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Afloat but Drifting Backwards

A Look at Dairy Land Values Over the Next Five Years

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Summary

- Following a phenomenal boom after the turn of the century and a partial correction during the global financial crisis, the value of New Zealand dairy land has been stuck in neutral since 2010.
- While valuing land is to some extent a subjective exercise, at current prices, the cash returns on owning dairy land are lower than they used to be and will likely decline further in the next few years.
- Rabobank expects that macro settings will exert downward pressure on land prices in the next five years.
- On farm, we expect the average farmgate milk price to soften somewhat, production growth to stabilise, and costs to rise, as farmers invest to meet more stringent environmental regulations.
- Foreign capital flows will remain lower unless the current policy settings are revised.
- Pending environmental changes, in combination with an upcoming election campaign to determine the next government, will continue to cast a cloud of uncertainty over investor confidence and therefore throw shade over land values for the next 12 to 18 months in particular.
- Tighter credit availability will add downside pressure to dairy land values over the coming five years.
- Beneath the general national trend towards softer dairy land prices, we will see segments of the market that perform differently. Regions with high competition for land use will fare the best.
- A declining land market will have implications for all industry participants.
- Investors will need a higher level of competency to attract capital and succeed in a declining market, with increased regulatory complexity and uncertainty.
- They will also need to undertake long, and more expensive, due diligence before purchasing dairy land. This will slow down the land-buying process and remove some of the drivers of market tension that have previously had an inflationary impact on prices.
- Banks will need a clear strategy for dealing with the increased environmental regulations – understanding the application of potential and existing regulations.

From boom times to doldrums: a brief history of dairy land price drivers

The value of New Zealand dairy land more than doubled between 2000 and 2019. Yet, across this timescale, land prices moved through three distinct periods.

The boom years: 2000-2008

Rising farmgate milk prices was one of the main drivers of escalating dairy land values between 2000 and 2008. World prices were increasing across most dairy commodities. The well organised New Zealand dairy industry was able to tap into these rising prices, with NZ export receipts benefiting, particularly as milk powder prices improved.

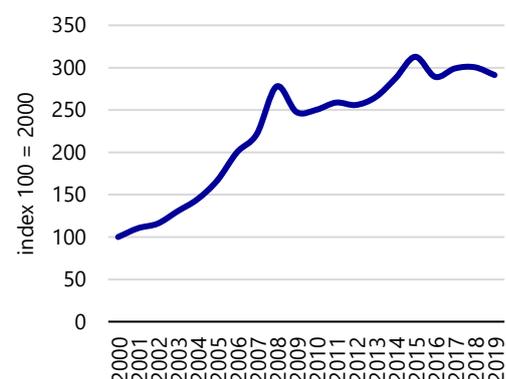
As New Zealand dairy farmers experienced better returns on average between 2000 and 2008, farmer confidence was reflected in further investment in the dairy sector. Underpinned by the Dairy Industry Restructuring Act 2001 (DIRA), which provided certainty of milk collection, and fuelled by regular cash flow, farmers sought to reinvest their profits. They invested in expanding their own businesses and in the cooperative model. By comparison, returns on non-dairy sectors were much lower. Average farmgate prices for sheepmeat were 20% less than farmgate prices for dairy, while farmgate beef prices were over 30% lower compared to dairy farmgate prices from 2000 to 2008.

Across this period, readily available capital significantly underpinned the dairy land value boom. Farmers had ready access to rural debt for development and expansion in a competitive banking landscape. The combination of lower-cost offshore funding and a strong lending appetite by financiers, backed by ambitious year-on-year increasing milk production and income budgets, fuelled land values to the next level.

With all parties demonstrating a high risk appetite, farmers borrowed more against increased land values, which fuelled the lending cycle around again. As land values rose further, farmers had the ability to borrow more against a growing equity base, developing further reliance on debt for expansion and growth.¹ Between 2003 and 2008, when land values lifted at 16% CAGR, farm debt grew at 17% CAGR, while the farmgate milk price increased by 16% CAGR.

Importantly, this period of rising land prices created a mentality of farming for capital gain for investors in dairy land. The land price appreciation that transpired fostered a focus on profiting through capital gain over operational returns, providing a buffer for losses as well as a sense that land values would keep rising.

Figure 1: Dairy land value index, 2000-2019



Source: DairyNZ, Rabobank 2019

¹ Flannery, Peter. "Banking – A New Norm: Back to the Future or Forward to the Past?" *Farm Plan* (2019). url: http://www.farm-plan.co.nz/files/7215/6669/3245/Banking_A_New_Norm.pdf

The global financial crisis correction: 2008-2009

Land values took a dive during the global financial crisis, as the milk price slumped, capital dried up, and confidence fell. New Zealand dairy land markets are generally considered to be liquid compared to offshore markets. Over the last ten years, around 2% of New Zealand dairy farms have been sold each year. However, liquidity dried up for farm sales over 2009 and 2010, with sales volumes halving compared to the ten-year average experienced between 2010 and 2019, as credit flows ground to a halt.

