Regulatory Impact Statement

Fonterra's Milk Price Setting, Capital Restructure and Share Valuation

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BIOSECURITY NEW ZEALAND

NEW ZEALAND FOOD SAFETY AUTHORITY

Agency Disclosure Statement

This Regulatory Impact Statement (RIS) has been prepared by the Ministry of Agriculture and Forestry (MAF). It provides 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 contestable market for farmers' milk; and
- ensure that Fonterra's capital structure 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.

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 preferred policy options 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.

Iain Cossar
Director
Sector Policy
Ministry of Agriculture and Forestry

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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[1] 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[2]:

    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

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[1] As well as downstream consumers in New Zealand.

[2] 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.

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.

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[3]:

   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[4];

   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[5] 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 transitionary 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.

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[3] 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.

[4] Effectively making it a legal requirement for Fonterra to have one year contracts with their farmers.

[5] Fonterra exports the vast majority of its production and therefore faces strong competitive pressure in international dairy markets.

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).

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 voucher ("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 vouchers ("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.

13. TAF cannot be implemented successfully without amendments to the share issue and redemption requirements in the DIRA. TAF may also require other supporting amendments to ensure a well functioning market.

PUBLIC POLICY OBJECTIVES

14. The overarching policy objective is to promote the efficient operation of New Zealand's dairy markets, towards achieving long term growth and dynamic efficiency.

15. Fonterra's proposed move to TAF does not change this policy objective.

16. An effective regulatory regime that promotes the efficient operation of New Zealand's dairy markets would include:

    a. Transparency of Fonterra's milk price setting process and confidence in the consistency of Fonterra's farm gate milk price with contestable outcomes; 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.

17. 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

18. 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

19. In the absence of a competitive market for farmers' milk, Fonterra's milk price has to be determined using an administrative methodology.

20. In general, the DIRA is premised upon regulating to ensure that the dominant player has the right incentives to be efficient. It does this through ensuring a credible threat of entry by efficient competitors – i.e. the DIRA imposes a contestability standard.[6] Contestability essentially means that outcomes should be efficient, whether or not there is an increase in the number of competitors in the farm gate milk market. That is, as long as Fonterra does not use the farm gate milk price as a barrier to entry for efficient competitors, then the price should allow an efficient processor to compete; and incentivise Fonterra to itself operate efficiently.

21. <u>Risk to confidence in efficiency of farm gate milk price:</u> Notwithstanding Fonterra's commercial 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.

[6] The purpose statement in section 4 of the DIRA includes that "The purpose of this Act 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".

22. Lack of transparency of setting of farm gate milk price: 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.

23. As noted above, in the absence of a competitive market, Fonterra's dominance means there is no way to avoid having to calculate the farm gate milk price using an administrative methodology. A key question is therefore what would be an appropriate theoretical construct for Fonterra to use in setting this price. It is useful to consider how the farm gate milk price would be expected to evolve in a workably competitive market. Annex 1 provides an overview of the evolution of prices in a workably competitive market. It shows the impossibility of determining the efficient price at any moment in time; hence it is left to the market whenever competition is a real possibility.

24. It is clear that the setting a milk price on an administrative basis is not a straight-forward exercise. Officials consider that the approach taken to the Milk Price Manual is conceptually consistent with outcomes in a competitive market.

25. Risk to confidence in efficiency of farm gate milk price: Notwithstanding this, there are a number of crucial – but necessarily subjective – decisions required in calculating Fonterra's milk price, which would have a material impact on the efficiency of the final outcome. That is, while at the conceptual level the Manual appears consistent with competitive outcomes, the specific assumptions utilised in applying the Manual have the potential to affect the extent to which the milk price acts as a barrier to entry. These assumptions/decisions include:

- Choice of the product mix and conversion of global prices into revenue;
- Selection of the appropriate scale and location of plant in the hypothetical business;
- Technical assumptions such as the assumed plant yield;
- Determination of the cost of capital and depreciation schedules; and
- Development of consistent definitions of ancillary costs, such as overheads.

26. Risk to confidence in efficiency of farm gate milk price: Furthermore, concerns were raised in submissions to the January 2012 consultation about specific assumptions utilised by Fonterra in applying its Manual. For example, independent processors noted that the assumption used for plant yield – the amount of a commodity product assumed to be derived from a litre of milk – was infeasible in practice. If some of the assumptions used in applying the Manual are, indeed, "overly optimised", then this could lead to a milk price that does not provide a "credible threat of entry", i.e. that is not consistent with the contestability aims of the DIRA.

27. Risk to transparency of setting of farm gate milk price: Moreover, 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.

28. Risk to confidence in milk price setting processes: 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.

29. 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.

