



Livestock Improvement Corporation

Independent Appraisal Report

Prepared in Relation to the Proposed Share Simplification

February 2018



Table of Contents

1.0	Executive Summary	4
1.1.	Introduction	4
1.2.	Summary of the Proposal.....	4
1.3.	Summary of our Assessment of the Proposal	5
1.4.	Conclusion	7
2.0	Profile of LIC	8
2.1.	Overview of the Company	8
2.2.	Significant Historical Events	8
2.3.	Capital Structure and Ownership	9
2.4.	Share Price Performance and Liquidity.....	11
2.5.	Summary Financial Results	12
2.6.	Outlook.....	15
3.0	Valuation of LIC	17
3.1.	Valuation Methodology	17
3.2.	Preferred Valuation Approach for LIC	18
3.3.	Earnings Multiple Valuation.....	19
3.4.	Valuation Conclusion	24
4.0	Assessment of the Merits of the Proposal	26
4.1.	Overview	26
4.2.	Relative Value Attributed to Investment Shares	28
4.3.	Impact on Control Position of the Company.....	28
4.4.	Other Implications for LIC Shareholders	29
	 Appendix 1. Comparable Company Information.....	 35
	Appendix 2. Sources of Information Used in this Report	37
	Appendix 3. Declarations, Qualifications and Consents	38



Abbreviations and Definitions

Company	Livestock Improvement Corporation Limited
Co-operative Control Shares	The first class of LIC shares carrying voting rights, with a nominal value, whose ownership is directly tied to Qualifying Expenditure at LIC and cannot be directly traded
Co-operative Control Shareholder	Person holding one or more Co-operative Control Shares
DIRA	The Dairy Industry Restructuring Act 2001
EBIT	Earnings before interest and taxation
EBITDA	Earnings before interest, taxation, depreciation and amortisation
EV	Enterprise Value
Exchange Ratio	The number of Ordinary Shares that each Investment Share is reclassified to under the Proposal
Fully Paid Share	Ordinary shares reclassified from Co-operative Control Shares and Investment Shares whose face value has been paid up
Fonterra	Fonterra Co-operative Group Limited
GBP	British pounds
IAR	This Independent Appraisal Report prepared by Northington Partners
Investment Shares	The second class of LIC shares which carry no voting rights but are entitled to the economic profit of LIC and are listed on the NZAX with trading restricted to Co-operative Control Shareholders
Investment Shareholder	Person holding one or more Investment Shares
kgMS	Kilograms of milk solids
LIC	Livestock Improvement Corporation Limited
Milk Price	The Fonterra Farmgate Milk Price that Fonterra forecasts and pays to its suppliers for each dairy season per kgMS
Nil Paid Share	Ordinary shares issued under the Proposal to Co-operative Control Shareholders whose face value has not been paid up
NMR	National Milk Records PLC
Northington Partners	Northington Partners Limited
Notice of Meeting	The notice of special meeting of LIC shareholders and accompanying material in relation to the Proposal
NZAX	The NZX Alternative Market exchange
NZX	NZX Limited
Ordinary Shares	Single class of shares which current Co-operative Control Shares and Investment Shares are reclassified to, and which are issued as part of the Proposal
PGG Wrightson	PGG Wrightson Limited
Proposal	The proposed change in capital structure to move LIC from a dual class structure to a single class structure as detailed in the Notice of Meeting
Qualifying Expenditure	The dollar amount of purchases of products and services from LIC identified by LIC as qualifying in its services catalogue, and upon which required ownership of Co-operative Control Shares is based
Share Ownership Ratio	The proportion of Co-operative Control Shares to Investment Shares that a shareholder holds
Share Standard	The number of shares that a Co-operative Control Shareholder must own based on their Qualifying Expenditure, currently 1 share for every \$25 of Qualifying Expenditure
Synlait	Synlait Milk Limited



1.0 Executive Summary

1.1. Introduction

Livestock Improvement Corporation Limited (“**LIC**” or the “**Company**”) is a user-owned co-operative that develops, produces and markets artificial breeding, genetics, farm software, farm automation and herd testing services to over 10,000 New Zealand dairy farmers and international customers.

The Company currently has two classes of shares:

- “Co-operative Control Shares” – 100% owned by LIC customers, who must subscribe for shares with a nominal value equal to 4% of their Qualifying Expenditure with the Company over the preceding dairy season; and
- “Investment Shares” - listed on the NZAX market, with trading restricted to Co-operative Control Shareholders.

In response to inherent conflicts between the holders of the two classes of shares, LIC began a comprehensive review of its share structure two years ago. A number of alternative structures have been evaluated and the LIC Board has now resolved to proceed with a proposal to simplify the Company’s capital structure and move to a single class of Ordinary Shares (the “**Proposal**”).

The LIC Board has commissioned Northington Partners Limited (“**Northington Partners**”) to prepare an Independent Appraisal Report (“**IAR**”) in relation to the Proposal. While a report is not formally required from a regulatory point of view, it will be made available to all shareholders to ensure that they are appropriately informed when deciding whether or not to approve the relevant resolutions in relation to the Proposal.

The principal purpose of the IAR is to provide an independent assessment of the rationale for the Proposal, its merits and the fairness to the holders of Co-operative Control Shares and Investment Shares respectively. These issues are all considered within the context of the current purpose and potential future strategy of the Company.

1.2. Summary of the Proposal

Full details of the Proposal are set out in the Notice of Special Meeting and Explanatory Memorandum (“**Notice of Meeting**”) which will be sent to all LIC shareholders. That includes a description of the background and purpose of the Proposal, as well as details on the mechanics of the process and the impact of the changes for each individual shareholder.

Table 1 summarises the key features of the two share classes currently on issue.

Table 1: Summary of Key Features of Co-operative Control Shares and Investment Shares

Feature	Co-operative Control Shares	Investment Shares
Shares on Issue	6,281,892 (18% of total shares on issue)	29,528,590 (82% of total shares on issue)
Voting Rights¹	Full standard voting rights	Voting rights only in respect of matters affecting their rights and in the event of a liquidation of the Company
Dividend Policy	Receive preferred dividends based on Westpac New Zealand’s farm first mortgage interest rates (to the extent they are paid)	Receive ordinary dividends based on LIC’s financial performance
Ownership Requirement	Must hold shares with aggregate nominal value equal to 4% of expenditure on LIC’s qualifying products or services (assuming this expenditure is more than \$500)	No obligation to own Investment Shares



Feature	Co-operative Control Shares	Investment Shares
Ownership Restrictions	Cannot be traded; shares are issued or redeemed by the Company so that customers remain compliant with the Share Standard	Can only be traded between Co-operative Control shareholders. A shareholder can own a maximum of 5% of Investment Shares on issue and must sell within two years of no longer holding Co-operative Control Shares
Number of Shareholders	10,212	6,691
Share Trading and Redemption	Issued and redeemed by LIC at a nominal value of \$1.00 per share	Traded on the NZAX through registered brokers or directly between shareholders off-market

¹ Any single shareholder is limited to 1% of total voting rights.

Under the Proposal, all shares in LIC will be reclassified into a single class of shares which are Ordinary Shares. The steps involved in the process are set out in the Notice of Meeting under the section titled “What does the Proposal involve”, and are designed to deliver an outcome whereby the aggregate number (and value) of Ordinary Shares held by each group of shareholders is consistent with the number of Co-operative Control Shares and Investment Shares that are currently on issue.

1.3. Summary of our Assessment of the Proposal

Our full assessment of the merits of the Proposed Transaction for LIC shareholders is set out in Section 4.0, and summarised below in Table 2.

Table 2: Summary of Conclusions

Item	Key Conclusions	Further Information
Overview	<ul style="list-style-type: none"> The current share structure creates potential conflicts between the Co-operative Control Shares and the Investment Shares, which in turn gives rise to a number of issues for the on-going management and governance of the Company. The key conflicts relate to shareholders at two ends of the Co-operative Control Share and Investment Share ownership spectrum (those having the majority of their investment in LIC weighted to either class). Shareholders weighted to Co-operative Control Shares have greater voting rights but a limited share in the future prospects of the Company or exposure to the potential financial benefits of LIC’s recent transformation programme and new growth opportunities. Conversely, those shareholders with more Investment Shares obtain a greater share of the economic value of LIC and its potential future growth with no ability to control the strategy or direction of the Company. These potential conflicts are exacerbated by the fact that the shareholders do not own the same proportions of the two share classes; for example, about 36% of shareholders only hold Co-operative Control Shares, while another 31% are overweight in Investment Shares (own a higher ratio of Investment Shares compared to the overall ratio of 18% Co-operative Control Shares / 82% Investment Shares). We believe that simplifying the capital structure to one class of share now is a sensible goal. Doing so will eliminate the conflict, preserve the company’s co-operative principles and allow the Company to focus on a strategy designed to benefit all shareholders equally. Unfortunately, the proposed implementation process is relatively complicated and has different impacts for different groups of shareholders, largely dependent on the relative holding of Co-operative Control Shares compared to Investment Shares. Those shareholders who currently only own Co-operative Control Shares are likely to do so simply to meet the Share Standard required to access LIC’s goods and services. The Proposal results in these farmers both increasing their investment in LIC through Nil Paid Shares (in essence, an interest free loan from the Company) and, given the terms of the Ordinary Shares, effectively converting their exposure to the Company to more of a 	Section 4.1