Afloat but moving sideways: 2010-present

Since the global financial crisis, land prices have shown only modest advancement. While milk prices have remained at a high level, farmgate prices haven't risen at the same rate as prior to the crisis.

Rising debt levels have proven to be one of the handbrakes to continued growth in land prices. National dairy debt as of June 2019 stands at NZD 41.4bn, a 43% lift since 2009 (or 4% CAGR). Farm working expenses have increased on average since 2010, as rising compliance obligations have further increased operational costs (and/or lowered potential land revenue). Margins have been lower as a result, and returns from farming have been more modest.

But the more central factor for stalling land values is that capital is not as readily available in a post-crisis world. The regulatory impacts of the global financial crisis still linger today and clearly set the framework for a different banking era – in addition to the recent enquiries into banking conduct and culture in New Zealand and Australia. Policy changes by the Reserve Bank of New Zealand (RBNZ) following the financial crisis meant that banks were required to source more of their funding from retail deposits and long-term wholesale markets, effectively holding more of their capital onshore.

Now, the RBNZ is raising the minimum level of regulatory capital in the banking system even higher to withstand a one-in-200-year event, with all banks required to increase their capital base for tier 1 capital over the next seven years. This may come at a cost, which may be passed down to farmers, as banks require a return on capital and may seek better returns in sectors outside of dairy.

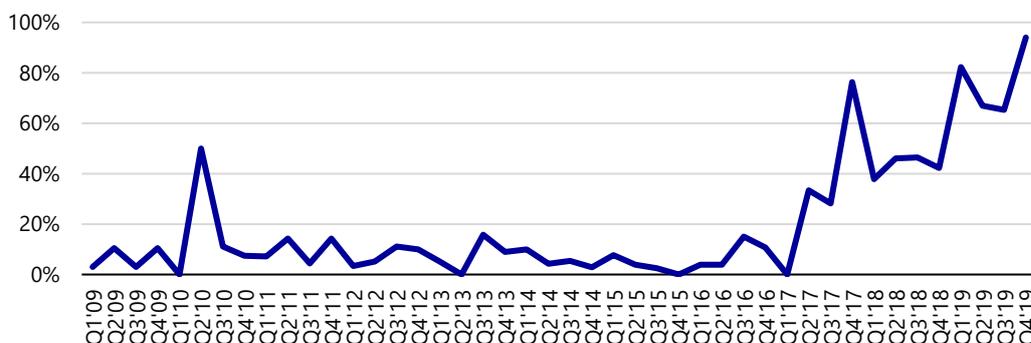
Furthermore, capital constraints on offshore parent companies of New Zealand-based banking subsidiaries are also driving more restrictive lending behaviour locally. Anecdotally, banking institutions are already taking a more conservative view of lending proposals and have tightened their approach to issuing credit. Lending decisions are now increasingly based on strong cash flow performance, with an ability to repay both principal and interest sums across all lenders.

In addition to local capital constraints, foreign capital investment in dairy land helped with a modest uptick in average prices in 2013 and 2014. However, changes to the Overseas Investment Office's (OIO) administration of the Overseas Investment Act 2005 in late 2017 have resulted in dairy land sales to foreign investors all but drying up. This has removed an avenue of capital, with the greatest impact evident in stagnant large-scale farm sales in the South Island.

Returns on other agricultural land investments have improved, particularly in the horticulture sector. This has provided an alternative home for investor capital, and syndications have shifted focus from dairy to sectors with higher returns, stemming another source of investment funds into dairy land.

More specifically for dairy farmers, the strength of some individual balance sheets has weakened over the last two years. Softer land values for Tier II and Tier III dairy land in some regions, in combination with the erosion of Fonterra farmer equity bases through Fonterra's share price performance, has reduced the financial position of some individual dairy farmers.² This has stunted dairy farmers' ability to expand their existing operations through debt funding – even assuming the tighter credit standards are met.

Figure 2: Percentage of dairy farmers attributing their expectation that the economy will worsen over the next 12 months to government intervention/policies



Source: Rabobank 2019

Finally, confidence in the long-term prospects of the dairy sector has waned. Rabobank's Rural Confidence Survey shows that dairy farming confidence in the broader agricultural economy is low. This is only the third period over the last ten years when net confidence of dairy farmers has moved into negative territory, but the drivers this time around are very different. In 2012, a high NZD/USD exchange rate was the culprit, and in 2014/15 the dairy downturn was in full swing. Rabobank's Confidence Survey's current lacklustre results have been largely driven by concerns regarding government intervention and policy changes, driving confidence lower than they have in any other period (see Figure 2).

Is dairy land overvalued?

Whether land is priced at the right level is to some extent subjective. It takes into account the returns that each investor considers acceptable, their risk appetite, but also the non-financial benefits they experience through owning a farm.