30. 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 pricing outcomes of contestable 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

31. 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 which it can alter as it sees fit.

32. As with Fonterra's milk price setting, despite Fonterra's commercial 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. When shares are priced below fair market levels, the earnings (dividends and retained earnings) will be above fair market returns, taking into account the relevant risks. If it is assumed that Fonterra and its competitors are offering the same (efficient) milk price, the excess earnings on Fonterra shares would give Fonterra a competitive advantage. Rival processors, particularly those that do not offer shares to suppliers, would need to offer a higher than competitive milk price in order to attract and retain suppliers.

33. 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 and ultimately impacting on the level of competition for farm gate milk. 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[7].

41. A well functioning TAF would also result in a number of additional benefits, including:

    a. Strengthening current incentives on 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[8].

    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 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. A well designed and well

[7] TAF may also reduce the competitive advantage that investor-owned dairy processors have over Fonterra with respect to Capital requirements.
[8] 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.

functioning TAF system supported by the fund and registered volume providers should result in Fonterra's share price being largely reflective of its fair value[9].

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. A poorly designed TAF could also damage the standing of New Zealand capital markets amongst international investors.

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.

[9] 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 contestable 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 and assessed by the Commerce Commission (against one of four potential standards). *MAF's preferred approach is for a combination of Options MP2, MP3 and MP4 to be implemented.*
	<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 capital structure 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 CS1: Maintain status quo.</u> The share issue and redemption obligations in the DIRA would remain and Fonterra would maintain its current discretion to determine its share valuation methodology. Under this option, Fonterra would not be able to launch TAF.
	<u>Option CS2: 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'. The share issue and redemption obligations in the DIRA would remain. Under this option, Fonterra would not be able to launch TAF.
	<u>Option CS3: Introduce the minimum DIRA amendments required for TAF and 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.

	Option CS4: Introduce a package of legislative requirements to underpin and strengthen Fonterra's incentives to design, implement and maintain a well functioning TAF system. A number of TAF specific legislative requirements would replace the current issue and redemption obligation on Fonterra.

Options to promote transparency of, and confidence in, Fonterra's milk price setting process, and consistency of its outcomes with those arising in contestable 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. Moreover, the potential measures to ensure that farmers can enter and exit Fonterra in a timely manner and at efficient share prices (see next section) may impose a further discipline on Fonterra's milk price.

50. 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.

51. Furthermore, it would not provide for an assessment of consistency of outcomes with those arising in a contestable market for farmers' milk. A number of submitters to the January 2012 consultation raised concerns that aspects of Fonterra's current price setting may be overly optimised and not feasible. This includes reports from independent economic and industry experts. The status quo is unlikely, therefore, to provide confidence in Fonterra's milk price setting methodology and process.

Option MP2: Introduce milk price governance requirements

52. 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.

53. 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 contestable market for farmers' milk (with the same risks outlined in MP1 above). This option is therefore unlikely to be sufficient, by itself, to achieve policy objectives.

Option MP3: Introduce milk price disclosure obligations

54. Under this option Fonterra would be required to publicly disclose information in relation to its milk price setting, including:

a. 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;

b. material changes to the Milk Price Manual, the underlying assumptions and the inputs into the Manual, including the reasons for these changes;

c. the terms of reference of the Milk Price Panel; and

d. the Milk Price Panel's recommendations to the Fonterra Board and the Board's reasons for not adopting Panel's recommendations.

55. 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.

56. 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.

57. 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 contestable market if this information is not analysed by financial analysts/commentators. Particularly since, as outlined under option MP1 above, there is a risk that Fonterra's current methodology may not be consistent with promoting outcomes consistent with contestable markets.

58. The effectiveness of this option in enhancing Fonterra's incentives to price milk efficiently 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

59. Under this option, the Commerce Commission would be tasked with undertaking annual assessments of Fonterra's milk price methodology and its application. This would involve measuring the underlying assumptions, inputs and process against a statutory purpose and set of principles and producing a public report. A monitoring regime could provide both increased transparency and further incentives for Fonterra to pay an efficient farm gate milk price (due to the fact that a regulatory agency would release a public report on Fonterra's farm gate milk price setting). Importantly, this option would not involve the Commission publishing *a price* (refer option MP5).

60. The milk price monitoring regime would be 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. 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. This implies lower regulatory costs (both direct and indirect) relative to Option MP5 discussed below, whereby the Commerce Commission would set a benchmark price that would likely become the default price. Under MP5 there are significant risks of regulatory error due to asymmetric information available to the regulator.

61. 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 contestable 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 of 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.

