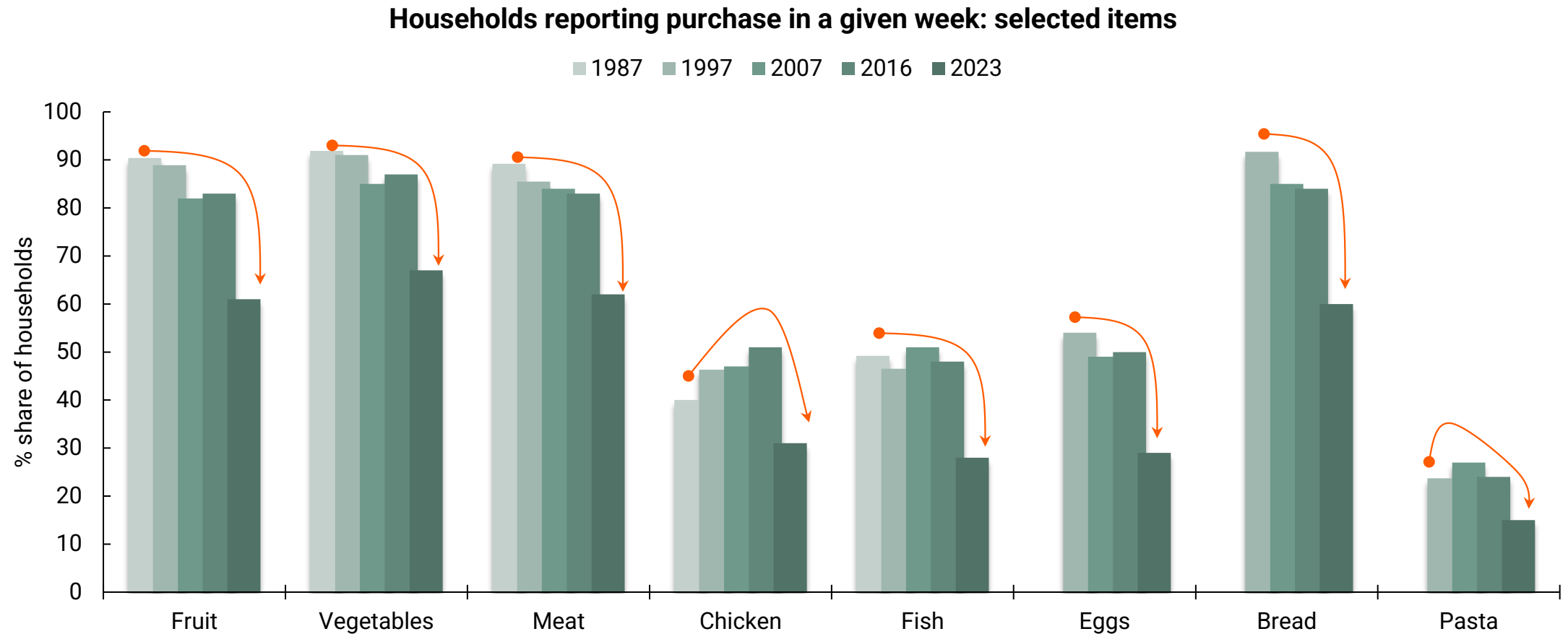
Source: Statistics NZ, S Eaqub



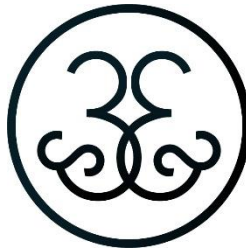
Source: Statistics NZ, S Eaqub



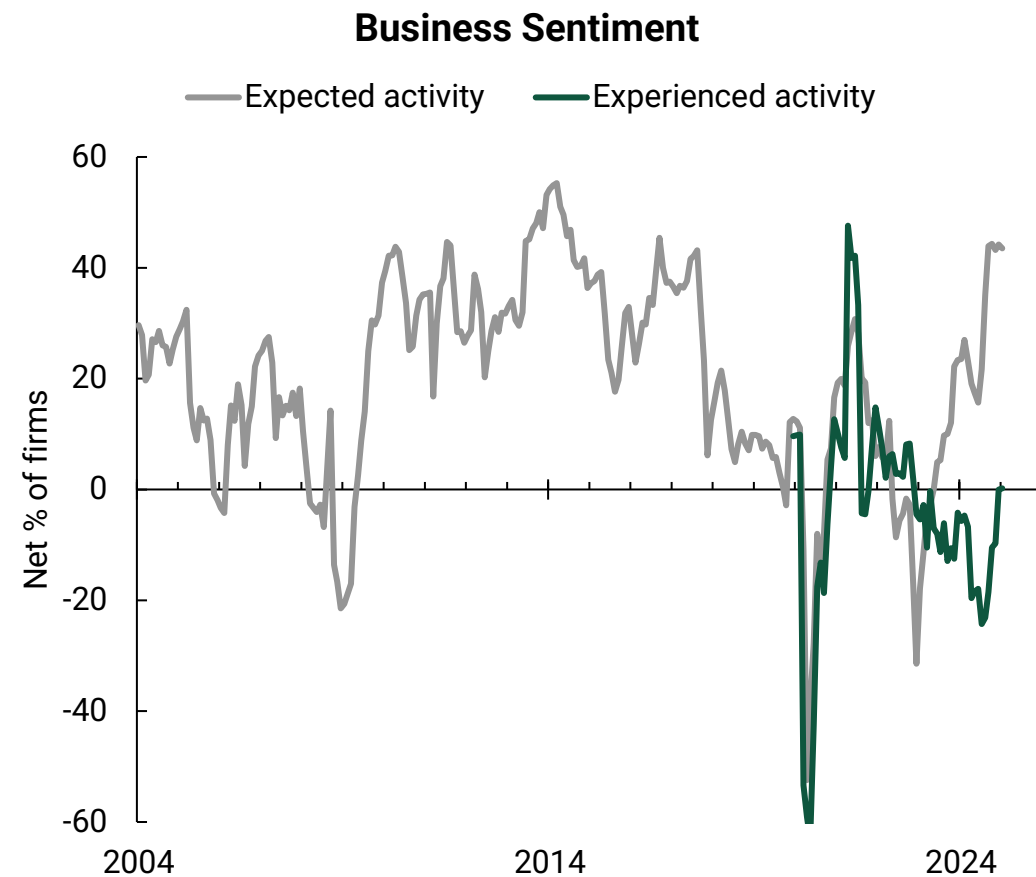
More people doing it tough



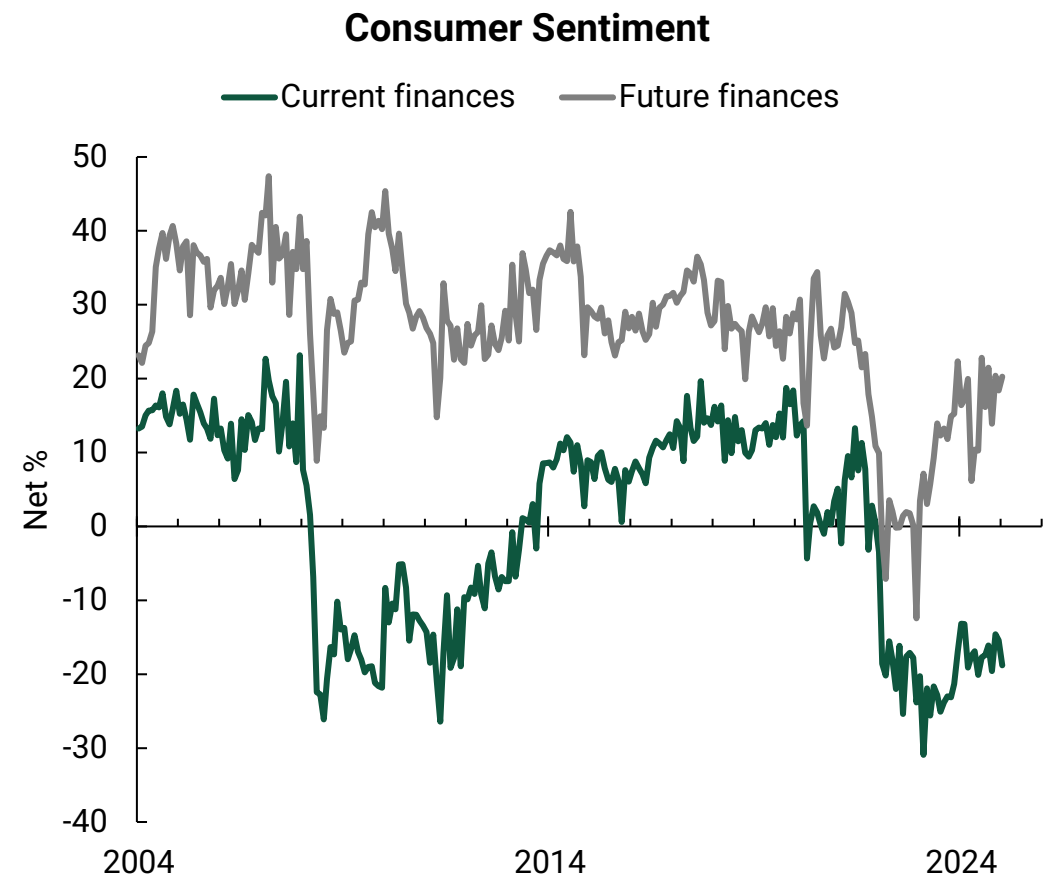
Source: Statistics NZ, S Eaqub



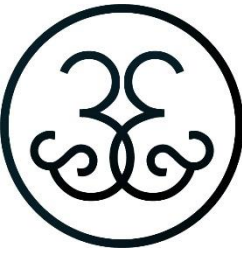
Returning hope



Source: ANZ Bank, S Eaqub

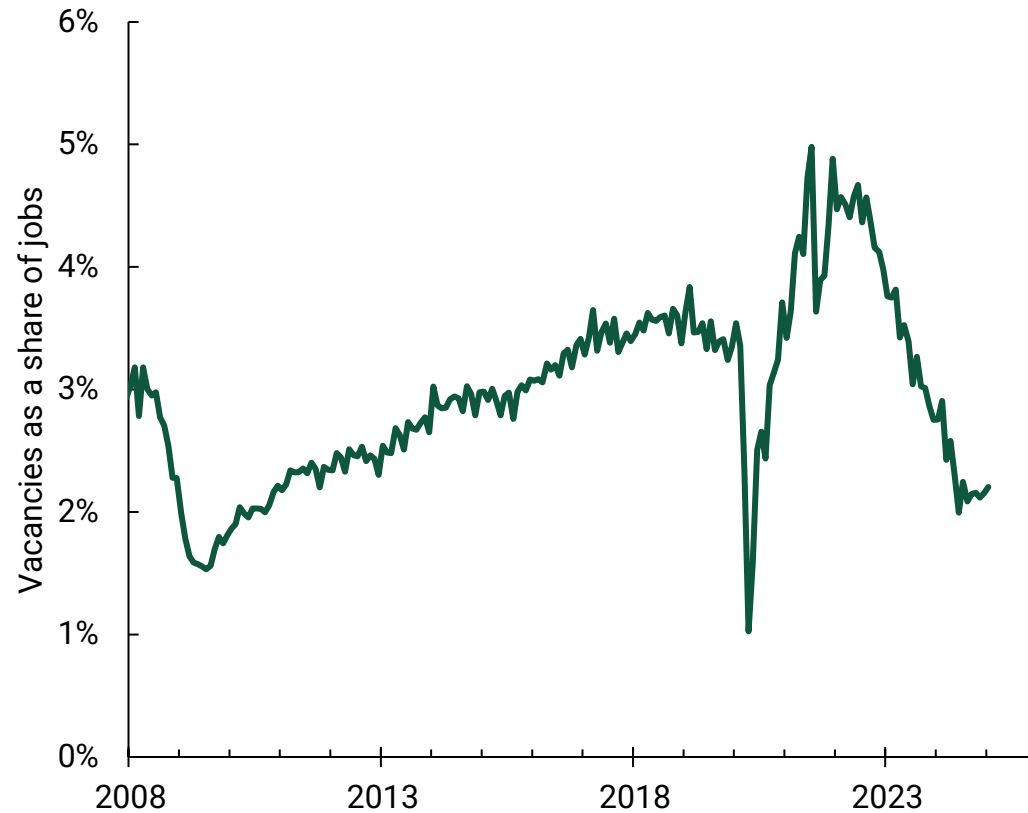


Source: ANZ Bank, S Eaqub



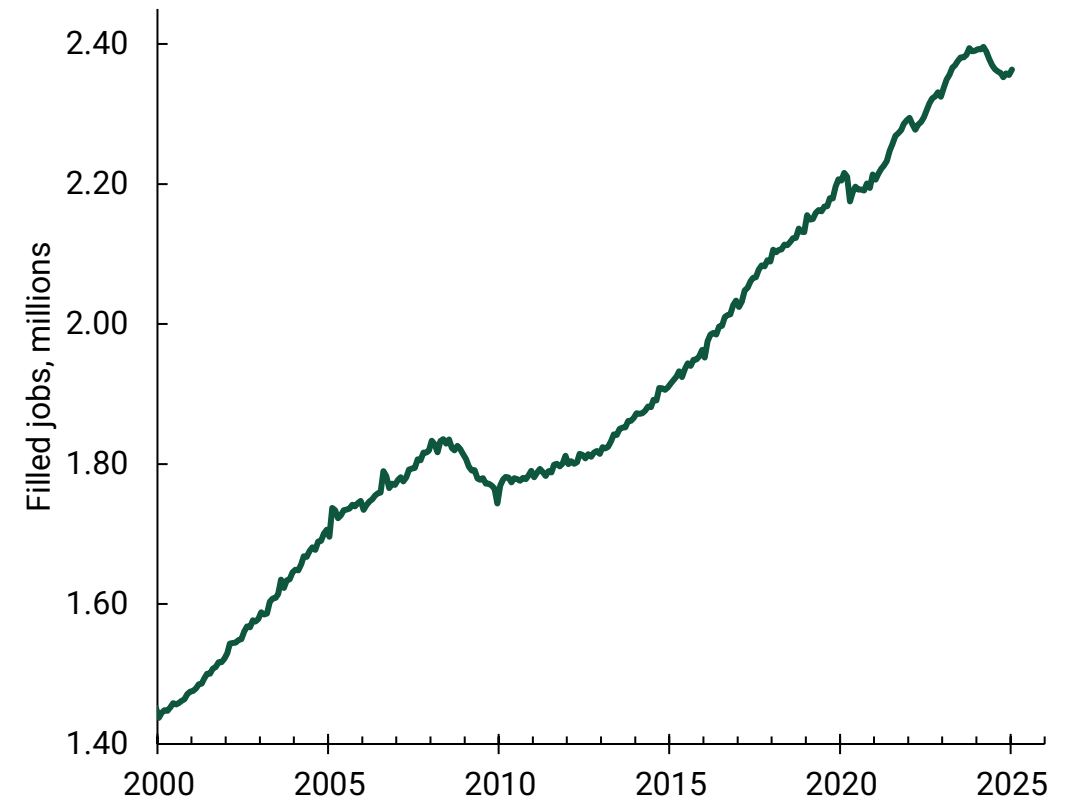
Recovery preconditions

Vacancy rate

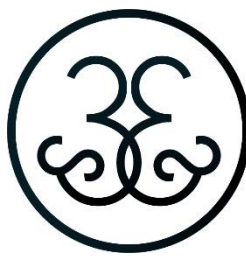


Source: MBIE, Statistics NZ, S Eaqub

Filled jobs

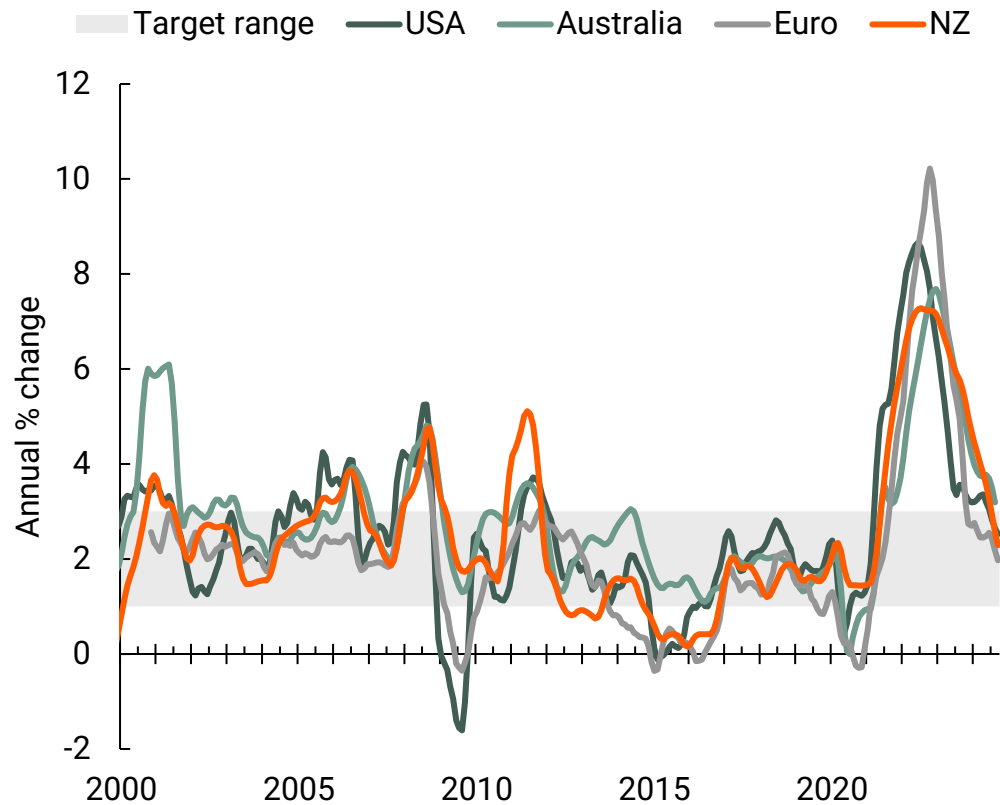


Source: Statistics NZ, S Eaqub



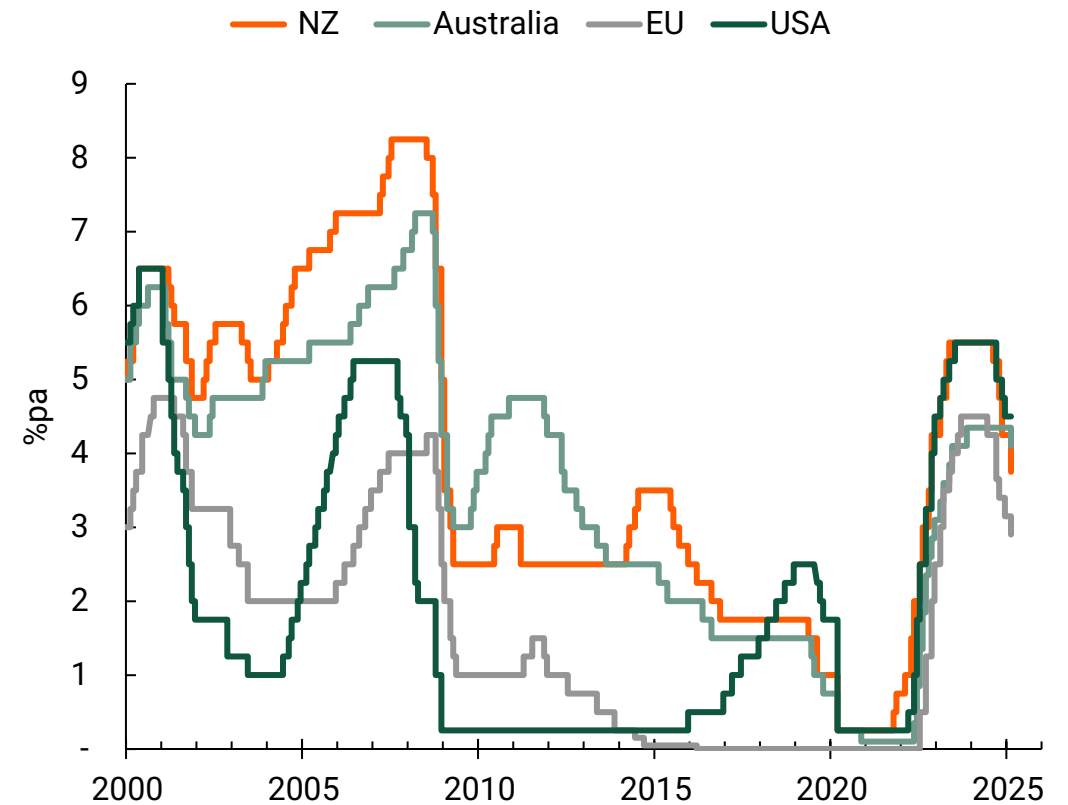