Item	Key Conclusions	Further Information
	<p>standard commercial interest. This commercial focus is more in line with the current objectives of the Investment Shares.</p> <ul style="list-style-type: none"> While some of the current shareholders who are underweight in Investment Shares may view the consequences of the Proposal negatively, we suggest that the impacts on an individual basis are relatively limited. Most farmers' investment in LIC is not very material in the context of their overall farming operations and the Proposal will not significantly change that position. Those shareholders overweight in Investment Shares are giving up some economic value in LIC through a reduced share of the future profits of the Company but obtain voting rights that will provide greater influence over the strategy and future direction of the Company (including the ability to vote on director appointments). This change will ensure Investment Shareholders have greater ability to preserve their economic interests. When considered across all LIC shareholders, we conclude that the benefits of the Proposal outweigh the potential negative impacts for some groups of existing shareholders. 	
Relative Value Attributed to Investment Shares	<ul style="list-style-type: none"> Implementation of the Proposal requires an assessment of the current intrinsic value of the Investment Shares compared to the \$1.00 nominal value attributed to the Co-operative Control Shares. The relative value attributed to each share class is important because it determines how much of the total economic value of the business is allocated to each group of shareholders as part of the Proposal. Based on a range of factors, including independent expert advice, the LIC Board has attributed a relative value of \$4.00 to each Investment Share. This is broadly in line with our assessed value range for the Investment Shares of between \$3.81 and \$4.88 per share, with a mid-point of \$4.34. We therefore conclude that the adopted Investment Share value of \$4.00 per share is fair to all shareholders. 	Section 4.2
Impact on Control Position of the Company	<ul style="list-style-type: none"> Under the current capital structure, 100% of the voting rights in the Company are attached to the Co-operative Control Shares. Following completion of the Proposal, all Ordinary Shares on issue will have voting rights and the distribution of voting rights amongst shareholders will change. The Proposal would have no impact on the control position if all shareholders held the same ratio of Co-operative Control Shares and Investment Shares. However, the shareholders who are underweight in Investment Shares will end up with a lower level of voting rights and those with an overweight position in Investment Shares will increase their relative voting control. These changes for individual farmers are not material. No shareholder currently has a significant control position in LIC and the Proposal will not change that position at an individual farmer level. However, the overall control position for the group of farmers who currently only own Co-operative Control Shares will be materially affected, moving from 40% of the total voting rights on issue down to 7%. Conversely, the total voting rights currently held by those shareholders who are characterised as being overweight in Investment Shares will increase from 26% to 69%. That means that a significant block of voting rights will effectively be transferred from a group of shareholders who currently have limited commercial interest in the Company (via either zero or a limited position in Investment Shares) to those that are currently most focused on commercial outcomes (holding a relatively high number of Investment Shares). In effect these shareholders are giving up their voting interests in exchange for a greater entitlement to the future profits of LIC. While these changes are important, we note that if the Proposal does go ahead, all shareholders should then be uniformly focused on commercial returns irrespective of their current relative holdings in Co-operative Control Shares and Investment Shares. 	Section 4.3



Item	Key Conclusions	Further Information
Other Implications for LIC Shareholders	<p>The Proposal will have a range of other potential implications for all LIC shareholders:</p> <ul style="list-style-type: none"> ▪ Share Standard: A number of changes to the current Share Standard are proposed as part of the Proposal. We believe that these will provide some benefits to both the Company and its shareholders in the future and will be implemented in a way which has limited short-term impact on the current shareholders. ▪ Market Price Risk: All Ordinary Shares will be subject to market price risk and may trade at prices above or below the implied issue price at inception (which is based on the assessed \$4.00 value of the Investment Shares). The risk is especially relevant to farmers who may be looking to retire in the short term and will therefore need to sell all of their shares. In relation to the nil paid Ordinary Shares issued in exchange for Co-operative Control Shares, it is possible that a retiring farmer will need to pay-up the share to \$1.00 and then sell the share on-market at a lower price. ▪ Liquidity: While the Investment Shares are currently listed on the NZAX market, liquidity is extremely low. We believe that there could be a higher level of liquidity in the Ordinary Shares following the Proposal, but note that the improvement is likely to be modest. ▪ Dividends Returns: Shareholders will be giving up the preferred dividend on their Co-operative Control Shares for ordinary dividends meaning all shareholders' future dividends will be directly linked to the future financial performance of LIC. While LIC paid no dividends on Co-operative Control or Investment Shares in FY17, assuming future dividends in-line with historic averages, shareholders with no Investment Shares (or underweight Investment Shares) will receive a greater share of future total dividends and shareholders overweight Investment Shares will suffer a modest level of dilution in exchange for greater control. Shareholders with a relatively balanced level of Co-operative Control to Investment Shares will receive similar dividend returns to what they do currently. 	Section 4.4

1.4. Conclusion

On balance, we believe that the Proposal is in the best interests of both classes of shareholders and the Company. While the impacts of moving to a single share structure differ for some groups of shareholders depending on their current relative investment in Co-operative Control Shares and Investment Shares, we believe that the overall benefits outweigh the negative effects. The current dual share structure gives rise to a potentially serious conflict of interest between the two shareholder groups and poses a considerable barrier to meeting the objectives of the Company. The reclassification to one class of Ordinary Shares will ensure that the Company can retain its co-operative principles while focusing on a future strategy that optimises the outcomes for all shareholders.



2.0 Profile of LIC

2.1. Overview of the Company

LIC is a farmer owned co-operative providing bovine genetics and technology solutions. Its history traces back to 1909 when herd testing services were first provided, and the Company is now the largest provider of artificial breeding services in New Zealand with management estimating LIC's market share between 75% and 80%.

LIC primarily provides solutions across four distinct but connected segments:

- Genetics: Provision of bovine genetic breeding material and related services to dairy farmers;
- Herd Testing: Measurement of milk outputs to assist with herd management and optimisation;
- Farm Software: Herd data recording and management through its MINDA software platform, and other information services; and
- Farm Automation: On-farm automation solutions such as drafting gates and sensors, primarily through the Protrack brand. These typically integrate with LIC's MINDA platform.

In addition to these segments, LIC also earns revenues from diagnostics, animal health and treatment and other ancillary services.

In December 2016, LIC separated into two businesses, a herd improvement company (LIC) and an agritechnology subsidiary (LIC Agritechnology Company Limited) which operates the software and automation business. This separation was done with the intention to create further growth options for the agritechnology business, and potentially allow for external investment into that business. Despite this move, LIC currently continues to operate as one single, combined business.

2.2. Significant Historical Events

Key milestones in LIC's history since inception are summarised below.

Date	Event
1909	First routine herd testing services commenced by New Zealand farmers.
1935	Artificial insemination trials begin in New Zealand.
1988	LIC Corporation formed as a wholly owned subsidiary of the New Zealand Dairy Board.
2001	The Dairy Industry Restructuring Act 2001 ("DIRA") passes into law.
2002	LIC takes its current form as a user-owned co-operative.
2003	Shareholders approve a dual share structure consisting of Co-operative Control Shares and Investment Shares.
2003	LIC enters the automation solutions sector with the launch of Protrack.
2004	Investment Shares listed on the NZAX market.
2008	LIC removes requirement for Co-operative Control Shareholders to own Investment Shares, and institutes the current maximum 5% shareholding cap for Investment Shareholders.
Jun-16	LIC commences a national roadshow to discuss potential changes to the co-operative's capital structure.
Dec-16	LIC separates into a herd improvement co-operative and an agritech company subsidiary.
Jun-17	LIC announces that when it communicates its preferred option for capital restructure in early 2018, it expects to seek shareholder approval to move to a single class of shares.

Source: LIC announcements and website, IRESS.



2.3. Capital Structure and Ownership

2.3.1. Dual Class Share Structure

LIC has a dual share class structure consisting of Co-operative Control Shares and Investment Shares. Co-operative Control Shares hold voting rights but are not entitled to an ordinary dividend, while Investment Shares receive dividends but have limited voting rights. Co-operative Control Shares receive a preferred dividend, at the discretion of LIC's board, based on the mortgage lending rates of LIC's bankers. The Co-operative Control Shares have a fixed nominal value of \$1.00 per share, while the Investment Shares trade freely amongst Co-operative Control Shareholders on the NZAX.

All customers of LIC are required to own 1 Co-operative Control Share for every \$25 of Qualifying Expenditure made during the most recent dairy season (subject to a minimum threshold). As the quantum of purchases by a shareholder changes from season to season, LIC issues and / or redeems Co-operative Control Shares from each shareholder at the \$1.00 nominal value. Only LIC customers can own Co-operative Control Shares, and should a farmer cease to be a customer they will be forced to redeem their shareholding.

Ownership of Investment Shares is restricted to Co-operative Control Shareholders (apart from the LIC Employee Share Scheme), but there is no obligation for Co-operative Shareholders to hold any Investment Shares if they so choose. Co-operative Shareholders can buy and sell Investment Shares on the NZAX subject to a limit that no shareholder can own more than 5% of all Investment Shares. A farmer who ceases to be a Co-operative Shareholder must divest their shareholding in Investment Shares within two years.

2.3.2. Shareholding Breakdown and Distribution

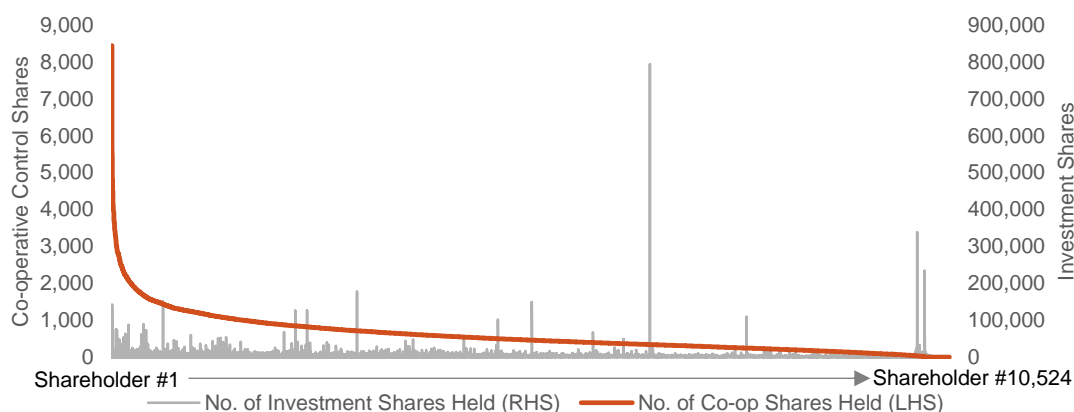
As at 10 January 2018, LIC had 6,281,892 Co-operative Control Shares and 29,528,590 Investment Shares on issue, spread over 10,212 Co-operative Control Shareholders. Approximately 6,378 shareholders own both Co-operative and Investment Shares. There were an additional 308 shareholders who own only Investment Shares, representing 4.3% of Investment Shares in aggregate. These represent employee holdings under the LIC Employee Share Scheme and former customers who are in the process of divesting their shareholdings.

