



Farm Price Indices

Beginner's Guide

There are many influences on the decision to purchase or sell a farm. For the most part, a farm is a business as compared to a residential property, which is a home, not a business. As a result, the factors that can influence a purchase/sale decision for a farm are far more varied and diverse than for other types of property.

The Real Estate Institute has developed the Farm Price Index and Dairy Farm Price Index in conjunction with the Reserve Bank to take account of some of these factors and, in doing so, generate measures that are more reliable than a straight dollars-per-hectare measure.

What is wrong with using dollars per hectare?

In principle there is nothing wrong with using dollars per hectare; it's a readily observable measure of price divided by the size of a farm property. However, there are issues that make it less useful as an overall guide to what farm prices are doing.

The first problem is that larger farms tend to sell for fewer dollars per hectare than smaller farms, so the overall median dollars per hectare in any given period can be skewed by the number of larger or smaller farms sold. A larger number of smaller farms selling will result in the dollars per hectare rising. On the other hand a larger number of larger farms selling will result in the dollars per hectare falling.

The second problem is that the location of the farm may have an influence, as well as the farm type. For example, a dairy property in Waikato will sell for more per hectare than a dairy property in Northland or in Otago. If more dairy farms are sold in Waikato than in other regions then the dairy farm median price per hectare will increase.

This says nothing about the value or worth of the properties being sold. It is a function of the mix of properties being sold in any period as compared to the previous periods.

This means that the Institute can report an increase or decrease in the median dollars per hectare with that movement largely due to the type, size and location of the properties being sold. This implies that the median doesn't say much about the overall pricing or value of farmland.

So what does the FPI do?

The FPI's principal role is to adjust for these property related factors - the farming type, location and farm size - and generate an index value that is a residual. In other words, once the property-specific factors are taken into account, any remaining movement in the FPI is due to off farm factors, such as commodity prices, exchange rates, interest rates, stock values, environmental factors and sentiment.

The FPI is an index because it is difficult to extract the property-specific factors and then relate them back to a dollars-per-hectare measure – because one of the roles of the FPI is to adjust for farm sizes.

An index measure works best because the focus should be on the rates of change rather than the overall level at any one time.

But the median price per hectare went up and the FPI went down. Why?

The analysis for March 2013 is a good example of this. The dollars per hectare went up by 11.3% between March 2013 and March 2012, but the FPI fell by 7.2%.

A look at the underlying data shows the following:

- There were fewer grazing farm sales as a percentage of total sales in March 2013 (43.4%) compared to March 2012 (53.9%).
- There were more horticulture sales in March 2013 (8.0%) compared to March 2012 (3.5%).
- There were more dairy farm sales in March 2013 (22.1%) compared to March 2012 (15.4%).
- Overall the median size of farms fell from 81 hectares in March 2012 to 77 hectares in March 2013.
- Both dairy farms and horticulture farms have higher median per hectare prices than grazing farms.
- There were more farms sold in Auckland (10.6%) in March 2013 than March 2012 (6.0%)

- There were fewer farms sold in Canterbury (15.6%) in March 2012 than March 2013 (10.1%)
- The median price per hectare for Auckland farms increased by 49.2% between March 2012 and March 2013 while the median price per hectare for Canterbury farms increased by 4.4%

To summarise the above bullet points; there were more sales of higher value farms on a dollars per hectare basis in March 2013 compared to March 2012, there were more farms sold in areas where the median was higher and fewer where the median was lower. In some areas, the median was significantly higher in March 2013 compared to March 2012.

Given the above, it's little wonder that the overall median price per hectare increased between March 2012 and March 2013.

Looking at the economy, the expectation is that the price of farmland would have fallen, due to:

- High and rising exchange rate;
- Falling commodity prices for beef and lamb;
- Tough offshore markets for beef and lamb;
- Drought conditions across much of the country; and
- Worries about winter feed and grass conditions moving into winter.

So in the face of these factors why would the median price per hectare increase other than for changes in the mix of properties being sold?

Between March 2012 and March 2013, the FPI fell by 7.2% because it adjusted for the changes in property mix and thus more accurately reflected the underlying direction of land prices, which would take into account the economic factors outlined above.

Conclusion

The median dollars per hectare measure is a "rough and ready" guide to the direction of farm prices, but it is influenced by the type, location and size of properties being sold in any one period. The median dollars per hectare can reflect changes in the mix of properties as much as it can reflect underlying land values and economic conditions.

The FPI adjusts for the changes in property mix and so provides a more accurate reflection of underlying land values and economic conditions.

The Dairy Farm Price Index works in the same way and shows the underlying trend in dairy farm prices after the farm particular issues have been removed.