Relief on inflation and rates

CPI Inflation: Selected Countries

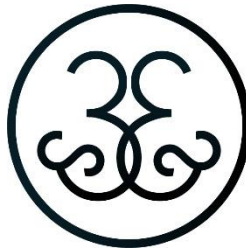


Source: MacroBond, S Eaqub

Central Bank Rates

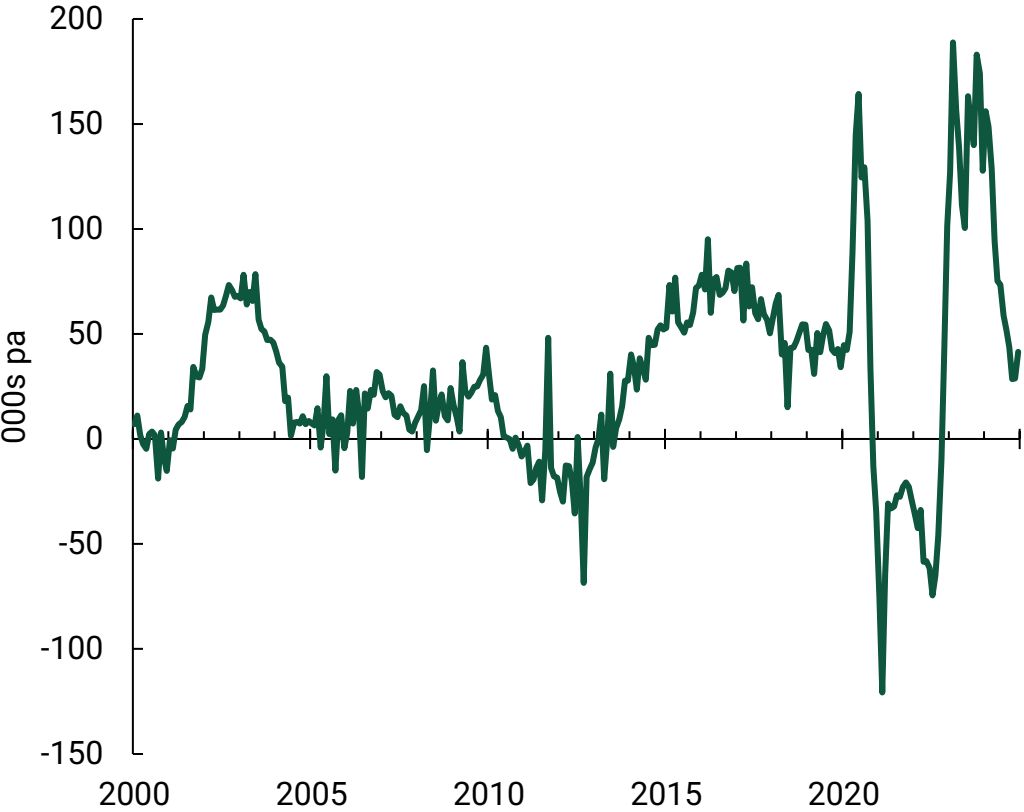


Source: MacroBond, S Eaqub

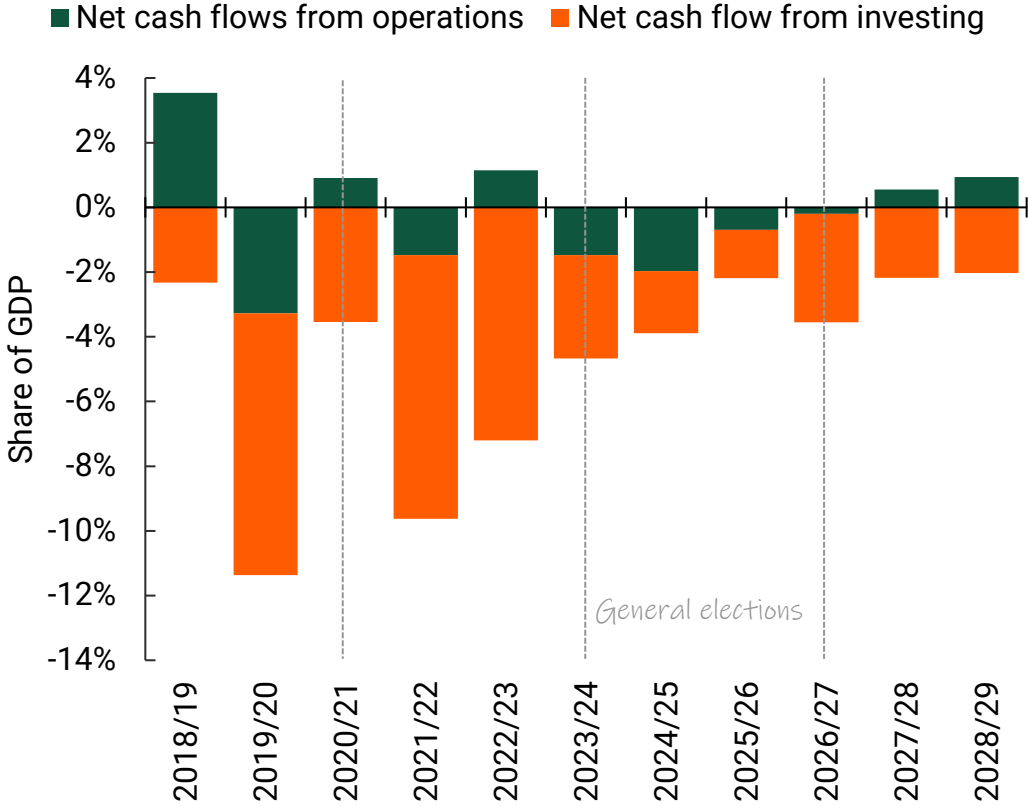


Slowing migration & fiscal austerity

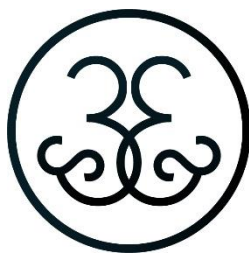
Net migration



Government spending: operating & investment

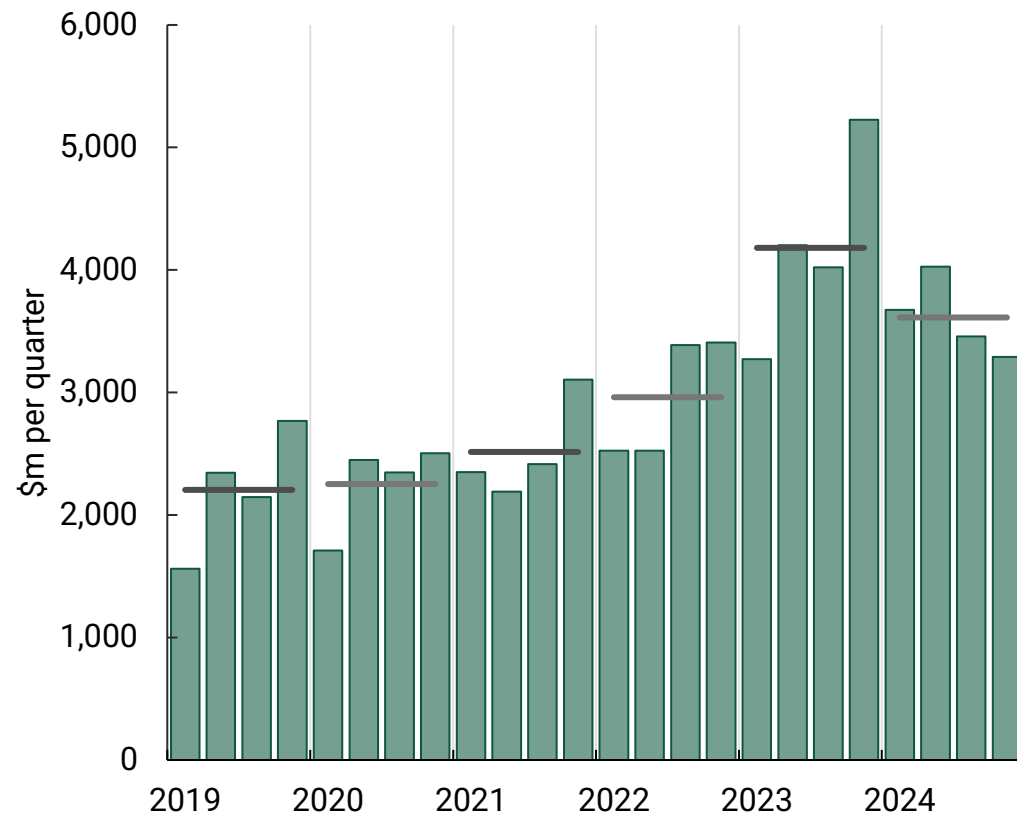


Source: Statistics NZ, S Eaqub



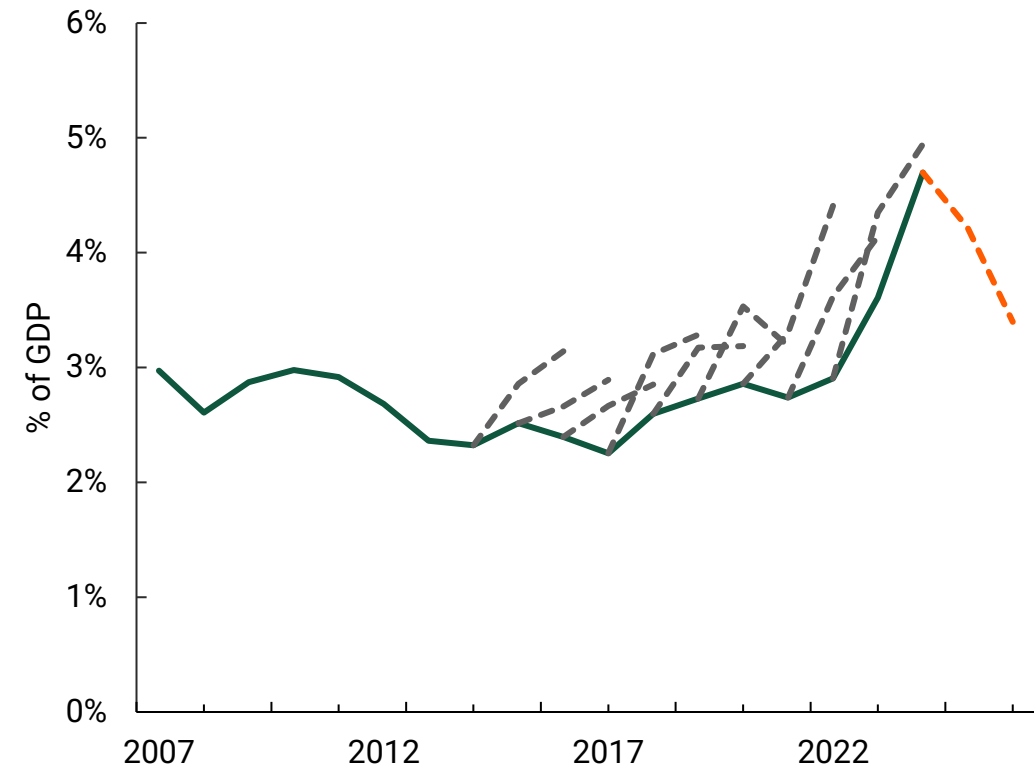
Infrastructure a risk

Central Government Infrastructure Spend

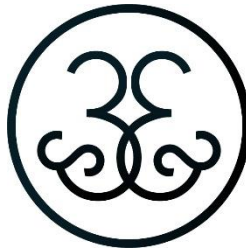


Source: NZ Treasury, S Eaqub

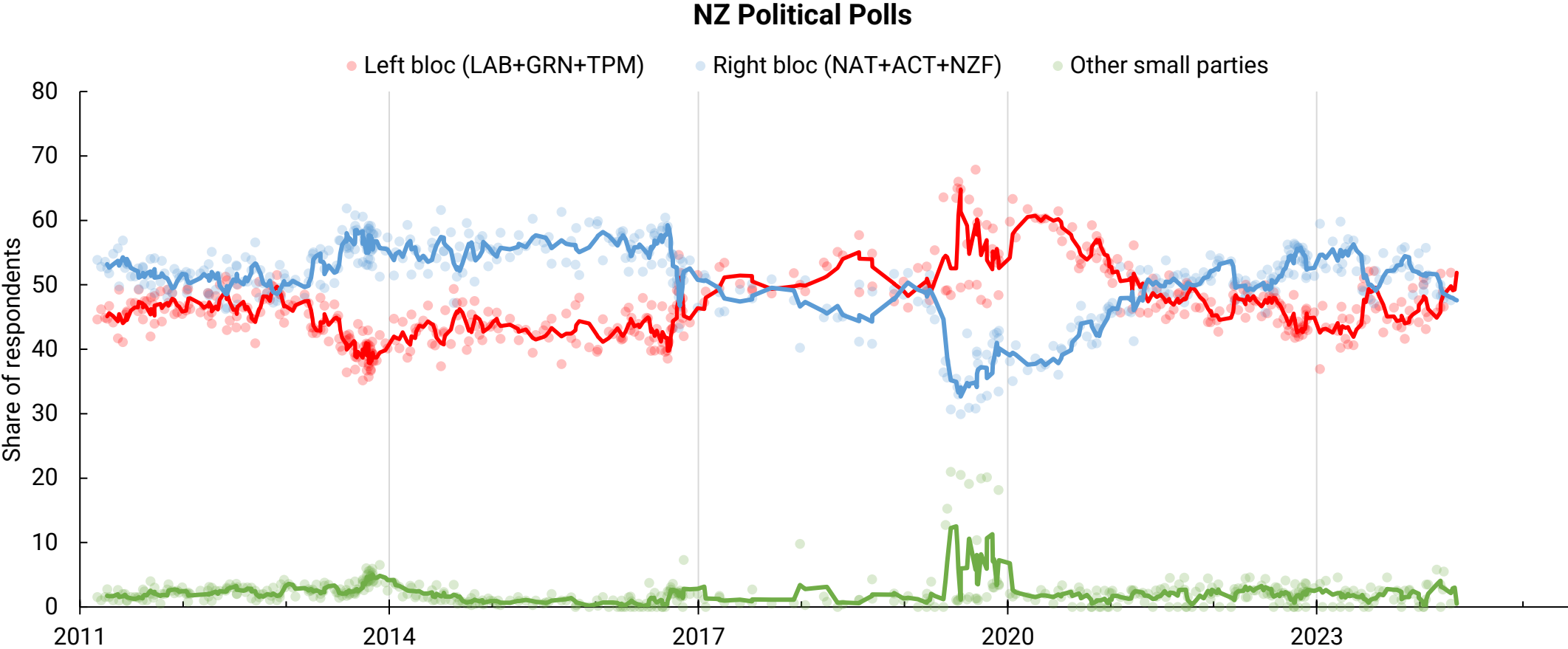
Government Infrastructure Spend:
Actual vs Projected

