



ASSET BETA

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THE KEY
QUESTION IS:
WHAT IS THE
NATURE OF
THE RISKS
FACING THE
NOTIONAL
PRODUCER?

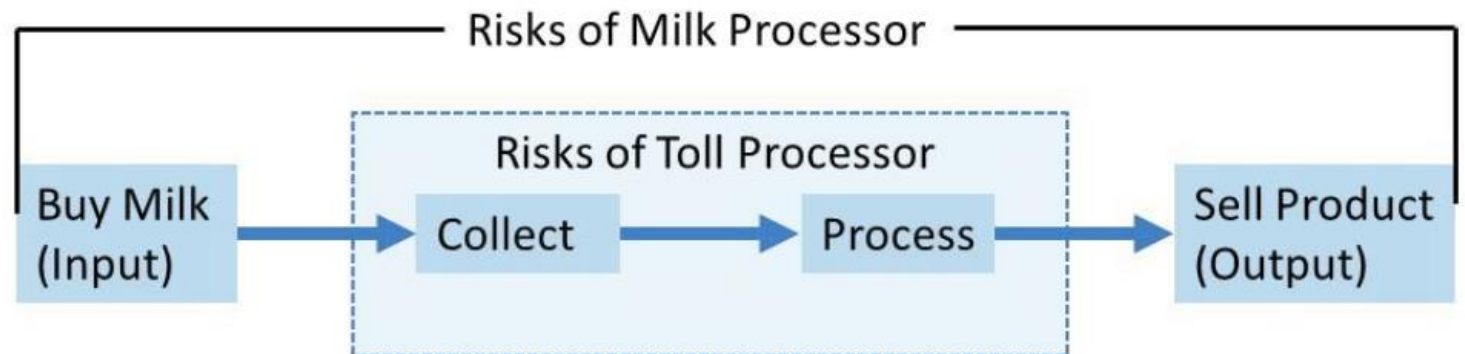
- Getting the asset beta right is essentially getting clarity about what is the nature of the business that the notional producer is in and what risks it faces
- The “technical” aspect of the calculation is hardly controversial:
 - Identify listed comparables with observable betas
 - Calculate their betas and find the right point in the sample
- The selection of comparables and any adjustment to the mid-point of the sample are essentially judgements about the nature of the notional business and what risks is practically feasible to avoid
- Choice of asset beta is one of the key determinants of how the Milk Price Calculation will shape the market
- Our objective for today is to reach shared agreement on the nature of the risks faced by the notional producer.

THE MARSDEN REPORTS MISCONCEIVE THE NATURE OF THE BUSINESS

- We have two fundamental problems with the approach adopted by Marsden
 - Choice of comparables
 - Adjust from sample mid-point based on vague assessment of notional producer risks
- Our key concern with choice of comparables is inclusion of Fonterra in the sample:
 - There is logical circularity: Fonterra commodity business risk is determined by the Milk Price Calculation, while observed beta is used for the calculation
 - Fonterra trading among farmers is not representative of equity risk as farmers have to hold supply shares: i.e. cannot sell milk without matching ownership
- Inclusion of Fonterra biases the midpoint of the sample. The adjustment from the midpoint is purely arbitrary based on poorly specified notions of risk

