



## Proposals to Amend the Dairy Industry Restructuring Act

- Review of Raw Milk Regulations
- Review of Fonterra's Milk and Share Price Setting
- Regulatory Regime to accompany Fonterra Capital Restructuring

MAF Discussion Paper No: 2012/01

ISBN 978-0-478-38770-4 (online)

ISSN 2230-2816 (online)

January 2012



Ministry of Agriculture and Forestry  
Te Manatū Ahuwhenua, Ngāherehere



## Disclaimer

Every effort has been made to ensure the information in this report is accurate.

MAF does not accept any responsibility or liability whatsoever for any error of fact, omission, interpretation or opinion that may be present, however it may have occurred.

Requests for further copies should be directed to:

Animal Sector Team  
Sector Policy  
Ministry of Agriculture and Forestry  
PO Box 2526  
Wellington 6140

Telephone: 0800 00 83 33

Email: [dairyconsultation@maf.govt.nz](mailto:dairyconsultation@maf.govt.nz)

This publication is also available on the MAF website at  
[www.maf.govt.nz/news-resources/consultations](http://www.maf.govt.nz/news-resources/consultations)

**© Crown Copyright, January 2012 - Ministry of Agriculture and Forestry**

|  |           |
|--|-----------|
| <b>Information for Submitters</b>  | <b>1</b>  |
| Posting and Release of Submissions   | 1         |
| Privacy  | 1         |
| <b>Introduction</b>  | <b>2</b>  |
| Purpose of this Consultation   | 2         |
| Brief Overview of the Work Streams   | 2         |
| Description of the Consultation and Background Material  | 3         |
| <b>Overview of the current regulatory settings</b>   | <b>5</b>  |
| <b>Raw Milk Regulations: background, overview of preferred options, and key areas for comment</b>                    | <b>6</b>  |
| Background   | 6         |
| What is the Issue?   | 6         |
| Overview of Preferred Option   | 6         |
| Key Areas for Feedback   | 7         |
| <b>Fonterra's farm-gate milk price setting: background, overview of preferred options, and key areas for comment</b> | <b>8</b>  |
| Background   | 8         |
| What is the Issue?   | 8         |
| Overview of Preferred Option   | 9         |
| Key Areas for Feedback   | 9         |
| <b>Fonterra's share valuation: background, overview of preferred options, and key areas for comment</b>              | <b>10</b> |
| Background   | 10        |
| What is the Issue?   | 10        |
| Overview of Preferred Option   | 10        |
| Key areas for Feedback   | 11        |
| <b>Regulatory regime to accompany TAF: background, overview of preferred options, and key areas for comment</b>      | <b>12</b> |
| Background   | 12        |
| What is the Issue?   | 12        |
| Overview of Preferred Option   | 13        |
| Consequential Amendments   | 13        |
| Key Areas for Feedback   | 14        |



# Information for Submitters

Written submissions on the issues raised in the consultation papers are invited from all interested parties. The closing date for submissions is Friday 24 February 2012, 5pm. Submissions should be directed to:

Animal Sector Team  
Sector Policy  
Ministry of Agriculture and Forestry  
PO Box 2526  
Wellington 6140

Delivery address; Level 10, Pastoral House, 25 The Terrace, Wellington

Email: [dairyconsultation@maf.govt.nz](mailto:dairyconsultation@maf.govt.nz)

Submissions will be considered by officials in the preparation of advice to Ministers. Specific questions have been posed to submitters, but these are only suggestions. Submissions on all issues that are within the scope of this consultation document will be considered. Submissions backed by evidence and argument will carry more weight than statements of opinion.

## POSTING AND RELEASE OF SUBMISSIONS

MAF may post all or parts of any written submission on its website at [www.maf.govt.nz](http://www.maf.govt.nz). Unless you clearly specify otherwise in your submission, MAF will consider you to have consented to posting by making a submission.

In any case, content of submissions provided to MAF are likely to be subject to public release under the Official Information Act 1982 following requests to MAF (including via email). Please advise if you have any objection to the release of any information contained in a submission, and in particular, which part(s) you consider should be withheld, together with the reason(s) for withholding the information. MAF will take into account all such objections when responding to requests for copies and information on submissions to this document under the Official Information Act 1982.

## PRIVACY

The Privacy Act 1993 establishes certain principles with respect to the collection, use, and disclosure of information about individuals by various agencies including MAF. It governs access by individuals to information about themselves held by agencies. Any personal information you supply to MAF in the course of making a submission will be used by MAF only in conjunction with the matters covered by this document. Please clearly indicate in your submission if you do not wish your name to be included in any summary of submissions that MAF may publish.

# Introduction

## PURPOSE OF THIS CONSULTATION

1. Throughout 2011, several work streams have been ongoing in relation to the regulatory regime underpinning New Zealand's dairy industry. In particular, the Ministry of Agriculture and Forestry (MAF) has led reviews of Fonterra's farm gate milk price setting, the Raw Milk Regulations, and the appropriate regime to accompany Fonterra's proposed capital restructure.
2. While the work streams are each looking at separate issues, they all aim to ensure the long term growth and dynamic efficiency of New Zealand's dairy industry. MAF believes that, before presenting these options to Government for consideration, it is important to bring the work streams together and to publicly consult on the preferred policy options in combination.
3. The purpose of this consultation is therefore to bring the various reviews together and to seek input prior to any legislation or other amendments being passed or made in 2012. This paper is the overarching explanatory paper to guide stakeholders, where relevant, to the underlying consultation material.

## BRIEF OVERVIEW OF THE WORK STREAMS

### Review of Raw Milk Regulations

4. The Raw Milk Regulations compel Fonterra to make available to independent processors up to five percent of the raw milk it collects from dairy farmers in New Zealand.
5. MAF has recently undertaken a review of the Raw Milk Regulations to ensure the Regulations meet the overall objective of promoting the long term growth and dynamic efficiency of New Zealand's dairy markets. The review included targeted consultation with key stakeholders in March 2011, and a public consultation in July 2011 to which around 1500 submissions were received.
6. MAF is now seeking comment on a series of proposed amendments to the Raw Milk Regulations. For illustrative purposes, MAF's proposed amendments are reflected in draft exposure Regulations. Given the public consultation previously undertaken on the Raw Milk Regulations, feedback on technical detail or any practical implementation issues would be most valuable at this stage.

### Fonterra's Milk and Share Price Setting

7. During 2011, an interdepartmental review examined Fonterra's farm gate milk price setting processes and methodology. The review concluded that Fonterra's current pricing methodology aims to mimic efficient milk pricing outcomes. However, up to September 2011 there has been a lack of transparency of how Fonterra sets its milk price (the DIRA does not require Fonterra to disclose how it sets its milk price), and it is difficult to assess whether Fonterra's milk price in any given season is indeed consistent with the outcomes of a competitive market.
8. Out of the review, MAF has been considering options to strengthen confidence in, and transparency of, Fonterra's farm gate milk price setting process and methodology. MAF

is also considering options to ensure that, in the absence of Fonterra's proposed capital restructuring (see below), Fonterra sets an efficient price for its shares.

9. MAF is now seeking comment on the options to achieve these objectives. For illustrative purposes, MAF's preferred solution is reflected in a draft exposure Bill. There has been limited public consultation to date on Fonterra's farm gate milk price and share price setting so comments on the wider policy options, as well as the technical detail, will be highly valuable.

### Regulatory Regime to accompany Fonterra Capital Restructuring

10. In 2009, Fonterra shareholders voted to change Fonterra's capital structure to implement a system referred to as Trading Among Farmers (TAF). In February 2011, MAF consulted on regulatory options to ensure that Fonterra's proposed move to TAF is designed and implemented in a way that allows New Zealand dairy farmers to enter and exit Fonterra in a timely manner and at efficient share prices.
11. MAF is now seeking comment on the options to achieve this. For illustrative purposes, MAF's preferred solution is reflected in a draft exposure Bill. Given the public consultation previously undertaken on the regulatory regime to accompany TAF, feedback on technical detail or any practical implementation issues would be most valuable at this stage.

### DESCRIPTION OF THE CONSULTATION AND BACKGROUND MATERIAL

12. A number of documents are attached as appendices, which may be of varying relevance to different stakeholders. This high-level document (*Consultation document 1*) will guide you to that material throughout.
13. The key consultation material is as follows:
  - *Consultation document 1* is this overarching consultation document. It provides an overview of the various work streams, guides stakeholders to further material where relevant, and seeks feedback on specific aspects of the proposals.
  - *Consultation document 2* is a draft Regulatory Impact Statement (RIS), which provides background, problem identification, and discusses policy options in relation to Fonterra's milk price, Fonterra's share price, and the regulatory regime to accompany TAF.
  - *Consultation document 3* is the exposure draft Amendment Bill, which illustrates potential amendments in relation to Fonterra's milk price, Fonterra's share price, and the regulatory regime to accompany TAF.
  - *Consultation document 4* is the exposure draft Raw Milk Amendment Regulations, which illustrate potential amendments in relation to the Raw Milk Regulations.
14. In addition to the key consultation material, further background information is provided. This includes MAF summary papers, previous discussion documents, and key advice provided by economic and regulatory experts. We note that some of the external advice is conflicting, reflecting the experts' different views. However, all the advice was beneficial to MAF in terms of providing balanced input, and it may similarly be beneficial to stakeholders.

15. The additional background information is as follows:

- *Background document 5* is a Summary of MAF's key findings from the 2011 review of Fonterra's Milk Price Manual.
- *Background document 6* is a Summary of MAF's Proposed Amendments to the Dairy Industry Restructuring (Raw Milk) Regulations.
- *Background document 7* is the February 2011 MAF Discussion Paper titled "Regulatory Regime to accompany Fonterra Capital Restructuring".
- *Background document 8* is the July 2011 MAF Discussion Paper titled "Review of Raw Milk Regulations".
- *Background document 9* is a July 2011 report to MAF by Castalia Limited titled "The 'Hypothetical Efficient Competitor' and Fonterra's Farm-gate Milk Price".
- *Background document 10* is an August 2011 memo to MAF by Covec titled "Farm Gate Milk Price: Policy Objectives & Problem Definition".
- *Background document 11* is a December 2011 memo to MAF by Covec titled "Valuation of Fonterra's Shares".



## Overview of the current regulatory settings

16. Upon its creation, Fonterra collected approximately 96 percent of New Zealand's milk production. Given this dominant market position it was necessary for government to regulate the behaviour of Fonterra in relation to its farmers and potential competitors in New Zealand dairy markets.
17. The regulatory regime is set out in Subpart 5 of Part 2 of the Dairy Industry Restructuring Act 2001 (DIRA) and the Dairy Industry Restructuring (Raw Milk) Regulations 2001. It consists of a suite of pro-competition provisions that have the purpose of promoting the efficient operation of New Zealand dairy markets by ensuring:
  - contestability in the market for farmers' milk; and
  - that independent processors are able to obtain raw milk and other dairy goods and services, necessary for them to compete in dairy markets.
18. Contestability in the market for farmers' milk (i.e. the farm gate milk market) and independent processors' ability to obtain raw milk directly from farmers are provided through DIRA's requirement that Fonterra operate an open entry and exit regime. This means that Fonterra must accept all milk supply offers from dairy farmers in New Zealand and allow relatively costless exit from the co-operative upon the request of farmer-shareholders. These requirements ensure that Fonterra cannot "lock in" its farmer-suppliers and, as a consequence, Fonterra faces commercial incentives to pay efficient prices for farmers' milk and capital invested in Fonterra.
19. The DIRA, through the Raw Milk Regulations, also compels Fonterra to make available up to five percent of the raw milk it collects from farmers to independent processors at either an agreed or regulated price.
20. The entire regulatory regime is, however, transitional in nature. It was designed to expire at a point where the dairy markets had become workably competitive. At this point, special regulatory provisions, beyond the general competition law, would become unnecessary. To this extent, the DIRA contains sunset clauses.
21. The DIRA pro-competition provisions also work in parallel with, and are supplementary to, the general competition provisions of the Commerce Act 1986.

# Raw Milk Regulations: background, overview of preferred options, and key areas for comment

## BACKGROUND

22. The DIRA, through the Raw Milk Regulations, compels Fonterra to make available up to five percent of the raw milk it collects from farmers to independent processors at either an agreed or regulated price. This is because Fonterra's dominant position in the market could enable it to refuse to supply raw milk to other processors, or to supply it at monopoly prices.
23. The objectives of the Raw Milk Regulations are to:
  - provide for an entrance pathway for independent processors into the farm gate milk market; and
  - support competition in the domestic dairy product markets.
24. In March 2011, MAF undertook targeted consultation with key stakeholders about the objectives of the Raw Milk Regulations. This stage of consultation also asked stakeholders their views about which elements of the Raw Milk Regulations worked well, and which did not. This targeted consultation was followed by the release of a public consultation document in July 2011, to which approximately 1500 submissions were received.

## WHAT IS THE ISSUE?

25. The key issue is whether the Raw Milk Regulations are providing an efficient entrance pathway into the farm gate milk market for independent processors, thus providing for competitive pressure on Fonterra in the farm gate milk market.
26. Currently all independent processors, regardless of the extent to which they source their own milk supply from farmers, have the ability to access regulated milk on an ongoing basis. When independent processors who are no longer new entrants to the farm gate market take regulated milk, this replaces raw milk that would otherwise have been sourced from farmers. This then reduces the additional competitive pressure that would have been placed on Fonterra in the farm gate market, had the milk been sourced from farmers.
27. Continued access to regulated milk by these independent processors also increases demand pressures on the total volume of regulated milk, potentially triggering the pro rata quantity rationing rule (which means all independent processors, including potential new entrants, then get less regulated milk).
28. MAF has also examined whether there are any practical/implementation issues and whether the terms and conditions set by the Raw Milk Regulations are consistent with the objective of supporting competition in domestic dairy product markets.

## OVERVIEW OF PREFERRED OPTION

29. On the basis of the consultation undertaken, and of further policy development, MAF has devised a series of amendments to the Raw Milk Regulations, which will ensure the Raw Milk Regulations better meet the overall objective of promoting the long term growth and dynamic efficiency of New Zealand dairy markets.

30. The preferred series of amendments is as follows:

- for those independent processors who are in the business of sourcing milk directly from farmers, access to regulated milk would be limited to three seasons;
- the total volume of milk available under the Raw Milk Regulations would be increased to five percent of Fonterra's total milk supply;
- there would be a series of maximum quantity limits set, restricting how much milk an independent processor can take under the Raw Milk Regulations in different months of the season, to reflect the seasonal dairy supply curve;
- the \$0.10 margin would be removed from the regulated milk price, as processors taking significant quantities of regulated milk will no longer have the ability to flatten the supply curve;
- the "October Rule" would be removed, as the quantity of regulated milk taken throughout the season will now be controlled by monthly maximum limits, rather than by comparison to the quantity taken in October; and
- Goodman Fielder would continue to be able to access up to 250 million litres of regulated milk per season, on a flat supply basis.

## KEY AREAS FOR FEEDBACK

31. MAF would welcome feedback on any aspect of the amendments to the Raw Milk Regulations. In addition, we would specifically welcome feedback in relation to the following questions:

- Is three seasons sufficient for a new independent processor to establish its own supply of milk from farmers?
- The recommendations include replacing the "October Rule" with a requirement that the quantity of milk that can be taken under the Raw Milk Regulations reflects New Zealand's seasonal dairy supply curve. Do you have any views on this change? Are there any specific issues that this would create?

*For further detail, stakeholders are directed as follows:*

- For further background on potential issues with the Raw Milk Regulations and detail on the preferred options, please refer to *Background Document 6* (Summary of Proposed Amendments to the Raw Milk Regulations).
- For detail on how the preferred option, or elements of the preferred option, might look if implemented, please refer to *Consultation Document 4* (exposure draft Raw Milk Amendment Regulations).
- For the July 2011 Discussion Paper on the Review of Raw Milk Regulations, please refer to *Consultation Document 8*.

# Fonterra's farm gate milk price setting: background, overview of preferred options, and key areas for comment

## BACKGROUND

32. In the absence of a competitive market for farmers' milk, Fonterra's farm gate milk price has to be determined using an administrative methodology. Since October 2008, Fonterra has utilised a "Milk Price Manual" which locks-in the process by which Fonterra's farm gate milk price is set.
33. The DIRA does not directly intervene in Fonterra's milk price setting processes. Instead, through its freedom of entry and exit requirements, it underpins and strengthens Fonterra's commercial incentives to price its milk efficiently<sup>1</sup> over the long term.
34. Fonterra's inability to limit the volume of milk it has to process, ensured through the DIRA's freedom of entry and exit requirements, means that if Fonterra were to pay a significantly higher than efficient milk price (or set a significantly lower than efficient share price), it would receive more milk than would be economical for it to process. This would require additional processing capacity for which Fonterra would not have sufficient capital in the long term. Over time, this would reduce the average milk price Fonterra could pay and Fonterra's profitability.

## WHAT IS THE ISSUE?

35. In 2011, an interdepartmental group of officials undertook a snap-shot analysis of Fonterra's farm gate milk price setting methodology and process. The review found that Fonterra's current milk price setting methodology is theoretically consistent with a milk price that would emerge in a competitive market for farmers' milk.
36. The review also found no concrete evidence that Fonterra is currently applying its Milk Price Manual in a way that leads to systemic upward bias of the farm gate milk price. However, given the number of inputs into the Manual, and the sensitivity of the Manual to each input, the review could not rule out a cumulative impact. The review also found that there is scope for Fonterra to bias the milk price upwards in the short to medium term, despite the incentives in the DIRA. In particular, Fonterra may, if faced with competitive pressure, be incentivised to pay farmers a higher than efficient milk price in order to encourage entry to, and discourage exit from, Fonterra in the short to medium term. Fonterra's behaviour at any point in time will depend on the relative balance of its short/medium and long term incentives.
37. If such action was to be taken by Fonterra, it would have a significant negative impact on actual and potential new entrants and therefore on the contestability of farmers' milk supply. Furthermore, without an explicit provision for ongoing monitoring and assessment of Fonterra's milk pricing against the desired policy outcomes, it is very difficult to know whether Fonterra's milk price in any given season is, or is not, meeting the DIRA regulatory objectives.
38. In addition, the DIRA does not require Fonterra to disclose how it sets its milk price. Until September 2011 there has been a lack of transparency of how Fonterra sets its milk price. Although Fonterra has now voluntarily disclosed its milk price setting

---

<sup>1</sup> Fonterra exports the vast majority of its production and therefore faces strong competitive pressure in international dairy markets.

methodology, it has the discretion to determine the content and quality of any such disclosure, and may choose to withdraw it from the public domain at any time.

## OVERVIEW OF PREFERRED OPTION

39. MAF has considered a range of options to strengthen confidence in and transparency of Fonterra's milk price setting process, and consistency of its outcomes with those arising in a competitive market for farmers' milk. MAF's current preferred option involves the following:
- a) embedding Fonterra's current milk price governance arrangements in legislation;
  - b) requiring Fonterra to publicly disclose information in relation to its milk price setting; and
  - c) introducing a milk price monitoring/oversight regime, which would involve the Commerce Commission undertaking, and publishing the results of, an annual qualitative assessment of Fonterra's milk price setting (including Fonterra's underlying assumptions, inputs and processes) against the outcomes that would have arisen in a competitive market for farmers' milk.

## KEY AREAS FOR FEEDBACK

40. MAF would welcome feedback on any aspect of the regulatory regime relating to Fonterra's farm gate milk price setting. In addition, we would specifically welcome feedback in relation to the following questions:
- Is a monitoring/oversight regime in relation to Fonterra's farm gate milk price setting warranted? Is the proposed process, as per pages 16-20 of the exposure draft Bill, workable?
  - Would the requirements for transparency in relation to Fonterra's milk price setting methodology and process be sufficient to strengthen confidence in Fonterra's milk pricing?
  - In your view, are the draft milk price purpose statement and principles, as per pages 13-14 of the exposure draft Bill, appropriate?

*For further detail, stakeholders are directed as follows:*

- For detail on the range of options considered and the pros and cons of each, please refer to pages 10-12 of *Consultation Document 2* (draft RIS).
- For detail on how the preferred option, or elements of the preferred option, might look if implemented, please refer to pages 13-20 of *Consultation Document 3* (exposure draft Bill).
- For background on the findings of the officials' review, please refer to *Background Document 5* (Key findings of review of Fonterra's Milk Price Manual).
- For external advice relating to the farm gate milk price, please refer to *Background Documents 9 and 10*.

# Fonterra's share valuation: background, overview of preferred options, and key areas for comment

## BACKGROUND

41. Fonterra's current cooperative form means there is not a market-discovered price for Fonterra's shares. Fonterra's share price is therefore set by an administrative methodology.
42. Between 2001 and 2009, Fonterra's constitution provided for its shares to be valued based on the projected sustainable earnings of the company, a concept commonly referred to as 'fair value', which is generally accepted as being reflective of an efficient share price.
43. In 2009 Fonterra changed its share pricing methodology to take into account the restricted nature of the market for Fonterra shares, reflecting limitations and restrictions on the circumstances under which Fonterra shares may be issued, surrendered or otherwise transacted. Fonterra's current 'restricted value' methodology is not precluded under the DIRA, which does not intervene in share price setting; rather it underpins Fonterra's commercial incentives to price its shares efficiently over the long term.

## WHAT IS THE ISSUE?

44. As with Fonterra's milk price setting, despite Fonterra's incentives to set an efficient share price over the longer term, Fonterra may, if faced with competitive pressure, be incentivised to set a lower than efficient share price in order to encourage entry to, and discourage exit from, Fonterra in the short to medium term. Fonterra's behaviour at any point in time will depend on the relative balance of its short/medium and long term incentives. A relatively short period of a moderately lower than efficient share price could be sufficient for Fonterra to reduce the competitive pressures it may otherwise be facing for milk supply.
45. The DIRA does not intervene in Fonterra's share price setting and, as such, does not preclude Fonterra from changing the share pricing methodology, such as was done in 2009. MAF is exploring whether, going forward, there may be value in requiring that Fonterra's shares be valued using a 'fair value' methodology. In particular, Fonterra's change in share pricing methodology in 2009 could be seen as restricting Fonterra's share price below its efficient level. This may indicate that the incentives in the current DIRA regulatory regime are not sufficient, on their own, to ensure efficient pricing of Fonterra's shares, at least in the short to medium term.
46. This issue would not exist in the event that TAF proceeds, since the share price would be determined by the market, rather than by an administrative mechanism. However, should Fonterra decide not to proceed with TAF in the near future, or should TAF be launched but be unsuccessful, it will be important to ensure that Fonterra's administratively set share price reflects 'fair value'.

## OVERVIEW OF PREFERRED OPTION

47. MAF has considered options to ensure that, in the absence of TAF, Fonterra's administratively set share price is set at an efficient level at all times.

48. MAF is proposing legislative guidance for Fonterra's share valuation to ensure that, if Fonterra does not proceed with TAF, or if TAF is unsuccessful, Fonterra is required to price shares at 'fair value'.

## KEY AREAS FOR FEEDBACK

49. MAF would welcome feedback on any aspect of the proposals relating to Fonterra's share price. In addition, we would specifically welcome feedback in relation to the following questions:
- Is legislative guidance required to ensure an efficient share price?
  - If so, is the proposed test, as set out on pages 6-7 (section 77A) of the exposure draft Bill, appropriate? Are both limbs of the test required, or would the first limb provide sufficient guidance on its own?

*For further detail, stakeholders are directed as follows:*

- For further background on potential issues with Fonterra's share price valuation, please refer to pages 6-7 of *Consultation Document 2* (draft RIS) and *Background Document 11* (Covec report).
- For further detail on the range of options considered and the pros and cons of each, please refer to pages 16-17 of *Consultation Document 2* (draft RIS).
- For detail on how the preferred option, or elements of the preferred option, might look if implemented, please refer to pages 6-7 of *Consultation Document 3* (exposure draft Bill).
- For external advice relating to Fonterra's share price, please refer to *Background Document 11*.

# Regulatory regime to accompany TAF: background, overview of preferred options, and key areas for comment

## BACKGROUND

50. The DIRA requires that Fonterra issues and redeems its cooperative shares at the same price and allows farmer-shareholders to leave the cooperative with minimal transaction costs. Fonterra shares are issued and redeemed by Fonterra based on an administratively determined share price and on a certain date of the year.
51. In 2009, Fonterra shareholders voted to change Fonterra's capital structure to implement a system referred to as Trading Among Farmers (TAF). Under TAF, farmers needing to purchase or sell their Fonterra shares (in accordance with their milk supply decisions) would trade their Fonterra shares in a market. Share prices and share availability would be determined by supply and demand of Fonterra shares at any given time. TAF would therefore replace the current Fonterra share purchase and redemption process, where the shares are issued and redeemed by Fonterra based on an administratively determined share price and on a certain date of the year.
52. The key features of TAF are:
- a) A farmer-only share market for the trading of Fonterra shares among Fonterra farmers only ("the share market").
  - b) A fund into which farmers may sell a portion of their shares in exchange for cash and a certificate ("the fund").
  - c) External investors would be able to purchase, from the fund, the beneficial rights to the shares that farmers have sold to the fund. The purchase of a "fund security" would provide the investor with the rights to receive the Fonterra dividend.
  - d) Voting rights in Fonterra would be based on milk solids supplied that are backed by either shares or certificates ("share backed milk"). Fund securities would not include voting rights in relation to Fonterra, but investors holding fund securities may be consulted on the nominees to the independent director positions on the Fonterra Board.
  - e) A second market where any investors could trade the fund securities ("the fund market") and receive any changes in the value of the fund security.
  - f) The fund and share markets would be closely connected through two mechanisms. Farmers and registered volume providers (market makers) would be able to participate in both markets and therefore create price convergence between the share and fund markets. In addition, farmers and registered volume providers would have the ability to convert fund securities into Fonterra shares and vice versa. These two mechanisms provide for the pass through of liquidity and create price convergence between the fund and share markets.
  - g) Fonterra and its share and fund markets will be subject to general securities law.

## WHAT IS THE ISSUE?

53. Fonterra's proposed TAF system, supported by the Shareholders Fund and registered volume providers, should result in an effective substitute to Fonterra issuing and redeeming its shares in a timely manner. This, in turn, should result in both farmers' ability to freely enter and exit Fonterra, and Fonterra's share price being, by and large, reflective of its efficient 'fair value'.



54. However, if TAF's design and/or implementation are deficient, there would be a significant negative impact on farmers' ability to enter and exit Fonterra and on the contestability of farmers' milk supply. In particular, effective functioning of the TAF system is heavily reliant on participation of external, primarily institutional, investors. If these investors do not invest, or do not trade actively, markets could become illiquid and farmers' ability to buy and sell shares in a timely manner and at efficient prices would be impaired.
55. Furthermore, while Fonterra has commercial incentives to ensure a well functioning TAF system, it may also, at times, have countervailing incentives to lock farmers in or out of the cooperative. Left unregulated, Fonterra's behaviour at any point in time will depend on the relative balance of these conflicting incentives.

## OVERVIEW OF PREFERRED OPTION

56. MAF has considered a range of options to ensure that Fonterra's proposed TAF system is designed and implemented in a way that allows dairy farmers to enter and exit Fonterra in a timely manner and at efficient share prices. MAF's preferred options is for the introduction of the following package of legislative requirements:
- a) a minimum Shareholders Fund size of \$500 million as a pre-condition to the launch of TAF;
  - b) a further pre-condition that Fonterra shares and fund securities be listed on a registered exchange at all times;
  - c) locking-in key structural features of TAF to ensure that they are maintained post launch, such as the presence of market-makers;
  - d) explicitly prohibiting Fonterra from engaging in behaviour with the purpose of hindering liquidity and fungibility of the TAF share and fund markets; and
  - e) imposing obligations on Fonterra to ensure that fund investors have the ability to appoint/remove a fund manager, and the ability to wind up the fund.

## CONSEQUENTIAL AMENDMENTS

57. Some consequential amendments involving other pieces of legislation may also be desirable to ensure that the TAF system is workable. In association with MAF, the Ministry of Economic Development (MED) is consulting on the following options.

### Companies Act 1993 and Co-operative Companies Act 1996

58. Modifications in relation to the Companies Act 1993 and the Co-operative Companies Act 1996 as they apply to Fonterra may be needed. Specifically, provision could be made to:
- a) allow Fonterra to provide financial assistance to certain persons (custodian, market maker, broker, or trustee or manager of the fund) to facilitate the operation of the co-operative share market and the fund, without needing to notify or obtain consent of all Fonterra shareholders as required by section 76(1) of the Companies Act 1993;
  - b) allow a subsidiary of Fonterra to hold Fonterra shares on trust (other than as a bare trustee as permitted by section 82(6)) on behalf of the fund and market-makers; and
  - c) remove the obligation on Fonterra imposed by section 20(2) and (3) of the Co-operative Companies Act 1996 requiring it to accept surrender of shares at the option of the estate of a deceased shareholder or a former transacting shareholder. Such a provision would

only come into effect once the general obligations on Fonterra to issue and redeem shares under the DIRA have been removed and the Fonterra share market is operational.

## Securities Markets Act 1988

59. The implementation of the TAF system may also require exemptions from the Securities Markets Act (SMA) relating to the SMA's prohibitions on insider trading and market manipulation. If required, these exemptions would be made in regulations under the SMA separate from the exposure draft Bill.
60. *Insider trading:* A number of Fonterra directors and employees are also supplying shareholders, and would be required to trade shares to comply with the share standard. If at the time they trade they hold material, non-public information about Fonterra, they are likely to be in breach of section 8C of the SMA ("information insider must not trade"). Fonterra and its agents could also risk breaching section 8E ("information insider must not advise or encourage trading") as a result of its contracts with supplying shareholders, registered volume providers and independent market agents.
61. *Market manipulation:* The operation of registered volume providers risks a technical breach of the market manipulation provisions of the SMA. Section 11C(2) of the SMA creates a presumption that an offer to trade securities is illegal market manipulation if the person making the offer, or an associate, makes an opposite offer that substantially matches their offer as to the number and price of the securities. While the presumption in 11C(2) is targeted at attempts to mislead other investors as to the true market price of a security, it also bears similarity with the legitimate operation of a registered volume provider or other market maker, which makes continuous, simultaneous offers to buy and sell a security. Note that section 11C(3) provides a defence if the offers were made for a legitimate reason.
62. Regulations could be made under the SMA to:
- a) Exempt Fonterra's directors and employees from insider trading (section 8C of the SMA) to the extent necessary to comply with the share standard. An additional exemption from section 8E of the SMA would likely be required for Fonterra and its agents.
  - b) Exempt registered volume providers and other market making activity from the market manipulation provisions of the SMA (section 11B). This could be a generic provision rather than Fonterra-specific.
63. An alternative option would be to confine the exemption from insider trading to trades made on behalf of supplying shareholders by an independent market agent. While this would further reduce the risk of insider trading, effectively forcing the use of independent market agents could be a disincentive to supplying shareholders becoming Fonterra directors or employees. An alternative to the proposed market manipulation exemption would be for registered volume providers to rely on the "legitimate reason" defence in section 11C(3) of the SMA.

## KEY AREAS FOR FEEDBACK

64. MAF (and MED as relevant) would welcome feedback on any aspect of the regulatory regime to accompany Fonterra's TAF scheme. In addition, we would specifically welcome feedback in relation to the following questions:

- Do you consider that the proposed package of legislative requirements would achieve the objectives of ensuring the freedom of farmers to enter and exit Fonterra and allowing the opportunity for the TAF proposal to be implemented?
- Do you have any specific comments on the individual requirements proposed? Do any of them present potential issues?
- Note that, under the exposure draft Bill, the regulatory regime to accompany TAF would expire if TAF is not launched by 31 December 2013 (i.e. this is the window in which TAF can be launched). Is this timeframe appropriate?
- Do you agree that exemptions from the insider trading and market manipulation provisions of the Securities Markets Act are required for the circumstances outlined above, and if so, how should the exemptions be specified?

*For further detail, stakeholders are directed as follows:*

- For further detail on potential issues with Fonterra's proposed move to TAF, please refer to pages 7-8 of *Consultation Document 2* (draft RIS).
- For further detail on the range of options considered and the pros and cons of each, please refer to page 12-16 of *Consultation Document 2* (draft RIS).
- For detail on how the preferred option, or elements of the preferred option, might look if implemented, please refer to pages 7-12 of *Consultation Document 3* (exposure draft Bill).
- For the February 2011 Discussion Paper on the Regulatory Regime to accompany Fonterra Capital Restructuring, please refer to *Consultation Document 7*.
- For detail on the consequential amendments relating to the Companies Act 1993 and the Co-operative Companies Act 1996, please refer to pages 22-23 of *Consultation Document 3* (exposure draft Bill).

**Consultation Document 2**

Draft Regulatory Impact Statement – Fonterra's Milk Price Setting, Capital Restructure and Share Valuation



## Draft Regulatory Impact Statement – Fonterra’s Milk Price Setting, Capital Restructure and Share Valuation

### Agency Disclosure Statement

This draft Regulatory Impact Statement (RIS) has been prepared by the Ministry of Agriculture and Forestry (MAF).

The recommendations outlined in this draft RIS are not Government policy. The draft RIS is provided for information and consultation purposes only and outlines MAF’s preliminary policy positions underpinning the exposure draft Dairy Industry Restructuring (Fonterra’s Milk Price, Capital Restructure and Share Valuation) Amendment Bill (exposure draft Bill).

The draft RIS outlines an analysis of options to:

- promote transparency of, and confidence in, Fonterra’s milk price setting process and consistency of its outcomes with those arising in a competitive market for farmers’ milk;
- ensure that Fonterra’s proposed move to Trading Among Farmers (TAF) system is designed and implemented in a way that allows New Zealand dairy farmers to enter and exit Fonterra in a timely manner and at efficient share prices; and
- ensure that, in the absence of TAF, Fonterra sets an efficient price for its shares.

This analysis was undertaken, and conclusions drawn, based on the assumption that the DIRA regulatory regime, which is subject to sunset clauses, remains in place.

MAF’s preliminary policy positions are likely to impose additional compliance costs on Fonterra. However, these costs are considered to be significantly outweighed by the benefits of promoting confidence in and effectiveness of the current regulatory regime in ensuring contestability of farmers’ milk supply, and thereby the long term growth and dynamic efficiency of the New Zealand dairy industry.

[Name and signature ]

[Date]



## BACKGROUND

### Purpose and rationale for the current regulatory settings

1. The Dairy Industry Restructuring Act 2001 (DIRA) provided for the merger of Kiwi Cooperative Dairies Limited, the New Zealand Cooperative Dairy Company Limited and the New Zealand Dairy Board into a single vertically integrated entity (Fonterra). This entity would be responsible for collecting, processing and marketing the vast majority (96%) of raw milk produced by dairy farmers in New Zealand. To allow the merger, the Government granted an exemption to the mergers and acquisition provisions of the Commerce Act 1986.
2. The purpose for the DIRA was twofold:
  - a. enable Fonterra to capture efficiencies of scope and scale in the collection and processing of raw milk produced by dairy farmers in New Zealand and to compete in international markets to the overall benefit of New Zealand; and
  - b. regulate the activities of Fonterra in New Zealand in relation to its farmers and potential competitors<sup>1</sup> to promote the long term growth and dynamic efficiency of the New Zealand dairy markets.
3. This document is concerned with the latter purpose. Long term growth and dynamic efficiency of an industry are normally driven by the process of competition among rival firms, exerting competitive pressure on each other. However, in the absence of effective competition, long term growth and dynamic efficiency of the New Zealand dairy industry could be impeded by a dominant firm, Fonterra, having:
  - a. incentives and the ability to put up significant barriers for dairy farmers seeking to switch to its competitors, thus impeding entry/expansion by existing or future competitors in the market for farmers' milk; and
  - b. fewer incentives to drive cost efficiencies and invest in innovation, as it could use its market position to retain dairy farmers even if they were dissatisfied with the company's performance, thus creating a risk of waste, inefficiency and suboptimal investment decisions.
4. If Fonterra were to act on its incentives and ability to put up significant barriers for dairy farmers' switching, it could<sup>2</sup>:
  - a. Impose restrictions on farmers' ability to enter and exit the cooperative. This could be given effect to by declining applications for new supply and/or locking farmers into long term contracts with high break costs. Such actions would result in competing dairy processors being unable to attract milk supply away from Fonterra in a timely manner, even if they were more efficient than Fonterra.
  - b. Pay a higher than efficient price for farmers' milk. This could be achieved by cross-subsidising the returns on milk with returns on farmers' capital investment in the cooperative. Such conduct would result in farmers' milk production decisions and choice of dairy processor being based on distorted price signals that do not reflect the true value of farmers' milk and capital contributions, leading to inefficient outcomes.

---

<sup>1</sup> As well as downstream consumers in New Zealand.

<sup>2</sup> Fonterra's cooperative form means that dairy farmers must invest capital in, and have ownership of, the processing assets of Fonterra in proportion to farmers' expected milk supply.

- c. Impede mobility of farmers' capital investment in the cooperative. This could be achieved by setting a lower than efficient share price. Such strategy would encourage dairy farmers to supply Fonterra over its rivals, as it would offer them an artificially inflated dividend yield (i.e. rate of return). It would also discourage existing farmers from exiting Fonterra, as they will be unable to capitalise the full value of their investment in Fonterra upon exit. Such conduct would result in farmers' capital investment decisions and choice of dairy processor being based on distorted price signals that do not reflect the true value of farmers' capital contributions and milk supply, leading to inefficient outcomes.
5. The DIRA promotes the efficient operation of New Zealand dairy markets by prohibiting Fonterra from imposing restrictions on farmers' ability to enter and exit the cooperative. This is achieved through the DIRA's 'open entry and exit' regime, whereby Fonterra is required to<sup>3</sup>:
  - a. remain an open cooperative by accepting all milk supply offered by dairy farmers in New Zealand willing to make capital contributions in proportion to their milk supply;
  - b. issue and redeem its cooperative shares at the same price and allow farmer-shareholders to leave the cooperative with minimal transactions costs;
  - c. ensure that the proceeds of cooperative shares are paid in a timely manner, i.e. within 30 working days after the end of the season in which a farmer ceases his/her milk supply<sup>4</sup>;
  - d. treat new entrants and existing shareholders the same in like circumstances.
6. The DIRA does not directly intervene in Fonterra's milk and share price setting processes. Instead, through its freedom of entry and exit requirements, it underpins and strengthens Fonterra's commercial incentives to price its milk and shares efficiently<sup>5</sup> over the long term.
7. Fonterra's inability to limit the volume of milk it has to process, ensured through the DIRA freedom of entry and exit requirements, means that if Fonterra were to pay a significantly higher than efficient milk price (or set a significantly lower than efficient share price), it would receive more milk than would be economical for it to process. This would require additional processing capacity for which Fonterra would not have sufficient capital in the long term. Over time, this would reduce the average milk price Fonterra could pay and Fonterra's profitability.
8. The DIRA regulatory regime is transitional in nature. It is designed to expire at the point where dairy markets in New Zealand have become workably competitive, i.e. at the point where Fonterra is no longer considered to be dominant. To this end, the DIRA contains sunset clauses that trigger an expiry process, including a comprehensive review of the need to have the DIRA regulatory regime in place. The sunset clauses are set at 80 percent of Fonterra's market share in each of the North and South Islands. Fonterra's market share is currently around 92.6 percent and 82.6 percent in the North and South Islands respectively.
9. The DIRA regulatory regime also works in parallel with, and is supplementary to, the general competition provisions of the Commerce Act 1986.

### Fonterra's proposed capital restructure

10. In 2009, Fonterra shareholders voted to change Fonterra's capital structure to implement a system referred to as Trading Among Farmers (TAF).

<sup>3</sup> The DIRA also requires that Fonterra a) pays farmers a fair value for their milk vats, b) allows farmers to divert up to 20% of their weekly milk supply to independent processors and c) ensures 1/3 of all milksolids in a 160km range must either be on contract with an independent processor or on a contract with Fonterra that expires at the end of the season.

<sup>4</sup> Effectively making it a legal requirement for Fonterra to have one year contracts with their farmers.

<sup>5</sup> Fonterra exports the vast majority of its production and therefore faces strong competitive pressure in international dairy markets.

11. Under TAF, farmers needing to purchase or sell their Fonterra shares (in accordance with their milk supply decisions) would trade their Fonterra shares in a market based on share prices and share availability determined by supply and demand of Fonterra shares at any given time. The proposal is, therefore, for TAF to replace the current Fonterra share purchase and sale process, where the shares are issued and redeemed by Fonterra based on an administratively determined share price and on a certain date of the year.
12. The key features of TAF are:
  - a. A farmer-only share market for the trading of Fonterra shares among Fonterra farmers only (“the share market”).
  - b. A fund into which farmers may sell a portion of their shares in exchange for cash and a certificate (“the fund”).
  - c. External investors would be able to purchase from the fund the beneficial rights to the shares that farmers have sold to the fund. The purchase of a “fund security” would provide the investor with the rights to receive the Fonterra dividend.
  - d. Voting rights in Fonterra would be based on milk solids supplied that are backed by either shares or certificates (“share backed milk”). Fund securities would not include voting rights in relation to Fonterra, but investors holding fund securities may be consulted on the nominees to the independent director positions on the Fonterra Board.
  - e. A second market where any investors could trade the fund securities (“the fund market”) and receive any changes in the value of the fund security.
  - f. The fund and share markets would be closely connected through two mechanisms. Farmers and registered volume providers (market makers) would be able to participate in both markets and therefore create price convergence between the share and fund markets. In addition, farmers and registered volume providers would have the ability to convert fund securities into Fonterra shares and vice versa. These two mechanisms provide for the pass through of liquidity and create price convergence between the fund and share markets.
  - g. Fonterra and its share and fund markets will be subject to general securities law.

## **PUBLIC POLICY OBJECTIVES**

13. The overarching policy objective is to promote the long term growth and dynamic efficiency of New Zealand dairy markets through an effective regulatory regime that ensures the contestability of farmers’ milk supply in New Zealand.
14. Fonterra’s proposed move to TAF does not change this policy objective.
15. An effective regulatory regime that ensures the contestability of farmers’ milk supply, while allowing Fonterra’s capital structure to evolve, would promote:
  - a. Transparency of, and confidence in, Fonterra’s milk price setting process, and consistency of its outcomes with those arising in competitive markets; and
  - b. Ability of dairy farmers to buy and sell Fonterra shares in a timely manner and at efficient prices, either under the proposed TAF system or when administratively determined by Fonterra.
16. An effective regulatory regime would also be consistent with general principles of good regulatory practice, such as transparency, cost-effectiveness and timeliness of regulatory processes, and certainty and predictability of regulatory outcomes.



## ISSUES WITH THE CURRENT DIRA REGULATORY REGIME

17. The analysis and conclusions outlined below are independent of Fonterra's proposed move to TAF and its implications for the effectiveness of the current regulatory regime.

### Issues with Fonterra's milk price setting

18. In the absence of a competitive market for farmers' milk, Fonterra's milk price has to be determined using an administrative methodology.
19. Notwithstanding Fonterra's incentives to set an efficient milk price over the longer term, Fonterra may, if faced with competitive pressure, be incentivised to pay farmers a higher than efficient milk price in order to encourage entry to, and discourage exit from, Fonterra in the short to medium term. Fonterra's behaviour at any point in time will depend on the relative balance of its short/medium and long term incentives. A relatively short period of a moderately higher than efficient milk price could be sufficient for Fonterra to reduce the competitive pressures it may otherwise be facing for milk supply.
20. Furthermore, without an explicit provision for ongoing monitoring and assessment of Fonterra's milk pricing against the desired policy outcomes, it is very difficult to assess whether Fonterra's milk price in any given season is, or is not, meeting the DIRA regulatory objectives.
21. Fonterra's current milk price methodology, which is understood to have changed significantly in 2008, draws heavily on the 'building blocks' regulatory approach used internationally to regulate natural monopolies. For the purposes of determining its milk price, Fonterra relies on revenues and costs of a notionally efficient competitor producing a notional product mix, and incurring notional operating and capital costs, rather than its own, actual, revenues and costs<sup>6</sup>.
22. The use of this type of methodology is not unusual for regulated entities as it provides incentives for the dominant/monopoly firm to operate efficiently. This approach is also conceptually consistent with the expected outcomes of a competitive market for farmers' milk, where the process of competition among dairy processors would drive the milk price up to the point where the *near term* marginal dairy processing plant built would just cover its total costs, including capital costs (an outline of economic theory of how the milk price would be set in a workably competitive market for farmers' milk is provided in the Appendix).
23. Because of the forward-looking view of revenues and processing costs (i.e. modelling of the *near term* milk processing plant that would be built), there is a necessary reliance on notional rather than actual revenues and costs that a processor would face in building that plant.
24. However, despite being conceptually consistent with how the milk price would be set in a competitive market, there is a number of crucial – but necessarily subjective – decisions required in calculating Fonterra's milk price, which would have material impact on the efficiency of the final outcome. These decisions include:
- a. Choice of the product mix and conversion of global prices into revenue;
  - b. Selection of the appropriate scale and location of the near term efficient plant;
  - c. Determination of the cost of capital and depreciation schedules; and
  - d. Development of consistent definitions of ancillary costs such as overheads.
25. For example, if Fonterra were to include a value-add product in its chosen product mix, before that product was widespread in New Zealand production, it would have a material impact on the

---

<sup>6</sup> Fonterra advises that for practical reasons, it is relying on a mixture of actual and notional revenues and costs.

efficiency of its milk price. Unlike other regulated entities, where such decisions would normally be made with at least some oversight by the regulator, Fonterra's decisions are not.

26. Furthermore, until September 2011 there has been complete lack of transparency of how Fonterra sets its milk price. Although Fonterra has now voluntarily disclosed its Milk Price Manual, without a legislative requirement to keep its Milk Price Manual in the public domain, Fonterra may choose to withdraw it at any time.
27. Fonterra's current milk price governance arrangements provide for the majority of the Milk Price Panel (a committee appointed by the Fonterra Board to oversee the milk price setting methodology and its application) and the chair to be independent of farmer interests. These arrangements are too at Fonterra's complete discretion and may change.
28. Furthermore, Fonterra's milk price setting process is guided by the constitutional principle of "maximising the sustainable milk price", which allows the Fonterra Board to pay a milk price that is above and beyond what is determined by the Milk Price Manual. Clause 10.1 of Fonterra's constitution provides that the Fonterra Board shall determine the payment for milk and in doing so, shall:  
*have regard to the income from all activities of the Company, including any dividends received or receivable by the Company and any transfers to or from reserves as the Board, in its absolute discretion, determines are desirable, less the costs of the Company. The costs of the Company include all manufacturing costs, principal repayment, interest and financing costs and other costs directly attributable to the other activities of the Company.*
29. This clause does not include reference to the milk price being determined by the Milk Price Manual, and places at the disposal of the Fonterra Board the entire resources of the company, for the payment of the milk price (e.g. by using its reserves or profits from its non-New Zealand operations). It is understood that the Fonterra Board has not, to date, exercised this discretion.
30. In summary, Fonterra's current milk price setting methodology is conceptually consistent with a milk price that would emerge in a competitive market for farmers' milk.
31. However, lack of transparency and monitoring/oversight of necessarily subjective judgements by Fonterra in applying its methodology, makes it very difficult to assess whether or not Fonterra's milk price in any given season is consistent with the outcomes of competitive markets. It is therefore difficult to determine whether the DIRA regulatory regime is effective in achieving its policy objectives.

### Issues with Fonterra's share valuation

32. Fonterra's current cooperative form means there is not a market-discovered price for Fonterra's shares. Fonterra's share price is therefore set by an administrative methodology.
33. As with Fonterra's milk price setting, despite Fonterra's incentives to set an efficient share price over the longer term, Fonterra may, if faced with competitive pressure, be incentivised to set a lower than efficient share price in order to encourage entry to, and discourage exit from, Fonterra in the short to medium term. Fonterra's behaviour at any point in time will depend on the relative balance of its short/medium and long term incentives. A relatively short period of a moderately lower than efficient share price could be sufficient for Fonterra to reduce the competitive pressures it may otherwise be facing for milk supply.
34. Between 2001 and 2009, Fonterra's constitution provided for its shares to be valued based on the projected sustainable earnings of the company, - a concept commonly referred to as 'fair value', which is generally accepted as being reflective of an efficient share price.

35. In November 2009, Fonterra's constitution was amended to provide for:
- a. farmers to hold shares in Fonterra of up to 120% of their milk production, with voting rights being attached only to the share-backed milk supply; and
  - b. the share valuation to be reported on both a 'fair value range' and a 'restricted market value range'; with the restricted value taking into account any limitations or restrictions on the circumstances under which shares may be issued, surrendered or otherwise transacted.
36. In June 2010, Fonterra's constitution was further amended to provide for the 'restricted market value range' to specifically take into account the limitations and restrictions on tradability of shares if they were traded only among dairy farmers. The independent valuer estimated a discount from 'fair value' of around 25% to reflect these limitations and restrictions.
37. However, rather than moving to a restricted value share price immediately, Fonterra decided to 'fix' its share price at the 2009 'unrestricted fair value' level. Fonterra stated that it intends to 'unfix' its share price when the 'restricted' share value exceeds that fixed price.
38. Fonterra's unrestricted fair value share price for the 2011/12 season would have been \$5.57 per share. The restricted fair value share price, being 25% lower, would have been \$4.18 per share. With Fonterra's share price being fixed at the 2009 level of \$4.52 per share, there is currently a 19% discount on the unrestricted fair value share price.
39. It could be argued that by restricting the share price below its fair value Fonterra has shifted some way towards a lower than efficient share price, potentially impacting on farmers' decisions to enter and exit Fonterra. This may indicate that the incentives in the current DIRA regulatory regime are not sufficient, on their own, to ensure efficient pricing of Fonterra's shares at least in the short to medium term.

## ISSUES WITH FONTERRA'S PROPOSED MOVE TO TAF AND ITS IMPLICATIONS FOR THE EFFECTIVENESS OF THE DIRA REGULATORY REGIME

40. Fonterra's proposed TAF system, if designed and implemented in a way that delivers deep, liquid, transparent, well informed and fungible markets for Fonterra shares, has the potential to be an effective substitute to Fonterra issuing and redeeming its shares<sup>7</sup>.
41. A well functioning TAF would also result in a number of additional benefits, including:
- a. Strengthening current incentives for Fonterra to pay an efficient milk price. The interests of external investors to maximise Fonterra's profit would provide some counterbalance to the interests of Fonterra's farmer-shareholders, whose interests are primarily to maximise the milk price Fonterra pays them as suppliers<sup>8</sup>.
  - b. Improving transparency of, and confidence in, Fonterra's milk price setting processes. The level of information disclosure required under the Securities Markets Act would ensure public availability of Fonterra's key information. Coverage by financial analysts should also provide a range of opinions on Fonterra's performance and profitability, resulting in public analysis of Fonterra's milk price setting processes.
  - c. Through the issuing of new dry shares, providing a new mechanism by which Fonterra could have the opportunity to raise additional capital from non-farmer investors (should farmer-shareholders choose to pursue that option) to pursue growth opportunities in New

<sup>7</sup> TAF may also reduce the competitive advantage that investor-owned dairy processors have over Fonterra with respect to Capital requirements.

<sup>8</sup> This is because a dairy farmer would normally have about 80 percent of his/her capital invested on farm and only 20 percent invested in Fonterra.

Zealand and other markets, as well as providing for the development of New Zealand's capital markets.

- d. Providing dairy farmers with real time, market-driven information on the price of Fonterra shares, rather than the current situation, where the price of Fonterra shares is set by an administratively determined share valuation methodology. The proposed TAF system supported by the fund and registered volume providers should result in Fonterra's share price being largely reflective of its fair value<sup>9</sup>.

The peculiar nature of the TAF system may, however, at least initially, result in the Fonterra share price being somewhat below its fair value. The size of any such initial discount would depend on the level of assurances Fonterra can provide fund investors, particularly with regards to its milk price setting process. A small discount may also emerge due to fund investors' lack of rights, representation or influence over Fonterra. A discount of that nature, although not ideal, could be considered acceptable from the wider policy perspective as it could be viewed as a trade-off required to enable Fonterra to evolve its capital structure and secure additional source of capital to pursue its growth opportunities. The above described benefits of TAF, particularly around additional pressure on Fonterra to pay an efficient milk price, may further justify such a policy trade-off.

- 42. However, if TAF's design and/or implementation are deficient, there would be a significant negative impact on farmers' ability to enter and exit Fonterra and on the contestability of farmers' milk supply. In particular, effective functioning of the TAF system is heavily reliant on participation of external, primarily institutional, investors. If these investors do not invest, or do not trade actively, markets could become illiquid and farmers' ability to buy and sell shares in a timely manner and at efficient prices would be impaired.
- 43. Furthermore, while Fonterra has commercial incentives to ensure a well functioning TAF system, it may also, at times, have countervailing incentives to lock farmers in or out of the cooperative. Left unregulated, Fonterra's behaviour at any point in time will depend on the relative balance of these conflicting incentives.
- 44. Furthermore, given that TAF is a highly novel concept, which is likely to take some time before its potential could materialise, TAF cannot therefore be relied on to address the current pressing issues with Fonterra's milk price setting processes.

---

<sup>9</sup> While the farmers only market would be restricted to dairy farmers, full fungibility of shares with fund securities listed on a registered exchange and the activities of registered volume providers operating in both share and fund markets should counter any illiquidity that would otherwise arise from the restricted trading of the farmer only share market.

## REGULATORY IMPACT ANALYSIS

45. The table below outlines the options identified to address issues identified above.

| Policy objective   | Options  |
|--|--|
| To promote transparency of, and confidence in, Fonterra's milk price setting process and consistency of its outcomes with those arising in a competitive market for farmers' milk      | <u>Option MP1: Maintain status quo.</u> Fonterra would maintain its current discretion to decide on its milk price governance, disclosure, and the milk price setting calculation.   |
|  | <u>Option MP2: Introduce milk price governance requirements.</u> Fonterra's current milk price governance arrangements would be embedded in legislation.   |
|  | <u>Option MP3: Introduce milk price disclosure obligations.</u> Fonterra would be required by legislation to publicly disclose milk price related information.   |
|  | <u>Option MP4: Introduce a milk price monitoring/oversight regime.</u> Fonterra's milk price setting would be monitored by the Commerce Commission. <i>MAF's preferred approach is for a combination of Options MP2, MP3 and MP4 to be implemented.</i>  |
|  | <u>Option MP5: Introduce a benchmark price.</u> For comparison purposes, the Commerce Commission would be required to determine an independent benchmark milk price.   |
| To ensure that Fonterra's proposed TAF system is designed and implemented in a way that allows dairy farmers to enter and exit Fonterra in timely manner and at efficient share prices | <u>Option TAF1: Rely on Fonterra's commercial incentives to design, implement and maintain a well functioning TAF system.</u> A generic requirement on Fonterra to ensure dairy farmers' ability to enter and exit Fonterra in a timely manner and at well-discovered prices would replace the current issue and redemption obligation on Fonterra. No TAF specific requirements would be introduced in legislation. |
|  | <u>Option TAF2: Introduce a package of legislative requirements to underpin and strengthen Fonterra's incentives to design, implement and maintain a well functioning TAF system.</u> A number of TAF specific legislative requirements would replace the current issue and redemption obligation on Fonterra. <i>MAF's preferred option.</i>  |
| To ensure that, in the absence of TAF, Fonterra's share price is set at efficient levels   | <u>Option FVS1: Maintain status quo.</u> Fonterra would maintain its current discretion to determine its share valuation methodology.  |
|  | <u>Option FVS2: Introduce legislative guidance for Fonterra's share valuation.</u> Legislative guidance would be provided in relation to Fonterra's administratively set share valuation to ensure that Fonterra's share price is set at 'fair value'. <i>MAF's preferred option.</i>  |

Options to promote transparency of, and confidence in, Fonterra's milk price setting process, and consistency of its outcomes with those arising in competitive markets

*Option MP1: Maintain Status Quo*

46. Under this option, no legislative requirements would be introduced, leaving it to Fonterra to decide on its milk price governance arrangements, disclosure, and the milk price setting calculation.
47. In September 2011, Fonterra released its Milk Price Manual and its associated governance and milk price setting processes to the public. Material disclosed by Fonterra indicates that Fonterra has recently established a Milk Price Panel responsible for recommending, to the Fonterra Board, the milk price that has been determined in accordance with the Milk Price Manual and the milk price principles, both developed by Fonterra. The Milk Price Panel has majority non-farmer membership, including a non-farmer chair.
48. Fonterra's current milk price governance arrangements, if maintained, should provide a degree of confidence in the milk price setting processes. Fonterra's information disclosure, if provided in sufficient detail, would also allow for some public scrutiny of Fonterra's milk price setting process and may shed some light on the consistency of Fonterra's milk pricing outcomes with those that would have arisen in a competitive market for farmers' milk, if analysed by qualified commentators.
49. The benefits of this option are that it does not require any further regulatory intervention and therefore does not impose any additional compliance costs on Fonterra. The key risks, however, are that this option allows Fonterra to retain complete discretion to determine and change its milk price governance and the content/quality of its disclosure documents, with the possibility of withdrawal from the public domain at any given time. This would detract from the objective of promoting transparency of, and confidence in, Fonterra's milk price setting process. Furthermore, it would not provide for an assessment of consistency of outcomes with those arising in a competitive market for farmers' milk.

*Option MP2: Introduce milk price governance requirements*

50. Under this option Fonterra's current milk price governance arrangements would be embedded in legislation, and include:
  - a. the requirement for Fonterra to have a Milk Price Panel, whose role it is to oversee the milk price calculation and advise the Fonterra Board on the milk price setting;
  - b. the requirement that the majority of the Panel members, including the chair, must be free of any supplier relationship with Fonterra; and
  - c. the requirement on Fonterra to maintain a Milk Price Manual.
51. A benefit of this approach is that it would provide for a degree of confidence in Fonterra's milk price setting process. It is preferred to Option MP1 as it would ensure that Fonterra could not withdraw or change its governance arrangements. Such legislative requirements would not impose additional costs on Fonterra to comply with, as they are simply entrenching Fonterra's current processes. However, this option stops short of promoting transparency of Fonterra's milk price setting process and confidence in consistency of Fonterra's outcomes with those arising in a competitive market for farmers' milk. This option is therefore unlikely to be sufficient, in itself, to achieve policy objectives.