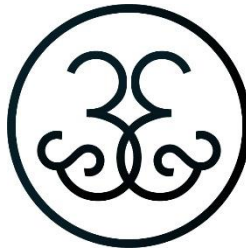


Source: NZ Treasury, Statistics NZ, S Eaqub

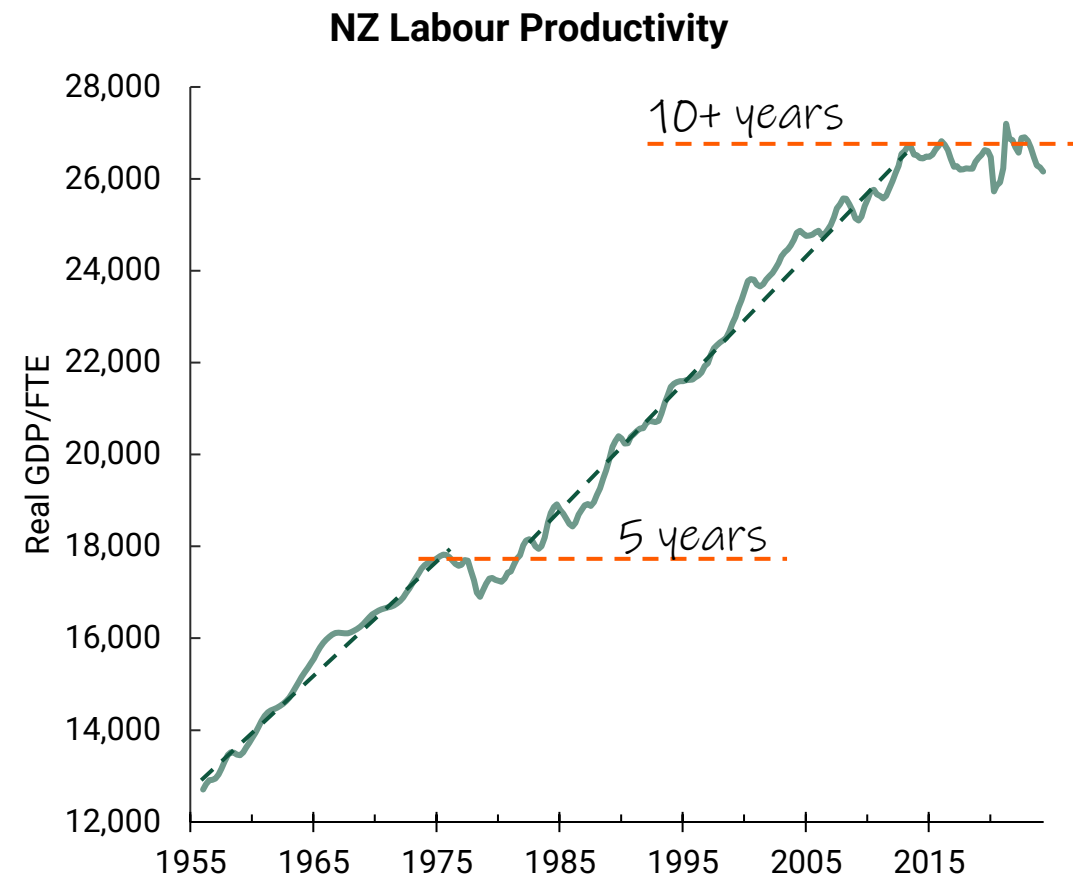


Political uncertainties

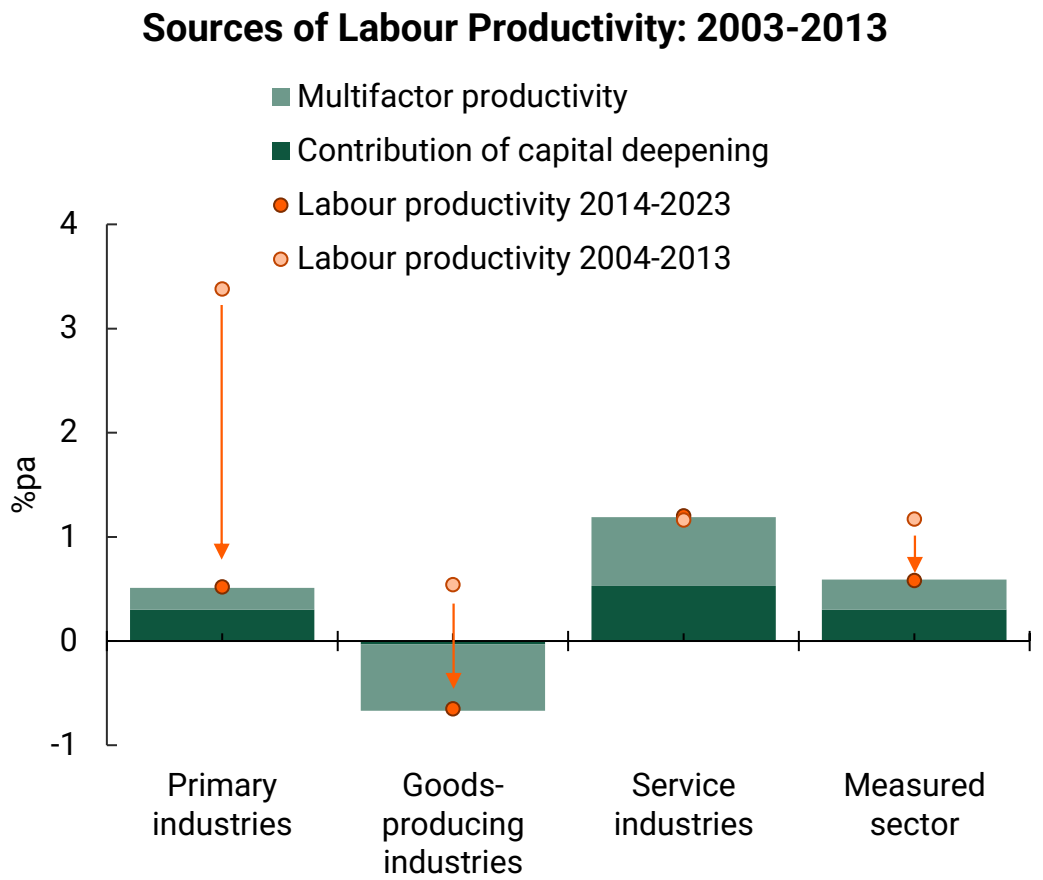




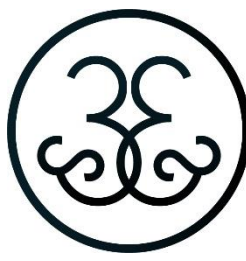
A troubling stall



Source: Statistics NZ, S Eaqub

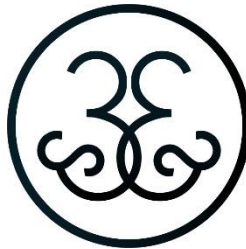


Source: Statistics NZ, S Eaqub



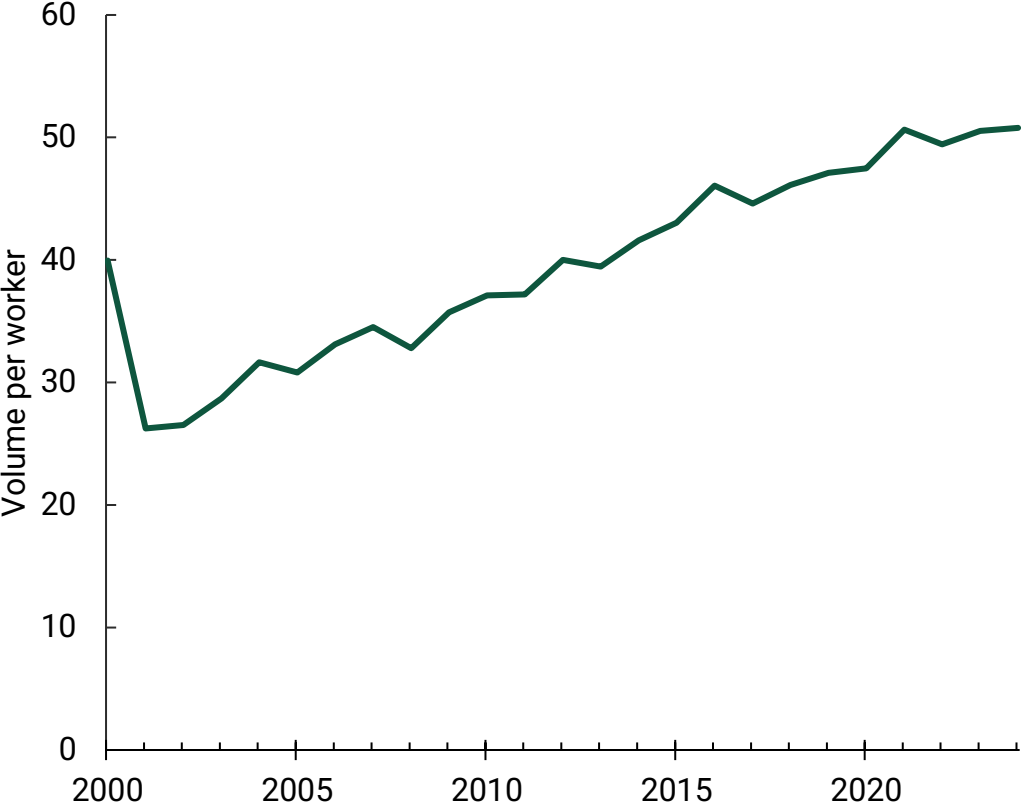
Dairy context

Slowing progress



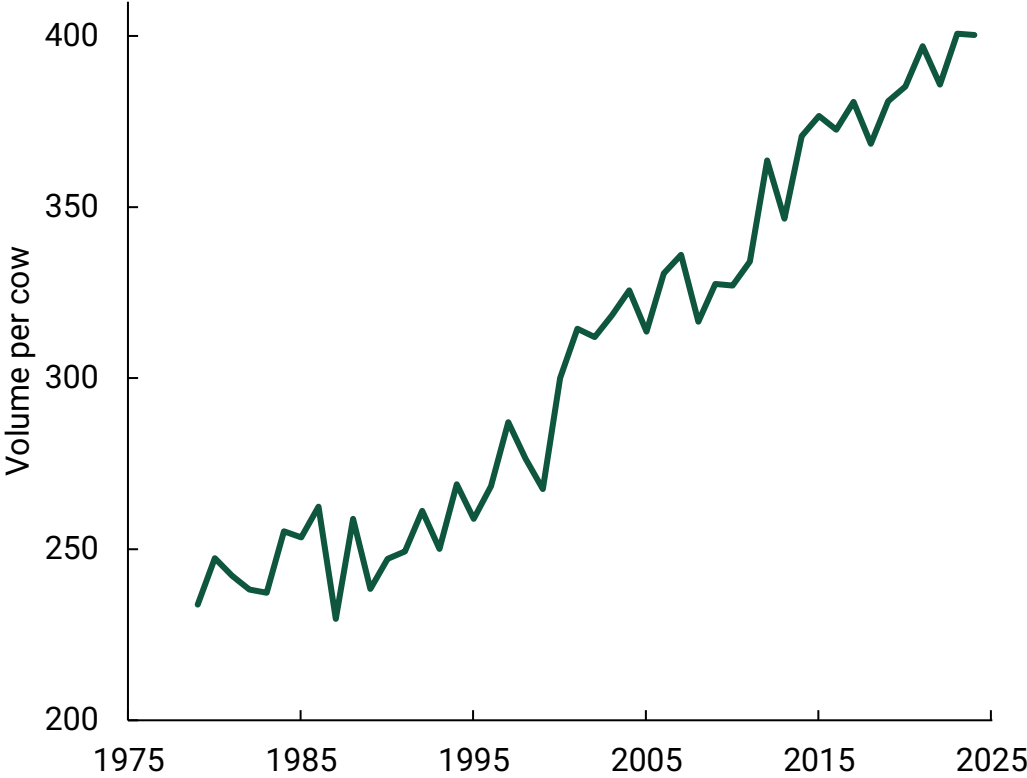
Efficiency measures

Efficiency: Milk solids/worker

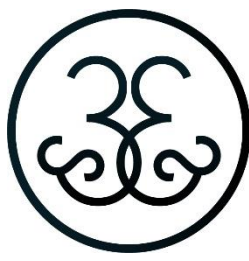


Source: Dairy NZ, S Eaqub

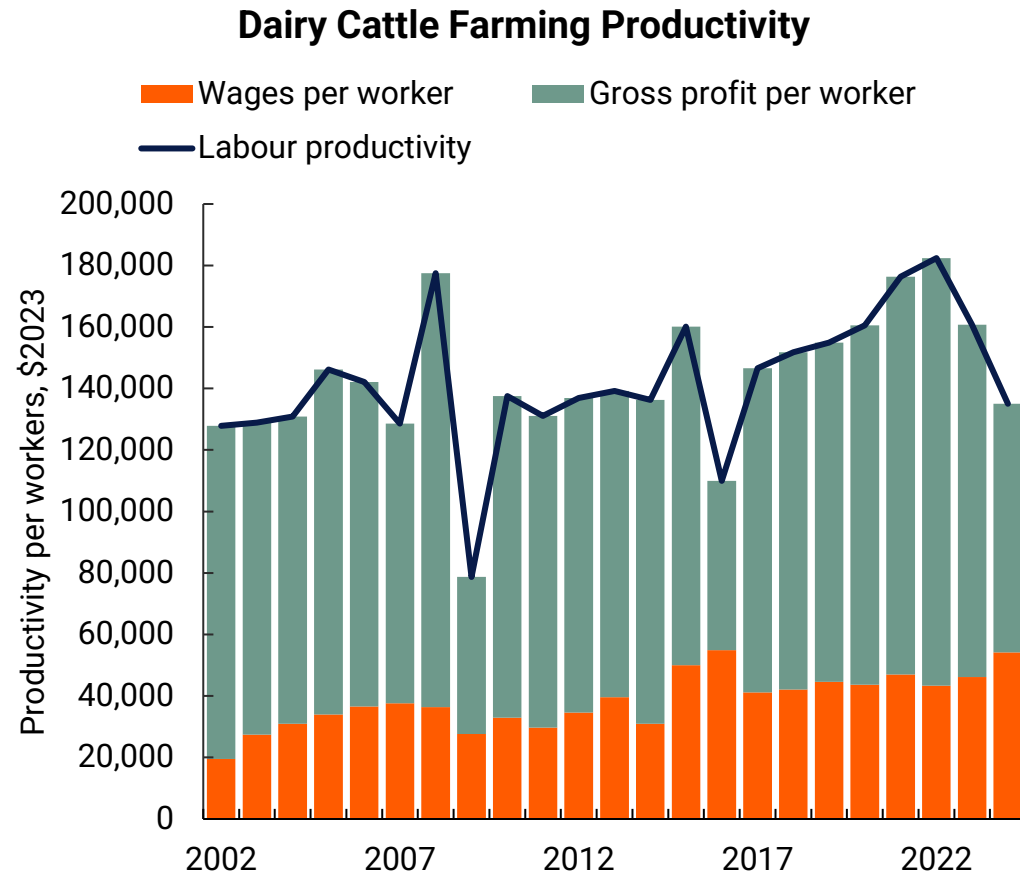
Efficiency: Milk solids/cow



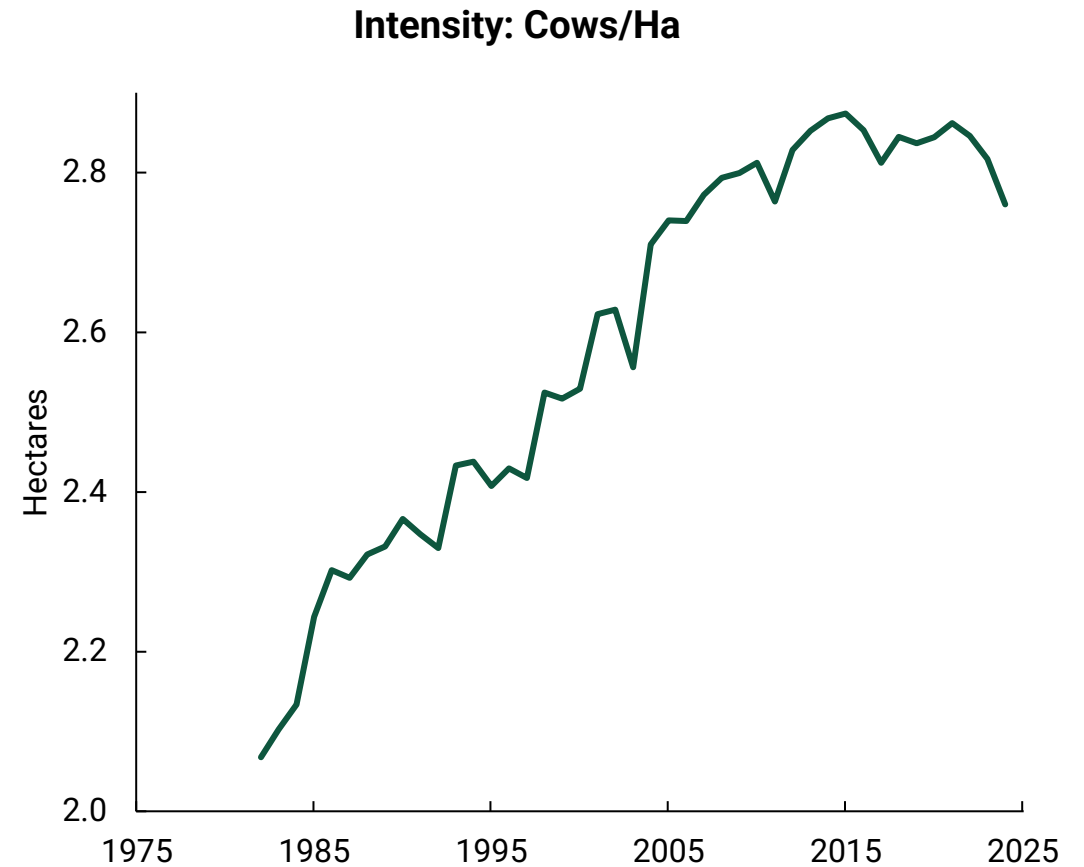
Source: Dairy NZ, S Eaqub



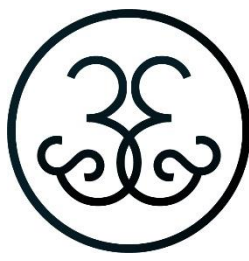
But financial returns stalling?



Source: Statistics NZ, S Eaqub

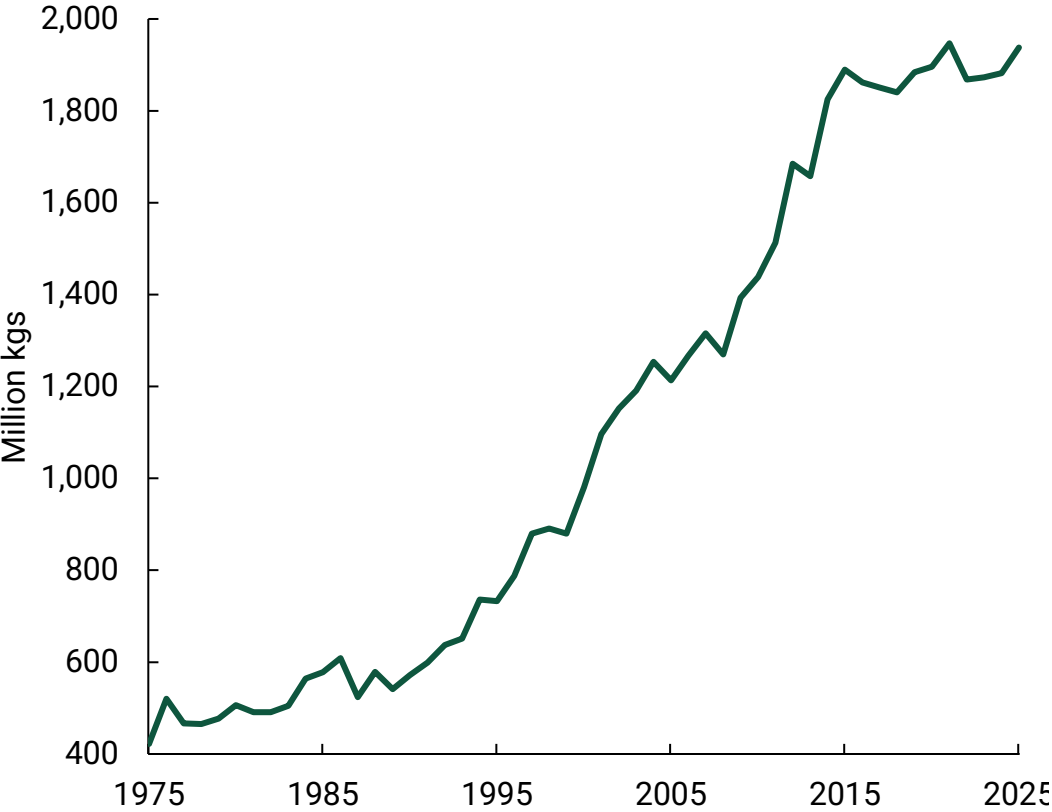


Source: Dairy NZ, Statistics NZ, S Eaqub



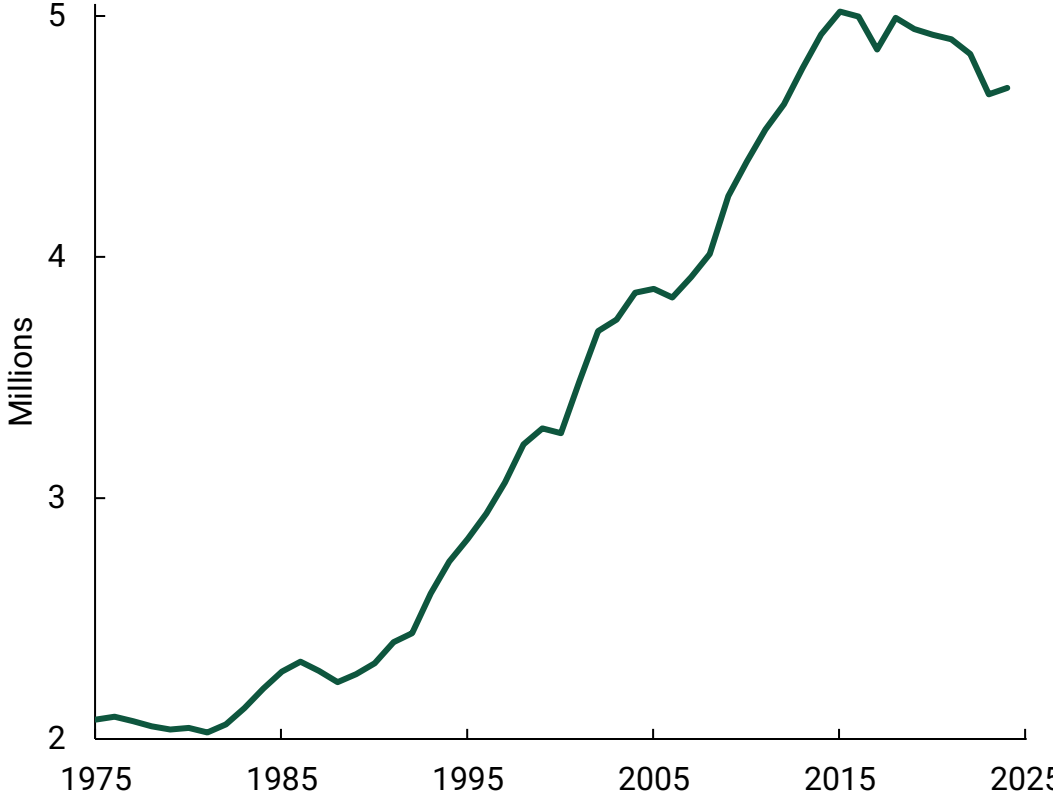
A new phase for sector

Dairy production

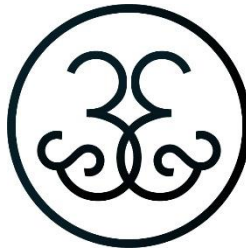


Source: Dairy NZ, S Eaqub

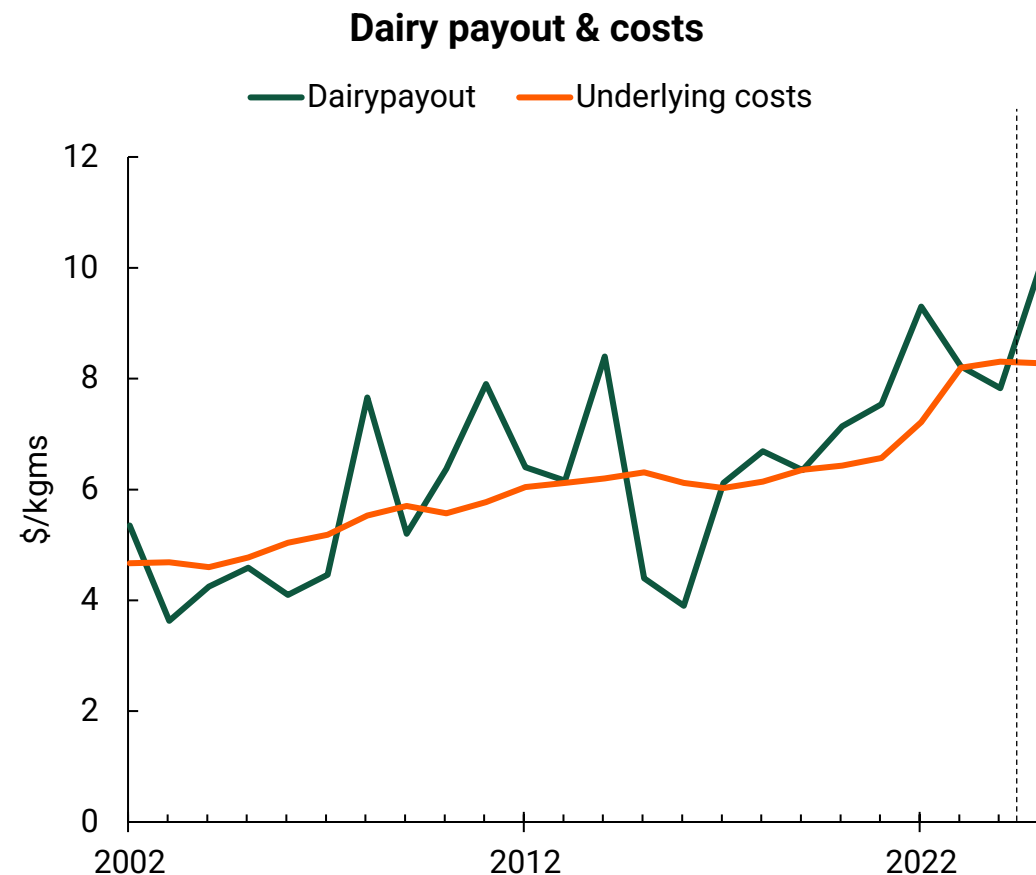
Dairy cows



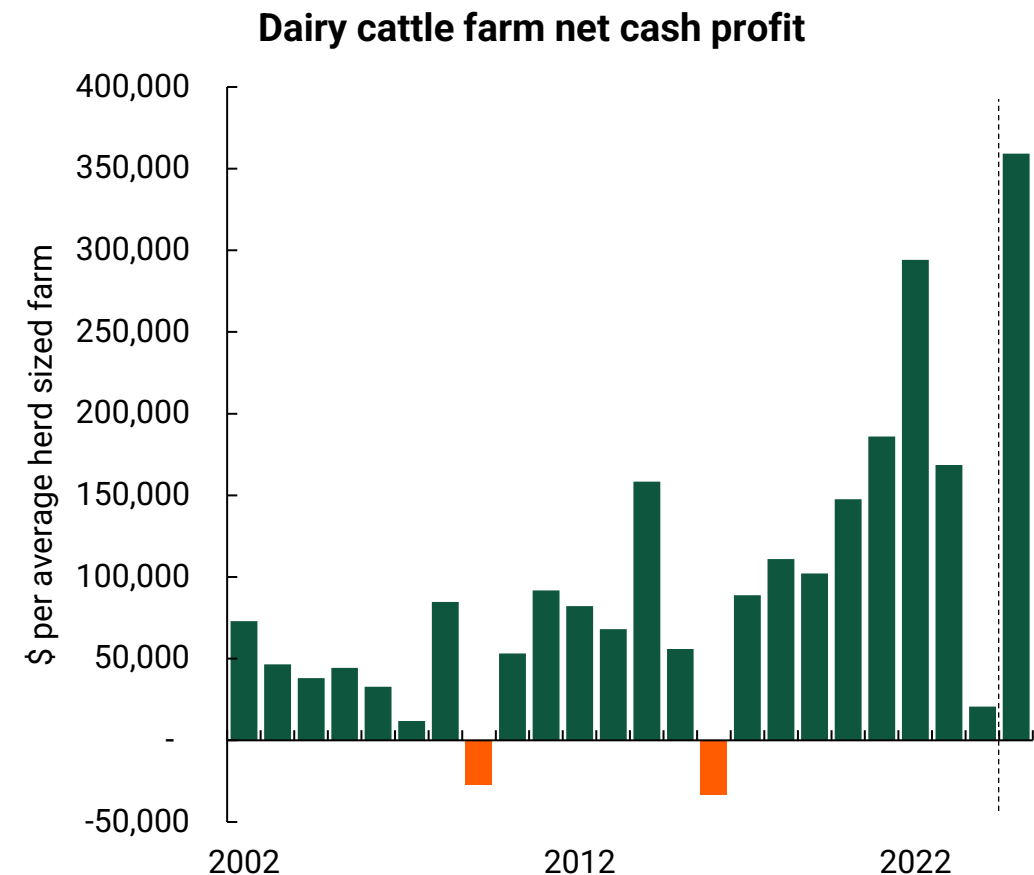
Source: Dairy NZ, S Eaqub



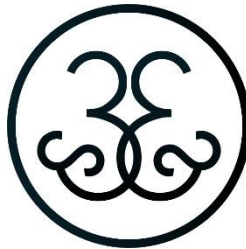
Global prices a boost this year



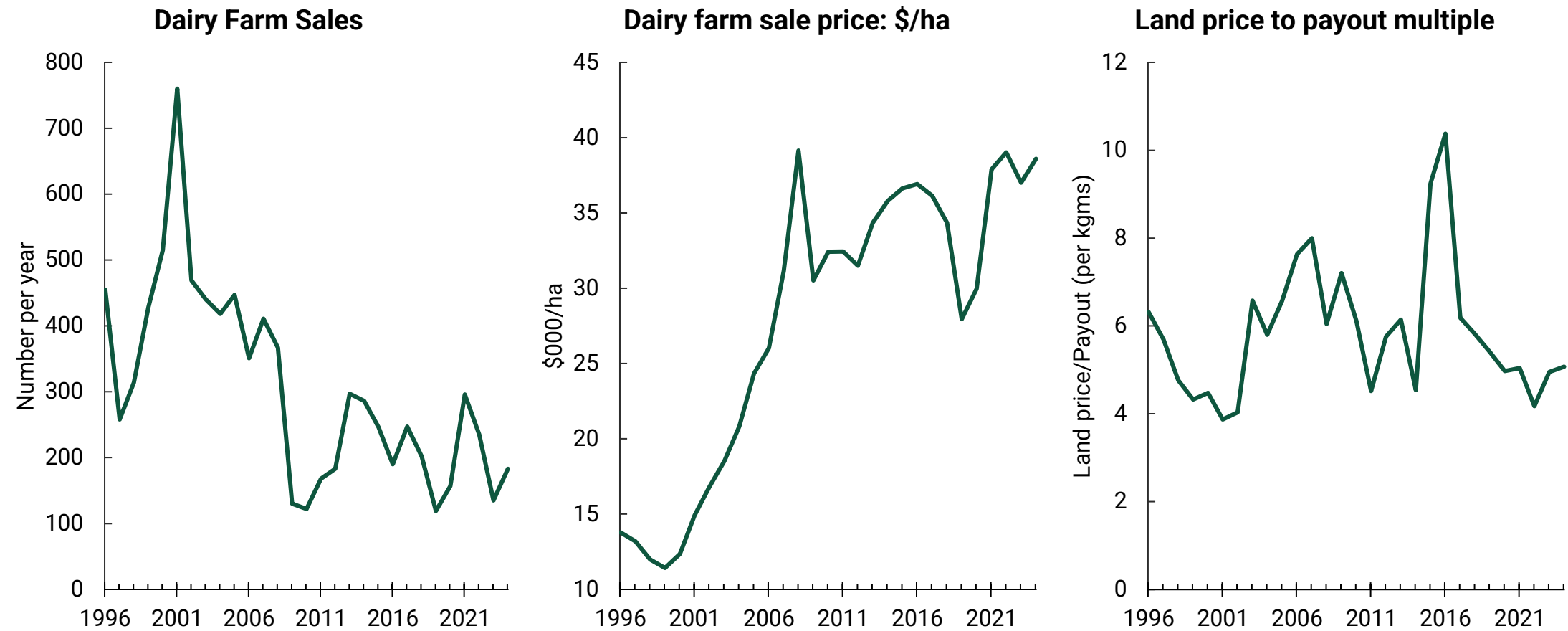
Source: Statistics NZ, Dairy NZ, S Eaqub



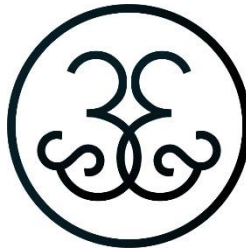
Source: Dairy NZ, Statistics NZ, S Eaqub



