

Hedging — The Best Bet or Just Betting?

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Introduction

My background

Before I was born, my Parents Joyce and Vinnie Jones moved from Liverpool (England) to Ross on the West Coast of the Sth Island, where I grew up and rode a horse to school. We lived on a small farm, the kind where the animals died of natural causes. Spent most of my life out in the Country mostly riding horses and looking after animals that were less fortunate (e.g. no one else was stupid enough to take them on). Have spent the last 7 years living in Auckland.

Role at ASB

My title is Financial Markets Dealer, which involves education, providing information, research and the development and implementation of hedging products. Part of my role is to identify trading opportunities and when applicable to trade in the market. I help with the identification of a risk then devise a plan and products to help manage and reduce the risk of the customer, ensuring this fits in with their needs and meets their desired goals.

Relevant experience

I studied in Wellington gaining a bachelor of business degree majoring in accounting and am currently doing a Post Graduate diploma in rural studies extramurally through Massey University.

For seven years, I worked in financial markets, over the past 4 years specialising in Financial markets for the rural industry. I worked for an NZ investment bank (ANZ) for four years before moving over to my current employer whom I have been with for three years. (ASB). Once I gained the necessary market knowledge and experience I was fortunate enough to be given the opportunity to apply this skill to the rural industry.

- I deal with farmers on a daily basis discussing market conditions and the possible impacts on them.
- I spoke at Large Herds conference in 2003.
- I have taken numerous seminars on FX Hedging to dairy farmers across the country.

Outline

Understanding the market

I will briefly explain the market how it works, how the NZD stands against all other currencies and what makes it tick.



Figure 1: Graph of the NZD since the float in 1987

How does the currency market work?

The currency market works exactly the same as any other commodity market, it all comes down to supply and demand. If more people are buying the NZD than selling it then the market moves up and if more people are selling the NZD then the market moves lower. Due to the size of our market we are often knocked about by big players, the most famous and well known being George Soros.

As with any market, the FX market is full of convention. The most common is that all currencies are quoted against the USD, leaving the USD as the base currency for any other currency in the world, including gold and silver. When you hear that the USD is weakening you often see that the NZD has default strength. This is not always the case, but it is the most common reason for the NZD movement.

Compare it to the milksolid commodity. Imagine that the full flow of milksolids in an average day bought and sold was 100,000 kgs. As long as the demand and supply remains at these levels the price will be constant. Imagine that production is reduced due to weather and supply drops to 80,000 kgs but the demand for the milk solids shoots up to 120,000kgs. This would push the price substantially higher.