However, based on several measures, the returns of owning dairy land are lower than they used to be and will likely decline further in the next few years at current asset prices.

One useful approach is to look at changes in land prices over time relative to the expected revenue derived from dairying. This is commonly expressed as:

$$\frac{\text{Land price in NZD per ha} \div \text{kg MS produced per effective ha}}{\text{Average milk price per kg MS}}$$

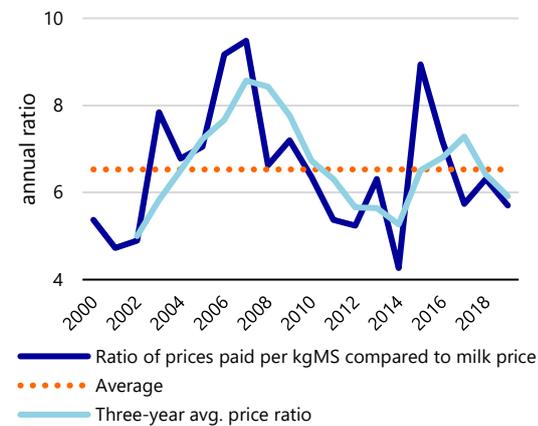
The lower this ratio is, the better the value of the land would appear.

Based on this approach, on face value, investing in dairy land at present looks a less attractive prospect than it was in the early boom years but is still below the 20-year average (see Figure 3).

² Fonterra share price at time of writing is NZD 4.01/share, compared to NZD 6.30/share two years ago

The limitations to this metric are the key drivers behind this ratio – productivity and an improving milk price. This measurement is subject to movement on an annual basis and is most vulnerable to fluctuating milk prices. As both productivity and the milk price have lifted significantly since 2015, the ratio has moved lower. We have included a three-year-average price ratio to reduce the influence of seasonal volatility.

Figure 3: The price of dairy land relative to revenue, 2000-2019



Source: Dairy NZ, Rabobank 2019

Another approach to measuring whether land is fairly valued is to compare the return that investors have made on that land over time.

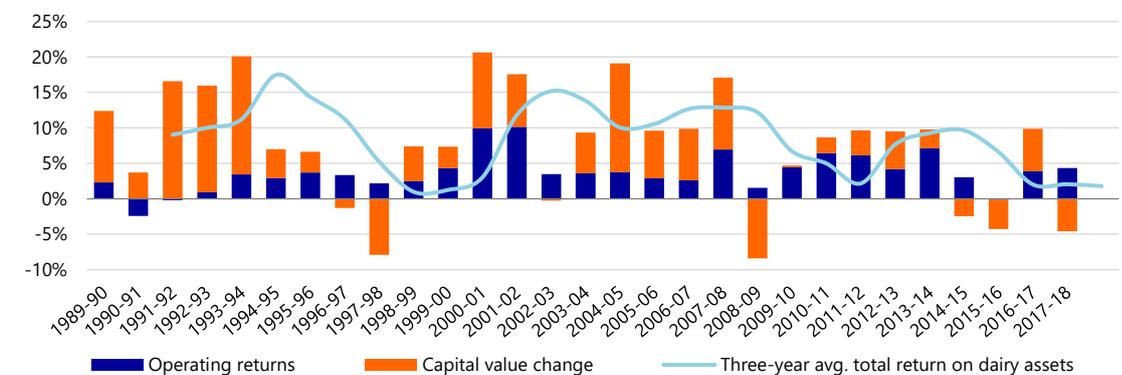
The cash return on total dairy assets (of which land comprises the greatest part) was lower in the ten years to 2017/18 (at 4% p.a.) than seen in the prior ten-year period (5% p.a.) – but not by much. The lower return was driven by a weak milk price over both the global financial crisis and dairy downturn periods in comparison to an inflated asset base (see Figure 4).

However, in the past, these fairly modest cash returns were sweetened by substantial capital gains or by lifestyle factors. Capital returns, while more volatile over time, have historically been

much higher than cash returns. The highest capital return over the last 20 years was 15.3%, compared to best cash return of 10.1%.

Capital gains have retreated over the last ten years, partly due to the reduced appeal of holding an asset with a 4% cash return. Over 20 years, capital returns have averaged 3.6%, compared to 4.6% for cash returns, driven by flat capital returns over the ten years to 2017/18.

Figure 4: Operating returns and capital gains, 1990-2018



Source: DairyNZ, Rabobank 2019

Moreover, based on our view of the dairy market for the next five years, dairy land’s revenue potential and the cash return will deteriorate in the coming years. Central to this are three assumptions:

- The average farmgate milk price over the next five years (NZD 6.25/kgMS) is likely to be below that seen in the last two years;
- Operational and compliance costs will rise;
- Production per hectare is likely to slow down over our forecast period (with improvements in genetics and management offset by the need to reduce stocking and fertiliser use in some regions under current environmental regulations – excluding pending Freshwater Reform regulation).