Less about real estate

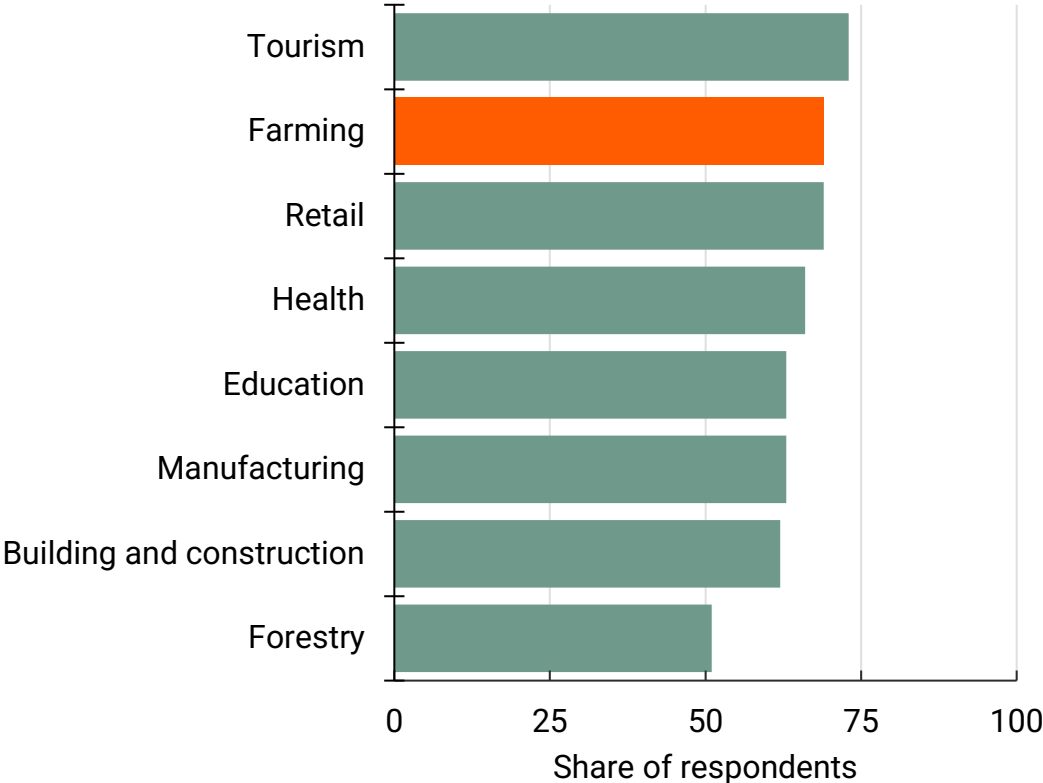


Source: REINZ, Dairy NZ, S Eaqub



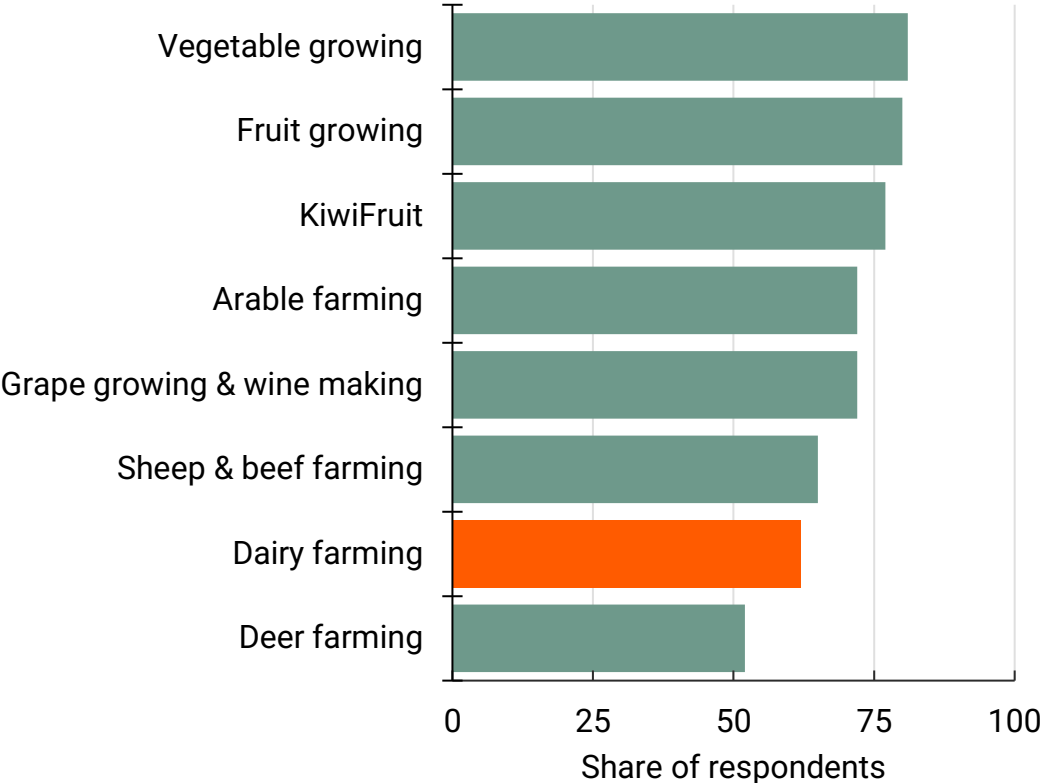
Social license: myths vs reality

Public Opinion of Sectors

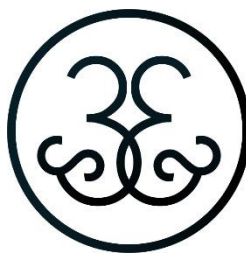


Source: Primary Purpose, NZCBIA, S Eaqub

Public Opinion of Farming Sub-sectors

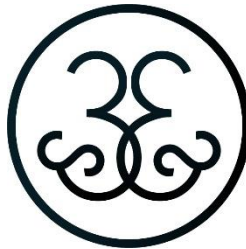


Source: Primary Purpose, S Eaqub

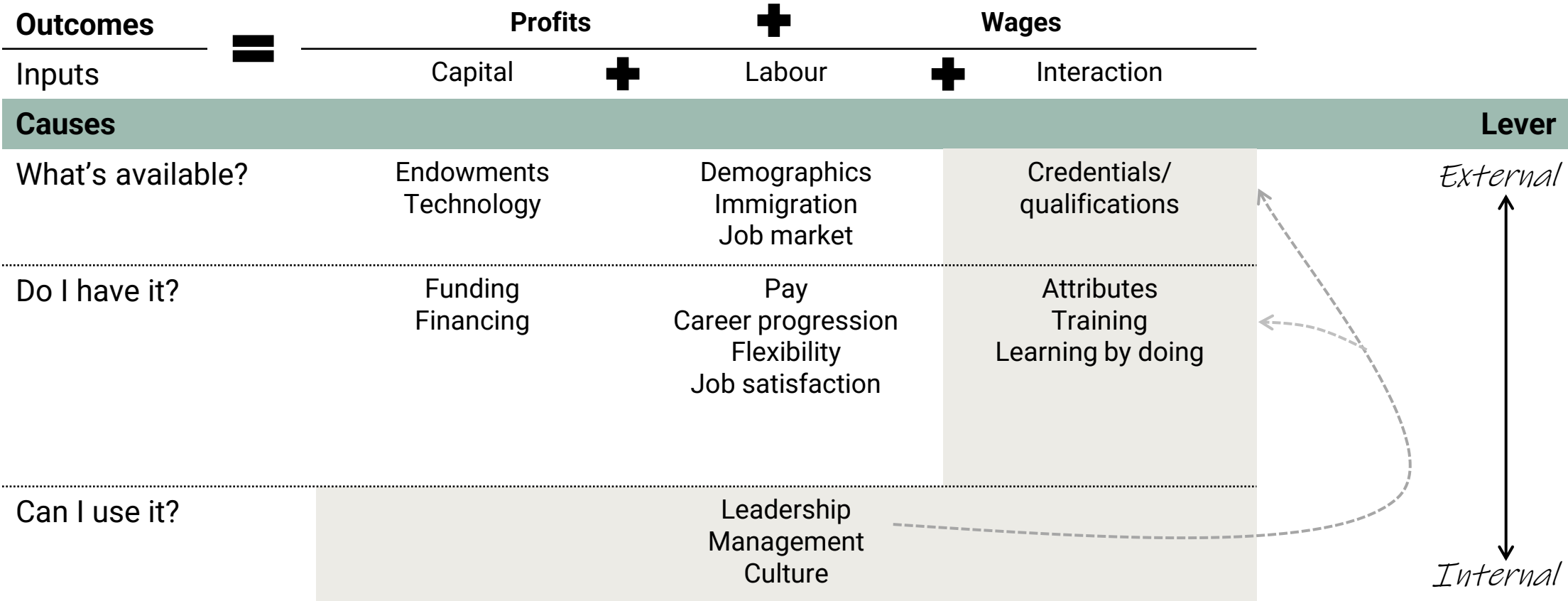


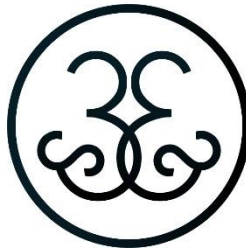
People context

Shortages, needs, knowing what you can control

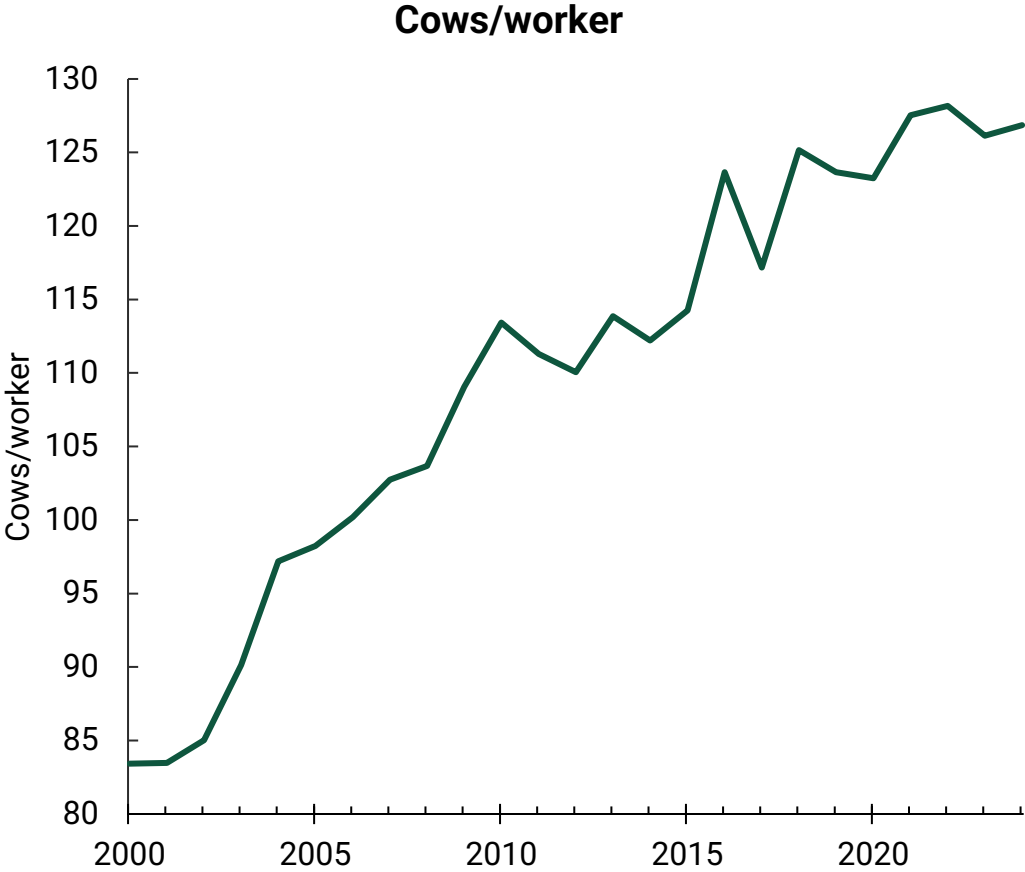


Profits and productivity

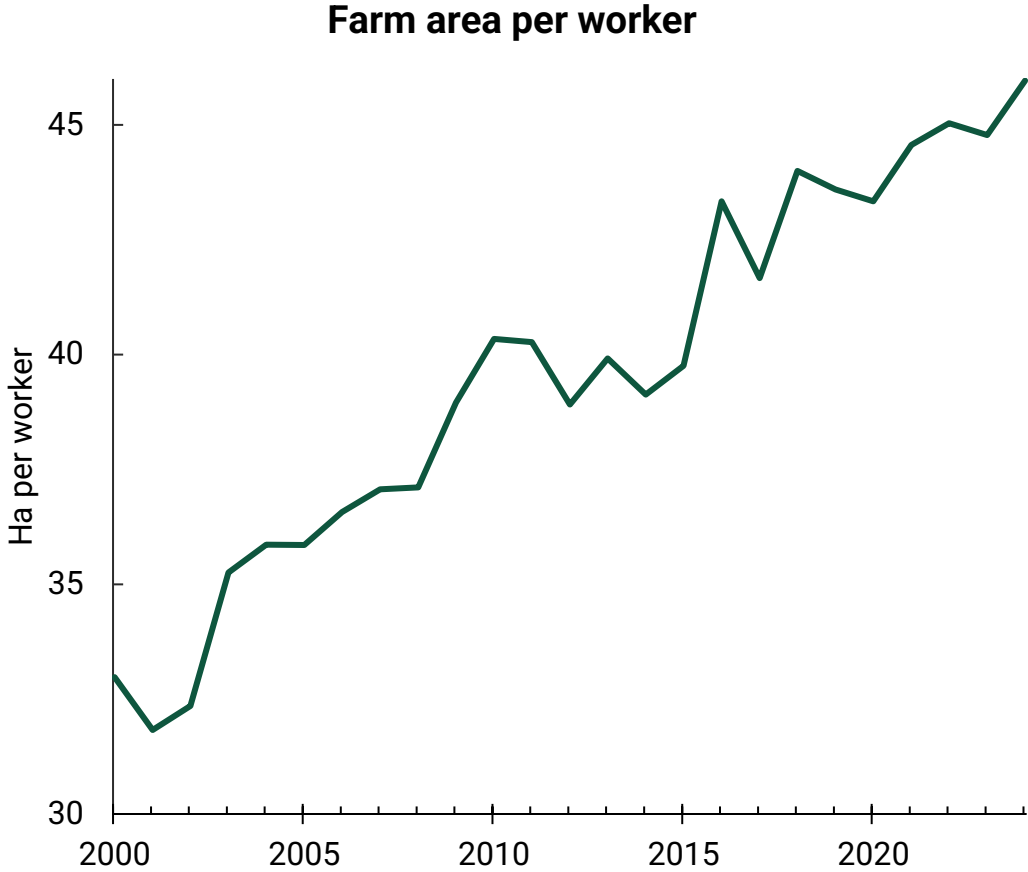




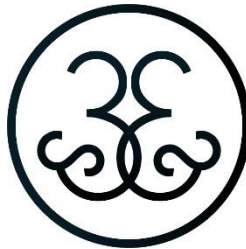
More responsibility



Source: Dairy NZ, Statistics NZ, S Eaqub

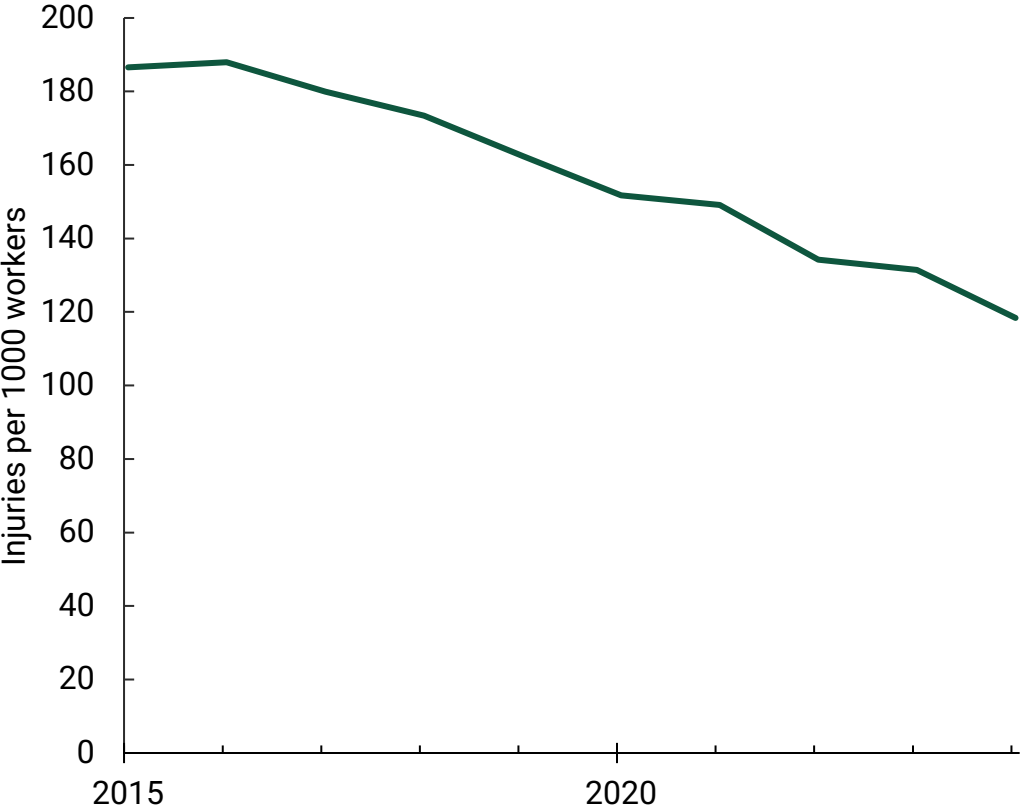


Source: Dairy NZ, Statistics NZ, S Eaqub



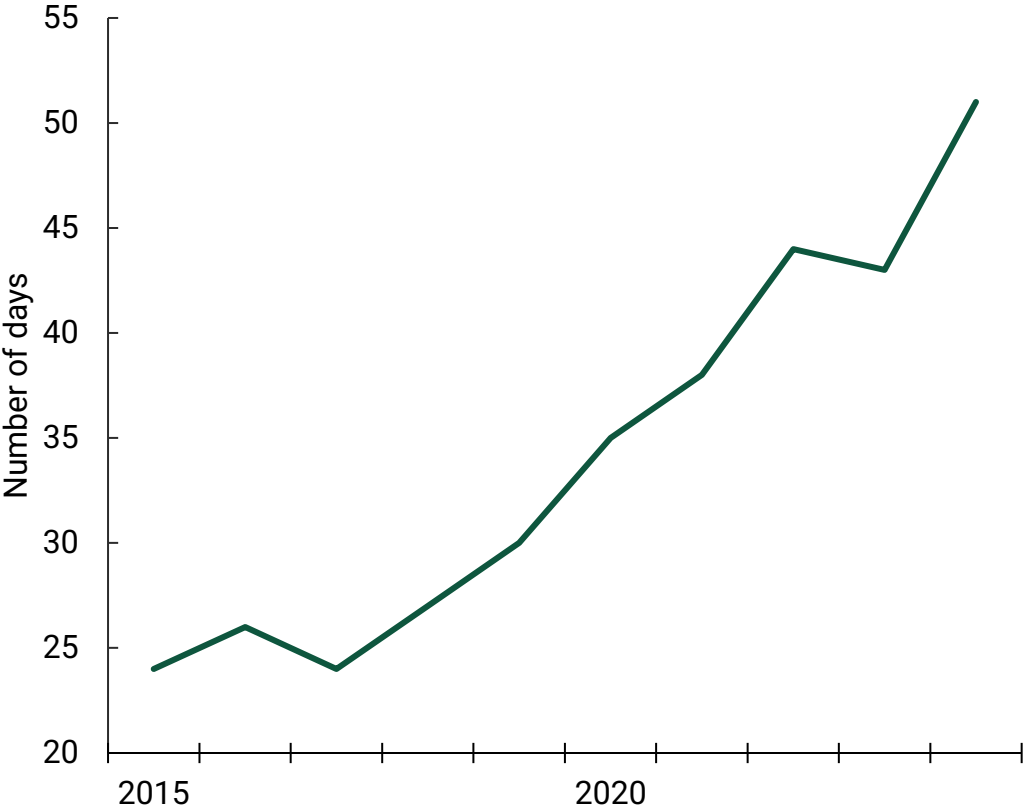
Injuries = 1-5m off; 2.5% drop in work

Dairy Cattle Farming: Injury Rate

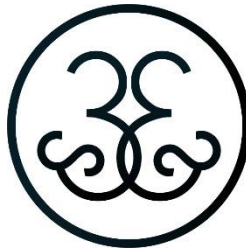


Source: ACC, WorkSafe, Statistics NZ, S Eaqub

Average Days off

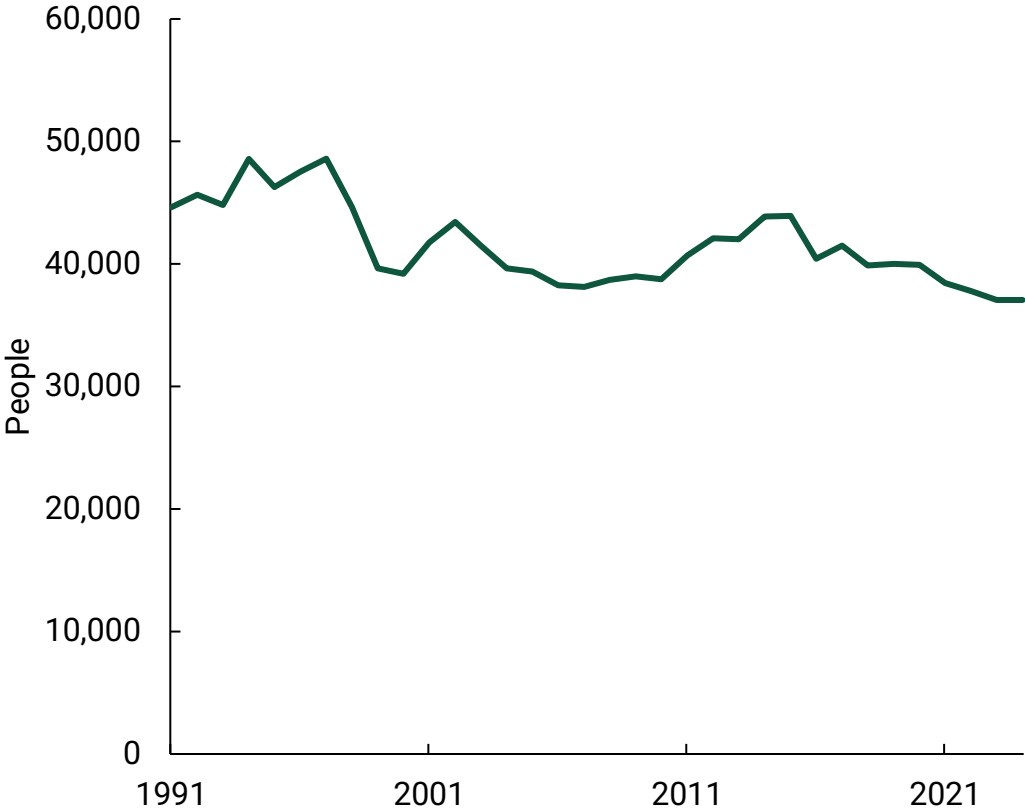


Source: ACC, WorkSafe, Statistics NZ, S Eaqub



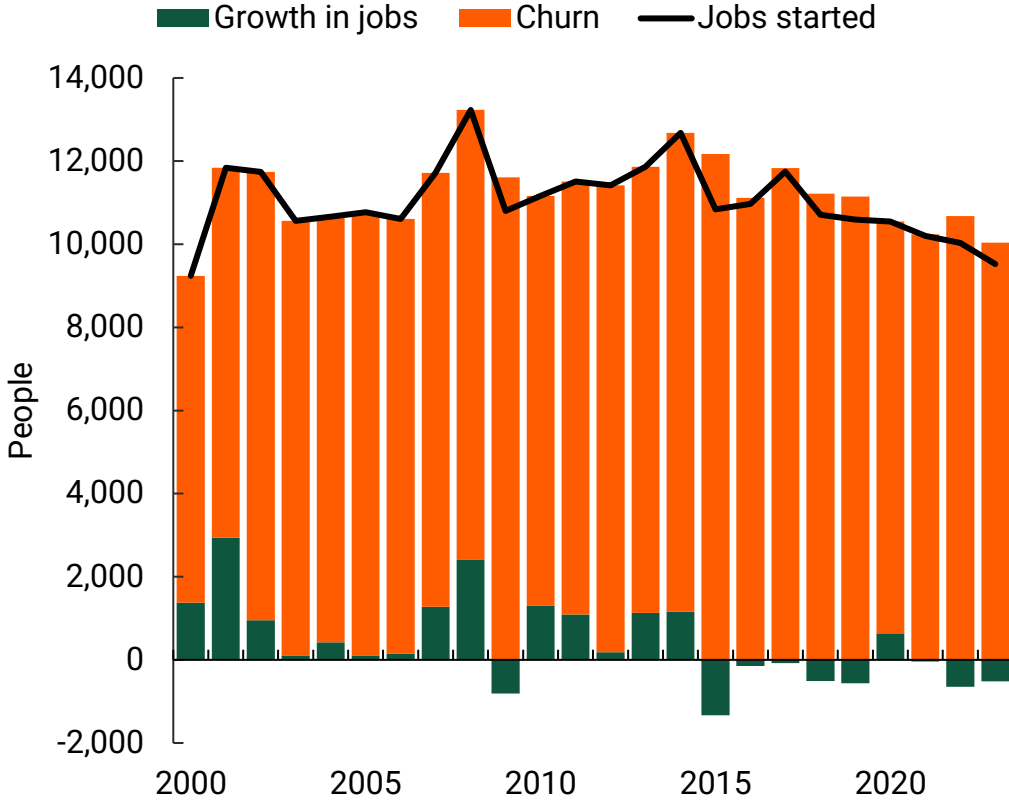
Not growing but hiring

Dairy employment

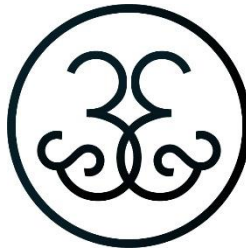


Source: Statistics NZ, S Eaqub

Dairy hiring composition

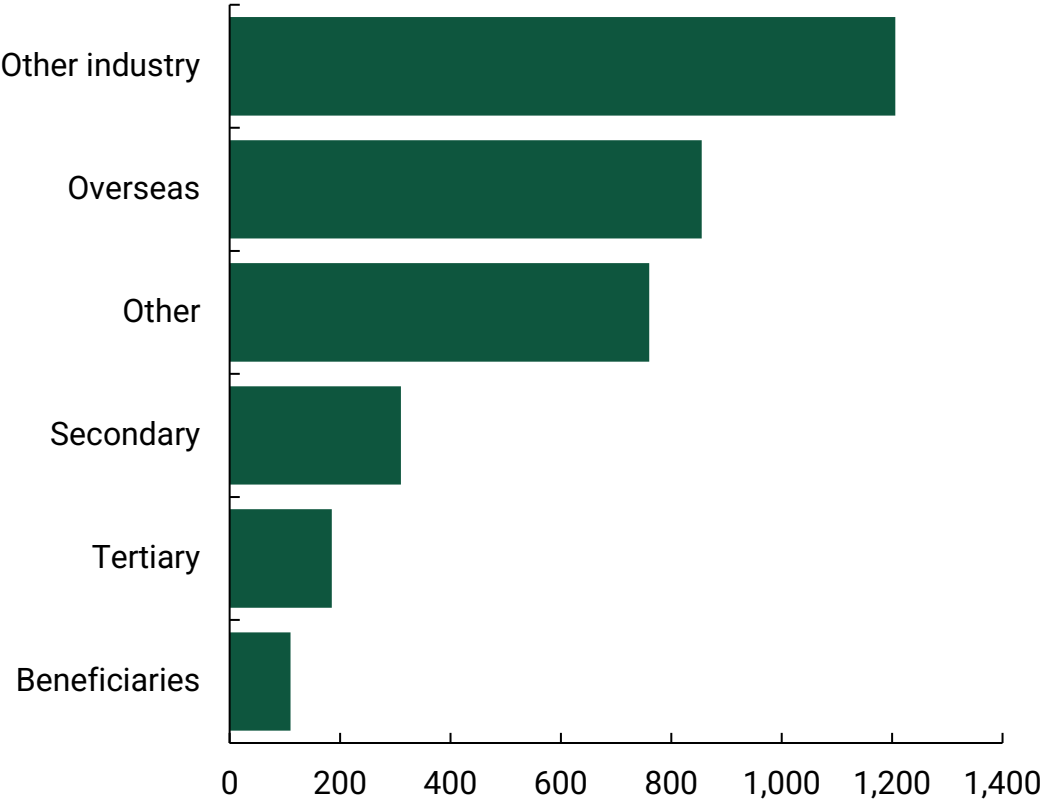


Source: Statistics NZ, S Eaqub

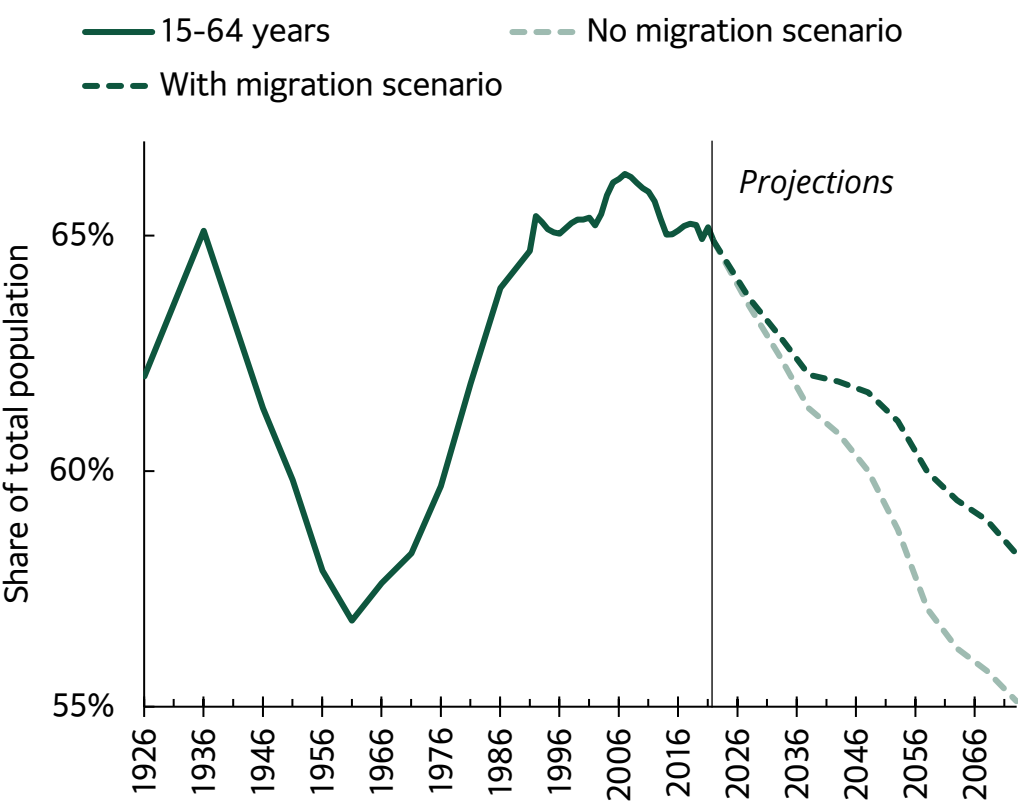


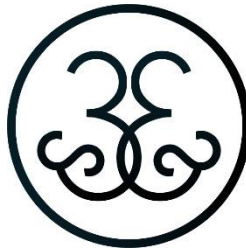
Increasingly competitive market

Dairy worker entrant sources



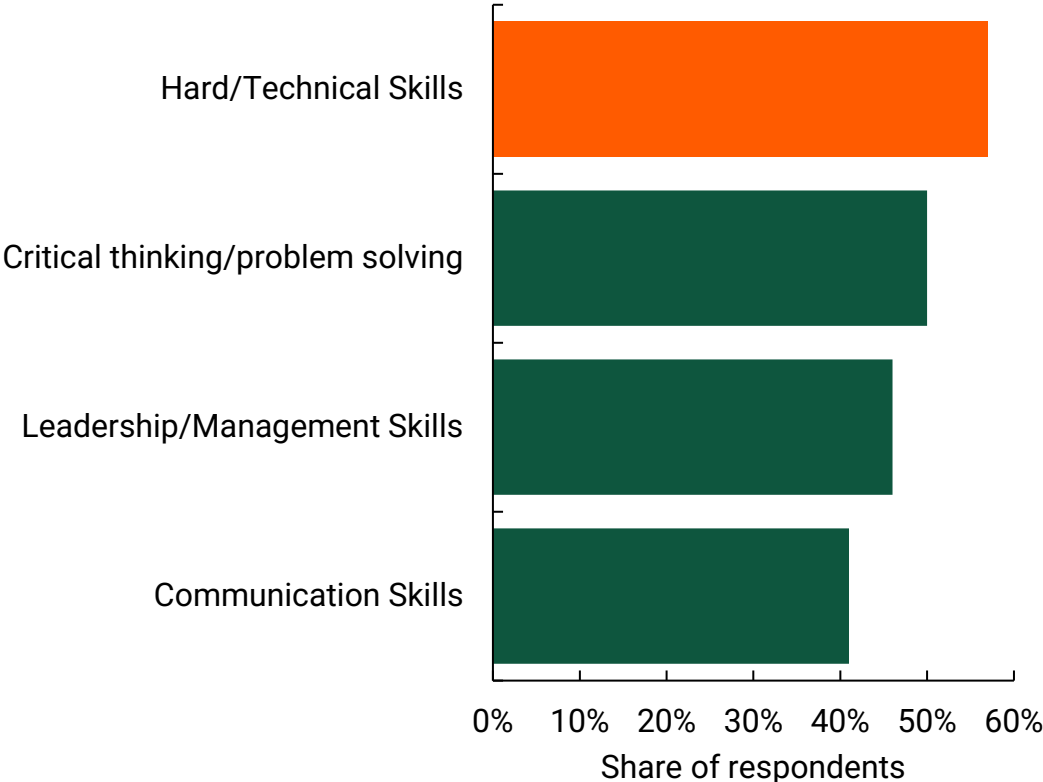
Core working age population: 15-64 years





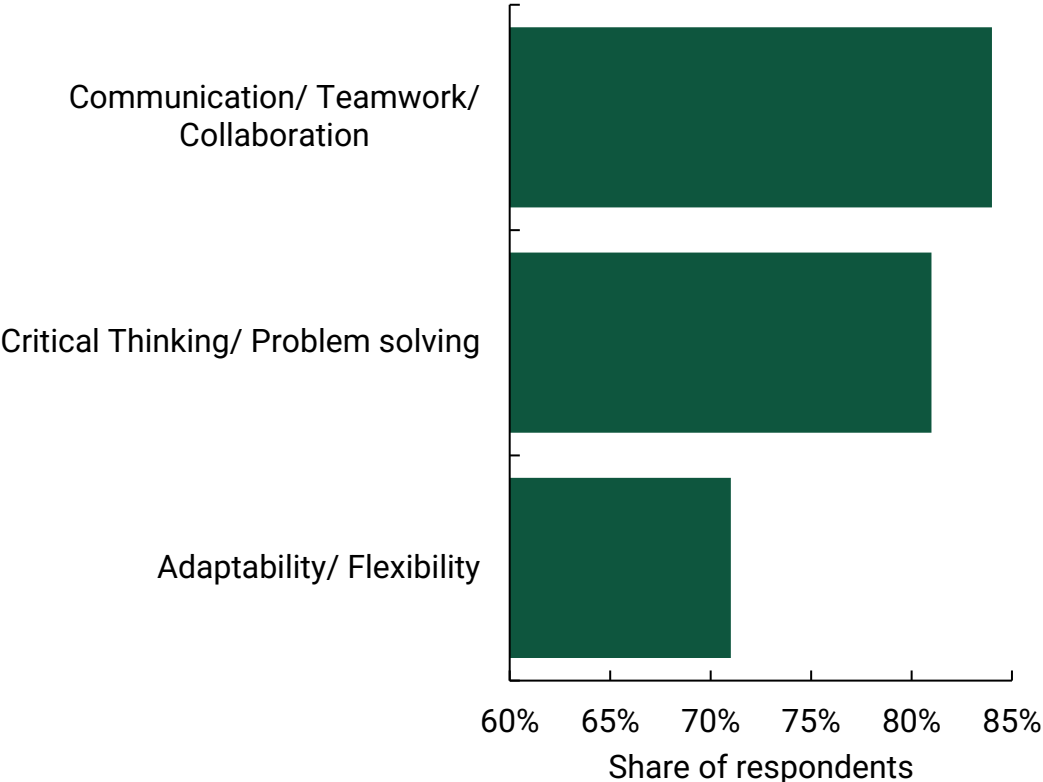
Current and future skills gaps

Current Skills Gaps

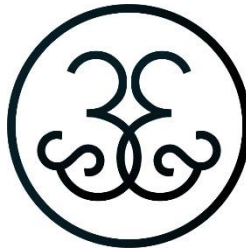


Source: The Hays 2025 Skills Report, S Eaqub

Future Skills Required



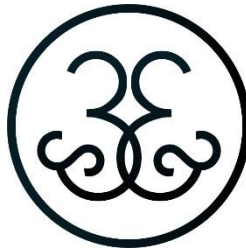
Source: The Hays 2025 Skills Report, ComTrade, S Eaqub



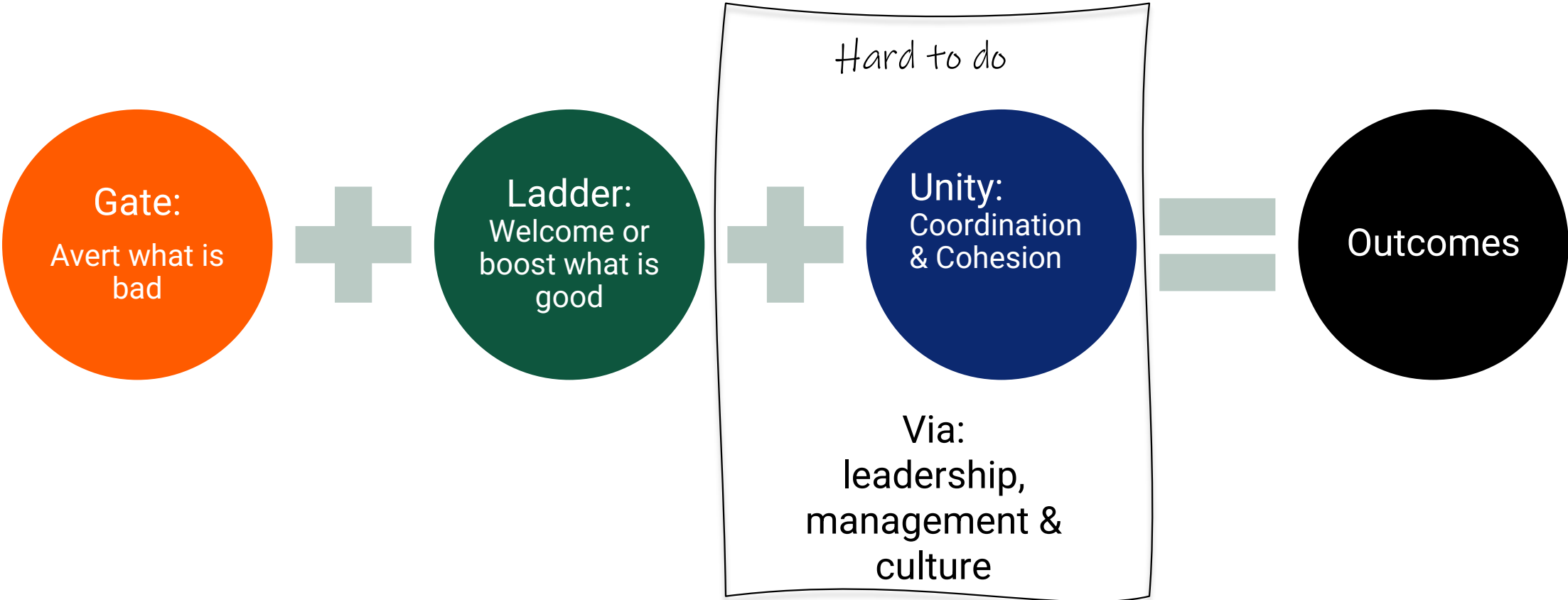
Upskilling $\neq$ education

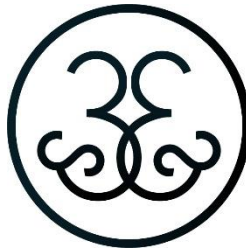


- Skills shortages are persistent...
- ...and changing
- Employee led upskilling doesn't work...
- ...but on the job learning does.
- Recruit and upskill right for success...
- ...in businesses with good leadership, management & culture.



Theory of change: How?





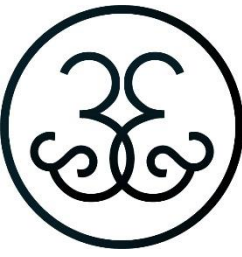
A roadmap

What workers want

- Money
- Progression
- Fulfilment
- Security
- Flexibility

What you can do

- Invest in you
 - Leadership
 - Culture
- Process
 - Split roles/attributes to free up critical staff
 - Training & career progression
 - Hire in the right way