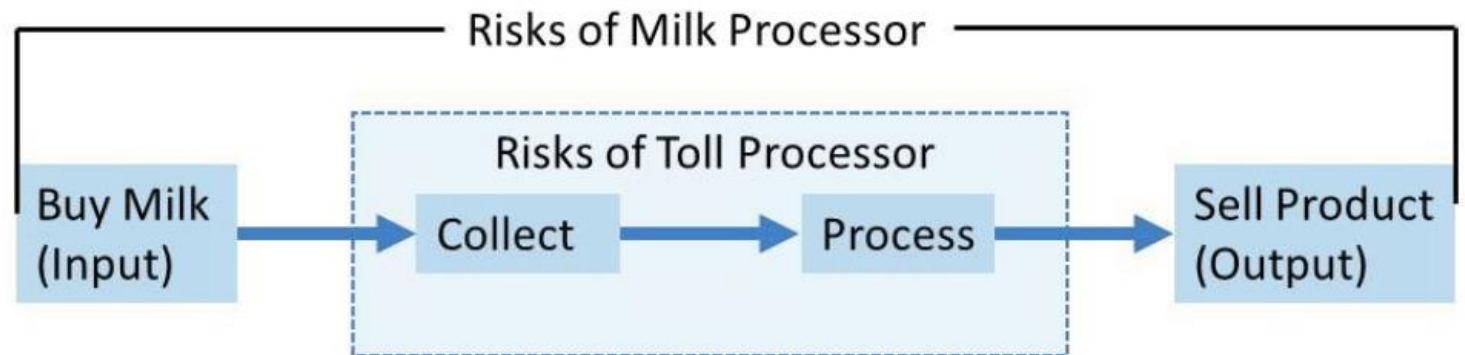
THE RISK PROFILE OF A MARKET PARTICIPANT

- Our key disagreement is that the cash flow risk of the notional processor is simply the difference between actual and efficient costs
- The assumption that there are no risks around the input prices (e.g. milk) and output prices (i.e. of processed commodities) does not reflect practical feasibility
- There is fundamental logical circularity: Milk Price Manual determines both the price of milk and the risk profile of the notional processor
- Rather, the risk profile of the notional processor should be determined exogenously based on practical feasibility



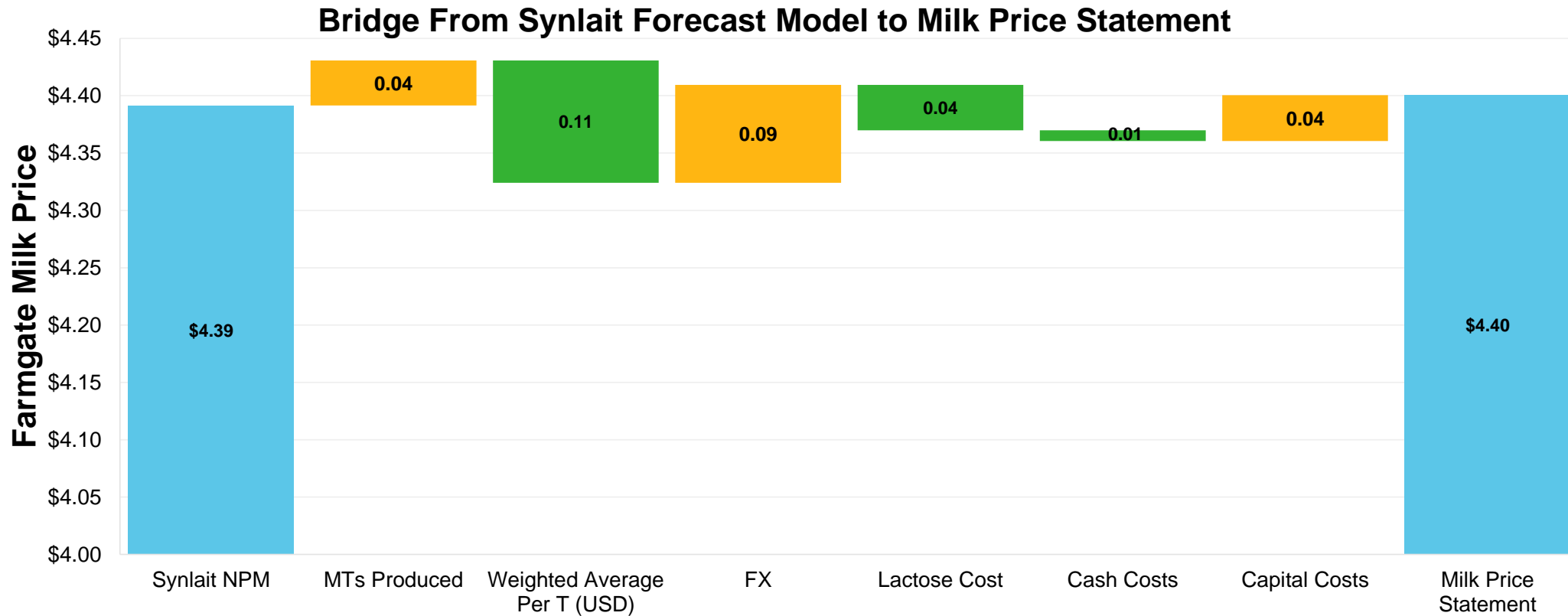
**NOTIONAL
PROCESSOR
WHICH DOES NOT
DETERMINE THE
PRICE OF MILK
CANNOT
PERFECTLY HEDGE
INPUT AND
OUTPUT PRICES**