Based on this view, cash returns on dairy assets will fall, and the price ratio of land to its revenue potential will rise – both of which will put downward pressure on the value of the asset itself.

Macroeconomic outlook offers more headwinds than tailwinds for dairy land values

Table 1: Outlook to 2024 for the macro fundamentals

	Influence	Outlook
Farmgate Milk Price		We expect the average farmgate milk price to be NZD 6.25/kgMS over the next five years, below recent price levels but above the current ten-year average. While this should be sufficient to keep most farms profitable, cash return on assets at existing prices will remain within the range of recent years, exerting modest downward pressure on land values.
Profitability		With an acceptable – but not stellar – anticipated average milk price across the next five years, profitability will be dependent on cost control. A framework of increasing regulatory compliance will add to fixed working expenses, providing a headwind for profitability (depending on individual business structures).
Confidence		Confidence and investment intentions are likely to remain at low levels until the direct impact of proposed regulation at the farm level are clear. While confidence levels can swing wildly depending on the government of the day, climate, and commodity prices received, Rabobank expects the factors undermining confidence at present to linger for at least the next 18 months.
Debt Positions		<p>Average dairy farmer debt/kgMS has shifted lower for the season ending 31 May 2019 to NZD 22/kgMS, down from NZD 22.50/kgMS the prior year. With milk production lifting at a similar rate over the same period, the reduction in debt is mostly flattered by higher milk flows.</p> <p>Not all dairy farming businesses will have a large balance sheet risk exposure. But weaker asset values, combined with tighter credit metrics, will remain a headwind for dairy land for the foreseeable future.</p>
Local Capital		<p>The RBNZ capital requirement changes could, for some farmers, result in an interest rate increase, where banks look to offset the higher cost of capital allocation. These changes could see further tightening of bank appetite for what they deem to be riskier sectors/deals.</p> <p>However, any inflationary interest rate pressure is coming from a low base. The Official Cash Rate (OCR) is at an all-time low, and wholesale funding costs are also moving lower – a trend we see holding over the next two to three years. Should the OCR and wholesale funding costs both move significantly downwards, this would alleviate some of the short-term interest rate pressure that might emerge.</p> <p>In a more conservative lending era, plus increased regulatory scrutiny in the banking industry, more banks will require principal and interest repayments. Stricter lending criteria are anticipated to remain a feature over the next five years, which may provide further headwinds for credit availability. A portion of highly indebted farmers are most vulnerable.</p>
Foreign Investment		With no sign of a relaxation of the OIO directive on the horizon, we anticipate foreign capital flows for dairy land to remain at current reduced levels. This will pose a moderate to significant risk for the price of farms above NZD 12m to NZD 15m and/or on large-scale properties in Tier II and Tier III locations that come to market.

Environmental Regulation		<p>The environmental regulation of New Zealand agriculture is set to increase markedly over the next five years. Pending environmental legislation includes: the pricing framework for meeting greenhouse gas emissions under the Zero Carbon Bill; Essential Freshwater³ proposals; biodiversity changes; and an overhaul of the Resource Management Act.⁴</p> <p>The immediate impact of increasing regulation will be to increase on-farm costs and reduce the ability to increase milk production. This will influence existing land uses, while at the same time increasing the complexity of the farming business.</p>
Dairy Land Availability		<p>New dairy conversions will not be a feature across the country over the next five years. Once environmental regulations have been worked through at the farm level, fully compliant dairy farms in well located areas will trade at a premium.</p>

Note: Green=Supportive, Orange=Mixed influence, Red=Will exert downward pressure on dairy land values
Source: Rabobank 2019

Risks that could impact our views

Table 2: Risks

<i>Risk</i>	<i>Direction</i>
Disruption to NZ access to the Chinese market on political grounds	
Faster-than-anticipated decline in the global economy	
A marked strengthening in the value of the NZD against the CNY or USD	
A further substantial depreciation of the NZD against the USD or CNY	
Greater-than-normal climatic or disease disruption to supply in key competing dairy regions	
A slowdown in the pace of environmental regulatory change	

Source: Rabobank 2019

Freshwater: the biggest unknown variable and possible weight on dairy land values

The key downside risks to our expectations for dairy land values outlined above have the potential to be further exacerbated by the Essential Freshwater proposals. More clarity regarding the stringency of these proposed changes is anticipated early 2020. In the interim, DairyNZ modelling suggests that, out of the four possible scenarios considered, the application of the full Essential Freshwater plan (Scenario 3), as well as Scenario 3 overlaid with the greenhouse gas emissions targets under the Zero Carbon Bill (Scenario 4), will have substantial impacts on land-use change, national herd numbers, milk production, and ultimately profitability.

While DairyNZ modelling suggests most of the changes will be more significantly felt over the medium- to long-term period, impacts on land values will still be very evident over the next five

³ Ministry for the Environment. "Action for healthy waterways: A discussion document on national direction for our essential freshwater." Published September 2019

⁴ For more information, read our report, "[Farm to Your Strengths: Investing to Farm Under New Environmental Reforms.](#)"

years should Scenario 3 or Scenario 4 emerge. The impacts have the potential to reverberate across the entire dairy land buying/selling process.