Under the current capital structure, 100% of the voting rights in the Company are attached to the Co-operative Control Shares. If the Proposal is approved, all of the Ordinary Shares will have voting rights and this change will have an impact on the overall control position of the Company, both at an aggregate level and potentially for each individual shareholder (as already discussed above and in Section 4.1).

Figure 1 illustrates the distribution of voting rights across the LIC shareholder base in order from the highest number of Co-operative Control shares to lowest. This indicates that most of LIC's shareholders hold less than 2,000 Co-operative Control Shares (with only 240 shareholders holding more). While there is no clear relationship between the number of Co-operative Control Shares a shareholder holds and the number of Investment Shares they choose to own, the largest shareholders of one class are typically not significant shareholders of the other. LIC's largest Co-operative Shareholder holds 8,447 Co-operative Control Shares (0.1% of total) and its largest Investment Shareholder holds 794,027 Investment Shares (2.7% of total).



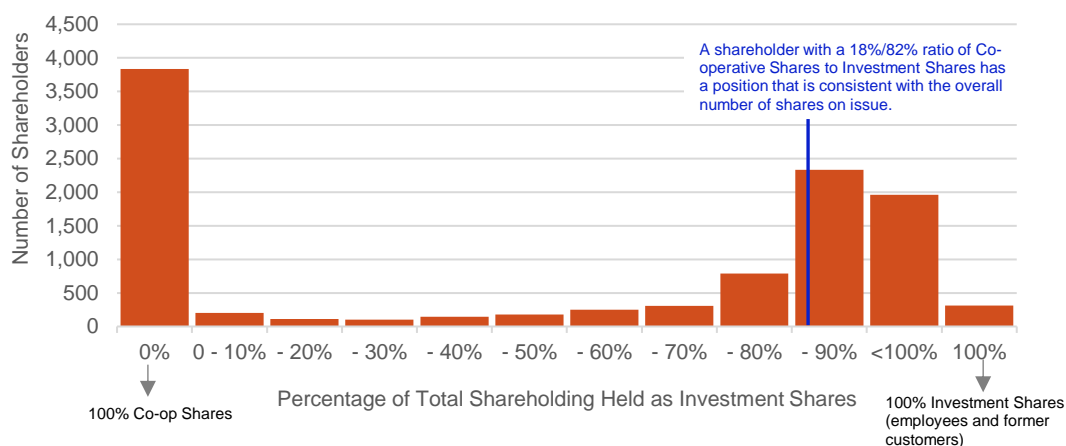
Figure 1: Co-operative and Investment Shareholding Across LIC's Shareholders



Source: LIC, Northington Partners.

Figure 2 shows the distribution of shareholders based on the percentage of their total shareholding (being Co-operative Control Shares plus Investment Shares) that is represented by Investment Shares. This illustrates that while the most common position amongst LIC shareholders is to hold only Co-operative Control Shares (with about 3,800 or 36% of shareholders in this position), the majority of shareholders do hold both Co-operative and Investment Shares. Amongst these dual class holders, it is most common for Investment Shares to comprise over 75% of each individual's total shareholding.

Figure 2: Number of Shareholders Categorised by Ratio of Shareholding Between Share Classes



Source: LIC, Northington Partners.

Approximately 18% of the total number of shares on issue are Co-operative Control Shares (6,281,892 shares), with the remaining 82% being Investment Shares (29,528,590 shares). This 18%:82% ratio is referred to as the Share Ownership Ratio and is a useful benchmark against which to compare each individual shareholder's personal position. Those that have less than 82% of their total shareholding in Investment Shares can be described as being underweight in Investment Shares, while those with greater than 82% are overweight in Investment Shares.

Based on the shareholder distribution data summarised in Figure 2, we note that:

- About 5,900 shareholders (56% of the total) are underweight Investment Shares, including approximately 3,800 shareholders (36%) that don't own any Investment Shares at all;
- Approximately 1,000 shareholders (10%) have a balanced position, with between 80% and 85% of their total shares represented by Investment Shares; and
- About 3,300 shareholders (31%) are overweight in Investment Shares, with an additional 308 shareholders (3%) holding only Investment Shares.

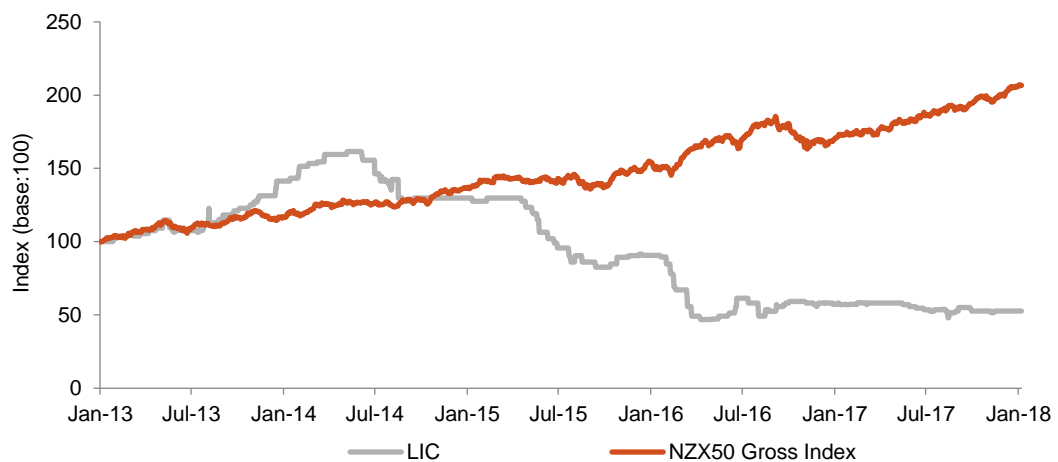


As discussed further in Section 4.0, we suggest that some shareholders' views on the merits of the Proposal may be related to their relative shareholding position and the degree to which they are underweight or overweight in Investment Shares.

2.4. Share Price Performance and Liquidity

Figure 3 summarises the total shareholder return (being capital movements plus dividends) from LIC's NZAX-traded Investment Shares for the five-year period ending 9 January 2018, relative to the NZX50 Gross Index. While LIC exhibited strong returns over 2013 and 2014, its returns since 2015 have been depressed, significantly impacted by reduced capital investment by dairy farmers under a lower dairy payout environment. In turn this has resulted in reduced liquidity in LIC which is likely to have contributed to LIC's relatively poor share price performance in the last three years of the period. Over the last five years, Investment Shares have delivered an aggregate -47% return compared to 107% for the NZX50.

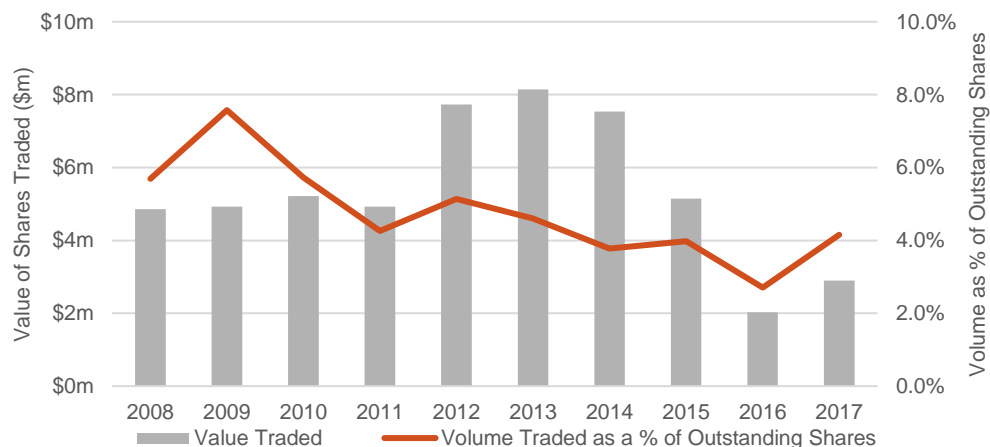
Figure 3: LIC Total Shareholder Return Relative to NZX50 (Rebased to 100)



Source: IRESS, Northington Partners.

Figure 4 illustrates the value and volume of Investment Shares traded over the last 10 years (up to the end of 2017). The volume of Investment Shares traded has shown a general declining trend since 2008/2009. However, trading values increased over 2012 to 2014 coinciding with a period of higher profitability and dividends. The resulting higher share price and active dividend reinvestment plan resulted in higher trading values. However, from 2015 onwards, both the share price and volumes traded declined, with just \$2 million of shares changing hands in 2016 (\$3 million in 2017).

Figure 4: LIC Investment Value and Volume Traded Over Last 10 Years

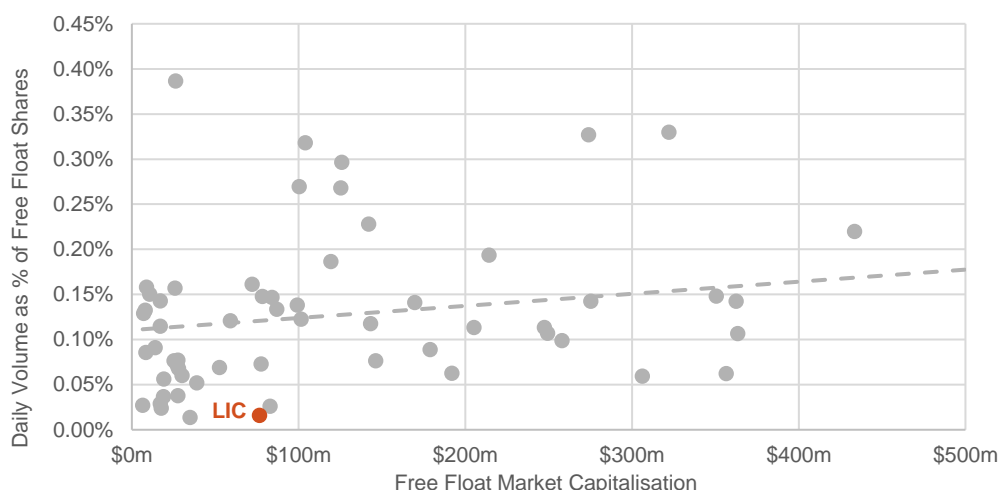


Source: IRESS, Northington Partners.