- Our key proposition is very simple: the notional processor cannot be conceived of as the regulator of the milk price with perfect hindsight and foresight about how it will be determined
- A practically feasible notional processor will have to manage uncertainty about matching input and output prices
- We follow with the example of uncertainty faced by the actual processor. It is not practically feasible to avoid it



HOW DID FGMP STATEMENT COMPARE TO THE NPM

There was a 1 Cent variance for the 2014/15 Milk Price Fonterra paid in comparison to our NPM. However, there were a number of large variations



FOCUS ON THREE KEY VARIABLES

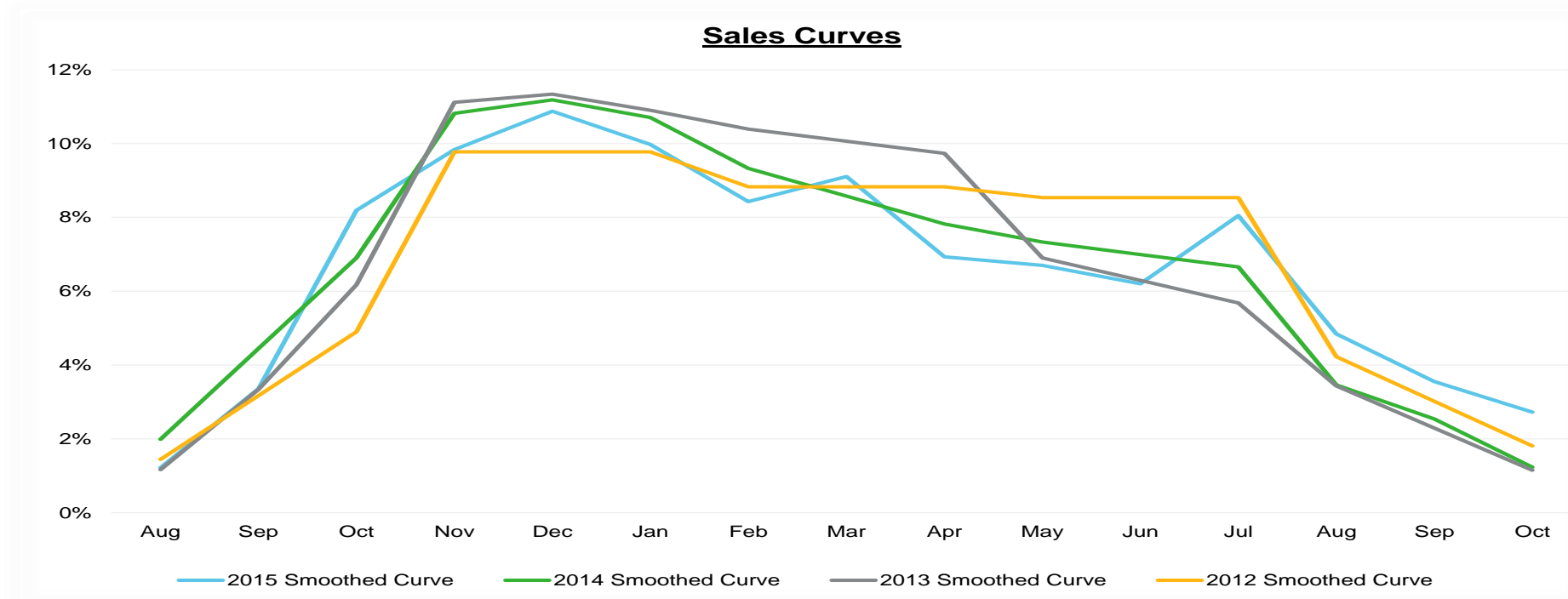
The three key variables that drive the annual FGMP are –