Specific water catchment-level due diligence by potential dairy land investors needs to step-up tremendously. It will be imperative for buyers to fully understand the potential impacts of the regulations on each property, particularly in relation to nitrate and phosphorous limitations. This will extend the timeframes for the due diligence period as well as the credit assessment period by financiers. This will most likely remove some sales tension from the market, as buyers become more cautious.

Banks will be required to develop a strategy for a new level of understanding of on-farm dynamics in order to assess the appropriateness of client-proposed budgets against lending metrics with respect to the regulatory impacts. It will be imperative that banks understand the impact on each individual business, along with understanding their portfolio risk that will still need to be managed.

Some regions will face macro headwinds better than others

While macro factors will have an impact on land prices in one way or another over the next five years, impacts will be felt to different degrees across the country. This will be determined by characteristics of the farmland within each region and the corresponding local environmental regulations.

In the appendices of this report, we outline the local nuances and provide an outlook for each major dairy region in New Zealand over the coming five years. We have not sought to anticipate the effects of the current proposed Essential Freshwater reforms on individual regions. Should this piece of regulation come to pass, however, we anticipate further downside pressure on our existing dairy land price forecasts.

Among the regions, three common themes exist:

1. Demand for existing dairy land for alternative use

Demand for competing land uses, such as sheep and beef, dairy support, horticulture, and the potential for subdivision, as well as specialised land uses, such as broiler and dairy goats, is adding to demand for dairy land. This is most prominent in the Waikato, but the South Island will also see more of this over the next five years.

2. Capital constraints – both local and foreign

A reduction in available capital will have implications for the dairy land market across the country. Canterbury will see the largest potential land recalibration, due to a lack of foreign capital underpinning large-scale property sales over the next five years. The Taranaki region is most susceptible to local credit constraints, given the combination of high farm debt⁵ and high land values, but all regions will face this as a headwind across the next five years.

3. Local environmental regulation

Land prices will vary greatly depending on the location of the farm relative to the regional land and water plan, with specific reference to nutrient allocations and availability of natural resources.

⁵ Based on DairyNZ Economic Survey 2017/18 Dairybase data

Conclusion: Land prices will sink lower over the coming years

At a broad market level, Rabobank expects the price of dairy land to continue softening in the coming years. Headwinds for the dairy land market are set to strengthen. Environmental regulations firmly remain the wild card, while changes to the banking landscape will continue to place pressure on credit flows for dairy land transactions.

Moreover, we see global market risks as weighted to the downside (meaning that things are more likely to be worse than our primary view than better). The most prominent threats that would bring a greater price fall than we envisage are a faster-than-anticipated decline in the global economy and/or Chinese withdrawal from the dairy market.

Beneath the general national trend towards softer dairy land prices, we will see segments of the market that perform differently. At a regional level:

- In the Waikato, the divergence of prices among property types will continue to widen across the next five years. Competitive demand for land use overlaid with environmental change will be the primary drivers.
- We anticipate more downside for land values in Canterbury, based on the reduced availability of foreign capital, with the full implications of this for larger-scaled operations yet to be seen.
- Taranaki is an area where values may further run-up against local capital constraints. The risks are weighted to the downside in the near term for dairy land values in this region, given that the five-year average milk price is likely to be below recent milk prices while cost structures are set to rise, impacting margins and profitability.
- Stagnant dairy land prices in Southland are likely over the coming 18 months, before declining further, depending on environmental regulation changes. The magnitude of the decline will be contingent on the location and calibre of the property, with Tier II land likely to see the biggest change in the median land price.

Appendices: Regional Performance and Outlook

Canterbury

Table 3: Five-year median regional land price CAGR (to end May 2019) by productive capacity*

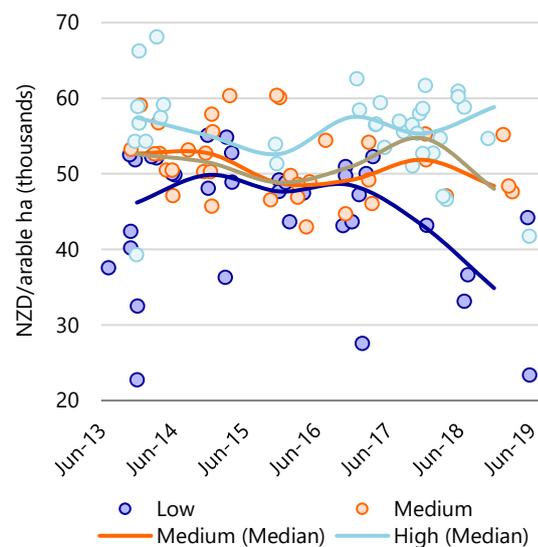
	All Sales	Low	Medium	High
Per ha	-1.8%	-5.5%	-1.7%	0.5%
Per kgMS	-1.2%	-4.2%	-1.3%	1.7%