62. While in general there are benefits in introducing a monitoring regime, the specific costs and benefits – and hence whether such a regime should be introduced – will depend on what standard Fonterra's farm gate milk price is assessed against.

63. We consider four potential standards in turn that could apply if a milk price monitoring regime is introduced:

    a. Milk price based on Fonterra's actual performance

    b. Milk price based on perfectly optimised notional competitor

    c. Milk price based on assumptions Fonterra would be expected to employ in a competitive market

    d. Milk price based on assumptions designed to promote incentives for Fonterra to be efficient in the context of the DIRA's contestable market aims

a. Milk price based on Fonterra’s actual performance

Under this option, the Commerce Commission would assess Fonterra’s farm gate milk price against the price that would be set if the inputs and assumptions were aligned with Fonterra’s actual costs and revenues of producing commodities. Any processor that is more efficient than Fonterra’s actual commodity business would be able to enter. Fonterra would obtain an adverse report from the Commerce Commission if, in response to such entry it adjusted its base milk price to reflect a notional set of costs and revenues.

While on the surface it seems reasonable that the price should be set such that any firm more efficient than Fonterra can enter, such an approach could, in practice, preclude Fonterra from behaving in a normal competitive manner. This may in turn reduce the overall efficiency of the farm gate milk market. In a competitive market, in order to retain market share an incumbent firm would have the ability to pay more for an input product than would enable it to recover its total costs. For example, an incumbent would continue to operate a relatively inefficient plant, for which the capital costs are already sunk, as long as the market price was covering its variable costs of continuing to operate the plant. This is part of the normal process of competition and incentivises the firm to move towards a more efficient performance over time. There is, therefore, a risk that this option may lead to new entry that would not have survived in a normal competitive market environment.

Furthermore, even if such new entry does not occur, the overall efficiency of the farm gate milk market may still reduce, as pricing milk based on its actual performance would not incentivise Fonterra to constantly strive to be more efficient. I.e. assessing whether the price is set by reference to Fonterra’s actual costs would be akin to “cost-based regulation” which is known to be ineffective in incentivising efficiency. Farmers would bear the cost of this reduction in Fonterra’s productive efficiency.

This option may be beneficial if the Government’s objective is to increase entry in the farm gate milk market irrespective of whether it is the most efficient outcome in the short to medium term. For example, there may be concerns about having “all eggs in one basket” and that in the long run the economy will benefit from actual competition in the market for farmers’ milk rather than relying on the threat of entry to moderate Fonterra’s activities.

This option would also be relatively low cost in terms of funding requirements for the Commerce Commission, as it wouldn’t require the Commission to model the characteristics of other competitors (whether actual or notional).

Overall this option is not recommended. It is not considered that a monitoring standard of “Fonterra’s actual performance” would meet the objective of promoting the efficient operation of New Zealand’s dairy markets.

b. Milk price based on perfectly optimised notional competitor

Under this option, the Commerce Commission would assess Fonterra’s farm gate milk price against the price that would be set based on a perfectly optimised notional competitor. This type of price setting would not be unusual for a regulated monopoly as it provides incentives to operate efficiently. Moreover, price regulation of a natural monopoly can focus solely on ensuring the regulated firm has incentives to behave efficiently, irrespective of the impact on competition.

Under this approach, there would be extremely limited likelihood of entry since a processor would need to be perfectly optimised just to recover its costs. In this way, while it may incentivise efficiency, it would be doing so in a different way to the general thrust DIRA – which is about incentivising efficiency through the credible threat of entry. Furthermore there is a risk that with all returns going to farmers (as distinct to shareholders), Fonterra would struggle to get access to retained earnings for growth, leading to excess milk production.

This option would have high regulatory costs associated with the Commerce Commission being required to model a fully optimised dairy processor. Moreover, as with the regulation of a natural monopoly, there is risk of regulatory error and the costs of the price being set either too high or too low.

This option may be beneficial if the Government considered that having a dominant firm was the optimal model for the New Zealand dairy industry and, taking this as a given, the overarching policy objective is to promote efficiency of the dominant firm. It would, however, require much broader changes to the DIRA, recognising that it would be a shift away from contestability.

Overall, this option is not recommended. It is not considered that a monitoring standard of "perfectly optimised notional competitor" would meet the objective of promoting the efficient operation of New Zealand's dairy markets.

c. Milk price based on assumptions Fonterra would be expected to employ in a competitive market

Under this option, the Commerce Commission would assess whether the milk price is based on assumptions consistent with those that Fonterra would be expected to employ in a competitive market.

The two options a. and b. above represent extremes; the former regulating for entry, the latter regulating for efficiency but precluding entry. In contrast, this option would be seeking a milk price somewhere between a. and b., such that entry is not precluded (subject to a particular level of efficiency of entrants), but also such that Fonterra is incentivised to constantly strive to be more efficient even in the event that such entry does not take place.