- Sales Phasing
- Product Mix
- Foreign Exchange

The impacts of differences in sales phasing and product mix are included within the “Weighted Average per MT (USD)” bridge item – 11 cent upside in 2014/15. Also included in this bridge item is the impact of calculating the weighted average USD sales price

The foreign exchange difference between Synlait and the NPM resulted in a 9 cent downside

SALES PHASING IMPACT



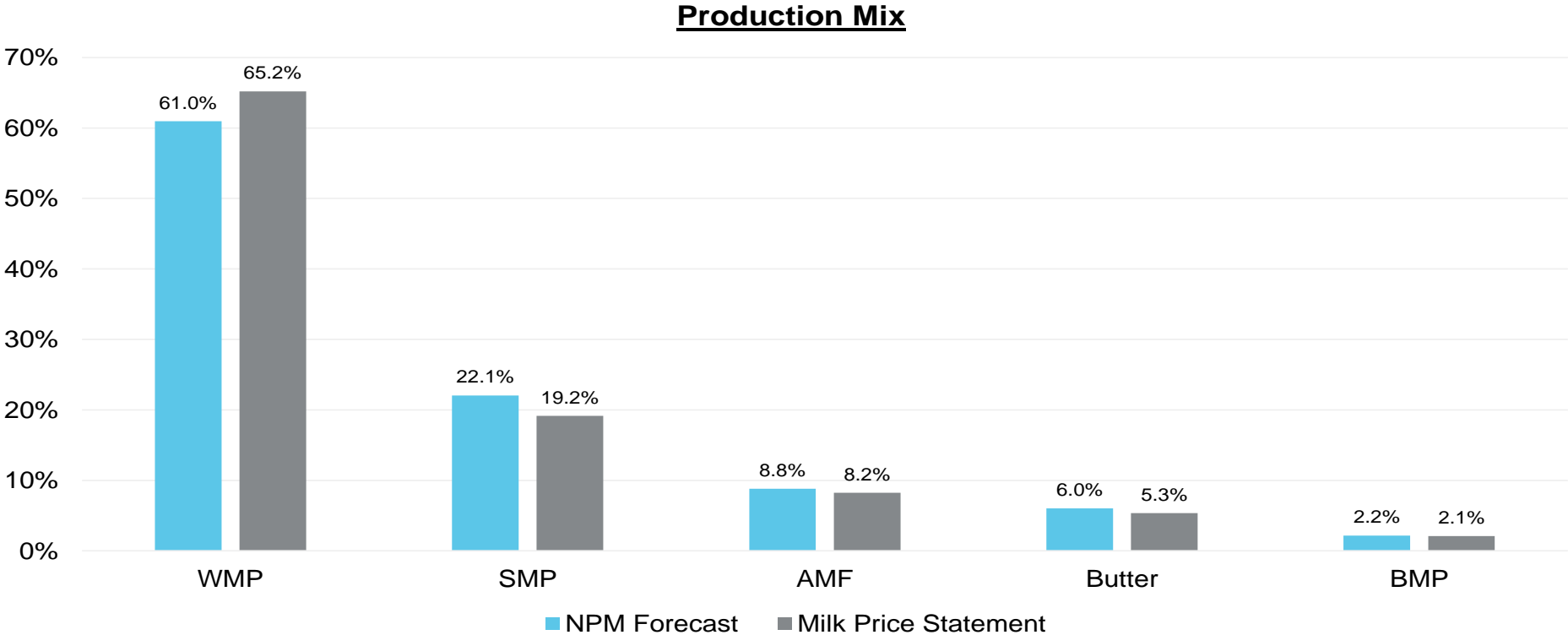
- The above graph reflects for the four years ended 2015 a different sales phasing curve applied every year. This can lead to either positive or negative impacts on the IP's assumed sales phasing curve
- During the FY15 season there were multiple large fluctuations in forecasts of production and thus availability on the GDT platform. This has resulted in what can only be described as a bazaar sales curve.