LIC is now one of the most illiquid shares listed on the NZX. Figure 5 compares the average daily volume traded over the last 12 months as a percentage of the free float for LIC's Investment Shares, compared with other NZX-listed companies with a free float market capitalisation between \$20 million and \$500 million. On this basis, LIC is the second most illiquid stock amongst its peers, with just 0.01% of its free float traded each day. Only South Port NZ Limited, which is majority owned and controlled by the Southland Regional Council, is less liquid than LIC. For a company of LIC's size, we would ordinarily expect trading volumes to be significantly higher.

Figure 5: Average Daily Volume Traded Relative to Free Float for NZX-listed Shares with a Market Capitalisation between \$20 and \$500 million



Source: IRESS, Capital IQ, Northington Partners. Based on the 12 months of trading to 10 January 2018.

While there is a positive relationship between market capitalisation and liquidity, Figure 5 indicates that there is significant variability in liquidity for similarly sized companies based on their individual characteristics. For LIC, we suggest that the low level of liquidity is directly attributable to the share ownership restrictions which require that shareholders must be a customer and that no shareholder can own more than 5% of the Investment Shares on issue. These effects are further exacerbated by the fact that 36% of the LIC shareholders do not own any Investment Shares, and possibly reflect the lack of market research coverage for LIC and the recent poor share price performance.

2.5. Summary Financial Results

2.5.1. Financial Performance

A summary of LIC's financial performance over the last five years is set out in Table 3 below.

Table 3: Historical Financial Performance

Year Ended 31 May (NZ\$ millions)	FY13	FY14	FY15	FY16	FY17
NZ Genetics	82.2	86.3	90.8	82.6	81.4
Herd Testing	25.2	29.2	28.4	22.1	24.6
Farm Software	42.9	36.2	39.2	40.2	41.2
Farm Automation	12.0	16.5	20.2	17.1	14.3
Other Revenue ¹	37.2	43.4	53.9	48.8	42.0
Total Revenue	199.5	211.5	232.5	210.7	203.5
Cost of sales	(29.2)	(30.9)	(39.8)	(37.5)	(28.4)
Gross Profit	170.3	180.6	192.7	173.3	175.1
Staff expenses	(83.0)	(89.6)	(93.6)	(93.0)	(89.4)
Other expenses	(46.3)	(48.6)	(59.9)	(53.6)	(49.6)



Operating earnings before depreciation and amortisation, finance costs, tax and fair value adjustments ("EBITDA")	41.0	42.4	39.2	26.7	36.2
Depreciation	(7.3)	(8.6)	(9.9)	(11.0)	(9.6)
Amortisation	(6.4)	(8.5)	(11.2)	(13.6)	(18.5)
Operating earnings before finance costs, tax and fair value adjustments ("EBIT")	27.3	25.3	18.1	2.1	8.1
Net finance expense	1.2	0.6	(0.7)	(0.9)	(2.2)
Tax expense	(7.5)	(7.3)	(6.5)	(1.5)	(2.8)
Underlying profit after tax	20.9	18.6	11.0	(0.3)	3.0
Post-tax fair value adjustments	2.7	(0.6)	2.7	(3.7)	17.8
Reported profit after tax	23.7	18.0	13.7	(4.0)	20.8
Underlying earnings per Investment Share (cents)	70.9	63.0	37.1	-1.0	10.3
Dividend per Investment Share (cents)	54.9	35.9	20.3	0.0	6.4
Normalisations					
EBIT	27.3	25.3	18.1	2.1	8.1
(Gain) / loss on sale of fixed assets	0.2	0.1	1.4	(0.3)	(1.1)
Project Pace costs	-	-	-	-	1.6
Other one-off costs	-	-	0.6	3.1	3.1
Normalised EBIT	27.5	25.4	20.1	4.9	11.7

Sources: LIC Annual Reports and Management. Totals may not sum due to rounding.

¹ Includes international operations, support services, research & development, diagnostics, animal health, and other services.

The main features of LIC's historical financial performance can be summarised as follows:

- LIC's revenue has generally moved in line with the performance of the dairy sector, having increased to a peak in FY15 and then declining in the subsequent two years. Dairy prices fell significantly over the 2014/15 season, which affected demand for services in FY16. Genetics revenue fell as farmers substituted to lower cost breeding products, while also reducing their frequency of herd testing. Software revenues remained stable as these are typically levied on a herd size basis, while automation revenue fell as fewer farmers chose to install new systems.
- Gross margin has remained relatively stable over the five-year period at between 82% and 86%, with gross profit moving in line with revenue.
- EBITDA remained relatively steady between FY13 and FY15 despite increasing revenues, due to an increased overhead base. The reduction in revenue in FY16 translated into reduced earnings; this reduction was greater at the EBIT level, with increased levels of depreciation and amortisation.
- LIC's depreciation and amortisation expenses have increased substantially over the period due to significant capital expenditure on plant and equipment and intangible software. Capital expenditure has typically been significantly higher than depreciation and amortisation (as illustrated in Table 5) as LIC has invested in its software platform and technology offering. While capital expenditure reduced significantly in FY17, future capital expenditure levels are expected to be more in line with depreciation and amortisation expenses.
- Also contributing to the weak results in FY16 and FY17's were one-off expenses as summarised in the normalisation adjustments. One-off costs in FY16 primarily relate to restructure redundancies in the NZ Markets operations. FY17 one-off costs largely consist of fees relating to Project Pace (see section 2.6) and capital structure changes.
- The net finance expense includes the preferred dividend paid to Co-operative Shareholders during the year (i.e. relating to the previous year), which was nil for FY17 and between \$0.5 million and \$0.6 million for FY13 to FY16.
- Fair value adjustments relate to non-cash changes in the value of LIC's bull team, as determined annually via a discounted cash flow approach. The value of the team is tied to the performance of the NZ dairy industry and fluctuates accordingly.



LIC reported a much-improved trading result for the first half of FY18, with EBIT of \$43.2 million (before one-off costs of \$20.7 million), 52% higher than the same period last year. However, due to the high seasonality of its business, LIC's interim results include the majority of the financial year's revenue but not a proportionate share of costs, and thus are not indicative of its full year result. The Company has provided guidance that it expects its underlying profit after tax to be similar to FY17's \$3 million (including one-off costs of Project Pace). Once the benefits of Project Pace are realised and with no further one-off costs being incurred, LIC expects FY19 underlying earnings to be between \$18 - \$26 million, assuming no significant climate events or Milk Price declines.

2.5.2. Financial Position

A summary of LIC's financial position for the five years to the end of FY17 is set out in Table 4, along with the interim position as at the end of November 2017.

Table 4: Historical Financial Position

As at 31 May (NZ\$ millions)	FY13	FY14	FY15	FY16	FY17	30 Nov 2017
Assets						
Cash & cash equivalents	19.7	15.5	2.5	2.7	3.5	7.6
Trade and other receivables	36.8	37.3	34.4	41.2	47.5	79.5
Inventories	9.0	10.8	13.2	14.6	12.0	11.7
Fixed assets	71.1	77.0	88.2	92.3	78.4	69.3
Biological assets	92.2	91.4	95.1	89.9	115.3	114.3
Intangible assets	35.8	50.1	65.4	79.7	73.1	74.8
Other Assets	10.9	1.7	2.8	3.3	5.2	13.5
Assets held for sale	-	-	-	-	6.5	-
Total Assets	275.5	283.8	301.5	323.7	341.5	370.7
Liabilities						
Trade and other payables	21.3	23.8	23.4	22.8	22.1	21.8
Provisions	8.9	9.4	10.3	9.1	8.3	14.6
Borrowings	-	-	10.4	42.8	32.1	39.2
Co-operative control shares	5.4	6.3	6.5	6.8	6.2	6.3
Other liabilities	31.0	30.8	32.2	31.2	39.3	39.9
Total Liabilities	66.6	70.4	82.7	112.7	108.1	121.7
Net Assets	208.9	213.4	218.8	211.0	233.4	248.9

Sources: LIC Annual Reports and Management. Totals may not sum due to rounding.

In relation to LIC's financial position, we note that:

- Both fixed and intangible assets have increased significantly over the last five years following LIC's investment into its software platform and automation offerings. Correspondingly, LIC's borrowings have increased to fund this expenditure.
- Biological assets reflect the value of LIC's bull team, which moves in line with market factors.
- LIC typically has a higher debt balance at November, as it is financing a significant amount of trade receivables from customers. The Company has reduced its borrowings significantly over FY18, with the sale of its deer improvement business and the Riverlea Road depot adding to the improved financial position. The net debt position (being borrowings less cash) has reduced to \$31.6 million at November 2017, down from \$46.8 million as at November 2016.



2.5.3. Cash Flow

Table 5 summarises of LIC's cash flow movements over the last five years.

Table 5: Historical Cash Flow Statement

Year Ended 31 May (NZ\$ millions)	FY13	FY14	FY15	FY16	FY17
Receipts from customers	189.7	209.9	231.7	201.4	205.2
Payments to suppliers and employees	(159.5)	(168.3)	(192.1)	(184.0)	(177.1)
Other operating cash flows	(4.5)	(4.5)	(4.9)	(3.0)	(2.7)
Cash flow from operating activities	25.8	37.0	34.8	14.4	25.4
Acquisition of intangibles	(13.2)	(22.8)	(26.6)	(21.5)	(11.9)
Acquisition of fixed assets	(10.8)	(11.8)	(19.1)	(12.7)	(4.2)
Other investing cash flows	13.5	9.2	(1.3)	(6.0)	2.8
Cash flow from investing activities	(10.5)	(25.4)	(47.0)	(40.2)	(13.3)
Net Co-op Shares paid up / (repurchased)	0.3	0.9	0.2	0.3	(0.6)
Dividends paid on Investment Shares	(11.6)	(16.2)	(10.6)	(6.0)	-
Preferred dividends paid on Co-op Shares	(0.5)	(0.5)	(0.6)	(0.6)	-
Increase / (decrease) in borrowings	-	-	10.4	32.4	(10.5)
Cash flow from financing activities	(11.7)	(15.9)	(0.6)	26.1	(11.1)
Net change in cash before exchange rate effect	3.6	(4.2)	(12.9)	0.3	1.0

Sources: LIC Annual Reports and Management. Totals may not sum due to rounding.