It would not be a straight-forward assessment for the Commerce Commission to make. At any given time, as market dynamics evolve, the milk price in a competitive market would be somewhere between the short-run outcome of the variable costs of the marginal plant[10] and the long-run outcome of the total costs of an efficient plant utilising the latest technology. Exactly where it sits will depend on a range of factors, including rate of innovation and firm specific factors such as where the plants are located and the presence of local market power.

[10] Even if short-run optimisation was sought, it would not be a straight-forward assessment. For example, what characteristics would the marginal processing plant have? Where would it be based? What ownership structure would it have? What business model/strategy would it adopt? Furthermore, the equilibrium price is itself an evolving target. Moreover, even if the equilibrium was fixed, competition would force the price below or above this level at particular times.

Officials consider that this standard would be complex, open to challenge/litigation and involve relatively high regulatory costs. For example, it would likely require consideration, and modelling, of the characteristics of other competitors (both actual and notional). It would also require a significant amount of subjective decision making on what constitutes competitive market outcomes, and it would not be simple to determine whether assumptions are consistent with this standard.

d. Milk price based on assumptions designed to promote incentives for Fonterra to be efficient in the context of DIRA's contestable market aims

Under this option, the Commerce Commission would assess whether the milk price is based on assumptions consistent with promoting incentives for Fonterra to be efficient, but moderated by the need to consider this in the context of the DIRA's contestable market aims.

As with option c. above, this option would be seeking a milk price somewhere between a. and b., such that entry is not precluded (subject to a particular level of efficiency of entrants), but also such that Fonterra is incentivised to constantly strive to be more efficient even if such entry does not take place.

However, relative to option c. it would be a more straight-forward assessment for the Commerce Commission to make. This is because the standard would be focussed on Fonterra. It would not therefore necessarily require complex modelling of other (actual or notional) competitors. The standard of "assumptions designed to promote incentives for Fonterra to be efficient" would require a relatively objective assessment and would be similar to assessments the Commission typically makes through its regulatory work.

There is a risk that this option would lead to a milk price that, while it incentivises efficiency, does not provide a credible threat of entry. Therefore, if this option is chosen, the milk price principles would be need to carefully designed to ensure that it does not lead to a milk price based on an "overly-optimised" set of assumptions.

64. Out of the possible milk price monitoring standards, option d. (milk price based on assumptions designed to promote incentives for Fonterra to be efficient in the context of DIRA's contestable market aims) is preferred.

65. It is considered options a. and b. would not promote the efficient operation of New Zealand's dairy markets. Both options c. and d. have the potential to promote the efficient operation of New Zealand's dairy markets through ensuring that that entry is not precluded (subject to a particular level of efficiency of entrants), but also such that Fonterra is incentivised to constantly strive to be more efficient.

66. Irrespective of the standard, a milk price monitoring 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 Commerce Commission.

67. Option d. is preferred to option c. since it provides a more objective standard for the Commerce Commission to assess assumptions against, and as such will have lower direct regulatory costs

(both for the Commission and for Fonterra in reporting to the Commission). [withheld under section 9(2)(f)(iv) of the Official Information Act 1982

] Moreover, there would be significant indirect costs resulting from the regulatory uncertainty of the relatively subjective standard under option c.

68. Overall, option d. is preferred as the least-cost option to promote the efficient operation of New Zealand's dairy markets.

69. The effectiveness of this option would be further improved if combined with Options MP2 and MP3 above.

Option MP5: Introduce a benchmark price

70. 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.

71. 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.

72. A number of the submissions to the January 2012 consultation commented that the milk price should be set by an independent party, either the Commerce Commission or an independent Milk Price Panel.

73. However, 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. As with the issues outlined under Option MP4, it is not straight-forward to determine what standard should be set, and would still require the choices outlined in MP4 (e.g. whether the price should be such that entry is promoted, or should it be set such that efficiency is the primary goal?).

74. Overall, the costs associated with this option would likely outweigh any potential benefits. Moreover, it is considered that increased confidence may be achievable through Option MP4 with much lower regulatory cost and risk (both direct and indirect).

75. In addition, as noted under option MP1, the potential measures to ensure that farmers can enter and exit Fonterra in a timely manner and at efficient share prices (see next section) may impose a further discipline on Fonterra's milk price. It would be beneficial to monitor that effect (e.g. through Option MP4(d)) and to seek greater transparency of Fonterra's processes and methodology (e.g. through Options MP2 and MP3) prior to imposing more intrusive regulation.