This created an approximate 18 cent upside in our model vs the NPM

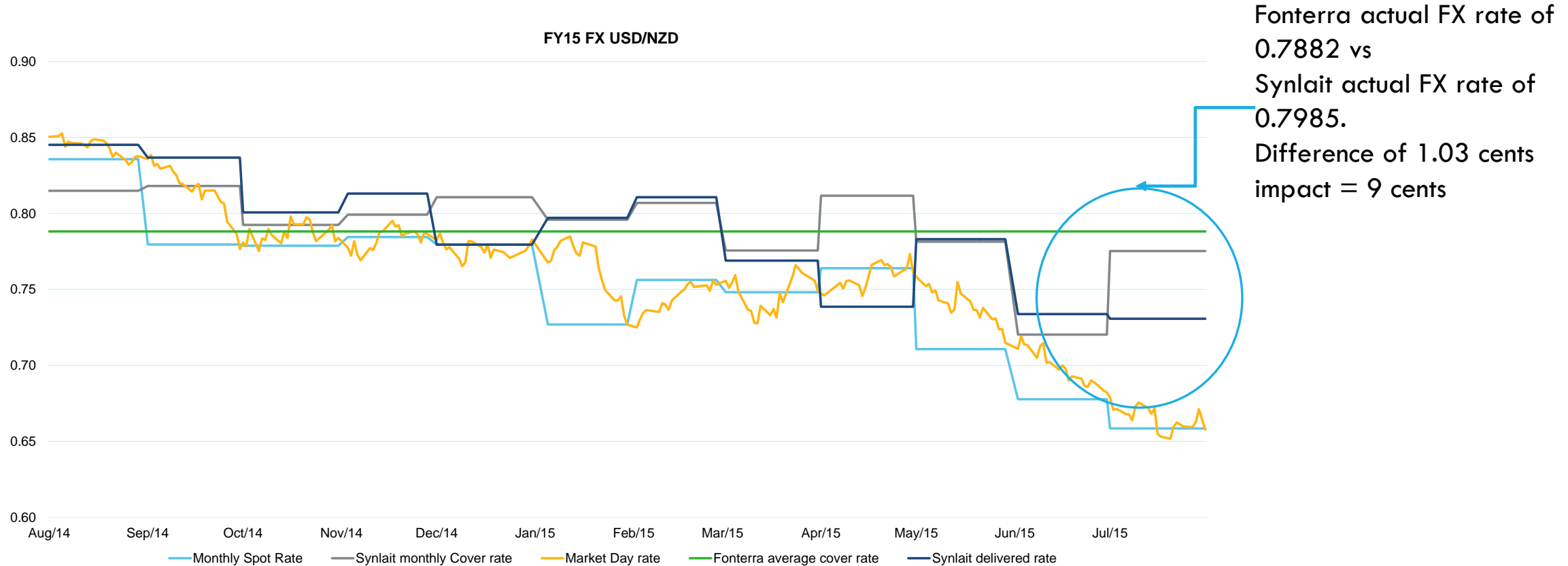
(Milk Price manual)

PRODUCTION MIX IMPACT

The MPS declared a WMP mix of 65%. This was significantly higher than the previous five year range of between 57%-63%. Our model assumed the mid-point of this range being 61%. Model impact was a 7 cent downside



FX IMPACT



At no point during the year did we have any real insight as to where the Fonterra annual average FX rate would land