The main features of LIC's historical cash flows can be summarised as follows:

- Over the last five years, LIC has invested an average of \$30.9 million in capital expenditure across its intangible (software) and physical fixed assets. This is in addition to an average annual outlay of \$15.1 million in research and development expenses over the same period, which is captured in operating expenses.
- Acquisition of intangibles mainly reflects the capitalisation of development wages and expenses. Acquisition of fixed assets relate primarily to upgrades and purchases of buildings, plant and equipment and vehicles.
- Positive investing cash flows in FY13 and FY14 reflect realisations from term investments.
- Dividends paid on Investment and Co-operative Control Shares reflect the prior year's declared payment. This has averaged \$8.9 million over the last 5 years for Investment Shares and \$0.4 million for Co-operative Control Shares.

2.6. Outlook

2.6.1. Project Pace

In 2016, LIC started Project Pace, a broad transformation programme intending to deliver various cost savings and revenue increases over both the short and long term. The programme is administered with the help of external consultants and consists of a large number of individual initiatives. We note the following features of Project Pace:

- As a broad programme it impacts all aspects of LIC's business. Initiatives range from reducing fuel consumption through route optimisation for on-farm staff to improved pricing strategies emphasising LIC's value-add capabilities.
- The one-off costs from Project Pace (aside from external fees) are expected to be approximately equal to one-off benefits, which should mitigate its impact on reported financial performance in the short term.
- We understand that the majority of Project Pace initiatives to date have been successful, and this should result in targeted recurring financial benefits in FY18 (and beyond) being achieved.



2.6.2. Key determinants of LIC's future performance

As signalled through the proposed capital structure change and growth initiatives, LIC has an ambitious strategy to drive an increase in its scope, size and profitability. In our view, the key drivers of its future performance include:

- **Milk Prices:** Demand for LIC's products are directly influenced by the Fonterra Milk Price. We note that while Fonterra lowered its 2017/18 forecast payout by 35 cents to \$6.40 in December 2017, that outcome would still represent one of the best results achieved since Fonterra's inception. The potential payout beyond the current season cannot be accurately predicted, but we suggest that the historical level of volatility should be expected to continue.
- **Cow Population:** While the number of dairy cows have been increasing over the last 15 years, it is now expected to stabilise. This outcome will clearly limit the growth potential for LICs traditional products in the domestic market.
- **Project Pace:** While the results to date have been promising, there is still uncertainty around the success of its long-term profitability initiatives.
- **Automation Business:** LIC has invested significantly in its automation business, which has not seen the anticipated uptake over the 2016 and 2017 seasons. That performance may improve with the recent increase in dairy prices, particularly if the higher prices can be sustained beyond the current season.
- **Overseas Sales:** LIC sees an opportunity to considerably increase sales of its software and hardware internationally. If successful, this offshore expansion would materially diversify LIC's performance with respect to the local Milk Price.



3.0 Valuation of LIC

3.1. Valuation Methodology

For most assets, value should be determined as a function of the estimated level of cash returns that the assets are expected to generate in the future. The specific approach that is used to estimate this value is dependent on the nature of the asset and the expectations regarding future performance. The two main approaches usually adopted in the valuation of larger assets and companies are summarised as follows:

- **Earnings Multiple:** This method determines value by applying a valuation multiple to the assessed level of maintainable annual earnings (or cash flows), where the multiple is chosen to reflect the risk associated with the future performance of the asset. Depending on the nature of the business, earnings can be appropriately measured at the EBITDA, EBITA, EBIT, or NPAT levels.
- **Discounted Cash Flows ("DCF"):** A DCF approach is based on an explicit forecast of the annual cash flows that will be generated over a specified forecast period (typically between 5 and 10 years). The value of cash flows that may occur after the end of the explicit forecast period is incorporated into the valuation process by capitalising an estimate of maintainable cash flows for the terminal period. A DCF model is therefore usually made up of two components:
 - (i) The present value of the projected cash flows during the forecast period; and
 - (ii) The present value of all other cash flows projected to occur after the explicit forecast period. This component is commonly referred to as the terminal value.

Each approach has some advantages and disadvantages, and the most appropriate choice is dependent on the characteristics of the business under consideration and the quality of the market data that is available. The key advantage of the earnings multiple approach is its simplicity. Value can be determined on the basis of the actual earnings results for the most recent financial reporting period or the equivalent projection for next year. Companies with well-established operations should be in a position to supply reasonably reliable earnings projections for the next one or two years, and the valuation model is therefore only reliant on an independent assessment of the appropriate earnings multiple. Estimates of an appropriate multiple are typically based on data derived from other companies that are considered to be comparable to the target company in relation to growth prospects, capital expenditure requirements, and risk profiles.

Unfortunately, it is extremely rare that the company will have any close comparables with respect to all of these important characteristics. In many cases, even earnings multiples extracted from a set of businesses within exactly the same industry will have a wide range of values that reflect company specific factors rather than the underlying risk level of the industry itself. It then becomes a matter of judgement to make a series of adjustments to the implied multiples to properly account for the differences between the companies. These adjustments are often arbitrary and very difficult to benchmark.

In the majority of cases, the earnings multiple approach is therefore most suited to businesses with a relatively stable earnings outlook (in the long-run, allowing for short-term variability). For companies with these characteristics, the multiples derived from market data are more likely to accurately reflect the market's perception of the underlying quality of the projected earnings stream.

The DCF approach can provide a better valuation treatment for companies with high future growth prospects and high capital expenditure requirements. Because each of these factors can be explicitly incorporated into the valuation process, the DCF model directly accounts for many important value drivers of the business under consideration. Accessing the necessary data for a DCF model can however be problematic, especially when there is no credible process by which to construct the future forecasts of free cash flows. The discounting process is also reliant on an estimate for the required rate of return. Because this parameter is not directly observable and must be derived from data collected from other comparable companies, the DCF value is also reliant on the existence of other companies that have the same risk profile.



3.2. Preferred Valuation Approach for LIC

We believe that the earnings multiple framework is most appropriate for the LIC valuation assessment. This view reflects the following:

- While LIC is projecting substantial earnings growth in the short to medium term, we believe that it is too early to explicitly forecast future earnings with the required level of confidence. As set out in Section 2.6, LIC has started to implement a comprehensive range of growth initiatives that have the potential to materially improve the profitability of the core business streams, as well as develop and grow new opportunities. The initial progress is encouraging, but there is some way to go before the projected earnings growth could be reasonably incorporated into a DCF model;
- On that basis, we suggest that an earnings multiple approach is best. Notwithstanding the short-term variability in earnings that is driven by annual fluctuations in the Milk Price, we believe that LIC's core operations are relatively stable in the long-run.

We have adopted EBIT as the appropriate earnings measure for the LIC valuation assessment. This reflects that EBIT is a better proxy for free cash flows for businesses such as LIC which have significant on-going capital investment requirements for software, research and development and product development. In these circumstances, EBIT is more appropriate than EBITDA because EBIT accounts for the high capital expenditure requirements through the depreciation and amortisation charge (whereby historical capital expenditure is effectively smoothed-out over time).

Our valuation approach for LIC is summarised in Table 6 below, and includes some adjustments which are needed to reflect LIC's unique investment circumstances.

Table 6: General Framework for Assessing LIC's Equity Value

	Step	Comment
	Standalone Enterprise Value ("EV")	Represents the aggregate value of the operating assets of the business. Estimated utilising an Earnings Multiple framework of forecast EBIT and an appropriate earnings multiple (see Section 3.3.3).
Plus	Surplus Assets (if any)	The value of assets that are not required to support the on-going operation of the business and which can therefore be sold.
Less	Net Debt	An assessment of average net debt over the forecast period allowing for the seasonality in LIC's cash flows (see Section 3.3.4).
Equals	Total Equity Value	The aggregate value of equity held by all LIC shareholders, including both Investment Shareholders and Co-operative Control Shareholders.
Less	Aggregate Co-operative Control Share Value	The nominal value of the Co-operative Control Shares as detailed in Section 3.3.4.
Equals	Gross Investment Share Value	Gross aggregate value of LIC Investment shares prior to any discount for their ownership and control restrictions and limited liquidity.
Less	Discount for Reduced Marketability and Control	Represents the assessed discount for the Investment Shares from lack of marketability, voting rights and control currently afforded to the Investment Shares.
Equals	Market Value of Investment Shares	The assessed market value of the Investment Shares as detailed in Section 3.4.

Source: Northington Partners.



3.3. Earnings Multiple Valuation

3.3.1. Overview

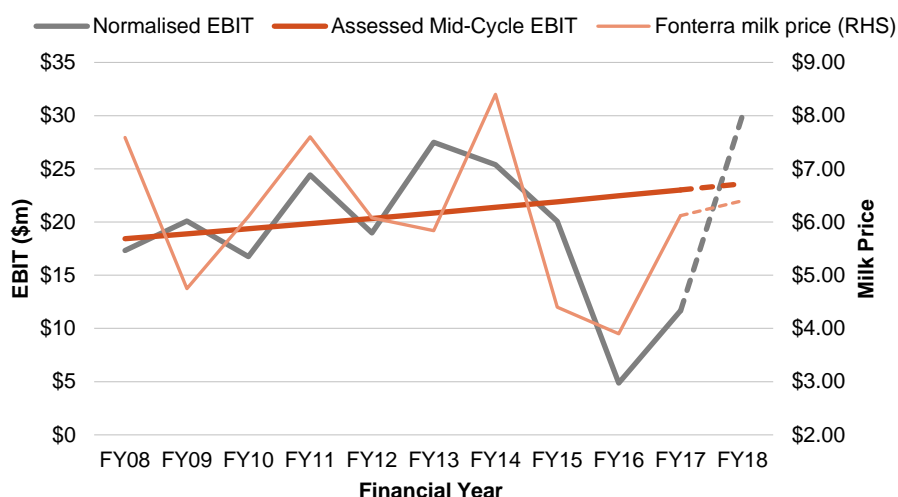
Our Earnings Multiple valuation framework for LIC is based on both historical results and forecasts provided by LIC, with a range of modifications to reflect our assessment of LIC's maintainable earnings through the Milk Price commodity cycle. This largely reflects judgement around LIC's earnings potential based on average nominal long-run milk prices, and therefore represents our view of "mid-cycle" earnings.