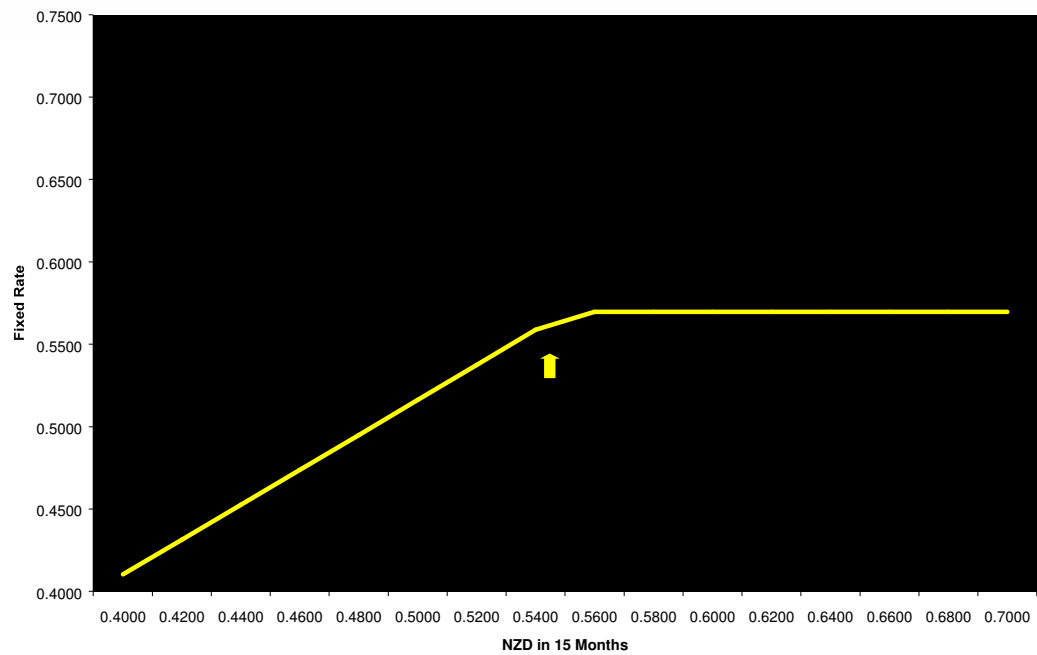
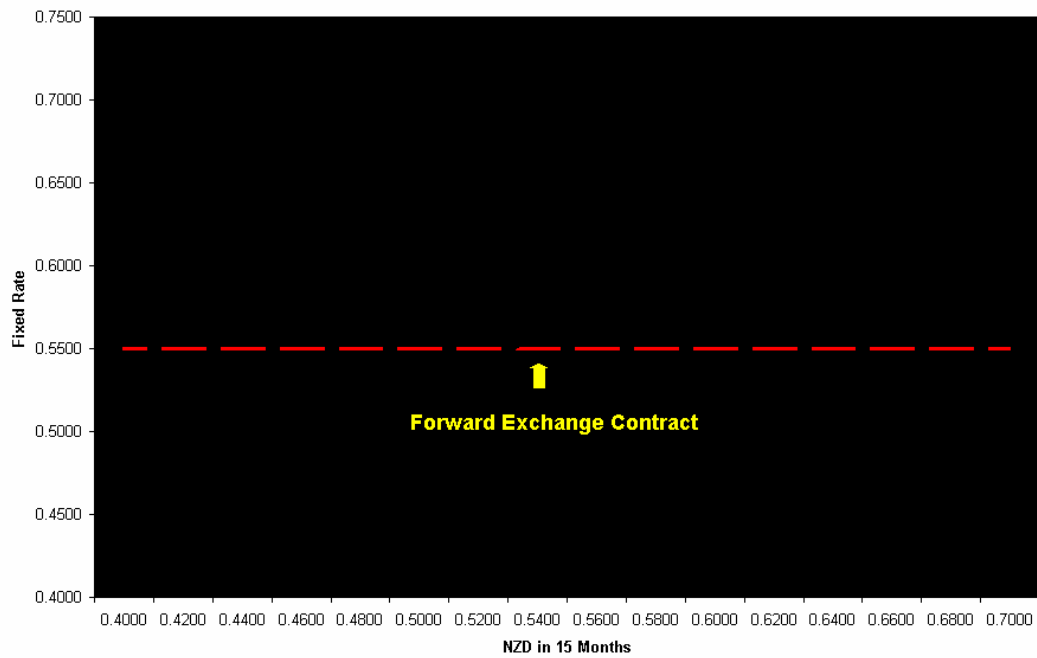
Conversely, if someone floods the milksolid market and without warning the supply is up to 150,000 kgs but the demand is still only 100,000 kgs, this would lower the price.