*Option MP3: Introduce milk price disclosure obligations*

52. Under this option Fonterra would be required to publicly disclose information in relation to its milk price setting, including:
- information in relation to Fonterra's Milk Price Manual, including the milk pricing methodology, underlying assumptions, inputs and processes used by Fonterra for calculation and determination of its milk price;
  - material changes to the Milk Price Manual, the underlying assumptions and the inputs into the Manual, including the reasons for these changes;
  - the terms of reference of the Milk Price Panel; and
  - the Milk Price Panel's recommendations to the Fonterra Board and the Board's reasons for not adopting Panel's recommendations.
53. As per Option MP2, these requirements would underpin and strengthen Fonterra's current voluntary policy, in this case in relation to disclosure, and ensure that these disciplines are maintained over time and to a sufficient standard. In addition, the requirement for information disclosure would further promote confidence in Fonterra's milk price setting process. It would also, to some degree, enhance Fonterra's commercial incentives to price milk efficiently.
54. This option might result in some additional compliance costs on Fonterra. These costs should be relatively low and are likely to be consistent with the disclosure requirements under securities legislation, which Fonterra will need to comply with if it proceeds with its capital restructuring plans. While this option may enhance Fonterra's incentives to price milk efficiently, it might stop short of promoting confidence in consistency of Fonterra's milk pricing outcomes with those arising in a competitive market if this information is not analysed by financial analysts/commentators. The effectiveness of this option would increase further if combined with the milk price governance requirements outlined in Option MP2 above.

*Option MP4: Introduce a milk price monitoring/oversight regime*

55. Under this option, the Commerce Commission would be tasked with undertaking annual qualitative assessments/audits of Fonterra's milk price methodology. This would involve measuring the underlying assumptions, inputs and process against a statutory purpose and set of principles (outlining pricing outcomes expected in competitive markets) and producing a public report.
56. The milk price monitoring regime is intended to supplement, rather than supplant, the existing disciplines that Fonterra faces under the DIRA 'open entry and exit' regime and any regulatory requirements that would apply under the proposed TAF system.
57. The Commerce Commission's reports would not be binding on Fonterra. Fonterra would continue to set its milk price as it sees fit, but it would do so in a transparent environment.
58. Whereas Options MP2 and MP3 would enhance confidence in Fonterra's *processes*, this option would also enhance confidence in the consistency of milk price *outcomes*, with those arising in a competitive market. The potential for an adverse report would provide additional incentives for Fonterra to act consistently with the statutory purpose. The information collected as part this monitoring/oversight process could also help inform an enforcement action under the Commerce Act 1986, and result in a threat of potentially further regulatory intervention, should Fonterra not address or be able to mount a credible explanation of significant and/or persistent issues raised by the Commerce Commission.

59. Given the view that the introduction of TAF would strengthen Fonterra's commercial incentives to set the milk price efficiently, the introduction of a monitoring/oversight regime would be useful in combination with TAF in order to assess whether this pressure/effect comes to bear.
60. This regime would result in additional compliance costs on Fonterra and require additional funding for the Commerce Commission. The monitoring/oversight regime would also introduce a degree of risk of further regulation should Fonterra not address or be able to mount a credible explanation of significant and/or persistent issues raised by the monitoring agency.
61. The effectiveness of this option would be further improved if combined with Options MP2 and MP3 above.

*Option MP5: Introduce a benchmark price*

62. Under this option, the Commerce Commission would be tasked with deriving and publishing an annual independent benchmark milk price. This benchmark price, rather than Fonterra's milk price, would likely result in being the reference price in the market for farmers' milk.
63. Although, in theory, Fonterra would be able to continue setting its own milk price, in practice, the Commission's benchmark price is likely to become the perceived default market price in the dairy industry. This would, in effect, mean regulating the milk price Fonterra and independent processors pay their farmers. In particular, through setting a different benchmark price, the Commission would effectively be signalling that Fonterra's milk price is not the efficient price, and hence that further regulation might be justified. The benchmark price would also likely to be the price at which Fonterra is required to supply milk to independent processors under the Dairy Industry Restructuring (Raw Milk) Regulations 2001.
64. There would be significant costs associated with setting a benchmark price. Similar to Option MP4, there would be additional compliance costs to Fonterra and additional funding would be required for the Commission. The required funding for the Commission is, however, likely to be much more significant than under Option MP4, because this option would involve the Commission building an independent pricing model, which would be separate from the Fonterra model. Furthermore, by effectively setting a regulated milk price, there are significant risks of further distorting the market due to asymmetric information available to the regulator. These indirect costs are likely to be significant.
65. Overall, and in the absence of greater certainty that Fonterra's current milk price setting is inefficient, the costs associated with this option would likely outweigh any potential benefits. Moreover, the introduction of TAF may impose a further discipline on Fonterra's milk price. It would be beneficial to monitor that effect (e.g. through Option MP4) and to seek greater transparency of Fonterra's processes and methodology (e.g. through Options MP2 and MP3) prior to imposing more intrusive regulation.

Options to ensure that Fonterra's proposed TAF system is designed and implemented in a way that allows dairy farmers to enter and exit Fonterra in a timely manner and at efficient share prices

*Option TAF1: Rely on Fonterra's commercial incentives to design, implement and maintain a well functioning TAF system*

66. Under this option, the current issue and redemption obligation on Fonterra would be removed and replaced with a generic requirement on Fonterra to ensure that there are systems in place to enable farmers to enter and exit Fonterra in a timely manner and at well-discovered prices. It



would then be left to Fonterra to design, implement and evolve such systems, subject only to generic securities law and the oversight of the Financial Markets Authority.

67. The key benefit of this option is the ability for Fonterra's capital structure to evolve without requiring any further amendments to legislation. Market design elements are, however, extremely important and will impact on farmers' ability to freely enter and exit Fonterra. Furthermore, a highly restrictive and illiquid market for Fonterra shares – resulting in Fonterra's share price being heavily discounted – could be argued to represent a 'well-discovered' share price for the kind of market system that has been put in place. As outlined above, a less than efficient Fonterra share price would inhibit efficient operation of New Zealand dairy markets.
68. While Fonterra is currently proposing a number of desirable design features for its TAF system, unless they are locked-in through legislation, there are no guarantees that these features will be maintained in the future. On one hand, Fonterra has commercial incentives to ensure that the markets remain deep and liquid so that it can use these markets to raise capital in the future. On the other hand, it is also possible that Fonterra could have some incentive to limit the liquidity of the markets to make it more difficult for farmers to either buy or sell shares and therefore prevent farmers from either entering or exiting Fonterra. Fonterra's actions at any point in time will depend on the relative balance of these conflicting incentives. This option may not therefore result in a well functioning TAF system for the purposes of enabling farmers to freely enter and exit Fonterra.
69. Furthermore, generic securities law and the oversight of the Financial Markets Authority focus on 'market integrity', rather than 'market liquidity' per se. Reliance on generic securities law and enforcement, therefore, would not be sufficient.

*Option TAF2: Introduce a comprehensive package of legislative requirements to underpin and strengthen Fonterra's incentives to design, implement and maintain a well functioning TAF system*

70. Under this option, a package of legislative requirements would be introduced to take the place of the current requirement on Fonterra to issue and redeem its cooperative shares. A number of specific legislative requirements that could be included in this package are discussed, in turn, below. If such a package is introduced, it may include some or all of these legislative requirements.
71. The key benefit of introducing a package of legislative requirements is that it would lock in the desirable features of TAF, and ensure that these features could not change in the future without Parliament's consideration and approval. This would help to ensure a well functioning TAF system for the purpose of enabling farmers to freely enter and exit Fonterra. This is crucial to achieving efficient outcomes, consistent with the objectives of the DIRA.
72. The key cost/risk is associated with the relative inflexibility of legislation in responding to changes in a dynamic market. An example of this is the cost of implementing legislative amendments that could be required in the future if Fonterra were to further evolve its capital structure. This option would increase regulatory costs to Fonterra and could slow down the evolution of Fonterra's capital structure.
73. Overall, however, given the importance of ensuring the freedom of entry and exit to the overarching objectives of the DIRA regulatory regime, Option TAF2 is preferred to Option TAF1.
74. Each of the legislative requirements is considered below on its own merits.
  - a. **Introduce a pre-condition of a minimum fund size.** The development of depth and liquidity in any market can take time and may evolve over a period of time. However, for

the purposes of the ‘open entry and exit’ regime, sufficient market depth and liquidity are required before the current share issue and redemption obligations can be removed. A fund of a minimum size of \$500 million (demonstrated by the total subscriptions to the fund) would provide reasonable assurance of market depth and liquidity at the outset. A fund size of \$500 million would likely place the fund within the NZX50 and would therefore attract more potential investors than a smaller sized fund. In determining the appropriate value of minimum fund size consideration has been given to the relative size of New Zealand’s capital markets in general to ensure that the pre-condition is feasible.

A key benefit of this option would be to provide reasonable assurance that the share and fund markets would be sufficiently liquid to provide for farmers to buy and sell shares in a timely manner and at efficient prices, before the issue and redemption obligations were removed.

A potential cost is that, if the minimum size is set at too high a level, it could prevent Fonterra from launching the TAF proposal. This could mean that Fonterra could not implement or evolve its capital structure and the potential benefits to the dairy industry and wider economy may not be realised.

Overall, provided that the minimum fund size is set at an appropriate value, there should be no additional costs of imposing this pre-condition. Once the pre-condition is met, it would cease to have any effect.

- b. **Introduce a pre-condition that Fonterra shares and fund securities be listed on a registered exchange.** Listing the fund and share markets on a registered exchange would mean that general legislative requirements relating to market manipulation, insider trading, related party transactions and continuous disclosure would apply to both the share and fund markets. The share and fund market conduct rules would also have to be approved by the Financial Markets Authority, thus ensuring that minimum investor protections are in place.

This option may encourage external investment through increased confidence that investor interests will be protected. Effective investor participation is critical to ensuring depth and liquidity of Fonterra’s TAF system and therefore farmers’ ability to freely enter and exit Fonterra.

There are no additional costs to Fonterra since this would be a necessary pre-condition for them to set up TAF. It does, however, ensure that the shares and fund securities remain on a registered exchange with the associated benefits as discussed above.

- c. **Lock in structural features of TAF** to ensure that they are maintained post TAF launch. A key structural feature of TAF is the presence of market-makers (e.g. registered volume providers), whose role is to facilitate price convergence between the share and fund markets. This option would require Fonterra to ensure that market-makers are present and operational at all times.

A potential cost of locking in such a structural requirement is that legislative amendments may be required in the future if Fonterra were to further evolve its capital structure. This could increase the regulatory costs to Fonterra and could slow down or prevent the evolution of the TAF system.

However, without the entrenchment of such structural features, Fonterra may choose to change or forgo the key elements of TAF without which farmers’ ability to freely enter and exit Fonterra could be jeopardised. Introducing such a structural requirement would strengthen Fonterra’s incentives in the direction of ensuring the liquidity of the markets.

- d. **Introduce behavioural requirements on Fonterra** to strengthen Fonterra's incentives to maintain liquidity and fungibility of the TAF share and fund markets, by explicitly prohibiting Fonterra from engaging in behaviour with the purpose of hindering liquidity and fungibility of the TAF share and fund markets. Although Fonterra has strong incentives to develop and maintain well functioning share and fund markets, it may also have incentives to limit the liquidity of the markets to make it more difficult for farmers to freely enter and exit Fonterra from time to time.

The key benefit is ensuring Fonterra does not take actions to limit the free entry and exit of farmers. There is, however, the potential for unintentionally preventing behaviour which may have been in the best interest of, for example, strengthening liquidity. That is, Fonterra may steer clear of any action that could potentially be considered to breach the prohibitions, even if those actions were in accordance with the objectives of the DIRA.

- e. **Introduce minimum investor protections to promote market depth and liquidity.** Given that all positive influence rights, such as voting and board appointments, lie with farmers on the basis of milk supplied, fund investors will need to be sufficiently confident that their interests are being protected. Otherwise they may choose not to invest in the fund, invest at low levels or at discounted prices or invest initially but then pull out of the fund.

This option therefore imposes obligations on Fonterra to ensure that fund investors have the ability to appoint/remove the fund manager and the ability to wind up the fund with Fonterra not being able to override investor wishes. Under this option, if investors were to choose to wind up the fund, the current issue and redemption obligation would be reinstated and Fonterra would have to return to an administrative mechanism for pricing its shares (methodology for determining an administrative share price is discussed below).

The key benefit of this option is attracting external investment through increased confidence that their interests will be protected. Effective investor participation is critical to ensuring depth and liquidity of Fonterra's TAF system and therefore farmers' ability to freely enter and exit Fonterra.

By legislatively requiring Fonterra to introduce minimum investor protections, it could send a signal to investors regarding Fonterra's (un)willingness to protect their interests. It may therefore be preferable for Fonterra to provide adequate rights to fund investors on its own accord rather than by government introducing such protections through legislation.

- f. **Introducing ongoing minimum liquidity requirements.** To promote liquidity in the share and fund markets, consideration has been given to the ongoing requirements specifically relating to measures of liquidity. For example, a requirement on Fonterra to maintain a minimum fund size and to have comparable liquidity of the top 15 companies listed on the New Zealand Stock Exchange.

A key benefit of this option would be to provide reasonable assurance that the share and fund markets would remain sufficiently liquid to provide for farmers to buy and sell shares in a timely manner and at efficient prices.

However, it is likely to be extremely difficult for Fonterra to comply with such requirements, because market liquidity is driven by any number of external factors that could be outside of Fonterra's control. Liquidity metrics may also not provide good information regarding farmers' ability to enter and exit Fonterra as even if there were only a few trades occurring, it does not necessarily follow that an entering or exiting farmer would not be able to make those few trades. This regulatory requirement is not therefore likely to be feasible.

75. In summary, to ensure that Fonterra's proposed TAF system is designed and implemented to be an effective substitute to Fonterra issuing and redeeming its shares in a timely manner and at fair value, Option TAF2 (a), (b), (c), (d), and (e), is recommended. This option ensures that the key features of the proposed TAF system are locked in to legislation, thereby underpinning and strengthening Fonterra's incentives to establish and maintain a well functioning market trading system. By locking the key design features in, Option TAF2 would significantly reduce the risk that TAF would not be an effective substitute to the current issue and redemption obligations in the DIRA.

#### Options to ensure that, in the absence of TAF, Fonterra's share price is set at an efficient level

76. The decision on whether, and if so when, to proceed with TAF rests with Fonterra. In the event that Fonterra either decides not to proceed with TAF in the near future or TAF is launched but is unsuccessful (i.e. the Fund has been wound up), the current issue and redemption obligation would be reinstated. Without a market-discovered share price, Fonterra's share price would revert to needing to be determined by reference to an administrative share valuation methodology.

#### *Option FVS1: Maintain Status Quo*

77. Under this option, Fonterra's share valuation methodology will continue to be determined by Fonterra, subject to the incentives created by the DIRA "open entry and exit" regime to set an efficient share price in the long term and the above proposed milk price monitoring/oversight regime.
78. The key benefit of this option is that the choice of the share valuation methodology would be made by an entity that has both the long term incentives and the information to set the share price at an efficient level, without any further regulatory intervention and at no additional compliance costs to Fonterra.
79. The key risk is that without any legislative guidance, Fonterra may, at times, choose to use a share valuation methodology that would result in a lower than efficient share price in the short to medium term, despite its incentives to set an efficient share price in the long term.
80. Critically, the proposed introduction of a milk price monitoring/oversight regime does not negate the need for such legislative guidance. This is because a dairy farmer faced with a choice to supply Fonterra or an independent processor, both of whom offer the same (efficient) milk price, would be incentivised to supply Fonterra because of the excess (inefficient) return offered on Fonterra shares. Fonterra's competitors would then need to pay a higher than efficient milk price to attract and/or retain milk supply.
81. Overall, the risk associated with potential inefficiencies that may arise should Fonterra choose to set a share price at a lower than efficient level is likely to outweigh the costs of imposing some legislative guidance to Fonterra in terms of its share price valuation methodology.

#### *Option FVS2: Introduce legislative guidance for Fonterra's share valuation*

82. Under this option, legislative guidance would be included in the DIRA with regards to Fonterra's share valuation to ensure that Fonterra reverts to, and maintains going forward, its pre-2009 'fair value' share pricing methodology.

83. The key benefit of this option is that Fonterra's share price would be set at efficient levels at all times (i.e. short, medium and long term), thereby ensuring that contestability of farmers' milk supply is not impeded.
84. The key risk/cost associated with this option is that the legislative guidance may either be unworkable or may not fully anticipate and reflect all future contingencies that might otherwise be reflected in an efficient share price. There is a risk therefore that a prescribed methodology would result in the over or under valuation of shares.
85. Overall, given the risk associated with Option FVS1, it is considered that the benefits of providing legislative guidance on Fonterra's share valuation would outweigh its potential costs.
86. Defining a share valuation methodology that would result in an efficient share price is not straightforward. The following options have been identified for consideration.

- a. **Fair value.** Under this option, Fonterra would be required to price its shares based on the fair market value of the company's assets, calculated based on the present value of the company's prospective earnings. The purpose of this type of valuation would be to ensure that Fonterra's share price reflects a price for which it would be traded in an open and unrestricted market.

This option is consistent with Fonterra's pre-2009 share valuation methodology as well as what would be expected to emerge under a well functioning TAF system. Such a share valuation methodology would provide an incentive for Fonterra to price its shares efficiently and as if it faced competition for its shareholders' capital in a way that a publicly listed company would.

- b. **Restricted value.** Under this option, Fonterra would be required to take account of the current ownership restrictions on Fonterra's shares (i.e. that dairy farmers and nobody else can own them) in valuing its shares. This would allow a liquidity discount to be applied to a fair value share price.

This option ignores the fact that the issue and redemption requirements in the DIRA ensure that dairy farmers' ability to buy and sell Fonterra shares is completely independent of other farmers making their shares available for 'trade'. Fonterra is required by law to stand in the market at all times to buy/sell as many of its shares as dairy farmers wish to sell/buy at a stated well-publicised price. The role of Fonterra is to support liquidity of its shares in the same way that registered volume providers and fund investors would support liquidity under TAF. Therefore, from a dairy farmer's perspective, as long as Fonterra is required to issue and redeem its cooperative shares, there is ample liquidity associated with buying/selling of Fonterra's shares. Critically, an application of an illiquidity discount could be viewed as shifting Fonterra's share price towards a lower than efficient level, thus inhibiting efficient operation of dairy markets in New Zealand.

87. In summary, to ensure that, in the absence of TAF, Fonterra's administratively set share price is set at an efficient level, Option FVS2 is recommended. This is because the risk associated with potential inefficiencies that may arise, should Fonterra choose to set a share price at a lower than efficient level, is likely to outweigh the costs of providing legislative guidance to Fonterra in relation to its share price valuation. In terms of the definition of an efficient share price, Option FVS2 (a) is preferred.

## CONCLUSIONS AND RECOMMENDATIONS

88. This is a draft RIS. The recommendations outlined below represent MAF's preliminary policy positions and are not Government policy. The RIS is provided for information and consultation purposes only and to underpin the accompanying exposure draft Bill. The exposure draft Bill has been developed to illustrate how the preferred set of options could be given effect to. The purpose of this draft RIS and the exposure draft Bill is to consult dairy industry stakeholders on all the options outlined above, before presenting these options to Government for policy approvals.
89. To promote transparency of, and confidence in, Fonterra's milk price setting process, and consistency of its outcomes with those arising in a competitive market for farmers' milk, Options MP2, MP3 and MP4 are recommended. Although all these options individually would provide for improvements over the status quo, they would be particularly effective if implemented jointly.
90. Strengthening Fonterra's milk price governance (Option MP2) only, while likely to promote some confidence in Fonterra's milk price processes, would not be sufficient for the purposes of transparency and consistency of outcomes.
91. Imposing milk price disclosure obligations on Fonterra (Option MP3) only, would lead to increased transparency, though it leaves open the possibility that an assessment of the consistency of Fonterra's milk price with those arising in competitive markets would either not be undertaken or undertaken infrequently and/or might lack credibility.
92. Introducing a milk price monitoring/oversight regime (Option MP4) would ensure that an assessment of Fonterra's milk price against the outcomes that would have arisen in a competitive market for farmers' milk is undertaken by an expert body on a regular basis and its results made public.
93. Importantly, the three options do not constrain the methodology that can be utilised by Fonterra in setting its milk price; rather they seek to improve confidence that a robust process is followed and obtain transparency of that process. It is considered that, in the absence of greater certainty that Fonterra's milk price is inefficient, the costs of regulating or constraining Fonterra's milk price, e.g. through MP5, would likely outweigh any potential benefits. Implementation of the three Options MP2, MP3, and MP4 in conjunction with each other would improve certainty that the DIRA regulatory regime is functioning as intended.
94. To ensure that Fonterra's proposed TAF system is designed and implemented to be an effective substitute to Fonterra issuing and redeeming its shares in a timely manner and at fair value, Option TAF2 (a), (b), (c), (d), and (e) is recommended. This option ensures that the key features of the proposed TAF system are locked in to legislation, thereby underpinning and strengthening Fonterra's incentives to establish and maintain a well functioning market trading system. By locking the key design features in, Option TAF2 would significantly reduce the risk that TAF would not be an effective substitute to the current issue and redemption obligations in the DIRA.
95. To ensure that, in the absence of TAF, Fonterra's administratively set share price is set at efficient levels, Option FVS2 is recommended. This is because the risk associated with potential inefficiencies that may arise, should Fonterra choose to set a share price at a lower than efficient level, is likely to outweigh the costs of providing legislative guidance to Fonterra in relation to its share price valuation. In terms of the definition of an efficient share price, Option FVS2 (a) is preferred.

## CONSULTATION

96. The purpose of this draft RIS and the accompanying exposure draft Bill is to consult dairy industry stakeholders on the options outlined in this document, before presenting these options to Government for its consideration. This RIS will be revised following consultation.
97. MAF has previously consulted on potential regulatory tools to accompany TAF. At the time, there was a clear disparity in views between two groups of submitters:
- Independent processors, some individual farmers, some dairy industry advisors and institutional investors all consider that strengthening of milk price governance and information disclosure is necessary to ensure that the TAF system will be adequately liquid. Some of these submitters consider that this does not go far enough and that fund investors will need some representation on the Board of Fonterra to ensure their ongoing participation in the fund. Some of these submitters supported maintaining the status quo, on the basis that TAF could not provide freedom of entry and exit for farmers. Others supported allowing TAF but implementing a range of the regulatory tools presented.
  - Conversely, Fonterra, the Fonterra Shareholders' Council, Federated Farmers and some individual farmers consider that little to no regulation is necessary as Fonterra's own commercial incentives are sufficient to ensure efficient milk pricing and liquidity, both in the short and long term.
98. The Ministry of Economic Development, the Treasury, Inland Revenue, Ministry of Foreign Affairs and Trade, and Te Puni Kōkiri were consulted on and agree with the content of this draft RIS and the exposure draft Bill. The Department of Prime Minister and Cabinet, the Commerce Commission and the Financial Markets Authority have also been informed. Further consultation will be undertaken with government agencies prior to seeking Government's policy approvals.

## IMPLEMENTATION

99. Legislative amendment is required to implement officials' preferred set of options outlined above. The Commerce Commission will be tasked with the milk price monitoring/oversight function outlined above and will continue in its current role of being the enforcement agency for disputes arising in relation to all DIRA provisions.

## MONITORING, EVALUATION AND REVIEW

100. The DIRA currently contains sunset clauses which trigger the DIRA expiry process, including a comprehensive review of the need to have the DIRA regulatory regime in place. This review will be undertaken either when certain market share thresholds have been met or in 2015, whichever is the earlier. This review is intended to cover a comprehensive set of issues, and may include an assessment of the effectiveness and efficiency of the proposed regulatory provisions.

## APPENDIX: ECONOMIC THEORY OF HOW THE PRICE OF MILK WOULD BE SET IN A WORKABLY COMPETITIVE MARKET FOR FARMERS' MILK

Economic theory suggests that dairy processors operating in a workably competitive farm gate milk market would compete to acquire raw milk from farmers and sell most of that milk as milk powder in a global dairy market, at international prices that they cannot influence. The process of competition can be described as follows:

- A dairy processor, seeking to maximise its profits, would pay farmers the lowest price it could, while ensuring continuing supply. If that milk price was significantly lower than the international dairy price and processing costs, it would yield a profit for the dairy processor.
- Other dairy processors, attracted by the prospect of this profit, would be incentivised to enter the market.
- As each new dairy processor enters the market, wanting to secure milk supply, it will be offering a price slightly above that offered by those already operating in the market, but still low enough to make as much profit as possible.
- Existing dairy processors, aiming to keep their milk supply, will also participate in this 'bidding process' by increasing their prices for milk.
- This process will continue until the price for milk reaches the point where processors are only just able to cover their costs (including capital costs). At this point, all the profit that had previously been captured by dairy processors will be captured by farmers, in the milk price they are paid for their milk.

At the beginning of this competition process, when there were still profits to be made for dairy processors, dairy processors would be expanding their processing capacities or building new processing plants. This would lead to increased demand for farmers' milk, and therefore an increase in the farm gate milk price.

So long as farmers are able to convert farmland from other land uses into dairy farming, the increase in the milk price would lead to an increase in the supply of farmers' milk. Given that the increase in the supply of farmers' milk in New Zealand is unlikely to be large enough to cause an oversupply of dairy products in international dairy markets, and therefore cause a shift in the international dairy price, the farm gate milk price offered by the competing dairy processors would continue to rise, even as the supply of farmers' milk rises.

This process of competition for farmers' milk among dairy processors would continue until dairy processors are just covering their costs, i.e. all the profits have been transferred to dairy farmers. This process would therefore have the effect of driving the farm gate milk price up to the point where the *near-term* marginal dairy processing plant built (regardless of which processor is building it) would just cover its total costs (including capital costs). In other words, competition among dairy processors would result in the following farm gate milk price:

*Farm gate milk price = Global price of dairy commodities – Full cost of building the near-term efficient milk processing plant.*

Because of the forward-looking view of revenues and processing costs (i.e. modelling of the *near-term* milk processing plant that would be built), there is a necessary reliance on notional rather than actual revenues and costs that a processor would face in building that plant.



## **Consultation Document 3**

Exposure Draft Dairy Industry Restructuring Amendment Bill

PCO 15205/9.0  
Drafted by Parliamentary Counsel

**SENSITIVE**

**Dairy Industry Restructuring  
Amendment Bill**

Government Bill



*Hon David Carter*

## **Dairy Industry Restructuring Amendment Bill**

Government Bill

### **Contents**

|   |               | Page |
|---|---------------|------|
| 1 | Title         | 4    |
| 2 | Commencement  | 4    |
| 3 | Principal Act | 4    |

### **Part 1**

#### **Amendments to principal Act**

|   |  |   |
|---|--|---|
| 4 | Section 5 amended (Interpretation)                   | 4 |
| 5 | Section 72 amended (Overview of subpart 5)           | 6 |
| 6 | New sections 77A and 77B inserted                    | 6 |
|   | 77A Price must be fair market value                  | 6 |
|   | 77B When section 77A first applies                   | 7 |
| 7 | New sections 109A to 109N and cross-heading inserted | 7 |

#### *Trading among farmers*

|      |  |   |
|------|--|---|
| 109A | Subpart 5 of Part 2 provisions do not apply                                      | 7 |
| 109B | Order in Council declaring that specified subpart 5 provisions do not apply      | 7 |
| 109C | When Minister must recommend that Order in Council be made                       | 8 |
| 109D | Preconditions for making Order in Council  | 8 |
| 109E | Requirements for notice by new co-op to chief executive                          | 9 |
| 109F | Notice by new co-op to chief executive triggering revocation of Order in Council | 9 |

**Dairy Industry Restructuring  
Amendment Bill**

|    |      |  |    |
|----|------|--|----|
|    | 109G | Revocation of Order in Council made under section 109B   | 9  |
|    | 109H | Chief executive may give new co-op notice requiring verification                               | 10 |
|    | 109I | When sections 109J to 109L apply   | 11 |
|    | 109J | New co-op's obligations in relation to market in co-operative shares and new co-op fund        | 11 |
|    | 109K | Restrictions on new co-op  | 11 |
|    | 109L | Limit on proportion of co-operative shares that may be exchanged for new co-op fund securities | 12 |
|    | 109M | Expiry of sections 109A to 109L  | 12 |
| 8  |      | Section 134 amended (Levy regulations)   | 12 |
| 9  |      | Section 148 amended (Subpart ceases to apply to island that meets its market share threshold)  | 12 |
| 10 |      | Section 149 amended (Subpart expires if both islands meet their market share thresholds)       | 12 |
| 11 |      | New subpart 5A of Part 2 inserted  | 13 |
|    |      | Subpart 5A—Base milk price   |    |
|    | 150A | Purpose of this subpart  | 13 |
|    |      | <i>Milk price principles</i>   |    |
|    | 150B | Milk price principles  | 13 |
|    |      | <i>Milk Price Panel</i>  |    |
|    | 150C | Milk Price Panel   | 15 |
|    | 150D | Appointment of members of panel  | 15 |
|    |      | <i>Milk price manual</i>   |    |
|    | 150E | New co-op must maintain milk price manual  | 16 |
|    | 150F | Steps new co-op must take if panel recommendation not followed or implemented                  | 16 |
|    |      | <i>Review of milk price manual by Commission</i>   |    |
|    | 150G | Commission must review milk price manual   | 16 |
|    | 150H | Commission's report  | 16 |
|    | 150I | Commission must make final report publicly available   | 17 |
|    |      | <i>Procedure for Commission's review of milk price manual</i>                                  |    |
|    | 150J | Procedure for review of milk price manual  | 17 |
|    | 150K | New co-op must provide Commission with milk price manual and other information                 | 17 |
|    | 150L | Draft Commission report  | 18 |

**Dairy Industry Restructuring  
Amendment Bill**

---

|      |  |    |
|------|--|----|
|      | <i>Audit of base milk price calculation</i>  |    |
| 150M | Commission must audit calculation of base milk price                                 | 18 |
| 150N | Commission's report  | 18 |
| 150O | Commission must make final report publicly available                                 | 19 |
| 150P | Steps new co-op must take if base milk price changed after Commission report         | 19 |
|      | <i>Procedure for Commission's audit of base milk price calculation</i>               |    |
| 150Q | Procedure for audit of base milk price calculation                                   | 19 |
| 150R | New co-op must provide Commission with certain information                           | 20 |
| 150S | Draft Commission report  | 20 |
|      | <i>Application of Commerce Act 1986</i>  |    |
| 150T | Application of Commerce Act 1986 to review or audit by Commission under this subpart | 20 |
| 12   | New sections 161A to 161C inserted   | 21 |
| 161A | Voting rights in respect of new co-op fund securities held by new co-op or nominee   | 21 |
| 161B | Financial assistance by new co-op for purchase of co-operative shares                | 22 |
| 161C | Application of Companies Act 1993  | 23 |
| 13   | New section 161D inserted  | 23 |
| 161D | Application of section 20(2) and 20(3) of Co-operative Companies Act 1996            | 23 |
| 14   | Other amendments to principal Act  | 23 |
|      | <b>Part 2</b>  |    |
|      | <b>Miscellaneous</b>   |    |
| 15   | References are references to principal Act   | 23 |
| 16   | Transitional provision for application under section 73 or 74 of principal Act       | 23 |
| 17   | Transitional provision for notice under section 97 of principal Act                  | 24 |
|      | <b>Schedule</b>  | 24 |
|      | <b>Other amendments to principal Act</b>   |    |

---

**The Parliament of New Zealand enacts as follows:****1 Title**

This Act is the Dairy Industry Restructuring Amendment Act 2012.

**2 Commencement**

- (1) Except for section 13, this Act comes into force on the day after the date on which it receives the Royal assent.
- (2) Section 13 comes into force on the commencement of an Order in Council made under section 109B as inserted in the principal Act by section 7.

**3 Principal Act**

This Act amends the Dairy Industry Restructuring Act 2001 (the **principal Act**).

**Part 1****Amendments to principal Act****4 Section 5 amended (Interpretation)**

- (1) In section 5(1), insert in their appropriate alphabetical order:
  - “**base milk price**, in relation to a season, means the price per kilogram of milksolids supplied to new co-op that is set by new co-op for that season
  - “**commodity** means a product made by the processing of milk that is—
    - “(a) traded in significant quantities in globally contested markets; and
    - “(b) characterised by uniform technical specifications
  - “**independent**, in relation to a person, means that the person is none of the following:
    - “(a) a shareholding farmer:
    - “(b) a relative of a shareholding farmer:
    - “(c) an employee of new co-op:
    - “(d) an employee of a shareholding farmer:
    - “(e) a person who has a direct or indirect financial interest in a farm that supplies milk to new co-op

“**listed** has the same meaning as in section 2(1) of the Securities Markets Act 1988

“**market maker in co-operative shares** means a person who maintains bids and offers on co-operative shares on the registered market on which they are listed by standing ready to buy and sell those shares at quoted prices or yields on a continuous basis during the periods that the registered market is in operation

“**milk price manual** means the manual that must be maintained by new co-op under section 150E

“**milk price principles** means the principles set out in section 150B

“**new co-op fund** means the fund referred to in section 109D(1)(b)

“**new co-op fund securities** means the securities referred to in section 109D(1)(b)(i)

“**panel** means the Milk Price Panel established under section 150C

“**publicly available**, in relation to making a document or information available, means that—

- “(a) the document or information is available for inspection, free of charge, on an Internet site that is publicly accessible at all reasonable times (except to the extent that making the document or information available would infringe copyright in the material in question or is inconsistent with any enactment or rule of law); and
- “(b) a copy of the document or information is available for inspection, free of charge, at all reasonable times at the head office of the person required to make it publicly available or, if that person is a Minister, at the head office of the relevant Ministry; and
- “(c) copies of the document or information may be purchased by any person at a reasonable price

“**registered market** has the same meaning as in section 2(1) of the Securities Markets Act 1988

“**relative**, in relation to any person, means—

- “(a) that person’s spouse, civil union partner, or de facto partner:



- “(b) a parent or step-parent of that person:
- “(c) a child or stepchild of that person:
- “(d) a brother or sister of that person, including a stepbrother or stepsister:
- “(e) a grandchild of that person:
- “(f) a grandparent of that person:
- “(g) a parent or step-parent of that person’s spouse, civil union partner, or de facto partner

“**specified subpart 5 provisions** means the provisions specified in section 109A

“**trade** has the same meaning as in section 2(1) of the Securities Markets Act 1988, and for the avoidance of doubt includes exchange”.

- (2) In section 5(1), replace the definition of **conversion date** with:  
“**conversion date** means 27 September 2002”.

## **5 Section 72 amended (Overview of subpart 5)**

In section 72, after subsection (5), insert:

- “(5A) Sections 109A to 109H provide for the disapplication by an Order in Council of specified provisions in this subpart, which relate to the requirement for new co-op to issue and redeem co-operative shares, if there is in place a regime for trading co-operative shares on a registered market and there is established a fund (the new co-op fund) the manager of which issues securities listed on a registered market.
- “(5B) Sections 109I to 109M regulate the conduct of new co-op in relation to the trading of co-operative shares and the functioning of the new co-op fund.”

## **6 New sections 77A and 77B inserted**

After section 77, insert:

### **“77A Price must be fair market value**

- “(1) The purpose of this section is to ensure that the price of a co-operative share is set at a price for which the co-operative share would be traded in an open and unrestricted market between knowledgeable, willing parties who are at arm’s length.
- “(2) The price set by new co-op under section 77(1) must be calculated by using the formula—

$$\frac{\text{assets} - \text{debts}}{\text{shares}} = \text{price}$$

where—

**assets** means the aggregate fair market value of new co-op's assets, taking into account the value of the forecast free cash flows expected to be generated from the operation of those assets; and

**debts** means the aggregate fair market value of new co-op's interest-bearing debt; and

**shares** means the total number of co-operative shares on issue.

**“77B When section 77A first applies**

Section 77A first applies—

- “(a) on the revocation of an Order in Council under section 109G; or
- “(b) if, before 31 December 2013, no Order in Council has been made under section 109B, on 31 December 2013.”

**7 New sections 109A to 109N and cross-heading inserted**

After section 109, insert:

*“Trading among farmers*

**“109A Subpart 5 of Part 2 provisions do not apply**

The following provisions (the specified subpart 5 provisions) do not apply if they are declared by an Order in Council made under section 109B not to apply:

- “(a) sections 77 to 85:
- “(b) sections 88 to 93:
- “(c) sections 98 to 105.

**“109B Order in Council declaring that specified subpart 5 provisions do not apply**

The Governor-General may by Order in Council made on the recommendation of the Minister declare that the specified subpart 5 provisions do not apply.

**“109C When Minister must recommend that Order in Council be made**

The Minister must recommend that an Order in Council be made under section 109B if the Minister is satisfied, on the basis of written confirmation by the chief executive, that the preconditions under section 109D for making the order have been met.

**“109D Preconditions for making Order in Council**

- “(1) The preconditions for making an Order in Council under section 109B are the following:
- “(a) co-operative shares are able to be traded by shareholding farmers on a registered market; and
  - “(b) there is established and maintained a fund (the new co-op fund) that satisfies the following requirements:
    - “(i) the securities issued in respect of the fund (the new co-op fund securities)—
      - “(A) are listed on a registered market; and
      - “(B) entitle the holders of those securities to receive dividends from new co-op as if they were holders of co-operative shares; and
    - “(ii) the rules of the fund permit shareholding farmers to exchange co-operative shares for an equal number of new co-op fund securities, and vice versa; and
    - “(iii) the manager of the fund has issued, or has entered into binding obligations to issue, new co-op fund securities for consideration of not less than \$500 million; and
  - “(c) new co-op has given a notice to the chief executive that complies with section 109E.
- “(2) The chief executive, subject to being satisfied as to the sufficiency and authenticity of the certificate in question,—
- “(a) must confirm to the Minister that the precondition in subsection (1)(a) has been met if the chief executive has received from the registered exchange in question a certificate verifying the matters set out in subsection (1)(a):

- “(b) must confirm to the Minister that the precondition in subsection (1)(b) has been met if the chief executive has received from the board of new co-op a certificate verifying the matters set out in subsection (1)(b).

**“109E Requirements for notice by new co-op to chief executive**

For the purposes of section 109D(1)(c), the notice by new co-op to the chief executive must—

- “(a) be in writing; and
- “(b) request that an Order in Council be made under section 109B; and
- “(c) specify the date on which the order should come into force.

**“109F Notice by new co-op to chief executive triggering revocation of Order in Council**

- “(1) New co-op must without delay give written notice to the chief executive if—
  - “(a) co-operative shares are no longer able to be traded on a registered market in accordance with section 109D(1)(a); or
  - “(b) new co-op fund securities have ceased to be listed on a registered market.
- “(2) The notice must be accompanied by the evidence relied upon by new co-op for asserting that subsection (1) applies.
- “(3) If new co-op contravenes this section, it commits an offence and is liable on conviction to a fine not exceeding \$200,000 and a fine of \$10,000 for every day that the offence continues.

**“109G Revocation of Order in Council made under section 109B**

- “(1) An Order in Council made under section 109B may be revoked only on the recommendation of the Minister under subsection (2).
- “(2) The Minister must recommend that the order be revoked if the Minister is satisfied, on written confirmation from the chief executive, that—

- “(a) co-operative shares are no longer able to be traded on a registered market in accordance with section 109D(1)(a); or
- “(b) new co-op fund securities have ceased to be listed on a registered market.
- “(3) The chief executive must confirm that subsection (2)(a) or (b) applies if the chief executive—
  - “(a) has received a notice from new co-op under section 109F; or
  - “(b) is satisfied on reasonable grounds, after making due inquiry, that subsection (2)(a) or (b) applies; or
  - “(c) has received a response from new co-op under section 109H(3)(b); or
  - “(d) has not obtained a response from new co-op, within 2 working days after service, to a notice given under section 109H.

**“109H Chief executive may give new co-op notice requiring verification**

- “(1) At any time while an Order in Council made under section 109B is in force, the chief executive may give new co-op a notice that complies with subsection (2) requiring new co-op to verify in writing, with documentary proof, that—
  - “(a) co-operative shares continue to be able to be traded on a registered market in accordance with section 109D(1)(a):
  - “(b) new co-op fund securities continue to be listed on a registered market.
- “(2) The notice must be—
  - “(a) in writing; and
  - “(b) dated; and
  - “(c) served on new co-op at its address for service.
- “(3) New co-op must respond to the notice not later than 2 working days after service of the notice by—
  - “(a) verifying the matter in question; or
  - “(b) if it is unable to verify it, stating that it is unable to do so.
- “(4) If new co-op contravenes subsection (3), it commits an offence and is liable on conviction to a fine not exceeding

\$200,000 and a fine of \$10,000 for each day that the offence continues.

**“109I When sections 109J to 109L apply**

Sections 109J to 109L apply only while an Order in Council made under section 109B is in force.

**“109J New co-op’s obligations in relation to market in co-operative shares and new co-op fund**

- “(1) New co-op must ensure that there are 1 or more market makers in co-operative shares operating during the periods of operation of the registered market on which the co-operative shares are listed.
- “(2) New co-op must ensure that the holders of new co-op fund securities have the following rights:
  - “(a) the right to appoint and remove the manager of the fund; and
  - “(b) the right to appoint and remove a majority of the board of the manager of the fund; and
  - “(c) the right to vote on resolutions proposed at general meetings of the fund; and
  - “(d) the right to pass a resolution for the liquidation of the fund.

**“109K Restrictions on new co-op**

- “(1) New co-op must not engage in any conduct for the purpose of preventing or hindering—
  - “(a) trading in co-operative shares; or
  - “(b) participation by shareholding farmers, new entrants, and market makers in co-operative shares in trading in co-operative shares or new co-op fund securities; or
  - “(c) the ability of shareholding farmers and new entrants to exchange co-operative shares for new co-op fund securities, and vice versa; or
  - “(d) the liquidity of the market for co-operative shares or for new co-op fund securities.
- “(2) New co-op must not engage in any conduct that limits the ability of holders of new co-op fund securities to liquidate the fund and receive the proceeds of the fund.

**“109L Limit on proportion of co-operative shares that may be exchanged for new co-op fund securities**

- “(1) Nothing in section 109K(1) prevents new co-op from imposing a limit that applies equally to every shareholding farmer and limits the proportion of a shareholding farmer’s co-operative shares that may be exchanged for new co-op fund securities.
- “(2) New co-op may not reduce a limit referred to in subsection (1) once it has been imposed.
- “(3) In this section, **impose** includes amending an existing limit.

**“109M Expiry of sections 109A to 109L**

Sections 109A to 109L expire and are repealed,—

- “(a) if an Order in Council has been made under section 109B and revoked under section 109G, on the revocation of the order; or
- “(b) if no Order in Council has been made under section 109B by 31 December 2013, on that date.”

**8 Section 134 amended (Levy regulations)**

- (1) In section 134(4)(a)(ii), after “subpart”, insert “or subpart 5A”.
- (2) In section 134(4)(a), after subparagraph (iv), insert:
- “(v) the cost of conducting reviews and audits under subpart 5A; and”.

**9 Section 148 amended (Subpart ceases to apply to island that meets its market share threshold)**

In section 148(4)(a), replace “and 110 to 146” with “77A, 104, 105, 109A to 109M, and 110 to 146”.

**10 Section 149 amended (Subpart expires if both islands meet their market share thresholds)**

- (1) In the heading to section 149, replace “**Subpart expires**” with “**Subparts 5 and 5A expire**”.
- (2) In section 149(1), after “(except section 134)”, insert “and subpart 5A of Part 2”.

**11 New subpart 5A of Part 2 inserted**

After section 150, insert:

**“Subpart 5A—Base milk price**

**“150A Purpose of this subpart**

- “(1) The purpose of this subpart is to promote the setting of a base milk price that is consistent with outcomes produced in a competitive market for milk purchased from farmers.
- “(2) For the purposes of subsection (1), a market for milk purchased from farmers is competitive if the returns from the processing of milk by an efficient processor are sufficient (but no more than sufficient) to allow that processor a reasonable prospect of recovering all the processor’s costs (including the cost of capital invested).

*“Milk price principles*

**“150B Milk price principles**

- “(1) In this subpart, a reference to the milk price principles means a reference to the following principles:
  - “(a) revenue taken into account in calculating the base milk price is determined from prices of a portfolio of commodities at the times that those commodities are sold by new co-op:
  - “(b) costs taken into account in calculating the base milk price reflect the costs that an efficient processor in New Zealand would incur in—
    - “(i) collecting milk; and
    - “(ii) processing milk into the same portfolio of commodities as the portfolio adopted for the purposes of paragraph (a), using processing plant of an efficient scale; and
    - “(iii) selling those products:
  - “(c) new co-op has the opportunity to earn a risk-adjusted return on capital that is sufficient to justify long-term investment in new and replacement assets for use in collecting and processing milk and selling the resulting products:



- “(d) risk is allocated between new co-op and shareholding farmers who supply milk to new co-op in a manner that reflects their respective ability to manage the risk.
- “(2) For the purposes of subsection (1)(a) and (b)(ii), the portfolio of commodities must be determined having regard to the following:
  - “(a) in respect of the commodities included in the portfolio,—
    - “(i) the commodities that are likely to be the most profitable over a period not exceeding 5 years from the time when the portfolio is determined; and
    - “(ii) the commodities that are—
      - “(A) produced by existing physical manufacturing capacity operated by new co-op and independent processors; and
      - “(B) likely to be produced in the future by existing and planned physical manufacturing capacity operated by new co-op and independent processors; and
    - “(iii) the need for commodities included in the portfolio to utilise all milk collected by new co-op; and
  - “(b) in respect of the relative proportions of the commodities included in the portfolio, the quantities of commodities likely to be produced by new co-op and independent processors based on—
    - “(i) the mix of commodities that are likely to be most profitable; and
    - “(ii) existing and planned investment by new co-op and independent processors in physical manufacturing capacity for the production of those commodities; and
    - “(iii) the need for commodities included in the portfolio to utilise all milk collected.

*“Milk Price Panel*

**“150C Milk Price Panel**

- “(1) New co-op must establish and maintain a committee known as the Milk Price Panel (the panel).
- “(2) New co-op must set the terms of reference for the panel, which must include the functions set out in subsections (3) and (4), and the panel must act in accordance with those terms of reference.
- “(3) The panel must, for each season,—
  - “(a) supervise the calculation of the base milk price; and
  - “(b) advise new co-op as necessary on the application of the milk price manual; and
  - “(c) recommend to new co-op the base milk price.
- “(4) The panel may, as it considers necessary or desirable, make recommendations to new co-op in respect of the milk price manual, including a recommendation that it should be amended and a recommendation that a proposed amendment should not be made.
- “(5) New co-op must make the terms of reference of the panel publicly available, including any amendments to those terms of reference.
- “(6) If new co-op contravenes subsection (1), (2), or (5), it commits an offence and is liable to a fine not exceeding \$200,000 and a fine of \$10,000 for each day that the offence continues.

**“150D Appointment of members of panel**

- “(1) New co-op must appoint the members of the panel and must appoint one of the members as the chair.
- “(2) New co-op must ensure that at all times the chair and a majority of the members (including the chair) are independent.
- “(3) If without reasonable excuse new co-op contravenes subsection (2), it commits an offence and is liable to a fine not exceeding \$200,000 and a fine of \$10,000 for each day that the offence continues.

*“Milk price manual***“150E New co-op must maintain milk price manual**

- “(1) New co-op must maintain a manual (the milk price manual) that sets out how the base milk price is calculated.
- “(2) New co-op must make the manual publicly available, including any amendments to the manual.
- “(3) If new co-op contravenes subsection (1) or (2), it commits an offence and is liable to a fine not exceeding \$200,000 and a fine of \$10,000 for each day that the offence continues.

**“150F Steps new co-op must take if panel recommendation not followed or implemented**

- “(1) This section applies if—
  - “(a) new co-op does not amend the milk price manual in accordance with a recommendation by the panel; or
  - “(b) new co-op amends the milk price manual contrary to a recommendation by the panel.
- “(2) New co-op must make publicly available—
  - “(a) the recommendation of the panel; and
  - “(b) a statement of new co-op’s reasons for not implementing the panel’s recommendation or for amending the milk price manual other than in accordance with the panel’s recommendation.
- “(3) If new co-op contravenes subsection (2), it commits an offence and is liable to a fine not exceeding \$200,000 and a fine of \$10,000 for each day that the offence continues.

*“Review of milk price manual by Commission***“150G Commission must review milk price manual**

The Commission must, for each season, review the milk price manual and make a report under section 150H.

**“150H Commission’s report**

- “(1) The Commission must make a report on the extent to which the milk price manual is consistent with the purpose of this subpart (*see* section 150A) and the milk price principles.
- “(2) In making the report, the Commission must—

- “(a) have regard to the information provided to it by new co-op under section 150K or under the procedure agreed under section 150J; and
- “(b) have regard to any submission made by new co-op under section 150L(2)(a) or under the procedure agreed under section 150J; and
- “(c) give reasons for its conclusions.

**“150I Commission must make final report publicly available**

The Commission must finalise its report under section 150H and make it publicly available by 15 December in the season to which the milk price manual relates.

*“Procedure for Commission’s review of milk price manual*

**“150J Procedure for review of milk price manual**

- “(1) The procedure for the review by the Commission of the milk price manual is—
  - “(a) the procedure set out in sections 150K and 150L; or
  - “(b) if a procedure is agreed between new co-op and the Commission, that procedure.
- “(2) If new co-op fails to comply with the agreed procedure,—
  - “(a) the agreed procedure lapses; and
  - “(b) the procedure set out in sections 150K and 150L applies to the extent that anything that is required to be done by new co-op under those sections remains still to be done.

**“150K New co-op must provide Commission with milk price manual and other information**

New co-op must, not later than 1 August in each year,—

- “(a) provide the Commission with the milk price manual for the current season; and
- “(b) notify the Commission of any change in the economic and business environment that, in new co-op’s view, requires a change in calculating how the base milk price is set for the current season; and

- “(c) certify to the Commission the extent to which new co-op considers that the milk price manual is consistent with the purpose of this subpart (*see* section 150A) and the milk price principles; and
- “(d) provide the Commission with reasons for the view expressed in new co-op’s certificate given under paragraph (c).

**“150L Draft Commission report**

- “(1) Not later than 15 October in the season to which the milk price manual relates, the Commission must provide new co-op with a draft of its report made under section 150H.
- “(2) Not later than 15 November in the season to which the milk price manual relates, new co-op must—
  - “(a) make a submission to the Commission on the draft report; or
  - “(b) notify the Commission that it does not wish to make a submission.

*“Audit of base milk price calculation***“150M Commission must audit calculation of base milk price**

- “(1) The Commission must, for each season, audit new co-op’s calculation of the base milk price set for that season by making a report under section 150N.
- “(2) The first audit under this section must be the audit to be held in 2013 in respect of the 2012/2013 season.

**“150N Commission’s report**

- “(1) The Commission must make a report on the extent to which the assumptions adopted and the inputs and process used by new co-op in calculating the base milk price for the season are consistent with the purpose of this subpart (*see* section 150A) and the milk price principles.
- “(2) In making the report, the Commission must—
  - “(a) have regard to the information provided to it by new co-op under section 150R or under the procedure agreed under section 150Q; and

- “(b) have regard to any submission made by new co-op under section 150S(2)(a) or under the procedure agreed under section 150Q; and
  - “(c) give reasons for its conclusions.
- “(3) In making the report, the Commission is not required to, and must not, state the amount of the base milk price according to its own calculations.

**“150O Commission must make final report publicly available**

The Commission must finalise its report under section 150N and make it publicly available by 15 September following the season to which it relates.

**“150P Steps new co-op must take if base milk price changed after Commission report**

- “(1) This section applies if, after the Commission has made its report under section 150N publicly available, new co-op changes the base milk price for the season to which the report relates.
- “(2) New co-op must without delay make publicly available—
- “(a) the new base milk price; and
  - “(b) a statement of new co-op’s reasons for the change.
- “(3) If new co-op contravenes subsection (2), it commits an offence and is liable to a fine not exceeding \$200,000 and a fine of \$10,000 for each day that the offence continues.

*“Procedure for Commission’s audit of base milk price calculation*

**“150Q Procedure for audit of base milk price calculation**

- “(1) The procedure for the audit by the Commission of the calculation of the base milk price is—
- “(a) the procedure set out in sections 150R and 150S; or
  - “(b) if a procedure is agreed between new co-op and the Commission, that procedure.
- “(2) If new co-op fails to comply with the agreed procedure,—
- “(a) the agreed procedure lapses; and
  - “(b) the procedure set out in sections 150R and 150S applies to the extent that anything that is required to be

done by new co-op under those sections remains still to be done.

**“150R New co-op must provide Commission with certain information**

New co-op must, not later than 1 July in each year,—

- “(a) provide the Commission with the assumptions adopted and the inputs and process used by new co-op in calculating the base milk price for the preceding season; and
- “(b) certify to the Commission the extent to which, in new co-op’s view, the assumptions adopted and the inputs and process used by new co-op in calculating the proposed base milk price are consistent with the purpose of this subpart (*see* section 150A) and the milk price principles; and
- “(c) provide the Commission with reasons for the view expressed in new co-op’s certificate given under paragraph (b).

**“150S Draft Commission report**

- “(1) No later than 15 August following the season to which the report under section 150N relates, the Commission must provide new co-op with a draft of its report.
- “(2) No later than 1 September following the season to which the report relates, new co-op must—
  - “(a) make a submission to the Commission on the draft report; or
  - “(b) notify the Commission that it does not wish to make a submission.

*“Application of Commerce Act 1986*

**“150T Application of Commerce Act 1986 to review or audit by Commission under this subpart**

- “(1) The following provisions of the Commerce Act 1986 apply, with all necessary modifications, to a review or audit by the Commission under this subpart as if the review or audit were an investigation by the Commission of a contravention of that Act:

- “(a) sections 15 to 17:
  - “(b) sections 98 to 98G:
  - “(c) section 99:
  - “(d) sections 100 to 103:
  - “(e) section 106:
  - “(f) section 109.
- “(2) For the purpose of carrying out its functions and exercising its powers under this subpart, the Commission may, in addition to exercising its powers under section 98 of the Commerce Act 1986, by notice in writing, require new co-op, at the time and place specified in the notice, to produce or supply to the Commission an expert opinion from an appropriately qualified person, or from a member of a class of appropriately qualified persons, as determined by the Commission in relation to any matter specified by the Commission.”

**12 New sections 161A to 161C inserted**

After section 161, insert:

**“161A Voting rights in respect of new co-op fund securities held by new co-op or nominee**

- “(1) Subject to subsection (2), new co-op must not exercise voting rights conferred by new co-op fund securities held by new co-op or a nominee.
- “(2) Nothing in subsection (1) prevents new co-op from exercising the right conferred by one new co-op fund security (the **veto security**) held by new co-op or its nominee to veto any of the following matters:
- “(a) any change in the governance structure of the board of the manager of the new co-op fund, including—
    - “(i) the number of members of the board appointed by holders of new co-op fund securities other than new co-op; and
    - “(ii) the number of members of the board appointed by new co-op; and
  - “(b) any change in the scope and role of the new co-op fund; and
  - “(c) any change in the obligation of the new co-op fund to facilitate the exchange of co-operative shares for an equal



number of new co-op fund securities, and vice versa;  
and

- “(d) any change in the limit on the number of new co-op fund securities that can be held by a person or entity (together with any associates of that person or entity); and
- “(e) any change in the terms on which the veto security is issued.

**“161B Financial assistance by new co-op for purchase of co-operative shares**

- “(1) New co-op may give financial assistance for the purpose of, or in connection with, the purchase of a co-operative share if—
  - “(a) the financial assistance is given in relation to the establishment and operation of—
    - “(i) the registered market on which co-operative shares are able to be traded by shareholding farmers; or
    - “(ii) the new co-op fund; and
  - “(b) the financial assistance is given to any of the following:
    - “(i) a custodian of co-operative shares;
    - “(ii) a person holding co-operative shares in a similar capacity to a custodian;
    - “(iii) a market maker in co-operative shares;
    - “(iv) a broker or other agent in relation to the trading of new co-op fund securities;
    - “(v) a trustee or manager of the new co-op fund; and
  - “(c) the board of new co-op has previously resolved that—
    - “(i) new co-op should provide the assistance; and
    - “(ii) the giving of the assistance is in the best interests of new co-op; and
    - “(iii) the terms and conditions under which the assistance is given are fair and reasonable to new co-op.
- “(2) The Companies Act 1993 excluding section 76(1) and (2) of that Act applies with all necessary modifications to the giving of financial assistance under subsection (1) as if the financial assistance were given under section 76(1) of that Act.
- “(3) Nothing in this section affects the giving of financial assistance by new co-op under section 76(1) of the Companies Act 1993.

**“161C Application of Companies Act 1993**

Nothing in section 82 of the Companies Act 1993 (the Act) prevents a subsidiary of new co-op holding shares in new co-op if the only reason that the exemption contained in section 82(6) of the Act does not apply is that new co-op or a subsidiary of new co-op holds new co-op fund securities.”

**13 New section 161D inserted**

Before section 162, insert:

**“161D Application of section 20(2) and 20(3) of Co-operative Companies Act 1996**

Section 20(2) and (3) of the Co-operative Companies Act 1996 does not apply to new co-op.”

**14 Other amendments to principal Act**

Amend the principal Act as set out in the Schedule.

**Part 2  
Miscellaneous**

**15 References are references to principal Act**

In sections 16 and 17,—

- (a) new section 109A and new section 109B mean the corresponding provisions inserted in the principal Act by section 7 of this Act; and
- (b) all other section references are references to the principal Act.

**16 Transitional provision for application under section 73 or 74 of principal Act**

- (1) This section applies to every application that—
  - (a) must be accepted under section 73 or has been accepted under section 74(3); and
  - (b) is made before the date on which the Order in Council under new section 109B comes into force; and
  - (c) is made in respect of the next season following the Order in Council coming into force.

- (2) Despite sections 109A and 109B, the following sections continue to apply in respect of an application to which this section applies as if the Order in Council had not been made:
- (a) section 77(4):
  - (b) section 81(1):
  - (c) section 82(1):
  - (d) sections 83 to 85:
  - (e) sections 88(1) and (2):
  - (f) sections 90 to 93.