3.3.2. Maintainable Earnings

As detailed in Section 2.5, LIC's earnings have demonstrated a high degree of variability and strong correlation with the commodity milk price. LIC's historical performance has also been impacted by a number of non-recurring items including restructuring costs and gains and losses from the sale of assets. We have therefore estimated a maintainable EBIT level which reflects the level of earnings LIC would maintain on average through the milk commodity price cycle and excluding non-recurring items. We refer to this earnings benchmark as "Mid-Cycle EBIT", being the expected level of normalised EBIT in an average but not exceptional (favourable or unfavourable) Milk Price environment.

Figure 6 summarises LIC's historical and forecast EBIT after normalisation adjustments for non-recurring items, along with our assessment of mid-cycle EBIT relative to Fonterra's Milk Price payout. This covers the 10-year historical period to FY17 and includes the forecast earnings for FY18.

Figure 6: LIC's Normalised EBIT and Assessed Mid-Cycle EBIT



Source: Northington Partners. Fonterra FY18 Milk Price based on forecast farmgate milk price of \$6.40 as of its forecast update dated 7 December 2017 (excluding dividends).

Figure 6 demonstrates:

- Over the 10 year period to FY17, Fonterra's Milk Price has averaged just over \$6.00 per kgMS, fluctuating between a low of \$3.90 per kgMS in the 2015/2016 season and a high of \$8.40 per kgMS in the 2013/2014 season.
- As at the date of this report, Fonterra's forecast payout for the 2017/2018 season is \$6.40 per kgMS, revised down from its previous \$6.75 per kgMS forecast in July 2017 (reaffirmed in September 2017). We note that many of LIC's customers may have been making their artificial breeding and herd testing decisions for the 2017/2018 dairy season around the time of higher Milk Price expectations.
- LIC's 10 year average normalised EBIT to FY17 was approximately \$18.7 million, but with considerable variability through the commodity milk price cycle; normalised earnings has ranged between \$27.5 million in FY13 to \$4.9 million in FY16.



- Allowing for the milk price commodity cycle, our assessed Mid-Cycle EBIT has grown modestly to approximately \$23 million in FY17. This contrasts with LIC's forecast of normalised EBIT for FY18 of approximately \$30 million.

Based on our analysis, we believe that FY18 performance will largely reflect an above average milk payout. Therefore, LIC's FY18 forecast financial performance should reflect better than Mid-Cycle EBIT. However, as summarised in Section 2.6, LIC has also recently undertaken a range of initiatives under Project Pace to reduce costs and improve revenue. LIC's historical performance does not reflect these initiatives which should, all else equal, improve LIC's overall profitability. Taking this into account, we have adopted a Mid-Cycle EBIT of \$26 - \$28 million, relative to LIC's current forecast EBIT of \$30 million. We believe that this earnings range is consistent with the following observations:

- LIC's performance for the first six months of FY18 demonstrated improved underlying profitability as initiatives from Project Pace have been realised;
- However, some risk remains for achieving full year FY18 forecasts; and
- The current Fonterra Milk Price forecast of \$6.40 is higher than our assessed mid-cycle level.

3.3.3. Earnings Multiple

An appropriate valuation multiple range can potentially be derived from a number of sources:

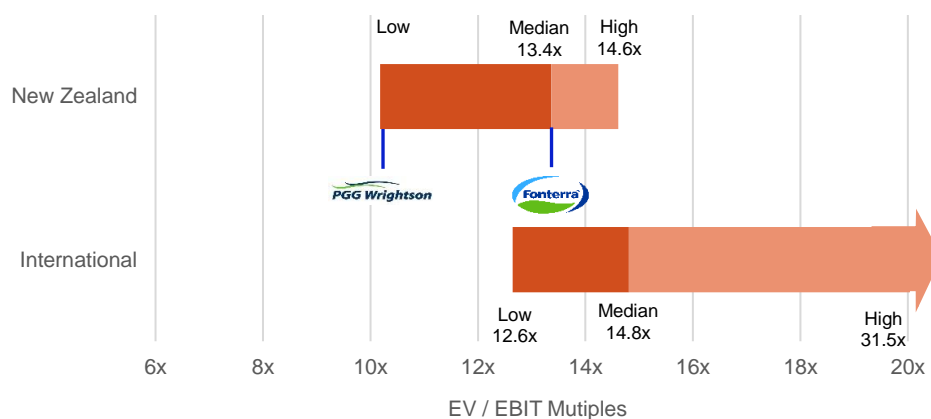
- Implied multiples from recent transactions involving similar target companies; and
- Publicly traded companies that are considered to be comparable to the subject company.

In deriving an appropriate valuation multiple for LIC, we have considered the observed trading multiples for a wide range of listed and potentially comparable New Zealand and international businesses. However, we note that LIC operates in a very specialised market and has no directly comparable company that operates in the same markets with the same business drivers and risk profile. Unfortunately, other genetics suppliers that are more comparable to LIC are often privately or co-operatively owned, and do not therefore provide any useful valuation benchmarks. We have therefore focussed on the trading multiples of New Zealand agri-service businesses.

We have also only focused on comparable company trading multiples, with no reliance on implied multiples from recent transaction evidence. This not only reflects the fact that there is a dearth of useful transaction evidence available, it also reflects the valuation context appropriate for the LIC assessment. While we believe that transaction multiples provide the best evidence for control transactions (such as full takeover offers), the key purpose of this valuation is to determine the value for a minority parcel of Investment Shares in LIC. Observed trading multiples exclude any control premiums evident in transaction multiples and are therefore can be directly applied to the valuation of a non-controlling position in LIC.

A summary of the benchmarked listed comparable companies is presented in Figure 7 below, with additional detail provided in Appendix 1.

Figure 7: Comparable Company EV / EBIT Multiples



Source: Capital IQ as at 18 January 2018.



In the absence of any directly comparable companies to LIC, we suggest that the PGG Wrightson (EBIT multiple of 10.2x) evidence is the most relevant to LIC. This reflects that:

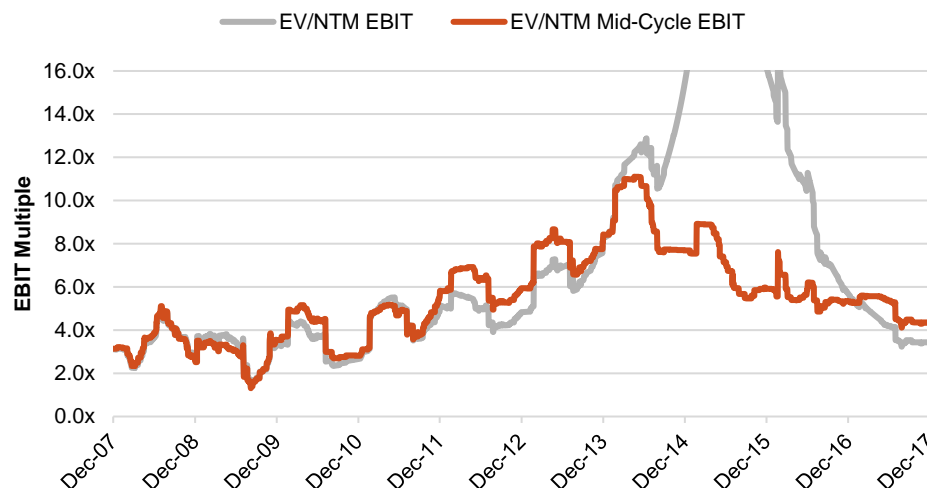
- PGG Wrightson has a similar profile and operating environment to LIC, with the majority of its earnings generated from the sale of agriculture related goods and services in New Zealand; and
- The profitability for both LIC and PGG Wrightson is strongly correlated with the payout for New Zealand dairy farmers, with both businesses providing a significant level of discretionary goods and services to the dairy sector.

After considering the key similarities and differences between LIC and the comparable set of listed entities, we have adopted a EBIT multiple range of 7.0 – 8.0x for LIC. This reflects a discount to its peers and PGG Wrightson to account for the following factors:

- Because PGG Wrightson has exposure to the sheep and beef, horticulture, real estate and seeds sectors, it has a higher degree of diversification with less observed earnings volatility than LIC;
- LIC is significantly smaller than the comparable companies and the chosen multiple range should therefore incorporate a discount for size;
- LIC is more capital intensive with significant annual capital expenditure required to support its business operations, even after allowing for expected reductions in capital expenditure to levels consistent with current depreciation and amortisation expenses (particularly when compared to PGG Wrightson); and
- Uncertainty remains in relation to achieving the targeted level of earnings improvements which have been incorporated into LIC's forecast Mid-Cycle EBIT as a result of the recent strategic initiatives.

In addition to comparable companies, LIC's own traded earnings multiple provides a potentially useful benchmark. Figure 8 below illustrates the ratio of LIC's EV to the 12 month forward forecast EBIT for the period from December 2007 until January 2018. We note that as no analyst forecasts are available for LIC, we have retrospectively applied LIC's actual EBIT results for the forecast period (and LIC's forecast FY18 EBIT) in order to derive a forecast EBIT multiple (e.g. the EV / EBIT multiple in May 2009 reflects LIC's actual EBIT for the 12 months to May 2010). In order to remove the significant volatility in the observed multiples, we have also presented the EV / EBIT multiple based on our assessed Mid-Cycle EBIT (as summarised in Figure 8).

Figure 8: LIC EV / EBIT Multiple



Source: Capital IQ, Northington Partners. "NTM" represents next 12 months based on actual LIC normalised EBIT for the period to FY17 and LIC forecasts for FY18. NTM Mid-Cycle EBIT based on Northington Partners' estimates. EV is equal to LIC's market capitalisation at the time plus the most recently reported value of net debt, equity minority interests and the book value of the Co-operative Control Shares.