*Notes: Productivity assessed on a 'within' region basis. Low=<1,436 kgMS/ha, Medium=1,436<1,517 kgMS/ha, High=>1,517 kgMS/ha
Source: Rabobank 2019

Capital constraints have resulted in lower median prices

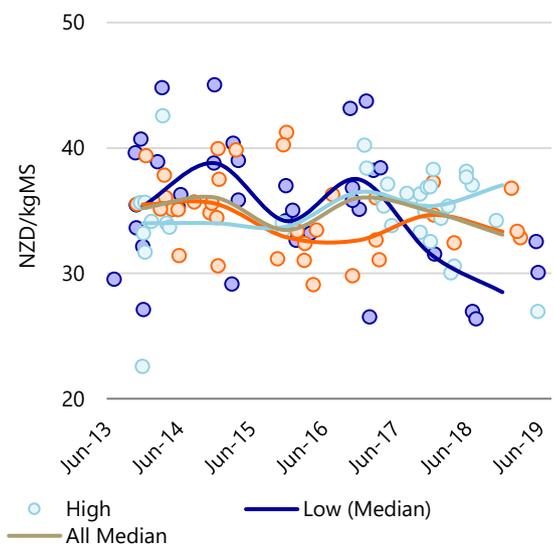
Prices for dairy land in Canterbury over the 2018/19 season have been dragged lower by more frequent sales of less-productive properties at lower price points. Lower-tier properties have tended to transact more frequently, due to the lower amount of capital required. The volume and spread of these sales are offsetting fewer sales of highly-productive properties with higher median prices.

Figure 5: Canterbury dairy land prices/ha



Source: Rabobank 2019

Figure 6: Canterbury dairy land prices/kgMS



Source: Rabobank 2019

Regulation adding further downward pressure to prices in five years ahead

Our base case scenario is that any change to the ministerial directive to the OIO regarding rural land sales is unlikely to occur over the next five years. This will have an impact on large farms with over 850 cows, with local capital struggling to accommodate all farmers of this scale considering an exit. Farmers will look to restructure larger farms where it is possible in order to split up the existing operating units into smaller parcels that will more easily attract local capital. In the absence of foreign buyers, we expect prices of large farms to be under the most pressure in the five years ahead. Should an increased number of these types of properties come onto the market, we would anticipate dairy land values to soften by 10% to 20% over the coming five years, compared to current land values.

Land price movements in Canterbury will vary greatly, depending on the location of the farm relative to its nutrient allocation zone, and thorough due diligence is recommended for potential land investors. Environment Canterbury's Land and Water Regional Plan (LWRPs) is creating significant uncertainty as to implementation of the regulations, particularly with Plan Change 7 changes still pending. Under the most pressure will be prices for land in Red Nutrient Allocation Zones, particularly in light of the Zero Carbon Bill methane targets as well as Essential Freshwater proposals.

Southland

Table 4: Five-year median regional land price CAGR (to end May 2019) by productivity*

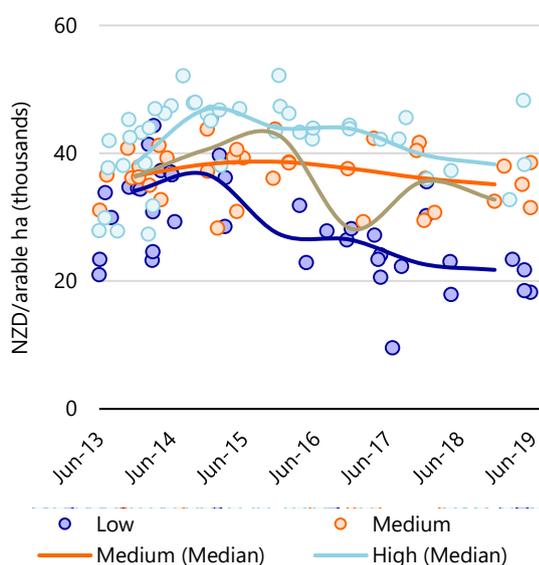
	<i>All Sales</i>	<i>Low</i>	<i>Medium</i>	<i>High</i>
Per ha	-2.1%	-8.6%	-0.7%	-0.1%
Per kgMS	0.1%	1.2%	-1.4%	1.9%

*Notes: Productivity assessed on a 'within' region basis. Low=<1,048 kgMS/ha, Medium=1,048<1,200 kgMS/ha, High=>1,200 kgMS/ha
Source: Rabobank 2019