Summary of options relating to Fonterra's farm gate milk price

Options	**Comment**	**Recommended package**
MP1: Status Quo	Leaves discretion to Fonterra to change its governance and content of disclosure documents. Therefore, does not promote transparency or consistency with contestable outcomes.	
MP2: Milk Price Governance Requirements	Provides for a degree of confidence in Fonterra's milk price setting process. On its own does not promote transparency or confidence in consistency with contestable outcomes.	✓
MP3: Milk Price Disclosure Requirements	Promotes transparency in Fonterra's milk price setting process. On its own does not promote confidence in consistency with contestable outcomes.	✓
MP4(a): Milk Price Monitoring Regime based on Fonterra's actual performance	Would not promote outcomes consistent with contestable market (in particular, removes incentives for Fonterra to strive to be more efficient)	
MP4(b): Milk Price Monitoring Regime based on Perfectly Optimised Notional Competitor	Would not promote outcomes consistent with contestable market (in particular, removes reasonable prospect of entry)	
MP4(c): Milk Price Monitoring Regime based on assumptions Fonterra expected to employ in a competitive market	Promotes consistency of its outcomes with those arising in contestable markets (entry is not precluded and Fonterra is incentivised to constantly strive to be more efficient). Relatively high regulatory costs due to complexity and subjectivity of assessment required.	
MP4(d): Milk price based on assumptions designed to promote incentives for Fonterra to be efficient in the context of DIRA's contestable market aims	Promotes consistency of its outcomes with those arising in contestable markets (entry is not precluded and Fonterra is incentivised to constantly strive to be more efficient). Relatively low regulatory costs due to simplicity of assessment required (relative to MP4(c)).	✓
MP5: Benchmark Price	Risks of regulatory error likely to outweigh potential benefits of setting a benchmark price in absence of grater certainty that the current methodology is inefficient.	

76. Rather than being mutually exclusive, the proposals to ensure that farmers can enter and exit Fonterra in a timely manner and at efficient share prices (see next section) would be complementary to the Milk Price recommended options as they may impose a further discipline on Fonterra's milk price.

Options to ensure that Fonterra's capital structure 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 CS1: Maintain Status Quo

77. Under this option, no changes would be made to the share issue and redemption obligations in the DIRA, and Fonterra would continue to issue and redeem its shares and therefore set its share price based on its own valuation methodology. As no amendments would be made to specifically support TAF, Fonterra would have difficulty in proceeding with its proposed capital restructure. The current requirement in the DIRA 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; and

    c. It would significantly deter participation in the fund market and consequently risk inhibiting the development of both the share and fund markets.

78. This option would therefore only be appropriate if the potential costs of Fonterra's proposed TAF regime compared to the status quo are considered to outweigh its potential benefits.

79. A key benefit of retaining the status quo is that Fonterra's share issue and redemption requirements are well understood by farmers and currently achieve one aspect of the policy objective as they ensure that dairy farmers can enter and exit Fonterra in a timely manner.

80. Another benefit 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.

81. The costs of maintaining the status quo are the opportunity costs of Fonterra not being able to implement TAF. In other words, the benefits that have been attributed to the proposed TAF regime would not be realised. The potential benefits of TAF are set out in Option CS4 below. [withheld under section 9(2)(b)(ii) of the Official Information Act 1982].

82. Another cost of maintaining the status quo 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. As explained earlier, this is a feasible course of action for Fonterra given the competitive advantage it could achieve from under-valuing its shares.

83. 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.

84. Overall, given the concerns raised by the investment community about Fonterra's design for TAF, the opportunity costs of maintaining the status quo in relation to issue and redemption of shares are unlikely to be as high as it first might appear. However, the risk associated with the 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 CS2: Introduce legislative guidance for Fonterra's share valuation

85. This option builds on the status quo in that no changes would be made to the share issue and redemption obligations in DIRA and Fonterra would therefore have difficulties in proceeding with its proposed capital restructure. The difference is that under this option, legislative guidance would be included in the DIRA with regards to Fonterra's administrative share valuation to ensure that Fonterra reverts to, and maintains going forward, its pre-2009 'fair value' share pricing methodology.

86. The key benefit of this option over and above the status quo 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.

87. 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.

88. The costs/benefits attributed to maintaining the issue and share redemption requirements are largely the same as those described in Option CS1. In addition, Fonterra has stated that if the fair value share requirement is introduced it would prevent it from being able to evolve its capital structure at all in the near future. This is because the existing 'restricted share value' would likely increase under 'fair value' but then potentially decrease again if TAF (or a new version of TAF) is introduced. A discount might arise as a result of initial uncertainty and the complexity of the structure. The key rationale for Fonterra moving to the 'restricted value' methodology in 2009 was, in its opinion, to better reflect the (lower) price at which shares would trade under TAF.