**17 Transitional provision for notice under section 97 of principal Act**

- (1) This section applies to every notice of withdrawal that is—
- (a) given before the date on which the Order in Council under section 109B comes into force; and
  - (b) given in respect of the next season following the Order in Council coming into force.
- (2) Despite sections 109A and 109B, the following sections continue to apply in respect of a notice of withdrawal to which this section applies as if the Order in Council had not been made:
- (a) section 98(1):
  - (b) section 99:
  - (c) sections 101 to 105.
- 

**Schedule**

s 14

**Other amendments to principal Act**

**Section 4**

Repeal section 4(a) and (c).

**Section 5**

In section 5(1), repeal the definitions of:

- (a) **exiting company:**
- (b) **peak note price:**
- (c) **peak note standard:**
- (d) **peak notes.**

**Subparts 1 and 2 of Part 2**

In Part 2, repeal subparts 1 and 2.

**Sections 44 to 46**

Repeal sections 44 to 46.

**Section 53**

Repeal section 53.

**Sections 54 to 58 and cross-heading above section 54**

Repeal sections 54 to 58 and the cross-heading above section 54.

**Section 59 and cross-heading above section 59**

Repeal section 59 and the cross-heading above section 59.

**Section 60**

Repeal section 60.

**Section 71**

Repeal section 71(f).

**Section 72**

Repeal section 72(6).

**Section 78**

Repeal section 78.

**Section 79**

In the heading to section 79, delete “**and peak note standard**”.

In section 79(1), delete “and a peak note standard”.

In section 79(2), delete “or the peak note standard”.

**Section 80**

Repeal section 80(1)(b) and (d).

**Section 81**

In the heading to section 81, delete “**and peak notes**”.

Replace section 81(3) with:

“(3) The co-operative share standard that applies to a new entrant or a shareholding farmer who makes an application under section 73 that new co-op is required to accept is the co-operative share standard published at the beginning of the application period in which the application is made.”

**Section 82**

In the heading to section 82, delete “**and peak notes**”.

Replace section 82(2) with:

“(2) The co-operative share standard that applies to a new entrant or a shareholding farmer who makes an application to which

section 74(3) applies is the co-operative share standard published at the beginning of the application period in the season immediately before the first season for the supply of milk to which the application relates.”

Repeal section 82(3).

### **Section 83**

In section 83, delete “and peak notes”.

### **Section 84**

In section 84(2), delete “and peak notes” in each place.

In section 84(3), delete “and peak notes”.

In section 84(3)(b), delete “and the peak note standard”.

### **Section 85**

Repeal section 85(2)(b).

### **Section 88**

In the heading to section 88, delete “**and peak notes**”.

Replace section 88(4) with:

- “(4) The co-operative share standard that applies to a new entrant or a shareholding farmer to whom this section applies is,—
- “(a) if the new entrant or shareholding farmer makes an election under subsection (2)(a), the co-operative share standard published at the beginning of the application period immediately before the first season for the supply of milk to which the application relates; or
  - “(b) if that election is not made, the co-operative share standard published at the beginning of the application period in which the application is made.”

### **Section 89**

In the heading to section 89, delete “**or peak note standard**”.

In section 89(1)(c), delete “or the peak note standard” in each place.

In section 89(2), delete “and peak notes” in each place.

In section 89(2)(c), delete “or the peak note standard”.

### **Section 90**

In section 90(2), delete “and peak notes”.

In section 90(3)(a), delete “and peak notes”.

In section 90(4)(a), delete “and peak notes”.

In section 90(5), delete “and peak notes”.

In section 90(5)(b), delete “and the peak note standard”.

**Section 91**

Replace section 91(2) with:

“(2) New co-op must not require a new entrant or a shareholding farmer to pay the balance (or part of it) of the purchase price for the co-operative shares before 1 June in the first season for the supply of milk to which the application relates.”

**Section 92**

In section 92(2), delete “and peak notes” in each place.

Replace section 92(3) with:

“(3) The total amount payable for the co-operative shares referred to in subsection (2) is calculated based on the most recent published price and co-operative share standard on the date that the deposit is payable.”

**Section 93**

Replace section 93(2) with:

“(2) New co-op must not require a new entrant or a shareholding farmer to pay the balance (or part of it) of the purchase price for the co-operative shares before 1 June in the first season for the supply of milk to which the application relates.”

**Section 98**

In the heading to section 98, delete “and peak notes”.

Repeal section 98(1)(b).

**Section 99**

In the heading to section 99, delete “and peak notes”.

Repeal section 99(b).

**Section 100**

In the heading to section 100, delete “or peak note standard”.

In section 100(1), delete “or the peak note standard”.

In section 100(1), delete “or peak note standard”.

In section 100(2), delete “and to the peak note standard”.

**Section 101**

In section 101(1), delete “and the surrender value of the relevant peak notes”.

**Sections 110 to 114 and cross-heading above section 110**

Repeal sections 110 to 114 and the cross-heading above section 110.

**Section 116**

Repeal section 116(1)(a)(ii) and (iii).

**Section 120**

In section 120(1), after “this subpart”, insert “(except section 77A)”.

**Section 166 and cross-heading above section 166**

Repeal section 166 and the cross-heading above section 166.

**Sections 167 and 168**

Repeal sections 167 and 168.

**Schedules 1 to 4**

Repeal Schedules 1 to 4.

**Consultation Document 4**

Exposure Draft Dairy Industry Restructuring (Raw Milk) Amendment  
Regulations



# DRAFT FOR CONSULTATION

**Prospective consolidation of Dairy Industry Restructuring  
(Raw Milk) Regulations 2001 incorporating proposed  
amendments set out in draft Dairy Industry Restructuring  
(Raw Milk) Amendment Regulations 2012**

---



# Dairy Industry Restructuring (Raw Milk) Regulations 2001

Silvia Cartwright, Governor-General

## Order in Council

At Wellington this 29th day of October 2001

Present:

The Right Hon Helen Clark presiding in Council

Pursuant to sections 115 and 116 of the Dairy Industry Restructuring Act 2001, Her Excellency the Governor-General, acting on the advice and with the consent of the Executive Council, makes the following regulations.

## Contents

|                  | Page |
|------------------|------|
| 1 Title          | 5    |
| 2 Commencement   | 5    |
| 3 Interpretation | 5    |

### Part 1

#### Supply of raw milk by new co-op

|    |  |   |
|----|--|---|
| 4  | New co-op must supply raw milk   | 7 |
| 5  | Advance estimates of raw milk requirements   | 7 |
| 5A | New co-op must prepare preliminary forecasts of estimated total raw milk requirements in each season   | 7 |
| 5B | New co-op must prepare final forecasts of estimated total raw milk requirements in each season   | 8 |
| 5C | Chief executive must verify final forecasts and prorate if estimated total demand for raw milk in season is likely to exceed limit on supply | 9 |

#### Returns

|    |   |    |
|----|---|----|
| 5D | Return by new co-op relating to quantity of raw milk supplied by shareholding farmers | 10 |
|----|---|----|

**Dairy Industry Restructuring (Raw  
Milk) Regulations 2001**

|     |   |    |
|-----|---|----|
| 5E  | Return by new co-op relating to quantity of raw milk supplied to independent processors   | 11 |
| 5F  | Returns by independent processor relating to quantity of raw milk sourced from own supply | 11 |
|     | <i>Estimates</i>  |    |
| 5G  | Whole season and monthly estimates  | 12 |
| 6   | Raw milk estimates  | 12 |
| 7   | Winter milk estimates for quantities exceeding 20 000 litres                              | 12 |
| 8   | Price of raw milk   | 13 |
| 9   | Calculation of annualised share value   | 14 |
| 10  | Other terms of supply   | 14 |
|     | <i>Maximum limits on supply of raw milk by new co-op</i>                                  |    |
| 11  | Limit on supply of raw milk to all independent processors                                 | 16 |
| 12  | Limit on supply of raw milk to each independent processor                                 | 17 |
| 12A | Limit on supply of raw milk to New Zealand Dairy Foods Limited                            | 17 |
| 12B | Limit on supply of organic milk   | 17 |
| 13  | Regulations do not apply to excess supply of raw milk                                     | 18 |
| 14  | Raw milk supplied under pre-commencement contracts  | 18 |
| 15  | Performance through associated person   | 18 |

**Part 2**

**Obligations on new co-op to publish information**

|    |  |    |
|----|--|----|
| 16 | Obligations to publish information                 | 19 |
| 17 | Statutory declarations under section 117(4) of Act | 20 |

**Schedule**

**Form of statutory declaration**

22

## Regulations

### 1 Title

These regulations are the Dairy Industry Restructuring (Raw Milk) Regulations 2001.

### 2 Commencement

These regulations come into force on the day after the date on which they are notified in the *Gazette*.

### 3 Interpretation

- (1) In these regulations, unless the context otherwise requires,—

**Act** means the Dairy Industry Restructuring Act 2001

**additional cost of organic milk** means the cost to new co-op of organic milk supplied to new co-op in a season per kilogram of milksolids minus the farm gate milk price in that season

**additional cost of winter milk**, in relation to an Island, means the cost to new co-op of winter milk supplied to new co-op in a season in that Island per kilogram of milksolids minus the farm gate milk price in that season

**balance of the season**, in relation to a season, means the months of November, December, January, February, March, April, and May

**farm gate milk price** means the total cost of milk divided by kilograms of milksolids

**Island** means the North Island or South Island of New Zealand

**kilograms of milksolids** is the number of kilograms of milksolids supplied to new co-op in a season by shareholding farmers

**organic milk** means raw milk certified as organic milk by—

- (a) New Zealand Biological Producers and Consumers Council Inc; or
- (b) The Biodynamic Farming and Gardening Association in New Zealand Inc; or
- (c) AsureQuality Limited

**own supply**, in relation to an independent processor,—

- (a) means raw milk collected from dairy farmers by, or on behalf of, the independent processor; but

- (b) does not include milk supplied to an independent processor under section 108 of the Act

**raw milk** means untreated milk from a cow, and includes organic milk; but does not include—

- (a) milk or a component of milk from a cow produced under special conditions by, for example, the use of—
- (i) specialised herd selection; or
  - (ii) specialised farming practice; or
  - (iii) specialised feeding practice; or
  - (iv) new technology; and
- (b) colostrum

**total cost of milk** means the total calculated by—

- (a) getting a sum by adding together all payments to which all the following apply:
- (i) the payment is made by new co-op and interconnected bodies corporate of new co-op; and
  - (ii) the payment is made to a shareholding farmer; and
  - (iii) *[Revoked]*
  - (iv) the payment is for the raw milk that the farmer supplies to new co-op in a season; and
- (b) deducting from the sum—
- (i) *[Revoked]*
  - (ii) *[Revoked]*
  - (iii) the total organic milk premium for the season; and
  - (iv) the total winter milk premium for the season

**total organic milk premium** means the total premium paid to shareholding farmers for the supply of organic milk to new co-op and interconnected bodies corporate of new co-op in a season

**total winter milk premium** means the total premium paid to shareholding farmers for the supply of winter milk to new co-op and interconnected bodies corporate of new co-op in a season

**wholesale milk price** is defined in regulation 8(6)

**winter milk** means raw milk supplied in June or July.

- (2) The following terms are defined in section 5 of the Act:

- (aa) chief executive:
- (a) Commission:
- (b) *[Revoked]*
- (c) independent processor:
- (d) interconnected body corporate:
- (e) milksolids:
- (ea) new co-op:
- (f) season:
- (g) shareholding farmer.

## **Part 1**

### **Supply of raw milk by new co-op**

#### **4 New co-op must supply raw milk**

- (1) New co-op must supply raw milk to independent processors.
- (2) The obligation in subclause (1) is subject to regulations 5 to 15.

#### **5 Advance estimates of raw milk requirements**

An independent processor must, in accordance with ~~regulations 6~~ regulations 5G, 6, and 7, provide new co-op with advance estimates of the quantity of raw milk required by the independent processor.

#### **5A New co-op must prepare preliminary forecasts of estimated total raw milk requirements in each season**

- (1) In each season, new co-op must prepare a preliminary forecast of the estimated total raw milk requirements of—
  - (a) each independent processor for the season; and
  - (b) all independent processors for the season.
- (2) ~~The preliminary forecast of the estimated total raw milk requirements of each independent processor for the season is to be based on—~~
  - (a) ~~the total quantity of winter milk actually supplied to the independent processor in the season; and~~
  - (b) ~~the estimated total quantity of raw milk to be supplied to the independent processor in October of the season based on an aggregate of the daily estimates provided~~

- by the independent processor in July in accordance with regulation 6(2)(a); and
- (c) ~~the estimated total quantity of raw milk to be supplied to the independent processor in all other months of the season based on the quantity estimated under paragraph (b) plus 10%.~~
- (2) The preliminary forecast of the estimated total raw milk requirements of each independent processor for the season is to be based on—
- (a) the total quantity of winter milk actually supplied to the independent processor in the season; and
- (b) the estimated total quantity of raw milk to be supplied to the independent processor in August, September, and October in the season based on an aggregate of the daily estimates for those 3 months provided by the independent processor in accordance with regulation 6(2)(a); and
- (c) the estimated total quantity of raw milk to be supplied to the independent processor in all other months of the season based on the estimate for the whole of the season provided by the independent processor in accordance with regulation 5G.
- (3) The preliminary forecast of the estimated total raw milk requirements of all independent processors for the season is to be based on the aggregate of each independent processor's raw milk requirements under subclause (2).
- (4) New co-op must, by the 10th working day in August in a season, provide the preliminary forecasts prepared under subclauses (2) and (3) to the chief executive.

**5B New co-op must prepare final forecasts of estimated total raw milk requirements in each season**

- (1) In each season, new co-op must prepare final forecasts of the estimated total raw milk requirements of—
- (a) each independent processor for the season; and
- (b) all independent processors for the season.
- (2) ~~The final forecast of the estimated total raw milk requirements for each independent processor in the season is to be based on—~~



- (a) the total quantity of winter milk actually supplied to the independent processor in the season; and
  - (b) the total quantity of raw milk actually supplied to the independent processor in August, September, and October in the season; and
  - (c) the estimated total quantity of raw milk to be supplied to the independent processor in the balance of the season based on the total quantity of raw milk supplied to the independent processor in October plus 10%.
- (2) The final forecast of the estimated total raw milk requirements for each independent processor in the season is to be based on—
- (a) the total quantity of winter milk actually supplied to the independent processor in the season; and
  - (b) the total quantity of raw milk actually supplied to the independent processor in August, September, and October in the season; and
  - (c) the estimated total quantity of raw milk to be supplied to the independent processor in November, December, and January in the season based on an aggregate of the daily estimates for those 3 months provided by the independent processor in accordance with regulation 6(2)(a); and
  - (d) the estimated total quantity of raw milk to be supplied to the independent processor in all other months of the season based on the estimate for the whole of the season provided by the independent processor in accordance with regulation 5G.
- (3) The final forecast of the estimated total raw milk requirements of all independent processors for the season is to be based on the aggregate of each independent processor's raw milk requirements for the season under subclause (2).

**5C Chief executive must verify final forecasts and prorate if estimated total demand for raw milk in season is likely to exceed limit on supply**

- (1) New co-op must, by the 10th working day in November in a season, provide the final forecasts prepared under regulation 5B to the chief executive for verification.
- (2) The chief executive must—

- (a) verify the information in the final forecasts; and
- (b) if the final forecasts as verified indicate that the estimated total quantity of raw milk required by all independent processors for the season is likely to exceed the limit on the volume of raw milk that new co-op must supply under ~~regulation 11(2)~~ regulation 11,—
  - (i) calculate, on a pro rata basis, the decrease in the total quantity of raw milk that each independent processor may receive for the balance of the season in order to bring the estimated total demand for raw milk in the season within the limit specified in ~~regulation 11(2)~~ regulation 11; and
  - (ii) publish a notice in the *Gazette* stating that the maximum quantity of raw milk that independent processors may receive from new co-op for the balance of the season is to be adjusted to bring the estimated total demand for raw milk in the season within the limit specified in regulation 11(2); and
  - (iii) notify new co-op and each independent processor in writing of the decrease in the total quantity of raw milk that new co-op may supply to the independent processor for the balance of the season.

**5D New co-op must advise chief executive of actual supply of raw milk after close of season**

New co-op must, within 20 working days after the close of a season, provide a return to the chief executive stating how much raw milk was actually supplied by new co-op—

- (a) to each independent processor in each month of the season; and
- (b) to all independent processors for the whole of the season.

Returns

**5D Return by new co-op relating to quantity of raw milk supplied by shareholding farmers**

New co-op must, within 20 working days after the close of a season, provide a return to the chief executive stating the total

quantity of raw milk actually supplied in that season to new co-op by shareholding farmers.

**5E** **Return by new co-op relating to quantity of raw milk supplied to independent processors**

New co-op must, within 20 working days after the close of a season, provide a return to the chief executive stating the total quantity of raw milk it actually supplied—

- (a) to each independent processor in each month of the season; and
- (b) to all independent processors in the whole of the season.

**5F** **Returns by independent processor relating to quantity of raw milk sourced from own supply**

- (1) This regulation applies to an independent processor who requires new co-op to supply it with raw milk under these regulations.
- (2) Subclause (3) applies to a current season beginning on 1 June 2013 or 1 June 2014.
- (3) If the independent processor was supplied with raw milk by new co-op in the immediately preceding season, the independent processor must, by 1 August of the current season, provide a return to the chief executive stating the total quantity of raw milk that the independent processor sourced from its own supply in that immediately preceding season.
- (4) Subclause (5) applies to a current season beginning on or after 1 June 2015.
- (5) If the independent processor was not supplied with raw milk by new co-op in the immediately preceding season, the independent processor must, by 1 August of the current season, provide a return to the chief executive stating the total quantity of raw milk that the independent processor sourced from its own supply in each of the 3 consecutive seasons immediately preceding the current season.

*Estimates***5G Whole season and monthly estimates**

- (1) This regulation applies to the quantity of raw milk to be supplied to an independent processor and any interconnected body corporate of the independent processor for the whole of a season, including winter milk to which regulation 7 applies.
- (2) An independent processor must provide new co-op, by the close of 31 May in the immediately preceding season, with an estimate of—
  - (a) the total quantity of raw milk required by the independent processor for the whole of the season; and
  - (b) the total quantity of raw milk required by the independent processor for each of the months specified in regulation 12(2)(a) to (j).
- (3) To avoid doubt, the estimates provided under subclause (2) must not exceed the limits specified in regulations 12, 12A, or 12B.

**6 Raw milk estimates**

- (1) This regulation applies to a quantity of raw milk to be supplied in 1 day to an independent processor and any interconnected body corporate of the independent processor, except a quantity of winter milk to which regulation 7 applies.
- (2) For a quantity of raw milk to which subclause (1) applies, an independent processor must provide new co-op with an estimate for supply—
  - (a) at least 3 months before the date on which the milk is to be supplied; and
  - (b) at least 1 week before the date on which the milk is to be supplied.
- (3) A quantity estimated under subclause 2(b) must be within the range from 40% more than a quantity estimated under subclause 2(a) to 40% less than that quantity.

**7 Winter milk estimates for quantities exceeding 20 000 litres**

- (1) This regulation applies to a quantity of winter milk that exceeds 20 000 litres to be supplied in 1 day to an independent

processor and any interconnected body corporate of the independent processor.

- (2) For a quantity of winter milk to which subclause (1) applies, an independent processor must provide new co-op with an estimate for supply—
  - (a) at least 18 months before the date on which the winter milk is to be supplied; and
  - (b) at least 1 week before the date on which the winter milk is to be supplied.
- (3) A quantity estimated under subclause (2)(b) must be within the range from 40% more than the quantity estimated under subclause (2)(a) to 40% less than that quantity.

## **8 Price of raw milk**

- (1) New co-op and an independent processor may agree a price for the supply of raw milk.
- (2) An independent processor may, however, require new co-op to supply the raw milk specified in subclause (3) or subclause (4) at the default milk price unless there is an agreement under subclause (1) about the supply of that raw milk.
- ~~(3) In each season, except the 2001/02 season, subclause (2) applies to—~~
  - ~~(a) raw milk required by an independent processor from new co-op in October; and~~
  - ~~(b) raw milk required by an independent processor from new co-op in August, September, November, December, January, February, March, April, or May that does not exceed by more than 10% the raw milk required by the independent processor from new co-op in October in that series of months; and~~
  - ~~(c) winter milk required by an independent processor from new co-op.~~
- (3) In each season, subclause (2) applies to—
  - (a) raw milk required by an independent processor from new co-op in each month from August to May; and
  - (b) winter milk required by an independent processor from new co-op.

- (4) *[Revoked]*
- (5) The default milk price for raw milk supplied to an independent processor in a season is the ~~wholesale milk price~~ farmgate milk price for that season plus,—
  - (a) for raw milk except organic milk or winter milk, the reasonable cost of transporting the raw milk to the independent processor; and
  - (b) for organic milk,—
    - (i) the reasonable cost of transporting the raw milk to the independent processor; plus
    - (ii) the reasonable additional costs to new co-op of procuring and supplying the organic milk; and
  - (c) for winter milk—
    - (i) the reasonable cost of transporting the raw milk to the independent processor; plus
    - (ii) the additional cost of winter milk in the Island in which the winter milk is supplied.
- (6) ~~The wholesale milk price for a season is the price per kilogram of milksolids calculated using the following formula:~~  
~~farm gate milk price + \$0.10 per kilogram of milksolids~~

## 9 Calculation of annualised share value

### 10 Other terms of supply

- (1) New co-op may require an independent processor to contract to buy a quantity of raw milk not exceeding 80% of the quantity of raw milk estimated by the independent processor under regulation 6(2)(b) or 7(2)(b).
- (2) An independent processor may require new co-op to contract to sell a quantity of raw milk not exceeding 120% of the quantity of raw milk estimated by the independent processor under regulation 6(2)(b) or 7(2)(b).
- (3) New co-op or an independent processor may require that a contract for new co-op to supply raw milk to an independent processor includes terms that are reasonable having regard to industry practice before the commencement of these regulations.

- (4) New co-op may require an independent processor to contract to notify new co-op of its actual requirement for raw milk by noon on the day before the raw milk is to be supplied.
- (5) This regulation does not allow new co-op to require that a contract to supply raw milk to an independent processor includes a take or pay requirement.

**~~11 Limits on volume of raw milk~~**

- ~~(1) This regulation applies to each season after the transitional period.~~
- ~~(2) The total volume of raw milk that new co-op must supply to independent processors under regulation 4 is limited to 600 million litres per season.~~
- ~~(2A) *[Revoked]*~~
- ~~(3) The total volume of that raw milk that new co-op must supply to 1 independent processor (except New Zealand Dairy Foods Limited and interconnected bodies corporate of that company); and interconnected bodies of the independent processor, is limited to 50 million litres per season.~~
- ~~(4) The total volume of that raw milk that new co-op must supply to New Zealand Dairy Foods Limited; and interconnected bodies corporate of that company (other than new co-op); is limited to 250 million litres per season.~~
- ~~(5) The total volume of that raw milk that is organic milk that new co-op must supply to 1 independent processor in a season is limited to the volume of organic milk supplied to that independent processor by The New Zealand Co-operative Dairy Company Limited and Kiwi Co-operative Dairies Limited in the 2000/01 season.~~

**~~12 Limits on volume of raw milk in transitional period~~**  
~~*[Revoked]*~~

**~~13 Regulations do not apply to excess supply of raw milk~~**

- ~~(1) Regulations 4 to 10 do not apply to the supply of raw milk by new co-op that exceeds the limit in regulation 11.~~

- (2) ~~The supply of raw milk by new co-op in excess of a limit in regulation 11(3) or (4) is not to be counted in calculating whether the limit in regulation 11(2) is met.~~
- (3) ~~{Revoked}~~

*Maximum limits on supply of raw milk by new  
co-op*

**11 Limit on supply of raw milk to all independent processors**

- (1) For the seasons beginning on 1 June 2012, 1 June 2013, and 1 June 2014, the maximum total volume of raw milk that new co-op must supply to all independent processors in each of those seasons under regulation 4 is limited to 770 million litres per season.
- (2) For a season beginning on or after 1 June 2015, the Minister must, at intervals not exceeding 3 consecutive seasons, determine the maximum total volume of raw milk that new co-op is required to supply to all independent processors under regulation 4 in any season (the **maximum limit on supply**).
- (3) The maximum limit on supply must be—
- (a) specified in millions of litres; and
  - (b) determined on the basis of the quantity that, in the Minister's opinion, is equivalent to 5% of the average total volume of raw milk actually supplied to new co-op by shareholding farmers in the 3 consecutive seasons immediately preceding the current season as specified in returns provided to the chief executive under regulation 5D.
- (4) As soon as is practicable after making a determination under subclause (2), and no later than 1 August in the season in which the determination is made, the Minister must notify the maximum limit on supply in the *Gazette*.
- (5) To avoid doubt, the maximum limit on supply notified under subclause (4) applies—
- (a) to the current season in which the notification is made; and
  - (b) to any subsequent season until amended or replaced.



**12** **Limit on supply of raw milk to each independent processor**

- (1) The maximum total volume of raw milk that new co-op is required to supply to each independent processor (except New Zealand Dairy Foods Limited and interconnected bodies corporate of that company) under regulation 4 in a season is—
- (a) limited to 50 million litres (including winter milk); and
  - (b) subject to the monthly limits specified in subclause (2).
- (2) The monthly limits are—
- (a) for August, 3 million litres;
  - (b) for September, 6 million litres;
  - (c) for October, 7 million litres;
  - (d) for November, 7 million litres;
  - (e) for December, 6 million litres;
  - (f) for January, 6 million litres;
  - (g) for February, 5 million litres;
  - (h) for March, 4 million litres;
  - (i) for April, 4 million litres;
  - (j) for May, 2 million litres.
- (3) Despite subclauses (1) and (2), new co-op is not required to supply raw milk to an independent processor under regulation 4 in a season beginning on and after 1 June 2015 if the independent processor's own supply of raw milk in each of the 3 consecutive seasons immediately preceding that season was equal to, or greater than, 30 million litres as specified in returns provided to the chief executive under regulation 5F(2) or (3).

**12A** **Limit on supply of raw milk to New Zealand Dairy Foods Limited**

The maximum total volume of raw milk that new co-op is required to supply to New Zealand Dairy Foods Limited, and interconnected bodies corporate of that company (other than new co-op), under regulation 4 in a season is limited to 250 million litres.

**12B** **Limit on supply of organic milk**

The maximum total volume of organic milk that new co-op is required to supply to each independent processor under regulation 4 in a season is limited to the volume of organic milk

supplied to that independent processor by The New Zealand Co-operative Dairy Company Limited and Kiwi Co-operative Dairies Limited in the 2000/01 season.

**13 Regulations do not apply to excess supply of raw milk**

- (1) Regulations 4 to 10 do not apply to the supply of raw milk by new co-op that exceeds the limits in regulations 11 to 12B.
- (2) The supply of raw milk by new co-op in excess of a limit in regulation 12A or 12B is not to be counted in calculating whether the limit in regulation 11 is complied with.

**14 Raw milk supplied under pre-commencement contracts**

Raw milk supplied by new co-op to an independent processor after these regulations commence under contracts in force immediately before that date must be included—

- (a) in calculating the volume of raw milk specified in regulation 8(3) and (4); and
- (b) in calculating the volume of raw milk supplied by new co-op for the purpose of regulation 11.

**15 Performance through associated person**

New co-op is authorised to perform its obligations under this Part through an associated person.

## Part 2

### Obligations on new co-op to publish information

**16 Obligations to publish information**

- (1) ~~New co-op must publish forecasts, in each season, of—~~
  - (a) ~~the total cost of milk for the season; and~~
  - (aa) ~~the farm gate milk price for the season; and~~
  - (b) ~~*Revoked*~~
  - (c) ~~kilograms of milksolids supplied in the season; and~~
  - (d) ~~the additional cost of winter milk for each Island for the season; and~~
  - (e) ~~the additional cost of organic milk for the season.~~
- (2) ~~New co-op must publish the total volume of raw milk that new co-op has contracted to supply to independent processors~~

under Part 1 for the season in which the information is published; and for the following 5 seasons:

- (3) New co-op must publish the forecasts specified in subclause (1) and the information specified in subclause (2) as soon as practicable after each of the following dates in each season:
  - (a) 1 June;
  - (b) 1 September;
  - (c) 15 December;
  - (d) 1 March.
- (4) New co-op must publish, for each season,—
  - (a) *{Revoked}*
  - (b) *{Revoked}*
  - (c) the total cost of milk for the season; and
  - (ca) the farm gate milk price for the season; and
  - (d) *{Revoked}*
  - (e) kilograms of milksolids supplied in the season; and
  - (f) the additional cost of winter milk for each Island for the season; and
  - (fa) the additional cost of organic milk for the season; and
  - (g) the total winter milk premium for the season;
  - (h) *{Revoked}*
- (5) *{Revoked}*
- (6) New co-op must publish the information specified in subclause (4) as soon as practicable after the end of the season to which the information relates.
- (7) New co-op must continuously publish the forecasts specified in subclause (1) and the information specified in subclauses (2) and (4) on new co-op's website in an electronic form that is publicly accessible.

## **16 Obligations to publish information**

- (1) New co-op must publish forecasts, in each season, of—
  - (a) the total volume of raw milk to be supplied to new co-op by shareholding farmers in the season; and
  - (b) the total cost of milk for the season; and
  - (c) the farm gate milk price for the season; and
  - (d) the kilograms of milksolids supplied in the season; and

- (e) the additional cost of winter milk for each Island for the season; and
  - (f) the additional cost of organic milk for the season.
- (2) New co-op must publish the total volume of raw milk that new co-op has contracted to supply to independent processors under Part 1 for the season in which the information is published, and for the following 5 seasons.
- (3) New co-op must publish the forecasts specified in subclause (1) and the information specified in subclause (2) as soon as practicable after each of the following dates in each season:
  - (a) 1 June;
  - (b) 1 September;
  - (c) 15 December;
  - (d) 1 March.
- (4) New co-op must publish, for each season,—
  - (a) the total volume of raw milk actually supplied to new co-op by shareholding farmers for the season; and
  - (b) the total cost of milk for the season; and
  - (c) the farm gate milk price in the season; and
  - (d) the kilograms of milksolids supplied in the season; and
  - (e) the additional cost of winter milk for each Island for the season; and
  - (f) the additional cost of organic milk in the season; and
  - (g) the total winter milk premium for the season.
- (5) New co-op must publish the information specified in subclause (4) as soon as practicable after the end of the season to which the information relates.
- (6) New co-op must continuously publish the forecasts specified in subclause (1) and the information specified in subclauses (2) and (4) on new co-op's Internet site in an electronic form that is publicly accessible.

## **17 Statutory declarations under section 117(4) of Act**

- (1)** Forecasts and information supplied to the Commission under section 117(1) or (2) of the Act must be verified by statutory declaration in the form specified in the Schedule.

- (2) The statutory declaration referred to in subclause (1) must be made by a director or officer of new co-op.
-

## Schedule

r 17

## Form of statutory declaration

I, *[full name]*, of *[address]* being a director\*/officer\* of *[name of company]* solemnly and sincerely declare that having made all reasonable enquiry, to the best of my knowledge,—

- (a) the information attached to this declaration is a true copy of information that—
  - (i) complies with the requirements of the Dairy Industry Restructuring (Raw Milk) Regulations 2001; and
  - (ii) has been made available to the public by *[name of company]* in accordance with those regulations\*;
- (b) the statement(s), report(s), or information *[specify]* attached to this declaration is (are) the statement(s), report(s), or information *[specify]* requested to be supplied by the Commission under section 117(2) of the Dairy Industry Restructuring Act 2001\*.

\* Delete if inapplicable.

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the Oaths and Declarations Act 1957.

.....  
Registrar

.....  
Declared at *[place]* on *[date]*

.....  
Justice of the Peace (*or* Solicitor  
or other person authorised to take  
a statutory declaration)

Marie Shroff,  
Clerk of the Executive Council.

---

Issued under the authority of the Acts and Regulations Publication Act 1989.

**Dairy Industry Restructuring (Raw  
Milk) Regulations 2001**

---

Date of notification in *Gazette*: 1 November 2001.

---

## **Background Document 5**

MAF key findings from the review of Fonterra's Milk Price Manual

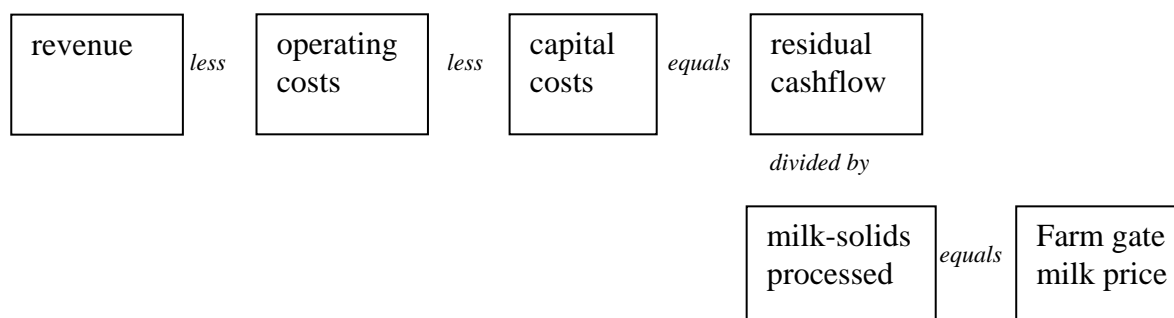




## MAF key findings from the review of Fonterra's Milk Price Manual

### THEORETICAL BASIS FOR FONTERRA'S MILK PRICE MANUAL

1. In the absence of a workably competitive market for farm gate milk, Fonterra's farm gate milk price (and the share price) has to be determined using administrative methodologies.
2. In October 2008, Fonterra shareholders voted to change the milk price methodology used at the time and to adopt the Milk Price Manual and associated processes. This decision came after a failed attempt by Fonterra to open downstream activities of the cooperative to external investors. Farmers were concerned that external investors would have the ability to put downwards pressure on the farm gate milk price. The Manual was developed to address these concerns and 'lock in' a process by which the milk price is set.
3. Fonterra's Milk Price Manual is detailed and complex, however the underlying concepts are relatively simple, and draw heavily on the 'building blocks' regulatory approach used internationally to regulate natural monopolies.
4. In essence Fonterra takes its total revenues and nets off operating costs (including tax and interest), depreciation, and a return on capital to derive a total residual cashflow that is available to pay for the milk Fonterra purchases from its farmers. The farm gate milk price is then calculated by dividing that residual cashflow by the total amount of milksolids Fonterra processes. This is shown illustratively in the diagram below.



5. Conceptually this is relatively straightforward. However, rather than relying on Fonterra's actual revenues and costs, the Milk Price Manual essentially models the processing costs to produce a hypothetical or "notional" product mix. It relies on a mixture of actual and notional revenues and costs to arrive at a milk price that could be paid by a Hypothetically Efficient Competitor (HEC) or the marginal processing entrant.
6. The use of this type of methodology is not unusual for regulated networks as they provide incentives for the dominant/monopoly firm to be efficient. Through the Milk Price Manual, Fonterra's farmers, in effect, regulate the tolling charge that Fonterra charges them for collecting and processing raw milk - imposing internal disciplines on the cooperative.



7. Officials were initially concerned that Fonterra's use of notional revenues and costs is manifestly inappropriate and would lead to a farm gate milk price being set at an unrealistically high level, especially for entry into milk processing.
8. Officials' key consideration was around the setting of the 'normal' weighted average cost of capital (WACC). Officials undertook an exercise, based on figures provided by Fonterra, to estimate what the farm gate milk price would have been if Fonterra had actually earned its assumed WACC for its "New Zealand milk business". The "New Zealand milk business" represents the best comparable business to that which Fonterra uses to determine its milk price.
9. This exercise resulted in an apparent difference in the farm gate milk price of approximately \$0.20 to \$0.30 per kilogram of milk solids<sup>1</sup> (i.e. 3 to 4 percent) between the farm gate milk price paid, and what the farm gate milk price would have been had Fonterra earned its assumed WACC on its comparable New Zealand milk business. This exercise raised some concerns as the result could be interpreted as Fonterra paying out a higher than efficient farm gate milk price, at the expense of its own profit.
10. However, a shift in officials' thinking came about during the analysis of economic theory of how the farm gate milk price be set in a contestable market. This analysis showed that, given the export-oriented nature of the New Zealand dairy industry, dairy processors operating in a competitive farm gate milk market would compete to acquire raw milk at the farm gate and sell most of it as milk powder in a global dairy market at international prices that they cannot influence. Competition at the farm gate market would have the effect of driving the farm gate milk price up to the point where the next milk processing plant would just cover its total costs (including capital costs). In other words:

*Farm gate milk price = Global price of dairy commodities – Full cost of building the next efficient milk processing plant*

11. Consideration of the "next efficient plant", i.e. taking a forward-looking view of revenues and processing costs, is necessarily reliant on notional rather than actual figures. This approach to setting a farm gate milk price is consistent with:
  - the outcome expected in a contestable farm gate milk market; and
  - the conceptual approach used in Fonterra's Milk Price Manual.
12. While this provides a broad level of comfort with Fonterra's conceptual approach to setting its farm gate milk price, the extent to which Fonterra's HEC is optimised in practice is important because this sets the bar for entry into the processing sector.
13. There are numerous important – but necessarily highly subjective – decisions required in applying the Milk Price Manual and which would have material impact on the efficiency of the milk price. These decisions include the following:
  - Choosing the product mix and conversion of global prices into revenue;
  - Selecting the appropriate scale and location of the next efficient plant;
  - Determining the cost of capital and depreciation schedules; and
  - Developing consistent definitions of ancillary costs such as overheads.
14. Unlike other regulated entities, where these decisions would normally be made with at least some oversight/monitoring by the regulator, Fonterra's decisions are only subject to the

<sup>1</sup> This figure has been derived from information provided by Fonterra and is necessarily subject to considerable uncertainty.

disciplines of the “open entry and exit” regime under the DIRA, which underpins Fonterra’s commercial incentives to price its milk efficiently over the longer term.

## FONTERRA’S APPLICATION OF MILK PRICE MANUAL

15. Officials have examined the appropriateness of several choices embodied in Fonterra’s Milk Price Manual and questions arise with respect to the following issues:
  - the scale and degree of automation (e.g. capital-labour choices) of the powder plants used in the calculation of the farm gate milk price;
  - revenue recognition issues including the timing of raw milk purchases and sales, contract horizon and foreign exchange hedging;
  - the level of the weighted average cost of capital;
  - the use of Fonterra’s own multi-site operations, which makes it difficult to know whether and if so how that firm’s scale economies (which may be unavailable to other firms) feed into the farm gate milk price; and
  - the choice of a depreciation method and the consequential impact on the level of tax payment.
16. Although there are a number of questions around particular assumptions and judgements made by Fonterra, officials have discovered nothing with respect to Fonterra’s application of the Manual that is manifestly or inherently “wrong”. In other words, the review also found no concrete evidence that Fonterra is currently applying the Milk Price Manual in a way that leads to systemic upwards bias of the farm gate milk price. However, given the number of inputs into the Manual, and the sensitivity of the Manual to each input, officials could not rule out a cumulative impact.
17. Nevertheless, as a result of the significant discretion Fonterra has in applying the Milk Price Manual, there is considerable scope for Fonterra to bias the milk price upwards if it chose to do so. The governance arrangements around Fonterra’s farm gate milk price setting are dominated by farmer interests, guided by the principle of “maximising the sustainable farm gate milk price”. Furthermore, Fonterra’s constitution places at the disposal of the Fonterra Board the entire resources of the company for payment for milk. Therefore, while it may not currently be happening, the Fonterra Board is able to pay above the Manual-determined price if it wishes (e.g. use its reserves or profits from its non-New Zealand operations). The complete lack of transparency on exactly how Fonterra sets the farm gate milk price and lack of ongoing price monitoring by government means that if Fonterra were to bias its farm gate milk price upwards in the past or in the future, this would remain largely unknown to parties external to Fonterra.

## CONCLUSIONS

- The conceptual approach currently used in Fonterra’s Milk Price Manual is consistent with a farm gate milk price that would emerge in a contestable farm gate milk market.
- No concrete evidence was found to suggest that Fonterra is currently applying its Milk Price Manual in a way that leads to systemic upwards bias of the farm gate milk price.
- However, given the number of inputs into the Manual, and the sensitivity of the Manual to each input, officials could not rule out a cumulative impact.

- As a result of the significant discretion Fonterra has in applying the Milk Price Manual, there is considerable scope for Fonterra to bias the milk price upwards in the short to medium term if it chose to do so, despite the incentives in the DIRA.
- Therefore, there is a case for strengthening the governance, transparency and monitoring of Fonterra's farm gate milk price.

**Background Document 6**

Summary of proposed amendments to the Dairy Industry Restructuring (Raw Milk) Regulations



# Summary of proposed amendments to the Dairy Industry Restructuring (Raw Milk) Regulations

|   |   |
|---|---|
| Executive Summary .....   | 1 |
| Background .....  | 2 |
| Regulatory settings .....   | 2 |
| Review of the Raw Milk Regulations .....                            | 2 |
| Policy Objectives .....   | 3 |
| Entrance pathway .....  | 3 |
| Competition in domestic dairy product markets .....                 | 3 |
| Issues with the current Raw Milk Regulations .....                  | 3 |
| Design Principles against which Options were measured .....         | 4 |
| Analysis and Preferred options .....                                | 4 |
| 1. Access / Eligibility .....                                       | 4 |
| 2. Total volume of regulated milk available to all processors ..... | 5 |
| 3. The seasonal supply curve .....                                  | 5 |
| 4. Remove the Regulated Milk Price margin .....                     | 7 |
| 5. Remove the October rule .....                                    | 8 |
| 6. Grandparenting provisions .....                                  | 8 |

## EXECUTIVE SUMMARY

1. The Ministry of Agriculture and Forestry (MAF) has recently undertaken a review of the Raw Milk Regulations. After two rounds of consultation and subsequent policy development, officials have devised a series of proposed amendments to the Raw Milk Regulations. These amendments will ensure the Raw Milk Regulations better meet the overall objective of promoting the long term growth and dynamic efficiency of New Zealand dairy markets.
2. The objectives of the Raw Milk Regulations are to:
  - i. provide for an entrance pathway for independent processors into the farm gate milk market; and
  - ii. support competition in domestic dairy product markets.
3. MAF does not consider that the Raw Milk Regulations are currently meeting these objectives. In particular, MAF is concerned that independent processors who are no longer new entrants to the farm gate milk market have ongoing access to regulated milk. This has the effect of both reducing competitive pressure on Fonterra in the farm gate milk market and increasing demand pressure on the total volume of regulated milk available.
4. The following key amendments are proposed to ensure the Raw Milk Regulations remain fit for purpose and achieve their objectives.
  - i. Independent processors who source some of their raw milk directly from farmers will only be able to access raw milk under the Raw Milk Regulations for three seasons.
  - ii. The total quantity of milk available under the Raw Milk Regulations will be increased to approximately five percent of Fonterra's milk supply.
  - iii. There will be a series of maximum quantity limits set, restricting how much milk independent processors can take under the Raw Milk Regulations in different months of the season. This



will, in effect, ensure that the supply of regulated milk correlates to Fonterra's seasonal supply curve. As part of this the current "October Rule" provisions will be removed from the Raw Milk Regulations.

- iv. The price for regulated milk will be changed by removing the \$0.10 margin, which is currently added to the farm gate milk price to compensate Fonterra for providing independent processors with the opportunity to take regulated milk on a flatter curve than that which Fonterra receives from its farmers.
5. These amendments will apply to all processors, with the exception that the maximum monthly quantity limits will not apply to Goodman Fielder, who will continue to have access to 250 million litres of regulated milk and who will retain the ability to take this milk on a flat supply curve.

## BACKGROUND

### Regulatory settings

6. Upon its creation, Fonterra collected approximately 96 percent of New Zealand's milk production. Given this dominant market position it was necessary for government to regulate the behaviour of Fonterra in relation to its farmers and potential competitors in New Zealand dairy markets.
7. The regulatory regime is set out in Part 2, Subpart 5 of the Dairy Industry Restructuring Act 2001 (DIRA) and the Raw Milk Regulations. It consists of a suite of pro-competition provisions that have the purpose of promoting the efficient operation of New Zealand dairy markets by ensuring:
- i. contestability in the market for farmers' milk; and
  - ii. that independent processors are able to obtain raw milk and other dairy goods and services, necessary for them to compete in dairy markets.
8. The DIRA, through the Raw Milk Regulations, compels Fonterra to make available up to five percent of the raw milk it collects from farmers to independent processors at either an agreed or regulated price. This is because Fonterra's dominant position in the market could enable it to refuse to supply raw milk to other processors, or to supply it at monopoly prices.
9. The regulatory regime is, however, transitional in nature. It is designed to expire at the point where dairy markets have become workably competitive, i.e. at the point where Fonterra is no longer considered to be dominant.

### Review of the Raw Milk Regulations

10. MAF has recently undertaken a review of the Raw Milk Regulations. In March 2011, targeted consultation was undertaken with key stakeholders about the objectives of the Raw Milk Regulations. This stage of consultation also asked stakeholders their views about which elements of the Raw Milk Regulations worked well, and which did not.
11. This targeted consultation was followed by the release of a public consultation document in July 2011, to which approximately 1500 submissions were received.
12. On the basis of the consultation undertaken, and of further policy development, a series of amendments to the Raw Milk Regulations is proposed, which will ensure the Raw Milk Regulations better meet the overall objective of promoting the long term growth and dynamic efficiency of New Zealand dairy markets.

## POLICY OBJECTIVES

13. Independent processors accessing regulated milk tend to fall into one of two categories:
  - i. vertically integrated independent processors, who are in the business of sourcing milk from farmers; or
  - ii. dairy food and beverage companies, who choose not to source their milk supply directly from farmers, instead relying on the wholesale supply of raw milk available under the Raw Milk Regulations. These processors tend to operate predominantly in domestic dairy product markets.
14. There are two objectives of the Raw Milk Regulations, each targeted at one of these categories of processor. These are to:
  - i. provide for an entrance pathway for independent processors into the farm gate milk market; and
  - ii. support competition in domestic dairy product markets.
15. Some of the proposed amendments to the Raw Milk Regulations are targeted at achieving one or the other of these objectives, while others will address both.

### Entrance pathway

16. Contestability for milk supply at the farm gate encourages Fonterra to set efficient prices for milk and shares. A necessary condition for contestability is low barriers to dairy processors for entry and expansion.
17. Independent processors who are or will be in the business of sourcing milk directly from farmers tend to rely on wholesale milk supply (i.e. milk sourced from another processor) at the initial stages of their operations, while they are becoming established.
18. By providing new entrants to the farm gate market with a critical mass of raw milk on regulated terms, the Raw Milk Regulations provide independent processors with an entrance pathway into the farm gate market.

### Competition in domestic dairy product markets

19. Fonterra's dominant position in the wholesale milk market has the potential to harm competition in downstream domestic dairy product markets.
20. The Raw Milk Regulations support competition in downstream dairy markets, where independent processors rely on raw milk as an input. Since the Raw Milk Regulations have been in effect, a number of small dairy food and beverage companies have built their business models based on the regulated milk supply rather than on standard commercial terms from dairy processors or sourcing it directly from farmers.

## ISSUES WITH THE CURRENT RAW MILK REGULATIONS

21. The key issue considered in this review was whether the Raw Milk Regulations are providing an efficient entrance pathway into the farm gate milk market for independent processors, thus providing for competitive pressure on Fonterra in the farm gate milk market.
22. In addition, the review considered whether the terms and conditions set by the Raw Milk Regulations are consistent with the objective of supporting competition in domestic dairy product markets.



## DESIGN PRINCIPLES AGAINST WHICH OPTIONS WERE MEASURED

23. In assessing the potential options, MAF considered the extent to which they meet the following regulatory design principles:
- Independent processors seeking entrance to the farm gate milk market should have access to sufficient quantity of regulated milk necessary for them to overcome the initial “catch 22” entry barrier.
  - Independent processors should be encouraged to establish alternative sources of raw milk supply rather than rely on sourcing regulated milk from Fonterra on an ongoing basis.
  - Access to regulated milk should be on terms that are equivalent to those on which Fonterra purchases its raw milk from farmers; this includes price, quality, product profile, etc. To the extent that regulated milk differs from raw milk Fonterra purchases from farmers (e.g. regulated milk is of a flatter profile and of guaranteed quality) the terms for sourcing regulated milk should fairly reflect these differences.
  - The design of the Raw Milk Regulations should be mindful of the economic costs to Fonterra of providing regulated milk and the potential under-utilised capacity which may affect its incentives to invest.
  - The Raw Milk Regulations should be consistent with the general principles of good regulatory practice of promoting regulatory certainty, predictability of regulatory outcomes, as well as transparency, cost-effectiveness and timeliness of regulatory processes.
  - The Raw Milk Regulations should be simple in design and not overly complex or difficult to understand.

## ANALYSIS AND PREFERRED OPTIONS

24. Outlined below are the key amendments proposed to the Raw Milk Regulations, to ensure they remain fit for purpose and achieve their objectives.

### 1. Access / Eligibility

25. Currently all independent processors, regardless of the extent to which they source their own milk supply from farmers, have the ability to access regulated milk until the Raw Milk Regulations expire. This provides little incentive for independent processors to replace their take of regulated milk with their own farmer supply. When independent processors who are no longer new entrants to the farm gate market take regulated milk, this replaces raw milk that would otherwise have been sourced from farmers. This then reduces the additional competitive pressure that would have been placed on Fonterra in the farm gate market, had the milk been sourced from farmers.
26. Continued access to regulated milk by these independent processors also increases demand pressures on the total volume of regulated milk, potentially triggering the pro rata quantity rationing rule (which means all independent processors, including potential new entrants, then get less regulated milk).
27. MAF therefore considers that for those independent processors who are in the business of sourcing milk directly from farmers, access to regulated milk should be limited to three seasons.
28. The time necessary for an independent processor to become established will vary, depending on what is happening in the industry at the time, and on the particularities of each processor. However, many of the industry submissions received, including advice from some financial institutions, indicated that three seasons is likely to be sufficient time for a processor to establish its own supply of milk.

29. A time limit on access to regulated milk would introduce strong incentives for independent processors to grow their own farmer supply sooner and to source milk on standard commercial terms directly from farmers as they are able. This would ensure that investment in dairy processing capacity is efficient over the longer term and supports competition for raw milk at the farm gate.
30. Such a time limit would also ensure that access to regulated milk is targeted to independent processors seeking an entrance pathway into the farm gate market, who will then be in a position to bring further competitive pressure to bear on Fonterra.
31. It is intended that those independent processors, such as dairy food and beverage companies, who are not in the business of sourcing raw milk from farmers would continue to have access to raw milk under the Raw Milk Regulations for as long as they remain in place. This is in order to continue to support competition in downstream domestic markets on an ongoing basis.

## 2. Total volume of regulated milk available to all processors

32. DIRA allows the total volume of regulated milk to be set at up to five percent of Fonterra's milk supply, as it was considered that five percent of Fonterra's total milk supply could be diverted to independent processors under the Raw Milk Regulations without causing significant economic harm to Fonterra. Within this five percent limit, the actual volume available is, however, set in the Raw Milk Regulations.
33. When the Raw Milk Regulations were initially put in place, the volume was set at 400 million litres, as this was approximately the size of the domestic market at the time. In 2007, when demand for regulated milk was forecast to exceed that amount, the total volume was increased to the current 600 million litres (which is approximately three percent of Fonterra's total milk supply).
34. MAF considers that as long as the Raw Milk Regulations remain in place, there should be sufficient regulated milk for all new entrants, in order to meet the key objective of providing an entrance pathway. MAF therefore considers that the total volume of milk available under the Raw Milk Regulations should be increased to five percent of Fonterra's total milk supply, with the amount being reviewed periodically (e.g. every three years) to ensure that it continues to represent approximately five percent of Fonterra's total milk supply. There appears to be little policy rationale for setting a limit other than the five percent available under the legislation.
35. Given other proposed changes to the access provisions of the Raw Milk Regulations, it is likely that total demand for regulated milk will decline over time, as processors with their own supply of milk transition out of the regime. Ultimately, the increased total limit may be largely theoretical and not be needed in practice. However, in the interim, existing processors can continue to take regulated milk for at least three seasons, and there could be new entrants also wanting access to regulated milk, putting pressure on the existing limit of 600 million litres<sup>1</sup>.
36. The increase would provide confidence that there would be sufficient regulated milk to provide an entrance pathway to whoever needed it.

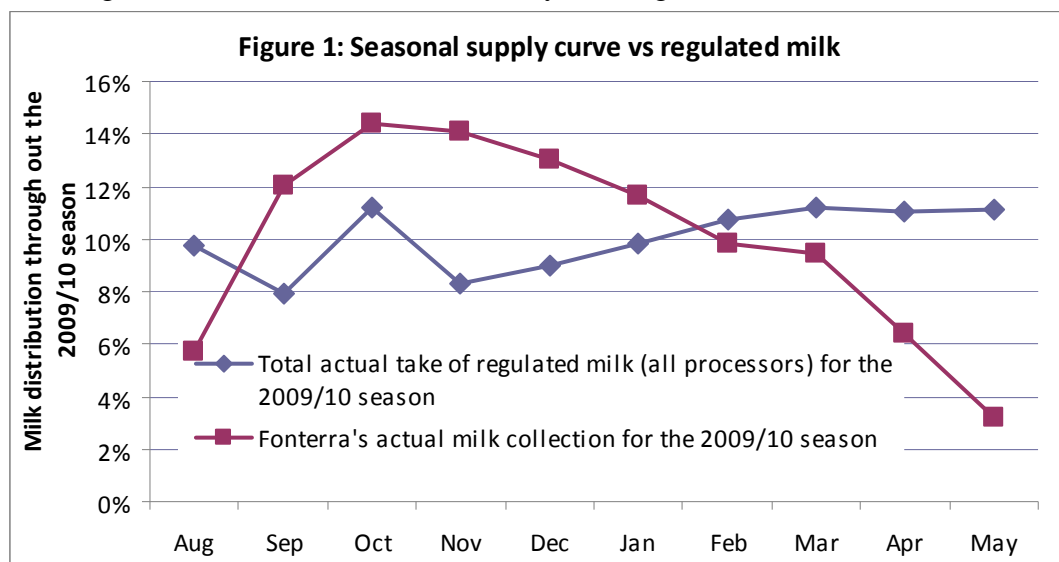
## 3. The seasonal supply curve

37. The value of raw milk differs across the season. In "peak" months, milk supply is plentiful and therefore raw milk is less valuable. In the "shoulder" months, milk production drops and the

<sup>1</sup> In the 2011-2012 season, regulated milk take is forecast to be a maximum of 595 million litres.

milk is therefore more highly valued. The New Zealand seasonal supply curve is shown in Figure 1<sup>2</sup>.

38. Currently, independent processors have the ability to flatten the supply curve (i.e. independent processors can take a greater proportion of their milk in the shoulder months, compared to the peak months, than the actual seasonal milk supply would suggest). This is also shown in Figure 1. Yet the price for regulated milk is averaged across the season, so processors pay the same amount regardless of the month in which they take regulated milk.



39. One intent of the Raw Milk Regulations is to encourage and prepare independent processors (who are in the business of sourcing milk from farmers) to eventually rely solely on their own supply of milk from farmers. This can be achieved by mimicking, where appropriate, the terms and conditions they will face when they no longer have access to regulated milk. MAF does not believe that the current approach achieves this intent. In addition, this element of the Regulations can see Fonterra facing significant economic costs. For example, Fonterra has advised that it has had to shut some of its own processing plants, in certain regions, during the shoulder months, due to not having sufficient milk to process, because of the quantity of milk that has been taken under the Raw Milk Regulations.
40. MAF is proposing to change the current approach by limiting the quantity of milk that can be taken under the Raw Milk Regulations in such a way as to reflect a typical seasonal supply curve. For example, out of the total 50 million litres available to a processor in a season, a processor would be able to take a monthly maximum of the following:
- August: 3 million litres
  - September: 6 million litres
  - October: 7 million litres
  - November: 7 million litres
  - December: 6 million litres
  - January: 6 million litres
  - February: 5 million litres
  - March: 4 million litres
  - April: 4 million litres
  - May: 2 million litres.

<sup>2</sup> Peak months are generally considered to be October and November, while shoulder months are usually August, April and May.

41. These quantities were arrived at by making the 50 million litres available to each independent processor under the Raw Milk Regulations reflect the proportion of Fonterra's milk collection in each month.
  42. A processor would not be compelled to take regulated milk in every month, and could choose to take zero in certain months, but no processor would be able to take any more than the maximum amount permitted in any given month.
  43. This should prevent situations both of processors having to take milk when it is inefficient for them to do so, and of processors taking more milk in the shoulder months than they would be able to if relying purely on their own supply of milk from farmers.
  44. Note that under this option, those processors without their own supply, who rely on the ability to flatten the curve (such as town milk suppliers), will still be able to do so. This is because the quantities these processors take generally fall below the proposed monthly maximums.
  45. Given that there is no requirement to take regulated milk in certain months, processors would, in principle, have the ability to take regulated milk in the shoulder months only. However, new entrant processors would be likely to require additional milk in all months of the season while they are in the process of building up their own milk supply. MAF therefore considers it unlikely that new entrant processors would take milk only in the shoulder months.
  46. Moreover, because the monthly maximums follow the seasonal supply curve, the quantity that processors could take in the shoulder months is limited. This, coupled with the proposal to limit access to three seasons, should minimise any inefficiencies. MAF considered other options to encourage and prepare independent processors to rely solely on their own supply of milk from farmers, such as introducing a price schedule for different points of the season. However MAF considers that imposing monthly maximums in line with the seasonal supply curve is the simplest and least cost option to meet the objectives.
- #### 4. Remove the Regulated Milk Price margin
47. The current regulated milk price is specified in the Regulations, as follows: "wholesale milk price = farm gate milk price + \$0.10 per kilogram of milk solids". This price is intended to ensure that independent processors are able to access regulated milk at a similar cost to what they would face if they were sourcing that raw milk from farmers, and at a similar cost to that which Fonterra faces.
  48. The "farm gate milk price" component represents the average cost of the raw milk to Fonterra over the season. A margin of \$0.10 was added to compensate Fonterra for providing independent processors with the opportunity to take regulated milk on a flatter curve than that which Fonterra receives from its farmers.
  49. Under the amendment outlined above, to restrict the extent to which independent processors can "flatten the supply curve", regulated milk will be available to independent processors according to monthly maximum quantities, in proportion to the seasonal supply of raw milk that Fonterra receives from its farmers. This proposal therefore removes the need for the \$0.10 margin, which, as outlined above, was intended to compensate Fonterra for providing regulated milk to independent processors on a flatter supply curve.
  50. Removing the \$0.10 margin would affect individual independent processors differently, depending on the volume of regulated milk they access throughout the season and whether or not they retain the opportunity to access regulated milk at a flatter supply curve.