Softer Southland prices, as sales volumes pulled back

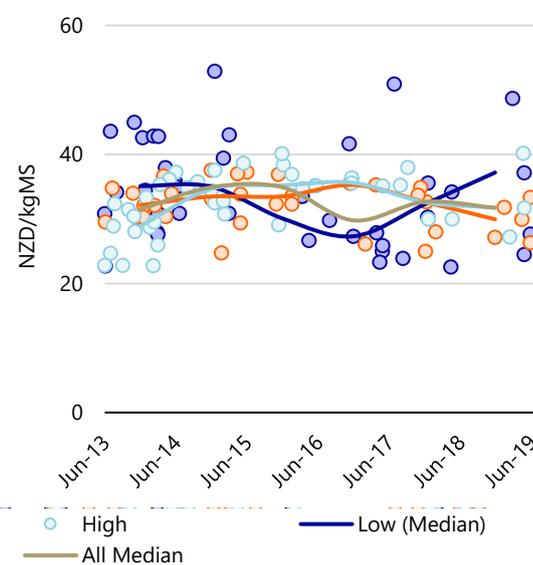
Median prices for Southland have been trending lower since the 2015/16 season, when prices peaked on both a price per ha and price per kgMS basis (see Figures 7 and 8). Both high-productive land (>1,515 kgMS/ha) and medium-productive land (1,200<1,515 kgMS/ha) prices have seen steady declines year on year. This is due to sales for properties of this scale drying up and remaining few and far between, as farmers have been impacted by tighter lending metrics in addition to the aftermath of the dairy downturn.

Figure 7: Southland dairy land prices/ha



Source: Rabobank 2019

Figure 8: Southland dairy land prices/kgMS



Source: Rabobank 2019

Price outlook: stagnant for now but hinging on environmental regulation changes

We expect that prices for Southland dairy land are likely to remain stagnant over the coming months before declining further once the proposed Environment Southland Water and Land Plan is finalised. These changes will result in a further divergence between the price of high- and low-performing properties over the next five years with the magnitude of the decline depending on nitrogen baselines as well as the location and calibre of the property.

We expect the demand for properties in premier locations to hold median prices firm over the next five years, as local environmental rules are set and clarity is obtained (excluding the Freshwater proposals). Medium-productive dairy land is likely to see the biggest shift in values over the coming five-year period.

For properties at the low end of the productivity scale, more decommissioning of dairy sheds back into dairy support or sheep and beef farming is highly likely, as dairy-land-value headwinds strengthen. This will inset a price floor for this land class, given the strength of the sheep and beef sectors currently and forecasts for the coming five years.

Taranaki

Table 5: Five-year median regional land price CAGR (to end May 2019) by productivity*

	All Sales	Low	Medium	High
Per ha	1.5%	0.9%	1.7%	1.7%
Per kgMS	1.2%	1.9%	2.2%	0.0%

*Notes: Productivity assessed on a 'within' region basis. Low=<900 kgMS/ha, Medium=900<1,000 kgMS/ha, High=>1,000 kgMS/ha

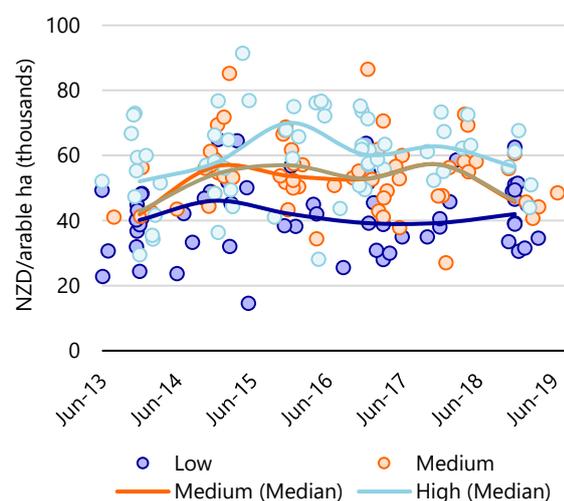
Source: Rabobank 2019

High prices underpinned by tight supply

Taranaki is home to some of the most expensive dairy land in New Zealand, underpinned by the expansion of traditionally closely held family dairy enterprises.

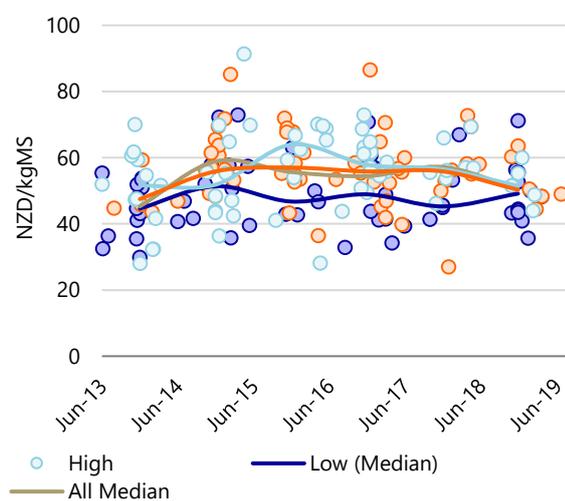
Being the most expensive dairy land in the country, the reduced availability of credit has impacted Taranaki more than other regions. As a result, buyers have turned their attention to land with a lower productive capacity (~<900/kgMS), in search of greater value.