89. Overall, given the risk associated with the lack of share valuation guidance as set out in Option CS1, it is considered that the benefits of providing legislative guidance on Fonterra's share valuation would outweigh its potential costs.

90. 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.** We have also considered whether the guidance should allow Fonterra 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 is the option that Fonterra would likely prefer as it is consistent with their current share valuation practice.

However, using a 'restricted value' methodology to allow for a liquidity discount would seem inappropriate given that 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.

91. In summary, to ensure that, in the absence of a market discovered price for shares, Fonterra's administratively set share price is set at an efficient level, Option CS2 is preferable to the status quo. 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, 'fair value' is preferred over 'restricted value'.

Option CS3: Introduce the minimum DIRA amendments required for TAF and rely on Fonterra's commercial incentives to design, implement and maintain a well functioning TAF system

92. Under this option, the current issue and redemption obligation on Fonterra would be removed, enabling Fonterra to proceed with its proposed capital restructure. DIRA would be amended to include 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.

93. The key benefit of this option is the ability for Fonterra's capital structure to evolve without requiring extensive amendments to the 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 the efficient operation of New Zealand dairy markets.

94. 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 and at efficient share prices.

95. 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 if TAF is launched.

Option CS4: Introduce a comprehensive package of legislative requirements to underpin and strengthen Fonterra's incentives to design, implement and maintain a well functioning TAF system

96. 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.

97. If designed correctly, TAF should bring numerous benefits, as explained in detail in paragraph 41 above. These benefits are summarised as follows:

  a. Strengthening current incentives on Fonterra to pay an efficient milk price.

  b. Improving transparency of, and confidence in, Fonterra's milk price setting processes through the level of information disclosure required under the Securities Markets Act and through coverage by financial analysts.

  c. The opportunity for Fonterra to raise additional capital from non-farmer investors to pursue growth opportunities in New 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.

98. [withheld under section 9(2)(b)(ii) of the Official Information Act

]. As noted earlier, TAF's success (and the benefits listed above) is heavily reliant on the 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. [withheld under section 9(2)(b)(ii) of the Official Information Act 1982

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99. [withheld under section 9(2)(b)(ii) of the Official Information Act 1982

100. [withheld under section 9(2)(b)(ii) of the Official Information Act 1982

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101. The full package of legislative requirements that has been considered under this option is described below.

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, and redeem units at 'fair value', with Fonterra not being able to override investor wishes. It might be preferable for only non-Fonterra farmer shareholders to be eligible to vote to wind up the fund as their interests are likely to be different to those of external investors. 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.

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. In 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.

Investor protections could also include a requirement that at least two Fonterra Board members are appointed to represent fund investors and that those Board members must also sit on Fonterra's Milk Price Panel. While investors would not have majority representation, it would enable them to at least participate in decision making regarding Fonterra's strategy and milk price decisions. While this would address institutional investors' main concern about Fonterra's TAF proposal, it is expected that a requirement like this would be completely unacceptable to Fonterra and its farmer shareholders and would likely prevent TAF being implemented.

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.

102. The key advantage of this option over Option CS3 is that introducing a package of legislative requirements 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.

103. 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.

104. Overall, however, given the importance of ensuring the freedom of entry and exit to the overarching objectives of the DIRA regulatory regime, Option CS4 is preferred to Option CS3.

Summary of capital structure options

105. The table below sets out which options have the ability to achieve one or both aspects of the objective of ensuring that Fonterra's capital structure 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	Potential to ensure timeliness of entry and exit	Potential to ensure efficient share price	Comment
CS1	Yes	No	Doesn't achieve both aspects of the objective as there will be no certainty that Fonterra will price its shares at the (efficient) fair value level.
CS2	Yes	Yes	There are risks associated with Fonterra not being able to evolve its capital structure – i.e. the potential benefits of TAF will be foregone.
CS3	Not likely	Not likely	Unlikely to achieve both aspects of objective because the key structural

			features of TAF that ensure liquidity will not be locked into the legislation.
CS4	Yes	Yes	[withheld under section 9(2)(b)(ii) of the Official Information Act 1982].

106. In summary, both options CS2 and CS4 have the potential to achieve the policy objective. [withheld under section 9(2)(b)(ii) of the Official Information Act 1982].

107. It is important to note that Options CS2 and CS4 are mutually exclusive in that if Option CS4 is adopted, there is no need to introduce any legislative guidance relating to the share price valuation as TAF will result in a market price for shares. Notwithstanding this, if Option CS4 is the adopted option but TAF subsequently fails, it would be prudent to provide for Option CS2 as a backstop. This is because, if TAF fails, Fonterra would need to return to an administrative share valuation process. Option CS2 would ensure that this process is based on valuing shares at 'fair value'.