51. Larger new entrant independent processors (who source some of their own milk from farmers) would tend to take close to the maximum amount of regulated milk, but would generally be taking it in line with the seasonal curve, while they build up their own supply of raw milk from farmers. There is therefore no rationale for the \$0.10 margin, as the supply curve is not being flattened; it is appropriate that these new entrants pay the farm gate milk price, which is the average cost of raw milk across the season.
  52. Small processors, however, would have access to regulated milk on largely the same terms and conditions as prior to the proposed amendments, but would be paying a cheaper price for it, once the margin is removed. This is because these processors tend to take small, regular quantities of regulated milk and would fall below the maximum monthly quantities proposed. They would therefore retain the ability to access regulated milk on a flatter supply curve. Accordingly, in principle, it could be argued that these processors should still pay the \$0.10 margin. Small processors, however, collectively take only about nine percent of the total regulated milk available (or 0.01% of all milk produced in New Zealand), therefore any inefficiency is minimal. The cost of this potential inefficiency is outweighed by the cost of implementing a more complicated regime with dual pricing regimes.
  53. MAF therefore proposes to change the regulated milk price to: “wholesale milk price = farm gate milk price”. The farm gate milk price would continue to reference the farm gate milk price paid by Fonterra to its farmers.
- 5. Remove the October rule**
54. Currently the Raw Milk Regulations contain clauses generally referred to as the “October rule”. This rule controls the quantity of regulated milk a processor can take. The rule is that in any month other than October, processors can only take up to 110 percent of the quantity of regulated milk they took in October. The purpose of the October rule is to prevent independent processors from taking most of their regulated milk in the shoulder months (when the milk is most valuable).
  55. Under the proposal outlined above, maximum limits will apply to the quantity of regulated milk processors can take at different points of the year, removing the need for the October rule. This is because processors will not be able to take large quantities of regulated milk during the shoulder months, as they will be limited to the maximum quantity limits set for those months.
  56. MAF therefore proposes to amend the provisions in the Raw Milk Regulations that make up the October Rule.
- 6. Grandparenting provisions**
57. When Fonterra was formed, the DIRA required that part of the business be divested, so as to provide for competition in the domestic market for dairy products in New Zealand. This part of the business became New Zealand Dairy Foods Limited which in turn became Goodman Fielder.
  58. In line with this same objective, the Raw Milk Regulations also currently distinguish Goodman Fielder from other independent processors by allocating 250 million litres of the available regulated milk to Goodman Fielder (rather than the 50 million litre maximum applied to other processors). Goodman Fielder takes its regulated milk allocation on a relatively flat basis across the season. This is due to the fact that as part of its business, Goodman Fielder supplies the New Zealand domestic market with fresh dairy products and requires a flat milk supply to do so.
  59. In line with the objective of supporting competition in domestic markets, MAF proposes to grandparent these provisions. To this end, under the amended Raw Milk Regulations, Goodman

Fielder would continue to be able to access up to 250 million litres of regulated milk per season, and will be able to access this milk on a flat supply basis. The proposed removal of the regulated milk price margin would, however, apply to Goodman Fielder.

**Background Document 7**

Regulatory Regime to accompany Fonterra Capital Restructuring – MAF  
Discussion Paper



# Regulatory Regime to accompany Fonterra Capital Restructuring

MAF Discussion Paper No: 2011/01

ISBN 978-0-478-37541-1 (print)  
ISBN 978-0-478-37542-8 (online)

ISSN 2230-2808 (print)  
ISSN 2230-2816 (online)

February 2011



Ministry of Agriculture and Forestry  
Te Manatū Ahuwhenua, Ngāherehere





## Disclaimer

The views contained in this document are those of the Ministry of Agriculture and Forestry (MAF) and do not reflect government policy.

Readers are advised to seek specific legal advice from a qualified professional person before undertaking any action in reliance on the contents of this publication. The contents of this consultation paper must not be construed as legal advice.

MAF does not accept any responsibility or liability whatsoever whether in contract, tort (including negligence), equity or otherwise for any action taken as a result of reading, or reliance placed on MAF because of having read, any part, or all, of the information in this consultation paper or for any error, inadequacy, deficiency, flaw in or omission from the consultation paper.

Requests for further copies should be directed to:

Regulation & Competition Team  
Sector Performance Policy  
Ministry of Agriculture and Forestry  
PO Box 2526  
Wellington 6140

Email: [dairyconsultation@maf.govt.nz](mailto:dairyconsultation@maf.govt.nz)

This publication is also available on the MAF website at:  
[www.maf.govt.nz/news-resources/consultations.aspx](http://www.maf.govt.nz/news-resources/consultations.aspx)

© Crown Copyright - Ministry of Agriculture and Forestry

| <b>Contents</b>   | <b>Page</b> |
|---|-------------|
| <b>Information for people making submissions</b>  | <b>1</b>    |
| <b>Official Information Act and Privacy Act Requirements</b>  | <b>1</b>    |
| Posting and Release of Submissions  | 1           |
| Privacy   | 1           |
| <b>1. Introduction</b>  | <b>2</b>    |
| 1.1 Purpose of document   | 2           |
| 1.2 Content of document   | 3           |
| <b>2. Background on the Dairy Industry Restructuring Act 2001</b>   | <b>4</b>    |
| 2.1 Key objectives of the DIRA  | 4           |
| 2.2 Current DIRA regulatory regime  | 5           |
| <b>3. Description of Fonterra's TAF proposal</b>  | <b>7</b>    |
| <b>4. Interaction between DIRA and Fonterra's TAF proposal</b>  | <b>10</b>   |
| 4.1 Problem definition  | 10          |
| 4.2 Scope of DIRA regulatory regime   | 11          |
| 4.3 Analysis of the TAF proposal for ensuring freedom of farmers to enter and exit Fonterra   | 12          |
| 4.4 Key elements for TAF system to deliver freedom of farmers to enter and exit Fonterra  | 14          |
| <b>5. Potential regulatory tools for ensuring freedom of farmers to enter and exit Fonterra in the context of Fonterra's TAF proposal</b>   | <b>16</b>   |
| 5.1 Pre-condition for the removal of issue and redemption obligations   | 16          |
| 5.2 Rules regarding milk price governance and disclosure  | 19          |
| 5.3 Ongoing liquidity requirements on the share and fund markets  | 21          |
| 5.4 Possible monitoring and enforcement regimes for each of the potential regulatory tools  | 26          |
| <b>6. Possible options for regulatory regime</b>  | <b>29</b>   |
| 6.1 Option one: Maintain the status quo   | 30          |
| 6.2 Option two: Pre-condition for the removal of share issue and redemption obligations, rules governing milk price determination and disclosure and ongoing liquidity requirements | 31          |
| 6.4 Option three: Pre-condition for the removal of share issue and redemption obligations and rules governing milk price determination and disclosure                               | 34          |
| 6.3 Option four: Pre-condition for the removal of share issue and redemption obligations and ongoing liquidity requirements   | 36          |
| 6.4 Option five: Pre-condition for the removal of share issue and redemption obligations and then no regulation of the TAF system   | 37          |
| <b>7. Summary of document</b>   | <b>39</b>   |
| <b>8. Summary of Questions</b>  | <b>41</b>   |



# Information for people making submissions

Written submissions on the issues raised in the consultation paper are invited from all interested parties. The closing date for submissions is Monday 7 March 2011, 5pm.

Submissions should be directed to:

Regulation & Competition Team  
Sector Performance Policy  
Ministry of Agriculture and Forestry  
PO Box 2526  
Wellington 6140

Delivery address: Level 10, Pastoral House, 25 The Terrace, Wellington

Email: [dairyconsultation@maf.govt.nz](mailto:dairyconsultation@maf.govt.nz)

Submissions will be considered by officials in the preparation of advice to Ministers. Specific questions have been posed to submitters, but these are only suggestions. Submissions on all issues that are within the scope of this consultation document will be considered. Submissions backed by evidence and argument will carry more weight than statements of opinion.

## Official Information Act and Privacy Act Requirements

### POSTING AND RELEASE OF SUBMISSIONS

MAF may post all or parts of any written submission on its website at [www.maf.govt.nz](http://www.maf.govt.nz). MAF will consider you to have consented to posting by making a submission, unless you clearly specify otherwise in your submission.

In any case, content of submissions provided to MAF are likely to be subject to public release under the Official Information Act 1982 following requests to MAF (including via email). Please advise if you have any objection to the release of any information contained in a submission, and in particular, which part(s) you consider should be withheld, together with the reason(s) for withholding the information. MAF will take into account all such objections when responding to requests for copies and information on submissions to this document under the Official Information Act 1982.

### PRIVACY

The Privacy Act 1993 establishes certain principles with respect to the collection, use, and disclosure of information about individuals by various agencies including MAF. It governs access by individuals to information about themselves held by agencies. Any personal information you supply to MAF in the course of making a submission will be used by MAF only in conjunction with the matters covered by this document. Please clearly indicate in your submission if you do not wish your name to be included in any summary of submissions that MAF may publish.

# 1. Introduction

## 1.1 PURPOSE OF DOCUMENT

### The Dairy Industry Restructuring Act 2001

1. The Dairy Industry Restructuring Act 2001 (DIRA) provided for the formation of Fonterra by permitting the merger of Kiwi Co-operative Dairies Limited, the New Zealand Co-operative Dairy Company Limited and the New Zealand Dairy Board. To allow the merger, the Government granted an exemption to the mergers and acquisition provisions of the Commerce Act 1986. Upon formation, Fonterra collected 96 percent of the milk supplied by dairy farmers in New Zealand.
2. Given Fonterra's position in the New Zealand dairy industry, it was necessary for the Government to ensure that Fonterra had the commercial incentives to operate efficiently and in the best interests of New Zealand dairy farmers and the New Zealand economy. This objective was primarily achieved by regulating Fonterra to ensure the contestability of milk supply through the freedom of dairy farmers to choose to enter or exit Fonterra.
3. Specifically, since 2001 the DIRA has required that Fonterra allow dairy farmers the freedom to enter or exit Fonterra and to determine the volume of milk that they choose to supply. In accordance with farmers' milk supply decisions, Fonterra is required to issue and redeem co-operative shares at the same price in any particular season. The freedom of farmers to enter and exit Fonterra ensures that Fonterra has incentives to operate efficiently and improve its performance so that it can maintain its milk supply.

### Fonterra's Capital Restructuring Proposal

4. On 30 June 2010, Fonterra's farmer shareholders voted in support of a range of constitutional changes that would allow the Fonterra Board to change its capital structure to implement a system for the trading of shares among farmers. This is known as Trading Among Farmers ("TAF").<sup>1</sup>
5. Fonterra's TAF proposal is intended to replace both the share issue and redemption requirements in the DIRA and Fonterra's current administrative fair value share price<sup>2</sup>.
6. MAF understands that Fonterra's objectives in relation to the TAF proposal are to improve the permanence of shareholder capital and reduce risk to the balance sheet from farmers exiting or other milk supply losses (that is, the removal of redemption risk).

### Purpose of document

7. Fonterra's TAF proposal does not change the Government's policy objective of promoting dynamically efficient and contestable dairy markets through the freedom of farmers to enter and exit Fonterra. While the freedom of farmers to enter and exit is currently achieved through the requirement for Fonterra to issue and redeem shares, it is possible that this could be achieved through a share trading system. To provide for the

---

<sup>1</sup> In November 2009, Fonterra's farmer shareholders voted in support of constitutional amendments to allow farmers to hold shares up to 120 percent of milksolids supplied.

<sup>2</sup> In November 2009, Fonterra's farmer shareholders voted in support of constitutional amendments to allow the current fair value share price methodology to take into account the discount to the price due to the restricted access of shares to farmer milk suppliers only.

freedom of farmers to enter and exit Fonterra, a share trading system would need to be designed in a way that ensured that new, current, exiting or potential Fonterra farmers could buy and sell shares in a timely manner and at efficient share prices.

8. The purpose of this discussion document is to seek feedback from dairy industry stakeholders on three potential regulatory tools and five possible regulatory options. The potential regulatory tools have been designed with the objective of ensuring that the freedom of dairy farmers to enter and exit Fonterra is maintained while allowing the opportunity for Fonterra to implement its TAF proposal.

## 1.2 CONTENT OF DOCUMENT

9. Part 2 of this document provides background information on the key objectives of the DIRA, outlines the relevant components of the current DIRA regulatory regime and discusses the scope of the DIRA in relation to Fonterra's TAF proposal.
10. Part 3 provides a description and diagram of Fonterra's TAF proposal.
11. Part 4 describes the interaction between the objectives of the DIRA and Fonterra's TAF proposal. This section invites discussion on the key elements under which the TAF proposal would be likely to satisfy the objectives of the DIRA, by ensuring the freedom of farmers to enter and exit Fonterra.
12. Part 5 describes three potential regulatory tools for ensuring the freedom of farmers to enter and exit Fonterra in the context of Fonterra's TAF proposal. Part 5 sets out a preliminary assessment of each of the potential regulatory tools against the key elements discussed in Part 4. This section invites comment on the potential regulatory tools.
13. Part 6 poses five possible regulatory options. Four of these options are set in the context of Fonterra's TAF proposal and draw on combinations of the three potential regulatory tools. The first option proposes maintaining the status quo. Part 6 invites comments on the five possible regulatory options.
14. Part 7 provides a summary of the discussion document and MAF's preliminary view.
15. Part 8 provides a timeline and a summary of the questions for consideration by submitters.

### Matters outside of scope

16. This discussion document is limited to the consideration of the regulatory regime that could be placed on Fonterra, under the DIRA or through other legislation, in relation to its TAF proposal and for the purpose of promoting the freedom of farmers to enter and exit Fonterra.
17. This discussion document does not cover the question of whether or not it is necessary to regulate Fonterra to ensure the contestability and efficiency of New Zealand dairy markets. A review was conducted in 2010 regarding this issue and a bill is currently before the House of Parliament to extend the market share thresholds for when Fonterra would no longer be subject to specific regulation under the DIRA. A separate review

regarding the operation of the Dairy Industry Restructuring (Raw Milk) Regulations 2001 is scheduled to commence in March 2011.

18. Submissions made in relation to either of the above matters will not be considered to be within the scope of this discussion document. For more information on past, present and future reviews please refer to the Consultation section of MAF's website:  
[www.maf.govt.nz](http://www.maf.govt.nz)

## 2. Background on the Dairy Industry Restructuring Act 2001

### 2.1 KEY OBJECTIVES OF THE DIRA

19. The DIRA provided for the formation of Fonterra by permitting the merger of Kiwi Co-operative Dairies Limited, the New Zealand Co-operative Dairy Company Limited and the New Zealand Dairy Board. To allow the merger, the Government granted an exemption to the mergers and acquisition provisions of the Commerce Act 1986. Upon formation, Fonterra collected 96 percent of the milk supplied by dairy farmers in New Zealand.
20. The Government facilitated the formation of Fonterra to provide the opportunity for efficiency gains to be realised from the creation of a large scale entity. A large scale entity may have the potential to reduce the overall costs to New Zealand of milk transportation, milk processing, and dairy product distribution and sales. The potential benefits arising from the large scale entity would flow through to improved returns to New Zealand dairy farmers and the wider New Zealand economy.
21. Given the importance of the New Zealand dairy industry to the New Zealand economy, it was also necessary for the Government to ensure that the newly created large scale entity, Fonterra, would operate efficiently and in the best interests of New Zealand dairy farmers and the New Zealand economy.
22. This is because Fonterra would be the price setter in the New Zealand dairy industry and therefore its milk price and share price are the key drivers of the following.
- a) **All New Zealand farmers' decisions regarding milk production volumes.** An over-pricing<sup>3</sup> of milk would encourage an oversupply of milk in New Zealand. This would result in *productive* and *allocative inefficiency* as the resources used to produce the extra milk could have been better put to use for alternative outputs (and vice versa for under-pricing of milk).
  - b) **Dairy farmers' choice of processor.** If Fonterra over-priced milk this would encourage farmers to choose Fonterra over other dairy processors (existing or potential) even if at the margins Fonterra was not able to return the highest value for this milk compared with other processors. This would lead to *allocative inefficiency* as some milk retained by Fonterra may have been better used (that is, more value returned) if it had been supplied to another processor (and vice versa).
  - c) **Investment in the New Zealand dairy industry.** If Fonterra over-priced milk, then this would mean that both Fonterra and other processors would have smaller margins,

---

<sup>3</sup> Over-pricing of milk would be a situation where milk was priced higher than an efficient price and therefore there is a cross subsidisation of the milk price from the downstream value added activities that more closely relate to returns on capital rather than milk.

less capital and less incentives to invest in the future of the New Zealand dairy processing industry. This would lead to *dynamic inefficiency* as less would be invested in innovation, research and technology that could have increased the net value of milk production in the future.

d) **Intergenerational equity between Fonterra farmers.** The efficient pricing of milk and shares is also necessary to ensure intergenerational equity between Fonterra's farmer shareholders. For example, a higher than efficient milk price and lower than efficient share price would lead to inequity between new and current Fonterra farmers. This is because new farmers could buy into the benefits of Fonterra at a discounted share price. This discount would be provided at the expense of those current Fonterra farmers that would not receive the true/fair value of their investment either on their balance sheet (while they remain Fonterra shareholders) or in cash upon exit from Fonterra.

23. The DIRA regulatory regime was developed as a condition for the formation of Fonterra and the Commerce Act exemption. The DIRA regulatory regime regulates Fonterra to ensure that it has the commercial incentives to operate efficiently, and price milk and shares efficiently. This objective was achieved by ensuring the contestability of milk supply through the freedom of dairy farmers to choose to enter and exit Fonterra.
24. Ensuring the freedom of farmers to enter and exit Fonterra requires the:
  - a) efficient pricing of milk by Fonterra as the price setter in the market; and
  - b) ability of farmers to choose to supply milk to Fonterra or not, and how much, in response to efficient price signals.
25. Because Fonterra is a co-operative and Fonterra farmers must hold co-operative shares to meet the share standard<sup>4</sup>, freedom of farmer entry and exit also relies on the:
  - a) ability of new, current, exiting or potential Fonterra farmers to buy and sell shares to match supply decisions; and
  - b) efficient pricing of shares to ensure that farmers' milk supply decisions are not distorted by inefficient share prices.

## 2.2 CURRENT DIRA REGULATORY REGIME

26. To achieve the freedom of farmers to enter and exit, since 2001 the DIRA has provided:
  - a) the regulated right for any dairy farmer to choose to enter or exit Fonterra and the volume of milk to supply.<sup>5</sup> Farmers need to indicate their intentions to Fonterra between December and February prior to the season commencing on 1 June;
  - b) the requirement for Fonterra to issue and redeem co-operative shares from farmers in accordance with their decision to enter or exit and the volume of milk to supply;
  - c) that Fonterra must ensure that the issue and redemption price for shares is the same in any particular season; and
  - d) that Fonterra is required to ensure that payment for shares redeemed by farmers is made within 30 working days of the commencement of the season, starting 1 June, for which the farmer notified their intention to exit or reduce milk supply.
27. The ability of farmers to choose to enter or exit Fonterra combined with the obligation for Fonterra to issue and redeem shares, in accordance with farmers' decisions, has been the

---

<sup>4</sup> The number of Fonterra shares that must be held by the farmer per kilogram of milksolids supplied by the farmer.

<sup>5</sup> This is subject to the dairy farm producing at least 10 000 kg of milksolids per season and the cost of transporting milk from the farm is no higher than any current farmer shareholder.



primary regulatory tool for supporting Fonterra's incentives to price milk and shares efficiently. Otherwise one of the following two situations would occur.

- a) If Fonterra over-priced its milk, it would receive more milk than would be economical to accept and it may need to build additional processing capacity. This would reduce average milk returns and Fonterra's profitability;
- b) If Fonterra under-priced its milk, it would receive less milk than would be economical and this may lead to underutilised processing capacity. This would reduce average milk returns and Fonterra's profitability.

- 28. The DIRA regulatory regime helps to ensure that Fonterra has strong incentives for efficiently pricing milk and shares and therefore achieve the Government's objective of ensuring the freedom of farmers to enter and exit Fonterra and promoting the dynamic efficiency of the New Zealand dairy industry.
- 29. The DIRA regulatory regime is subject to sunset clauses. Once the sunset clauses are reached, and assuming that they are not reset, then the DIRA regulatory provisions would expire. In this case, the DIRA would no longer regulate for the freedom of farmers to enter and exit Fonterra. It is intended that the DIRA regulatory regime should expire when there are sufficient competitive pressures from other dairy processing companies in New Zealand such that generic competition law, particularly the Commerce Act 1986, would be sufficient to regulate the behaviour of all market participants. At this point, industry specific regulation (under the DIRA) would no longer be required.

### 3. Description of Fonterra's TAF proposal

30. Since 2001, and until a TAF system is implemented, Fonterra's constitution provides for an independent valuer to determine a value for co-operative shares that is fair to all shareholders. The fair valuation must take into consideration the projected business and sustainable earnings of Fonterra and other factors such as changes in milk volumes and limitations on ownership. The fair valuation is set once for each season and is forecast six months in advance of the respective season and finalised by the beginning of the season on 1 June.
31. Since 2001, the DIRA has required Fonterra to issue shares and redeem shares from its farmer shareholders in accordance with the farmers' milk supply decisions and Fonterra's share standard. The DIRA also requires that the price for shares issued and redeemed is the same in any given season.
32. On 30 June 2010, Fonterra's farmer shareholders voted in support of a range of constitutional changes that would allow the Fonterra Board to change its capital structure to implement a system for the trading of co-operative shares among farmers (TAF).
33. MAF understands that Fonterra's TAF proposal involves the following features (also refer to Diagram 1 on page 9).
  - a) Fonterra Shareholders' Market – this is a market for trading in Fonterra shares in which only Fonterra farmers may participate (referred to in this document as “the share market”).
  - b) Fonterra Shareholders' Fund (referred to in this document as “the fund”) – this is a fund to which Fonterra farmers may transfer a proportion of their shares in exchange for cash and a certificate (“co-op voucher”). The maximum proportion of shares that an individual farmer may transfer to the fund is determined by Fonterra's Board. This maximum proportion is envisaged to be initially limited to 10 to 15 percent of the minimum number of shares that a farmer is required to hold under the share standard.
  - c) The legal title for shares transferred to the fund would be held by a custodian on behalf of the fund. Through the custodian, the fund would receive the beneficial rights to the shares such as the dividend and any other distributions. The custodian, on behalf of the fund, would have the legal protections of a shareholder under the Companies and Securities Markets Acts, but excluding any voting rights.
  - d) Investors would be able to purchase the beneficial rights to shares from the fund. This “fund security” would provide the rights to receive the dividend and any changes in the value of the fund security.
  - e) A second market for the trading of the fund securities (referred to in this document as “the fund market”). Both Fonterra farmers and other investors may participate in the fund market.
  - f) The participation of registered volume provider/s that are contracted by Fonterra to work within and between the share and fund markets to facilitate trades and liquidity, and to support price convergence between the share and fund markets.
  - g) The ability for Fonterra farmers and registered volume providers to convert fund securities into Fonterra shares and vice versa. Non-farmer investors in the fund could not convert fund securities into shares.
  - h) The share and fund markets would be subject to existing securities regulation, including the market rules (listing and conduct rules) of the relevant registered exchange, the Securities Act 1978 and the Securities Markets Act 1988 and any successor legislation.

- i) The share market is likely to be a unique private market that would require its own market rules. The market rules would need to be approved by the Minister of Commerce on the recommendation of the Securities Commission.<sup>6</sup>
  - j) The fund market is likely to be listed on an existing registered exchange with existing listing rules. The fund operator would be responsible for ensuring compliance with the listing rules. Fonterra would enter into contractual arrangements with the fund operator to ensure that the fund operator can comply with the listing rules.
  - k) The gross economic returns to the fund security and shares would be equivalent<sup>7</sup>.
  - l) Fonterra would be able to undertake share issues, bonus issues, share splits and share buy backs, subject to the Companies Act requirements. MAF understands that these would be undertaken in a manner that was equitable to all shareholders, including the custodian, on behalf of the fund.
34. In addition, Fonterra's share standard would change in the following ways.
- a) Measurement of compliance with the share standard would be based on a rolling three season average of milksolids supplied in the current and past two seasons.
  - b) Fonterra's Board may, at its discretion, allow a period (envisaged to be initially three seasons) over which new entrant farmers and growing farmers could buy shares to meet the minimum required share standard (that is, purchase at least one-third of the required shares per kilogram of milksolids supplied each season). Farmers that are exiting or reducing their milk supply would have the same period to sell their shares (that is, sell at least one-third of shares held each season).
  - c) Farmers would be able to meet the share standard by either holding shares or certificates (certificates are issued to farmers in exchange for transferring shares to the fund). The number of certificates that would be able to be counted towards the share standard would be the same as the number of shares that individual farmers may place with the fund. This would be subject to the Fonterra Board's discretion but is envisaged to initially be limited to 10 to 15 percent of the minimum number of shares that a farmer is required to hold under the share standard.
  - d) Fonterra's Board may, at its discretion, set a milk price that is higher for share backed milk (or certificate backed) than for non-share backed milk. The price for share backed milk is intended to be initially set at 10 cents per kilogram of milksolids higher than the price for non-share backed milk.
35. Fonterra's TAF proposal would be subject to the following parameters that are set in Fonterra's constitution.
- a) Voting is based on the milksolids supplied that are backed by either shares or certificates ("share backed milk").
  - b) Legal title to shares could be held only by farmers that are new, current, or exiting Fonterra farmers and by the custodian (the custodian holds the legal title to shares on behalf of the fund).
  - c) Fonterra's Board may, at its discretion, allow individual farmers to hold up to a maximum of two shares for every kilogram of milksolids supplied (shares held in excess of the minimum share standard are referred to as "dry" shares). Dry shares are non-voting as voting is based on the number of milksolids backed by shares or certificates (share backed milk).
  - d) In aggregate, shares held in excess of the minimum number of shares required to be held by farmers under the share standard may not total more than 25 percent of the total Fonterra shares on issue. If this limit is exceeded, the Board is to take steps to

<sup>6</sup> The Financial Markets (Regulators and KiwiSaver) Bill would, if passed as proposed, establish a new Financial Markets Authority from April 2011, which would approve market rules for registered securities markets (replacing the Securities Commission and the role of the Minister of Commerce).

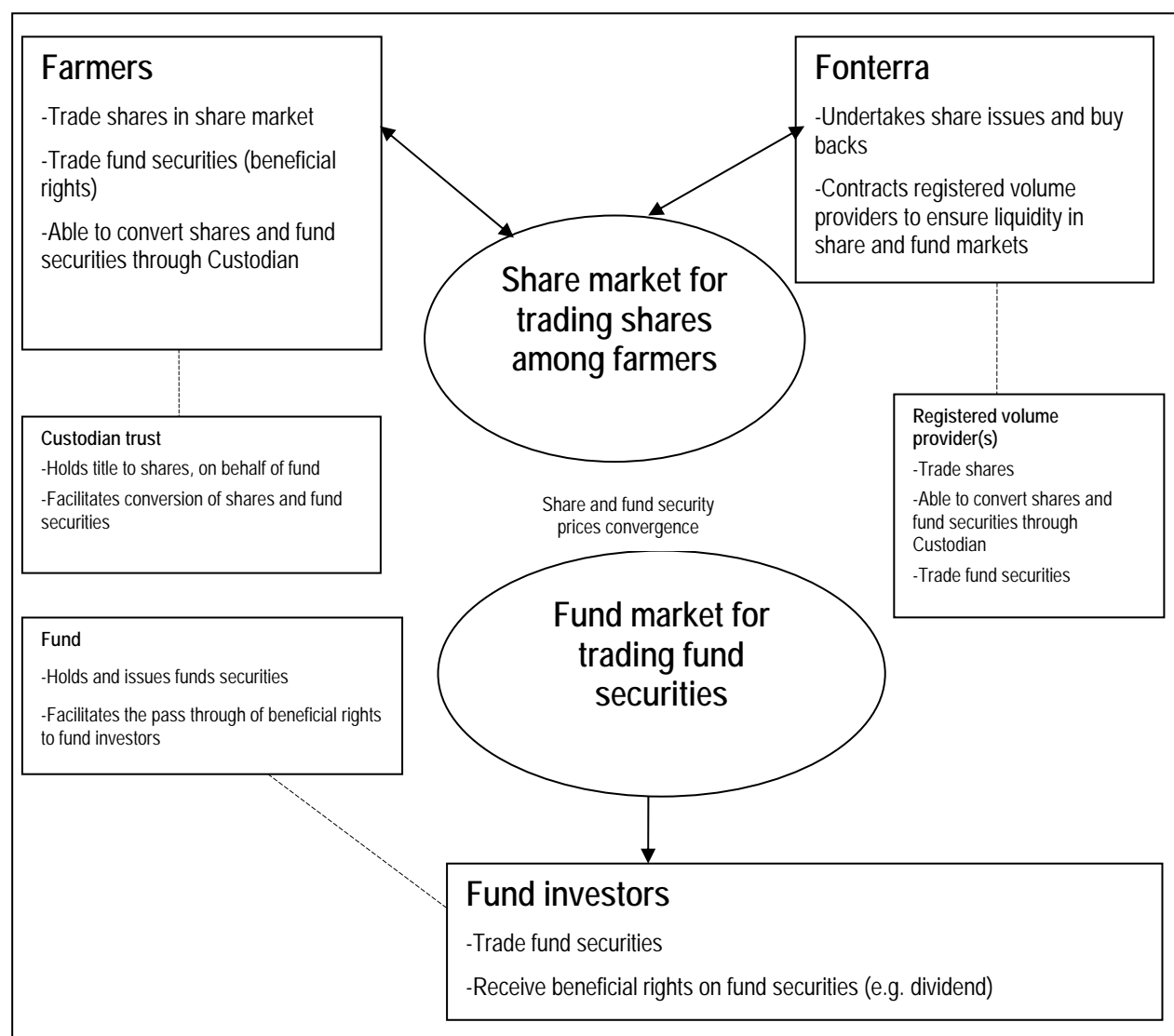
<sup>7</sup> Gross returns before tax.

bring the aggregate number of shares back within the limit within an appropriate timeframe.

- e) The total number of shares that can be transferred to the fund would be limited to 25 percent of the total number of Fonterra shares on issue. If this limit is exceeded, the Board is to take steps to bring the total number of shares transferred to the fund back within the limit within an appropriate timeframe.

36. MAF understands that these constitutional parameters have been put in place by Fonterra's farmer shareholders to ensure that they maintain control and ownership of Fonterra. The Fonterra Board has discretion to set and change the operational limits within the various constitutional parameters. Voting shareholders have the power to collectively modify the constitutional parameters.

Figure 1: Fonterra's Trading Among Farmers proposal



## 4. Interaction between DIRA and Fonterra's TAF proposal

### 4.1 PROBLEM DEFINITION

37. The Government's policy objective is to promote the dynamic efficiency and contestability of New Zealand's dairy markets. This is currently achieved through the freedom of farmers to enter and exit Fonterra and the obligation for Fonterra to issue and redeem co-operative shares in accordance with farmers' milk supply decisions. Fonterra is also required to ensure that the price of shares issued and redeemed is the same in any given season. Fonterra's TAF proposal does not change the importance of ensuring the freedom of farmers to enter and exit Fonterra.
38. MAF considers that the freedom of entry and exit for farmers could be achieved through a share trading system, provided that the system is designed in a way that allows farmers to buy and sell shares in a timely manner and at efficient share prices.
39. It is likely that the current regulatory mechanism in the DIRA for achieving freedom of farmer entry and exit, in particular the requirement for Fonterra to issue and redeem shares at the same price, would fundamentally impair the prospects of success of Fonterra's TAF proposal. This is because:
  - a) shares issued and redeemed by Fonterra would remove liquidity from the share and fund markets;
  - b) trading prices in the share and fund markets would be heavily constrained by the administratively set share price because farmers could arbitrage between the two systems;
  - c) it would significantly deter participation in the fund market and consequently risk inhibiting the development of both the share and fund markets.
40. Therefore, maintaining the current share issue and redemption requirements in DIRA would most likely prevent Fonterra from evolving its capital structure in accordance with the mandate provided by its farmer shareholders on 30 June 2010.
41. The freedom of entry and exit for farmers could be achieved in Fonterra's TAF proposal, whereby farmers buy and sell shares throughout the season through the share and fund markets, rather than through share issue and redemption by Fonterra at the beginning and end of the season.
42. Furthermore, MAF considers that Fonterra's TAF proposal has the potential to improve the efficiency of New Zealand dairy markets, relative to the current share issue and redemption obligations by:
  - a) improving the transparency around Fonterra's performance and therefore strengthening Fonterra's incentives to operate efficiently and improve its performance and profitability. The level of information disclosure required under the Securities Markets Act would be significantly higher than is currently required of Fonterra;
  - b) improving the clarity around farmers' dual roles in Fonterra, as milk suppliers and shareholders, and providing a much clearer distinction between the returns from the two roles;

- c) strengthening the commercial incentives on Fonterra to ensure efficient pricing of milk;
  - d) providing shareholders with real time, market evaluated information on the price of shares and Fonterra's performance (rather than the current situation of an administrative share price set once per season);
  - e) providing a new mechanism by which Fonterra would have the opportunity to raise additional capital from non-farmer investors, should farmer shareholders choose to pursue that option. This capital could be used to pursue growth opportunities in the future.
43. The regulatory problem is, therefore, to identify the regulatory regime that would ensure the freedom of farmers to enter and exit Fonterra, while also allowing the opportunity for Fonterra to implement its TAF proposal.

#### Questions

1. Do you agree with the problem definition "to identify a regulatory regime that both provides for both the freedom of farmers to enter and exit Fonterra and allows the opportunity for the TAF proposal to be implemented"?

Please explain your answer.

## 4.2 SCOPE OF DIRA REGULATORY REGIME

44. Fonterra's TAF proposal involves the development of two markets for the trading of securities (shares and fund securities). This means that both the share and fund markets would be subject to generic legislation, including the provisions of the Companies Act 1993, the Securities Act 1978 and the Securities Markets Act 1988. These acts govern the activities of directors of any business that has tradable securities, and include:
- a) continuous disclosure obligations on an issuer of equity securities, disclosure of relevant interests of directors and disclosure of substantial security holders;
  - b) rules around insider trading, market manipulations and general misconduct;
  - c) shareholder protections under the Companies Act for both farmer shareholders and the custodian, on behalf of the fund. (Voting rights are excluded as voting is based on the number of kilograms of milksolids supplied that are backed by shares or certificates);
  - d) obligations on directors to act in good faith and in what the director believes to be in the best interests of the company.
45. In addition, Fonterra, like other companies in New Zealand, is subject to the Commerce Act 1986 and the Fair Trading Act 1986. As Fonterra is a co-operative, it is also subject to the Co-operative Companies Act 1996.
46. The DIRA regulatory regime is additional to the generic legislative requirements applying to Fonterra and the operation of the share and fund markets. The DIRA is specifically targeted towards promoting the efficiency and contestability of New Zealand dairy markets by ensuring the freedom of farmers to enter and exit Fonterra.
47. Therefore, in the context of Fonterra's TAF proposal, the DIRA regulatory regime would only include any additional provisions, over and above the generic legislative

requirements, that are necessary to ensure the freedom of farmers to enter and exit Fonterra.

48. It should be noted that the Government does not have any decision rights regarding Fonterra's capital structure or corporate form as these decisions are the responsibility of the shareholders of Fonterra. The Government's interest is in promoting the efficiency of New Zealand dairy markets through ensuring the freedom of farmers to enter and exit Fonterra. The Government's decisions on these matters are implemented, with the concurrence of Parliament, through the DIRA and/or other legislation.

#### 4.3 ANALYSIS OF THE TAF PROPOSAL FOR ENSURING FREEDOM OF FARMERS TO ENTER AND EXIT FONTERRA

49. Two critical aspects of Fonterra's TAF proposal for ensuring the freedom of entry and exit of farmers are the role of the fund and the convertibility of shares and fund securities (by Fonterra farmers and registered volume providers only).
50. Farmers' demand for shares is likely to be driven primarily by the need to buy and sell shares to comply with Fonterra's share standard ("compliance trading")<sup>8</sup>. This demand would be influenced by milk price signals and external factors affecting milk supply, for example, drought. In addition, some farmers may choose to hold and trade shares in excess of the required share standard.
51. Given the relative similarity of the drivers on farmers' demand for shares, a market limited to farmers only (without the role of the fund and registered volume providers) would have a high risk of one-sided trading and price volatility. This is because there would be likely to be situations where:
- a) there was large excess supply of shares, for example during a drought, significant dairy commodity price fall, and/or significant rise in farm operating expenses;
  - b) there was a large excess demand for shares, for example following an unexpectedly good season, a significant milk price rise or significant fall in farm operating expenses;
  - c) large numbers of farmers tended to purchase or sell shares only at particular times during the season, for example, just before the measurement date for compliance with the share standard (1 November), or just before the record date for when shares must be held to receive a distribution/dividend (31 May);
  - d) large numbers of farmers tended to purchase shares as long-term investments and do not actively trade these, thus limiting liquidity in the share market.
52. These types of situations could lead to irregular trading activity, periods of illiquidity (low frequency of share trades) and price volatility in the share market. This could, therefore, lead to situations where farmers are unable to buy and sell shares at efficient prices at the time when they need to. Consequently, farmers could be deterred from entering or exiting Fonterra, or increasing or decreasing milk supply, due to difficulties with buying and selling shares and paying or receiving reasonable prices for these.
53. In these types of situations, Fonterra farmers would carry the risk associated with potential illiquidity in the markets and potential price volatility. The greatest risk would be to those farmers wishing to enter or exit or change the volume of milk supplied as they

---

<sup>8</sup> The share standard is the number of shares that must be held by a farmer per kilogram of milksolids supplied by that farmer. Fonterra's share standard is currently set at one share per kilogram of milksolids.

would need to trade shares even if there were very small volumes of counterparty trades available and when the share price may be either unreasonably high or low.

54. The role of the fund in Fonterra's TAF proposal is critical for overcoming the potential problems and constraints of farmer-only share trading. The fund would allow other investors, who may have different economic drivers and greater propensity to actively trade, to provide the necessary liquidity in the fund market. This liquidity would be transferred to the share market through the ability of new, current or exiting Fonterra farmers and the registered volume provider/s to:
  - a) participate in both the share and fund markets at the same time;
  - b) convert shares into fund securities and vice versa.
55. These two components of the TAF proposal would provide for close connections and fungibility<sup>9</sup> between the two markets. This should lead to liquidity from the fund market being passed through to the share market and price convergence between the two markets. These outcomes are necessary to ensure that farmers can buy and sell shares when they need to and at efficient share prices. This in turn would ensure the freedom of farmers to enter and exit Fonterra.
56. Without fungibility between the fund and share markets and the role of the registered volume provider/s, there would be a risk that farmers may not be able to readily buy and sell shares when they need to in order to either meet the share standard or to enter or exit Fonterra. There would be a risk of price volatility and farmers having to buy and sell shares at prices that may not reasonably reflect the investment made in Fonterra. This could influence farmers' preferred milk production and supply decisions.
57. The registered volume provider/s alone could not provide sufficient liquidity in a farmer-only share market. The fund would enable the registered volume provider/s to trade with non-farmer investors that may have different economic drivers and a greater propensity to trade. Consequently, without the role of the fund and fungibility between the share and fund markets, Fonterra's TAF proposal would be unlikely to meet the Government's objective of ensuring the freedom of farmers to enter and exit Fonterra.
58. The key limitations on Fonterra's TAF proposal are the various constitutional parameters<sup>10</sup>, particularly the total number of shares that can be transferred to the fund. These limits are flexible in that once met, Fonterra's Board would need to take steps to bring the fund back within the limit within an appropriate timeframe. Hence, Fonterra's ability to adequately manage these limits would be critical to ensuring the ongoing depth and liquidity in both the share and fund markets.
59. If the constitutional limits were not well managed by Fonterra, a situation could arise where the fund size is approaching or has exceeded Fonterra's constitutional limit of 25 percent of the total number of shares on issue. This could mean that fungibility between the fund and share market may begin to break down if the constitutional limits were strictly adhered to. In such a situation, supply and demand imbalances in the farmer-only share market could then no longer be satisfied through the link to the fund. The consequence could be potential illiquidity in the share market and potential unwarranted price volatility. Such a situation would not be conducive to freedom of farmers to enter and exit Fonterra.

---

<sup>9</sup> In this context, "fungibility" means that shares and fund securities provide the same economic return and are fully interchangeable.

<sup>10</sup> Refer to paragraph 35 in Part 3 of this document.



60. It will therefore be essential for Fonterra to constantly monitor the constitutional limits and to take appropriate actions to ensure that the constitutional limits do not create illiquidity and price volatility in the share and fund markets.

#### 4.4 KEY ELEMENTS FOR TAF SYSTEM TO DELIVER FREEDOM OF FARMERS TO ENTER AND EXIT FONTERRA

61. In order for Fonterra's TAF proposal to adequately provide for the freedom of farmers to enter and exit, it would need to have the following two key elements.
- a) The share and fund markets would need to be sufficiently:
- **deep** – an adequate number of buyers and sellers and significant volumes are traded in both the share and fund markets;
  - **liquid** – an adequate numbers of shares and fund securities are being actively traded on a regular basis;
  - **well-informed** – buyers and sellers in both the share and fund markets have the information they need about Fonterra's operations to properly evaluate the price at which they are willing to buy and sell shares and fund securities;
  - **transparent** – all buyers and sellers in the share and fund markets have the same high quality and timely information, and this is released to both markets at the same time;
  - **fungible** – the share and fund markets would remain closely connected through the ability of farmers and registered volume providers to trade in both markets and convert shares to fund securities and vice versa. The economic returns on shares and fund securities would be equivalent to the extent possible. This fungibility would provide for liquidity in the fund market to be passed through to the share market and would create price convergence between the two markets.

These elements are required to ensure that farmers are able to transact shares in a timely manner when they need to enter or exit Fonterra or increase or decrease milk supply.

- b) Efficient pricing of milk – the milk price is Fonterra's principal input cost hence is a key factor in determining Fonterra's distributable profit (the dividend plus retentions). Fonterra's expected distributable profit would be the main factor driving the price at which buyers and sellers would be willing to trade shares and fund securities.<sup>11</sup>

Efficient milk pricing is required to ensure that farmers' decisions whether to enter or exit Fonterra, or increase or decrease milk supply are not influenced by inefficiently high or low milk and share prices.

62. Therefore, any new regulatory regime in DIRA that would replace the current share issue and redemption requirements and allow the development of Fonterra's TAF proposal would need to support and/or strengthen Fonterra's incentives to:
- a) provide and maintain deep, liquid, transparent, well-informed and fungible share and fund markets;
- b) price milk efficiently and, therefore, efficiently determine distributable profit (dividends and retentions).

---

<sup>11</sup> Fonterra profit = revenue – costs – milk payments = dividend + retentions. Therefore, if Fonterra's milk price is higher than efficient, then Fonterra's profit (dividend plus retentions) is less than efficient and the Fonterra share price (and fund security price) is less than efficient.

### Questions

2. Do you agree that efficient milk pricing and deep, liquid, transparent, well-informed and fungible share and fund markets are necessary and sufficient elements for ensuring the freedom of farmers to enter and exit Fonterra?

3. In the context of Fonterra's TAF proposal, what additional or alternative key elements do you consider to be necessary for ensuring the freedom of entry and exit for farmers?

Please explain your answers.

## 5. Potential regulatory tools for ensuring freedom of farmers to enter and exit Fonterra in the context of Fonterra's TAF proposal

63. In the context of Fonterra's TAF proposal, MAF has developed a set of potential regulatory tools that would aim to ensure the freedom of farmers to enter and exit Fonterra.
64. Each of the potential regulatory tools is accompanied by a preliminary assessment of the impact of the regulatory tool for supporting or strengthening Fonterra's commercial incentives to:
  - a) provide and maintain deep, liquid, transparent, well informed and fungible share and fund markets;
  - b) price milk efficiently, and therefore efficiently determine distributable profit (dividends and retentions).
65. MAF considers that the stronger Fonterra's commercial incentives to price milk efficiently and maintain the liquidity of the share and fund markets over time, the less regulation would be required to support the liquidity of the share and fund markets and strengthen the integrity of the milk price setting process.

### 5.1 PRE-CONDITION FOR THE REMOVAL OF ISSUE AND REDEMPTION OBLIGATIONS

66. The development of depth and liquidity in any market can take time and may evolve over a period of time. However, for competition purposes, the Government needs to be assured that the share and fund markets would have sufficient depth and liquidity to deliver the freedom of farmers to enter and exit Fonterra before the current share issue and redemption obligations could be removed.
67. This assurance could potentially be delivered by a pre-condition that the fund be a minimum size before the current share issue and redemption obligations in DIRA would be removed and new regulatory provisions would take effect. Fonterra would need to demonstrate through a demand and supply side book build<sup>12</sup> that the fund would be launched at a size equal to or exceeding the specified minimum size.
68. If the minimum fund size were set at an appropriate level, then it should provide confidence that the share and fund markets would launch with sufficient liquidity for farmers to transact their shares in a timely manner and at efficient prices.
69. Furthermore, in seeking to meet the minimum fund size and satisfy the pre-condition, Fonterra would likely need to achieve a range of things including the following.
  - a) Listing the fund and share markets on a registered exchange and subject to the generic securities markets legislation. This would mean that general legislative requirements relating to market manipulation, insider trading, related party transactions and continuous disclosure would apply to both the share and fund markets.

---

<sup>12</sup> The process of generating and recording demand and supply of fund securities, and determining the offer price for the fund securities.

- b) The share and fund market conduct rules (business and listing rules) approved by the relevant Securities Markets Authority<sup>13</sup>. The conduct rules would deal with the relationship between the operator of the registered exchange and the issuer (Fonterra for the share market and the fund operator for the fund market) as the entity with the securities listed on the exchange (listing rules). The conduct rules also deal with the conduct of business in the market and of persons who are authorised by the exchange to conduct trading activity on the exchange (business rules). Potential investors in the fund, particularly institutional investors, would expect best practice with regards to the conduct rules otherwise they would not be prepared to participate in the fund.
  - c) Establish a high level of transparency and information disclosure around the milk price setting mechanism and the performance of Fonterra's business operations, including the New Zealand based milk collection and processing operation.
  - d) Establish a reasonable degree of independence in the governance of the milk price determination would be established.
  - e) Ensure efficient setting of the milk price relative to distributable profit (dividend plus retentions).
  - f) Put in place stable mechanisms to promote liquidity of the fund and share markets would be in place, including:
    - contract registered volume providers to provide liquidity;
    - target active traders, such as institutional investors in the fund to provide liquidity;
    - ensure fungibility between the share and fund markets to provide the transfer of liquidity between fund and share markets. This would include convertibility of shares and fund securities (by Fonterra farmers and registered volume providers) and price convergence between the fund and share markets.
70. MAF understands that Fonterra already intends to implement the above measures before launching the share and fund markets. A minimum fund size pre-condition would simply underpin Fonterra's intentions because if for some reason, Fonterra chose not to implement most of the items listed above, then the fund would not likely reach the minimum size, the pre-condition would not be met, and the DIRA issue and redemption obligations would remain.
71. MAF considers an appropriate minimum fund size could be set at a value of somewhere between NZ\$500 million and NZ\$900 million.
72. Based on the current administered share price of \$4.52 and current number of Fonterra shares of 1.34 billion, this would mean that the number of fund securities would be between, approximately:
- a) eight percent of the number of Fonterra shares (at NZ\$500 million);
  - b) 15 percent of the number of Fonterra shares (at NZ\$900 million).
73. MAF understands that Fonterra is envisaging the initial size of the fund would be around NZ\$500 million.

#### Potential benefits of the pre-condition

74. Provided the pre-condition on the minimum size of the fund is set at an appropriate level, then it would provide reasonable assurance that the share and fund markets would be sufficiently liquid to provide freedom of entry and exit for farmers at the outset. This is because meeting the pre-condition on the minimum fund size would mean that Fonterra

<sup>13</sup> This would be the Minister of Commerce, upon recommendation of the Securities Commission, until and if the Financial Markets (Regulators and KiwiSaver) Bill is passed, whereupon it would be the Financial Markets Authority.

would need to attract sufficient demand for the fund securities. The liquidity from the fund market would then pass through to the share market.

75. The overall impact of the pre-condition on the size of the fund would be to promote the depth and liquidity of the share and fund markets before the share issue and redemption obligations would be removed.

#### Potential costs of the pre-condition

76. The pre-condition on the fund size should be set neither too high nor too low for the following reasons.
- a) A minimum fund size that is too high could prevent Fonterra from launching the TAF proposal. This could mean that Fonterra could not implement or evolve its capital structure and the potential benefits to the dairy industry and wider New Zealand economy may not be realised. Consideration needs to be given to the size of New Zealand's capital markets in general to ensure that the pre-condition is feasible.
  - b) A minimum fund size that is too low could mean that when the TAF system is launched, and the issue and redemption obligations are removed, that there is insufficient liquidity in the fund market to ensure liquidity in the share market. This would mean that freedom of farmer entry and exit could be impaired by potential illiquidity and potential price volatility in the share market.
77. Provided that the minimum fund size is set at an appropriate value, then there should no additional costs of the pre-condition.

#### Questions

4. MAF has proposed that a pre-condition on the minimum size of the fund is set at a value of between NZ\$500 million and NZ\$900 million. What value do you consider would be the most appropriate for a pre-condition on the minimum size of the fund?

5. Do you consider that once the pre-condition on the minimum size of the fund is met, the share and fund markets would be sufficiently liquid to ensure the freedom of farmers to enter and exit Fonterra at the outset?

Please explain your answers.

## 5.2 RULES REGARDING MILK PRICE GOVERNANCE AND DISCLOSURE

78. The efficient pricing of milk is a key factor in the successful development of the share and fund markets. If milk was not priced efficiently, then this would deter confidence in the markets and lead to poor depth and liquidity in both the share and fund markets.
79. Efficient milk pricing is also critical for ensuring efficient share prices. If milk was over-priced, then this would lead to discounts in the prices realised in the share and fund markets.
80. Efficient milk pricing is therefore essential for ensuring that farmers can trade shares in a timely manner and at efficient share prices. Otherwise, farmers' preferred milk supply decisions could be influenced by poor liquidity in the share market and/or by unreasonably low or high share prices. This situation would not be conducive to the freedom of farmers to enter and exit Fonterra.
81. MAF considers that Fonterra already has the following commercial incentives to ensure efficient milk pricing over time.
  - a) If milk was over-priced, then Fonterra would receive more milk than would be economical and additional processing capacity may be required. This would reduce average milk returns and Fonterra's profitability.
  - b) If milk was under-priced, then Fonterra would receive less milk than would be economical, which may result in under-utilised processing capacity. This would reduce average milk returns and Fonterra's profitability.
82. In the context of the TAF proposal, Fonterra's commercial incentives could be strengthened through provisions relating to milk price governance and disclosure.

### Milk price governance

83. Fonterra has indicated its intention to implement a Milk Price Panel that would be responsible for recommending, to the Board, the milk price (and therefore, by default, the residual value of distributable profit that would be split into the dividend plus retained earnings). Fonterra has also indicated its intention that the Milk Price Panel would have five panel members. Panel members would be appointed by the Board. The majority of members would be independent (that is, non-farmers) including the Chair and the majority would be from the Fonterra Board. Two panel members would be nominated by the Fonterra Shareholders' Council.
84. The regulatory regime could require that the Milk Price Panel, including its responsibilities and a requirement for a majority of independent members and an independent chair, are imbedded either through DIRA and/or the approved market rules. This would ensure that the role and independence of the Milk Price Panel could not freely be changed over time.
85. Majority independent representation on the Milk Price Panel, including an independent chair, would provide reasonable balance in the milk price determination and recommendation process for advising the Board on the setting of the milk price relative to distributable profit.

86. The regulatory regime could also introduce a nomination process for appointing some of the independent Milk Price Panel members. The Trustee of the fund and/or an independent body could nominate a list of potential candidates. The Fonterra Board could then appoint the independent members to the Milk Price Panel from the list of nominated candidates. Alternatively, the Board could be required to either consult with, or seek approval from, an independent body before appointing panel members.
87. As an example, this type of process could mean that the Milk Price Panel consists of five members, two of which are nominated by the Fonterra Shareholders' Council, two of which are nominated by the Trustee of the fund or an independent body and one of which is an independent member from the Fonterra Board. The Fonterra Board member could be the chair and/or have a casting vote.
88. The introduction of some type of nomination process could provide additional assurance that the independent panel members are truly neutral and would be likely to take a balanced view on the relative setting of the milk price and distributable profit. This would have the effect of strengthening confidence of farmer shareholders and fund investors in the milk price setting process and supporting Fonterra's incentives for efficient milk pricing. This would support ongoing interest in the fund, and therefore liquidity in the fund and share markets, and the freedom of farmers to enter and exit Fonterra.

#### Milk price information disclosure

89. The disclosure of information relating to the milk price setting and formulation process is likely to be critical for encouraging demand for fund securities. The milk price is the key determinant of the distributable profit and therefore, both farmer shareholders and potential investors in the fund will need information on how the milk price is set and why. The more information that is provided, the more confident farmer shareholders and potential fund investors can be. This may lead to more demand for shares and fund securities and more liquidity in the share and fund markets.
90. MAF therefore considers that the regulatory regime could include requirements for Fonterra to publicly disclose information relating to the milk price setting process<sup>14</sup> such as the below examples.
  - a) Relevant and non-commercially sensitive sections of the *Milk Price Manual*.
  - b) The methodology and process for the calculation and determination of the milk price, including the key inputs into the milk price calculation and any changes to the methodology or process.
  - c) The terms of reference for the Milk Price Panel.
  - d) The Milk Price Panel's recommendations to the Fonterra Board regarding the setting of the milk price, where the Milk Price Panel's recommendations are not agreed by the Board.
  - e) The financial performance of the New Zealand milk collection and processing business.
91. MAF understands that Fonterra is already intending to disclose much of this information. Regulation would therefore support this intention and ensure it is maintained over time.

---

<sup>14</sup> Disclosure of specific information relating to the milk price as described here would be supplementary to the generic disclosure requirements under the Securities Markets Act.

### Potential benefits of milk price governance and disclosure

92. The regulation of milk price governance and disclosure would strengthen confidence in the milk price setting process and support Fonterra's own commercial incentives to price milk efficiently. While Fonterra intends to introduce a new milk price governance and disclosure regime on its own accord, regulation could strengthen these processes and ensure that the disciplines were maintained over time. Regulation of milk price governance and disclosure would therefore provide greater assurance that freedom of farmers to enter and exit would be maintained over time.
93. The regulation of milk price governance and disclosure would be unlikely to undermine the development of the TAF system, as it would support, rather than deter, confidence of farmer shareholders and fund investors.

### Potential costs of milk price governance and disclosure

94. The proposed requirements for Fonterra to introduce a Milk Price Panel with majority independence and an independent chair could involve some administrative costs. MAF understands that the Board has already developed terms of reference for the panel and developed an appointment process for panel members.
95. The proposal to introduce an independent nomination process for the appointment of independent members to the panel would be likely to introduce some additional administrative cost. MAF expects that the additional cost of the independent nomination process would be relatively low.
96. The proposed milk price disclosure requirements may introduce some administrative costs in terms of preparation for the release of material and ensuring compliance. MAF considers that these costs would be relatively low but may be necessary for ensuring confidence in the fund.

#### Questions

6. Do you consider that regulation of milk price governance and disclosure would be necessary to strengthen confidence in the milk price setting process and therefore support the liquidity of the share and fund markets?

7. Do you consider that it would be necessary for the Trustee of the fund or an independent body to nominate candidates to be the independent members of the Milk Price Panel?

Please explain your answers.

## 5.3 ONGOING LIQUIDITY REQUIREMENTS ON THE SHARE AND FUND MARKETS

97. The ongoing depth and liquidity of the share and fund markets are essential for ensuring that farmers can trade shares when increasing or decreasing their milk supply or entering or exiting Fonterra. If the fund and share markets became illiquid for any extended period of time, then this could have the effect of influencing farmers' decisions regarding milk production and entry or exit. Therefore, illiquidity in the share and fund markets could impair the freedom of farmers to enter and exit Fonterra.



98. In the context of the TAF proposal, MAF considers that Fonterra has the following commercial incentives to provide and maintain over time deep liquid transparent and well-informed share and fund markets.
- a) Farmer shareholders would expect to be able to trade shares when they want to, and at prices that reasonably represent the expected future returns to milk processing and dairy product marketing. Farmers could express this view through Fonterra's democratic process.
  - b) The share and fund prices, if allowed to rise too quickly or get too high, would discourage new entry and milk supply growth.
  - c) If the share and fund prices fell too quickly or too low, this would encourage an oversupply of milk, and additional processing capacity could be required. This would reduce Fonterra's average milk returns and profitability.
  - d) If Fonterra considers that the share and fund markets could be used to raise capital in the future, then this would provide incentives to maintain deep and liquid share and fund markets to ensure the markets remained viable future options to raise capital.
99. Fonterra's commercial incentives to provide and maintain the depth and liquidity of the share and fund markets over time could be supported and/or strengthened by including in the regulatory regime some requirement/s relating to the ongoing liquidity of the share and fund markets.
100. The following three forms of potential ongoing liquidity requirements could be considered.
- a) Rules that imbed the key institutional features of the TAF system.
  - b) Rules that place general requirements on Fonterra's conduct to maintain the integrity of the TAF system.
  - c) Rules that place specific measurable requirements on the performance of the TAF system.

