



NEW ZEALAND'S EXCHANGE

NZ MILK PRICE FUTURES

www.nzx.com





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Contact us

For further information please contact NZX Derivatives on 09 309 3672 or at:
dairyfutures@nzx.com

PRODUCT SPECIFICATIONS

Milk Price Futures – individual contract specification

Unit of trading	6,000 kilograms of milk solids (kg MS)
Price basis	NZD / kg MS
Minimum price movement (Tick size and value)	0.01 NZD per kg MS (NZD 60)
Daily price limits by contract	<p>Contract 1 in the current expiry calendar: 10% above or below the previous trading day's daily settlement price.</p> <p>Contracts 2-3 in the current expiry calendar: 15% above or below the previous trading day's daily settlement price.</p> <p>Contracts 4-5 in the current expiry calendar: 20% above or below the previous trading day's daily settlement price.</p> <p>Price limits only apply to a contract once a trade has been executed in that contract on the market. Price limits do not apply for 5 trading days preceding and including the last trading day.</p>
Contract months	Every September such that up to 5 calendar years are available for trading.
Trading hours	As determined from time to time by NZX by notice to the market in accordance with the NZX Derivatives Market Rules and Procedures.
Last trading day	<p>Trading shall terminate at the close of trading on the second Thursday of September each calendar year, or such other time as specified by NZX in accordance with the contract terms and administrative procedures for Derivatives Market Contract No 8 ("Contract T&Ps").</p> <p>The last trading day is the day specified in the expiry calendar for NZX Derivatives Market Contract No 8, or such other day specified by NZX in accordance with the Contract T&Ps.</p>
Final settlement	Cash settled to the final settlement price determined by NZX by reference to the relevant farmgate milk price, in accordance with the Contract T&Ps.
Clearing house	New Zealand Clearing Limited

WHAT ARE NZ MILK PRICE FUTURES?

NZ Milk Price Futures are tradeable forward contracts which allow farmers to lock in some or all of their milk price for the current season or seasons ahead.

The contract is designed to allow farmers and processors the opportunity to manage their milk price risk and help create price certainty, transparency and a forward view of market sentiment.

To be easily exchangeable, the terms of each futures contract are standardised, except for the price. This allows buyers and sellers to trade freely with each other without the burden of unique or tailored terms. Each NZ Milk Price Futures contract is equal to 6,000 kilograms of milk solids (kg MS). These are annual contracts, which align with the New Zealand dairy season. Three seasons are listed for trading – the current season plus two seasons ahead.

For NZ Milk Price Futures, rather than the seller providing milk in exchange for cash on settlement day, either the buyer or the seller settle by exchanging a cash differential, calculated with reference to Fonterra's final farmgate milk price announced each September. For more information please see the 'How do they work?' section across the page.

NZ Milk Price Futures provide a useful tool for dairy farmers and processors to reduce their milk price risk, and as volatility increases in the global dairy markets it is now more important than ever to understand how to use these risk management tools.

BENEFITS OF HEDGING WITH FUTURES

- Profit stability – locking in a certain amount of production with milk price futures provides certainty of revenue received
- Reduce risk – locking in a portion of the milk price can reduce farmer's susceptibility to milk price movements which are largely outside of their control
- Reliable budgeting/forecasting – certainty around what revenue is coming in allows for more accurate budgeting and forecasting
- Strategic decision making – enhanced forecasting allows for an increased ability to make strategic investment decisions when looking at investing in infrastructure or growing your farming operation
- Being counter cyclical – while hedging the milk price may mean missing some of the peaks, it also protects against the lows. Normally during periods of high milk price, asset prices are expensive. Being hedged at higher levels during periods of downturn in the milk price allows farmers to be better positioned to take advantage of lower land and other asset prices

RISKS OF HEDGING WITH FUTURES

- Cash flow implications – futures are backed by a cash margin and are re-valued against the market price daily. This requires access to cash to pay any margin calls should the price move against you. For more information please see the 'How do they work?' section across the page.
- Production risk (over-hedging) – trading more kg MS than you actually produce can result in an over-hedged situation which could result in a loss or gain on closeout of the position
- Basis risk – when the price received for milk supplied to your processor differs from Fonterra's final farmgate milk price (e.g. non-Fonterra suppliers) potential losses or gains in the futures market may not be offset equally by the revenue from milksolids sold to your processor.