CONCLUSIONS AND RECOMMENDATIONS

108. The recommendations outlined below represent MAF's policy recommendations and are not Government policy.

Recommended package

109. To promote transparency of, and confidence in, Fonterra's milk price setting process, and consistency of its outcomes with those arising in a contestable market for farmers' milk, Options MP2, MP3 and MP4(d) are recommended as illustrated in the table below. Although all these options individually would provide for improvements over the status quo, they would be particularly effective if implemented jointly.

Recommended Options	Comment
MP2: Milk Price Governance Requirements	Provides for a degree of confidence in Fonterra's milk price setting process. On its own does not promote transparency or confidence in consistency with contestable outcomes.
MP3: Milk Price Disclosure Requirements	Promotes transparency in Fonterra's milk price setting process. On its own does not promote confidence in consistency with contestable outcomes.
MP4(d): Milk price based on assumptions designed to promote incentives for Fonterra to be efficient in the context of DIRA's contestable market aims	Promotes consistency of its outcomes with those arising in contestable markets (entry is not precluded and Fonterra is incentivised to constantly strive to be more efficient). Relatively low regulatory costs due to simplicity of assessment required (relative to MP4(c)).

110. 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 the costs associated with directly constraining Fonterra's milk price, e.g. through MP5, would likely outweigh any potential benefits, particularly given that increased confidence may be achievable through Option MP4 with much lower regulatory cost and risk (both direct and indirect).

111. Implementation of the three Options MP2, MP3, and MP4(d) in conjunction with each other would improve certainty that the DIRA regulatory regime is functioning as intended.

112. Rather than being mutually exclusive, the proposals to ensure that farmers can enter and exit Fonterra in a timely manner and at efficient share prices would be complementary to the Milk Price recommended options as they may impose a further discipline on Fonterra's milk price.

113. As shown in the table blow, officials consider two options have the potential to achieve one or both aspects of the objective of ensuring that Fonterra's capital structure 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	Potential to ensure timeliness of entry and exit	Potential to ensure efficient share price	Comment
CS2	Yes	Yes	There are risks associated with Fonterra not being able to evolve its capital structure – i.e. the benefits foregone
CS4	Yes	Yes	[withheld under section 9(2)(b)(ii) of the Official Information Act 1982]

114. [withheld under section 9(2)(b)(ii) of the Official Information Act 1982].

115. It is important to note that Options CS2 and CS4 are mutually exclusive in that if Option CS4 is adopted, there is no need to introduce any legislative guidance relating to the share price valuation as TAF will result in a market price for shares. Notwithstanding this, if Option CS4 is the adopted option but TAF subsequently fails, it would be prudent to provide for Option CS2 as a backstop. This is because, if TAF fails, Fonterra would need to return to an administrative share valuation process. Option CS2 would ensure that this process is based on valuing shares at 'fair value'.

CONSULTATION

116. In January 2012, a draft version of this RIS was released for public consultation, together with an exposure draft Bill which illustrated how the preferred set of options could be given effect to. The purpose of the consultation was to consult dairy industry stakeholders on the proposals, before presenting options to Government for policy approval. During the consultation period, MAF met with a number of institutional investors to obtain feedback on Fonterra's TAF proposal and the supporting regulatory regime consulted on as part of the exposure draft amendment bill. MAF also met with Fonterra, a number of independent processors, and Federated Farmers to obtain their feedback on the range of proposals.

117. The analysis of options in this RIS has been undertaken on the basis of the comments received to the January 2012 consultation. The key arguments raised are summarised as follows:

Fonterra's farm gate milk price

118. In relation to how Fonterra sets its farm gate milk price and the proposals to introduce a price monitoring regime, submissions tended to fall into the following categories:

    a. *Large independent processors* tend to support the move to introduce a milk price regime but consider that the proposed monitoring regime does not go far enough. In particular, they submitted that:

i. the farm gate milk price should be set by an independent party; and
ii. that it should be based on Fonterra's actual costs and revenues, rather than notional costs and revenues.

b. *Fonterra* submitted that it is comfortable with the price monitoring regime provided it is clear that the regime is focussed on transparency. Fonterra noted that critics contend that Fonterra should be using its actual costs, and responded that no competitive market can ever guarantee that an incumbent will recover all costs on existing investments.

c. *Fonterra farmers* that commented on the milk price regime were either supportive to the extent that "Fonterra has nothing to hide", or opposed as the proposals represent government interference in a private company.