#### **Rules that imbed key institutional features of the TAF system**

101. These types of rules would lock in the key institutional features of Fonterra's TAF system that are essential for liquidity in the share and fund markets and the freedom of farmers to enter and exit Fonterra, as in the following examples.
- a) A requirement for the share and fund markets to be listed on a registered exchange and subject to the generic securities markets legislation.
  - b) A requirement for shares to be able to be traded in either the share market or transferred to the fund.
  - c) A requirement for farmer shareholders and other approved persons (for example, registered volume providers) to be able to participate in the fund market.
  - d) A requirement for farmer shareholders and other approved persons (for example, registered volume providers) to be able to freely convert shares to fund securities and vice versa.
  - e) A requirement that economic returns to shares and fund securities are the same, to the extent possible.
  - f) A requirement that the custodian holds legal title to shares transferred to the fund, on behalf of the fund.
102. These rules would ensure that the key features of the TAF system are locked in over time. These rules should be costless in the sense that Fonterra is already proposing to implement all of these features of the TAF system. However, these rules could introduce

costs in the future if Fonterra wished to evolve the TAF system and this required amendments to the key features that were locked in through the regulatory regime.

### Rules that place general requirements on Fonterra's conduct to maintain the integrity of the TAF system

103. These general rules would create obligations on the Fonterra Board to maintain the integrity of the TAF system by ensuring that its actions promote the liquidity of the share and fund markets, and therefore promote the freedom of farmers to enter and exit, as in the following examples.

- a) A requirement for the Fonterra Board to take all reasonable steps to ensure that the share and fund markets remain deep, liquid, transparent and well informed.
- b) A requirement for the Fonterra Board not to take actions that would have the effect of breaking down fungibility and price convergence between the share and fund markets.
- c) A requirement to ensure that the initial distribution of fund securities is undertaken in a way which fosters a high level of liquidity in the fund market from the outset.

104. These potential general ongoing liquidity requirements could strengthen Fonterra's commercial incentives to maintain the liquidity of the share and fund markets over time. Fonterra's Board would need to ensure that its actions promoted liquidity in the share and fund markets, otherwise it could breach the regulatory provisions and penalties may apply. This would therefore provide greater assurance that the TAF system would provide for freedom of farmers to enter and exit Fonterra and that this would be maintained over time.

105. At the same time, however, the potential general liquidity requirements would be subjective and therefore compliance would rely on a level of judgement by Fonterra and the regulator. This could create uncertainty for Fonterra's Board, the regulator and potentially the farmer shareholders and fund investors. To prevent unnecessary burden on the TAF system, it would therefore be necessary to carefully consider an appropriate monitoring, enforcement and remedy regime for the potential general liquidity requirements.

### Rules that place specific measurable performance requirements on the TAF system

106. These rules would include specific measures of liquidity that the TAF system would need to comply with, as in the following examples.

- a) A requirement for the fund to maintain a minimum size, such as 10 percent of the number of Fonterra shares on issue. This could be measured by the average size of the fund over a set time period ranging between 20 working days to an annual average.
- b) A requirement for liquidity in the fund, as measured by one or more parameters, to be comparable to the average of the top 15 companies (by capitalisation) listed on the New Zealand Stock Exchange. This could be measured by rolling averages of key measurable parameters over a set period of time ranging between 20 working days to an annual average.

107. The specific measures would provide a more direct measure of liquidity in the share and fund markets and would, therefore, be less subjective than the potential general measures.

108. Meeting specific liquidity measures may at times be beyond Fonterra's control. This is because, in some circumstances, external factors could drive the performance of the share and fund markets rather than the actions or inactions of Fonterra. It could, therefore, be

difficult for Fonterra to ensure that it complied with the specific measures at all times. This could create potential uncertainty for farmer shareholders and fund investors. This could lead to reduced liquidity in the share and fund markets and, therefore, risk impairing the freedom of farmer entry and exit.

109. It may be necessary to provide for flexibility around the potential specific measures, to the extent that a review process may be needed to identify the cause of any breach, and to consider the appropriate enforcement and remedy in particular circumstances. Specific measures would be likely to require regular monitoring of the TAF system by both Fonterra and the regulator, however, this type of information is likely to be required for the fund and share markets anyway.

#### **Potential benefits of ongoing liquidity requirements**

110. Regulating for some form of ongoing liquidity requirement would strengthen Fonterra's commercial incentives to ensure that its actions promote liquidity in the share and fund markets, and that this liquidity is maintained over time. An ongoing liquidity requirement would, therefore, provide greater assurance that the TAF system would provide for the ongoing freedom of farmers to enter and exit Fonterra.
111. Without any ongoing liquidity requirements, there may be a risk that, over time, the fund and share markets could gradually become illiquid and, therefore, the freedom of farmers to enter and exit Fonterra may risk becoming impaired.

#### **Potential costs of ongoing liquidity requirements**

112. Depending on the form of the potential ongoing liquidity requirements, it may be difficult for Fonterra to ensure compliance at all times. This is because liquidity can be influenced by external factors that are not the result of Fonterra's actions or inactions. For some forms of potential ongoing liquidity requirements, it may be necessary to introduce a monitoring, enforcement and remedy process that took into consideration the various factors that may be affecting liquidity in the markets. This could introduce some costs to Fonterra and the regulator.
113. Depending on the form of the ongoing liquidity requirements, there may also be a risk of introducing uncertainty for farmer shareholders and fund investors. This uncertainty could lead to illiquidity in the fund and share markets, and would therefore be counter-productive. It is, therefore, important that any ongoing liquidity requirements do not create significant uncertainty as this could risk impairing the freedom of farmers to enter and exit Fonterra.

### Questions

8. Do you consider that regulation of ongoing liquidity requirements would be necessary to strengthen Fonterra's commercial incentives to ensure that the share and fund markets remain sufficiently liquid over time?

9. What form or forms of ongoing liquidity requirements do you consider would be most appropriate to ensure the ongoing liquidity of the share and fund markets?

Please explain your answers.

## 5.4 POSSIBLE MONITORING AND ENFORCEMENT REGIMES FOR EACH OF THE POTENTIAL REGULATORY TOOLS

114. The purpose of monitoring and enforcement regimes is to create incentives for compliance with regulatory requirements and to impose appropriate remedies for non-compliance. An enforcement regime is likely to be most effective when:
- a) applied in a manner that is appropriate to the relevant regulatory requirement;
  - b) consistent with standard legal principles;
  - c) able to act in a timely and low cost manner;
  - d) clearly defined and able to be understood;
  - e) its significance deters deliberate non-compliance;
  - f) outcomes are consistent with the overarching objectives of the regulation.
115. It should be noted that the share and fund markets would be subject to generic securities markets legislation and, therefore, the generic monitoring and enforcement regimes under that legislation. Monitoring and enforcement of regulations that place additional requirements on the TAF system – in order to ensure the freedom of farmers to enter and exit Fonterra – should be consistent with the principles of the generic securities markets legislation and should avoid imposing double jeopardy.
116. The current DIRA regulatory requirements are predominately based on relatively well defined rules which Fonterra either meets or fails to meet due to its own actions. The Commerce Commission is the independent agency currently responsible for monitoring and enforcing compliance with these rules and for investigating and determining any disputes arising in relation to the interpretation of the rules. Enforcement action, in the case of contravention, is taken in the High Court by the Commission.
117. Enforcing some of the potential regulatory requirements proposed in Part 5, section 5.3 may not be as straight forward because the particular performance measure may, at times, be out of Fonterra's direct control and/or may have the effect of undermining the development of the share and fund markets. For example, external factors may, at times, have significant influence on Fonterra's ability to comply with some of the potential ongoing liquidity requirements.

### Pre-condition on minimum fund size

118. The proposed pre-condition on the minimum fund size (of between NZ\$500 million and NZ\$900 million) does not require a monitoring and enforcement regime, as it is either satisfied by the successful launch of the share and fund markets, or not satisfied. If it is satisfied, the share issue and redemption obligations would be removed and the pre-condition becomes spent. A formal framework for a "one off" compliance assessment before giving effect to the new regulatory regime would be required.

### Milk price governance and disclosure

119. Developing a monitoring and enforcement regime for compliance with the potential milk price governance and disclosure requirements is likely to be relatively straight forward as compliance would be directly in Fonterra's control and not subject to the influence of external factors. Compliance with the potential milk price governance and disclosure requirements could be enforced as follows.

- a) **Milk price governance** – Failure to meet the compliance order could be met by financial or non-financial penalties on either the company or directors.
- b) **Milk price disclosure** – These could be integrated with the continuous disclosure requirements that apply to listed issuers. Breach of the continuous disclosure rules may give rise to civil penalties under the Securities Markets Act 1988. To the extent that the rules are in the market rules (and Fonterra is bound by them), they may be enforced by the registered exchange and the relevant securities markets authority. Penalties include public statements of breach, suspension of the securities, cancellation of the listing and monetary penalties.

### Ongoing liquidity requirements

- 120. Developing a monitoring and enforcement regime for compliance with ongoing liquidity requirements needs further consideration and would depend on the form of the liquidity requirements.
- 121. Compliance with rules that imbed the key features of the TAF proposal could be easily observed by Fonterra and the regulator and easily remedied by Fonterra.
- 122. Compliance with general ongoing requirements would be subjective and compliance with specific measures of liquidity could at times be beyond Fonterra's control. For either of these two forms of liquidity requirement, a review process could be considered.
- 123. A review process could involve a requirement for Fonterra to report to the regulator on the performance of TAF in relation to measures of liquidity. This report requirement could be integrated into market rules. Regular reporting could be required, for example bi-annually, and/or could be sought on demand by the regulator.
- 124. The report could provide explanation for any failure to comply with ongoing liquidity requirements and could include action plans for coming back into compliance within a set timeframe. The regulator could, if not satisfied by either the explanation and/or the action plan, provide an alternative action plan and/or timeframe, and/or impose financial or non-financial penalties on either the company or directors.
- 125. This approach is similar to the approach a registered exchange may take in relation to a breach of investor spread requirements, which are designed to promote some level of liquidity. The issuer would be asked why the requirements were breached, whether it was resolvable, and to devise a plan for resolving it that was approved by the exchange. The exchange could waive the requirement, and require the issuer to report on progress implementing the plan.
- 126. Further consideration would also need to be given as to whether or not Fonterra would be obliged to publicly disclose the report on liquidity under its continuous disclosure obligations in relation to the market rules for the share and fund markets.

### Appropriate regulator

- 127. The potential regulatory tools relating to milk price governance and disclosure and ongoing liquidity requirements are intended to support and/or strengthen Fonterra's incentives to ensure that the share and fund markets are sufficiently liquid and produce efficient prices.

128. Given that the potential regulatory tools relate directly to the performance of the share and fund markets, it may be appropriate to consider the relevant securities markets authority as a supplementary regulator to the Commerce Commission for some of the potential regulatory tools.

129. The Securities Commission is currently the relevant securities markets authority.

However the Financial Markets (Regulators and KiwiSaver) Bill that is currently before the Commerce Select Committee would replace the Securities Commission with a new financial markets authority. The bill (as currently drafted) provides for the new financial markets authority to have a more proactive role in relation to the performance of securities markets registered in New Zealand, and the compliance of markets with the securities markets legislation, including the Securities Markets Act and the Securities Act. The Bill also provides for market integrity provisions.

#### Questions

10. What do you consider would be an appropriate monitoring, enforcement and remedy regime for each potential regulatory tool, including milk price governance and disclosure and the three forms of ongoing liquidity requirements?

Please explain your answer.

## 6. Possible options for regulatory regime

130. Based on the potential regulatory tools outlined in Part 5, MAF has developed the following five possible options for the regulatory regime to accompany Fonterra's TAF system.

- **Option one:** Maintain the status quo, or a modified version, by continuing to require Fonterra to issue and redeem shares to and from farmers upon entry and exit.
- **Option two:** Pre-condition on the minimum fund size for the removal of share issue and redemption obligations, rules regarding milk price governance and disclosure and ongoing liquidity requirements applying to the fund and share markets.
- **Option three:** Pre-condition on the minimum fund size for the removal of share issue and redemption obligations and rules regarding milk price governance and disclosure.
- **Option four:** Pre-condition on the minimum fund size for the removal of share issue and redemption obligations and ongoing liquidity requirements applying to the fund and share markets.
- **Option five:** Pre-condition on the minimum fund size for the removal of the share issue and redemption obligations and then no additional regulation of the TAF system.

Table 1: Summary of Regulatory Tools and Options

| Regulatory tools | Issue and redemption of shares | Pre-condition on minimum fund size | Milk price governance and disclosure | Ongoing liquidity requirements |
|------------------|--------------------------------|------------------------------------|--------------------------------------|--------------------------------|
| Option one       | yes                            | no                                 | no                                   | no                             |
| Option two       | no                             | yes                                | yes                                  | yes                            |
| Option three     | no                             | yes                                | yes                                  | no                             |
| Option four      | no                             | yes                                | no                                   | yes                            |
| Option five      | no                             | yes                                | no                                   | no                             |

131. Please note that all options propose maintaining the current requirements for Fonterra to:

- accept applications by new entrants to supply milk to Fonterra as shareholding farmers, and accept applications by existing shareholding farmers to increase the volume of milk supplied;
- accept applications by existing shareholding farmers to exit Fonterra or reduce the volume of milk supplied;
- treat new entrants and existing shareholding farmers in the same circumstances in the same way;
- allow at least one-third of all milk supply contracts within a 160 kilometre range to either expire each year, or be on contract with an independent processor;
- allow dairy farmers to divert up to 20 percent of their weekly milk supply to an independent processor without having to redeem their shares;
- sell the milk vat of an exiting dairy farmer at a market price to the dairy farmer or to an independent processor;
- supply a limited volume of raw milk to independent dairy processors at a regulated price, under the Dairy Industry Restructuring (Raw Milk) Regulations.



132. In the context of Fonterra's TAF system and possible regulatory options two, three, four and five, under DIRA, Fonterra must accept supply applications from farmers. Farmers would then be responsible for ensuring compliance with Fonterra's constitution and the share standard set by the Board by purchasing or selling shares through the share and fund markets.
133. Each of the possible regulatory options is accompanied by a preliminary assessment of the impact on the strength of Fonterra's incentives to:
- a) price milk efficiently, and therefore efficiently determine distributable profit (dividend plus retentions);
  - b) provide and maintain deep, liquid, transparent and well-informed share and fund markets.
134. Note: The regulatory options posed have been developed on the basis of the TAF system as currently proposed by Fonterra, and understood by MAF (outlined in Part 3 of this document). Subsequent changes in Fonterra's TAF system could have significant impacts on the appropriateness of the possible regulatory options.
135. Please consider the possible regulatory options in light of the Government's statement: *Better Regulation, Less Regulation* ([www.treasury.govt.nz/economy/regulation/statement/index.htm](http://www.treasury.govt.nz/economy/regulation/statement/index.htm)).

## 6.1 OPTION ONE: MAINTAIN THE STATUS QUO

136. Option one involves retaining the current requirements in the DIRA for Fonterra to issue shares to farmers who are entering or increasing the volume of milksolids supplied, and to redeem shares from farmers exiting or decreasing the volume of milk supplied. The price of shares issued and redeemed is required to be the same in any particular season.

### Potential benefits of option one

137. Option one would preserve the current assurance regarding the freedom of farmers to enter and exit Fonterra by continuing to require Fonterra to issue and redeem shares. This would ensure that New Zealand dairy markets remained contestable and that the current incentives on Fonterra to price milk and shares efficiently would be maintained.
138. This option could be considered should Fonterra's TAF proposal prove unable to provide sufficient assurance that farmers would be able to buy and sell shares when they need to, and at efficient prices.

### Potential costs of option one

139. Maintaining the share issue and redemption requirements would be very likely to fundamentally impair the prospect of success of Fonterra's TAF proposal, because:
- a) shares issued and redeemed by Fonterra would remove liquidity from the share and fund markets;
  - b) trading prices in the share and fund markets would be heavily constrained by the administratively set share price because farmers could arbitrage between the two systems;
  - c) it would significantly deter participation by investors in the fund market and consequently risk inhibiting the development of both the share and fund markets.

140. Option one – maintaining the status quo – would also mean that Fonterra would be unlikely to be able to evolve its capital structure as supported by its farmer shareholders. Therefore, there is a risk that the potential benefits to the New Zealand dairy industry, and the wider New Zealand economy arising from Fonterra’s TAF proposal (as discussed in paragraph 42 in Part 4), would not be realised.

### Summary of option one

141. Option one would risk simply maintaining the status quo in terms of both the DIRA and Fonterra’s capital structure. This would be because of the high likelihood that Fonterra’s TAF proposal could not be successfully launched or sustained with share issue and redemption obligations still in place.

142. The opportunity for improvements in the efficiency of New Zealand’s dairy markets could be missed if a regulatory regime could not be implemented that would both ensure the freedom of farmers to enter and exit Fonterra and allow the opportunity for Fonterra’s TAF proposal to be implemented.

### Questions

11. Do you consider that option one – maintaining the status quo – would achieve the objectives of ensuring the freedom of farmers to enter and exit Fonterra and allowing the opportunity for the TAF proposal to be implemented?

Please explain your answer.

## 6.2 OPTION TWO: PRE-CONDITION FOR THE REMOVAL OF SHARE ISSUE AND REDEMPTION OBLIGATIONS, RULES GOVERNING MILK PRICE DETERMINATION AND DISCLOSURE AND ONGOING LIQUIDITY REQUIREMENTS

143. Option two includes:

- a) the pre-condition for the removal of share issue and redemption obligations. The pre-condition would be for the fund to be a minimum size of between NZ\$500 million and NZ\$900 million;
- b) rules regarding milk price governance and the disclosure of information relating to the milk price;
- c) some ongoing liquidity requirements applying to the share and fund markets, to ensure that liquidity was maintained over time.

### Potential benefits of option two

#### *Preconditions:*

144. Including the pre-condition in option two would provide reasonable assurance that the share and fund markets would be adequately deep, liquid, transparent and well-informed

before the share issue and redemption obligations were removed. This is because meeting the pre-condition on the minimum fund size would mean that Fonterra would need to ensure that the TAF system would meet an extensive range of other conditions (refer to Part 5, paragraph 70).

145. The overall impact of the pre-condition on the minimum fund size would be to ensure that the TAF system provided for freedom of farmer entry and exit before the share issue and redemption obligations would be removed.

*Milk price governance and disclosure:*

146. The regulation of milk price governance and disclosure (refer to Part 5, section 5.2) would provide additional assurance that Fonterra's own commercial incentives to price milk efficiently were strengthened and maintained over time. Regulating milk price governance and disclosure would also support the confidence of farmer shareholders and fund investors in the milk price setting process. This would support the maintenance of depth and liquidity in the share and fund markets over time and, therefore, support freedom of farmer entry and exit.

147. Regulating milk price governance and disclosure would not likely undermine the development of the share and fund markets as it would support, rather than deter, the confidence of farmer shareholders and fund investors. While Fonterra intends to introduce some of the potential milk price governance and disclosure requirements on its own accord, regulation would underpin this outcome.

*Ongoing liquidity requirements:*

148. Including ongoing liquidity requirements (as discussed in Part 5, section 5.3) would strengthen Fonterra's commercial incentives to maintain the liquidity of the share and fund markets over time. The ongoing liquidity requirements would provide greater assurance that Fonterra would continue to take actions to ensure that sufficient liquidity were maintained in the share and fund markets otherwise it would be in breach of the regulatory provisions and penalties may apply. The ongoing liquidity requirements would therefore provide greater assurance that the TAF system would provide the freedom of farmers to enter and exit Fonterra over time.

149. The ongoing liquidity requirements and regulation of milk price governance and disclosure would be mutually reinforcing. For example, if Fonterra were to over-price milk at the expense of lower distributable profit (dividend plus retentions), the demand for fund securities would decline, prices would fall in both the share and fund markets, investors would begin exiting the fund, and it would become increasingly difficult for Fonterra to comply with the ongoing liquidity requirements. Conversely, the obligation to maintain liquidity in the share market would reinforce Fonterra's incentives to price milk efficiently, failing which the liquidity obligations would likely not be satisfied.

*Other benefits*

150. Compared with the status quo, option two greatly reduces the risk of Fonterra's TAF proposal not being able to be implemented. Therefore the potential benefits to the New Zealand dairy industry and the wider New Zealand economy of Fonterra's TAF proposal would more likely be realised, including the following benefits.
- a) Improved transparency around Fonterra's performance, and therefore strengthened incentives for Fonterra to operate efficiently and improve its performance and profitability. The level of transparency required under the Securities Markets Act in

relation to the share and fund markets would be significant higher than currently required of Fonterra.

- b) Improved clarity around farmers' two roles in Fonterra, as milk suppliers and shareholders, and a much clearer distinction between the returns from the two respective roles. This would support better information for farmers when making on-farm milk production decisions and off-farm capital investment decisions.
- c) Strengthened commercial incentives on Fonterra to ensure efficient pricing of milk and determination of distributable profit (dividend plus retentions). This would support allocative efficiency in terms of the volume of resources used to produce milk in New Zealand and the marginal allocation of milk to the processor that can return the highest value for the milk.
- d) Providing shareholders with real time information on the value of shares and Fonterra's performance compared with the status quo, where shares are administratively valued only once per season.
- e) Providing another mechanism by which Fonterra would have the opportunity to raise, through farmers and the fund, additional capital to pursue growth opportunities in the future.
- f) Contributing to the development of New Zealand's capital markets.

#### Potential costs of option two

151. Moving from the status quo – issue and redemption obligations – to Fonterra's TAF proposal does give rise to the risk that there will be less certainty for farmers regarding their ability to buy and sell shares at reasonable prices in the share and fund markets.

152. Option two proposes three potential regulatory tools that aim to mitigate this risk.

- a) Not removing the share issue and redemption obligations until the pre-condition has been met, to ensure that the share and fund markets are sufficiently deep and liquid at the outset.
- b) Introducing milk price governance and disclosure requirements on Fonterra to support confidence in the milk price setting process and strengthen the incentives for efficient milk pricing.
- c) Introducing some ongoing liquidity requirements regarding the share and fund markets to support and/or strengthen the incentives on Fonterra to ensure that the share and fund markets would continue to provide for farmers to buy and sell shares at efficient prices.

153. The cost of regulating for milk price governance and disclosure would be predominately administrative and unlikely to be overly burdensome on Fonterra.

154. Meeting the proposed ongoing liquidity requirements may at times be beyond Fonterra's control as in some circumstances external factors could drive the performance of the share and fund markets rather than the actions or inactions of Fonterra. Therefore, the ongoing liquidity requirements could have unintended consequences of introducing uncertainty and impeding the development of the TAF system.

155. The cost of regulating for some forms of ongoing liquidity requirements is likely to be higher than other forms. This is because of the level of judgement involved in the potential general requirements and the possibility that other external factors may make it difficult for Fonterra to meet the potential specific measures of liquidity at all times. This would mean that regular monitoring and reporting on the liquidity of the TAF system

could be required for assessing compliance with the potential general and/or specific ongoing liquidity requirements.

156. The two regulatory tools regarding milk price governance and disclosure and ongoing liquidity requirements are mutually supportive and reinforce each other. Including both regulatory tools could introduce more regulation than may be strictly necessary to ensure efficient milk pricing and adequate liquidity in the share and fund markets. However, the potential benefits and costs of any mutually reinforcing regulation warrant consideration.
157. Regulating for some forms of ongoing liquidity requirements, and to a lesser extent rules regarding milk price governance and information disclosure, could risk reducing the flexibility for Fonterra's TAF system to evolve over time. It could, therefore, be necessary to reassess the regulatory regime should the TAF system significantly change before the expiry of the DIRA regulatory regime (refer to Part 2, paragraph 29).

### Summary of option two

158. By requiring the precondition on the minimum fund size and milk price governance and disclosure requirements to be satisfied before the removal of the share issue and redemption obligations, option two would provide a high level of assurance that the TAF system would provide an adequate mechanism for farmers to buy and sell shares in a timely manner and at efficient share prices. The addition of ongoing liquidity requirements would raise the level of assurance.
159. Option two provides an alternative regulatory mechanism to the status quo that would ensure both the freedom of farmers to enter and exit and allow for Fonterra's TAF proposal to be implemented and the potential benefits of the TAF proposal have a good chance of being realised.

### Questions

12. Do you consider that option two – pre-condition, rules regarding milk price governance and disclosure and some ongoing liquidity requirements – would achieve the objectives of ensuring the freedom of farmers to enter and exit Fonterra and allowing the opportunity for the TAF proposal to be implemented?

Please explain your answer.

## 6.4 OPTION THREE: PRE-CONDITION FOR THE REMOVAL OF SHARE ISSUE AND REDEMPTION OBLIGATIONS AND RULES GOVERNING MILK PRICE DETERMINATION AND DISCLOSURE

160. Option three includes:
- a) the pre-condition for the removal of share issue and redemption obligations. The pre-condition would be for the fund to be a minimum size of between NZ\$500 million and NZ\$900 million;
  - b) rules regarding milk price governance and the disclosure of information relating to the milk price.

### Potential benefits of option three

161. Option three would provide the same benefits as option two in the following respects.

- a) The pre-condition would provide assurance that the share and fund markets would need to be adequately deep, liquid, transparent and well-informed before the share issue and redemption obligations would be removed.
- b) Rules regarding milk price governance and disclosure that would strengthen Fonterra's commercial incentives to price milk efficiently.
- c) The milk price governance and disclosure rules would also strengthen confidence in the milk price setting process and, therefore, support depth and liquidity in both the share and fund markets.
- d) Allow the potential for Fonterra's TAF proposal to contribute to improvements in the efficiency of the New Zealand dairy industry and benefits to the wider New Zealand economy.

### Potential costs of option three

162. Option three also introduces the same risks as option two with regards to farmers moving into a situation where the ability to buy and sell shares at reasonable prices is less certain than the status quo. Option three mitigates this risk through the pre-condition and rules regarding milk price governance and disclosure.

163. The costs of regulation would be lower under option three than option two. This is because option three would not involve any ongoing liquidity requirements that would be likely to require regular monitoring and reporting. The administration costs associated with milk price governance and disclosure would be the same as option two.

164. However, because option three does not directly regulate for the ongoing liquidity in the share and fund markets, the strength of the incentives on Fonterra to ensure that the liquidity in the fund and share markets is maintained over time may not be as strong as in option two.

### Summary

165. Compared with the status quo, option three provides an alternative regulatory mechanism for ensuring the freedom of farmers to enter and exit, and allows for Fonterra's TAF proposal to be implemented.

166. Compared with option two, option three does not regulate for ongoing liquidity in the share and fund markets, and, therefore, provides relatively less assurance that the share and fund markets would remain sufficiently liquid to provide for farmers to buy and sell shares in a timely manner. Option three therefore provides relatively less assurance than option two that the freedom of farmers to enter and exit Fonterra would be maintained over time.

### Questions

13. Do you consider that option three – pre-condition and rules regarding milk price governance and disclosure – would achieve the objectives of ensuring the freedom of farmers to enter and exit Fonterra and allowing the opportunity for the TAF proposal to be implemented?

Please explain your answer.

## 6.3 OPTION FOUR: PRE-CONDITION FOR THE REMOVAL OF SHARE ISSUE AND REDEMPTION OBLIGATIONS AND ONGOING LIQUIDITY REQUIREMENTS

167. Option four includes:

- a) the pre-condition for the removal of share issue and redemption obligations. The pre-condition would be for the fund to be a minimum size of between NZ\$500 million and NZ\$900 million;
- b) some ongoing liquidity requirements applying to the share and fund markets, to ensure that liquidity would be maintained.

168. Option four is the same as option two except that there would be no rules regarding milk price governance or disclosure.

### Potential benefits of option four

169. Option four would provide the same benefits as option two in the following respects.

- a) The pre-condition would provide assurance that the share and fund markets would be adequately deep, liquid, transparent and well-informed before the share issue and redemption obligations would be removed.
- b) Ongoing liquidity requirements would support and/or strengthen Fonterra's incentives to maintain the liquidity of the share and fund markets over time.
- c) Ongoing liquidity requirements would support Fonterra's own commercial incentives to price milk efficiently.
- d) It would allow the potential for Fonterra's TAF proposal to contribute to improvements in the efficiency of the New Zealand dairy industry and benefits to the wider New Zealand economy.

### Potential costs of option four

170. Option four also introduces the same risks as options two and three with regards to farmers moving into a situation where the ability to buy and sell shares at reasonable prices is less certain than the status quo. Option four mitigates this risk through the pre-condition and ongoing liquidity requirements.

171. However, option four does not directly regulate milk price governance or disclosure. Therefore, confidence in the milk price setting process and the incentives placed on Fonterra to price milk efficiently may not be as strong as in option two or three. The administrative costs associated with regulations of milk price governance and disclosure would not exist under option four.

172. However, the costs of regulating for ongoing liquidity requirements would still exist. The risks of over-regulation would be only marginally lower under option four than option two, as there would no requirements regarding milk price governance and disclosure.

### Summary

173. Compared with the status quo, option four provides an alternative regulatory mechanism for providing assurance of the continuing freedom of farmers to enter and exit and allows for Fonterra's TAF proposal to be implemented.

174. Compared with option two, option four does not regulate for milk price governance and disclosure and therefore provides relatively less assurance that Fonterra's TAF proposal would provide an adequate mechanism for farmers to buy and sell shares in a timely manner and at efficient share prices. Option four, therefore, provides relatively less assurance than option two that the freedom of farmers to enter and exit Fonterra would be maintained over time.

#### Questions

14. Do you consider that option four – pre-condition and ongoing liquidity requirements – would achieve the objectives of ensuring the freedom of farmers to enter and exit Fonterra and allowing the opportunity for the TAF proposal to be implemented?

Please explain your answer.

## 6.4 OPTION FIVE: PRE-CONDITION FOR THE REMOVAL OF SHARE ISSUE AND REDEMPTION OBLIGATIONS AND THEN NO REGULATION OF THE TAF SYSTEM

175. Option five includes:

- a) the pre-condition for the removal of share issue and redemption obligations. The pre-condition would be for the fund to be a minimum size of between NZ\$500 million and NZ\$900 million;
- b) no additional regulation of the TAF system.

### Potential benefits of option five

176. Option five would provide the benefit that the pre-condition would give assurance that the share and fund markets would need to be adequately deep, liquid, transparent and well-informed before the share issue and redemption obligations would be removed.

177. Option five would also allow the potential for Fonterra's TAF proposal to contribute to improvements in the efficiency of the New Zealand dairy industry and benefits to the wider New Zealand economy.

178. Option five does not provide the benefits of option two and four in terms of regulating for ongoing liquidity to support and/or strengthen Fonterra's incentives to ensure that liquidity of the share and fund markets is maintained over time.

179. Option five does not provide the benefits of option two and three in terms of regulating for milk price governance and disclosure to strengthen confidence in the milk price setting process and strengthen Fonterra's incentives to ensure efficient milk pricing (therefore efficient determination of the dividend and retentions) over time.

### Potential costs of option five

180. Option five introduces the same risks as options two, three and four with regards to farmers moving into a situation where the ability to buy and sell shares at reasonable prices is less certain than the status quo. Option five mitigates this only through the pre-



condition on the minimum fund size and, therefore, the risk is mitigated to a lesser extent than in options two, three or four.

181. Option five provides the least assurance that the TAF system would provide and maintain adequately liquidity and efficient pricing of milk to ensure the freedom of farmers to enter and exit Fonterra. This is because, once the pre-condition has been met, option five relies solely on Fonterra's commercial incentives to price milk efficiently and promote liquidity of the share and fund markets, and to maintain both of these over time.

182. The costs of regulation would be lower than under options one, two, three or four. This is because once the pre-condition is met, there would be no further regulation of the TAF system, and share issue and redemption obligations that are currently regulated under the status quo would be removed.

### Summary

183. Compared with the status quo, option five allows for Fonterra's TAF proposal to be implemented, and proposes that no alternative regulatory mechanism is necessary for ensuring the freedom of farmers to enter and exit under the TAF system.

184. Compared with options two, three and four, option five does not regulate for either the ongoing liquidity in the share and fund markets or milk price governance and disclosure, and, therefore, provides relatively less assurance that Fonterra's TAF proposal would provide for farmers to buy and sell shares in a timely manner. Option five therefore provides less assurance that the freedom of farmers to enter and exit Fonterra would be maintained.

### Questions

15. Do you consider that option five – pre-condition only – would achieve the objectives of ensuring the freedom of farmers to enter and exit Fonterra and allowing the opportunity for the TAF proposal to be implemented?

Please explain your answer.

## 7. Summary of document

185. In summary, the Government's policy objectives are to ensure the freedom of farmers to enter and exit Fonterra, and to allow the opportunity for Fonterra's TAF proposal to be implemented.

186. MAF considers that the two key elements for the TAF proposal to deliver the freedom of farmers to enter and exit Fonterra are the efficient pricing of milk (and therefore efficiently determined dividend plus retentions), and that the share and fund markets are adequately deep, liquid, well-informed, transparent and fungible.

187. The stronger that Fonterra's commercial incentives are to price milk efficiently and maintain the liquidity of the share and fund markets over time, the less regulation would be required to support and/or strengthen the integrity of the milk price setting process, and the liquidity of the share and fund markets.

188. MAF considers that the strength of Fonterra's incentives to price milk efficiently and maintain the liquidity of the share and fund markets is linked to the extent to which Fonterra would be likely to need the share and fund markets to raise new capital in the future. The greater the extent to which Fonterra intends to use the fund and share markets for capital raising in the future, the stronger Fonterra's commercial incentives would be to ensure efficient milk pricing and to maintain the liquidity and integrity of the share and fund markets over time.

189. MAF has developed three potential regulatory tools that, in the context of the TAF system, would strengthen Fonterra's commercial incentives to price milk efficiently, and maintain liquidity in the share and fund markets. These potential regulatory tools include:

- a) a pre-condition for the removal of share issue and redemption obligations. The pre-condition would be for the fund to be a minimum size of between NZ\$500 million and NZ\$900 million;
- b) rules regarding milk price governance and the disclosure of information relating to the milk price;
- c) some ongoing liquidity requirements applying to the share and fund markets to ensure that liquidity was maintained.

190. This document poses five possible regulatory options that draw on the potential regulatory tools.

- **Option one:** Maintain the status quo by continuing to require Fonterra to issue and redeem shares from farmers on entry and exit.
- **Option two:** Pre-condition for the removal of share issue and redemption obligations, rules regarding milk price governance and disclosure, and some ongoing liquidity requirements applying to the fund and share markets.
- **Option three:** Pre-condition for the removal of share issue and redemption obligations, and rules regarding milk price governance and disclosure.
- **Option four:** Pre-condition for the removal of share issue and redemption obligations, and some ongoing liquidity requirements applying to the fund and share markets.
- **Option five:** Pre-condition for the removal of the share issue and redemption obligations, and then no additional regulation of the TAF system.

191. At this stage, MAF considers that it is possible that the TAF proposal could provide the freedom for farmers to enter and exit Fonterra. However, it is likely to be necessary to employ a range of the potential regulatory tools to provide sufficient assurance that the TAF proposal would deliver the freedom of farmers to enter and exit Fonterra and that this would be maintained over time. This preliminary view may change in response to the provision of additional information and/or the arguments presented by submitters on this consultation document.

192. Finally, it should be noted that the Government does not have any decision rights regarding Fonterra's capital structure or corporate form, as these decisions are the responsibility of the shareholders of Fonterra. The Government's interest is in ensuring the efficiency of New Zealand dairy markets and the freedom of farmers to enter and exit Fonterra. In this respect, the Government, with the concurrence of Parliament, has decision rights regarding the content of the DIRA and other relevant legislation.

#### Questions

16. Do you agree with the potential benefits and costs that are outlined under options one to five?

17. Which, if any, regulatory tools and regulatory options do you consider would be necessary to provide sufficient assurance that the TAF proposal would provide for the freedom of farmers to enter and exit Fonterra, and that this would be maintained over time?

18. In the context of Fonterra's TAF proposal, what additional or alternative regulatory tools or regulatory options do you consider would be necessary to support the freedom of farmers to enter and exit Fonterra?

Please explain your answers.

## 8. Summary of Questions

Specific questions summarised below have been posed to submitters, but these are only suggestions.

For more information on making a submission, please refer to page 1 of this document. Note that the closing date for submissions is Monday 7 March 2011, 5pm.

Table 1: Summary of Regulatory Tools and Options

| Regulatory tools | Issue and redemption of shares | Pre-condition on minimum fund size | Milk price governance and disclosure | Ongoing liquidity requirements |
|------------------|--------------------------------|------------------------------------|--------------------------------------|--------------------------------|
| Option one       | yes                            | no                                 | no                                   | no                             |
| Option two       | no                             | yes                                | yes                                  | yes                            |
| Option three     | no                             | yes                                | yes                                  | no                             |
| Option four      | no                             | yes                                | no                                   | yes                            |
| Option five      | no                             | yes                                | no                                   | no                             |

### Summary of Questions

1. Do you agree with the problem definition “to identify a regulatory regime that both provides for both the freedom of farmers to enter and exit Fonterra and allows the opportunity for the TAF proposal to be implemented”?
2. Do you agree that efficient milk pricing and deep, liquid, transparent, well-informed and fungible share and fund markets are necessary and sufficient elements for ensuring the freedom of farmers to enter and exit Fonterra?
3. In the context of Fonterra’s TAF proposal, what additional or alternative key elements do you consider to be necessary for ensuring the freedom of entry and exit for farmers?
4. MAF has proposed that a pre-condition on the minimum size of the fund is set at a value of between NZ\$500 million and NZ\$900 million. What value do you consider would be the most appropriate for a pre-condition on the minimum size of the fund?
5. Do you consider that once the pre-condition on the minimum size of the fund is met, there would be sufficiently liquidity in the share and fund markets to ensure the freedom of farmers to enter and exit Fonterra at the outset?
6. Do you consider that regulation of milk price governance and disclosure would be necessary to strengthen confidence in the milk price setting process, and, therefore, support the liquidity of the share and fund markets?
7. Do you consider that it would be necessary for the Trustee of the fund or an independent body to nominate candidates to be the independent members of the Milk Price Panel?
8. Do you consider that regulation of ongoing liquidity requirements would be necessary to strengthen Fonterra’s commercial incentives to ensure that the share and fund markets remain sufficiently liquid over time?
9. What form or forms of ongoing liquidity requirements do you consider would be most appropriate for ensuring the ongoing liquidity of the share and fund markets?

10. What do you consider would be an appropriate monitoring, enforcement and remedy regime for the potential regulatory tools, including milk price governance and disclosure and the three forms of ongoing liquidity requirements?
11. Do you consider that option one – maintaining the status quo – would achieve the objectives of ensuring the freedom of farmers to enter and exit Fonterra and allowing the opportunity for the TAF proposal to be implemented?
12. Do you consider that option two – pre-condition, rules regarding milk price governance and disclosure and some ongoing liquidity requirements – would achieve the objectives of ensuring the freedom of farmers to enter and exit Fonterra and allowing the opportunity for the TAF proposal to be implemented?
13. Do you consider that option three – pre-condition and rules regarding milk price governance and disclosure – would achieve the objectives of ensuring the freedom of farmers to enter and exit Fonterra and allowing the opportunity for the TAF proposal to be implemented?
14. Do you consider that option four – pre-condition and ongoing liquidity requirements – would achieve the objectives of ensuring the freedom of farmers to enter and exit Fonterra and allowing the opportunity for the TAF proposal to be implemented?
15. Do you consider that option five – pre-condition only – would achieve the objectives of ensuring the freedom of farmers to enter and exit Fonterra and allowing the opportunity for the TAF proposal to be implemented?
16. Do you agree with the potential benefits and costs that are outlined under options one to five?
17. Which, if any, regulatory tools and regulatory options do you consider would be necessary to provide sufficient assurance that the TAF proposal would provide for the freedom of farmers to enter and exit Fonterra, and that this would be maintained over time?
18. In the context of the TAF proposal, what additional or alternative regulatory tools do you consider would be necessary to support the freedom of farmers to enter and exit Fonterra?

**Please explain your answers.**

## **Background Document 8**

Review of Raw Milk Regulations – MAF Discussion Paper



# Review of Raw Milk Regulations

MAF Discussion Paper No: 2011/09

ISBN 978-0-478-38468-0 (online)  
ISSN 2230-2816 (online)

July 2011



Ministry of Agriculture and Forestry  
Te Manatū Ahuwhenua, Ngāherehere



## Disclaimer

Every effort has been made to ensure the information in this report is accurate.

MAF does not accept any responsibility or liability whatsoever for any error of fact, omission, interpretation or opinion that may be present, however it may have occurred.

Requests for further copies should be directed to:

Regulation & Competition Team  
Sector Performance Policy  
Ministry of Agriculture and Forestry  
PO Box 2526  
Wellington 6140

Telephone: 0800 00 83 33

Email: [dairyconsultation@maf.govt.nz](mailto:dairyconsultation@maf.govt.nz)

This publication is also available on the MAF website at  
[www.maf.govt.nz/news-resources/consultations](http://www.maf.govt.nz/news-resources/consultations)

**© Crown Copyright, July 2011 - Ministry of Agriculture and Forestry**



| <b>Contents</b>                                       | <b>Page</b> |
|---|-------------|
| <b>1 Introduction</b>                                 | <b>1</b>    |
| <b>2 Information for Submitters</b>                   | <b>2</b>    |
| 2.1 Posting and Release of Submissions                | 2           |
| 2.2 Privacy   | 2           |
| <b>3 Background</b>                                   | <b>3</b>    |
| 3.1 Wider regulatory context                          | 3           |
| 3.2 Raw Milk Regulations                              | 4           |
| 3.3 Demand for regulated raw milk                     | 4           |
| <b>4 Objectives of the Raw Milk Regulations</b>       | <b>6</b>    |
| 4.1 Entrance pathway                                  | 6           |
| 4.2 Competition in domestic dairy product markets     | 6           |
| <b>5 Regulatory Design Characteristics</b>            | <b>7</b>    |
| <b>6 Issues with the Current Raw Milk Regulations</b> | <b>8</b>    |
| 6.1 Issues considered as being resolved               | 8           |
| 6.2 Issues outside the scope of this review           | 8           |
| 6.3 Issues considered in this review                  | 8           |
| <b>7 Potential Options</b>                            | <b>10</b>   |
| <b>8 Summary of Questions</b>                         | <b>18</b>   |
| <b>Appendix 1</b>                                     | <b>21</b>   |



# 1 Introduction

During 2007 and 2008, MAF conducted a review of the Dairy Industry Restructuring (Raw Milk) Regulations 2001 (Raw Milk Regulations). Following that review, the Raw Milk Regulations were amended to:

- replace the default pricing formula for raw milk available under the Raw Milk Regulations with a price of “farm gate milk price plus \$0.10 per kilogram of milksolids”;
- set the volume of milk that Fonterra is required to supply at up to 600M litres; and
- introduce a pro rata quantity rationing rule that would be employed in the event of excess demand for regulated raw milk.

The Dairy Industry Restructuring Act 2001 has since been amended to:

- allow, but not require, the Minister of Agriculture to use an auction system or any other method for determining the price and allocation of regulated raw milk; and
- set new market share thresholds for expiry of the Dairy Industry Restructuring Act and introduce a process for a review of the state of competition in dairy markets once the new thresholds are met.

In October 2010, the Minister of Agriculture announced that a subsequent review of the Raw Milk Regulations would commence in March 2011 to ensure that the Raw Milk Regulations remain fit for purpose.

Following initial stakeholder engagement in March 2011, this consultation document seeks stakeholder feedback on a number of issues related to possible improvements to the current working of the Raw Milk Regulations.

Dairy industry stakeholders will be aware that, in addition to this review of Raw Milk Regulations, MAF has been undertaking work to:

- design a regulatory regime to accommodate Fonterra’s proposal on Trading Among Farmers that meets government’s policy objectives; and
- better understand Fonterra’s farm gate milk price setting mechanism.

These issues, although related to the review of the Raw Milk Regulations, are outside the scope of this consultation document. Despite being progressed separately, it is MAF’s intention not to proceed with recommending any regulatory amendments to the Raw Milk Regulations until work on Fonterra’s farm gate milk price setting mechanism is completed and the wider implications can be fully considered.

Dairy industry stakeholders will also be aware that MAF is considering issues arising from farm gate milk sales by farmers direct to consumers. These issues are subject to a separate consultation process that will be undertaken in the near future. These issues are not related to the Dairy Industry Restructuring Act 2001 and the Raw Milk Regulations.

## 2 Information for Submitters

Written submissions on the issues raised in the consultation paper are invited from all interested parties. The closing date for submissions is Friday 2 September 2011, 5pm. Submissions should be directed to:

Regulation & Competition Team  
Sector Performance Policy  
Ministry of Agriculture and Forestry  
PO Box 2526  
Wellington 6140

Delivery address; Level 10, Pastoral House, 25 The Terrace, Wellington

Email: [dairyconsultation@maf.govt.nz](mailto:dairyconsultation@maf.govt.nz)

Submissions will be considered by officials in the preparation of advice to Ministers. Specific questions have been posed to submitters, but these are only suggestions. Submissions on all issues that are within the scope of this consultation document will be considered. Submissions backed by evidence and argument will carry more weight than statements of opinion.

### 2.1 POSTING AND RELEASE OF SUBMISSIONS

MAF may post all or parts of any written submission on its website at [www.maf.govt.nz](http://www.maf.govt.nz). Unless you clearly specify otherwise in your submission, MAF will consider you to have consented to posting by making a submission.

In any case, content of submissions provided to MAF are likely to be subject to public release under the Official Information Act 1982 following requests to MAF (including via email). Please advise if you have any objection to the release of any information contained in a submission, and in particular, which part(s) you consider should be withheld, together with the reason(s) for withholding the information. MAF will take into account all such objections when responding to requests for copies and information on submissions to this document under the Official Information Act 1982.

### 2.2 PRIVACY

The Privacy Act 1993 establishes certain principles with respect to the collection, use, and disclosure of information about individuals by various agencies including MAF. It governs access by individuals to information about themselves held by agencies. Any personal information you supply to MAF in the course of making a submission will be used by MAF only in conjunction with the matters covered by this document. Please clearly indicate in your submission if you do not wish your name to be included in any summary of submissions that MAF may publish.

## 3 Background

### 3.1 WIDER REGULATORY CONTEXT

Upon its creation, Fonterra collected approximately 96 percent of New Zealand's milk production. Given this dominant market position it was necessary for government to regulate the behaviour of Fonterra in relation to its farmers and potential competitors in New Zealand dairy markets.

The regulatory regime is set out in Subpart 5 of the Dairy Industry Restructuring Act 2001 (DIRA) and the Dairy Industry Restructuring (Raw Milk) Regulations 2001. It consists of a suite of pro-competition provisions that have the purpose of promoting the efficient operation of New Zealand dairy markets by ensuring:

- contestability in the market for farmers' milk; and
- that independent processors are able to obtain raw milk and other dairy goods and services, necessary for them to compete in dairy markets.

Contestability in the market for farmers' milk (i.e. the farm gate milk market) and independent processors' ability to obtain raw milk directly from farmers are provided through DIRA's requirement that Fonterra operate an open entry and exit regime. This means that Fonterra must accept all milk supply offers from dairy farmers in New Zealand and allow relatively costless exit from the co-operative upon the request of farmer-shareholders. These requirements ensure that Fonterra cannot "lock in" its farmer-suppliers and, as a consequence, Fonterra faces commercial incentives to pay efficient prices for farmers' milk and capital invested in Fonterra.

The DIRA, through the Raw Milk Regulations, also compels Fonterra to make available up to five percent of the raw milk it collects from farmers to independent processors at either an agreed or regulated price.

The entire regulatory regime is, however, transitional in nature. It was designed to expire at a point where the dairy markets had become workably competitive. At this point, special regulatory provisions, beyond the general competition law, would become unnecessary. To this extent, the DIRA contains sunset clauses.

The DIRA pro-competition provisions also work in parallel with, and are supplementary to, the general competition provisions of the Commerce Act 1986.

## 3.2 RAW MILK REGULATIONS

The key provisions of the Raw Milk Regulations attempt to replicate the elements of a private contract. To this end, the Raw Milk Regulations set out quantity, price and terms and conditions for the sale of raw milk by Fonterra to independent processors. The key provisions of the Raw Milk Regulations currently are:

|                          |   |
|--------------------------|---|
| Access                   | Each independent processor has access to a maximum of 50 million litres of regulated milk (with the exception of Goodman Fielder who can access up to 250 million litres) in a season for as long as the Raw Milk Regulations are in place.   |
| Total Quantity           | Up to 600 million litres of regulated milk can be accessed by all independent processors from Fonterra in a season. Should the total demand from independent processors exceed the total volume available under the Raw Milk Regulations, a pro rata quantity rationing rule would apply, whereby all independent processors would be scaled back.  |
| Regulated Price          | The regulated price is Fonterra's farm gate milk price plus 10 cents per kilogram of milk solids. The farm gate milk price reflects the price Fonterra pays its farmers. The additional 10 cents captures the extra cost to Fonterra of providing independent processors with the option of "flattening" the profile of the regulated milk.   |
| "October rule"           | The quantity of regulated milk available to an independent processor in each of the months in the dairy season (except for winter months) is set at 110 percent of the quantity of regulated milk taken by that independent processor during the month of October.  |
| Forecasting rules        | The Raw Milk Regulations require independent processors to provide a forecast to Fonterra three months prior to delivery. This forecast is then confirmed seven days prior to delivery, with a plus or minus 40 percent margin. The forecast is confirmed again one day in advance of delivery with a plus or minus 20 percent margin.<br>An independent processor is only required to pay for what it takes (not what it said earlier it would take), within the bounds of the above requirements. |
| Payment scheduling rules | Regulated price is currently based on an ex-post pricing system, as the key component of the regulated price (the farm gate price that Fonterra pays its farmers) is not set until August/September after the close of the dairy season in May. This results in a "wash-up" payment the following season.   |

## 3.3 DEMAND FOR REGULATED RAW MILK

As shown in the table below, there has been a steadily increasing take of regulated milk by independent processors<sup>1</sup>.

| Season  | Millions of Litres |
|---------|--------------------|
| 2001/02 | 300                |
| 2002/03 | 302                |
| 2003/04 | 299                |
| 2004/05 | 320                |
| 2005/06 | 353                |
| 2006/07 | 333                |
| 2007/08 | 408                |
| 2008/09 | 441                |
| 2009/10 | 466                |
| 2010/11 | 510                |

<sup>1</sup> These volumes are subject to variation depending on what is included in or excluded from the calculation, i.e. winter milk, milk taken outside of the Raw Milk Regulations etc.

Independent processors accessing regulated milk tend to fall into one of the following categories:

- Vertically integrated independent processors, who are in the business of sourcing milk from farmers. In 2010/11 dairy season, there were five such processors, which together, took about 237 million litres of regulated milk, i.e. 46 percent of the total regulated milk accessed under the Raw Milk Regulations, which equates to approximately 1.5 percent of the total milk collected in New Zealand in 2010/11 season.
- Dairy food and beverage companies, who choose not to source their milk supply directly from farmers, instead relying on the wholesale supply of raw milk available under the Raw Milk Regulations. In 2010/11 dairy season, Goodman Fielder (Fonterra's key competitor in the domestic dairy product market) accessed approximately 213 million litres of regulated milk. The other 20 dairy food and beverage companies together took about 60 million litres of regulated milk in 2010/11 season, this accounted for approximately 12 percent of the total volume of regulated milk, which equates to approximately 0.38 percent of the total milk collected in New Zealand.

There have been a number of disputes concerning the definition of "independent processor". An independent processor is currently defined in DIRA s 5(1) as "a processor of milk or milk solids or dairy products who is not an associated person of Fonterra". The disputes have been around the issue of whether an independent processor can contract a third party to do the initial processing of the milk. The Commerce Commission made a determination, which has to date been upheld by the Court of Appeal, that the term "independent processor" does allow an independent processor the freedom to contract a third party to perform some or all of the production process for milk, milk solids or dairy products. The Commission considers that this interpretation best gives effect to the purpose of promoting the efficient operation of dairy markets in New Zealand. MAF understands that Fonterra is seeking leave to appeal this decision.

## 4 Objectives of the Raw Milk Regulations

The Raw Milk Regulations are one component of the pro-competitive regulatory measures to support the overall purpose of DIRA of promoting the efficient operation of dairy markets.

The objectives of the Raw Milk Regulations are to:

- provide for an entrance pathway for independent processors into the farm gate milk market; and
- support competition in the domestic dairy product markets.

### 4.1 ENTRANCE PATHWAY

Contestability for milk supply at the farm gate encourages Fonterra to set efficient prices for milk and shares. A necessary condition for contestability is low barriers to entry and expansion.

Independent processors who are in the business of sourcing milk directly from farmers tend to rely on wholesale milk supply (i.e. milk sourced from another processor) at the initial stages of their operations as they find themselves in a “catch 22” situation. That is, farmers want to see a processing plant before committing supply and financiers want an assurance of sufficient milk supply before providing the finance for plant construction. To create potential barrier to entry for new independent processors looking to enter the farm gate market, Fonterra could choose not to supply wholesale milk to these processors.

By providing new entrants to the farm gate market with a critical mass of raw milk on regulated terms, the Raw Milk Regulations provide independent processors with an entrance pathway into the farm gate market.

While addressing the “catch 22” situation, the entrance pathway should also encourage independent processors to source milk on standard commercial terms directly from farmers. This ensures that investment in dairy processing capacity is efficient over the longer term.

### 4.2 COMPETITION IN THE DOMESTIC DAIRY PRODUCT MARKETS

Fonterra’s dominant position in the wholesale milk market may also harm competition in downstream domestic dairy product markets.

To support downstream competition in domestic consumer product markets, Fonterra was required to divest its NZ Dairy Foods business (now Goodman Fielder) and undertake to provide the divested entity with access of up to 250 million litres of regulated milk a season. This allocation was a negotiated outcome between government and the promoters of the dairy merger.

The Raw Milk Regulations also protect the position of other independent dairy processors who compete in downstream dairy markets but rely on raw milk as an input. Since the Raw Milk Regulations have been in effect, a number of small dairy food and beverage companies have built their business models based on the regulated milk supply rather than having it outsourced to dairy processors or sourcing it directly from farmers.

#### Questions:

1. What objectives of the Raw Milk Regulations cited above do you agree/disagree with, and for what reasons?
2. What additional objectives, if any, do you think should be considered for the Raw Milk Regulations, and for what reasons?



## 5 Regulatory Design Characteristics

To achieve the objectives of the Raw Milk Regulations, MAF considers the following regulatory design characteristics to be desirable:

- Independent processors seeking entrance to the farm gate milk market should have access to sufficient quantity of regulated milk necessary for them to overcome the initial “catch 22” entry barrier.
- Independent processors should be encouraged to establish alternative sources of raw milk supply rather than rely on sourcing regulated milk from Fonterra on an ongoing basis.
- Access to regulated milk should be on terms that are equivalent to those on which Fonterra purchases its raw milk from farmers; this includes price, quality, product profile, etc. To the extent that regulated milk differs from raw milk Fonterra purchases from farmers (e.g. regulated milk is of a flatter profile and of guaranteed quality) the terms for sourcing regulated milk should fairly reflect these differences.
- The design of the Raw Milk Regulations should be mindful of the economic costs to Fonterra of providing regulated milk and the potential under-utilised capacity which may affect its incentives to invest.
- The Raw Milk Regulations should be consistent with the general principles of good regulatory practice of promoting regulatory certainty, predictability of regulatory outcomes, as well as transparency, cost-effectiveness and timeliness of regulatory processes.

### Questions:

3. What regulatory design characteristics for the Raw Milk Regulations do you agree/disagree with, and for what reasons?
4. Do you consider that some of the above regulatory design characteristics are not desirable? If so, which ones and why?
5. What additional regulatory design characteristics, if any, do you think should be considered for the Raw Milk Regulations, and for what reasons?

## 6 Issues with the Current Raw Milk Regulations

Over the last few years a number of issues to do with the current working of the Raw Milk Regulations have been raised with MAF by various industry stakeholders. While a number of those issues have been considered in the course of the previous reviews of the Raw Milk Regulations and have been resolved, there are still outstanding issues.

### 6.1 ISSUES CONSIDERED AS BEING RESOLVED

- Uncertainty over the potential expiry of the DIRA, including the Raw Milk Regulations, has been addressed by introducing new thresholds for expiry, instituting a process for review once the new thresholds are met, and providing a lead time for the removal of the Raw Milk Regulations.
- The perceived mispricing of the regulated milk by the default pricing formula that artificially unbundled Fonterra's payout was addressed by replacing that formula with Fonterra's farm gate milk price plus \$0.10 per kilogram of milksolids.

### 6.2 ISSUES OUTSIDE THE SCOPE OF THIS REVIEW

- Consideration of concerns over how Fonterra sets its farm gate price is part of a separate work stream currently being undertaken by MAF and other government departments.
- The definition of an independent processor is being contested in Courts. It would not therefore be appropriate to consider this issue as part of this review.
- The allocation of up to 250 million litres of regulated milk in a season to Goodman Fielder is not considered to be appropriate for review due to it being a negotiated outcome at the time of Fonterra's creation.
- Concerns over access to regulated milk by independent processors, on the basis of them exporting their product into the same markets as Fonterra, are not considered appropriate for review because "end-use" discrimination could present trade policy concerns.

### 6.3 ISSUES CONSIDERED IN THIS REVIEW

The key issue to be considered in this review is whether the Raw Milk Regulations are providing an efficient entrance pathway into the farm gate milk market for independent processors.

Currently all independent processors, regardless of the extent to which they source their own milk supply from farmers, have the ability to access regulated milk on an ongoing basis.

When independent processors who are no longer new entrants to the farm gate market take regulated milk, this replaces raw milk that would have otherwise been sourced from farmers. This then reduces the additional competitive pressure that would have been placed on Fonterra in the farm gate market, had the milk been sourced from farmers.

Continued access to regulated milk by these independent processors also increases demand pressures on the total volume of regulated milk, potentially triggering the pro rata quantity rationing rule to be applied to all independent processors. This means that those who might still be in the early stages of their operations, and therefore reliant on accessing sufficient volume of regulated milk, would be rationed back.

Particular issues that arise when considering the effectiveness of the Raw Milk Regulations in providing an efficient entry pathway include:

- "who" should have access to regulated milk and "for how long"; and

- “how much” regulated milk should an independent processor have access to.