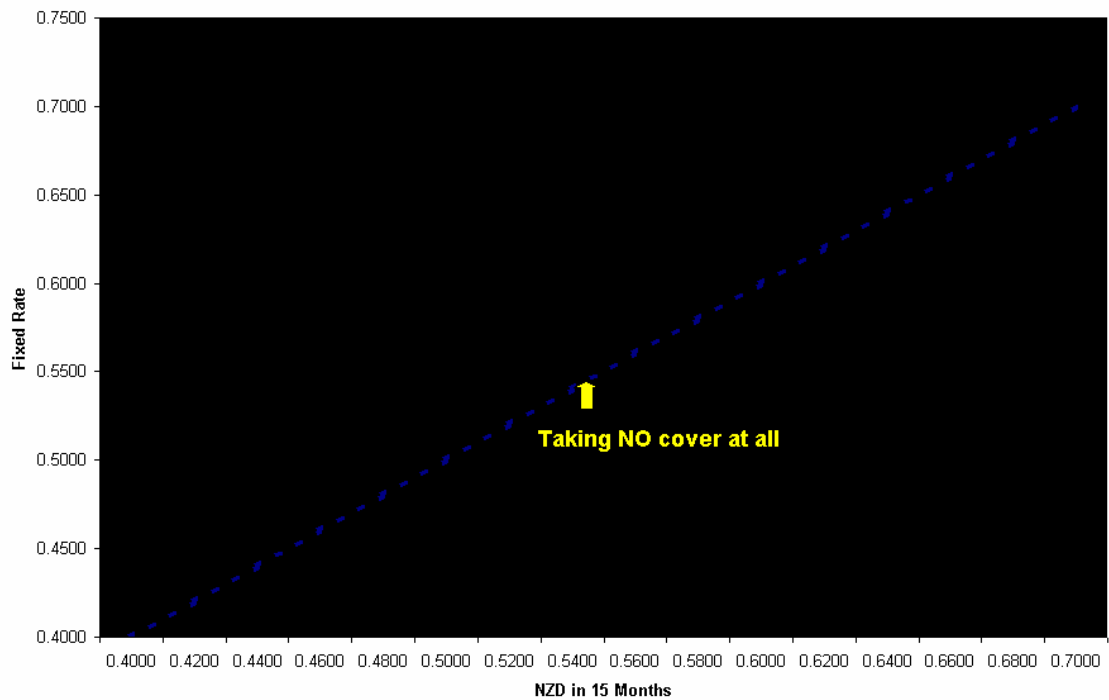
Fonterra's hedging policy

Fonterra's hedging policy was put in place just over a year ago. Fonterra sell USD and Buy NZD. Several countries are involved, but all currencies are converted to USD then to NZD.

Cover one 15th every month out 15 months (effectively leaving them 100% covered).

They use forward exchange contracts and options.





Figures 2, 3, 4: Fonterra's hedging policy

Do farmers need to do something?

There is no need to do anything, it is your choice. You will not be worse off by doing nothing. You may miss an opportunity for gain but you are not at risk of loss. Make the right decisions for the right reason and insure they are well informed decisions. It is not for everyone. Making the right decisions for the right reasons can often be difficult but it is the most important part of the whole process. It's all about having all the facts, developing your own understanding of them and looking at your own situation and asking yourself, "is this is something I need?"

Ask yourself what you want to get out of this and weigh up your expectations with real possible outcomes. It is not something you decide on quickly. It's like any purchase, if it does not work you risk losing your input of cash. Are you prepared to accept that? More importantly can you afford to do that? Just because the guy down the road made heaps on FX dealing it does not mean you will. I am sure the guy who lost a lot of money isn't running around telling everyone.

Just because someone else is doing this doesn't mean that you are missing out on something. At the point you make the decision you have to accept a few things:

- you might lose the money you have invested
- you may not be able to achieve the gains you are looking for
- you cannot control the markets and someone could unexpectedly turn your strategy on its ear.

If you can accept all of this on day one then you have made an informed decision.

The dairy farmer can enter into his own hedging if he or she desires. This is separate to what Fonterra do and sits within your own personal farming business. This does however have risks associated with it and can potentially end up costing the individual farmer rather than protecting them.

Before even considering doing anything the farmer needs to ask him or herself some questions:

- What am I trying to achieve?
- Why do I want to do this?
- Can I afford to lose?
- How much can I afford to lose?

If the farmer decides they would like to participate in the currency market they then need to think about what their own view is i.e. do I think the currency is going up or going down?

If they believe that the currency is going up then they will supplement what Fonterra do which means they will take out a currency in the same way Fonterra have done.

If the belief is that the NZD is at its peak and likely to move lower then the farmer would look to offset what fonterra have done i.e. take out a currency rate opposite to what Fonterra have done. This is the most likely scenario due to the current market conditions.

I now present a brief case study showing the dollar and possible gains or losses using both options and forward exchange contracts. Discussion is encouraged. The case study will illustrate advantages and disadvantages.

Conclusion

I will summarise the points from our discussion.

This is not for everybody and the dairy farmer looking to enter into such products should ensure that the risk management is tailor made to their individual risk profile.