Trading Among Farmers

119. In general, submitters did not comment extensively on the government's proposed regulatory package to accompany TAF. Instead, comments were focussed on Fonterra's own plans to evolve its capital structure and whether this is likely to result in positive outcomes. The various submitters' views can broadly be summarised as follows:

a. *Independent Processors*: expressed concerns that TAF will impair the freedom of entry and exit of farmers to/from Fonterra, thus damaging competition for farm gate milk. Processors therefore agree that safeguards need to be included in the DIRA.

b. [withheld under section 9(2)(b)(ii) of the Official Information Act 1982].

c. *Fonterra*: remains satisfied that implementing TAF is the right strategy for the co-operative and is broadly supportive of the proposed amendments to the DIRA, with the exception of the section that imposes certain restrictions on its behaviour.

d. *Fonterra farmers*: the large majority of farmers who commented on TAF in their submission were not supportive of the capital restructure. This is largely due to concerns about a lack of information supplied by management and suspicions that farmers will no longer have 100 per cent control of the co-operative. A number of farmers consider that another vote on TAF should be held.

Fonterra's share valuation

120. Submissions on the proposal that, in the absence of TAF, legislative guidance should be included in the DIRA on Fonterra's share valuation can be broadly summarised as follows:

a. *Fonterra:* considers that the legislative guidance on share price is unnecessary and will not work. The definition will result in an artificially high share price and one that is higher than the price that would prevail under TAF.

b. *Independent Processors:* all agree that Fonterra should be required to set its prices based on 'fair value'. One processor considers that the requirement should be brought in immediately rather than if TAF is not launched or does not succeed.

c. *Fonterra farmers*: the large majority of farmers who commented on the share valuation proposal are opposed to legislative guidance as they consider this is a matter for Fonterra to determine. Only one Fonterra farmer was supportive of the requirement.

121. In addition, MAF has previously consulted on potential regulatory tools to accompany TAF.

122. 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.

IMPLEMENTATION

123. 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

124. 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.

Annex 1: Evolution of price in a workably competitive market

Summary

"Workable competition" is the term often used to describe how a (reasonably) competitive market operates in practice. Unlike the theory of "perfect competition" it is impossible to exogenously determine the single price that will emerge in a workably competitive market. Rather, the price will evolve over time, depending on a range of factors such as rate of innovation, fluctuations in the international price for milk products, and firm specific factors such as where they are located and the presence of local market power.

This evolution of price is part of the ongoing process of competition. It creates incentives for firms to enter/ expand/ exit in various locations in response to pricing signals. The impossibility of determining the "efficient" price at any moment in time is precisely why it is left to the market whenever competition is a real possibility.

Evolution of milk price in a workably competitive market

It is useful to consider how the farm gate milk price would be expected to evolve in a workably competitive market. This was a source of much disagreement in submissions to the January 2012 consultation. Independent processors tended to submit that, in a competitive market, the price would be determined by the *marginal* plant; that is, the *least* efficient plant among those active in equilibrium. Fonterra, on the other hand, submitted that a model premised on full cost recovery by a notional efficient dairy processor is appropriate.

Officials agree that in the short-term, and in a competitive market, the market price would be set by the least efficient processor in the equilibrium – the processor with the highest variable (operating costs). This is the outcome we see in high-frequency commodity auctions like the electricity market. While the market for farmers' milk wouldn't be expected to reflect this theory so perfectly, it represents a bound on what might be expected in the short term. I.e. the milk price would be set based on the variable costs of the marginal plant.

In the longer term, as market dynamics evolve, a more sustainable industry structure would be expected to emerge. Inefficient plants would be displaced from the market. Entry would occur, and entrants would build efficient plants. In the very long run, the farm gate milk price would be such that an efficient plant utilising up-to-date technology was just recovering its total costs (over the life of its assets). I.e. the milk price would be set based on the total costs of an efficient plant.

However, investments in the dairy industry are lumpy. Entry will not instantaneously occur such that the market is made up entirely of the most efficient plant. Moreover, technology – and hence what constitutes an efficient plant – will continue to change. Therefore, when an efficient plant enters the market, the price will not be set such that the efficient firm just recovers costs.

At any given time in a workably competitive market, the milk price will be somewhere between the short-run outcome of the variable costs of the marginal plant and the long-run outcome of the total costs of an efficient plant utilising the latest technology. Exactly where it sits will depend on a range of factors, including rate of innovation, fluctuations in the international price for milk products, and firm specific factors such as where they are located and the presence of local market power.

The evolution of price between these extremes is part of the ongoing process of competition. The impossibility of determining the efficient price at any moment in time is precisely why it is left to the market whenever competition is a real possibility.