Consideration is also required of whether:

- the current “total volume cap” of 600 million litres is sufficient;
- the pro rata quantity rationing rule is optimal for managing situations of excess demand; and
- the terms of supply of regulated milk achieve the objectives of the Raw Milk Regulations. In particular, whether:
  - the average margin of \$0.10 per kilogram of milksolids that compensates Fonterra for the cost of providing a flatter milk supply curve is appropriate;
  - current forecasting rules are affording too high a degree of “unpriced” flexibility to independent processors;
  - current ex-post pricing system for regulated milk presents a high degree of uncertainty for independent processors; and
  - there is a need to replace the “October rule” with a “November rule” in the South Island.

### Questions

6. Do you agree/disagree with the proposition that the key issue to consider is whether the Raw Milk Regulations are providing an efficient pathway to the farm gate milk market?
7. Do you agree with the proposition that independent processors who are no longer new entrants to the farm gate milk market should not have access to regulated milk?
8. Do you believe that removing access to regulated milk for independent processors with their own established farm gate milk supply will drive more competition at the farm gate market?
9. Do you agree that the issues highlighted above all need to be addressed?
10. Do you believe there are any additional issues with the current Raw Milk Regulations that should be considered for review? If so, what are they and why?

## 7 Potential Options

A number of options could be considered to address each of the issues identified above. MAF considers that it would be more beneficial, at this stage of the policy development process, to consider the issues individually. However, clearly many of the issues are interrelated and therefore MAF invites interested parties to also consider these interrelationships when developing comments on the options.

### Who should have access to regulated milk and for how long?

A number of options could be considered to address the issue of independent processors with their own established supply of milk from farmers continuing to access regulated milk. These options include:

- 1. Retain the status quo.** Under this option all independent processors, including those with their own established farmer supply, would continue to have access to regulated milk for as long as the Raw Milk Regulations are in place. This option provides little incentive for independent processors to replace their take of regulated milk with own farmer supply and imposes costs on Fonterra. Retaining the status quo would, however, avoid the costs and potential uncertainty associated with regime change.
- 2. Introduce time bound limits for those with own farmer supply.** Under this option, access to regulated milk would be limited to a set period of time (e.g. first 3 seasons), for those who have some degree of their own farmer supply. This option would introduce strong incentives for independent processors to grow the amount of their own farmer supply sooner. It would also ensure that access to regulated milk is targeted to independent processors seeking an entrance pathway into the farm gate market and those without any of their own farmer supply. This option could, however, see independent processors who may otherwise have sought a small amount of own supply (but who did not have plans to grow big enough to rely solely on own supply), choose not to do so to avoid being subject to the “time bound limit”. It is also the case that any set time limit would be arbitrary and independent processors are likely to vary in the length of time it takes them grow and develop enough to rely solely on own supply. This would be particularly so where, for example, one of the years within the time limit was a year with severe climatic conditions impacting on milk supply.
- 3. Introduce “established own farmer supply” rule.** Under this option access to regulated milk by those with their own farmer supply would cease once a certain level of farmer supply is established (e.g. 100 million litres). This option would introduce stronger incentives to establish own farmer supply than is currently the case. Careful consideration would need to be given, however, to determining the right access threshold. This option could otherwise create a perverse incentive for independent processors to establish and maintain their own supply just below the access threshold (e.g. 99 million litres). It could also disincentivise independent processors from seeking their own supply at all.

#### Questions

11. Do you agree that access to regulated milk should not be provided to independent processors with their own established supply of milk from farmers?

12. What, in your opinion, are the pros and cons of introducing time bound limits to those independent processors with some degree of own farmer supply?
13. What, in your opinion, are the pros and cons of introducing a certain quantity of own supply ("established own supply" rule) after which independent processors would no longer have access to regulated milk?
14. If the option of "time bound limits for those with own farmer supply" were to be implemented, what in your opinion, is the optimal period of time that access to regulated milk should be limited to, e.g. 2, 3 or 5 seasons? Please explain your reasons.
15. If "established own farmer supply" rule was to be implemented, what, in your opinion, is the appropriate level of farmer supply that would ensure access to sufficient volume of regulated milk to enable an effective entry pathway while preventing some of the perverse incentives that may arise with this rule?
16. Are there any other options that should be considered to address the issue of independent processors with their own established supply of milk from farmers continuing to access regulated milk?

### How much regulated milk should an independent processor have access to?

A key purpose of the Raw Milk Regulations is to provide independent processors with a critical mass of raw milk to kick-start their processing operations, while incentivising them to seek alternative sources of raw milk supply rather than relying on regulated milk from Fonterra on an ongoing basis. Potential options include:

1. **Retain the status quo.** Under this option, all independent processors would be able to source up to 50 million litres in every season that they have access to regulated milk. MAF understands that 50 million litres would be sufficient to fill approximately one quarter of a standard milk processing plant. While this volume of regulated milk might be providing the critical mass necessary to overcome the "catch 22" entry barrier, it may not be as effective as some of the alternative options in incentivising independent processors to seek alternative sources of supply.
2. **Introduce gradual reduction in volume for those with their own farmer supply.** This option would provide independent processors intending to develop their own farmer supply with the ability to access a diminishing quantity of regulated milk over the period of the entry pathway. For example, up to 50 million litres in the first season, 40 million litres in the second season, 30 million litres in the third season, etc. Thereafter, the independent processor would be ineligible for further regulated milk. This option could still be effective in providing the critical mass of raw milk needed to kick start new processing operations, but may be more effective in signalling the need to develop alternative supply options sooner. However this option would be more complicated (and therefore potentially more costly) to administer and comply with.
3. **Introduce a smaller cap for those without own farmer supply.** This option would be additional to either of the options above. Under this option, independent processors not seeking own farmer supply would have access of up to 10 million litres of regulated milk a season (with exception of Goodman Fielder, who would continue to have access up to 250 million litres, and possibly also excepting those currently accessing regulated milk in greater volumes, e.g. Cadbury). This option would still provide small independent processors with sufficient volume of regulated milk but it would also provide the incentive to consider alternative supply options should these business wish to grow. However this option would create a more complex regime, with two different limits to administer. It may also be unnecessary, as currently no

small independent processors take more than 10 million litres, and therefore this option could be proposing regulatory change unnecessarily.

#### Questions

17. What volume of regulated milk do you consider to be sufficient to provide for the critical mass needed to overcome the initial “catch 22” entry barrier faced by the new entrants to the farm gate milk market?
18. What do you consider to be the pros and cons of allowing access to the same volume of regulated milk in each of the seasons that independent processors have access to regulated milk?
19. What do you consider to be the pros and cons of introducing a gradual reduction in volume over the access period?
20. Do you believe that introducing a smaller volume cap for independent processors without own farmer supply is desirable?
21. What would be the impact of introducing smaller volume caps for independent processors without their own farmer supply?
22. Are there any other options relating to how much regulated milk each independent processors should have access to that you think should be considered?

#### What should be the total volume of regulated milk?

While DIRA allows the total volume of regulated milk to be set at up to 5 percent of Fonterra’s milk supply, the Raw Milk Regulations currently set the total volume at 600 million litres. Options on setting the total volume of regulated milk include:

- 1. Retain the status quo.** Under this option, the current 600 million litres cap would be maintained. This level of total volume has, up until recently, been sufficient to provide all independent processors with access to regulated milk at their full entitlement. However, with the growing number of independent processors and with all independent processors continuing to access regulated milk on an ongoing basis (rather than for initial “catch 22” purposes only), this level of total volume is facing excess demand pressures. Depending on how the situation of excess demand is managed (which is discussed further below) this may have a positive effect on incentivising independent processors to seek alternative sources of milk supply rather than relying on regulated milk. However it could also mean that independent processors who are in their early development or those with no farmer supply, and who therefore rely on regulated milk, cannot access the amount they need.
- 2. Increase “total volume” to 5 percent of Fonterra’s total milk supply and review every 3 years.** Under this option, the total volume of regulated milk would be set at approximately 5 percent of Fonterra’s current supply and reviewed periodically (e.g. every 3 years), to ensure that it represents roughly 5 percent of Fonterra’s total milk supply. This option would enable a greater number of independent processors to access regulated milk but may be counterproductive in terms of incentivising independent processors to seek alternative sources of milk supply.

3. **Introduce gradual reduction in “total volume”.** Under this option the total volume of regulated milk would be reduced over time as independent processors with their own farmer supply become established, e.g. as an independent processor establishes own farmer supply and ceases having access to regulated milk, the total volume of regulated milk would be reduced by the amount previously taken by that independent processor. This option would provide a certain number of new entrants with the entrance pathway into the farm gate milk market and send a strong signal of the need to develop alternative sources of supply. This option would likely, however, be ineffective in providing potential future new entrants with a sufficient pool of regulated milk.

#### Questions

23. Do you have a preference for a static amount of the “total volume” of regulated milk versus one that moves with Fonterra’s own milk supply volumes? Please explain your preference.
24. If the “total quantity” of regulated milk was to continue to be set below 5 percent of Fonterra’s milk supply, what do you consider the optimal level for the “total volume” provision to be and why?
25. Do you consider the option of gradual reduction in the “total volume” of regulated milk to be desirable? Please explain why.
26. Are there any other options relating to the total volume of regulated milk that you think should be considered?

#### How should excess demand for regulated milk be managed?

From time to time, situations of excess demand may occur. Options for managing excess demand situations include:

1. **Retain the status quo.** Under this option, the current pro rata rationing rule would continue to apply and scale all independent processors’ take of regulated milk back, irrespective of their ability to switch to alternative sources of raw milk. This option would clearly signal the need for independent processors to develop alternative sources of milk supply. However, it may not be effective in providing newly established independent processors with sufficient volume of regulated milk to overcome the initial “catch 22” entry barrier and may disproportionately affect those not looking to source milk from farmers.
2. **Introduce “priority ranking”.** This option would see the least established independent processors with their own farmer supply and those without own farmer supply, having the first call on the total volume of regulated milk available. Independent processors who are relatively well established with some of their own farmer supply would have access to the remainder. This option would provide new independent processors with an entrance pathway to the farm gate market and incentivise independent processors to seek their own supply over time as they take lower priority in situations of excess demand. However this option would be more complicated (and therefore potentially more costly) to administer and comply with.
3. **Introduce an auction mechanism.** Under this option if an excess demand for regulated milk situation arises, regulated milk would be allocated using price. The price would be revealed through an auction mechanism where independent processors would bid for the right and the obligation to access regulated milk. Access itself would

continue to be provided on the then applicable terms and conditions, e.g. subject to individual processor volume cap, regulated price, forecasting and scheduling rules, etc. This option would allocate regulated milk to those who value it most and incentivise those with cheaper alternative sources of supply to switch away from regulated milk. This may be the most efficient way to manage excess demand; however, designing such an auction mechanism is highly complex (a number of possible auction design features are set out in the appendix) and would likely be costly to administer.

## Questions

27. Do you consider the current pro rata rationing rule to be an adequate mechanism for managing excess demand for regulated milk?

28. Which of the alternative mechanisms do you consider to be most effective in managing excess demand? Please explain why.

29. Are there any other options relating to managing excess demand that you think should be considered?

## How should the margin for the flattening of the seasonal supply curve be set?

The component of the regulated price formula that compensates Fonterra for providing independent processors with an option of “flattening” the profile of their regulated milk supply is currently set at the average margin of \$0.10 per kilogram of milksolids. This applies to all regulated milk taken during the season. However, averaging this cost out across the season may not be efficient in situations where independent processors do not take regulated milk in every month of the season. Options include:

1. **Retain the status quo.** This option would maintain a simple approach to pricing the cost to Fonterra of providing independent processors with the ability to flatten their regulated milk supply by setting the average margin across the season. This option may not however be compensating Fonterra fairly for providing access to regulated milk at average prices during the off-peak supply when raw milk is most valuable.
2. **Introduce a price schedule for different points of the season.** This option would see different margins set for different times of the season, e.g. peak and non-peak milk supply. This option could allow for a more efficient allocation of regulated milk as the independent processors would be able to take regulated milk when they need it (rather than having to take it in October). The margin that they would pay to compensate Fonterra would reflect the scarcity of milk supply at the time the milk is taken. For example, there could be a relatively low/no margin attached to the peak milk supply, with a slightly higher margin being set for the mid-season supply, and a significantly higher margin set for the regulated milk that independent processors took during the shoulder months of the dairy season. While this option may provide a more efficient mechanism for distributing milk across the season, it would add a considerable degree of complexity to the pricing and scheduling provisions of the Raw Milk Regulations.



## Questions

30. Do you consider the current simple averaging out approach to be acceptable? If so, do you believe that the current average margin of \$0.10 per kilogram of milksolids is adequate to compensate Fonterra for the cost of flattening the regulated milk supply curve? If not, what average margin would you recommend and why?

31. If a price schedule for different points of the season was introduced, what level of the margin would you consider to be appropriate to be set for the peak supply, mid-season and shoulder months supply?

32. Are there any other options relating to the seasonal supply curve that you think should be considered?

## What degree of flexibility should be provided for by forecasting rules?

To address the issues of the current “unpriced” flexibility in the independent processors’ ability to change their forecasts of regulated milk the following options could be considered:

- 1. Retain the status quo.** This option would retain the existing degree of “un-priced” flexibility in the forecasting rule. This would have the advantage of not requiring any regulatory change and the risk of unwanted regulated milk would continue to sit with Fonterra, who is arguably best placed to manage it. However this option may be inefficient, where those who do not genuinely need that degree of flexibility still access it, at a cost to Fonterra.
- 2. Reduce current flexibility.** This option would reduce the current degree of flexibility to make it more reflective of standard commercial terms. For example, the 40 percent margin could be reduced to 30, 20 or 10 percent. Similarly, the later 20 percent margin could be reduced to 10 percent. This option would reduce the degree of potential inefficiencies stemming from “un-priced” flexibility, but it is still a relatively blunt tool that may be providing unnecessary flexibility at a cost to Fonterra. This is particularly the case given the difficulty in determining exactly what degree of flexibility is necessary.
- 3. Introduce “pricing of the option”.** Under this option, independent processors could “opt in” to retain access to existing (or amended) flexibility provisions but be charged a certain additional margin, set in the Raw Milk Regulations, to compensate Fonterra for any changes in delivery forecasts. This option could result in a more efficient system, where those who need the flexibility would have it, but independent processors would compensate Fonterra for passing on this risk. This option would, however result in a more complex system where some independent processors would “opt in” while others wouldn’t, requiring the operation of different systems for different independent processors. Including this option in the Raw Milk Regulations could also have the effect of inhibiting parties from developing commercial solutions of their own to address the issue.
- 4. Introduce “take or pay” provisions.** Removing all flexibility by introducing a “take or pay” provision in the Raw Milk Regulations would incentivise independent processors to more accurately forecast their requirements for regulated milk, thus reducing the costs on Fonterra. Imposing a “take or pay” provision would also ensure consistency between supply options as processors that contract directly with farmers, including Fonterra, have a non-negotiable obligation to take farmers’ milk. However this option would mean that all the risk of unwanted regulated milk, for example in the

case of a plant break down, would fall on the independent processor, who may not be best placed to manage it.

#### Questions

33. Do you think flexibility provisions of some sort are necessary? If so, do you think the current level or a reduced degree of flexibility would be appropriate?

34. What flexibility arrangements are likely to prevail in standard commercial contracts?

35. If “pricing of the option” was to be introduced, what do you think the premium should be set at?

36. If a “take or pay” provision was to be introduced, what in your opinion are the key risks to independent processors and how these could be managed?

37. Are there any other options relating to the flexibility provisions that you think should be considered?

38. Do you believe the option of introducing a “November” rule would add a great deal of complexity in administering both “October” and “November” rules? If so, how do you believe this could be managed?

39. Are there any other options relating to peak supply that you think should be considered?

#### Should there be more certainty around payment for regulated milk

The payment for regulated milk is currently based on an ex-post pricing system, where the final price for farm gate milk (which is the key component of the regulated milk price) is not set until August/September after the close of the dairy season in May. This presents a number of challenges for independent processors, as the final price for their key input is somewhat uncertain (although guided by Fonterra’s quarterly forecasts) until well after the marketing and product mix decisions have been made.

Options to address this issue include:

- 1. Retain the status quo.** This option does not mitigate the current concerns but would remain consistent with how Fonterra and other processors with their own supply pay their own farmers. It also allows for innovative commercial solutions to address this issue to be developed.
- 2. Introduce set pricing (potentially quarterly).** This option would use Fonterra’s quarterly forecast for the farm gate milk price as the final farm gate price for that quarter. A risk management margin would be introduced to compensate Fonterra for bearing the risk of volatile milk prices, i.e. the likely situation that the farm gate component of the regulated price may result in being less than the farm gate price Fonterra pays its own farmers at the end of the season. This mechanism could be included in the Raw Milk Regulations as an option, alongside the current ex-post pricing mechanism, and independent processors could choose which pricing method they prefer. This option would provide more price certainty to those independent processors who need it. The additional risk management margin would ensure that Fonterra would be compensated for bearing the risk of price volatility. The ability to opt in or out provides an efficient solution as those independent processors who value the increased price certainty would be paying for it. This option would, however, result in a more complex system where some independent processors would “opt in” while others wouldn’t, requiring the operation of different systems for different independent processors. Including this option in the Raw Milk Regulations could also

have the effect of inhibiting parties from developing commercial solutions of their own to address the issue.

#### Questions

40. Do you think the option of price certainty should be provided for in Regulations, or should it be a negotiated commercial solution?
41. If you do consider it should be provided for in the Regulation, do you think that quarterly is the appropriate timing for set pricing?
42. If a risk management margin were to be introduced, what do you consider would be an appropriate margin?
43. Are there any other options relating to payment scheduling that you think should be considered?

#### Should the October rule apply in both North and South Islands

The provisions under the “October rule” are based on the premise that the peak of the seasonal supply of raw milk occurs in October. While this might be true for the North Island, it may not be the case for the South Island where, due to different climatic condition, peak milk supply tends to occur a month later, in November. To account for this, the following options could be considered.

- 1. Retain the status quo.** This option would maintain the current nationally uniform approach, which ensures consistency and ease of application, but would not address the potential discrepancies associated with a different peak month in the South Island.
- 2. Introduce “November rule” for the South Island.** This option would replace the “October rule” with the “November rule” in the South Island. While it could ensure a better fit with regard to the seasonal supply curve in the South Island, it would also create a degree of complexity and administrative difficulty, especially for independent processors whose operations span both Islands.

#### Questions

44. Do you agree that the peak for milk supply in the South Island is more likely to fall in November than in October?
45. Do you consider introducing the “November rule” for the South Island to be of critical importance? If so, please explain why.

## 8 Summary of Questions

Specific questions summarised below have been posed to submitters, but these are only suggestions.

For more information on making a submission, please refer to page 2 of this document. Note that the closing date for submissions is Friday 2 September 2011, 5pm.

### Summary of Questions:

1. What objectives of the Raw Milk Regulations outlined in this document do you agree/disagree with, and for what reasons?
2. What additional objectives, if any, do you think should be considered for the Raw Milk Regulations, and for what reasons?
3. What regulatory design characteristics for the Raw Milk Regulations do you agree/disagree with, and for what reasons?
4. Do you consider that some of the above regulatory design characteristics are not desirable? If so, which ones and why?
5. What additional regulatory design characteristics, if any, do you think should be considered for the Raw Milk Regulations, and for what reasons?
6. Do you agree/disagree with the proposition that the key issue to consider is whether the Raw Milk Regulations are providing an efficient pathway to the farm gate milk market?
7. Do you agree with the proposition that independent processors who are no longer new entrants to the farm gate milk market should not have access to regulated milk?
8. Do you believe that removing access to regulated milk for independent processors with their own established farm gate milk supply will drive more competition at the farm gate market?
9. Do you agree that the issues identified as being within the scope of this document all need to be addressed?
10. Do you believe there are any additional issues with the current Raw Milk Regulations that should be considered for review? If so what are they and why?
11. Do you agree that access to regulated milk should not be provided to independent processors with their own established supply of milk from farmers?
12. What, in your opinion, are the pros and cons of introducing time bound limits to those independent processors with some degree of own farmer supply?
13. What, in your opinion, are the pros and cons of introducing a certain quantity of own supply ("established own supply" rule) after which independent processors would no longer have access to regulated milk?
14. If the option of "time bound limits for those with own farmer supply" were to be implemented, what in your opinion, is the optimal period of time that access to regulated milk should be limited to, e.g. 2, 3 or 5 seasons? Please explain your reasons.

15. If “established own farmer supply” rule was to be implemented, what, in your opinion, is the appropriate level of farmer supply that would ensure access to sufficient volume of regulated milk to enable an effective entry pathway while preventing some of the perverse incentives that may arise with this rule?
16. Are there any other options that should be considered to address the issue of independent processors with their own established supply of milk from farmers continuing to access regulated milk?
17. What volume of regulated milk do you consider to be sufficient to provide for the critical mass needed to overcome the initial “catch 22” entry barrier faced by the new entrants to the farm gate milk market?
18. What do you consider to be the pros and cons of allowing access to the same volume of regulated milk in each of the seasons that independent processors have access to regulated milk?
19. What do you consider to be the pros and cons of introducing a gradual reduction in volume over the access period?
20. Do you believe that introducing a smaller volume cap for independent processors without own farmer supply is desirable?
21. What would be the impact of introducing smaller volume caps for independent processors without their own farmer supply?
22. Are there any other options relating to how much regulated milk each independent processors should have access to that you think should be considered?
23. Do you have a preference for a static amount of the “total volume” of regulated milk versus one that moves with Fonterra’s own milk supply volumes? Please explain your preference.
24. If the “total quantity” of regulated milk was to continue to be set below 5 percent of Fonterra’s milk supply, what do you consider the optimal level for the “total volume” provision to be and why?
25. Do you consider the option of gradual reduction in the “total volume” of regulated milk to be desirable? Please explain why.
26. Are there any other options relating to the total volume of regulated milk that you think should be considered?
27. Do you consider the current pro rata rationing rule to be an adequate mechanism for managing excess demand for regulated milk?
28. Which of the alternative mechanisms do you consider to be most effective in managing excess demand? Please explain why.
29. Are there any other options relating to managing excess demand that you think should be considered?
30. Do you consider the current simple averaging out approach to be acceptable? If so, do you believe that the current average margin of \$0.10 per kilogram of milksolids is adequate to compensate Fonterra for the cost of flattening the regulated milk supply curve? If not, what average margin would you recommend and why?
31. If a price schedule for different points of the season was introduced, what level of the margin would you consider to be appropriate to be set for the peak supply, mid-season and shoulder months supply?
32. Are there any other options relating to the seasonal supply curve that you think should be considered?
33. Do you think flexibility provisions of some sort are necessary? If so, do you think the current level or a reduced degree of flexibility would be appropriate?

34. What flexibility arrangements are likely to prevail in standard commercial contracts?
35. If “pricing of the option” was to be introduced, what do you think the premium should be set at?
36. If a “take or pay” provision was to be introduced, what in your opinion are the key risks to independent processors and how these could these be managed?
37. Are there any other options relating to the flexibility provisions that you think should be considered?
38. Do you believe the option of introducing a “November” rule would add a great deal of complexity in administering both “October” and “November” rules? If so, how do you believe this could be managed?
39. Are there any other options relating to peak supply that you think should be considered?
40. Do you think the option of price certainty should be provided for in Regulations, or should it be a negotiated commercial solution?
41. If you do consider it should be provided for in the Regulation, do you think that quarterly is the appropriate timing for set pricing?
42. If a risk management margin were to be introduced, what do you consider would be an appropriate margin?
43. Are there any other options relating to payment scheduling that you think should be considered?
44. Do you agree that the peak for milk supply in the South Island is more likely to fall in November than in October?
45. Do you consider introducing the “November rule” for the South Island to be of critical importance? If so, please explain why.

**Please explain your answers.**

# Appendix 1

Table below outlines a number of possible features of an auction platform that could be used should an auction be a preferred method for managing excess demand for regulated milk.

| Possible Auction Features   | Reasoning   |
|---|---|
| The auction would be established and operated by the Government rather than Fonterra.   | This is to ensure independence of the auction process.  |
| The auction would feature an online platform and employ a simple ascending format (c/f. TradeMe or EBay)  | An online platform is preferred for its high level of functionality and convenience. A simple ascending format should be adequate to the task, and dovetail well with the open entry and exit requirements of sourcing milk directly from farmers.  |
| The action could take place annually in late November of the season prior or done quarterly.  | The November timing would be to link the timing of auction with the period Fonterra farmers can lodge an exit notice (15 Dec – 28 Feb) and thereby ensure that the auction would not generate price spiking behaviour. The annual auction could also be sufficient as independent processors would be able to build a portfolio of milk that they could then “draw down” across the season in accordance with the forecasting rules prevailing at the time. |
| The regulated price formula would continue to be “farm gate price + 10c”. This price would be the minimum price independent processors would pay for regulated milk.  | The current regulated price formula ensures that independent processors do not obtain regulated milk at a lower price than Fonterra pays its on suppliers.  |
| Independent processors would have both the right and the obligation to purchase raw milk at the regulated price.  | Risk managing instruments such as “puts” could be offered.  |
| The Commerce Commission’s oversight role regarding the pricing of regulated milk would be retained.   | This provides consistency with the status quo.  |
| The Minister, via Regulations, would have the: <ul style="list-style-type: none"> <li>• ability to set an appropriate auction reserve price;</li> <li>• ability to amend the maximum quantity of regulated milk independent processors can bid for; and</li> <li>• permit the provision of risk managing instruments such as “puts”.</li> </ul> | These rules would provide the Minister to make adjustments to the auction as and if required.   |
| Provisions would be made outside of the auction process: <ul style="list-style-type: none"> <li>• to manage the needs of “small” processors, and</li> <li>• for the provision of “winter milk”.</li> </ul>  | This would be a pragmatic response to manage the issue of very small lot sizes and managing the lead times associated with winter milk.   |

**Background Document 9**

Castalia Report: The “Hypothetical Efficient Competitor” and Fonterra’s Farm-gate Milk Price





# **The “Hypothetical Efficient Competitor” and Fonterra’s Farm-gate Milk Price**

**Report to the Ministry of Agriculture  
and Forestry**

**July  
2011**

## Acronyms and Technical Terms

|                    |   |
|--------------------|---|
| ACCC               | Australian Competition and Consumer Commission  |
| ADF                | Australian Dairy Farmers  |
| AMF                | Anhydrous Milk Fat  |
| BMP                | Butter Milk Powder  |
| CAP                | European Common Agricultural Policy   |
| CAPEX              | Capital Expenditure   |
| CCC                | United States Commodity Credit Corporation  |
| CDC                | Canadian Dairy Commission   |
| CMSMC              | Canadian Milk Supply Management Committee   |
| DIRA               | Dairy Industry Restructuring Act 2001. New Zealand legislation that permitted the merger of the New Zealand Dairy Board, the Kiwi Cooperative Dairy Company, and the New Zealand Dairy Group to form Fonterra. The DIRA aims to promote the efficient operation of dairy markets in New Zealand by regulating the activities of Fonterra, and ensuring that the market for dairy goods and services is contestable. |
| DMF                | Dutch Milk Fund   |
| DORC               | Depreciated Optimised Replacement Cost  |
| DSAF               | Australian Dairy Structural Adjustment Programme  |
| EC                 | European Commission   |
| ECPR               | Efficient Component Pricing Rule, also known as the Baumol-Willig, Margin, Retail-minus, or the Imputation rule. Access pricing approach based on the premise that in a truly contestable market, an incumbent that sells essential inputs to downstream competitors would demand a price equal to the revenue the incumbent would receive if it processed the input itself.  |
| Essential facility | A facility or service element that is not possible to either replicate or develop an alternative means of providing the good or service. In the United States, and recently in Australia, 'possible' is interpreted as being privately profitable.  |
| EU                 | European Union  |
| FERC               | United States Federal Energy Regulatory Commission  |
| FMMO               | United States Federal Milk Marketing Order  |

|                  |   |
|------------------|---|
| HEC              | Hypothetical Efficient Competitor. A theoretical construct used to model the costs of efficiently producing a particular good or service. Shared and fixed costs are optimised to the extent that the operation is assumed to be efficient.   |
| HLG              | European Commission High Level Group on Milk  |
| IMPE             | Intervention Milk Price Equivalent  |
| IPART            | Independent Pricing and Regulatory Tribunal of New South Wales  |
| LPMC             | Long Run Marginal Cost. The total fixed and variable costs of supplying an additional unit of supply. In contrast to short-run marginal cost which assumes that production capacity is constant, LPMC takes includes fixed costs, such as capital expenditure to expand capacity.   |
| Margin squeeze   | <p>Strategic pricing by a vertically-integrated incumbent selling an essential input to downstream purchasers (or charging a high price for the input that competitors cannot match). The difference between final and wholesale prices may be so small that a hypothetical, equally efficient downstream competitor would find it impossible to remain profitable. A margin squeeze prevails if:</p> $\text{Downstream revenue} - \text{Upstream (input) price} < \text{Downstream unit cost}$ |
| MCVE             | Milk for Cheese Equivalent  |
| MMBs             | Milk Marketing Boards   |
| MPC              | Milk Protein Concentrate  |
| MSQ              | Market-sharing Quota  |
| Natural monopoly | A situation where it would be uneconomical for anyone to develop another facility to provide the service because total costs are lower with only one firm operating at the prevailing level of demand. A similar concept, cost sub-additivity, means there are resource savings by keeping an incumbent intact rather than breaking it up.  |
| ODV              | Optimised Deprival Value  |
| Ofgem            | UK Office of Gas and Electricity Markets  |
| Ofwat            | UK Office of Water Services   |
| PUC              | California Public Utilities Commission  |
| RCPs             | Reference Commodity Products. Products that are traded on international markets that reflect the most valuable processing option for Fonterra's marginal raw milk. RCPs are used by Fonterra to model the revenues of the notional business.  |

|                      |   |
|----------------------|---|
| Resource rents       | The returns earned through New Zealand dairy farmers having lower costs than the marginal raw milk supplier into the international market   |
| SMP                  | Skim Milk Products  |
| TFP                  | Total Factor Productivity   |
| TSLRIC               | Total Service Long Run Incremental Cost. Long-Run Incremental Cost (LRIC) provides a forward-looking estimate of what it would cost to produce and make available to market a product or service, using near-term, best-practice technologies and efficient engineering to calculate costs—not necessarily the technology and capital actually used by a firm. TSLRIC is the additional cost incurred when adding a new product to its existing portfolio of goods or services—holding the quantities of all other goods and services constant. |
| WACC                 | Weighted Average Cost of Capital. A firm's WACC is the overall required return on the firm as a whole, used internally by company directors to determine the feasibility of investment opportunities. It is the appropriate discount rate for cash-flows with risk that is similar to that of the overall firm.   |
| WMP                  | Whole Milk Products   |
| WMPA                 | Canadian Western Milk Pooling Agreement   |
| Workable competition | A benchmark used by regulatory authorities to evaluate market outcomes, which arises from the observation that the strict conditions of perfect competition do not exist in real world markets.   |

# Table of Contents

|          |  |           |
|----------|--|-----------|
| <b>1</b> | <b>Introduction</b>  | <b>1</b>  |
| <b>2</b> | <b>Analytical Framework and Key Concepts</b>                                 | <b>2</b>  |
| 2.1      | Markets Affected by Fonterra's Milk Price Model                              | 2         |
| 2.2      | Why Access to Raw Milk May Need to be Regulated                              | 8         |
| 2.3      | Public Policy Objectives for Raw Milk Pricing                                | 11        |
| 2.4      | Access Interventions   | 13        |
| 2.5      | Approaches for Determining Prices  | 14        |
| 2.6      | Pricing Approaches and the Hypothetical Efficient Competitor (HEC)           | 16        |
| 2.7      | Summary of Pricing Approaches  | 18        |
| <b>3</b> | <b>Fonterra's Current Pricing Approach</b>                                   | <b>19</b> |
| 3.1      | How the <i>Milk Price Manual</i> Works                                       | 19        |
| 3.2      | Is There Anything "Wrong" with the <i>Milk Price Manual</i> ?                | 22        |
| <b>4</b> | <b>Is there a Better Alternative to Fonterra's Current Pricing Approach?</b> | <b>24</b> |
| 4.1      | Alternative Approach Using ECPR  | 24        |
| 4.2      | Fonterra's Internal Milk Price and External ECPR Milk Prices                 | 26        |
| <b>5</b> | <b>Further Analysis</b>  | <b>27</b> |

## Appendices

|  |           |
|--|-----------|
| <b>Appendix A : Review of Access Regulation</b>  | <b>28</b> |
| <b>Appendix B : Review of International Dairy Market Structures and Pricing Arrangements</b> | <b>35</b> |

## Figures

|   |           |
|---|-----------|
| <b>Figure 2.1: The New Zealand Market for Raw Milk</b>                        | <b>3</b>  |
| <b>Figure 2.2: Milk Collection Options</b>                                    | <b>6</b>  |
| <b>Figure 2.3: Overview of Access to Essential Facility</b>                   | <b>9</b>  |
| <b>Figure 2.4: Top-down Pricing (Retail-Minus)</b>                            | <b>15</b> |
| <b>Figure 2.5: Options for Applying HEC in Bottom-up Pricing Approach</b>     | <b>17</b> |
| <b>Figure 4.1: Comparison of Fonterra's Current Pricing Approach and ECPR</b> | <b>25</b> |

## Executive Summary

The Ministry of Agriculture and Forestry (MAF) engaged Castalia to consider how a workably competitive market with a dominant cooperative would price raw milk, and how Fonterra's current approach to pricing raw milk performs against this benchmark. This work is an input into a government review of raw milk pricing in New Zealand that is being carried out by MAF, the Ministry of Economic Development, and Treasury.

The main conclusion of our work is that Fonterra's current approach to setting the raw milk price creates a barrier to entering the market for processing raw milk. By subtracting the costs of a hypothetical efficient competitor (HEC) that is more efficient than Fonterra from the retail price of processed milk, the current methodology prevents entry from new processors that are more efficient than Fonterra (but less efficient than the hypothetical benchmark). A pricing approach that used Fonterra's actual costs (rather than hypothetically efficient costs) would enable efficient entry and promote outcomes that are more consistent with a workably competitive market.

Moving from hypothetical to actual costs for pricing access to raw milk would not necessarily be simple. Such a change raises the prospect that a dual pricing structure will emerge—one price for internal Fonterra purposes, and another price for supply to third parties. While there is nothing inherently wrong with dual pricing, it could have the unintended consequence of entrenching Fonterra's dominance of purchasing raw milk at the farm gate. An empirical analysis of the costs and benefits of requiring Fonterra to change its pricing approach would help to inform any further policy action.

### **The unique characteristics of dairy markets influence competition**

New Zealand's distance from global markets means that most raw milk supplied in New Zealand is traded globally in the form of basic commodity products. The global demand for food can imply volatile prices for basic commodity products. However, the supply of raw milk is relatively constant and seasonal, and cannot be varied easily in the short-term.

Although a variety of supply structures can be observed across different countries, dairy supply arrangements are typically a response to the mismatch between different concentration levels in milk supply and processing: there are many geographically dispersed farmers, while the buyers of raw milk are more concentrated. This often translates into processors having considerable bargaining power over individual farmers. In this context, there is an inherent tension between more pro-competitive approaches to raw milk pricing—which in theory can improve efficiency—and the potential costs associated with the reduction in income security for farmers.

In addition, there may be a margin between the global milk price (expressed in New Zealand as the price of the basket of basic dairy commodities minus the processing and collection cost), and the cost of raw milk supply. This raises the concern of ensuring that any such "resource rents" are shared appropriately between different market participants.

### **Evaluating Fonterra's approach to raw milk pricing needs to reflect these market characteristics**

Fonterra's raw milk price model needs to be assessed both in terms of its effects on the efficiency of the dairy industry and in terms of its effects on income security and value capture by New Zealand dairy farmers. It is notable, in this context, that in some deregulated dairy markets—particularly in United Kingdom and Australia—the current concerns raised about raw milk pricing are the opposite of those being heard in New Zealand: in those markets, the concerns are that raw milk prices are too low, and that is

making farming unsustainable. In those markets, there are calls to re-balance bargaining power towards farmers and, in particular, away from supermarkets.

The problem with this approach is that when the internal transfer price designed for management purposes is used as an access price for third parties, it sets an artificially high benchmark: the internal transfer price is designed to be high to drive the actual costs of the business to the hypothetically efficient costs. But it also means that only super-efficient new entrants—processors that are more efficient than the optimised HEC model, rather than actually more efficient than Fonterra—can enter the market.

### **Competition theory provides guidance to evaluate Fonterra's raw milk pricing**

This report clarifies the key concepts involved in deciding whether the raw milk price set by Fonterra is socially optimal to provide officials with a clear framework to assess the current pricing approach and any modifications. We also identify the key empirical questions that need to be answered before deciding to do anything different.

We draw on competition theory to answer two specific questions:

- What are the economic effects of a raw milk price that is administratively set using Fonterra's *Milk Price Manual*?
- If those effects are problematic for social welfare, are there better ways to set the raw milk price?

Officials will consider other policy considerations before proposing any changes to raw milk pricing. These broader considerations are important but fall outside the scope of this report.

### **Fonterra's approach is both a barrier to entering the processing market, and an effective corporate governance tool**

Fonterra's *Milk Price Manual* is designed to impose internal discipline within Fonterra on its collection and processing costs, and the raw milk price that results from applying the HEC model reflects this purpose. In other words, the raw milk price derived from the *Milk Price Manual* is best seen as a transfer price that regulates the returns to Fonterra's manufacturing and processing business (like a tolling charge) to a level that would be consistent with:

- Revenues from a reasonably efficient (although not fully optimised) bundle of commodity outputs, and
- Costs of a hypothetically efficient processing and collection operation. These costs are also partially, rather than fully, optimised.

### **An ECPR pricing approach would better achieve some public policy objectives**

We conclude that at a conceptual level, an Efficient Component Pricing Rule (ECPR)-based pricing model that sets the raw milk price by deducting actual avoided costs from the revenues—rather than hypothetically efficient costs—would result in more efficient prices for third parties. However, within the scope of this report, we are not able to quantify the potential gains from this efficiency. The current distortion may be quite minor.

We also find that Fonterra's existing model appears to be an effective management tool, which suggests that Fonterra should not be prevented from applying the model for internal purposes. As a result, an alternative pricing model for raw milk price supplied to third parties may need to co-exist with the internal milk pricing model. However, the internal milk pricing model will also have an external effect, since it will determine the

value of Fonterra's shares, and will affect the incentives for entry and exit by members. The inter-play between the incentives associated with the two raw milk prices is complex, and may cause unexpected consequences. Our analysis suggests that the effects would not undermine efficiency, but we are conscious of the risks involved.

In our opinion, any decision to require Fonterra to change its model for setting the price of raw milk for third parties should be based on a careful empirical assessment of whether the benefits and the risks of a new approach outweigh the costs imposed by the current model. While the conceptual clarity provided by this report is critical to responding to the concerns that have been raised about Fonterra's raw milk pricing approach, answers must also be based on well-informed judgements about the likely costs and benefits of the status quo and any change.



# 1 Introduction

The Ministry of Agriculture and Forestry (MAF) has engaged Castalia to review the methodology used by Fonterra to set the price of raw milk in New Zealand. The purpose of this work is to help officials evaluate whether Fonterra's current pricing system is achieving public policy objectives, and in particular whether the approach results in outcomes that are consistent with workably competitive markets.

This report focuses on the economic concepts that underpin expectations of workably competitive markets, as well as the regulatory approaches used in other markets and international jurisdictions to achieve various public policy objectives. Other policy and political issues will need to be taken into account to fully evaluate the impacts of Fonterra's raw milk pricing and the merits of requiring a change in methodology. Further empirical analysis will also likely be required to assess the merits of any policy change.

We begin this report by describing, in Section 2, the key concepts underpinning our work. We do this by classifying the relevant markets where Fonterra's farm gate milk price has impacts on competition, and identifying what policy and regulatory concerns arise in these markets. We offer some public policy objectives that government might want to achieve, and we describe the pricing approaches that are typically used in other markets to achieve these objectives. Section 2 concludes by considering how the Hypothetical Efficient Competitor (HEC) concept fits into possible regulatory mechanisms.

Section 3 applies the key concepts to Fonterra's pricing approach (as set out in the *Milk Price Manual*). We also consider the implications of Fonterra's pricing approach for the public policy objectives that the government may want to achieve.

In Section 4 we consider whether any alternative pricing approaches would better achieve the identified public policy objectives. We specifically review how an Efficient Component Pricing Rule (ECPR)-based pricing model could work by setting the raw milk price minus actual avoided costs (rather than hypothetically efficient costs). This leads us to consider the possible implications of such a change.

The Appendices to this report briefly describe access pricing overseas, and review international experience with raw milk pricing and regulation.

## 2 Analytical Framework and Key Concepts

To understand the effects of Fonterra's milk price model on competition, we first need to develop a clear and rigorous analytical framework:

- First, we need to define the markets that may be affected by Fonterra's milk price model
- Second, we need to consider what policy concerns may arise in the different markets
- Third, we need to consider the possible policy objectives that the Government may expect to achieve from the operation of the different markets
- Fourth, we need to consider the regulatory interventions that could be used to achieve public policy objectives
- Fifth, we need to understand broad regulatory mechanisms that can be used to achieve the policy objectives, and
- Finally, we need to consider how the HEC model fits into possible regulatory mechanisms.

The following sub-sections trace through each of these analytical steps. We find that achieving public policy objectives in New Zealand's dairy markets could be prevented by horizontal and vertical restraints on competition. There are several possible regulatory interventions and pricing approaches that could help to address these restraints—and the HEC is one approach for treating costs within these pricing approaches. The logic of the HEC fits much better within an approach that builds-up an estimate of efficient costs from the bottom-up, rather than a top-down pricing approach.

### 2.1 Markets Affected by Fonterra's Milk Price Model

To understand the public policy concerns created by different prices within the milk supply chain (from the farm to the retail shelf), we first need to define the relevant market or markets that generate prices. Stakeholders frequently express concerns about the price of milk in New Zealand. What does this concern mean? Is it a concern about the price of milk at the farm gate, or a concern about a step in the supply chain between what the farmer gets paid and what consumers pay?

Proposed interventions, such as requiring Fonterra to supply raw milk at a regulated price, are often articulated on the basis of promoting competition. However, it is important to be clear about where the supposed competition will take place. Is it competition between farmers for the supply of milk, which would result from pricing that would encourage more farmers to exit Fonterra? Is it competition between processors that manufacture milk products from raw milk? Or is it competition elsewhere in the supply chain, such as in milk collection or transportation? Steps to promote competition in one market may lead to reduction in competition in another market, so the relationships between the relevant markets need to be clearly understood.

We think there are three relevant markets when considering raw milk pricing in New Zealand:

- The market for the **supply** of raw milk at the farm gate (the activity of dairy farming)
- The market for the **collection** of raw milk and its delivery to processing facilities. We understand that officials have not traditionally considered this a

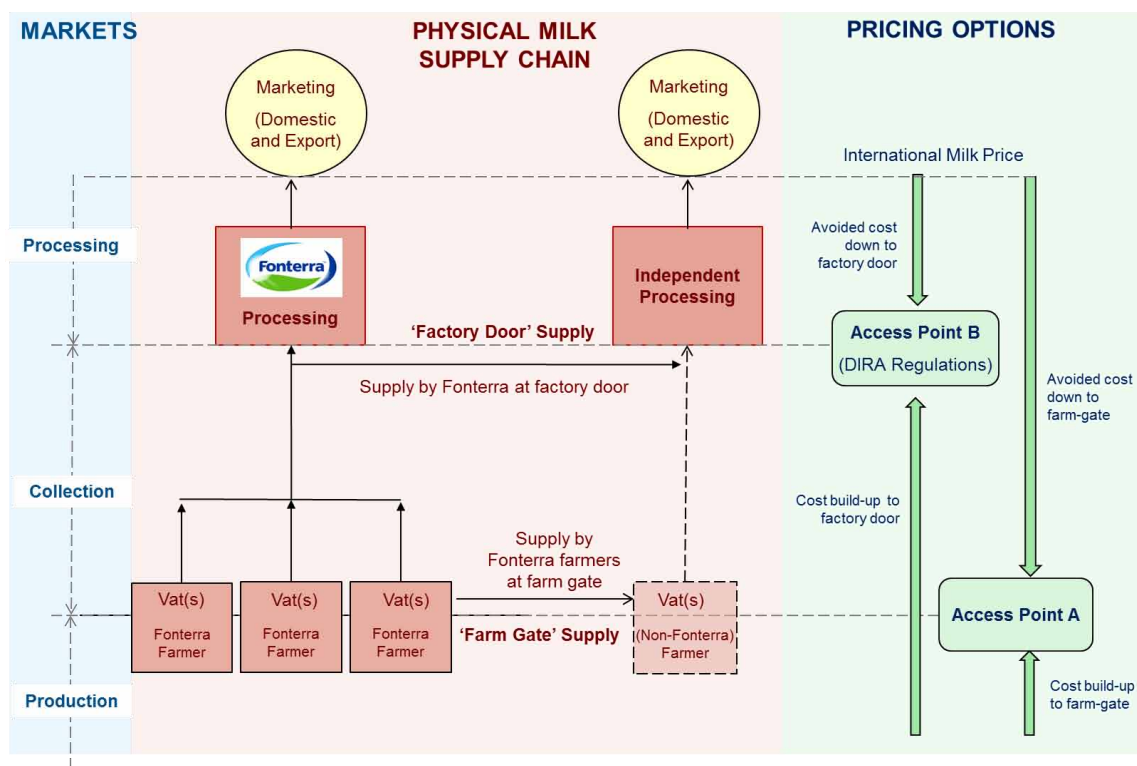
separate market. We explain why it is useful to examine raw milk collection as a stand-alone activity

- The market for **processing** raw milk into dairy products, supplied either to food manufacturers or to final consumers in New Zealand and overseas.

We describe competition and pricing in each of these markets under the subheadings below.

Figure 2.1 presents an overview of the New Zealand dairy industry supply chain. Competitive access to raw milk can occur anywhere in the range between points A and B. Point A represents a new entrant collecting raw milk from each farmer, while point B assumes that a new entrant is delivered raw milk at some point of aggregation (such as a Fonterra processing factory).

**Figure 2.1: The New Zealand Market for Raw Milk**



A clear understanding of the supply chain is important for two reasons:

- Assumptions about the point at which access to raw milk occurs will determine which costs are relevant to which market, and
- Market efficiency downstream (that is, in the collection and processing markets) may be affected by the availability of access or opportunities to bypass different input options upstream.

In terms of the inputs needed to compete at the different levels of this supply chain, the sale of milk products to final consumers (such as milk powder for export and liquid milk for domestic consumption) clearly requires significant capital investment in plant and equipment, as well as skilled labour. Effective marketing and sales operations are then needed to offer processed milk to local and international consumers. The essential element, needed at every level of the supply chain, is access to raw milk.

## **Competition and pricing in the market for the supply of raw milk at farm gate**

New Zealand has approximately 13,000 dairy farms, although there is considerable and growing cross-ownership of farms.

The opportunity to enter this market comes by changing existing land use to create new dairy farms. If there are no barriers to such entry, then we would expect the price of raw milk at the farm gate (access point A) would reflect the long-run marginal cost of production (LRMC) on the farm. Pricing at LRMC is often used as the test for workable competition because prices above this level cannot be sustained for any period of time without barriers to entry.<sup>1</sup> In the production market, prices that are higher than LRMC would allow a new raw milk purchaser to attract other types of farmers (such as sheep and beef farmers) to convert to dairying, and then sell their milk at a level that recovers the entrant's costs.

If the milk price equalled the LRMC of dairy farming (and assuming that farmers were able to sell or surrender their Fonterra shares at a price that reflected the discounted cash flow from expected future dividends), there would be no barriers to Fonterra members switching from supplying Fonterra to supplying other processors. This would further enhance the competitiveness of the dairy supply market, ensuring that prices remained in line with the LRMC of dairy farming.

If prices in this market approached this workably competitive level, alternative processors would not have to convince farmers that they would be more efficient than Fonterra—farmers would not care, as they would receive the same price from any processor. Farmers who exited Fonterra would receive full compensation for Fonterra's relative efficiency.

If land-use conversions into dairying are not sufficient to influence market prices (that is, if there are some barriers to entry), Fonterra's aggregation of the majority of New Zealand dairy farmers into a cooperative means two things:

- First, the internal transfer arrangements between dairy supply and processing, collectively agreed by Fonterra's members, are an administrative matter, and
- Second, Fonterra is able to influence the price of milk outside its membership.

Fonterra's market share means that the price that Fonterra uses for internal transfer purposes sets the price for raw milk in the market (rather than the other way around). Fonterra collects approximately 92 percent of the total raw milk for use in downstream markets, which includes Fonterra's own processing operations and delivery to independent processors (access point B in Figure 2.1). The remaining 8 percent of raw milk is supplied to other parties by non-Fonterra farmers (access point A in Figure 2.1) who are paid at a rate equal to Fonterra's raw milk price. If any independent party paid any less than Fonterra's administered raw milk price, then farmers would simply join Fonterra and sell their raw milk to Fonterra.

Fonterra's "open entry and exit regime" was designed to create a contestable market for farmers' raw milk by:

- Requiring Fonterra to issue and redeem shares at the same price, though the valuation methodology for those shares was left to Fonterra to determine

---

<sup>1</sup> Workable (or effective) competition is used by the Commerce Commission and regulatory authorities overseas as a benchmark for evaluating market outcomes. The concept of workable competition is distinct from the theoretical ideal of perfect competition—which has strict assumptions that mean perfect competition is very rarely observed in real world markets.

- Requiring Fonterra to accept milk from any farmer, and
- Imposing a redemption risk by requiring Fonterra to pay out a farmer that leaves the cooperative within 30 days of the end of the season.

The result is a pricing regime where Fonterra should have incentives to pay an efficient milk price—if it over-pays farmers for raw milk, it could face an over-supply of uneconomic milk. If the raw milk price is set too low, Fonterra would lose supply and face a binding redemption risk.

Although the design of the open entry and exit regime is elegant, concerns remain regarding the incentives that Fonterra may have to over-price raw milk. If the consequences of oversupply are not serious, then Fonterra can effectively “lock-in” suppliers by paying inefficiently high raw milk prices to farmers and retaining the value of any exiting supplier’s capital contributions for as long as possible after they cease to supply milk. This behaviour would create barriers to entry for competitors seeking to acquire farmers’ raw milk, and could allow Fonterra to operate inefficiently while remaining in business (and even growing its market share).

Whether a high milk price causes over-supply is an empirical issue. Over-supply is a situation where Fonterra’s shareholders as a group are worse-off if dairy supply increases. As supply grows, the average cost of processing may rise if there are diminishing returns to scale. However, it is not clear that Fonterra has already extracted all possible scale benefits. Moreover, how an increase in the average cost of processing—even if it were occurring—would affect farmers will itself depend on the economics on the dairy farm: if there are significant fixed costs on the dairy farm (such as the cost of land which needs to be amortised), and if most of the increase in supply is coming from existing farms, then farmers will be better off increasing supply even if this leads to diminishing returns from processing. Overall, Fonterra’s behaviour to date appears to demonstrate that it does not regard over-supply as a significant practical problem, even though it has exercised policy-makers as a theoretical concern.

### **Competition and pricing in the market for collecting raw milk**

Collection of raw milk is currently undertaken by Fonterra and bundled with its processing costs to calculate the raw milk price paid to farmers. However, these activities do not need to occur together, and several independent processors use Fonterra’s collection services when accessing raw milk under the Raw Milk Regulations (access point B in Figure 2.1). In principle, it is also possible that milk collection could be undertaken by an independent organisation. Although the only parties collecting milk in New Zealand are processors, Australia has seen the emergence of milk collection agents—independent contractors who collect milk from farms and sell it to processors.

One issue in the market for the collection of raw milk is whether duplication of milk collection runs imposes significant costs. Figure 2.2 shows two possible milk collection arrangements: the first occurs if farms are aggregated around each processing facility; the second occurs if farms associated with each facility are interspersed.

The second outcome of multiple overlapping collection runs is likely to result in higher costs. In a theoretically efficient market, we should observe two possible solutions to this problem:

- Each processor pays a premium to the farms to induce an efficient aggregation of suppliers, or

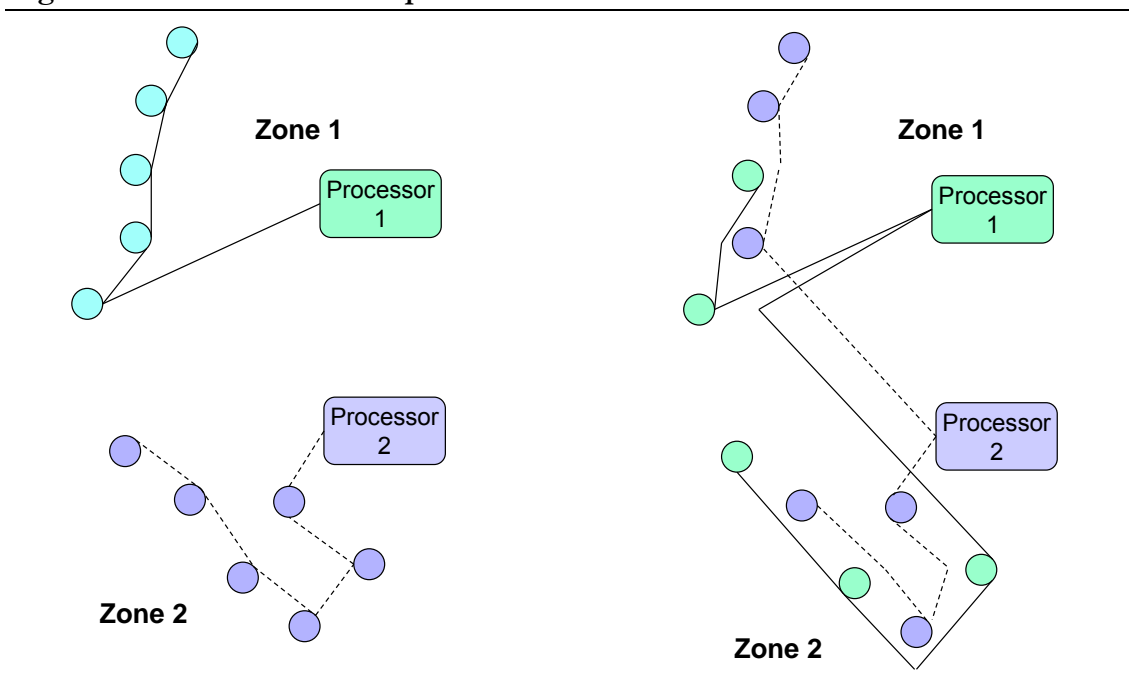
- Farmers and processors jointly contract to organise efficient milk runs (for example, each processor would collect both for itself and its competitor within an efficient area of aggregation, or they would contract to a third party).

In reality, however, these efficient outcomes may not occur, even if the market was not already concentrated:

- There are significant coordination costs between farmers, and
- Liability issues could make joint collection risky.

The likelihood of an efficient outcome is further reduced when the market for milk collection is predominantly undertaken by Fonterra. It is not clear that Fonterra would have an incentive to collect on behalf of its competitors, as this could facilitate their entry into the market.

**Figure 2.2: Milk Collection Options**



In effect, we need to ask whether milk collection may be a local natural monopoly—is it inefficient to send multiple tankers owned by different collection companies down the same farm road. The network economies of scale in aggregating milk from farms and delivering milk to processing plants may mean that it is less costly for one supplier to provide this service in an area.

If such natural monopoly characteristics are significant, the implications for the rest of the dairy value chain are that:

- Collection efficiencies could become a barrier to entry for new processors. A new entrant would not only need to attract a required volume of suppliers, it would need to coordinate suppliers located within an area of efficient aggregation. Alternatively, the processing operation would need to be significantly more efficient than Fonterra in order to compensate for any collection inefficiency, and

- From Fonterra's perspective, the exit of members may lead to an increase in the average cost of collection. This would strengthen the incentive to lock members into the cooperative.

Concerns about the cost of duplicating milk collection do not hinge on this activity being a natural natural monopoly. For example, connecting houses to an electricity network is a natural monopoly (it would be inefficient to have two sets of wires running to a house), but there are many separate network companies throughout New Zealand. Similarly, it does not need to be a natural monopoly in every region of the country. One could easily imagine parts of New Zealand where the locations and prevalence of dairy farming enable overlapping milk collection runs to be reasonably efficient.

However, if the collection market has some natural monopoly characteristics in some areas due to low farm density and processor location, then intervention may be needed to avoid the inefficient duplication of costs and to ensure that the monopoly supplier charges reasonable prices for parties wanting to access its monopoly facilities. This issue is particularly important if there are resource rents in final product prices—for instance New Zealand could have an inherent cost advantage over international milk producers, which might yield a premium on milk products sold in competitively traded international markets. Market entrants will have incentives to duplicate monopoly facilities to capture resource rents, while the owner of the collection monopoly may also have incentives to force new entrants into duplication. Similarly, it is important that policy interventions do not induce inefficient duplication if there is a natural monopoly in milk collection.

The current raw milk supply requirement under DIRA requires Fonterra both to provide supply from its member farms and to collect to an efficient point of aggregation on behalf of third parties. A possible alternative intervention could be to require Fonterra to offer a collection service which could link independent individual suppliers (including those who wish to exit Fonterra) and new entrants. We discuss this in more detail later in Section 2.3 of the report.

### **Competition and pricing in the market for processing raw milk**

Much of the concern about milk pricing seems to relate to competition in the market for milk processing and delivering final goods to consumers. However, if the price of raw milk in the market for the production at the farm gate is set above LRMC, competition in the market for processing will not compensate for the higher input prices.

There may be several reasons to want competition in this market:

- To put pressure on Fonterra to keep its production costs of bulk processing down. Given Fonterra's market share, such competition is unlikely to materialise, and other tools may be required
- To innovate and stimulate new demand for milk products. Entry by niche producers may lead to more of this innovation, and
- To keep pressure on final milk prices, including prices paid by New Zealand consumers. However, competition among many farmers may do little to reduce the price of milk products in New Zealand if prices are effectively set by demand, and therefore prices paid, in export markets.