So is currency hedging a sure bet or is it betting? This could be debated until we are blue in the face and at the end of the day the only person that can answer that question is you.

Some feel that it is the only thing to do and others just see it as betting. Neither person is right or wrong; both have justifiable arguments. At the end of the day people will enter or not enter into the currency market for different reasons. As long as those reasons are well informed and they know what they are trying to achieve then the question almost becomes irrelevant.

Does anyone have further questions?

Appendix 1

Offsetting Fonterra's hedge

The farmer believes the NZD is at the top of its range and would like to offset Fonterra's hedge. This means the farmer is looking to sell NZD and buy USD (the opposite transaction to what Fonterra is doing). For the purposes of this exercise we will assume the value of the production of 100,000 kgs to be equal to exposure worth USD213,000 (using 3.50 kgs as a payout).

Below are the outcomes using an forward foreign exchange contract and an option.

Forward exchange contract (FEC)

Definition: An exchange rate agreed today for settlement at a forward date for an agreed amount of foreign exchange.

The forward exchange rate is calculated from the current spot rate and the interest rates of the 2 countries.

Indicative rates:

Current spot rate	0.6300
Forward points (cost) to Apr 05	-0.0300
Outright FEC rate	<u>0.6000</u>

New Zealand interest rates are higher than US interest rates, so the forward points are subtracted from the spot rate as above.

Since we are currently subtracting the forward points, the longer the maturity of the FEC, the lower the overall exchange rate will be to the farmer.

Possible outcomes

On the maturity date of the FEC, the bank will close out the farmer's FEC at the current market rate. If the market is trading below the FEC rate the bank will pay the farmer the difference. If the market rate is higher, then the farmer will pay the bank the difference.

Currency dropped to USD 0.5600

FEC	USD213, 000	0.6000	NZD355,000
Close out	USD213, 000	0.5600	NZD380,357
Receive from the bank			<u>NZD 25,357</u>

Equal to 25 cents gain per kgs on payout on 100,000 kgs

Currency sitting at USD 0.6600

FEC	USD213, 000	0.6000	NZD355,000
Close out	USD213, 000	0.6600	NZD322,727
Pay to the bank			NZD 32,273

Equal to a 32 cent cost per kgs on payout on 100,000 kgs

Currency sitting at USD 0.6200

FEC	USD213, 000	0.6000	NZD355,000
Close out	USD213, 000	0.6200	NZD343,548
Pay to the bank			NZD 11,452

Equal to a 11 cent cost per kgs on payout on 100,000 kgs

NZD put option

The farmer is uncomfortable that the risk of a loss from using an FEC is unlimited. He prefers to look at an alternative where he can cap the possible loss on payout but still participate in any gains.

A NZD put option gives the buyer the right but not the obligation to sell NZD at an agreed price (strike rate), on a given date (expiry date). In return for this right, the buyer of the option pays a premium to the bank.

Put: The farmer benefits from any moves below the strike. Due to the nature of the product, upside currency movement does not affect him.

Spot: 0.6300

Wanting to offset the hedge that Fonterra has in place, the farmer buys a NZD put option with a strike of 0.6000 expiring in 12 months' time.

Amount: USD 213,000

If the market rate is below the option strike at expiry, the farmer will exercise the option, close out at the market rate and take the cash benefit. If the spot market is above the option strike at expiry, the farmer will simply let the option lapse.

Strike Rate: 0.6000

Tenor: Apr 2005

Premium is payable up front for this right, regardless of outcome.

Premium: NZD 18000

Premium cost is 18 cents cost per kgms on 100,000kgms

Possible outcomes at option expiry date

Currency dropped to USD 0.5600

Option Contract	USD213, 000	0.6000	NZD355,000
Close out	USD213, 000	0.5600	NZD380,357
Receive from the bank			NZD 25,357

Payout 25 cents/kgs

Less Premium 18 cents/kgs

Net gain on payout = 7 cents/kgs (on 100,000 kgs)

Currency sitting at USD 0.6600

Premium cost 18 cents/kgms (100,000 kgms)

The premium amount is paid up front and regardless of how high the currency goes, the farmer will not pay any more money to the bank.