- Industry
 - Pathways with industry
 - Long term labour force planning.



Key points



History has returned



Risks, but economy near bottom



Shaping up to be a good year for dairy



Knowing internal levers of control



What role will people play?

Questions?



EAQUB & EAQUB

What is the biggest bottleneck or inefficiency on your farm?

Bad communication and toxicity

Poor communication and not enough training

Too tired to work doing 12 on 2 off should be illegal

Lack of technology, lack of trust, lack of time or manager direction.

Poorly planned days

Boss doesn't do much

Disagreement of sharemilkers and farm owners

The lack of appreciation makes the team feel under valued

Technology but lack of use or set up

When we redo the job of unskilled staff, wastes precious time

Boss talks plans on this and that needing to be done for more production but quivering at paying for anything

Poor communication and not enough training.

The Triple Edge

People, technology
and productivity

Jeremy Duckmanton

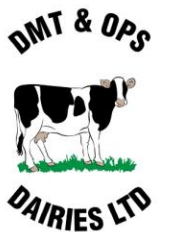
DMT & OPS



DAIRIES LTD

What drives me

- Loyalty
- Determination / competitive nature
- Opportunities

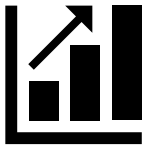


Key reasons for technology



Streamline business operations

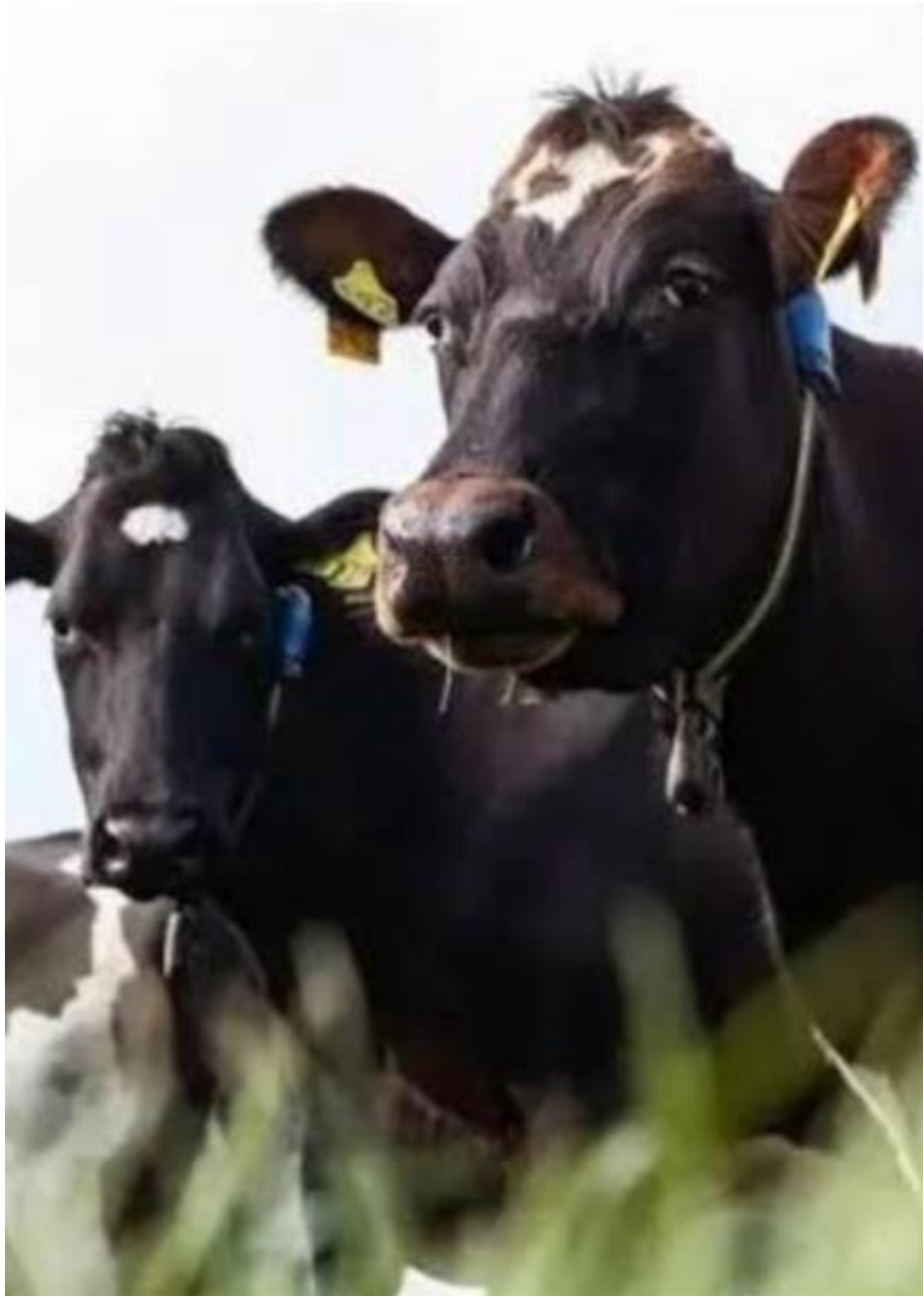
- Always looking for easier ways to do things
- Reliable / Repeatable / Transferable



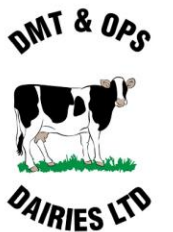
Improve options and outcomes

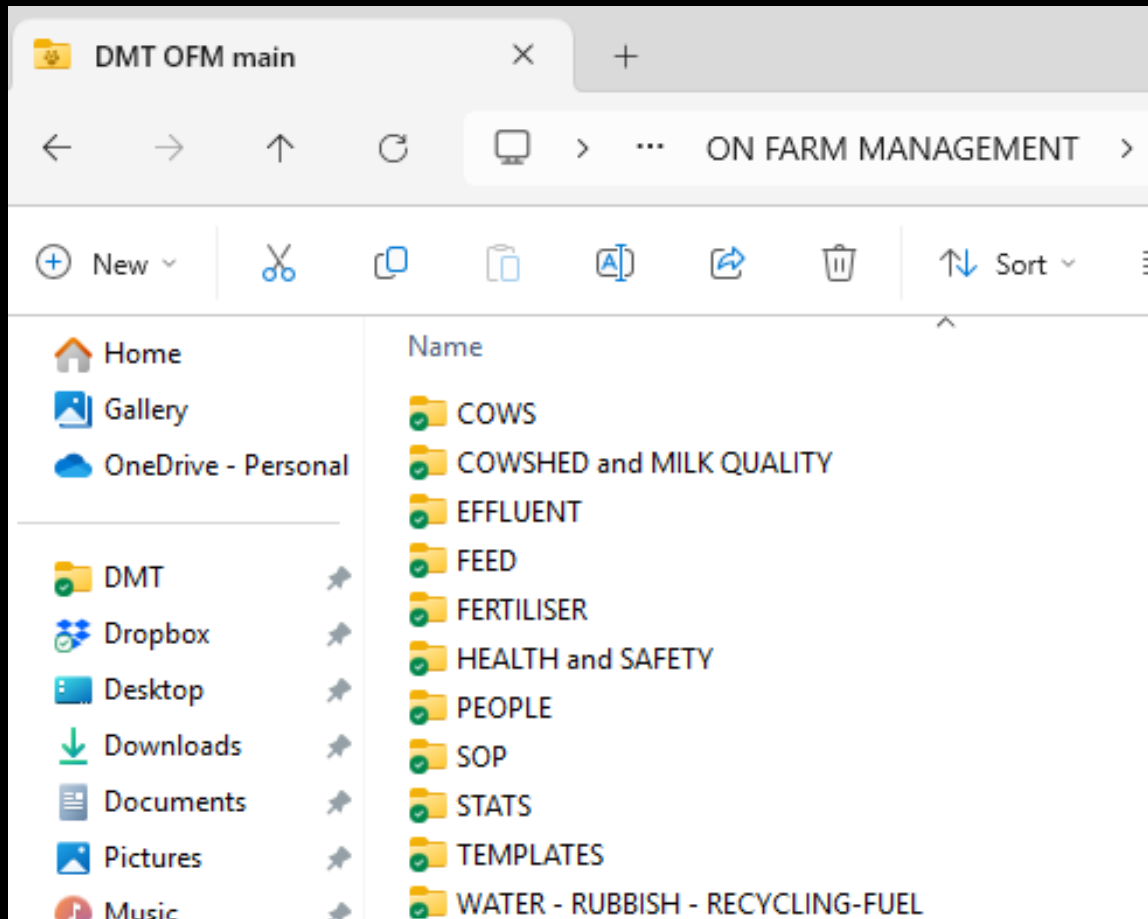
- People
- Animals
- Profitability





**Not all tech
costs big \$**

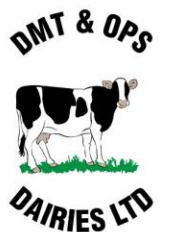


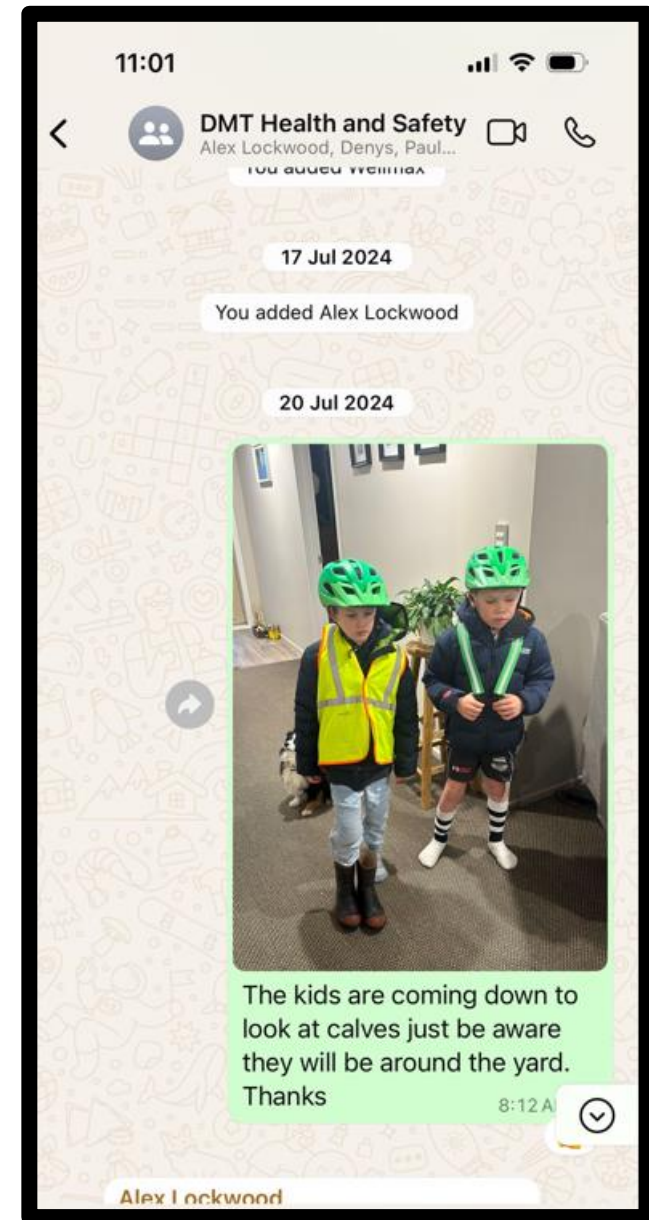


On Farm Management file

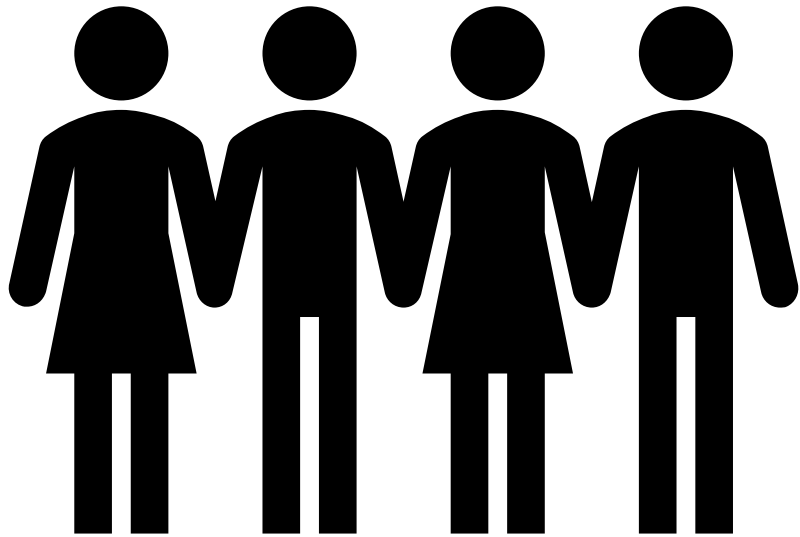
- Cows
- Feeding
- People
- Audit information and records

Sharing accounts files with managers and staff



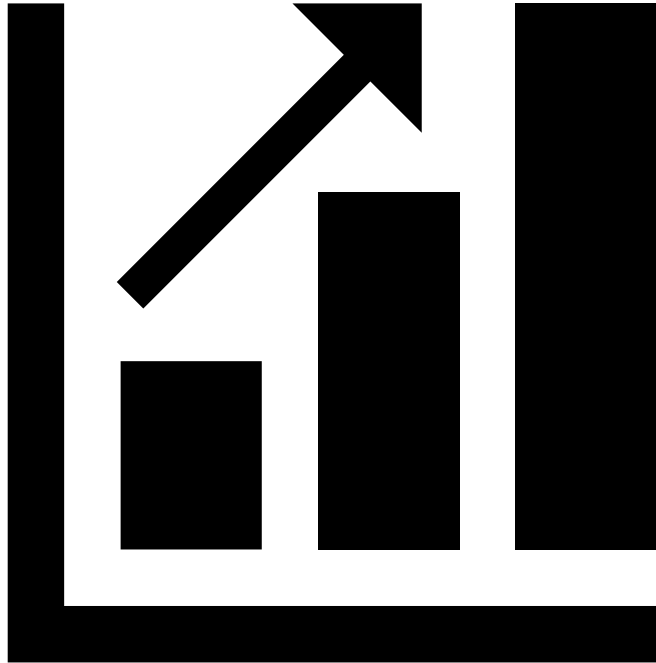


Technology and people



- Smooth team changes
- Changing skill sets
- Team engagement

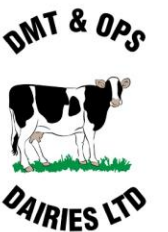
New areas of focus



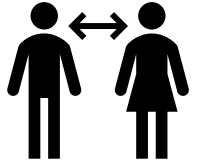
- People
- Feeding cows
- Animal health
- = Profitability

Technology benefits

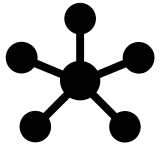
- Expansion / economies of scale
- Efficiency increases profitability
- Resilience
- Retention and attraction



Key learnings



Impact on the team



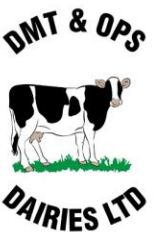
Benchmarking with others



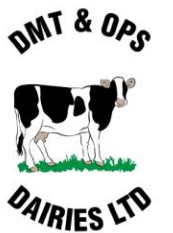
Not all tech suits everyone

**As time goes on successful tech
changes from a great idea to
something you can't live without**

**If tech is around long enough, is
it still tech?**



Questions?