Initial concerns about competition in the processing market led to legislated access to Fonterra's raw milk under the Dairy Industry Restructuring (Raw Milk) Regulations 2001 (the DIRA Regulations). The DIRA Regulations require Fonterra to supply up to 600 million litres of raw milk per season to independent processors (less than four percent of Fonterra's expected production for 2010/2011). This access is provided at an

aggregation point (represented by point B in Figure 2.1). The access price is based on Fonterra's published milk price that farmers receive in the raw milk production market, plus collection costs and a margin. There are no restrictions on the use of this milk—new independent processors are able to create different products and export them.

As a result of access under the DIRA Regulations, since 2001 a number of independent operators have entered and established processing capacity. These processors include Open Country Cheese Company Limited, Dairy Trust Limited, Synlait Limited, and New Zealand Dairies Limited, and together collect or process approximately 10 percent of the raw milk collected in New Zealand.

## 2.2 Why Access to Raw Milk May Need to be Regulated

The boundary between vigorous but legitimate conduct by a firm with market power, and conduct that uses market power for anti-competitive purposes, is difficult to draw. However, law and public policy are clear that using market power to restrict competition is not in the long-term interests of consumers.

There are two reasons why Fonterra's market power may raise policy concerns in relation to access to raw milk:

- **Horizontal dominance**—By aggregating 92 percent of raw milk supply in New Zealand through a cooperative agreement, Fonterra acquires the power to set the price of raw milk at the farm gate (or elsewhere in the value chain) through a collective arrangement. Competitive pressures in these markets may therefore not prevent Fonterra from pricing at levels that are different from the prices expected in a workably competitive market, and
- **Vertical restraints on competition**—Fonterra is a vertically-integrated producer of final milk products, with market power in the upstream raw milk production and collection markets in New Zealand. Vertical integration may create an incentive and ability for Fonterra to prevent competitors from accessing raw milk on efficient terms.

We discuss both of these concerns under the following subheadings.

### Horizontal dominance

As a cooperative, Fonterra is in effect exempted from the Commerce Act prohibitions on price fixing—Fonterra's 11,000 members are free to set internal transfer prices collectively. The key question is what happens when these internal transfer prices are applied to outside parties.

Section 36 of the Commerce Act prohibits parties from using market power to restrict competition, but does not prevent parties from deriving benefits from their market power. In other words, as long as a party does not use its market power to restrict entry, deter competition, or eliminate a competitor, the party with market power is free to determine prices for its products or services.

In order to exercise horizontal dominance in the market for the production of raw milk, Fonterra would need to create barriers to entry into dairy farming. Setting a high raw milk price does not do that. In fact, it has the opposite effect. High raw milk prices make conversion into dairying more attractive and encourage processors to seek out new suppliers. Hence, any exercise of Fonterra's horizontal market power is not against competition law. A policy intervention based on horizontal reasons would have to be based on a logic which goes beyond section 36 of the Commerce Act, such as an



argument that existing market power should be broken up (while section 36 of the Commerce Act only restricts creation of further market power).

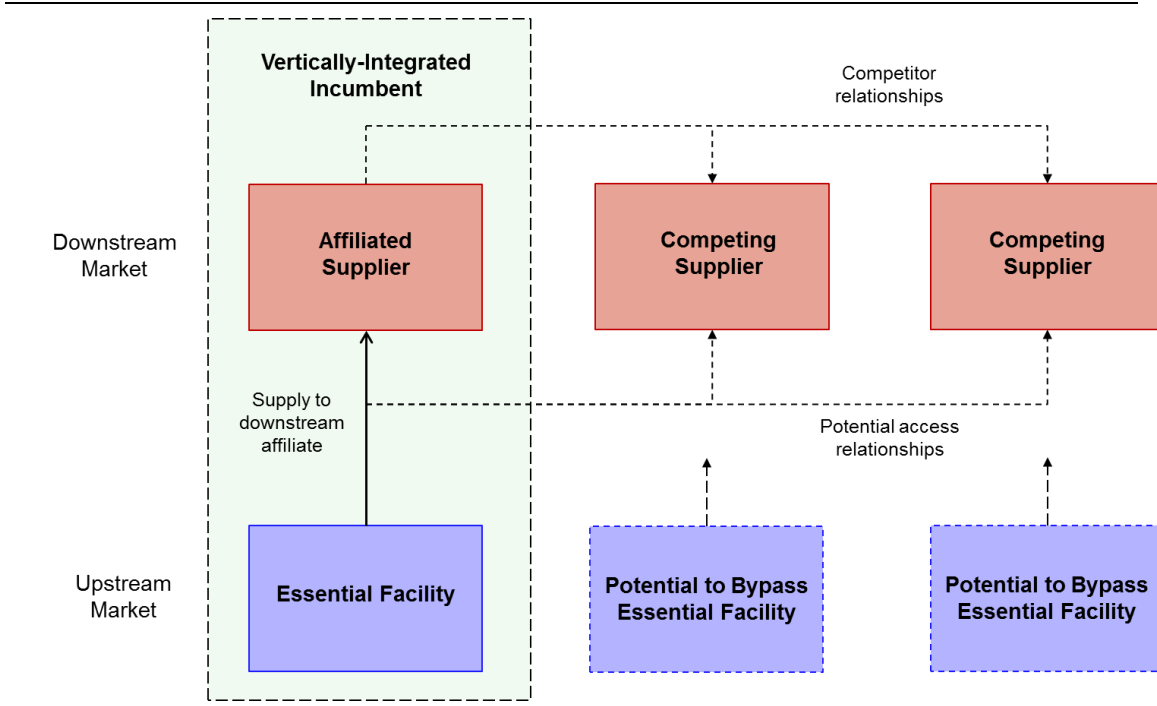
Part 4 of the Commerce Act also provides for the price and quality of certain goods or services to be regulated where there is little competition and no likelihood of an increase in competition. The provisions in Part 4 have been applied to industries where natural monopoly problems have been clearly identified, such as electricity lines services, gas pipelines, and airports.

### Vertical restraints on competition

In situations where an upstream monopolist competes in downstream markets (in this case, milk processing), economic theory predicts that the monopolist may use its upstream market position to foreclose competition downstream, either by discriminating against its competitors through its prices or by otherwise raising its rivals' costs.

A common concern for policy-makers is that a vertically-integrated monopolist will prevent efficient access to a bottleneck facility that lies between upstream and downstream markets. Figure 2.3 emphasises the vertical and horizontal relationships in New Zealand's milk markets (this is essentially a simplified version of Figure 2.1).

**Figure 2.3: Overview of Access to Essential Facility**



In the markets shown, Fonterra could use its upstream market power in raw milk supply and collection by controlling access to raw milk, which is an essential element for milk processing firms that compete downstream. Without an opportunity to bypass Fonterra farmers' raw milk (for example by setting up supply through new dairy farms or by purchasing raw milk from farmers that leave the Fonterra cooperative), downstream firms could be dependent on Fonterra for access to raw milk.

The term "essential" has a particular meaning in competition law and policy that requires further explanation. How could raw milk from Fonterra be "essential" if there are other potential sources of milk, including attracting new suppliers into the market?

- The concept of “essential facility” originates in the United States, and refers to situations where the owner of a facility could profitably supply a service, but refuses to do so, and it is not **privately** profitable for an entrant to duplicate this facility. For example, if Fonterra could, without any loss to itself, supply raw milk and collection services to a new entrant, while that entrant could not profitably attract independent suppliers, then any refusal to supply would fall within the US-style essential facilities doctrine, and
- The concept of “essential” access was extended in Australia and the European Union by focusing on whether it is **socially** optimal to duplicate a facility. The key difference is that, in some circumstances, it may be privately profitable but socially sub-optimal to duplicate a facility. For example, the very high prices of coal and iron ore in Australia make it privately profitable for mid-size mining companies to truck output from mine to port alongside roads running parallel to the under-utilised rail lines owned by the mining majors. While it is privately profitable to duplicate the service of the existing rail link, trucking is expensive and consumes resource rents. It would be socially optimal for all miners to have access to the rail link. The same situation may occur with respect to raw milk supply—it may be privately profitable for new entrants to set up their own collection networks, but it may also be socially sub-optimal.

A recent decision<sup>2</sup> by the Australian Federal Court approved a “privately profitable” test, which is narrower than the “social benefit” approach previously used by the Australian Competition Tribunal.

Overall, to say that a facility is “essential” does not deny that opportunities may exist to access the same service in alternative way. Rather, we ask whether it is efficient to by-pass the facility. In the context of access to raw milk, the question is: would the absence of regulated access to raw milk prevent efficient new entry into the processing market or induce entry through less efficient channels?

This means that the existence of small alternative cooperatives—such as Westland and Tātua—or the theoretical opportunity to organise a new cooperative, do not by themselves make access to raw milk from Fonterra less “essential”. The main question is whether Fonterra’s aggregation of 11,000 dairy suppliers (92 percent of raw milk by volume) effectively gives it control of raw milk supply, which can only be by-passed in extreme circumstances.

Fonterra’s upstream market power allows it to apply a margin squeeze to its competitors. A margin squeeze occurs if the revenue that the competitor earns less the price it pays to Fonterra for raw milk that has been collected from farmers, is less than the efficient costs of operations. Alternatively, if the processor collects its own milk, a margin squeeze would require revenues earned by the processor to be insufficient to cover the farm gate raw milk price plus the efficient costs of processing and collection.

This concern is not purely conceptual or academic. Specific concerns have been raised that Fonterra may be using the combination of the farm gate raw milk price and its share price to create a barrier to farmers exiting the cooperative. Setting a high milk price and a low share price has the effect of locking in suppliers and maintaining Fonterra’s high market share of member farmers. Because farmers are indifferent as to how their pay-outs are received (whether through the milk price or dividends), such a form of strategic pricing can be sustainable while distorting market outcomes.

---

<sup>2</sup> *Pilbara Infrastructure Pty Ltd v Australian Competition Tribunal* (2011) FCAFC 58.

Where rivals rely on a vertically-integrated incumbent for access to an essential facility, economic theory also predicts that the upstream monopolist will have the incentive and ability to use non-price discrimination to increase its revenues in the downstream markets.<sup>3</sup> This can be achieved by increasing competitors' costs, reducing their operating efficiencies, or reducing the quality of the product offered to downstream competitors.

There are numerous ways that Fonterra could use non-price discrimination in the markets for raw milk. Practices that would fall into this category include:

- Discretionary delivery practices that result in delays and require processing rivals to hold more inventories of raw milk (a perishable good)
- Setting raw milk specifications that affect downstream rivals' product quality, and
- Prioritising Fonterra's own milk in order to ensure final customers perceive greater quality from Fonterra than its competitors.

Such practices would be limited by Fonterra's adherence to New Zealand's stringent food safety regulations, and the fact that there are currently maximum timeframes stipulated in the DIRA regulations for delivering raw milk to independent processors.

### **2.3 Public Policy Objectives for Raw Milk Pricing**

Given the concerns that arise from the characteristics of the relevant markets, we now consider a set of possible objectives that raw milk pricing could seek to achieve. At a high level, the objective is clear: to promote economic growth by ensuring that Fonterra contributes to maximising the potential of New Zealand dairy farming and that opportunities exist for new entrants, particularly to exploit niches. The Government also has an interest in ensuring that it does not face any fiscal risks in relation to the dairy sector, and that the Government's investment in trade policy—including increased access for New Zealand dairy products into the international markets—translates into economic benefits for New Zealand.

In practice, it may be difficult to translate these high-level objectives into specific objectives in relation to the individual markets of raw milk in New Zealand. Given the nature of the international dairy markets, how much would competition within New Zealand promote New Zealand's economic interests rather than benefit international consumers? As a cooperative, how much of Fonterra's effectiveness in maximising New Zealand's dairy potential depends on internal governance rather than external competition, and could the two be in conflict?

In fact, at the partial level at which policy interventions inevitably need to be assessed, it is possible that objectives may conflict. Policy-makers may therefore need to decide which objectives are most important, and which pricing approaches best achieve the most important objectives. In the absence of perfect information, policy-makers may also need to decide which risks are more or less important. We consider the main "partial" objectives below.

#### **Ensuring workably competitive outcomes in the supply of raw milk**

As discussed above, achieving the objective of workable competitive in the supply of raw milk at the farm gate will involve ensuring that the price of raw milk reflects the LRMC of dairy farming. This outcome will have a number of advantages:

---

<sup>3</sup> See Salop, S. and Scheffman, D. (1983) "Raising rivals' costs," *The American Economic Review* 73(2) pp263–271, and Economides, N. (1998) "The Incentive for Non-Price Discrimination by an Input Monopolist," *International Journal of Industrial Organization* 16 pp271–284.

- It will send efficient entry signals for conversion to dairy farming
- It will ensure that the benefit of low cost of production is passed on to processors in New Zealand and consumers
- It will create appropriate incentives for exit by Fonterra's members.

The question is whether the LRMC of raw milk supply in New Zealand is likely to be well below the export parity price (after allowing for collection and processing costs). In other words, it is important to understand whether New Zealand is earning resource rents from dairy production. In this context, it is important to distinguish between the accounting returns on dairy farming and economic returns. In New Zealand, dairy farm returns tend to be capitalised into land prices, reducing the accounting returns earned from farming. In a hypothetical workably competitive market, land prices would tend to be bid down to the value of land in alternative uses, while returns would decline to the level that enables farmers to earn their WACC on the market value of the land in alternative use.

If resource rents are available to New Zealand, a workably competitive market outcome would mean that the benefits of New Zealand's low cost of dairying would accrue to processors and traders, rather than to dairy farmers in New Zealand. These benefits could also be lost to New Zealand through competition among processors and traders: in other words, both New Zealand consumers and foreign consumers would benefit from the lower prices.

### **Enabling efficient entry into the milk processing market**

Another objective could be to allow new entry into processing, but only if that entry is more efficient than Fonterra. As we discuss below, this objective would be consistent with raw milk prices that are above workably competitive outcomes in the raw milk supply market. This objective is perhaps most consistent with the purpose statement in section 4 of the DIRA, which is to “promote the efficient operation of dairy markets in New Zealand by regulating the activities of new co-op to ensure New Zealand markets for dairy goods and services are contestable”.

### **Preventing inefficient duplication of investment in the collection of raw milk**

It is difficult to know when duplication of dairy collection is socially inefficient. In principle, efficient duplication could occur in parts of the collection market, for example in an area with high farm production density and scope for competition. On the other hand, actual entry into collection may be inefficient—if there are sufficiently high resource rents, economically inefficient duplication of a natural monopoly would be privately profitable.

The objective of preventing inefficient duplication of milk collection would only be achieved if there were no rents—that is, if export prices were the same as the LRMC of raw milk supply, collection and processing in New Zealand. However, this may not be a desirable outcome for New Zealand.

### **Ensuring that New Zealand captures full benefits from low cost dairy farming**

Whether policy-makers should be more concerned about the possible dissipation of resource rents, or the dynamic and productive inefficiencies that may be associated with protecting those rents, is fundamentally an empirical question. However, if New Zealand is a relatively low-cost producer of raw milk, policy-makers will want to understand where the difference between production costs and international prices ends up. It is important to emphasise that New Zealand does not need to be the lowest cost producer in the world to earn resource rents. As long as New Zealand dairy farmers have lower

costs than the marginal raw milk supplier into the international market (that is, the most expensive producer required to meet world demand) then resource rents will be present.

The risk to resource rents will also depend on the degree of influence that New Zealand supply could have on the international markets: could domestic rivals access raw milk at its LRMC, under-cut Fonterra's export price, and reduce the returns to New Zealand? Again, this is an empirical question, and to answer it would require a careful analysis of the structure of the international markets for dairy and New Zealand's role in producing less than 3 percent of the total global dairy production. Dairy markets globally are distorted by numerous policy interventions, and the effects of different possible competition incentives between New Zealand-based processors cannot be predicted on a conceptual basis. The key question is to what extent Fonterra's vertically-integrated cooperative structure may be necessary to allow farmers to retain the entire benefit of New Zealand's low cost dairy farming.

A pricing method that sets the price by subtracting processing costs from the export value will mean that the raw milk price in New Zealand reflects the LRMC of raw milk production in the marginal dairy supply country, rather than in New Zealand. As a result, New Zealand dairy farmers will be guaranteed to capture the full benefit of any difference between New Zealand and overseas costs of dairy farming.

## **2.4 Access Interventions**

If access to raw milk is seen as a policy problem, there are several options for intervention. Fonterra's current pricing approach falls under the interventions in Subpart 5 of the DIRA, and there are several ways that regulatory intervention could be extended.

The current approach under DIRA can be characterised as consisting of three components:

- The requirement for open entry and exit into Fonterra, which is intended to create better incentives for Fonterra to set the price of raw milk at a level which would encourage neither inefficient entry nor inefficient exit
- The requirement to provide a certain quantity of the total collected milk at the internally set raw milk price to third parties
- The reliance on generic competition law, including section 36 of the Commerce Act to discipline Fonterra's market behaviour.

The present review of Fonterra's internally-set raw milk price responds to concerns that these components are not working effectively. In particular, there are concerns that open entry and exit into the cooperative may not provide sufficient incentive for Fonterra to set an economically efficient level of raw milk price, and that the Commerce Act does not provide adequate or efficient protection. Since the Commerce Commission has indicated that it is considering an investigation into the milk price, it may be impossible to determine what the effect of the Commerce Act would be until the conclusion of such an investigation.

If the concern about Fonterra's incentives is justified and if the *ex post* intervention under the Commerce Act is inadequate, possible interventions (in order of escalating regulatory intervention) include:

- The government could develop its own indicative pricing methodology, which would equip access seekers with a negotiating tool in their dealings with Fonterra

- The government could mandate a price negotiation-arbitration process. For example, in Australia, commonwealth and state access regulations do not mandate the access price. Rather, they provide principles that should be applied in determining access prices, with the opportunity for both the access seeker and the access provider to appeal to the ACCC or the state regulator for price arbitration, and
- The government could intervene in the price setting mechanism and mandate that Fonterra apply a particular methodology. Cabinet has the power to set raw milk prices or specify a pricing methodology under section 115 of the DIRA through an Order in Council made on the recommendation of the responsible Minister.

While the degree of regulatory intervention would need to be determined, the government needs to have a good understanding of the approaches which could be used to determine efficient prices.

## 2.5 Approaches for Determining Prices

In this section we describe the alternative approaches for determining prices at the farm gate (access point A in Figure 2.1)—prices for the outputs of the raw milk supply market. These approaches provide both a framework for assessing whether Fonterra’s current methodology is efficient and provide a basis for a possible further regulatory intervention (whether fully prescriptive or not).

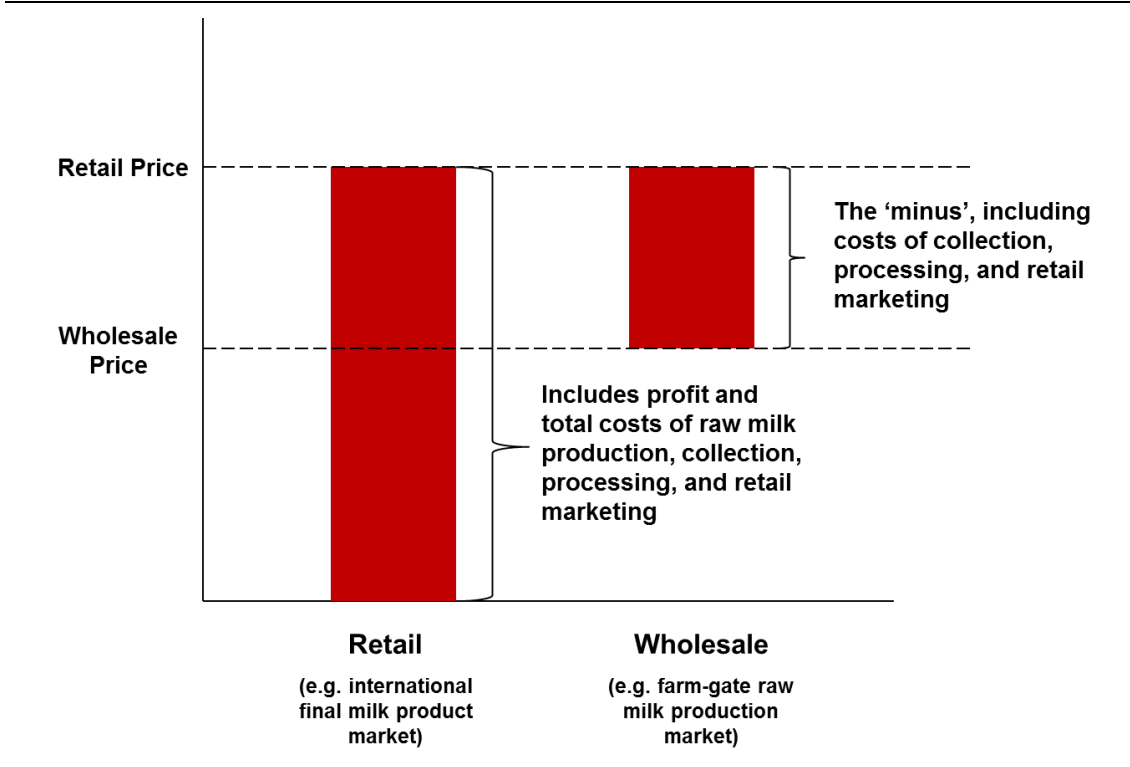
While there are numerous variations of pricing methodologies, the approaches can be grouped into two fundamentally different types:

- **Top-down**—input prices are calculated by subtracting processing and other relevant costs from final prices
- **Bottom-up**—input prices are calculated by estimating the actual costs of the activity.

### Top-down (avoided cost or “retail-minus”) approach

Pricing raw milk using a top-down approach starts with the incumbent’s final market price and subtracts some measure of the costs incurred in turning the raw milk input into a final product. It is also known as the retail-minus method, since it starts with the incumbent’s “retail” price (the price achieved in its most downstream market), and subtracts all costs not relevant for the “wholesale” market (the market to which access is being considered). This is shown in Figure 2.4.

**Figure 2.4: Top-down Pricing (Retail-Minus)**



The formal exposition of the retail-minus approach is known as the **Efficient Component Pricing Rule**, or ECPR:

$$\text{Input price} = \text{output price} - \text{marginal cost of producing output products}$$

The ECPR is also known as the Baumol-Willig rule, the Margin rule, or the Imputation rule, and used to determine whether a margin squeeze (discussed above), has taken place. New Zealand has been a test-bed for the ECPR, beginning with the 1994 Privy Council consideration of section 36 of the Commerce Act in *Telecom v Clear*.<sup>4</sup> The ECPR suggests that in a truly contestable market, an incumbent that sells essential inputs to downstream competitors would demand a price equal to the revenue the incumbent would receive if it processed the input itself.

Where competitors need to purchase the essential input from the incumbent (that is, if there is no opportunity for bypass), regulators may make access to the input compulsory. If access is created through Fonterra's collection and delivery network, the additional cost of providing access to Fonterra's processing competitors would be added to the input price. The access price based on a top-down approach would therefore be set at a level that would discourage entry by a rival downstream processor that is less efficient than the costs subtracted from the retail price.

The Baumol-Willig version of the ECPR is based on subtracting actual avoided costs, so that a new entrant can be as efficient as Fonterra (or more efficient). In the context of pricing raw milk as an essential input into dairy processing, this price would equal what Fonterra would have earned if it had processed the available raw milk, less what it would save by allowing an entrant to process raw milk.

<sup>4</sup> Telecom Corporation of New Zealand Ltd v Clear Communications (1994) 6 TCLR 138.

Given that New Zealand has a production cost advantage and is able to earn resource rents in the final market, the ECPR would result in a raw milk input price higher than the LRMC of producing that milk. There is on-going debate about settings where a rule that is more generous to entrants might be used to encourage entry to promote innovation, which is particularly relevant where there may be a minimum efficient scale of running a milk processing operation.

### **Bottom-up (cost build-up or cost of service) approach**

A bottom-up approach to pricing reflects the costs associated with the product itself—raw milk made available by farmers—and does not rely on knowledge about collection or processing costs, or final product prices.

The logic of a cost-of-service approach is that in workably competitive markets prices tend to reflect the LRMC of production. Cost-of-service models therefore try to estimate the LRMC, with different degrees of precision.

The major areas of debate in applying cost-of-service approaches are:

- **The estimation of a weighted average cost of capital (WACC).** The logic of approximating a workably competitive market is that capital employed in the business will just recover its opportunity cost. Hence, WACC needs to reflect non-diversifiable risk involved in the business. For example, the more price volatility faced by dairy farmers, the higher the required WACC
- **The valuation of sunk assets.** It is reasonably easy to assess the value of new investments, but more difficult to decide on the value of the assets employed in the business such as land. There is a problem of circularity: the value of the current assets may depend on the price of the final output, while the regulated price depends on the value of the assets. Regulators using cost of service models have come up with various ways of addressing this problem, and
- **The degree of optimisation to apply to cost estimates.** Regulators do not want to reward regulated producers for inefficiency. This requires the regulator to decide the extent that prices should allow costs to be recovered that reflect the actual costs of the business rather than hypothetically efficient costs. This applies both to capital costs through the treatment of stranded or underutilised assets, and to operating costs through the use of assumed improvements in operating efficiency over time.

## **2.6 Pricing Approaches and the Hypothetical Efficient Competitor (HEC)**

We can now consider how the concept of the HEC fits with top-down and bottom-up pricing approaches. In summary, using hypothetical costs in a top-down approach works against the objective of allowing firms that are more efficient than the incumbent to enter the market. Using hypothetical costs fits better in bottom-up pricing approaches, although hypothetical cost benchmarks still need to be applied with caution.

### **Using hypothetical costs in top-down pricing**

The notion of an HEC does not fit very well into top-down pricing approaches. The costs subtracted from the retail price set the benchmark for efficiency that new entrants need to beat. Actual cost is therefore a natural benchmark in top-down approaches because the resulting input price provides an incentive for any new entrant that is more efficient than the current monopolist.



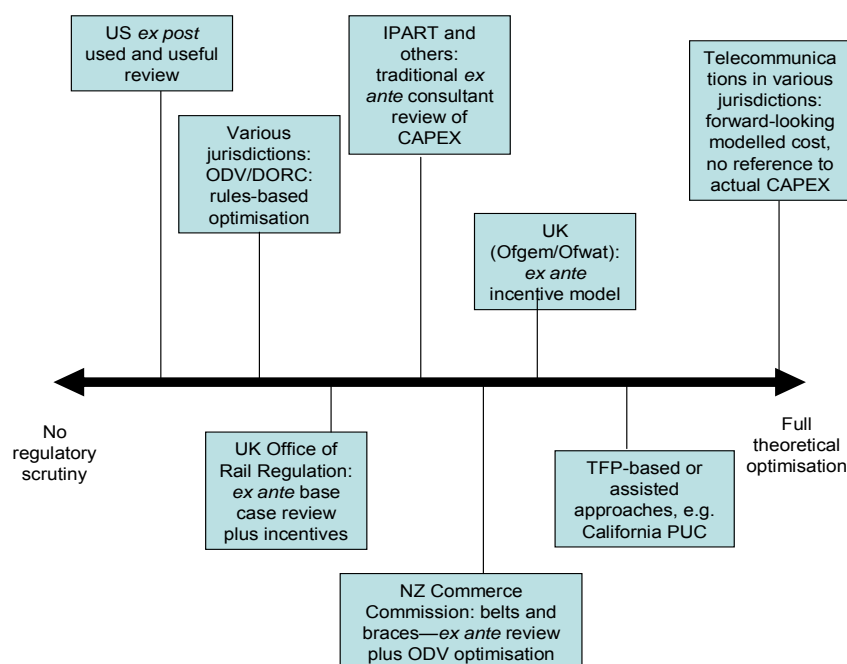
In contrast, a hypothetically efficient cost would not incentivise entry by more efficient firms than the monopolist: by subtracting the costs of an HEC from the final price, we require new entrants to instead be more efficient than the HEC. In theory, if the costs of the HEC are correctly calculated (as the costs that would be borne by an optimal new entrant) then no actual new entrant would be able to beat that hurdle.

### Using hypothetical costs in bottom-up pricing

The HEC is a useful tool for bottom-up pricing approaches that build-up cost estimates. By using hypothetical rather than actual costs, bottom-up pricing approaches ensure that the monopoly provider of an input is not rewarded for any inefficiency through prices.

The different bottom-up methodologies for setting prices using hypothetical costs can be visualised along a continuum where, at one extreme, the regulator accepts whatever costs are incurred by the regulated entity, while at the other extreme, the regulator determines prices through a cost model which does not rely on the regulated entity's data. The approaches adopted by regulators internationally are placed along this spectrum in Figure 2.5, which shows that the reliance on hypothetical (optimal) costs differs in different jurisdictions and industries.

**Fi**



Note: ODV is Optimal Deprival Valuation. DORC is Depreciated Optimised Replacement Cost. TFP is Total Factor Productivity.

In selecting an appropriate level of cost optimisation, regulators need to balance concerns about the efficiency of the monopolist against the potential for regulatory error. Any estimate of hypothetically efficient costs risks being incorrect, and if prices are set too low as a result, the regulated entity will not recover its cost of capital and will not invest. If hypothetical costs are not sufficiently optimised in bottom-up approaches then the regulator loses the opportunity to encourage efficiency improvements through prices.

It is important to note that bottom-up pricing approaches focus solely on the impacts of prices within the level of the supply chain being analysed. Bottom-up estimates do not consider the impacts that the resulting prices might have on competition at other levels

of the supply chain. This means that a bottom-up approach to pricing that estimated the LRMC of dairy farming in New Zealand as a way to set raw milk prices at the farm gate would not account for any impacts that the resulting price would have in the milk collection and processing markets.

## **2.7 Summary of Pricing Approaches**

The approach to regulating the price for raw milk needs to be based on a clear choice between possible public policy objectives, which in turn are derived from understanding the relevant markets for raw milk in New Zealand, and the outcomes that would be desirable in these markets.

The HEC model then needs to be seen within the context of the pricing approach that would best achieve the policy objectives. The HEC model does not fit well into top-down pricing models. It does, however, fit into cost build-up approaches.

### 3 Fonterra's Current Pricing Approach

In this section, we describe our understanding of how Fonterra's *Milk Price Manual* works, and its implications.

#### 3.1 How the *Milk Price Manual* Works

In essence, Fonterra's approach is to conceptualise its business this way:

- The marginal supply of milk to Fonterra (any milk additional to current volumes) is converted into a bundle of commodity products
- Farmers have to hire a collection, processing, and marketing agent to convert their raw milk into the commodity bundle and sell it to international buyers
- Since commodity products are freely traded, there is very little (if any) marketing cost
- Hence, the key issue for farmers is to ensure that they pay the collecting and processing agency no more than would be required for an efficient operator.

In this context, Fonterra's farmers want to regulate the "tolling" charge that the processing and collecting agency charges them. The Milk Price is the residual of that calculation: it is what the milk is worth to farmers if it is converted to a commodity bundle by an efficient collecting and processing sub-contractor.

Given this objective, Fonterra applies a bottom-up, cost-of-service pricing approach to calculate the charge levied by its milk collecting and processing arm. In other words, the price that is regulated is the price of the downstream services as if such services were supplied in a monopoly setting.

This approach is entirely logical for Fonterra's members. Large-scale entry into the processing market is unlikely in New Zealand—both because of the costs of coordinating a large scale exit of Fonterra's members and the incentives on Fonterra to prevent such an exit. Treating collection and processing as monopoly services provided to cooperative members, and applying standard regulatory pricing techniques to price these services makes sense from the perspective of cooperative members. The question is whether this is socially optimal.

#### **The milk price is the residual of modelled collection and processing costs**

The *Manual* essentially models the processing costs to produce a hypothetical product mix. The Milk Price is calculated as the residual of final revenue, less operating and overhead, less a charge of fixed assets and working capital of the business delivering product to the New Zealand wharf (the off-shore network is not included). The *Manual* therefore follows a building block regulatory model to generate an input, rather than an output price. This has four steps:

1. Defining the boundaries of the notional commodity business
2. Calculating the notional revenue
3. Calculating the recoverable notional costs ("notional cash costs")
4. Calculating an appropriate capital recovery amount ("notional capital costs").

We discuss each of these four steps below.

## Defining the boundaries of the notional commodity (milk price business)

Efficient near-term competition comes from would-be new entrants who construct milk powder plants—equivalent to, and of the same scale as, the notional commodity business. This business is focussed on the sale of powder products overseas. International markets provide the deepest and most transparent benchmark for milk prices, so milk powder and cream products are simple to model. The *Milk Price Manual* produces a price that over time is the price that an “optimally efficient” Fonterra, processing all New Zealand raw milk, would pay farmers in a competitive, integrated collection and processing market.

Therefore a notional pure commodity product manufacturing business is identified within Fonterra. Fonterra doesn’t operate a segregated “powder-only” business. Aside from long term contracts, the difference in costs between Fonterra and the “Milk Price” is legacy assets. This historical asset footprint and capacity constraints limit the ability to produce an optimal product mix. For instance, cheese and casein plants reduce profitability relative to milk powder.

The treatment of volume and the product mix is important:

- **Volume.** All milk collected by Fonterra in New Zealand is manufactured into Reference Commodity Products (RCPs), including milk to independent processors under the Raw Milk Regulations (access point B in Figure 2.1). This means that any difference in the Milk Price and price paid for access to raw milk by independent processors will accrue to Fonterra
- **Initial Reference Basket.** A sample of Fonterra’s actual sales prices of four reference commodity “base” milk powder streams: whole milk powder (WMP, 58 percent), skim milk powder (SMP, 24 percent), butter (10 percent), and anhydrous milk fat (AMF) and butter milk powder (BMP) (eight percent).

## Calculating notional revenue

Reference prices are derived from the *globalDairyTrade* online auction of commodity milk products,<sup>5</sup> and bilateral trade prices are only relevant for butter and certain other items. Fonterra bears the risk of short term decisions to manufacture product mix different from the RCPs, as long as the benchmark mix can be adjusted to maximise the Milk Price (based on the Reference Basket).

Current actual Fonterra volumes are: WMP (36 percent), SMP (17 percent), Cream (including butter—13 percent), AMF and BMP (eight percent), and other (cheese, casein, liquid milk, MPC, whey, etc—26 percent).

The Production Plan and Benchmark Product Mix set the production volume of the Notional Commodity Business. They are prepared at the start of the season, but are able to be altered. Benchmarks must:

- Be feasible, given the Notional Fixed Asset Base configuration
- Result in the notional conversion of all Milk into RCPs
- Be consistent with an objective of maximising the aggregate Milk Price and profits of the Notional Commodity Business, given the relative returns of the RCPs, and
- Create strong incentives for Fonterra to optimise its product mix.

---

<sup>5</sup> See <http://www.globaldairytrade.info/> (last accessed 4 July 2011).

### Calculating the recoverable notional (operating) costs

The calculation of operating costs applies Fonterra's actual manufacturing unit, maintenance, collection, and supply chain costs to a manufacturers' specification of processing utilisation.

- Modelled variable costs x notional production volume
- Plus modelled fixed costs, if all milk converted to reference commodity products,
- Plus notional tax payable (this requires an adjustment of depreciation for tax purposes from the assumed regulatory treatment described below).

**Manufacturing costs** reflect a "standard" of 1.9m litres per day average plant capacity. Notional manufacturing costs use a 'bottom-up' approach on the notional construction of the cost base Fonterra would require if it did nothing other than manufacture this milk into Reference Commodity Products. Financial models are maintained and audited for each standard plant and for manufacturing sites in aggregate.

**Variable manufacturing costs** are set by reference to utilisation rates set by manufacturer and independently reviewed. **Fixed costs** are "reasonable" and reviewed by an independent reviewer. **Maintenance costs** are actual Fonterra costs over last four years, scaled by the ratio of the aggregate replacement cost of the Reference Assets to the replacement cost of Fonterra's actual NZ manufacturing assets, as calculated for insurance, adjusted for inflation.

**Collection Costs** reflect actual costs incurred by Fonterra in collecting milk, adjusted to reflect any material differences between costs of transferring milk between sites and the notional cost implied by the Notional Production Plan and the allocation of standard plants to sites. **Supply Chain Costs** reflect Fonterra's actual factory to wharf transport and storage costs, as if they were reasonably incurred manufacturing RCP under the Notional Production Plan.

**Sales Costs** include agent costs or Fonterra's own (whichever is lesser), including selling through *globalDairyTrade*.

### Calculating notional capital costs

Capital recovery reflects the standard asset base (existing plus capital expenditure) applied to reasonable rate of return and depreciation/revaluation.

- Annualised provision for WACC recovery on notional fixed asset base
- Plus annualised provision for WACC recovery on notional net working capital
- Plus annualised provision for recovery of net depreciation on notional fixed asset base. The depreciation calculations for the notional commodity business back-load depreciation charges towards the end of the assumed useful life of the assets.

The Notional Fixed Asset Base comprises:

- Standard plants—using a cost assessment from a reputable engineering firm retained by the valuer
- On-site assets (and installation costs) required for processing—based on replacement costs

- Milk Collection Assets (including on-farm vats) required to collect total milk to deliver that milk to its “actual delivery point”—this is based on an estimate of replacement costs, and
- Information systems and land required for manufacturing sites—based on current market value.

Fixed asset capital costs of the notional commodity business are calculated through a stream of annuities sufficient to earn both a WACC and a recovery of a deemed acquisition cost over each asset’s economic life. The WACC used to determine the fixed asset capital charge and the net working capital charge is set to appropriately reflect the allocation of risks set out in the *Manual*. The capital charge is applied to a monthly net working capital balance.

### 3.2 Is There Anything “Wrong” with the *Milk Price Manual*?

The *Milk Price Manual* makes perfect sense as a manual for regulating the collection and processing toll to be charged to Fonterra members. The Milk Price, which emerges as a residual of the collection and processing cost calculation, produces an effective management tool for Fonterra shareholders:

- Fonterra management is remunerated on the basis of the profitability of the collection and processing business
- By treating the calculated Milk Price as an input cost into that business, managers can only earn more than WACC if they:
  - Achieve actual costs which are lower than the hypothetical efficient costs of processing and collection, or
  - Achieve a product mix which is more profitable than the hypothetical product mix.

Over time, for the purposes of the internal oversight, the *Milk Price Manual* can tighten the pressure on management through an even greater optimisation of inputs, or through stronger assumptions on the optimisation of the product mix. Either approach will result in a higher raw milk price for a given set of international commodity prices. In essence, as an internal management tool, the pricing model assumes that threat of, or actual exit by farmers is an inefficient and undesirable tool for keeping management honest. Rather, the model aims to achieve a desirable level of efficiency through an internal regulatory mechanism.

In terms of the pricing approaches introduced in Section 2.5 of this report, Fonterra’s current approach follows the overall logic of top-down pricing by starting with the retail price and subtracting costs. Following a top-down approach ensures that any resource rents are captured by upstream economic agents (in this case, dairy farmers). However, by applying the HEC in the process of estimating costs, Fonterra is using an optimisation approach that fits much better with bottom-up pricing approaches.

While this model makes perfect sense as an internal management tool, the resulting Raw Milk Price does not appear to satisfy some of the public policy objectives presented above:

- It sets an unrealistically high hurdle for new entrants into the milk processing market, and may therefore prevent entry by efficient competitors
- It may deter investment from competitors that would contribute to a more dynamic agricultural sector, particularly niche processors

- It encourages uneconomic by-pass of existing milk collection services in an effort to capture any resource rents
- It serves as a barrier for Fonterra's farmers to exit the cooperative.

### **Box 3.1: Fonterra's *Milk Price Manual* Summary**

- Applied to raw milk, the *Manual* uses revenue from export commodity sales, minus the downstream costs of processing. The *Manual* therefore follows a building block regulatory model to generate an input price for raw milk, rather than an output price
- Applied to the cost of service provided to farmer-owners (that is, in adding value to raw milk), the *Manual* calculates a partially-optimised TSLRIC (total service long-run incremental cost) price of collection and processing services
- The *Manual* models the processing costs of producing a hypothetical product mix. The processing and collection costs include operating and overhead costs, and a charge of fixed assets and working capital delivering products to the New Zealand wharf
- The *Manual* identifies a notional pure commodity product manufacturing business within Fonterra. Aside from long term contracts, the difference in costs between Fonterra and the "Milk Price" relates to legacy assets. Historical assets and capacity constraints limit the ability to produce an optimal product mix. For instance, cheese and casein plants reduce profitability relative to milk powder
- The *Manual* assumes that efficient near-term competition comes from would-be new entrants who construct milk powder plants—equivalent to the notional commodity business and of the same scale as Fonterra. This business is focussed on the sale of powder products overseas. International market is the deepest and most transparent benchmark for milk prices, so milk powder and cream products are simple to model
- The *Manual* produces a price that, over time, is the price that a Hypothetically Efficient Competitor of a comparable scale to Fonterra would pay for raw milk in a workably competitive integrated collection and processing market. This entity benefits from any current economies of scale and scope in collection and processing
- The *Manual* also produces a milk price higher than would be achieved in a workably competitive raw milk production market.

## 4 Is there a Better Alternative to Fonterra's Current Pricing Approach?

Our analysis of Fonterra's current pricing model suggests that it results in a raw milk price to third parties (Fonterra's competitors) which may be higher than would be efficient:

- It requires any new entrant into the collection and processing markets to be super-efficient to beat the hypothetical benchmark. This weakens incentives to innovate and invest in areas where Fonterra may not be actively focusing
- It is likely to set the price for raw milk above a workably competitive outcome in the market for the supply of raw milk, and
- It may encourage inefficient solutions, such as requiring new entrants to waste resources (that is, to consume resource rents) on building their own supply base when this reduces New Zealand's welfare.

At the same time, it appears that Fonterra's current approach is effective at achieving the objectives set by cooperative members. In particular, the current approach ensures that Fonterra's processing and collection business is well managed in terms of keeping the costs of collection and processing as low as possible. By regulating the cost of collection and processing that is charged to cooperative members, members to a significant extent replicate the effects of any pressure that could be applied on Fonterra by external competitors to reduce production costs. With an efficient price of milk and open entry and exit, Fonterra would have an incentive to be as efficient as possible in order to avoid losing suppliers to external competitors. Fonterra's internal regulation of the cost of collection and processing applies the same pressure, regardless of whether the milk price that falls out of the model is efficient or not from the public policy perspective.

Given the effectiveness of the *Milk Price Manual* as an internal regulatory tool, and given the fact that Fonterra is likely to remain as the dominant dairy cooperative in New Zealand, the government should be concerned not to undermine the workings of the mechanisms which Fonterra's members use to promote processing and collection efficiency. The question of whether Fonterra should be compelled to change its approach to pricing raw milk therefore comes down to whether the benefits of an alternative approach would exceed any costs in damaging Fonterra's internal mechanisms.

### 4.1 Alternative Approach Using ECPR

Given that Fonterra's model requires a new entrant to be super-efficient, social welfare could be improved if:

- The benchmark for new entrants was lowered to being at least as efficient as Fonterra. It is important to emphasise such entry may do little to increase the pressure on Fonterra to be efficient, compared to the internal pressure applied by the HEC model. However, it should enhance dynamic efficiency by allowing more innovation and investment in processing around the edges of Fonterra's business, and
- New processors—even if they had their own suppliers—could access Fonterra's milk collection services where duplication was socially inefficient.

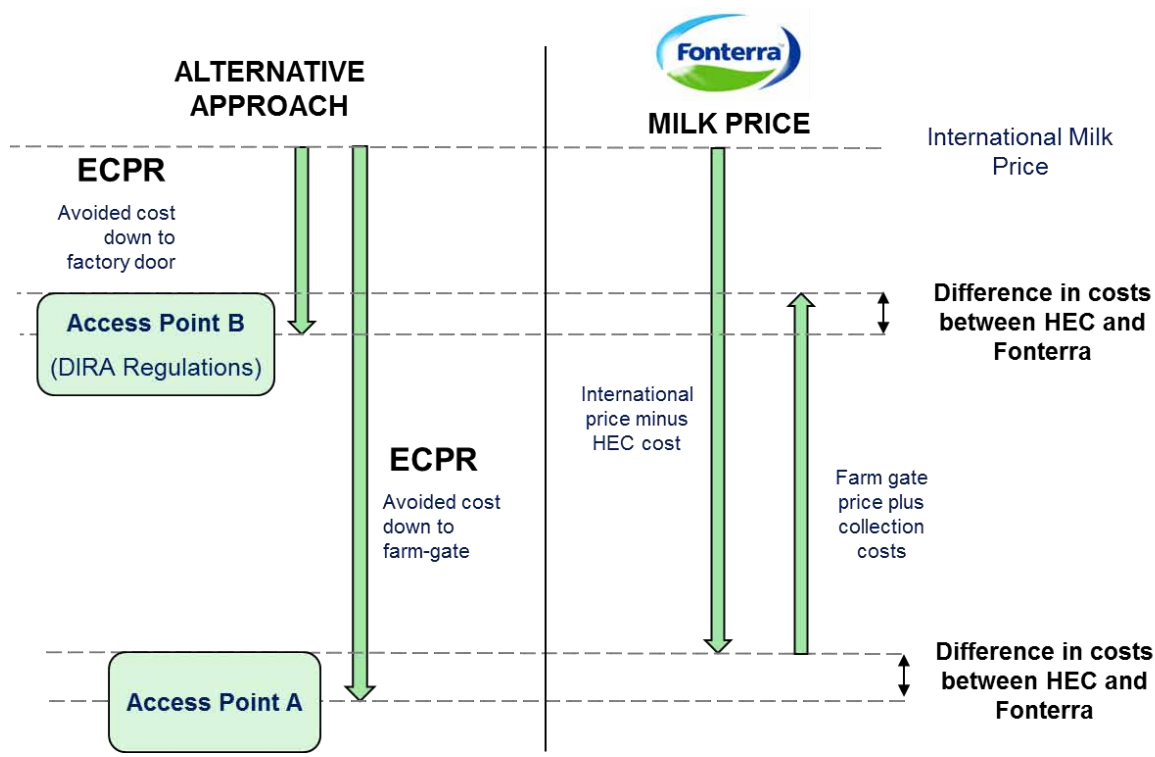
Achieving these outcomes suggests two possible modifications to improve the current pricing regime:



- **Requiring Fonterra to use the ECPR approach to set the raw milk price applied to third party access seekers.** In general, the ECPR states that where a vertically-integrated access provider supplies both an access input upstream and a retail output downstream, the access price should be set equal to the direct incremental cost of access plus an amount which compensates an access provider for the opportunity cost, or lost profit, associated with not providing the retail output. In other words, under an ECPR approach, Fonterra would be no worse off from providing access than from doing its own processing (oddly, under the HEC model, it would actually be more profitable for Fonterra to supply milk to other processors than to process it itself). The ECPR price of raw milk would be lower than the price produced by the *Milk Price Manual*—in essence, it would subtract more costs (actual rather than hypothetical) from the same revenues, and
- **Requiring Fonterra to offer different “inter-connection” options on its network.** Competitors could either access raw milk that has already been collected or access raw milk at the farm gate. This means that ECPR solves both problems of entry into processing and any natural monopoly issues in raw milk collection—the access price would include a collection component if access seekers are supplied at an aggregation point. Access prices could also be specified at regional “collection nodes” to account for any geographic differences in Fonterra’s costs.

An overview of how an ECPR approach compares with Fonterra’s current pricing approach is shown in Figure 4.1.

**Figure 4.1: Comparison of Fonterra’s Current Pricing Approach and ECPR**



The fundamental logic of ECPR is that Fonterra should be indifferent to supplying access seekers and undertaking the processing and/or collection activity itself. The ECPR approach should therefore reimburse Fonterra for the actual costs that it bears, even in

regions that Fonterra serves under its statutory obligation under section 71(b) of the DIRA to accept all applications by new entrants and shareholding farmers to supply it with milk as shareholding farmers.

In principle, it is possible that a rigorous application of the Commerce Act would result in exactly the same outcome as ECPR. However, regulatory intervention may be justified if the transactions costs or regulatory uncertainty under the Commerce Act are inefficiently high.

A major advantage of ECPR over bottom-up pricing approaches is that ECPR ensures that farmers continue to receive any resource rents. In contrast, bottom-up approaches may place at risk New Zealand's ability to capture the benefits from low cost dairy farming. As a result, we have not explored the implications of requiring Fonterra to apply a bottom-up pricing approach for raw milk in detail.

## 4.2 Fonterra's Internal Milk Price and External ECPR Milk Prices

In deciding whether some form of mandated shift to ECPR for setting the milk price for third parties is justified, we need to consider whether Fonterra's internal regulatory approach—which produces the milk price as a by-product—could co-exist with a different methodology being used to set the external milk price for third-party access.

In theory, it is not unusual for vertically-integrated companies to use internal transfer prices that differ from market prices. In essence, what Fonterra is doing is not unusual: setting deliberately high transfer prices to hold managers' feet to the fire. Such internal mechanisms can, and do, co-exist with different market outcomes for the same reasons that Fonterra's is currently used. It should be noted, however, that it cannot be predicted whether Fonterra would continue with the *Manual's* pricing model in its current form.

Assuming Fonterra did continue with the current pricing model for internal governance reasons, the divergence between the internal milk price and any external ECPR-based prices could raise two types of issues:

- First, Fonterra members may protest against the apparent supply of milk to third parties at a lower price than they receive. Of course, Fonterra members are not really receiving a higher price. What is happening is that the *Milk Price Manual* notionally divides the payments that Fonterra members are receiving into a lower dividend and a higher milk price. However, this is a subtle distinction which may be difficult to explain, and which could cause farmer opposition to apparent "subsidy" to other processors, and
- Second, and perhaps more importantly, the value of Fonterra shares would continue to be based on the internal transfer price. Hence, the incentives for entry and exit into Fonterra would be influenced by the internal price. The availability of raw milk at a lower external price would mean that the incentives on the independent processors could become distorted—to secure their own supply, they would need to match the price that Fonterra is offering, while they could obtain milk from Fonterra at a lower price. Hence, the incentive will be to draw raw milk from Fonterra.

As a result, the co-existence of a more efficient external milk price for third party access-seekers and the internal milk price which feeds into Fonterra share valuation (whether under the current valuation model or through prices being set by trading among farmers) could entrench Fonterra's position as the raw milk supplier. In essence, new processors would always be better off drawing raw milk from Fonterra than seeking their own supply.

This outcome could be efficient, but it may be less competitive than the outcome which would result if both the internal and external prices for Fonterra raw milk were set using the same pricing methodology. The incentive to draw raw milk from Fonterra naturally poses the question: should the quantity which Fonterra is obligated to provide to third parties be restricted?

In theory, the application of ECPR should always ensure that Fonterra is no worse off supplying third parties than it is undertaking the processing itself. Hence, there is no reason why the quantity to be supplied should be capped. However, the cap may be necessary from a political economy perspective (particularly given concerns about supplying milk at a “subsidised” price).

## 5 Further Analysis

Conceptually, the use of the ECPR methodology to set the price for raw milk supplied to third parties may improve social welfare. This improvement is possible even if Fonterra continues to use its *Milk Price Manual* to internally regulate its processing and collection costs. However, internal regulation will inevitably have an external effect by feeding into the Fonterra share price. As a result, the coexistence of an ECPR-based milk price for third-party access and an HEC-based milk price for internal purposes will affect the incentives in the milk supply market, and may have substantial political economy effects. This makes it important to acknowledge the risk of introducing unintended consequences by implementing an ECPR methodology for third party access pricing.

Changes in regulation often cause unanticipated effects. In the context of this report, we are unable to answer the empirical question of whether the distortion caused by Fonterra’s current use of the HEC methodology for setting the raw milk price is sufficiently large to justify the risk of causing unanticipated effects through a change in policy. This is an empirical question that needs to be informed by an analysis of:

- The loss in dynamic efficiency that is being incurred due to innovation from niche entrants and insufficient market discipline on Fonterra’s own investment decisions, and
- The loss in efficiency that is being incurred through the duplication of collection facilities to enable entry or expansion by independent processors.

There are also other practical or implementation issues that will need to be addressed in moving to an ECPR approach, including:

- Whether any restrictions should be placed on the quantity supplied by Fonterra at any access points on its network, and
- Whether any access requirements could be phased out once competition has emerged at the farm gate and factory door (similar to the current intended phasing out of the DIRA regulations).

## Appendix A: Review of Access Regulation

The purpose of this appendix is to provide a brief overview of the theoretical justifications used for regulating access to services and facilities. We also explore how access is regulated by competition authorities in the following jurisdictions:

- Australia
- The United States
- Europe
- New Zealand.

### A.1 Why Regulate Access?

It is well-recognised in economic theory and in regulatory practice that providing certain products and services—especially in the network parts of an industry—involves cost and demand characteristics that mean a single player is the most efficient industry structure, rather than competition between multiple suppliers.

These activities are referred to as natural monopolies. They are typically characterised by a combination of high fixed costs, high entry barriers and inelastic demand, and economies of scale (higher output lowers the average cost per unit). In technical terms, an activity is defined as a natural monopoly where total costs are lower with only one firm operating at the prevailing level of demand—known as cost sub-additivity. This means that resources are saved by keeping an incumbent monopoly intact, rather than breaking it up into several competing suppliers (which is a common regulatory solution in markets with a dominant player that are not natural monopolies).

Natural monopoly conditions have historically been associated with the public utility industries, such as electricity, telecommunications, water, and railroads. However, in the past 30 years many overseas jurisdictions have liberalised these markets by opening parts of the industry to competition and restricting the scope of regulation to natural monopoly aspects of the industry. Technological developments have played a role in these regulatory changes. Policy-makers now recognise that industries are often comprised of a number of sub-activities, some of which may be contestable. For example, gas storage in many jurisdictions is now considered to be a contestable activity, electricity generation is seen as competitive, as are many retail and supply related activities in the provision of utility services.

The “network” aspects of utility industries—the customer access network in telecommunications, and electricity transmission and distribution networks—are nevertheless still generally considered to display strong natural monopoly characteristics. Most jurisdictions therefore retain some form of regulatory regime to compel an incumbent to provide access to entrants. It is generally accepted that this form of regulatory intervention leads to more efficient outcomes. The motivation for this regulation is that efficient competition in downstream markets would be difficult, or even impossible, unless entrants can access the essential input at appropriate prices, terms and conditions.

Moreover, the regulation of access prices restricts the ability of the service provider to exploit their position of economic power by charging excessive or discriminatory prices. This is a particular concern where the incumbent access provider is vertically-integrated and operates at a number of levels in the production chain—for example as both a seller of an input (access at the wholesale level) to downstream markets and a competitor in

that (retail) downstream market. In these circumstances, the incumbent access provider has an incentive to raise the wholesale input price of access to its competitors in the downstream market, and to “squeeze” their competitors’ margins and make their competitors’ businesses unviable.

Whether a particular industry is a natural monopoly depends on the costs and demand characteristics of that industry—businesses that are a natural monopoly in one country may be competitive in another country where cost differ or market demand is higher. In relation to New Zealand’s dairy markets, there is some evidence that milk collection may be a natural monopoly. However, this will depend on the precise location of the different collection points or farms, and the local topography (including the road network), among other things. Collection services already exist for a range of agricultural products produced on farms. Distribution and collection services for supermarkets, shops, and hotels for several products already exist under competitive conditions, even in remote locations.

Access arrangements are sometimes also required for activities which may **not** be natural monopolies. Certain services may be an “essential” or “bottleneck” facility, where access to this service is required by firms at different levels of the production chain in order to participate in other markets. The meaning of what constitutes a bottleneck or essential facility (particularly as interpreted by the Courts) can be broader than that of a natural monopoly.

For instance, Fonterra could use its upstream market position by strategically controlling access to raw milk, an essential element for competing downstream milk processing firms. There is a risk Fonterra can set a farm gate raw milk price too high and make entry to the processing and collection markets difficult, particularly if there is a low potential for bypassing Fonterra’s upstream business. Without an opportunity to bypass Fonterra farmers’ raw milk (for example by setting up supply through new dairy farms or by purchasing raw milk from farmers who leave the cooperative), those firms are dependent on Fonterra for access.

### **How access is regulated: theory and practice**

Whatever the rationale for regulating access, the central issue in access regulation is how the terms of access (both price and non-price) are determined between an integrated firm with market power and its rivals in downstream or related markets. Determining an appropriate access pricing methodology is controversial in regulated industries.

A net-benefit approach focuses on the goal of efficiency, the central question being “who can deliver the access service most efficiently?” From this perspective, the only time access should be “sub-contracted” to an entrant in a downstream market is where the entrant provides “value” over and above that which could be provided if the incumbent access provider supplied the market.

For example, in settings where the optimal access price results in “low” or “no” value entry (either because the entrant does not attract sufficient customers or the value added per customer is low), but results in a cost recovery problem for the incumbent access provider, it may be more efficient to not allow access. This position might be qualified by recognising a number of other reasons that entry or competition may be desirable or important in many contexts (such as in cases of technological change and innovation possibilities).

Where a facility is deemed to be a natural monopoly, economic theory is clear that to promote economic efficiency, access prices should be set to equal the marginal cost of

providing the service. However, as many activities in network industries involve substantial fixed costs, this can lead to a revenue shortfall for a service provider.

One method of deviating from marginal cost pricing to account for fixed costs is to allow prices to reflect the willingness to pay of different users. This approach (known as Ramsey or demand-based pricing) applies a mark-up above marginal cost that is inversely proportional to the elasticity of market demand for a particular service. In principle, the mark-up for different users can be chosen in such a way that allows the service provider to generate sufficient revenue across all customers. Averaged long-run marginal cost (LRMC) is often a more useful benchmark, since it takes into account that:

- The cost of capital expenditure required to expand capacity before a firm can change production, and
- The revenue earned from such an investment may not be sufficient in the short run while capacity is unused. If prices deviate from LRMC over time, efficiency is not maintained.

In practice, different access prices and pricing methodologies will achieve different policy objectives. While a “low” access price might encourage entry into related markets, it might also reduce incentives for investment by the incumbent access provider. Conversely, a “high” access price might create incentives for network duplication or bypass, but also entrench positions of market power, frustrate competition and entry in related markets, and raise prices for consumers.

In order to generate incentives for dynamic efficiency, an access price needs to ensure that sufficient revenue is generated to cover the efficient costs of providing access to services, including an appropriate return on investment. At the same time, an access price should be related to the underlying costs of access services, as this will ensure the efficient use of services and investment in related markets. A further consideration, and one of importance in dairy markets in New Zealand, is the relationship between access prices and final retail prices, and in particular, whether prices in related domestic dairy markets are regulated or unregulated.