HOW DO THEY WORK?

Trading

Trading happens on a central exchange (the NZX), where orders to buy and sell are matched together. To view the latest best buy (bid) and best sell (offer) prices visit www.nzx.com/markets/nzx-dairy-derivatives/quotes/futures/mkp

Cash settlement

Rather than delivering the physical product (e.g. milk solids) when a contract settles, NZ Milk Price futures contracts are settled in cash against Fonterra's final farmgate milk price. The parties settle the futures contract by receiving/paying the gain/loss related to the contract in cash after it expires.

For example

If we assume that a farmer sells some futures to hedge a portion of their production at \$6.00 and at the end of the season the final Fonterra farmgate milk price is announced at \$5.00, the farmer has received \$5.00 in payments from Fonterra, and also receives \$1.00 from the settlement of the futures contracts at settlement date, netting out to the futures rate of \$6.00 on the hedged portion of production. Vice versa, with the same futures position in place at \$6.00, if we assume that the final farmgate milk price is announced at \$7.00, then the farmer receives \$7.00 in payments from Fonterra and then pays \$1.00 on the settlement of the futures contracts, again netting out to the futures contract rate of \$6.00.

Margin

Initial margin

Initial margin acts as a good faith bond that will be used if the holder of the futures position fails to meet any obligations. If all obligations are met at settlement then the initial margin is returned in full once the futures position is settled. Initial margin for NZX Dairy Futures is generally between 5 -10% of the value of the traded contract.

To view current initial margin rates, visit: www.nzx.com/services/nzx-clearing/risk-management

Variation margin

Variation margin is a daily valuation, or mark to market of the futures position based on the daily settlement price on the day. The daily settlement price is calculated by NZX and is a reflection of where the market settled on the day. The futures contract rate is then calculated against this and the difference is either received or paid depending on if the price has moved for or against the holder of the futures contract.

For example

If we assume that a farmer hedges 60,000 kg MS (sells 10 contracts) at \$6.20. Current season futures have an initial margin (bond) requirement of \$3,000 per contract. On the day the trade is executed the farmer must post \$30,000 initial margin (\$3,000 x 10 contracts).

If we also assume that on day two the market sells off and the daily settlement price falls by 0.20 cents to \$6.00 the farmer would receive \$12,000 in variation margin into their brokerage account. Alternatively, if on day two the daily settlement price rises by 0.20 cents to \$6.40, the farmer would pay an additional \$12,000 in variation margin to his brokerage account. In this way variation margin is a daily mark to market of the position and seeks to ensure that every trader meets their obligations by posting cash as collateral to back the trade.

The farmer's margin is calculated daily and any margin calls must be met within 24 hours.

HOW TO ACCESS THE MARKET

1. Understand how price risk affects your business

It is important that you understand how hedging can deliver value to your business. Considerations might include your business objectives, the capacity of your business to meet cash flow obligations and withstand adverse price movements and your risk appetite. You can do so by seeking advice from an NZX Derivatives participant (list provided below) or an independent advisor.

2. Develop a hedging strategy

Aim to understand the different products on offer, the associated costs and how margining works. You can do so by seeking advice from an NZX Derivatives participant (list provided below) or an independent advisor.

3. Calculate margin finance facility required

NZX futures are backed by cash collateral (cash margin), so ensuring you have a large enough cash facility to withstand any potential price moves against you is important. This often requires discussion with your bank.

4. Open an account and start trading

This requires you to provide basic company information and to fund the account. Trading can be done over the phone or email with an NZX Derivatives participant (broker):



ADM Investor
Services, Inc.



BNP PARIBAS

FNZC

INTL · FCStone®

OMF

Connecting you to global markets

A full list of contact details for NZX Derivatives participants can be found at:

www.nzx.com/markets/nzx-dairy-derivatives/access-the-market