What could your manager do to improve your satisfaction and enjoyment of work?

Ask and listen instead of assuming and accusing

Care for staff. Remember we are people and not robots. We get tired. We make mistakes

Give credit where it's due

Change her attitude, learn to control her anger & get professional help

Just help me up to things the I didnt know yet, and I'm keen to learn everything

Just don't panic, every problems has its own solution

Get things fixed that brake instead of workers having to put up with everything bugged

Increase my salary above minimum wage

Be nice and not grumpy and stuck up

Motivation, appreciation, treating me like a human being that has a family

People & Productivity

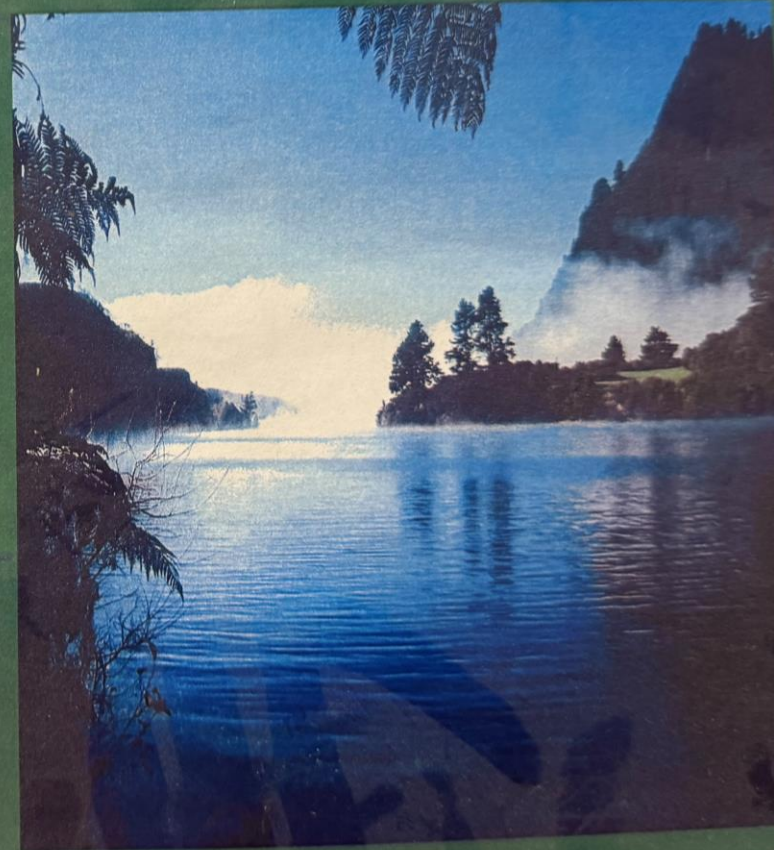
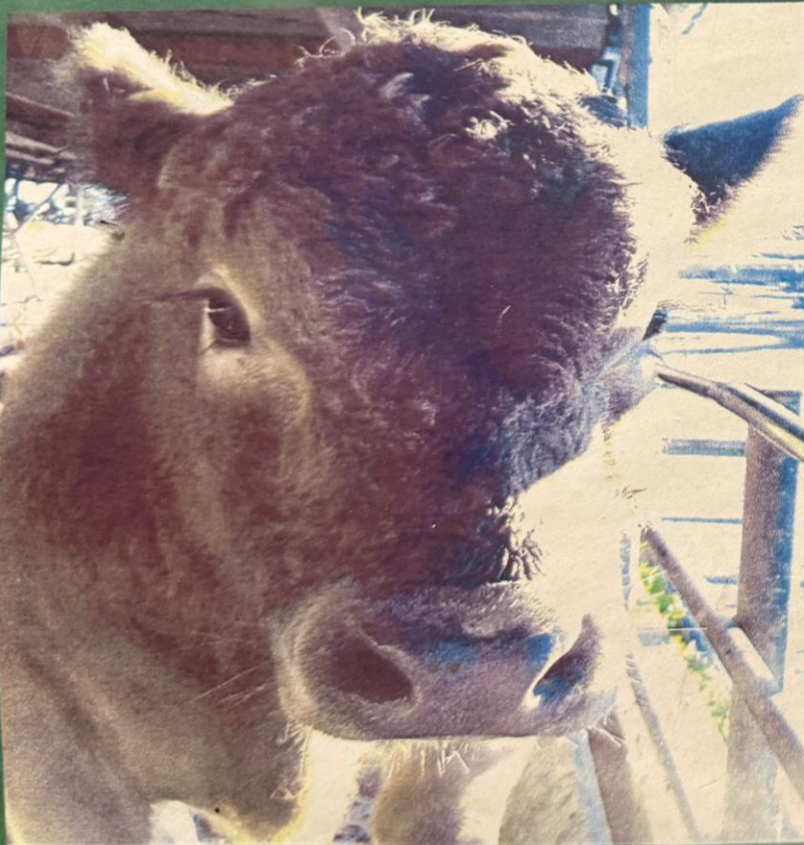
Will & Kim Grayling

Singletree & Chertsey Dairies
Canterbury, New Zealand



FARMING

The Ultimate Business With Built-in Lifestyle



Steve & Donna Hines
Mangakino & Tirohanga



WE'RE HIRING

Assistant Manager
Chertsey Dairies









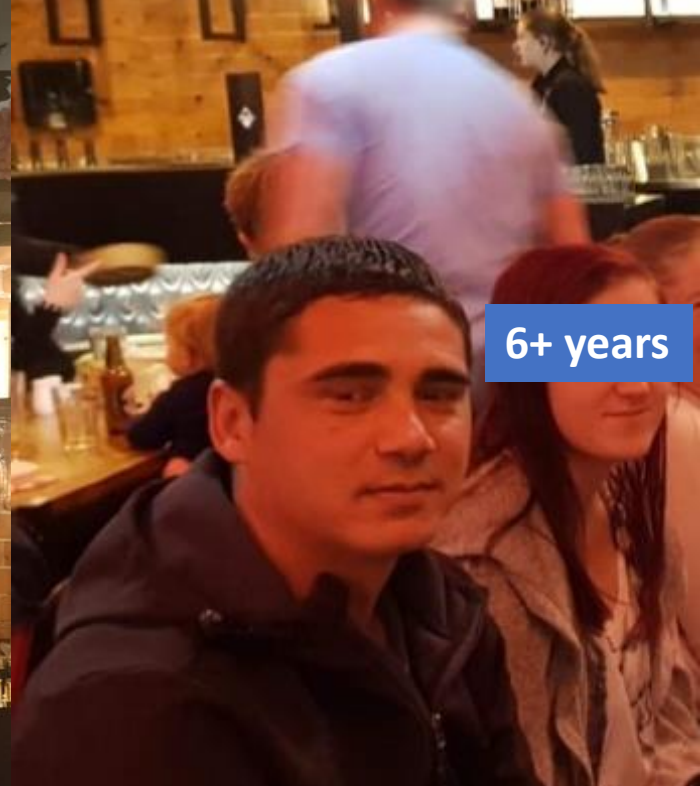
8+ years



9+ years



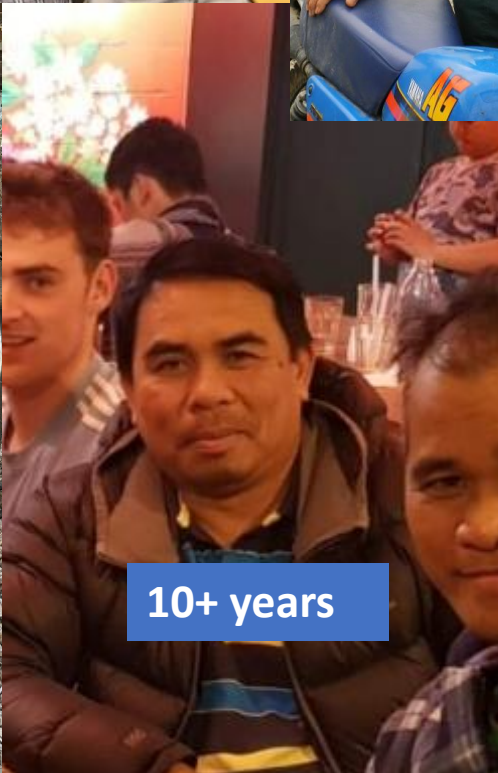
7+ years



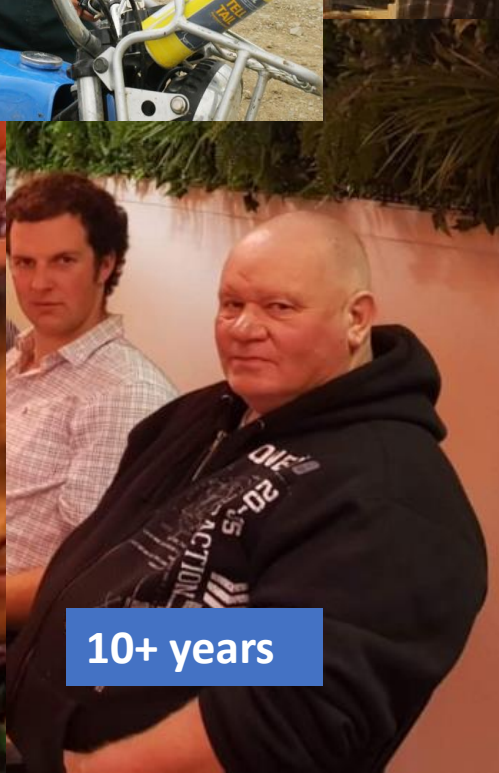
6+ years



5+ years



10+ years



10+ years



11+ years



*Growing
people ...*

www.dairygrads.co.nz



*grows a better
farm*





Questions?



PEOPLE EXPO

Powering
productive
workplaces

Delivered in partnership with



DAIRY WOMEN'S
NETWORK
success through inspiration



Agritech & People

James Allen

The Topic: Redesigning excellence in agribusiness advisory

Key question:

1. The role of the Ag advisor given rapid the changes in farming and technology,
2. leading to a deeper dive into productivity issues in our industry



NUFFIELD
NEW ZEALAND
FARMING SCHOLARSHIPS

**Global vision,
leadership and
innovation**

Outline



- ❖ Productivity challenges
 - ❖ Agritech & AI
 - ❖ The farmer of the future
 - ❖ Where to from here?
-

Old v New



Task	Traditional	Now
Animals		
Heat detection	Observation	Collars
Pregnancy testing	Vet/ultrasound	Milk sample Collars
Disease diagnosis	Blood samples	Milk samples
BCS	Observation	Automated
Lameness detection	Observation	Automated

Old v New



Task	Traditional	Now
Pastures		
Pasture Cover assessment	Plate meter/eye/tow-behind	Satellite
Feed planning	Manual calculations/Feed budgets	Satellites +AI
Feed allocation	Electric fencing	Geo-fencing
Weed control	Hand/tractor/aerial	Drone

Old v New



Task	Traditional	Now
Dairy Shed		
milking	manual	ACRS Robots??
Teat spraying	Manual	automated
Milk production/cow	Herd testing	In-line
Drafting	manual	Auto-drafting

Old v New



Task	Traditional	Now
Financial		
Accounts management	Paper based	Automated feeds & coding
Budgeting	Paper based	Customised software
Soils & Fertiliser		
Fertiliser recommendations	Spreadsheets/Overseer	Spreadsheets/Overseer
Fertiliser application	manual	Proof of placement, autosteer

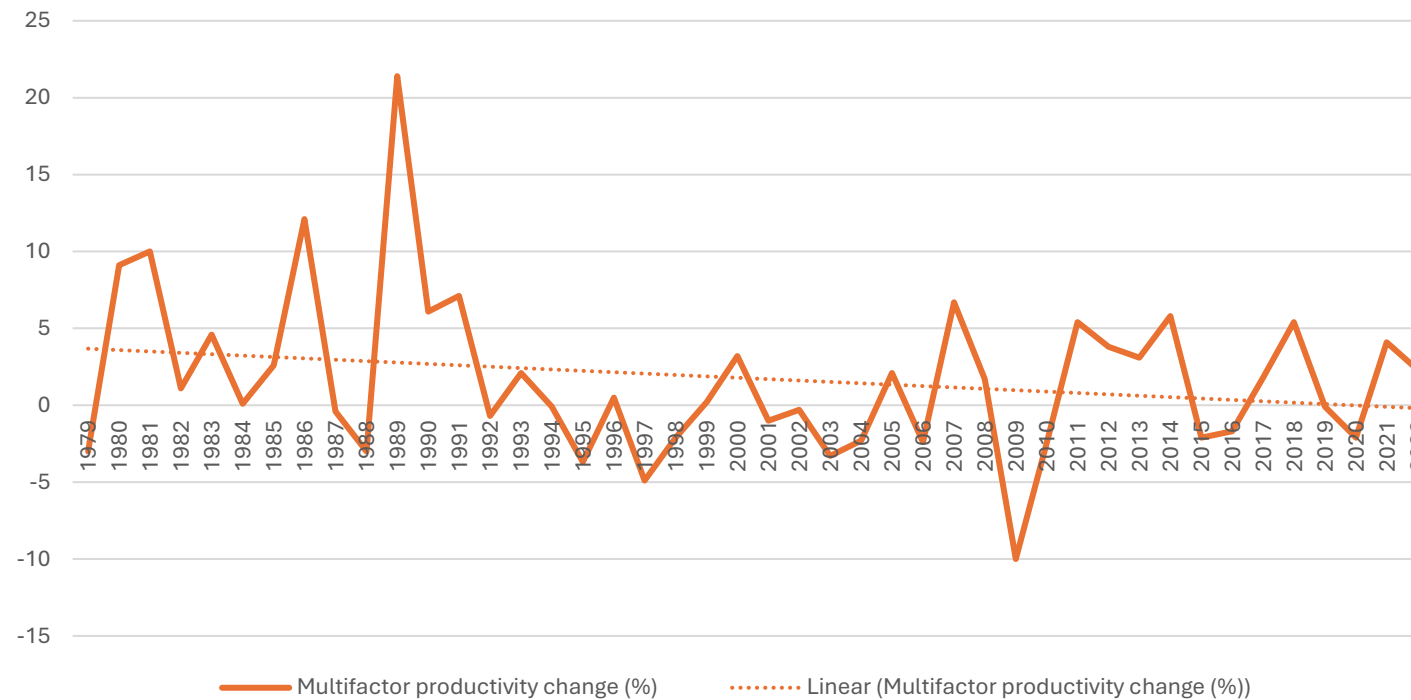
Old v New



Task	Traditional	Now
Communication	In person, call, txt, email	Whats app/messenger
		Apps. Eg Monday.com
Environment		
Invertebrate assessment	Visual stream assessment	eDNA
Nitrogen loss	Periodic stream sampling	In stream real time monitoring
Soil moisture	Weekly monitoring	Real time soil moisture monitoring

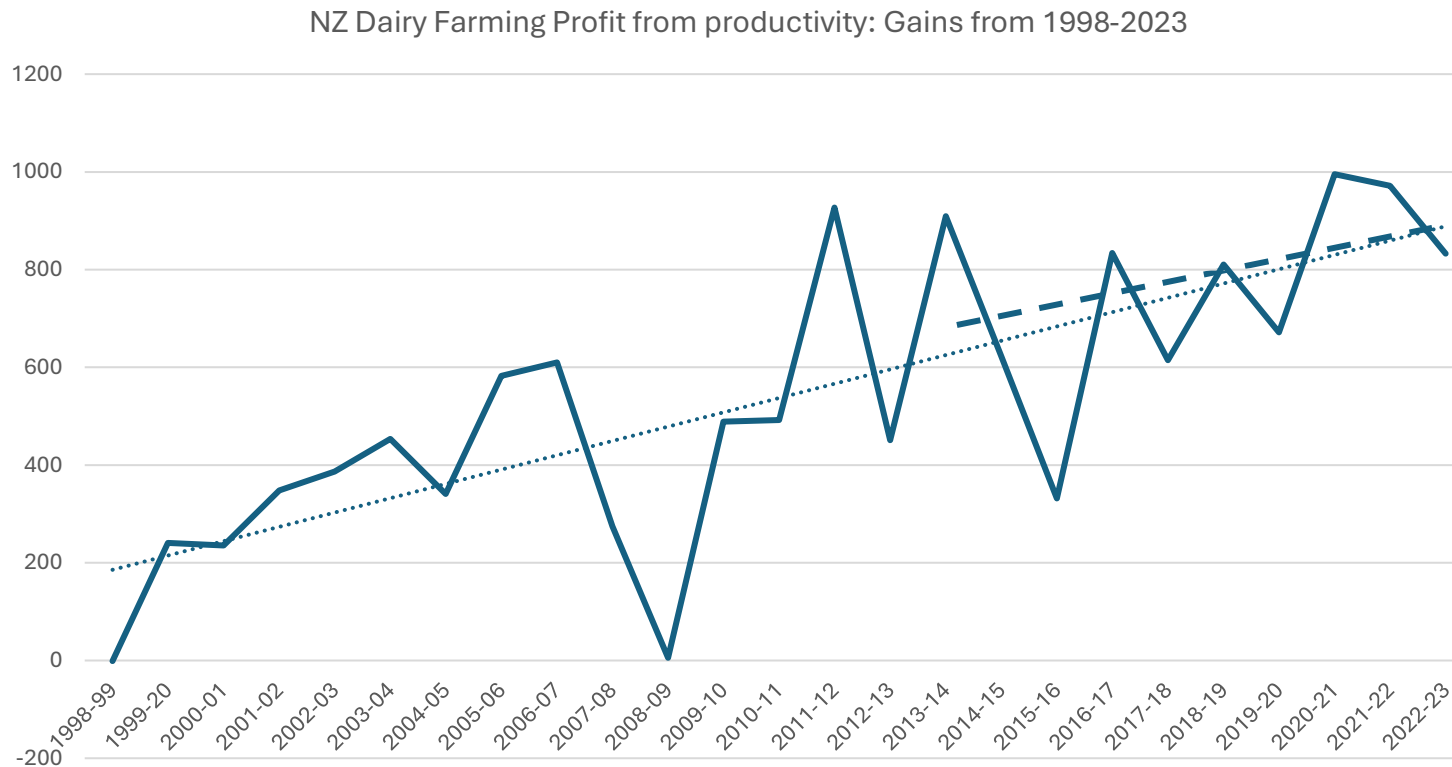
Productivity...

Agriculture Sector Multifactor productivity change (%)



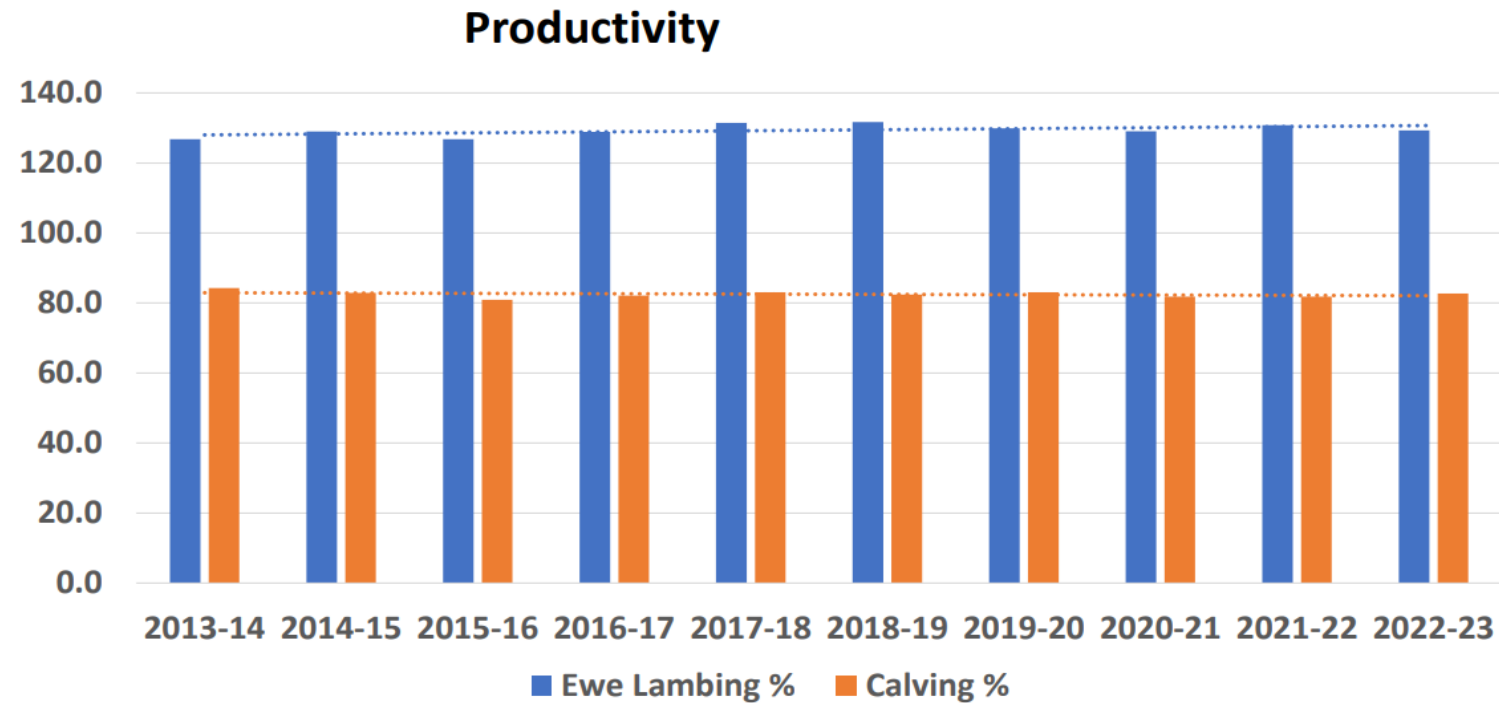
Source: Statistics NZ, via Figure.nz

Productivity gains – where are they?



Source: DairyNZ

Productivity gains – where are they?