The performance of an access pricing framework can be evaluated against the signals or incentives that an access price provides for:

- The efficient use of a network or facility
- The level and type of investment in a network or facility
- The type of competition in, and extent of entry into, related markets, and
- The supply of access services at reasonable costs.

There is typically no “right” answer when it comes to determining access prices. Rather, the key insight is that it is important to have an access pricing framework that is well-designed, and creates the right incentives for access providers and users, and achieves the desired policy objectives. This means that access prices cannot be evaluated without a thorough understanding of market dynamics—what is appropriate in any particular setting will depend on the context and conditions in the particular market, which are likely to change over time.

## **A.2 Review of Access Regimes Overseas**

We now consider examples of approaches adopted in different jurisdictions to regulate access to facilities.

## Australia

Australia has a formally developed nationwide access regime. It was implemented in 1995, and consists of a process to facilitate access to natural monopoly bottlenecks for businesses to compete in related upstream or downstream markets. Industry-specific access regimes have been developed in energy and telecommunications, and for some port facilities (such as the Dalrymple Bay Coal Terminal in Queensland).

The national access regime is contained in Part IIIA of the Competition and Consumer Act 2010. Part IIIA provides for access to the services of infrastructure facilities on appropriate terms through a process known as the “declaration” of services (with designation of a facility as a natural monopoly by the Government). The National Competition Council is responsible for making recommendations to relevant ministers on applications to have particular services or assets “declared” under Part IIIA.

If a service is declared under the national access regime, and an access seeker and the access provider are unable to agree on the terms and conditions of access, either party may notify the ACCC of the dispute. In these circumstances the ACCC may make an arbitration determination that binds the parties. The ACCC also has various price surveillance powers, which allow it to review (but not set) the prices of certain goods and services. These powers are in addition to standard competition law powers to intervene against proscribed anti-competitive practices by firms with substantial market power.

Part IIIA contains several criteria for access declaration, including:

- Whether access (or increased access) “would promote a material increase in competition in at least one market ... other than the market for the service”. This is quite a broad criterion, as it is not restricted to the downstream or final market, and
- Whether it would be “uneconomical for anyone to develop another facility to provide the service”. If applied as a strict natural monopoly issue, this is a very narrow test—asking whether capital and operating costs for meeting the reasonably foreseeable demand for the service would be lower with one facility than with more than one.

Applying these tests in the New Zealand dairy markets, it may be hard to argue for access to Fonterra’s milk collection assets. However, if applied more broadly in the context of the potential for strategic pricing, entry may be foreclosed due to the lack of bypass opportunities.

More generally, there is considerable legal and economic debate as to the proper interpretation of the natural monopoly part of the test. One interpretation is that this criterion looks at efficiency from a social welfare or net-benefit perspective, and in terms of the costs for production to occur through one facility (sub-additivity). However, in a recent Federal Court decision on access, the criterion was interpreted from the perspective of an access seeker or potential entrant, and is therefore focussed on the question of the interests and ability of that party to develop the facility<sup>6</sup>.

Under the Competition and Consumer Act, small businesses can be authorised to “collectively bargain” with customers and suppliers in circumstances where the ACCC is satisfied that the public benefit from the conduct outweighs any public detriment. This is a method by which the raw milk price has been determined in Australia since 2002, and

---

<sup>6</sup> *Pilbara Infrastructure Pty Ltd v Australian Competition Tribunal* (2011) FCAFC 58, where the Australian Federal Court favoured the “privately profitable” interpretation of essential facility.

the ACCC has recently issued a draft decision<sup>7</sup> proposing to allow dairy farmers to continue to collectively bargain with processors for a further 10 years (see discussion in Annex B below).

### The United States

The institutional structure of antitrust and economic regulation in the United States is complex, partly reflecting the distinction between the jurisdiction of the Federal government and the States. Access arrangements for traditional utility activities (telecommunications, electricity and rail) are therefore often a combination of initiatives at the federal and state levels.

For example, the Federal Energy Regulatory Commission (FERC) has set out various Orders that establish a right for third parties to access interstate transmission networks, and FERC has outlined the pricing principles that should apply to such access. Similarly, in relation to interstate and international telecommunications network, the federal regulatory arrangements provide for negotiated agreements between parties on terms of access interconnection and resale, with the ability for State regulators to arbitrate if parties cannot agree on price and conditions.

In relation to economy-wide activities, United States antitrust law has developed an essential facilities doctrine, which sets a high bar for gaining access to privately owned bottleneck facilities, but can be used in extreme cases. The essential facilities doctrine asks whether it is privately possible (profitable) to develop an alternative facility or to use alternative means of meeting the need. A range of activities have been declared to be “essential facilities” under this doctrine, including a railway bridge, a sports stadium, the New York Stock Exchange, and a multi-day ski-pass scheme<sup>8</sup>.

A leading judgment<sup>9</sup> has identified four necessary elements to establish access under the essential facilities doctrine:

1. Control of the essential facility by a monopolist
2. A competitor's inability (practically or reasonably) to duplicate the essential facility
3. Denial of the use of the facility to a competitor, and
4. The feasibility of providing the facility.

Criterion (2) relates to the duplication of the essential facility. According to one leading judgment on the interpretation of this provision, this requires a plaintiff to show that an alternative to the facility is not feasible—not simply that it would be inconvenient, or result in economic loss to develop the facility.

In a landmark 2004 decision regarding the telecommunications sector, the United States Supreme Court ruled that the essential facilities doctrine will **not** apply where a government agency (such as a regulator) has powers to enforce access to a facility. In its

---

<sup>7</sup> Available online at:

<http://www.accc.gov.au/content/trimFile.phtml?trimFileName=D11+2247500.pdf&trimFileTitle=D11+2247500.pdf&trimFileFromVersionId=993364> (last accessed 4 July 2011).

<sup>8</sup> A good review can be found in Blumenthal, W., King, and Spalding (1989) *Compulsory Access under the Antitrust Laws*, available online at: <http://www.kslaw.com/library/pdf/blumcompulsory.pdf> (last accessed 4 July 2011).

<sup>9</sup> *MCI Communications Corp. v. AT&T*, 708 F.2d 1081, 1132 (7th Cir.1983).



judgment, the Court highlighted broader concerns and economic trade-offs associated with requirements to provide access to so-called essential facilities:

*Firms may acquire monopoly power by establishing an infrastructure that renders them uniquely suited to serve their customers. Compelling such firms to share the source of their advantage is in some tension with the underlying purpose of antitrust law, since it may lessen the incentive for the monopolist, the rival, or both to invest in those economically beneficial facilities. Enforced sharing also requires antitrust courts to act as central planners, identifying the proper price, quantity, and other terms of dealing - a role for which they are ill-suited. Moreover, compelling negotiation between competitors may facilitate the supreme evil of antitrust: collusion.<sup>10</sup>*

In the United States, the essential facilities doctrine defines the boundary between the relevant property rights of the potential entrant and the incumbent as arising where an owner of an facility has freedom to choose its commercial counterparts and to deal or not to deal—unless there was no viable way for competition to occur in an upstream or downstream market without access. The focus is typically on the downstream markets and whether consumers will be harmed in the absence of access.

## Europe

The position on access pricing in Europe is in some ways as complicated as that of the United States, reflecting the division of powers and responsibilities between the European Union and Member States. As in the United States, access terms for traditional utility type activities (telecommunications, electricity, and rail) are a combination of European and Member State initiatives and policies.

Beyond the regulated utility sectors, issues relating to access to bottleneck or essential facilities are also captured by the abuse of dominance provisions of the relevant European competition laws, principally where denial of access to a facility or service is characterised as a “refusal to deal”. In an early case concerning access to a port, the European Commission (EC) stated the position on access to essential facilities in the following way:

*An undertaking in a dominant position may not discriminate in favour of its own activities in a related market. The owner of an essential facility which uses its power in one market in order to protect or strengthen its position in another related market, in particular, by refusing to grant access to a competitor, or by granting access on less favourable terms than those of its own services, and thus imposing a competitive disadvantage on its competitor, infringes [the prohibition on abuse of dominance].<sup>11</sup>*

Unlike the position in the United States described above, the European authorities have been more willing to conclude that a dominant firm refusing to supply an “essential service” to a rival constitutes unlawful behaviour. There has been a range of activities which have been investigated in the context of the “essential facilities” doctrine, including energy networks, airports, telecommunications networks, television programme listings, and clearing facilities.

Moreover, unlike the position adopted by the United States Supreme Court in *Trinko*, the notion of essential facility in the EU context does not appear to be restricted to non-regulated activities. The European Courts have upheld two decisions relating to access

---

<sup>10</sup> *Verizon Communications Inc v Law Offices of Curtis V. Trinko LLP*, 540 U.S. 398 (2004).

<sup>11</sup> *Sea Containers/Stena Sealink*, OJ 1994 L15/8.

pricing (both too-high and too-low) in the telecommunications sector—even though there was government involvement in the terms of access to those facilities.

The EC has also addressed the issue of essential facilities in the application of Article 82 (now Article 102) to abusive exclusionary conduct, noting that firms, including dominant firms, are generally entitled to determine who they supply, and entitled to decide not to continue to supply certain customers.<sup>12</sup> However, when a dominant firm imposes unfair trading conditions, or charges prices that are not economically viable for the buyer to continue its activity, then such conduct can constitute a refusal to supply. Specifically, the EC's Discussion Paper notes:

*A refusal to supply may be classified as an exclusionary abuse. The dominant company prevents the requesting or terminated party from getting access to an input. As a result, this undertaking is either driven out of the market, marginalised or prevented from entering the market. For a refusal to supply to be abusive, it must, however, have a likely anticompetitive effect on the market which is detrimental to consumer welfare.*<sup>13</sup>

## New Zealand

In New Zealand, section 36 of the Commerce Act has been used (with mixed success) to underpin access to bottleneck facilities. However, there is no overarching access regime for bottleneck facilities. It is possible that the lack of a clear regulatory framework has deterred competitive market entry in many sectors, particularly in vertically integrated industries. Several targeted attempts to develop a wide variety of case-specific solutions have occurred, most notably in telecommunications.

Section 36 is not directed against the existence of monopolies, but against the conduct of the monopoly—the misuse of market power. It does not prevent a firm using its market power for purposes other than restricting competition, such as charging prices above a competitive level. It is therefore unlikely that monopoly pricing would breach section 36 *per se*.

However, this will depend on the circumstances. Section 36 is likely to be more applicable in cases where the incumbent is vertically integrated, and an entrant seeks access to the monopoly input. This was the situation in the famous *Telecom-Clear* litigation,<sup>14</sup> where the Privy Council found that Telecom's price in its offer to Clear, up until the High Court hearing in 1992, was in breach of section 36.

The *Telecom-Clear* case also sanctioned the use by Telecom of the Baumol-Willig (or ECPR) rule. This has attracted criticism because the ECPR does not act in itself to eliminate any monopoly rents resulting from the pricing of a hypothetical monopolist. According to the Privy Council, it provides a “level playing-field” upon which monopoly rents may be competed away. The default position in New Zealand is therefore, that monopoly pricing is legal, unless and until political action is taken to curtail particular pricing abuses.

---

<sup>12</sup> European Commission ‘DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses’, December 2005.

<sup>13</sup> Ibid, para 210.

<sup>14</sup> *Telecom Corporation of New Zealand Ltd v Clear Communications* (1994) 6 TCLR 138.

## **Appendix B: Review of International Dairy Market Structures and Pricing Arrangements**

A major issue in international dairy markets is the interaction between competition or antitrust laws on the one hand, and collective bargaining arrangements by farmers on the other. The purpose of this appendix is to summarise how dairy markets overseas operate in terms of market structure, price setting, and regulatory arrangements.

We present information on dairy markets in the following jurisdictions:

- Australia
- Great Britain
- Norway
- The European Union
- The United States, and
- Canada.

The experience in Europe and Australia, and the origins of deregulation in Great Britain, highlight the tension between allowing farmers to collectively negotiate raw milk production prices, and the paradigm shift in economic policy towards efficiency and pro-competitive reform.

### **B.1 Australia**

The share of milk processing by traditional cooperatives in Australia (where the farmer is guaranteed that all of the milk produced will be taken) is less than 40 percent. The price of milk is determined according to a staged process where an opening price of milk is announced at the start of the season, followed by additional top-up payments. The other 60 percent of milk is supplied under different forms of supply arrangements. As a consequence, a range of supply models exist in Australia.

The majority of milk is now processed and marketed by a diverse group of proprietary firms from small, private, niche companies operating regionally, to large, international companies. There has been considerable foreign entry into processing, and the two dominant fresh milk processors are foreign-owned and procure their milk directly under contract from farmers.

Although the proportion of milk purchased under co-operative arrangements is declining, cooperatives still play an important role in how farm gate prices are determined. The largest buyer and processor of raw milk in Australia is the farmer-cooperative Murray Goulbourn, which takes approximately 33 percent of all milk. Murray Goulbourn has a large influence on the raw milk price facing other buyers and processors.

In recent years milk collection agents (firms who collect milk off farms and on-sell to third party processors) have entered the market. There is also diversity in terms of the focus of farmers in different parts of the country. In the northern states, such as Queensland, milk is mainly supplied for local markets, and this has led to firms seeking supply arrangements with more stable year-round prices. In contrast, a greater proportion of the milk produced in New South Wales and Victoria is destined for international markets.

Supply cooperatives have also emerged post-deregulation, and are principally the result of the splitting up of the production side from the collection side of operations. Supply cooperatives negotiate milk supply arrangements with processors of the former larger (combined) cooperatives.

In 1999, Australia began the transition of moving into a completely deregulated dairy industry. The Dairy Structural Adjustment Program (DSAP) eased the shift with an 11 cent per litre levy paid by consumers and allocated to farmers. Since the DSAP concluded, there are no legislative controls over the price of milk. Instead, the farm gate price is largely dependent on international markets. Australia has historically exported around 50 percent of its milk, mostly to Asia. Australia tends to receive slightly less for its milk than most countries, but the cost of production is also generally lower.

Payments to farmers vary marginally, being affected by such factors as product mix, marketing strategies, and plant efficiency. Each firm also has its own forms of incentives and penalties to encourage milk quality and volume.

Due to the reliance on international markets, Australian farmers created Dairy Australia, an industry service company that works to maximize the conditions for export. Dairy Australia is funded by levies paid by farmers on the fat and protein content of their milk. The company researches new markets while monitoring established ones, and works on maximising effectiveness of Australia's overseas marketing. Dairy Australia is also politically involved in assessing trade agreements in other countries and promoting the removal of trade barriers. It has been active in World Trade Organisation discussions, as the Australian dairy industry has a lot at stake in the Doha round of agricultural negotiations.

The lack of government involvement makes the Australian dairy industry similar to New Zealand. However, rather than a cooperative organising payments to farmers (as Fonterra does in New Zealand), farmers are paid by processors directly. Although each processor has its own way of determining prices, prices are generally based on butterfat and protein content.

The deregulated nature of Australia's market has led to the government recognising a need to manage the tension between the sustainability of farming and other companies in the milk value chain on one hand, and the volatility of international markets on the other hand.

In broad terms, the price of milk sold under direct contract (typically for domestic consumption) is usually higher than that paid under other supply arrangements, reflecting the greater costs associated with supplying a year round supply of milk. In contrast, the manufacturers of longer-life products, or for export, have tended to prefer the traditional pricing approach based on an opening price at the start of the season, with step-up payments.

One response to the issue of how farmers can protect their positions when negotiating prices and conditions with larger dairy processors has involved collective bargaining arrangements. This involves groups of farmers collectively negotiating the terms under which they will supply raw milk to individual firms. However, such collective negotiations may breach competition laws relating to coordination between horizontal suppliers on terms of supply. These arrangements therefore need to be authorised by the ACCC, which balances the potential detriments against the public benefits of the agreement.

Dairy farmers have been collectively bargaining with milk processors under an ACCC authorisation granted to Australian Dairy Farmers Ltd (ADF) since 2002. Approximately

500 farming families are currently registered under the ADF's collective bargaining arrangements in 18 collective bargaining groups. The most recent approval was on 16 June 2011, where the collective bargaining agreement was approved for 10 years.<sup>15</sup>

Several submitters to the recent approval noted that the success of collective bargaining depends on several factors, including:

- The abilities of the bargaining groups' leadership
- The relationship with processors, and
- The training provided.

The Australian experience with milk price negotiation suggests that the less successful farmer groups are those that have taken a more adversarial approach. As part of the collective bargaining arrangements, the Federal government has provided funding to allow for the training of farm leaders on negotiation skills and bargaining tactics.

The Australian Dairy Industry Council has concluded that there is generally a high level of competition for farm milk in Australia. The diversity in supply arrangements have allowed farmers to freely move between different firms—it appears that farmers regularly monitor pricing offers and are willing to switch if actual or expected payments diverge. However, the presence of a large cooperative (owned by farmers) has kept upward pressure on farm gate prices.

## **B.2 Great Britain**

The history of British milk is interesting from the context of deregulation. Until 1994, there were four Milk Marketing Boards (MMBs) which held a statutory monopoly on the collection and sale of milk in Great Britain. The MMBs were established to resist the downward pressure on producer incomes resulting from the increasing power of dairy processing companies. The MMBs became responsible for all the milk produced by dairy farmers, selling it on their behalf and pooling the returns in order to provide equal returns according to the volume of milk consigned by each farmer.

Although the MMBs were typically described as co-operatives, farmers were generally required to sell their milk to them. The MMBs were, in turn, required to buy milk from farmers and find a market for it. This meant that MMBs acted not only as sole purchasers but also as monopoly suppliers of milk to the processors in their respective areas. The price of milk was negotiated and agreed by the MMB (on behalf of dairy farmers) and the Dairy Trade Federation (on behalf of dairy processing companies).

Although the MMB system was generally regarded as having operated satisfactorily, the customers of the MMBs became concerned about prices and their relationship to competition law. Following consultation, the MMBs were abolished in 1994 and the market was deregulated.

Following deregulation, a farmer-owned voluntary co-operative, Milk Marque, was established as the successor to the England and Wales MMBs. The majority of dairy farmers who had previously sold milk through the MMBs switched their allegiance to Milk Marque.

In 1999, the Monopolies and Mergers Commission (now the Competition Commission) determined that Milk Marque had used its dominant position to hold prices above a

---

<sup>15</sup> Draft determination available on the ACCC's website:

<http://www.accc.gov.au/content/trimFile.phtml?trimFileName=D11+2247500.pdf&trimFileTitle=D11+2247500.pdf&trimFileFromVersionId=993364> (last accessed 4 July 2011).

competitive level, and recommended that Milk Marque be broken up<sup>16</sup>. The Government did not accept the recommendation.

Some dairy farmers were also dissatisfied with the farm-gate price offered by Milk Marque and were withdrawing in ever-increasing numbers. In the event, Milk Marque voluntarily chose to split into three roughly equal-sized farmer-owned cooperatives:

- Milk Link
- Axis (now merged with Scottish Milk to form First Milk), and
- Zenith (now merged with The Milk Group to form Dairy Farmers of Britain).

Since deregulation, the Government's role in the dairy industry has been limited. As the market is deregulated, all prices are determined by negotiation. Raw milk is procured from dairy farmers mainly by three types of purchasers: cooperatives, milk brokers, and independent processors.

### **Market Characteristics**

The main farmer cooperatives are First Milk and Dairy Farmers of Britain. They keep some of the milk they procure from their farmer-members for their own processing activities and sell the remainder of their milk on to other processors. Milk brokers sell all the milk they procure to processors (except for those that are active as a processor as well as a broker).

Independent processors that procure milk directly from farmers use almost all for their own activities. These processors generally also buy some of their milk requirements from co-operatives and milk brokers to "dual source" their requirements.

According to the Department for Environment, Food, and Rural Affairs, there are 130 milk purchasers and over 100 processors in the United Kingdom. The industry is, generally speaking, domestically focussed. The largest purchasers from producers are the farmer-owned cooperatives. The combined share of all cooperatives in the procurement of raw milk was 46 percent in 2006/7.

The Dairy Industry Association believes that about 90 percent of the UK's raw milk is processed by the privately-owned dairy companies and only about 10 percent by farmer-owned cooperatives. The main processors that procure milk directly from farmers are Dairy Crest, Arla, and Wiseman, with their volumes growing in the past three years.

Milk brokers procured an estimated 7.6 percent of milk in 2007. This includes Meadow Foods, which also operates as a processor, and the largest pure broker, Sorn Milk, with a share of less than 5 percent.

An estimated 3,000 of the United Kingdom's 13,500 dairy farmers have special supplier deals with the major supermarket chains, although it is unclear whether these farmers are currently covering their costs of production. It is therefore been argued that the processing sector has been taken right out of the value chain, as supermarkets contract the farmer to supply the milk, before it goes to the processing plant contracted for by supermarkets. This has resulted in supermarkets integrating up the supply chain, lowering prices for farmers and processors. The major supermarkets in the United Kingdom are therefore now criticised for being in a position to determine farm-gate prices, with Tesco particularly influential due to its volume.

---

<sup>16</sup> UK Monopoly and Mergers Commission (1999) *Milk: A Report on the Supply in Great Britain of Raw Cows' Milk*, June 1999, summary and conclusions available online at: [http://www.competition-commission.org.uk/rep\\_pub/reports/1999/fulltext/429c1.pdf](http://www.competition-commission.org.uk/rep_pub/reports/1999/fulltext/429c1.pdf) (last accessed 4 July 2011).

There are longstanding concerns about the sustainability of milk farming, and the low levels of raw milk prices. In particular, concern that low prices for raw milk has resulted from strong bargaining power of supermarkets. This is similar to recent media coverage of Australian supermarkets engaging in a price war over liquid milk. There are currently calls for minimum prices to be paid to farmers.

### **B.3 Norway**

TINE Råvare is the largest dairy producer in Norway, and has a near monopoly with market share of 99 percent. TINE Råvare is the tenth largest global dairy co-operative in terms of turnover, and experienced annual growth in sales between 2003 and 2008 of 7 percent.

TINE's commercial objective is not to earn an annual profit. Any profit or deficit is allocated in the annual settlement as accounts receivable or debt, and set off by the fixing of the subsequent payment price to farmers from TINE Råvare. According to academic literature,<sup>17</sup> farm gate raw milk prices are set by the Norwegian Agricultural Authority regulator following an ECPR approach. Norwegian milk producers receive the profits from TINE Råvare in the form of the paid price of milk delivered to TINE Råvare. The disbursement is divided into two payments.

The result that appears in the TINE Råvare accounts is based on the same price for milk as the input factor for other players. However, other players have received a rebate for milk which is paid to them through the price compensation scheme. The payment in arrears by TINE Industri represents the share of the annual result approved by the Group Board. The remaining part of the annual result is allocated to retained earnings.

Their Agricultural Agreement in the spring of 2009 did not lead to a changed target price for milk, but measures were adopted to improve the milk producers' economic situation via the state budget. Rate changes in the price compensation scheme for milk made it possible to bring the quoted price from TINE Råvare up to the target level from 1 July 2009. Since the first half of 2008, the Norwegian Competition Authority has conducted a semi-annual margin control of selected TINE products. Which products are selected in each review depends on the volume of product sold and on competition issues. The first check was conducted in the autumn of 2008, with the results available in June 2009. The Norwegian Competition Authority writes in its report that the obtained information gives no reason to suspect that margins have been squeezed in order to impair competition.

### **B.4 The European Union**

Like New Zealand, farm gate prices in Europe are generally determined by cooperatives. Unlike New Zealand, however, there is significant competition between the cooperatives and the price the producer receives is specific to each organisation. About 58 percent of milk in Europe is currently processed by cooperatives. Under the following subheadings below, we review some of the major features of the dairy markets in Europe, and we consider the specific arrangements in some Member States (the Netherlands, Ireland, Germany, Denmark, Sweden, and Finland).

#### **The Common Agricultural Policy (CAP)**

The 27 countries that make up the European Union (EU) are joined by a Common Agricultural Policy (CAP) that is based on a single market and common financing. The

---

<sup>17</sup> Kristin Linnerud and Steinar Vagstad (2010) European Review of Agricultural Economics, Volume 37, Issue 1, pp 77-96.

dairy industry was previously seen as part of a larger European position of agricultural being multifunctional, fulfilling a broad range of roles, from maintaining rural communities to protecting environmental welfare. Farmers were paid both for their milk, and on the basis of commodity-focused supports in the form of subsidies that rewarded producers for these other inherent services they provided. Supply was controlled and dictated by a quota system.

Quotas are now in the process of being phased out, with a complete termination targeted for 2015. The European Commission (EC) supported a paradigm shift toward making the market more efficient through price determination. The previous subsidies schemes are being replaced by a decoupled payments that are not based on the amount of milk produced.

### **Bargaining Power of Farmers and Competition Rules**

The market structures for milk are very different across the different Member States in Europe, but generally speaking, the concentration at production level is less than the supply or processing level concentrations.

This is seen to result in an imbalance in bargaining power in many Member States, and means that farmers have little choice of processor or transportation option for raw milk. In addition, in some countries, farmers are unaware of the prices that they will receive for raw milk until after they have delivered it to processors, as the price may be set much later.

There has been much interest in the structural characteristics of the milk sector in the EU in the last 18-24 months, which culminated in the creation of a high-level group (HLG) on milk in 2010. After examining the structure of the market and the participants (including contractual relations, bargaining power, the role of producer organisations, and vertical integration), the HLG concluded that there is an imbalance in the bargaining power between farmers and processors. Much of the information in this appendix summarises the submissions and report of the HLG.<sup>18</sup>

According to the HLG, the production chain arrangements and the long period of high institutional prices and fixed quotas did not give incentives for market participants to respond to market signals. For example, despite low demand in 2009 and low prices, the level of supply in many member states did not respond, leading to “milk being poured on the streets” in Europe.

The EC is currently proposing a regulation to implement a number of significant changes in the dairy sector.<sup>19</sup> The regulation aims to improve the contractual relationships between farmers and processors, including allowing farmers (subject to certain thresholds) to collectively bargain through producer organisations with processors (and therefore be exempt from competition rules). This will allow farmers to negotiate raw milk prices collectively and allow farmers to be in a stronger bargaining position.

The proposal will provide for optional written contracts to be drawn up in advance of delivery of raw milk which would include the key aspects of price, the timing and volume of deliveries and the duration of the contract. The arrangements relating to collective

---

<sup>18</sup> Information can be found on the EC website at [http://ec.europa.eu/agriculture/markets/milk/hlg/index\\_en.htm](http://ec.europa.eu/agriculture/markets/milk/hlg/index_en.htm) (last accessed 4 July 2011).

<sup>19</sup> The proposal will be discussed in the Council of Agriculture Ministers and in the European Parliament and is expected to come into effect in 2012. [http://ec.europa.eu/agriculture/milk/index\\_en.htm](http://ec.europa.eu/agriculture/milk/index_en.htm) (last accessed 4 July 2011).



bargaining do not apply where cooperatives are vertically-integrated in raw milk supply and processing.

The collective bargaining arrangements for the collection of raw milk by a farmer to a processor can be negotiated between producer organisations on behalf of farmer-members, subject to certain thresholds. As long as these thresholds are *not* exceeded, then the agreements will be exempt from competition restrictions of collective agreements. However, the regulation states that a competition authority may choose to investigate a collective arrangement in a member state below these thresholds where there are concerns that small and medium processors are potentially being excluded from the market.

### **Pricing Formulas and Member Country Market Dynamics**

The determining formulas and factors involved in these calculations are private and seldom released. The government has little involvement in the market, except for price support arrangements in association with the Intervention Milk Price Equivalent (IMPE).

The EU buys an allotted amount of units of unsalted butter and skim milk powder when the prices for these products fall to a determined level, functioning much like the Commodity Credit Corporation (CCC) in the United States.

Another benchmark indicator used in Europe is the Milk for Cheese Value Equivalent (MCVE). This figure determines a factory-door price by calculating the returns on mild cheddar, whey butter, and whey protein. The MCVE has no direct bearing on the price received by farmers and is not used in any other calculations. Instead, the level of its changes is used to indicate the adjustment in the value of the milk farmers supply to their cooperatives, and in turn can hope to receive back.

### **The Netherlands**

The dominant co-operative in the Netherlands (with 70-80 percent market share) is Friesland-Campina, the world's largest global dairy co-operative in terms of turnover. Retained earnings in 2010 were 8.7 percent of total assets. The co-operative was created (subject to strict undertakings) in 2008 via a merger between two large dairy cooperatives, and required explicit clearance from the EC. Other dairy companies include DOC Kaas, Cono Kaasmakers, and Bel-Leedamer.

The farm gate milk price is determined on the basis of an index of weighted average of the raw milk price paid by dairy cooperatives in Denmark (Arla), Germany, Belgium (Milcobel) and the Netherlands (DOC, Cono, Bel-Leedamer).

Before merging with Friesland, the farm gate price was calculated by Campina *ex-post* to reflect the financial performance achieved (revenues, cash costs, and capital costs). The farm gate price was based on the net result of the cooperative with part of the net profit reserved for re-investment in the co-operative. The remaining net profit was paid to the member-farmers through the same average milk price, irrespective of where these members are located

On top of the milk price, farmers were granted member bonds and member certificates, which are financing instruments awarded to member-farmers on the basis of the quantity of milk delivered by them in a given year. The compensation or interest rate payable on such instruments for financing the company is independent of the quantities of milk that such investors deliver to the company. Therefore, members are remunerated for financing the company through annual interest on bonds. They also have the option of cashing the value of these bonds upon termination.

Friesland pays a dividend to its current and retired members at the end of the fiscal year. The amount paid depends also on the business results of the cooperative and is the same for each member. The so called “performance” payment equals 25 percent of the net profits, while 75 percent of these profits are added to the reserves of the company. Of this, 60 percent is added to the reserves directly and 15 percent through the issuance of bonds to members.

Access to raw milk for competitors is mandated through the Dutch Milk Fund (DMF)—similar to the framework in New Zealand’s DIRA. The DMF is an independent non-profit organisation which acts as a mediator between Friesland-Campina and potential access-seekers. A “default” maximum quantity of raw milk for competitors is set at 1.2 billion kg. Incentives are designed to provide access for competing processors to the source of raw milk—farmers—through “start-up” subsidy scheme. This aims to encourage exit from the dominant cooperative Friesland-Campina.

The DMF scheme is intended to remain in operation until the volume of raw milk to be made available by Friesland-Campina through the DMF has been reduced to zero following farmers departing to supply to other milk processors. The volume will be reduced every year until newcomers in the downstream markets have been able to constitute their own supply platform.

The DMF price for raw milk is the same as the guaranteed price that the merged entity will offer to its member-farmers **minus** 1 percent for the first five years. Thereafter, it will be the same as the guaranteed milk price.

## **Ireland**

The Irish Dairy Board (IDB) is a commercial cooperative, and owner of the Kerrygold brand of butter and cheeses. Kerry is an international food processor with 140 factories in 19 countries. It had a turnover last year of €4.8 billion and profits of just under €300 million. At the initial public offering in 1986, the share capital was valued at the equivalent of €50 million. At today’s share price of approximately €20, the cooperative is worth close to €800 million. The annual dividend is €9 million. Add in the current value of the 48 million shares dispersed to members since 1993, and the collective shareholding of Kerry’s farmers is an estimated €1.8 billion.

Kerry started as a dairy co-operative in the south west of Ireland. From 1986, its model retained some cooperative ownership of the public company, and was imitated by Avonmore Foods, Waterford Foods, Golden Vale, and the Irish Agricultural Wholesalers Society.

Farmers clubbed together to form Kerry by buying local dairy processing and collection assets from the state, in order to keep control of the downstream operations. The industry was adapting the EU’s introduction of production quotas for milk, aimed at restricting farmers’ output. Kerry was at the time the smallest and least resourced of Ireland’s big six milk cooperatives.

As with Fonterra, farmers are both suppliers to the company, and company shareholders. The issue is often highlighted at annual meetings where farmer-shareholders press for milk price increases. As a company buying bulk milk for processing cheese, milk proteins and other products, there is an incentive to keep prices low. The farmers, on the other hand, want to maximise the price received for their production.

Driving earnings and meeting its responsibilities to the members of the dairy co-operative was initially very difficult. If there is a conflict today, it is between those farmer-shareholders (who are still milk producers) and those who have retired or

inherited shares. Dry shareholders make up two-thirds of the cooperative's 12,000 members. Those engaged in milk production have seen the rise in the Kerry share price more than compensate for declines in the milk price.

### **Germany**

Nearly two-thirds of German milk is processed by dairy cooperatives, but there is no dominant dairy company. Market players include Friesland-Campina, NordContor, Nordmilkch, Humana Milcunion, and Hochwald.

Private cooperatives use two price setting systems, either a reference price plus a top-up, or a fixed price between farmer and cooperative. A survey was carried out in 2008 among 161 dairy farmers. Most farmers (71.2 percent) delivered their milk to a dairy cooperative and 72.8 percent based their decision on price. 65 percent of producers were critical of price setting, while 35 percent approved or had no opinion.

The main factors influencing the price setting of dairy cooperatives include long-term orientation, followed by support for cooperatives, economic power of supermarkets, importance of milk income for farm income, and the age of the farm manager.

### **Denmark**

Arla is the third largest global dairy co-operative in terms of turnover. Arla uses a common milk pricing formula across both Denmark and Sweden. When the merger between Arla and MD foods occurred (2000) two separate raw milk prices were used in the two countries due to the additional earnings in the Swedish market (in 2000, Swedish dairy farmers received a 18 percent higher milk price than that paid to Danish dairy farmers). This difference was phased out in three years, as per the original agreement.

The state plays only a minor role in regulation of Danish dairy market, and the EU framework has largely superseded this role.

### **Sweden**

The performance price is a key figure for Arla. This includes everything that Arla has paid out for milk during the year as well as the year's profits. The performance price is based on the amount of milk (in kg) supplied by the owners during the preceding year.

Following a decision by the Swedish Competition Authority, Arla undertook to introduce a clear amendment to its membership rules, giving Swedish members the right to deliver up to 50 percent of their milk production to dairy companies other than Arla.

### **Finland**

Valio is the main dairy producer in Finland with a market share of approximately 86 percent. Valio procures raw milk for processing primarily from the milk producers of the dairy co-operatives committed to the company. Milk is supplied to Valio Group dairies by some 9,200 milk producers. Arla is also a minor player in Finland.

Valio pays its owners a monthly advance for raw milk, using equal criteria, proportioned to composition, quality and the time at which the milk is produced. In addition to the advance, Valio pays for the precise milk volume afterwards and then a dividend after the closing of the accounts.

Valio's group financial goal is to have a milk margin that is on par with the best European dairy companies. The milk margin is equal to the net turnover minus other costs excluding depreciation and the producer price and interest on shareholder loan paid to the owners. Retained earnings in 2010 were 15.2 percent of total assets, with annual growth in sales between 2003 and 2008 approximately four percent.

Valio actively co-operates with Finnish and international universities and research institutes. The research goal is to utilise the diversity of milk as a raw material and develop products for the promotion of health and well-being, as well as general marketing potential.

## **B.5 United States**

A total of 196 cooperatives sold 86 percent of all milk sold in the United States in 2002, with five cooperatives accounting for half of all milk sold. 62 percent was sold raw, and the remaining 38 percent processed.

There are currently two programmes to regulate raw milk prices in the United States:

- The Federal Milk Price Support Program, which began in 1949, and
- Federal Milk Marketing Orders (FMMOs), which started under the Agricultural Marketing Agreement Act of 1937.

Through the Federal Milk Price Support Program, the government purchases dairy products that cannot be sold commercially. Prices are set at levels intended to enable processors to pay farmers the announced support price for milk. Cooperatives are thus assured of a market for their products at federally set minimum prices.

FMMOs require milk processors (called handlers) to pay no less than an established minimum price for the “Grade A” milk they purchase from farmers. A classified pricing system requires handlers to pay a higher price for milk used for fluid consumption than for milk used in manufactured dairy products. According to the United States Department of Agriculture, the three major objectives of FMMOs are to:

- Assure consumers of an adequate supply of milk at a reasonable price
- Promote producer price stability and orderly marketing, and
- Provide producer prices to ensure an adequate current and future “Grade A” milk supply.

## **B.6 Canada**

Canada uses a milk quota supply management system. Through this system, the Canadian Milk Supply Management Committee (CMSMC) estimates domestic demand for milk by consumers, and sets the national target for production.

The price to be paid to the producer is then set by the Canadian Dairy Commission (CDC) based on an annual study of production costs. Production in excess of a farmer’s quota is purchased at reduced or zero price. Producers own a number of shares in the quota and are required to increase or decrease production for their quota as determined by the demand.

The CDC operates a supply management system that works to plan annual production. Under the National Milk Marketing Plan, the CMSMC establishes the market-sharing quotas (MSQ) for the country, which the CDC monitors and adjusts when necessary. Target production is measured in terms of butterfat. The CMSMC gives each province a share of the MSQ, which the province allocates to individual producers.

Like the United States, the milk produced in Canada is priced with a Harmonized Milk Classification System, breaking down the end use of wholesale products into five classes. Class I consists of fluid milk, Class II of most soft products (except butter), Class III for cheeses, Class IV is butter, milk powder, and certain components like casein, and Class V

includes ingredients used elsewhere in manufacturing. Each class has multiple subsets that further organise the products.

Revenues from milk components used in rennet casein are pooled among all the provinces, and CDC receives milk utilisation declarations from all provinces on a monthly basis for pooling purposes.

The CDC annually determines support prices for butter and skim milk powder. They work much like the United States CCC in purchasing butter and skim milk powder at this established price, creating a support floor on the market. Once a year the CDC collaborates with the provinces in a national study on the farmer's cost of production. In addition to this, the CDC holds a forum with producers, processors, restaurant owners and consumers.

Provinces in Canada function in similar ways as marketing orders in the United States. While the government has federal authority over the marketing of industrial milk and products (solid goods), provinces regulate the marketing and export trade of fluid milk. Provinces generally license producers, distribute milk quotas to producers, determine the prices charged to processors, and some assume other specific responsibilities, such as negotiating shipping costs with transportation agencies.

There are two pooling agreements among provinces:

1. The P5 "All Milk Pooling" (five signatory provinces) pools both industrial and fluid milk, transportation costs, and provides for multiple component pricing, a daily quota system and quota trade, and the pricing of components based on their end use in products, and
2. The Western Milk Pooling Agreement (WMP, containing the four western provinces) has been engaged in discussion on a pricing system that provides fluid milk pricing that allows for the consumer price index, the cost of producing milk, and farmers' disposable incomes.



T: +1 (202) 466-6790  
F: +1 (202) 466-6797  
1700 K Street NW Suite 410  
WASHINGTON DC 20006  
United States of America

T: +61 (2) 9231 6862  
F: +61 (2) 9231 3847  
36 – 38 Young Street  
SYDNEY NSW 2000  
Australia

T: +64 (4) 913 2800  
F: +64 (4) 913 2808  
Level 2, 88 The Terrace  
PO Box 10-225  
WELLINGTON 6143  
New Zealand

T: +33 (1) 45 27 24 55  
F: +33 (1) 45 20 17 69  
7 Rue Claude Chahu  
PARIS 75116  
France

----- [www.castalia-advisors.com](http://www.castalia-advisors.com)

## **Background Document 10**

Covec Report: Farm Gate Milk Price: Policy Objectives and Problem Definition

# Farm Gate Milk Price: Policy Objectives & Problem Definition

John Small

Revised 22 August 2011

1. This note develops several ideas for the consideration, and/or approval of the inter-departmental working group currently considering the farm gate milk price (FGMP) in New Zealand.
2. In my professional opinion, the propositions set out below are consistent with economic theory as applied to the New Zealand dairy industry facts currently known to me.
3. The note seeks to:
  - a. define relevant policy objectives to underpin the farm gate milk price;
  - b. characterise a farm gate milk price (FGMP) consistent with those objectives;
  - c. compare that FGMP with current practices of Fonterra; and
  - d. thereby to define and characterise the problem Officials wish to address.

## Policy Objectives

4. As it relates to the issues before Officials, the relevant purpose of the Dairy Industry Restructuring Act (2001) ('DIRA') is contained in section 4(f) of DIRA, namely to "*promote the efficient operation of dairy markets in New Zealand by regulating the activities of new co-op to ensure New Zealand markets for dairy goods and services are contestable*" (emphasis added).
5. While this purpose is clearly focused on efficiency, there has been some debate over whether the relevant competitive standard is, or should be that of "contestable markets" (as mentioned in DIRA) or "workably competitive markets", the standard on which most competition (case) law in New Zealand is based.
6. Strict adherence to a contestable market benchmark seems unrealistic for dairy processing markets because (strictly) contestability requires an absence of sunk costs of entry, whereas dairy processors do in fact sink considerable amounts of capital when building new plants. However a somewhat weaker interpretation of "contestability" seems to have been in the mind of legislators when DIRA was passed, namely that "any investor has the opportunity to build the next processing plant". The following proposed policy objective is consistent with this latter interpretation, and is also considered more generally appropriate.



**Policy Objective:** Fonterra's FGMP should be at a level consistent with any firm (not just Fonterra) being financially able to build the next efficiently scaled processing plant required by milk supply growth.

7. This objective builds on the DIRA notion of contestability by providing that Fonterra is not the only party able to build the next efficiently scaled plant. For example, the FGMP should not be so high that the only viable builder of such a plant is the only national operator (Fonterra). Other firms, for example firms might lack network-related transport economies, should also have an opportunity to build the next efficiently scaled plant provided they can secure the necessary milk supply.
8. There is also a view among officials that currently operating independent operators should be able to cover all of their costs (including capital costs) provided they are using modern efficient technologies and processes. This could be used as a second policy objective. However it would not be suitable for inclusion in DIRA as a principle that should be respected by the milk pricing manual. The reason is that doing so would be inconsistent with broader competition policy by obliging Fonterra to worry about the profitability of its rivals when setting its prices.

#### **A Competitive Milk Price**

9. The prices of commodity dairy products are global prices that New Zealand producers cannot affect. Processors in New Zealand acquire raw milk and receive these globally-determined prices for their final products. Milk supply in New Zealand has been growing over time. Competition in a market for farm gate milk in New Zealand therefore has the effect of driving the FGMP up to the point where the next plant built would just cover its total costs (including capital costs). Competition between dairy processors therefore results the following farm gate milk price.

FGMP = Global Price of Dairy Commodities – Full cost of new processing plant.

10. In addition to being consistent with the outcome expected from competition between processors in New Zealand, this FGMP is also consistent with the efficient component pricing rule (ECPR) construct, and with the general approach used in Fonterra's milk price manual. Regarding the ECPR construct, note that the entire cost of the next plant (including its capital cost) is avoidable.
11. Note in particular that a "new" plant is consistent with this being a growing industry and with the policy objective of ensuring that any firm could potentially build the next processing plant. The full cost of this plant includes operating costs, plus depreciation and a return on capital. A "new" plant refers to "modern equivalent assets" which is the latest version of technology considered reliable enough for large scale deployment (not a speculative or "over-the-horizon" technology).

12. Because we adopt a forward-looking view of processing costs (i.e. by considering the cost of the next plant) there is no meaningful distinction between “hypothetical efficient costs” and the “actual costs” that will be incurred by the investor. Any rational investor will seek to build an efficient plant.
13. Since milk supply in New Zealand is ultimately constrained, consideration must also be given to whether the above definition of the FGMP should still be used at that time. In my opinion it should indeed remain in place and it would still have a competitive market rationale even though the nature of that competitive market will have changed once milk supply stops growing. At that time, there will no longer be a case for adding new capacity but it will still be necessary to renew existing plant when it reaches the end of its useful life. Farm gate prices will tend towards levels consistent with processors earning the long-run marginal cost of processing, even though competition may force them below or above this level at particular times.
14. One factor that does potentially change after milk supply stops growing is the link between the FGMP as defined above and the ECPR concept. If one took a short-run view of avoidable costs in a market with excess processing capacity, then the ECPR price would not include any capital costs in the “avoidable costs” discount and the implied milk price would be much higher than current levels. There is no need to debate the merits of this argument now because Fonterra is not advocating this approach. Nevertheless, it would seem prudent to avoid making statements now that might later be interpreted as giving the argument credence. For that reason, I suggest that we do not use the ECPR concept to justify our interpretation of the competitive FGMP.
15. While the competitive FGMP concept is clear, there are several important practical decisions required to give effect to it in a milk price manual, including the following.
  - a. Choosing the product mix and translating from global prices into revenue.
    - i. My own view is that Fonterra’s current FGMP modelling is appropriately focussed on powder-oriented commodities, and that it does not involve infeasible optimisation; but
    - ii. There are open questions over commercially important choices required (in the model) regarding the effective timing and duration of contracts for foreign exchange transactions and for raw milk purchases.
  - b. Selecting the appropriate scale of the new plant.
    - i. There are open questions over plant scale and a consequent need to better understand the business models of Fonterra and its rivals. It may be helpful for officials to consider how to assess the impact of a smaller plant size might affect the FGMP. Under

- c. Assessing the cost of capital and depreciation schedules.
    - i. The cost of capital should be tailored to the business being modelled, and depreciation should be consistent with normal business practice. Further work is required on both of these subjects.
  - d. Developing consistent definitions of ancillary costs such as collection costs.
    - i. The FGMP is a single price whereas farm gate supply occurs in regional (sub-island) markets. If a single price is maintained, it needs to reflect a (second-best) optimal balancing between the interests of farmers and processors in different regions.
16. Poor or inappropriate choices on these matters could substantially undermine the efficiency of the FGMP.

### Comparison with Fonterra's Current Practice

17. There are two concerns with Fonterra's current implementation of the FGMP process.
- a. **Control of process and information.** Fonterra and its agents designed the milk price manual and the governance process around it. Until recently, Fonterra has consistently refused to release the manual. This complete control has made it very difficult for officials to assess whether the detail in the manual and the FGMP setting process is consistent with public policy objectives. There is a strong case for much greater transparency and a governance process more representative of the wider group parties affected by the FGMP.
  - b. **The assumptions contained in the model.** Officials are considering the appropriateness of several choices embodied in the milk price manual. While views are still evolving, in my opinion reasonable concerns still exist about the following issues:
    - i. The scale of the powder plants used in the model, while smaller than Fonterra's largest plant, is larger than the plants currently used by Fonterra's rivals;
    - ii. Revenue recognition issues including regarding the timing of raw milk purchases and sales (which are primarily denominated in foreign currencies);
    - iii. The level of the weighted average cost of capital (WACC) needs to be considered carefully;

- iv. The model is based on Fonterra's own multi-site operations which makes it difficult to know whether and if so how that firm's scale economies (which may be unavailable to other firms) feed into the FGMP; and
  - v. Whether carefully crafted information disclosure could assist Fonterra's rivals to better match its revenue optimisation.
- 18. It is considered that both of these are significant problems. Despite being somewhat connected, they are also distinct. Even if the milk price manual was simplified and focused on an appropriately scaled plant, it would still be important that the processes used to update the model were made more transparent.

**Background Document 11**

Covec Report: Valuation of Fonterra's Shares

# Valuation of Fonterra's Shares

John Small

5 December 2011

## Summary

1. At present and in a non-TAF future, Fonterra must be one of the parties to any sale or purchase of its shares. Since there is no market trading, it is possible for shares to be persistently priced below fair market levels. In that case, the earnings (dividends and retained earnings) will be correspondingly above fair market returns, taking into account the relevant risks.
2. Fonterra has many lines of business but we can divide them into two groups: processing of NZ sourced milk into commodities, and other "added-value" activities. The farm gate milk price is set so that efficient processors such as Fonterra will just earn a normal rate of return on the first of these activities, and the number of Fonterra shares on issue depends on the volume of its NZ milk supply. Each of these shares also earns a return from the added-value businesses of Fonterra however. The fair value of Fonterra shares is therefore above the value of shares in a hypothetical firm that only processed NZ milk into commodities.
3. By restricting the value of its shares, Fonterra can effectively use some of its added-value profits to give excess share returns to its suppliers, without starving its NZ milk processing business of capital needed for new and replacement plant. In this scenario, new suppliers buying Fonterra shares at restricted value prices are receiving an implicit subsidy from existing suppliers, but still paying enough to cover the cost of assets needed to process their milk.
4. This strategy could be rational for existing members motivated by a desire to strengthen the co-operative. Among other things, it has the effect of tilting the competitive landscape between Fonterra and rival processors in Fonterra's favour. If a farmer is choosing between Fonterra and a rival, both of whom offer the same (efficient) milk price, the farmer will not be indifferent when account is taken of the excess return offered on Fonterra shares. Based on recent data, rival processors would need to offer a milk price about 11c/kg ms higher than Fonterra to counteract the excess return on shares.

## Introduction

5. This note considers the competition and efficiency effects of Fonterra shares being priced below fair value.<sup>1</sup> At present, Fonterra's share valuer is instructed to assume that the market demand for shares is restricted to New Zealand dairy farmers; the resulting (illiquidity) discount is 25% off fair value. In reality however, farmers do not buy from each other. Fonterra stands ready to buy shares from farmers, so there is very good liquidity and no economic case for a discount.

---

<sup>1</sup> In general terms "fair value" means the present value per share of the expected future stream of Fonterra's total corporate profits, discounted appropriately for risk.

6. If Fonterra successfully implements its current plan for Trading Among Farmers (TAF), the value of shares is expected to increase, though a smaller discount (perhaps 10%) is likely to remain, reflecting the lack of voting and control rights available to external investors in the shareholders fund. However if there are significant delays in successfully launching TAF, the shares may remain substantially under-valued for some time.
7. In the context of amendments to the DIRA, and assuming that TAF does not proceed or is delayed for an indefinite period, the following policy questions therefore arise:
  - a. Is it financially possible for Fonterra to persistently under-price its shares?
  - b. Would doing so compromise the interests of existing Fonterra shareholders?
  - c. Assuming that raw milk is priced efficiently, are there competition and/or efficiency concerns with under-pricing Fonterra shares?
8. In addressing these questions, let us maintain the assumption that raw milk is priced efficiently, as envisaged by the milk price manual. One implication of efficient milk pricing is that new processing plants of an efficient scale will earn about the same as their cost of capital: i.e. they will be approximately break-even investments.

### Feasibility

9. There is no financial impediment to having Fonterra shares priced below fair value for an extended period of time. The effect is that the dividend yield (i.e. dividend / share price) is correspondingly inflated so that shareholders earn more than a fair risk adjusted rate of return. This situation could not persist if there was a liquid secondary market because market forces would drive the price up to fair value, at which point the dividend yield would reflect expected risk-adjusted profits.
10. Since there is no secondary market for Fonterra shares (all trades are between the co-operative and its members), a suppressed share price and excessive dividend yield could persist indefinitely. Whatever the flow-on effects,<sup>2</sup> it is clearly possible for co-operatives such as Fonterra to price their shares below fair value.

### Incentives

11. The next question is whether Fonterra could have an incentive to under-price its shares. It will be convenient to break this question into two parts. This section will examine whether under-pricing shares compromises the interests of members, i.e. is there a clear disadvantage? The question of whether there is a motive for under-pricing (i.e. a clear advantage) is addressed in the next section where the impact on competition is considered.

---

<sup>2</sup> For example, the excess dividend returns would tend to flow into higher prices for farm land suited to dairying.

### *Notional Commodities Only Co-op*

12. Assume first that Fonterra only manufactures commodities from New Zealand sourced milk. In this (hypothetical) scenario, there are no significant differences between Fonterra and the notional milk business represented in the milk pricing manual/model. Under these conditions, the capital value of Fonterra will be represented mainly by the value of its physical processing assets.
13. If milk supply is growing, there is a strong case for pricing shares issued to suppliers of extra milk at the long-run unit cost of processing capacity. If this is done, that extra share capital will earn the normal (risk adjusted) rate of return (WACC) that is embedded in the milk pricing manual. Alternatively, if the extra shares are priced below the cost of new processing capacity, the cash shortfall will need to be funded by all existing co-op members rather than by those members that are increasing supply.
14. A transparent subsidy of this type (from existing to new suppliers) could be difficult to sustain under collective decision making processes. Existing suppliers would have an incentive to object, and would in all likelihood also have the voting strength to prevent material under-pricing of new equity.
15. Transparent and material over-pricing would be no more sustainable. In a competitive environment it would direct new supply to alternative investor-owned processors. It could also lead to an outflow of co-operative members, each of whom would effectively be paid a subsidy by those members remaining in the co-operative.

### *Fonterra*

16. The above analysis was deliberately artificial. Does it still hold when we look at the actual Fonterra, rather than the notional stripped-down NZ-only commodities business considered above? The main difference is that the real Fonterra has many more lines of business, henceforth referred to collectively as “added-value” businesses. These include milk collection and processing in other countries (around 30% of Fonterra’s raw milk is not sourced from New Zealand) and the sale of branded products.
17. These added-value activities are presumably profitable in aggregate, even taking account of any extra risk. However the total number of equity shares in Fonterra is limited by New Zealand milk supply.<sup>3</sup> It follows that the dividend return on each share must be higher than the return on commodities that is embedded in the milk price manual via the WACC (see paragraph 13), with the difference being the contribution from value-added activities. Therefore the fair value of a share in the actual Fonterra must be higher than the fair value of a share in the notional, stripped-down NZ-only commodity business embedded in the milk price manual.
18. This shows that Fonterra could price its shares below fair value but above the cost of domestic processing capacity. An explicit cash subsidy to new suppliers (as discussed in

---

<sup>3</sup> Until recently, there was one share for every kilogram of milk solids collected and processed in New Zealand. The number of shares can now vary but is still bound to be between 1 and 1.2 shares per kilogram of NZ milk processed.



paragraphs 13 and 14 above) would not occur because new suppliers would be paying enough in share capital to cover the cost of the assets needed to process their milk.

19. There would still be a subsidy, but it would be of a different type. Rather than the co-op (and therefore its existing members) having to pay cash for processing assets in order to admit extra supply, it would simply tilt the entry/exit balance in favour of recruiting and retaining members. Admitting new supply would incur an opportunity cost<sup>4</sup> (relative to pricing shares at fair value), but no actual cash cost.
20. Let “moderate under-pricing” refer to this strategy of setting the share price below fair value but above the cost of new capacity. To understand how existing co-op members might feel about moderate under-pricing it will be helpful to consider the competition effects.

### **Competition Effects**

21. Recall the assumption that raw milk is being priced efficiently (paragraph 8) by Fonterra. If the DIRA objectives of contestability are to be respected, it should also be the case that any dairy farmer who is offered that same efficient milk price by Fonterra and one of its rivals should be indifferent between those offers.
22. Share ownership is tied to Fonterra supply however, so a supplier faced with this choice between processors offering the same raw milk price will also need to consider the financial implications of share ownership. If Fonterra shares are priced below fair value, then by definition their dividend yield is excessive relative to the risk. This will tilt the competitive balance in favour of Fonterra.
23. Since rival processors generally do not offer shares to suppliers and in any case have no value-added revenues from which to subsidise share prices, they will need to offer higher milk prices in order to match Fonterra’s offer. The net effect is that Fonterra’s rivals will need to pay above the competitive price for raw milk, or find some other way to retain suppliers. Either way, this will lessen competition for raw milk.

### **Rationality of Moderate Under-Pricing**

24. As noted above, moderate under-pricing means shares are priced above the cost of processing capacity but below their fair value. Under this strategy, new suppliers are granted admission to an exclusive club where there are two conditions for membership: dairy farm ownership and Fonterra supply. Membership is rewarded in part by the inherent attractions of dairy farming, but also by excess returns on share capital.
25. Assume that most Fonterra suppliers have a strong co-operative ethos and are therefore biased towards Fonterra.<sup>5</sup> It is plausible that these farmers would be willing to accept a moderate discount on share values in return for a durable competitive advantage

---

<sup>4</sup> The opportunity cost would be the share of value-added profits foregone by existing shareholders.

<sup>5</sup> This is consistent with recent reports of concern over the potential for TAF to grant some control to non-farmer investors.

against investor-owned rival processors. That view would be strongest in those farmers not contemplating an exit from Fonterra, which is probably a majority.

26. It is worth noting also that there are natural limits to the overall size of the implicit subsidy for new supply. Fonterra's rivals account for less than 10% of New Zealand's raw milk, so all competitors could potentially be driven from the market by paying the implicit subsidy to less than 10% of existing supply. In the meantime, Fonterra would need to accept supply from land newly converted to dairying, but this activity is already starting to reach environmental limits in some locations.<sup>6</sup>
27. Fonterra's management could be expected to be significantly more enthusiastic about moderate under-pricing than members. The strategy would tend to obfuscate the true return on (fairly valued) equity, allowing scope for slippage and inefficiency in operations and management functions. Management incentive packages based on dividend yield and/or raw milk market shares in New Zealand would reinforce this incentive.

### **Materiality**

28. In its 2010 Annual Report, Fonterra indicated that the restricted value of its shares at the start of the 2010-11 season was in the range [\$3.95 - \$4.58] with a mid-point of \$4.27. Inflating this to remove the 25% discount, the fair value can be calculated as \$5.69. Relative to this fair value, a supplier entering Fonterra for the 2010-11 season would have paid \$4.52, which implies a discount of 20.6%.
29. Over the course of that season, earnings per share were 55c (reported in Fonterra's 2011 Annual Review). Some of this (30c) was paid as dividend but all earnings are to the benefit of shareholders. Using a fair value of \$5.69, these earnings (55c) represent a yield of 9.7% which can be viewed as a fair return for the associated risks. Since new shareholders only had to pay \$4.52, a fair return on that capital would be 43.7c. Thus, we can interpret the excess return on Fonterra shares as being worth about 11c/kg ms to a new supplier. Equivalently, a rival processor would need to pay about 11c/kg above Fonterra's farm gate price in order to compensate for a farmer losing the excess return on Fonterra shares.

### **Conclusions**

30. Based on the above analysis, it seems clear that
  - a. Fonterra could obtain a durable competitive advantage by pricing its shares below fair value;
  - b. This strategy need not require a cash subsidy to new suppliers, and could be attractive to some members as a way of strengthening the co-op;

---

<sup>6</sup> For example, Environment Southland recently announced that it is seeking to make dairy conversion a discretionary activity. <http://www.es.govt.nz/your-council/news/2011/new-rule-changes-proposed-for-new-dairy-conversions/>

31. So it seems entirely possible that Fonterra could sustain a moderate cross-subsidisation of its NZ share prices from its added-value operations.