Figure 9: Taranaki dairy land prices/ha



Source: Rabobank 2019

Figure 10: Taranaki dairy land prices/kgMS



Source: Rabobank 2019

Prices likely to decline over the next five years

With expensive land values on both a per ha and per kgMS basis, relative to other regions, we expect a price recalibration to occur over the next five years. This is due to our expectation that the average milk price over this period is likely to be NZD 6.25/kgMS while cost structures are set to rise, impacting margins and profitability for Taranaki dairy farmers.

Consistent profitability of existing farming businesses will be required to fuel further land exchanges by family farms and adjoining neighbours over the next five years, making profitability

the key driver of dairy land values in the next five years. The milk price, and any corresponding cost structure movement, will have the biggest impact on purchasing decisions in the future.

Tighter credit availability will pressure land prices in this region more than others in the coming five years. According to DairyBase data, the Taranaki region has some of the highest debt per kgMS across the country, suggesting that the capacity for extra borrowing is lower than in other regions.

Waikato

Table 6: Five-year median regional land price CAGR (to end May 2019) by productivity*

	<i>All Sales</i>	<i>Low</i>	<i>Medium</i>	<i>High</i>
Per ha	2.8%	3.9%	1.7%	3.4%
Per kgMS	1.9%	1.1%	0.6%	4.2%

*Notes: Productivity assessed on a 'within' region basis. Low = <888 kgMS/ha, Medium=888<1,000 kgMS/ha, High=>1,000 kgMS/ha

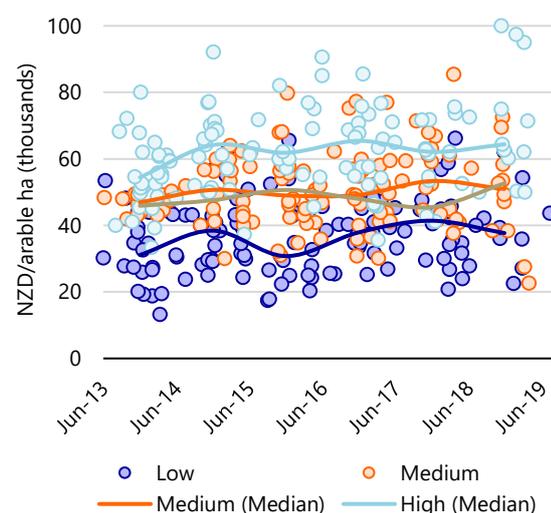
Source: Rabobank 2019

Alternative land uses are driving prices

Demand for competing land uses elevated the median price of dairy land in the Waikato region by 16 percent from the 2017/18 season to the 2018/19 season. Competition among buyers looking to utilise land not only for dairy but also beef, goats, poultry, cropping, finishing, and, more recently, horticulture are drivers of price.

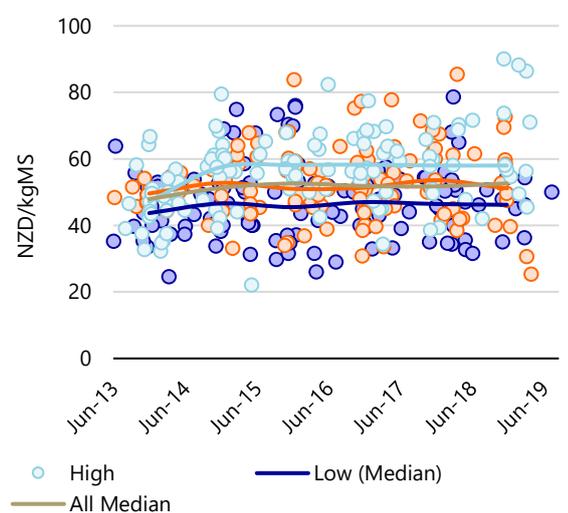
Properties selling at lower prices are generally less productive (~<888 kgMS/ha) or are considered to be in more undesirable locations. They may be isolated, for example, have a steep gradient, or require significant capital expenditure for infrastructure contingencies to meet environmental regulatory standards.

Figure 11: Waikato dairy land prices/ha



Source: Rabobank 2019

Figure 12: Waikato dairy land prices/kgMS



Source: Rabobank 2019

Property prices will continue to diverge according to land use

The divergence of prices among property types will continue to widen across the next five years, primarily driven by land use competition, as environmental regulation changes increasingly influence the highest and best use of land.

There will be more focus on environmental regulations affecting dairy land values in different catchments over the next five years. The Healthy Rivers Plan for Change – Proposed Waikato Regional Plan Change 1 (Plan Change 1), impacting the Waipa and Waikato catchments, is set to be agreed on by the Waikato Regional Council by 30 April 2020. This is anticipated to bring significant changes to land use and nutrient allocations, largely based around Farm Environment Plans. Thorough due diligence by potential land investors is recommended.

Imprint

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