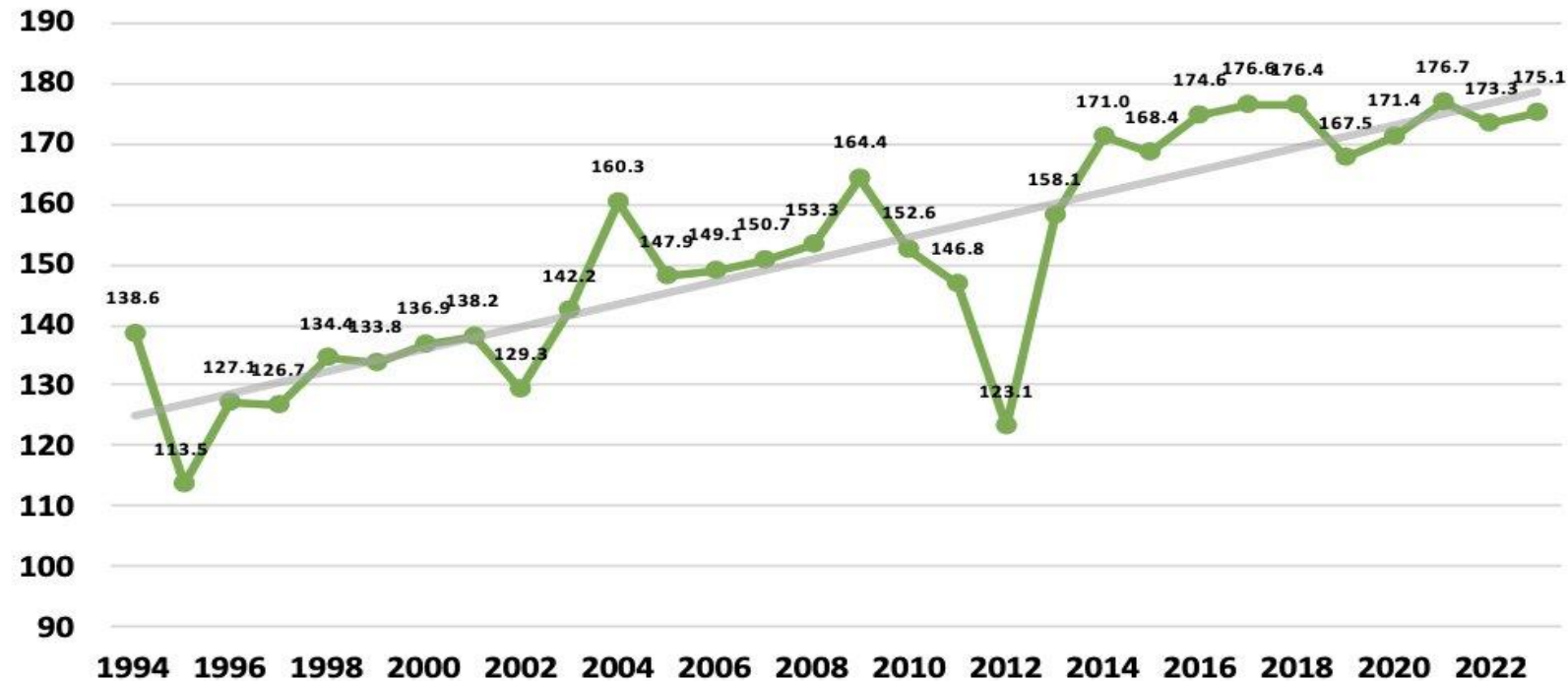
Source: BLNZ

Productivity gains?

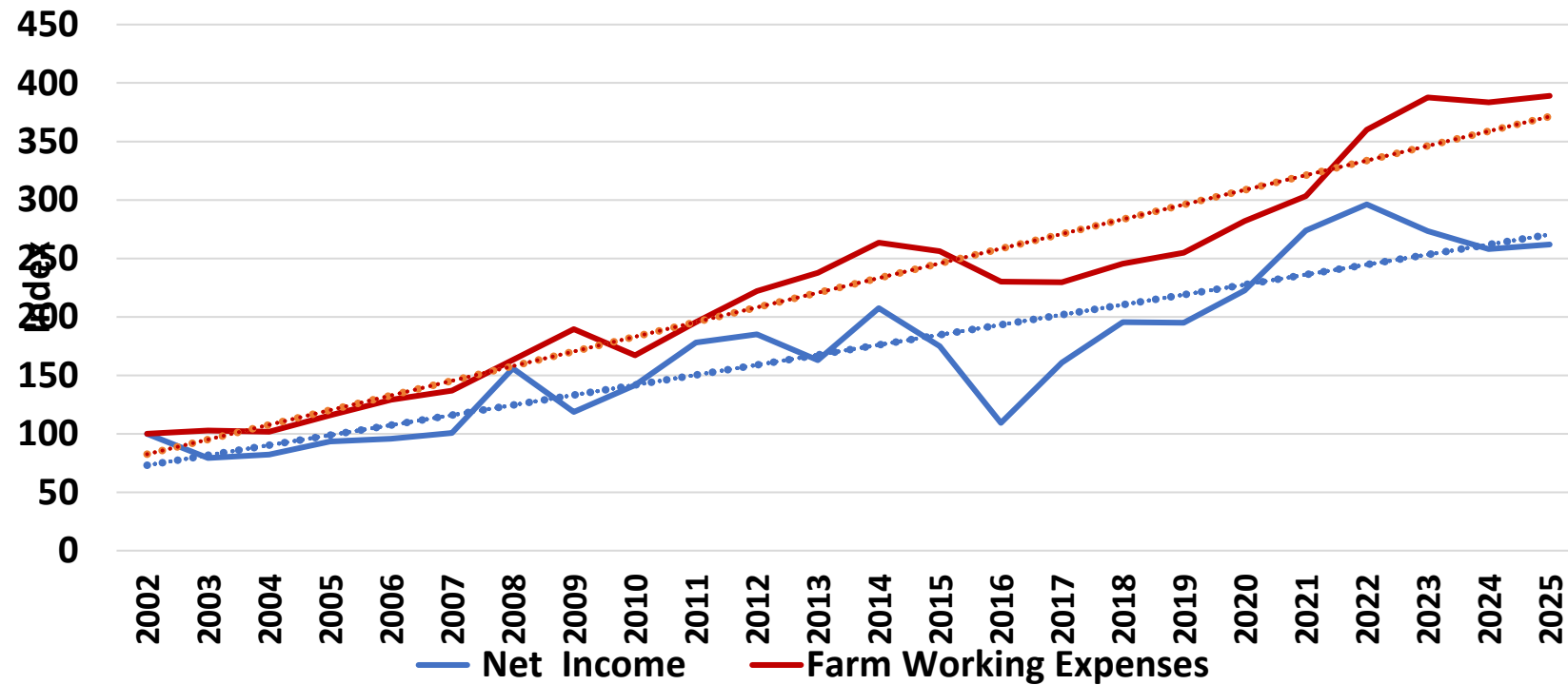


Corn Yield United States

Bushels per Acre



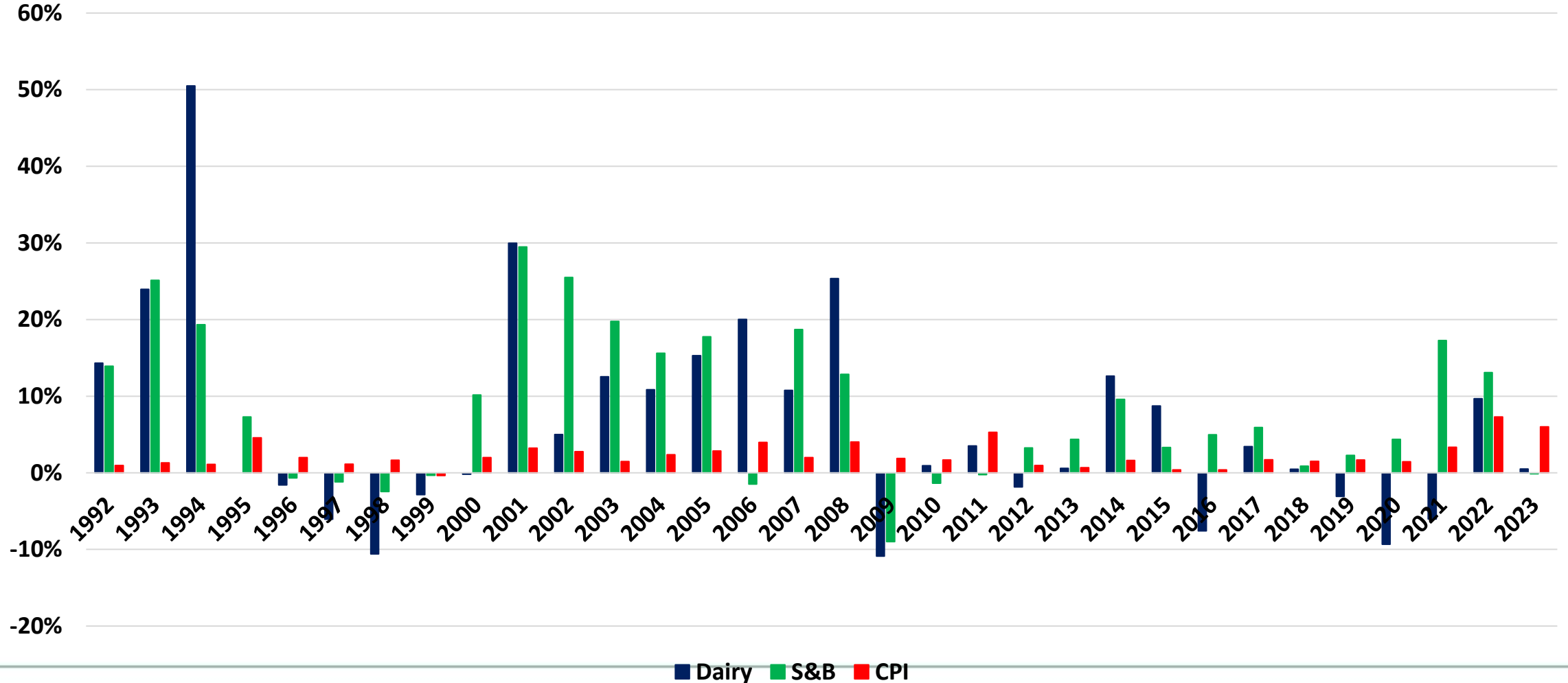
Trends: FWE vs Income



Don't rely on Capital Gain.....



Changes in Land Values vs CPI



Productivity – what is going on??

Nationally

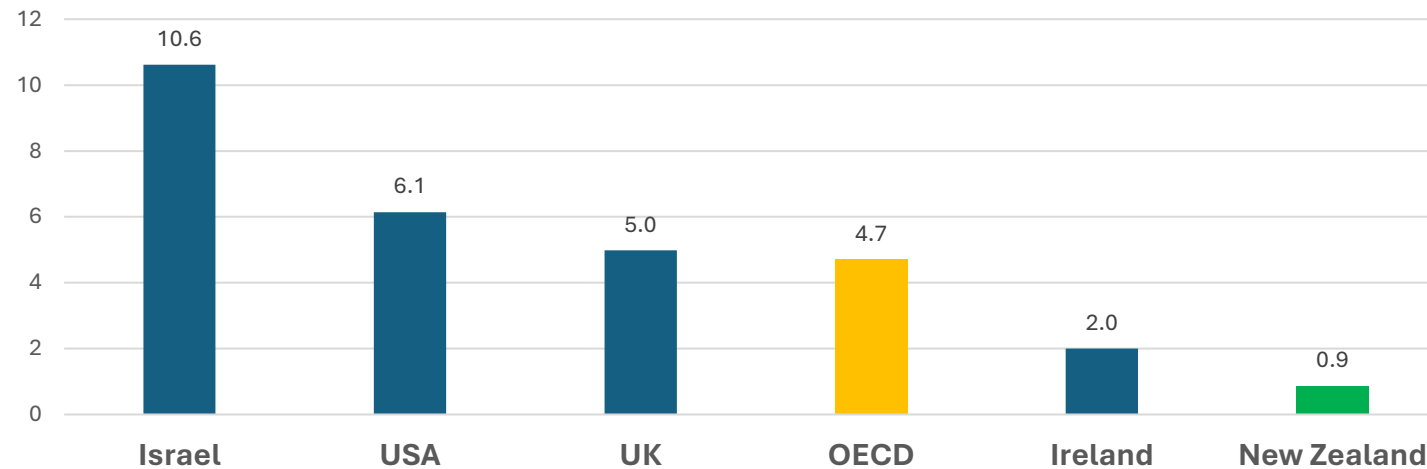
- Investment in R&D
- Innovation
- Capital



Leading a smarter, sustainable, high-performing primary sector

Productivity – what is going on??

% Spend in R&D as a % of GDP in 2021.



Source: Stats NZ

Productivity - Primary Sector

- Climatic variability
- No increases in pasture growth
- Regulatory pressures
- Cost-price squeeze – the commodity trap



Leading a smarter, sustainable, high-performing primary sector

Productivity – what needs to change?



Leading a smarter, sustainable, high-performing primary sector

So what's out there?



AI...



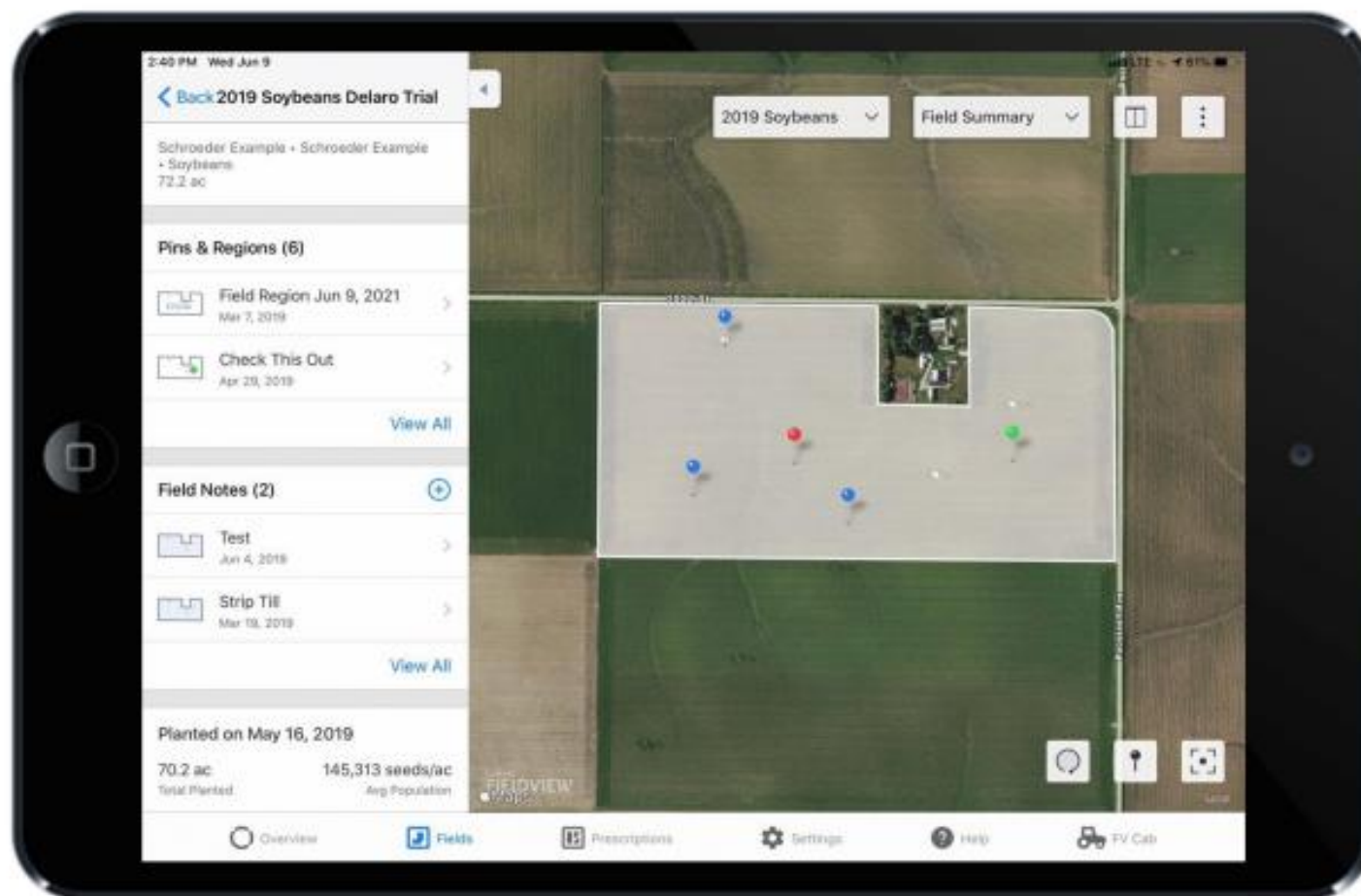


8451

Climate FieldView™ Platform

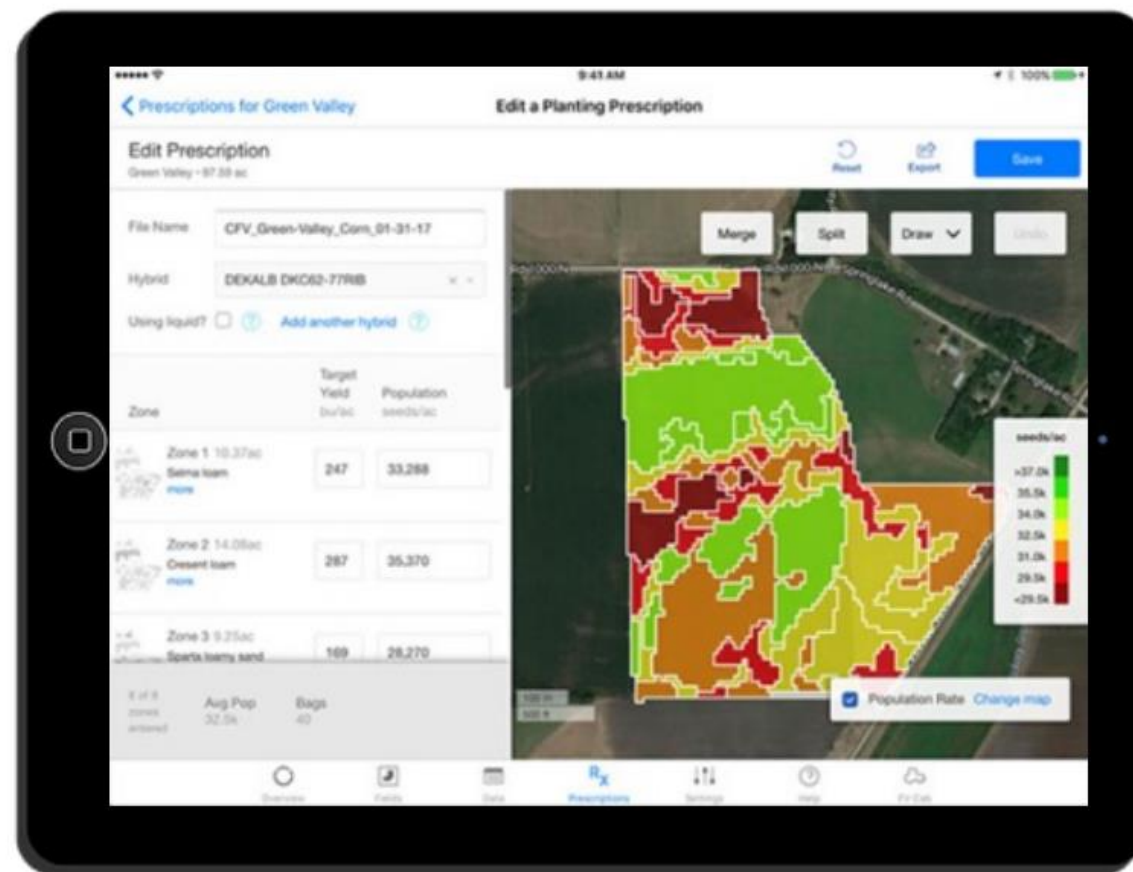
*“Connecting all data layers
year-round”*

- Collect a variety of layers
- Connect to other platforms
- Share with your trusted advisors
- Decision making based on insights from your fields



Variable Rate Prescriptions

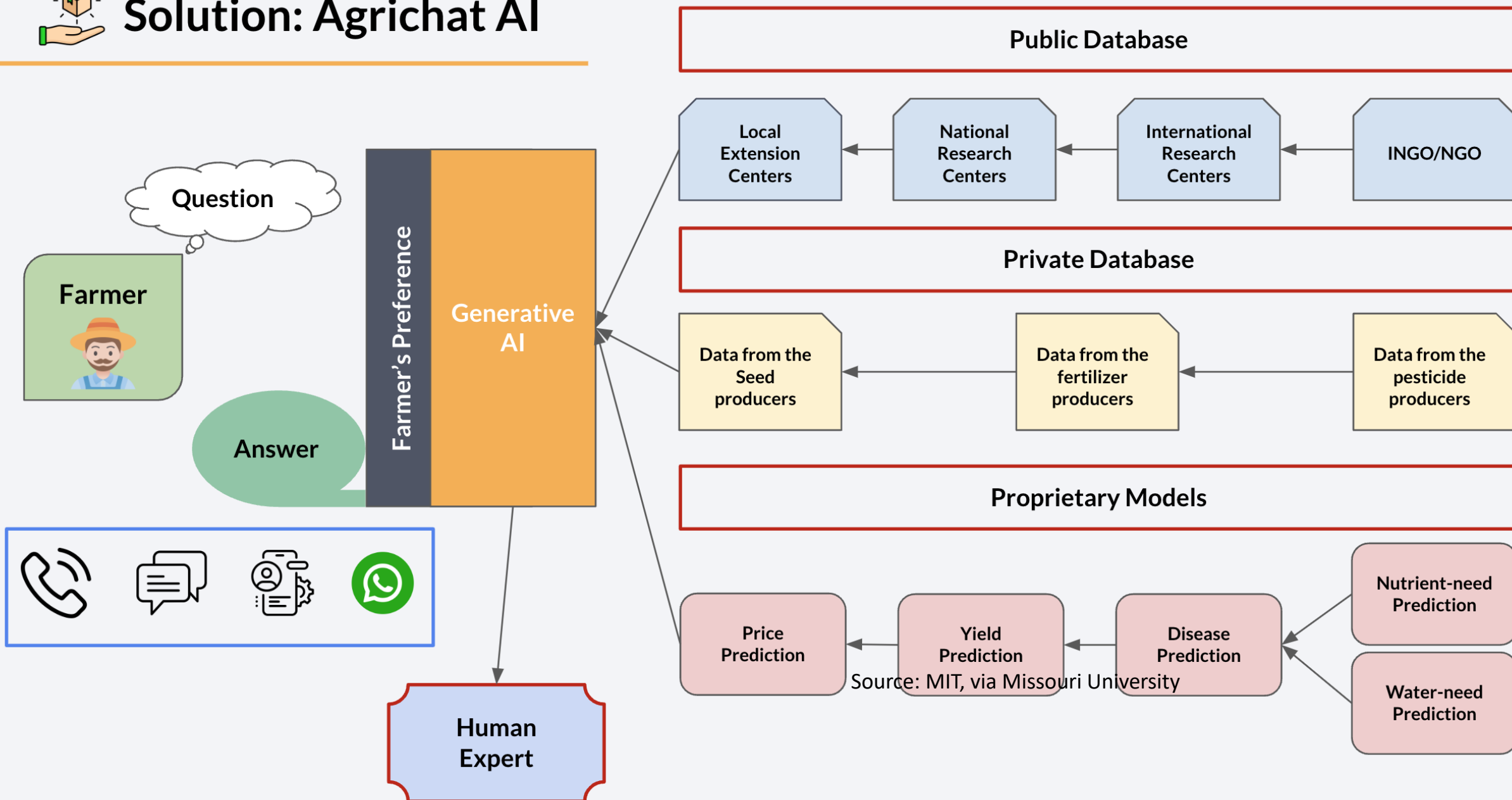
- FieldView Planting, Fertility, and Crop Protection Prescriptions
- Create custom prescriptions from satellite imagery or historical yield data







Solution: Agrichat AI





Hello! I'm ready to assist with your agricultural queries from University of Kentucky Database. What are you looking for today?

how should i decide when to plant my corn? i am in Ohio

AU



Deciding when to plant your corn involves understanding the growth stages of the corn plant. Corn, or maize, is a member of the grass family. When properly managed, a single corn plant can reach 7 to 9 feet tall and produce a single ear with 450 to 600 kernels. Corn grown in Kentucky, for example, normally produces over 11,000 pounds of seed and 11,000 pounds of fodder per acre, which is nearly 200 bushels per acre. Understanding how a corn plant develops and understanding key development stages will help you better manage your corn. For corn to produce a plant and kernels, it must conduct both photosynthesis and respiration. Photosynthesis uses sunlight to convert water and carbon dioxide into glucose sugar. Respiration uses sugar to build structures such as the plant itself.

As for your location in Ohio, the planting time may vary slightly due to differences in climate and soil conditions compared to Kentucky. It's important to monitor your local weather conditions and soil temperature. Corn typically requires a soil temperature of 50°F for germination. You may also want to consult with local agricultural extension services or experienced farmers in your area for more specific advice tailored to your local conditions.

Sources:

ID-139: A Comprehensive Guide to Corn Management in Kentucky



Send a message.



Farmer.CHAT

An AI Assistant by Gooey.AI and Digital Green
to make vetted farmer knowledge accessible.