Figure 8 demonstrates:

- LIC's observed EV / EBIT multiple has fluctuated significantly, with a range between 1.4x – 39.5x EBIT;
- Smoothing the significant EBIT volatility by using Mid-Cycle EBIT shows that LIC has generally traded between 4.0x – 8.0x EBIT; and
- LIC is currently trading at approximately 3.3x FY18 forecast EBIT of \$30 million (based on assumed net debt of \$25 million).

While these observed multiples for LIC provide a useful cross-check, we do not believe that this evidence is directly applicable to our valuation assessment. As summarised in Section 2.4, the LIC Investment Shares are extremely illiquid. When this trading illiquidity is considered together with the share ownership restrictions and nature of the shareholder base, we suggest that the observed market prices are unlikely to provide a reliable assessment of the underlying value of the business.

Taking all of the evidence into account, we conclude that a multiple range of 7.0x – 8.0x Mid-Cycle EBIT is appropriate for our valuation assessment of LIC.

3.3.4. Valuation Range for Investment Shares

Based on the assumptions outlined above, we have assessed an enterprise valuation range of \$182 to \$224 million for LIC. This is summarised in Table 7.

Table 7: Enterprise Value Assessment

\$m (unless otherwise stated)	Low	High
Assessed Maintainable Mid-Cycle EBIT	\$26.0	\$28.0
multiplied by Assessed EBIT Multiple	7.0x	8.0x
Enterprise Value	\$182.0	\$224.0

The EV represents the value of future cash flows available to all forms of capital providers – both debt and equity capital. In order to assess the aggregate equity value for LIC and the relative value of the Co-operative Control Shares and the Investment Shares, the assessed EV must be adjusted for net debt and any potential surplus assets.

Surplus Assets

LIC owns a number of investments which are not part of its core business but provide a range of potential strategic benefits or are held to meet ownership obligations of other co-operatives. The largest investment includes National Milk Records PLC (“NMR”), a United Kingdom based milk recording services and laboratory testing business. LIC acquired its initial investment in NMR in 2008 before increasing its shareholding in June 2017 to 17.2% through the purchase of additional GBP2.6 million worth of shares. NMR trades on an unlicensed exchange with a current market capitalisation of approximately GBP19 million, implying a market value for LIC's investment of approximately GBP3.8 million. However, NMR's shares are illiquid and a large parcel of shares would potentially be difficult to sell.

LIC has a number of other investments including holdings in Figured (New Zealand based rural accounting software), Agrigate (farm information joint venture with Fonterra) and small holdings in a number of other New Zealand co-operative businesses including Fonterra, which are held due to LIC's dairy farming operations.

Collectively, the current market value of LIC's total holdings is approximately \$13.5 million, of which NMR comprises over half. Having consideration to each of LIC's investments, their relative liquidity and short-term risks (e.g. NMR may be hard to dispose of and represents further currency risk), we have valued LIC's surplus investment assets at \$10 - \$13 million. These represent value over and above the value of LIC's operations derived above in Section 3.3.4.



Net Debt

Because LIC operates a highly seasonal business, the appropriate level of net debt for valuation purposes should be based on the expected average level of net debt throughout the forecast financial period. To illustrate LIC's cash flow seasonality, we note that LIC's opening and closing net debt for FY17 was \$40.1 and \$28.6 million respectively, but peaked at over \$75 million during the financial year.

After taking into account LIC's actual monthly net debt position to December 2017 and the forecast net debt for the remaining months of FY18, we have assumed an average net debt level of \$25 million.

Co-operative Control Share Value

Given the nature of the Co-operative Control Shares, we have assessed a value of \$1.00 per share. This reflects the nominal value attributed to the shares, and the value which is currently used as the basis for any purchases and redemptions required to meet the Share Standard.

As at 10 January 2017, LIC has 6,281,892 Co-operative Control Shares on issue with an assessed aggregate value of \$6.3 million.

Investment Share Value

After allowing for surplus investment assets, net debt and the value of Co-operative Control shares, we derive a gross value for the Investment Shares of \$160.7 million to \$205.7 million. This assessment is summarised in Table 8.

Table 8: Assessed Investment Share Value

\$m (unless otherwise stated)	Low	High
Enterprise Value	\$182.0	\$224.0
plus Surplus Assets	\$10.0	\$13.0
less Net Debt	(\$25.0)	(\$25.0)
Total Fair Market Equity Value	\$167.0	\$212.0
less Value of Co-operative Control Shares	(\$6.3)	(\$6.3)
Gross Investment Share Value	\$160.7	\$205.7

We believe that this value should be discounted further to reflect a number of factors primarily relating to the lack of marketability, voting rights and control currently afforded to the Investment Shares. All else equal, these factors would lower the value of a security relative to the same security with no voting or ownership restrictions in a liquid market. We summarise the factors which may impact on the appropriate discount in Table 9.

Table 9: Factors Attributable to a Discount on Investment Share Value

	Lack of Marketability	Lack of Control
Description	Represents the discount for transferability restrictions which impacts on an investment's marketability and liquidity. It essentially represents the opportunity cost attributable to the reduced ability to exit an investment in a timely fashion.	Represents the discount for voting control and other ownership restrictions which impacts on an investor's ability to influence key management and governance decisions, including overall company strategy as well as investment and dividend policies.



LIC Factors Attributing to Discount

- Shareholders restricted to farmers using qualifying products and services of LIC.
- The pool of potential buyers of securities is significantly restricted to only ~10,200 Co-operative Control shareholders, many of whom may have limited appetite for Investment Shares. We note that only 61% of current shareholders hold both classes of shares.
- As demonstrated in Section 2.4, the lack of marketability has resulted in LIC being one of the most illiquid stocks on the NZX. Market liquidity (the ability to buy and sell securities easily) has a significant bearing on price discovery and market value.
- Investment Shareholders have no ability to influence strategy and key investment decisions of LIC.
- 5% constitutional cap of holdings in Investment Shares.

Source: Northington Partners.

Taking all of these factors into account, we have applied a 30% discount to the gross value of the Investment Shares in our assessment of the underlying market value. We believe that this level of discount is supported by the following:

- Empirical studies of value discounts for lack of liquidity and marketability of equities (primarily in the US). These studies have generally demonstrated discounts of between 20% – 35%¹;
- Is consistent with the 20% – 30% discount applied by Fonterra for its fair value shares (the “Restricted Share Value”) under Fonterra’s share standard between 2009 and 2012, prior to implementation of “Trading Amongst Farmers”. Fonterra’s shares did not have voting restrictions and given LIC’s size and services compared to Fonterra, we consider a discount at the upper end of this range is appropriate; and
- The size of the discounts typically applied in other comparable valuation exercises in the New Zealand market.

After applying a 30% discount to the gross value of the Investment Shares, we derive a market value of the Investment shares of \$3.81 to \$4.88 as summarised in Table 10.

Table 10: LIC Valuation Summary

\$m (unless otherwise stated)	Low	High
Gross Investment Share Value	\$160.7	\$205.7
less 30% discount for Restricted Voting, Marketability & Liquidity	(\$48.2)	(\$61.7)
Aggregate Market Value of Investment Shares	\$112.5	\$144.0
Investment Shares on Issue	29,528,590	29,528,590
Investment Shares - Market Value Per Share	\$3.81	\$4.88

Source: Northington Partners analysis.

3.4. Valuation Conclusion

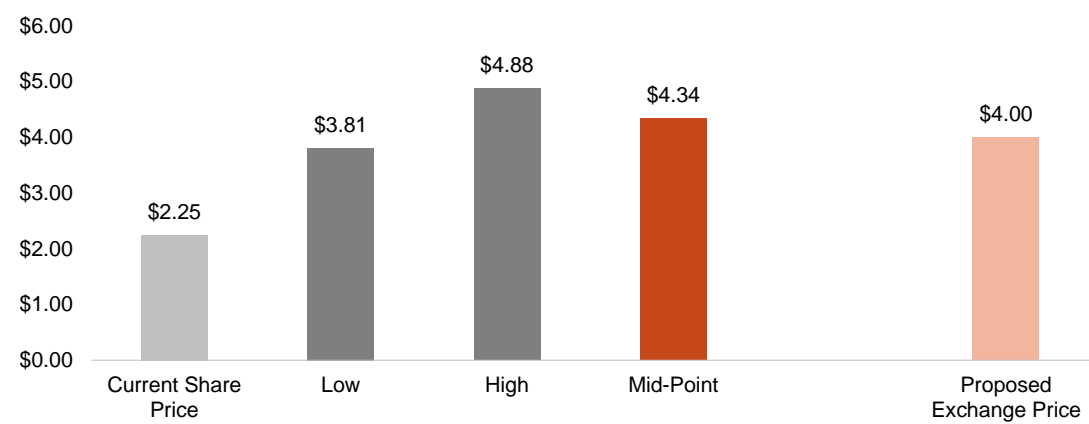
We have valued LIC’s total equity at \$167 to \$212 million. After allowing for the nominal value of the Co-operative Control shares and an appropriate discount for the unique investment attributes of the Investment Shares, we derive a market value for the Investment shares of \$3.81 to \$4.88, with a mid-point of \$4.34. This compares to the trading price of LIC shares of \$2.25 as of 7 February 2018 and the

¹ See for example The Discount for Lack of Marketability: Update on Current Studies and Analysis of Current Controversies (2007), Reilly, R and Rotkowsky, A.



proposed Exchange Ratio of 4.0 (equivalent to a relative value of \$4.00 per current Investment Share) as illustrated in Figure 9.

Figure 9: Summary Valuation Assessment



Source: Northington Partners. LIC share price as of 7 February 2018.



4.0 Assessment of the Merits of the Proposal

4.1. Overview

The main benefit of the Proposal is that it will result in one class of shares that provide the same rights and obligations to all shareholders. The current capital structure is not only complicated and potentially distracting to LIC in meeting its strategic objectives, but it also gives rise to a potential conflict between the Co-operative Control Shares and the Investment Shares in terms of the future strategy and management of the LIC business. The conflict is broadly between those shareholders more focused on access to LIC's goods and services through Co-operative Control Shares and those shareholders more focussed on shareholder returns through their investment in Investment Shares. Co-operative Control Shareholders control the voting rights but do not benefit from the economic value of LIC while Investment Shareholders carry the economic rights to LIC's profits and surplus assets but do not have voting rights or the ability to influence key decisions of the Company.