India

Ethiopia

Kenya

Chat in the following languages:

हिंदी



తెలుగు



English

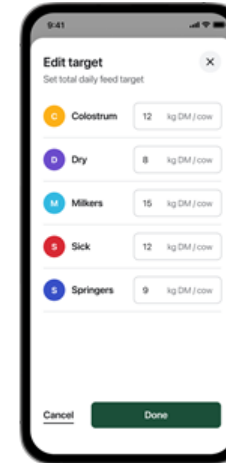
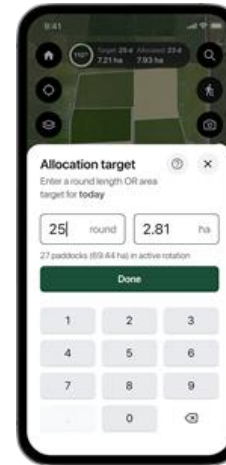
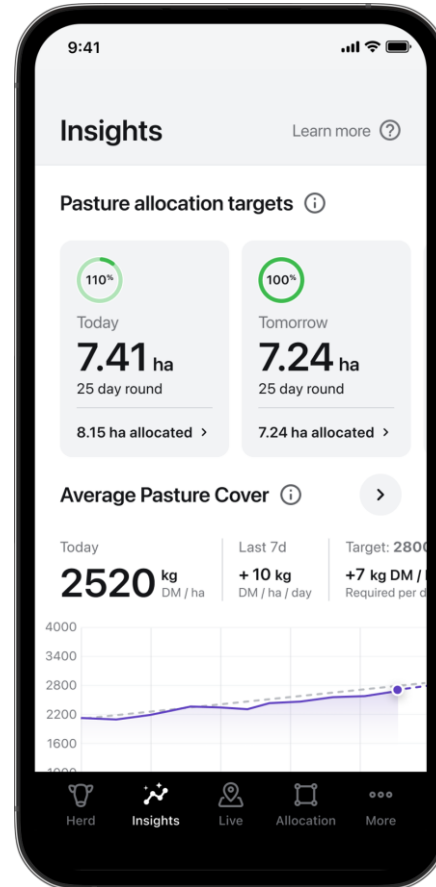


भोजपुरी



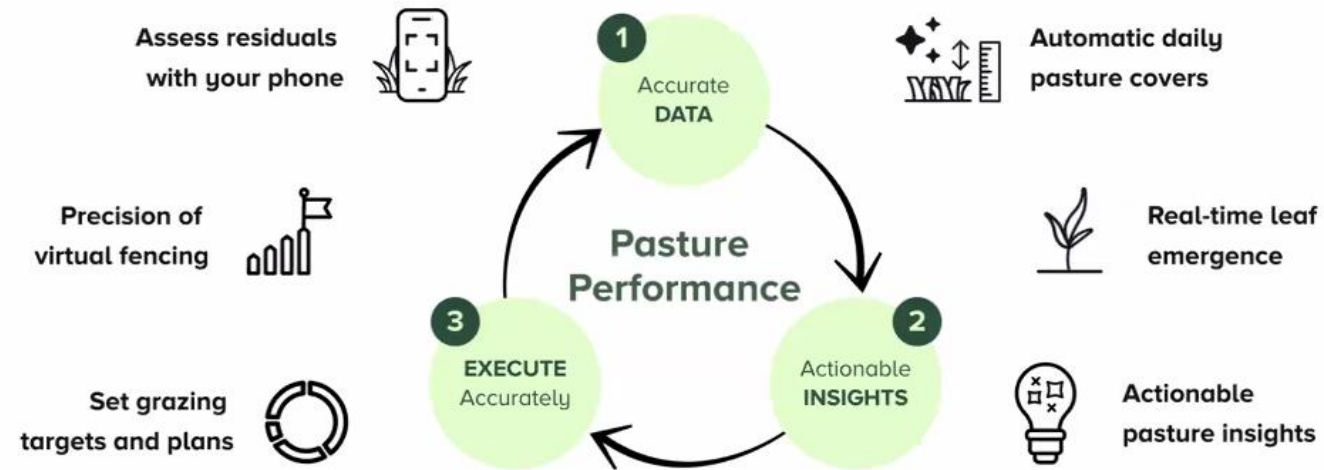
What about New Zealand?

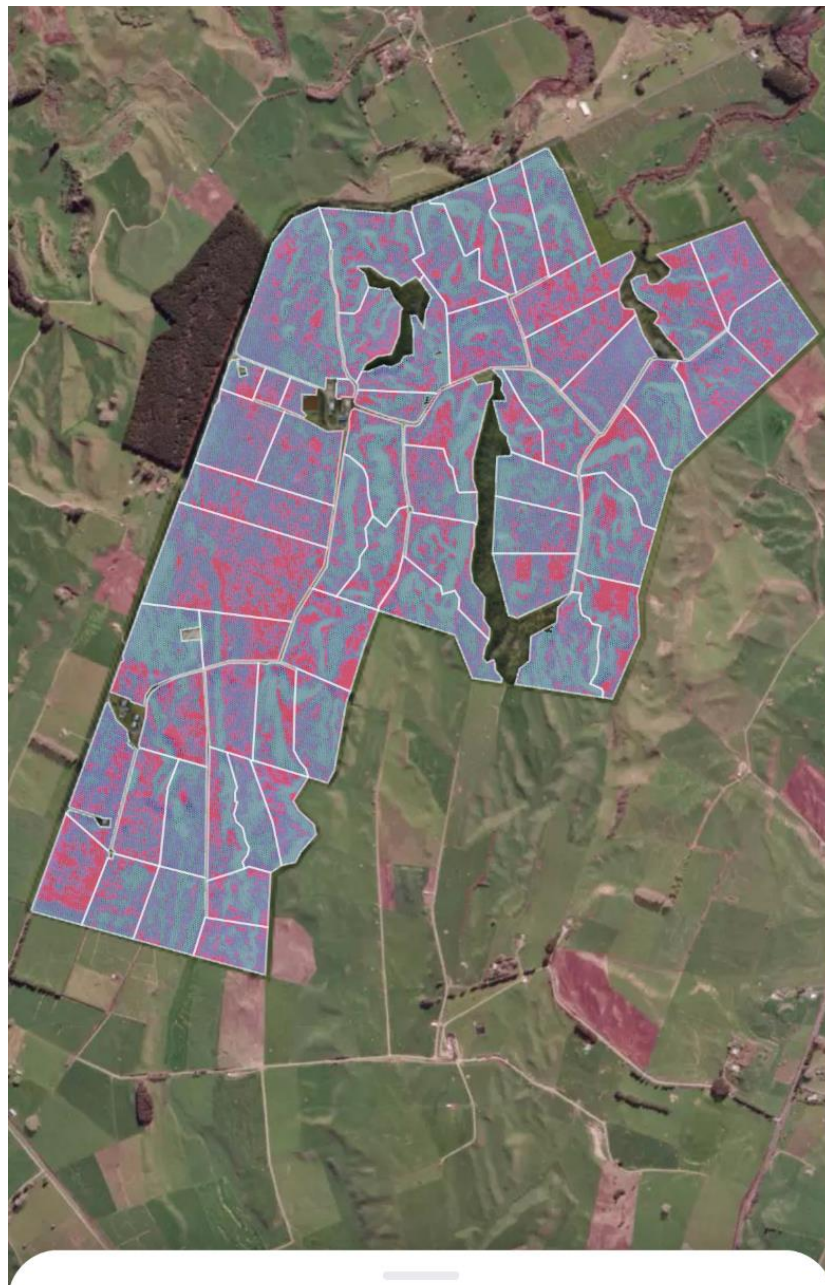




Halter™

Pasture Pro introduces...





Herd heatmap

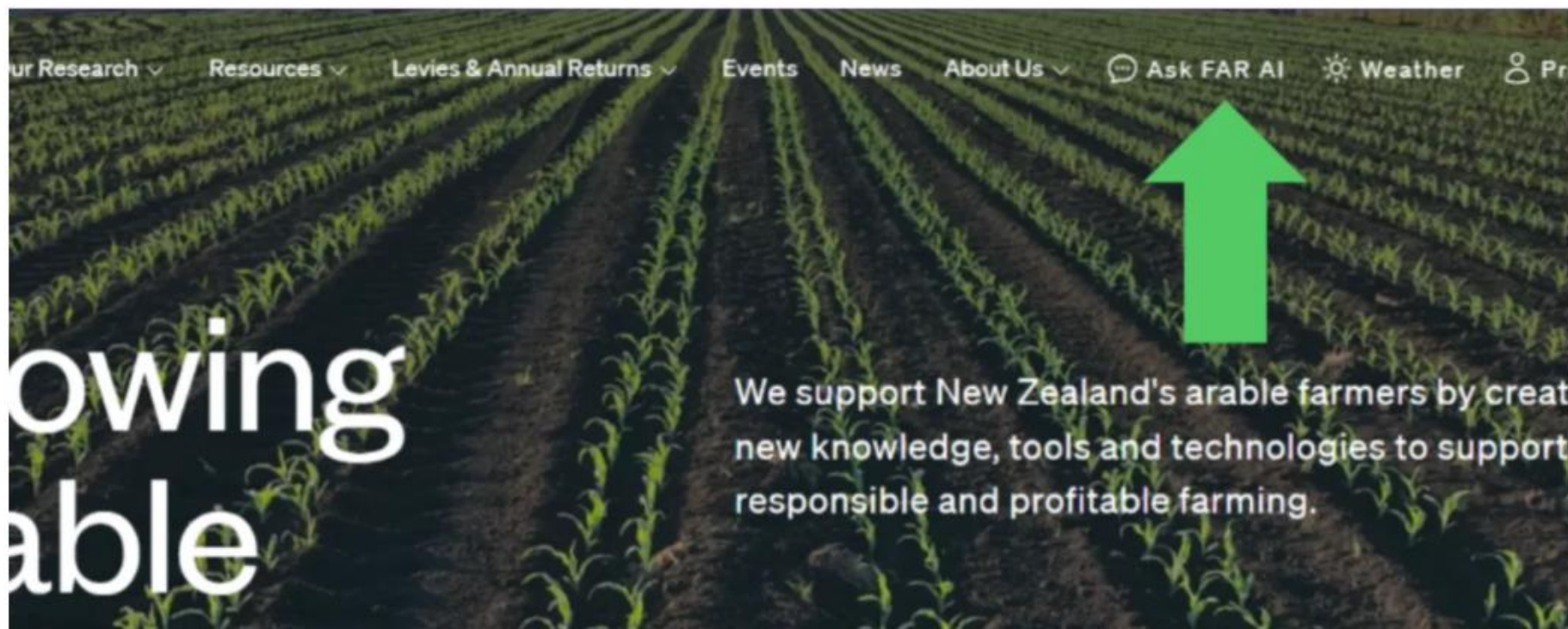
Where cows spend the most time.



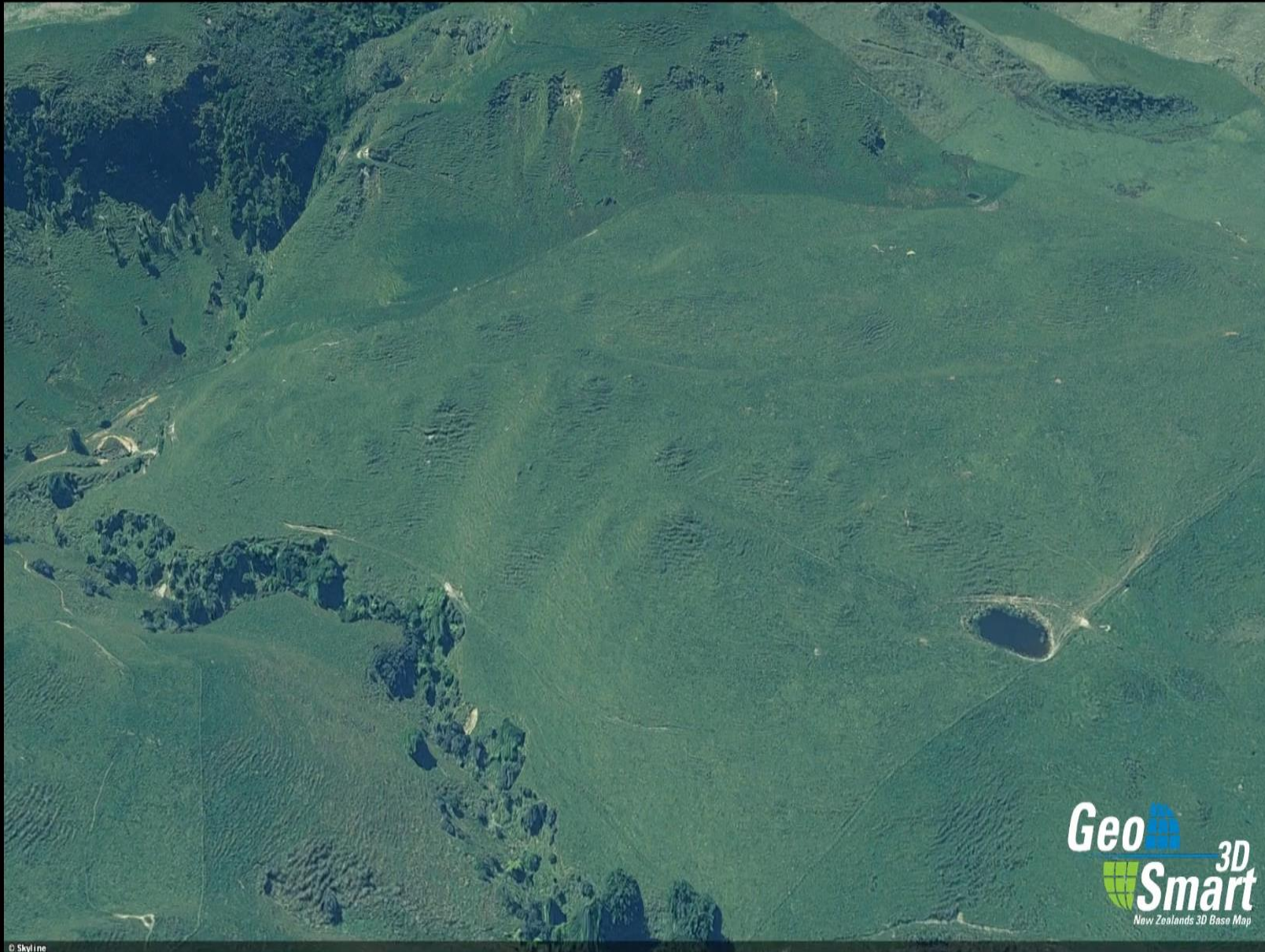
[Our Research](#) ▾[Resources](#) ▾[Levies & Annual Returns](#) ▾[Events](#)[News](#)[About Us](#) ▾[Ask FAR AI](#)[Weather](#)[LOGIN](#)

[Homepage](#) / [Resources](#) / [Ask Far](#)

Ask FAR!









A photograph of a large indoor facility, likely a dairy farm, housing many black cows. The cows are packed closely together in rows, with some looking towards the camera. They have yellow identification tags on their ears. The facility has a high ceiling with green metal beams and skylights. The floor is covered with straw or hay. The text "So what..." is overlaid in white, sans-serif font across the middle of the image.

So what...

The farm(er) of the future



Increased scale



Well qualified



Adept at accessing technical data



Producing more from less (how?)

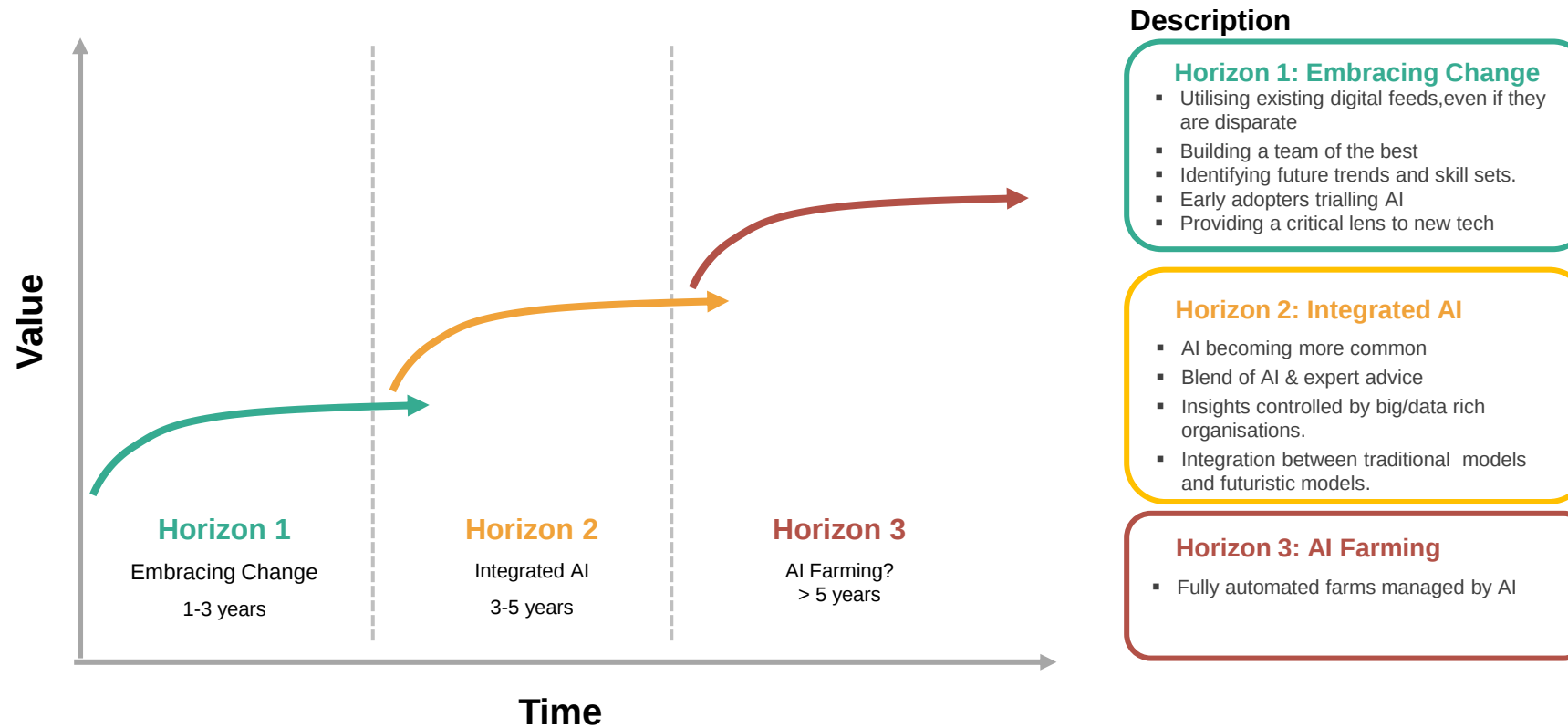


Digitally connected



More division of land ownership v management

The future of the primary sector



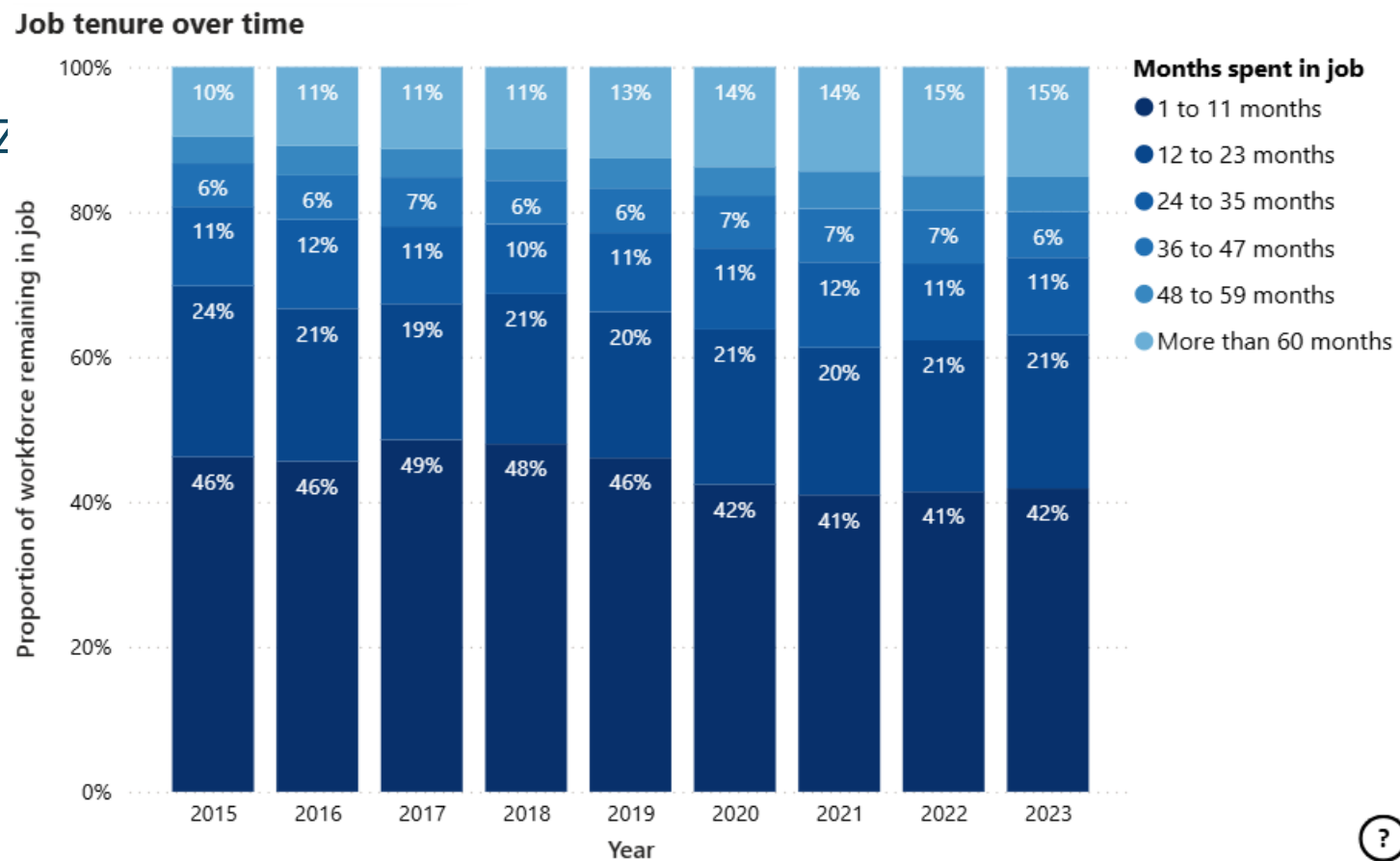
It's all about the people and less about the tech.

- Use ag-tech to
 - enhance performance
 - improve retention
 - Create more repeatable results
 - Retention
 - don't think about the industry staff retention issues – think about your business
 - retention affects productivity
 - How do I become the employer of choice?
-

Dairy farm – job tenure



Source: DairyNZ



Precision farming – the simple version!



Managing every
animal , every
square metre

Management
by paddock
and mob



Changing Behaviours



- If you do what you've always done...
- This is a team approach –ownership of new ideas and tech by the farm team
- Agtech – dumbing-down or upskilling?
- Democratisation of information

Changing Skill Sets



Changing Skill Sets



- E.g. Ability to pick cows on heat
- vs ability to analyse & interpret information?
- The role of the farm data manager – in-house or outsourced?

Don't aim for average – it doesn't work.

- 5% lift in production with a 5% decrease in costs = ?% increase in profit...
- Add in a 5% lift in value, profit increases by ?%
- How do we use Ag tech to produce these 5% increases?

5 x 5 x 5



kg MS 200,000				
			5% reduced costs, 5% increased production	plus 5% added value
	\$/kgMS	Total		
Payout	\$ 9.00	1,800,000	1,890,000	1,984,500
Costs, f.w.e	\$ 6.50	<u>1,300,000</u>	<u>1,235,000</u>	<u>1,235,000</u>
	EBIT	500,000	655,000	749,500
		% Profit Increase	31%	50%

Return on Dairy Assets



Source: DairyNZ Economic Survey 2022-23

How good is your data management on farm?



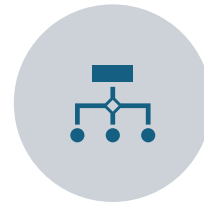
Hard drive v
Cloud storage?



Backup systems



Sharing of farm
information
between staff



Data loss when
managers/sharemilkers
move on



Connectivity
issues

Key Points



- Don't aim for average, it doesn't work
 - 5% lift in production with a 5% decrease in costs = >30% increase in profit...
 - How do we use Ag tech to produce these 5% increases?
 - Precision farming = managing the farm per sq m & per cow
 - What skill sets do you and your team need in the future?
 - How will you integrate new tech to ensure it is adding value?
 - How well are you managing your data on farm?
 - It's all about the people!
-

Don't be a Sheep



The end.



Leading a smarter, sustainable, high-performing primary sector

What could your manager do to improve your satisfaction and enjoyment of work?

Nah because my manager is the best, I learned much

He's teaching me little by little about his knowledge about dairy farming so that i can do my job well

My manager teaching me very well about our farm job. Sometimes he make jokes, some fun, so that I can learn very easy, and enjoy. With job I can improve myself.

He always guides me and if I make a mistake, he always supports me and gives me advice, even in personal problems, if there is anything he always helps.

My boss is a good example for farming sector

In all honesty nothing, I am well looked after, a great farm and team and he is very caring with me towards my family. We have great equipment and time off when needed is always there.

He guide me to lead even though I am not in charge. Sending me in different workshops & training for me to grow

Absolutely nothing best boss ive ever had

Thank you

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