Simplification to a single share class will clearly eliminate this conflict and we believe this outcome is in the best interests of all shareholders while better supporting LIC's strategy. In our view, the status quo arrangements pose a serious impediment to meeting the objectives of the business and the tension between the two classes of shares could worsen if the divergence in ownership between the two share classes grows. Resolving the conflict now ensures all shareholders benefit if LIC is successful in executing its recent strategic initiatives and all shareholders have a say in the future direction of LIC based on their overall investment in LIC (total Ordinary Shares and not just Co-operative Control Shares).

However, the implementation of the Proposal is unavoidably complicated in order to deliver an equitable outcome and the consequences of the process will not be the same for all shareholders. This reflects the fact that the ratio of Investment Shares held for each Co-operative Control Share owned varies considerably across the shareholder base. As set out in Section 2.3, there are a large number of shareholders who do not own any Investment Shares, while conversely there is also a material number of shareholders who are significantly "overweight" in Investment Shares.

Table 11 outlines the impact of the Proposal on the relative voting rights, required LIC investment and Qualifying Expenditure requirements for three different shareholding scenarios. In each case, we assume the shareholder owns the median Co-operative Control Shareholding of 500 shares, but the scenarios differ by the assumed number of Investment Shares that are also owned. With reference to the discussion in Section 2.3, our hypothetical scenarios consist of shareholders who:

- i. Only hold Co-operative Control Shares and are therefore under-weight in Investment Shares compared to the average Share Ownership Ratio of 18%/82%.
- ii. Hold Co-operative Control Shares (500) and Investment Shares (2,350) in line with the average ratio of 18%/82%.
- iii. Is overweight in Investment Shares compared to the average ratio of 18%/82%. In this particular case, we assume a Share Ownership Ratio of 5%/95%.



Table 11: Impact of the Proposal for Varying Levels of Investment Share Ownership

	No Investment Shares		Balanced Shareholding (18%/82% Share Ownership Ratio)		Overweight Investment Shares (5%/95% Share Ownership Ratio)	
	Pre	Post	Pre	Post	Pre	Post
Co-operative Control Shares Held	500		500		500	
Investment Shares Held	0		2,350		9,500	
Total Shares	500		2,850		10,000	
Fully Paid Ordinary Shares		500		9,900		38,500
Nil Paid Ordinary Shares		1,500		1,500		1,500
Total Ordinary Shares		2,000		11,400		40,000
Voting Rights (% of Total)	0.008%	0.001%	0.008%	0.008%	0.008%	0.028%
Share of Dividends (% of Total)	0.000%	0.001%	0.008%	0.008%	0.032%	0.028%
Implied Investment in LIC ¹	\$500	\$2,000	\$9,900	\$11,400	\$38,500	\$40,000
Permitted Qualifying Expenditure from Shareholding	\$12,500	\$12,500	\$12,500	\$75,000	\$12,500	\$250,000

Source: LIC, Northington Partners

¹ Based on the \$1.00 nominal value for Ordinary Shares post-simplification (including the full value of Nil Paid Shares) and an Exchange Ratio of 4.0 Ordinary Shares for every Co-operative Control Share and Investment Share. Investment Shares are also included at a value of \$4.00 per share.

When comparing the current position of each hypothetical shareholder with their respective positions following the completion of the Proposal, we note the following:

- The position of the Balanced Shareholder is effectively unchanged in terms of their control position and relative dividend allocation, while the implied total investment in LIC increases by \$1,500. This increase reflects the additional 3.0 nil paid Ordinary Shares that will be issued for every Co-operative Control Share currently held, valued at the nominal value of \$1.00 per share. While these shares are nil paid when initially issued, the shareholder has the obligation to pay the \$1.00 subscription price via future dividend entitlements and is therefore effectively committed to the additional investment in LIC.
- There are three main impacts for the shareholder with no Investment Shares:
 - The relative control position reduces substantially, from 0.008% of the total votes to 0.001%. While this represents a material change, we note that the effective change at an individual shareholder level is limited because the shareholder already has limited control or influence over the Company.
 - The nil paid Ordinary Shares issued in exchange for the Co-operative Control Shares provide the right to a dividend payment; and
 - The required nominal investment in LIC increases from \$500 to \$2,000. The increase reflects the 1,500 nil paid Ordinary Shares which will be paid for through time using the dividend stream from all Ordinary Shares required to meet the Share Standard (i.e. both the 500 fully paid and 1,500 Nil Paid Shares in the example). No up-front cash payment is required.
- For the hypothetical shareholder who is overweight in Investment Shares, the impact is largely opposite to that for the shareholder with no Investment Shares. The conversion to Ordinary Shares increases their control position and reduces the relative share of dividends. As with the other two scenarios, the required investment in LIC for this shareholder increases by \$1,500 in relation to the Nil Paid Shares, but this represents a relatively small percentage increase (4%) compared to the existing investment.

This analysis shows that the impact of the Proposal differs from shareholder to shareholder. The impacts on relative control, dividend allocation and required investment in LIC are relatively limited for those shareholders who hold Co-operative Control Shares and Investment Shares in line with the



18%/82% Share Ownership Ratio. The consequences for the more “un-balanced” shareholders are more pronounced, whereby those that are underweight (overweight) in Investment Shares are effectively giving up voting rights (rights to dividends) for the right to receive dividends (voting rights). Shareholders who are underweight in Investment Shares will also be required to materially increase their total investment in LIC over time, although the increase is effectively self-funded from dividends and requires no further cash payment now.

We are not in a position to assess how these changes will be interpreted by each shareholder; it is not possible to contemplate all shareholders’ personal circumstances or investment objectives and our assessment is therefore general in nature. The appropriate course of action for each shareholder is dependent on their own unique situation. However, we note that even if a particular group of shareholders perceive that some of the impacts of the Proposal are negative from their point of view, we believe that the overall impact will be positive for the Company and its shareholder base as a whole.

4.2. Relative Value Attributed to Investment Shares

The proposed share reclassification process accounts for the fact that the underlying value of the Investment Shares is higher than that for the Co-operative Control Shares. Considering a range of factors, including independent valuation advice, with respect to the relative values between the existing two share classes, the LIC Board has resolved to reclassify each Investment Share into 4.0 Ordinary Shares.

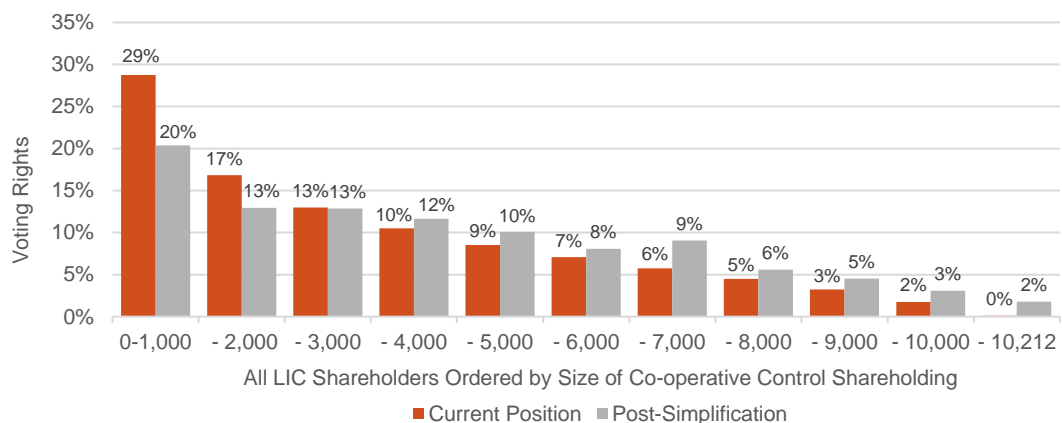
As set out in Section 3.0, we have assessed the value of the Investment Shares in a range between \$3.81 and \$4.88 per share, with a mid-point of \$4.34 per share. Given that the redemption value of the Co-operative Control Shares is fixed at \$1.00 per share, we suggest that the “fair” Exchange Ratio between Investment Shares and Ordinary Shares is between 3.81x and 4.88x and we therefore conclude that the proposed Exchange Ratio of 4.0x is fair to all shareholders. The chosen ratio is slightly lower than our mid-point valuation, but sits comfortably within our assessed range.

4.3. Impact on Control Position of the Company

Under the current capital structure, 100% of the voting rights in the Company are attached to the Co-operative Control Shares. If the Proposal is approved, all of the Ordinary Shares will have voting rights and this change will have an impact on the overall control position of the Company, both at an aggregate level and potentially for each individual shareholder (as already discussed above in Section 4.1).

Figure 10 illustrates the distribution of voting rights across the LIC shareholder base before and after the Proposal. It shows the aggregate impact for groups of 1,000 shareholders, where the groups are formed based on the number of Co-operative Control Shares owned by each shareholder. Group 1 consists of the 1,000 largest Co-operative Control Shareholders, the next 1,000 largest shareholders are in Group 2, and so on.

Figure 10: Change in Overall Control Position from the Proposal



Source: LIC, Northington Partners.



The overall outcome is most pronounced for the groups that are significantly overweight or underweight in terms of their relative holding in Investment Shares.

- As set out in Section 2.3, there are approximately 3,800 shareholders that do not hold any Investment Shares. In aggregate, these shareholders currently hold about 40% of the voting rights in LIC (via their collective holdings of Co-operative Control Shares) but that position will reduce to 7% following implementation of the Proposal.
- Conversely, the 3,300 shareholders that are overweight in Investment Shares will increase their aggregate control position from 26% to 69% as a result of the simplification process.

This analysis shows that while the control impact for each individual is generally limited, in aggregate the Proposal does transfer a material number of voting rights from one stakeholder group to another. Under the current structure, a significant proportion of the voting rights are held by shareholders with either zero or a limited position in Investment Shares. This group may be characterised as farmers who are most focused on access to the goods and services provided by LIC (via the required holding in Co-operative Control Shares), with limited interest in seeking commercial returns from an investment in the Company.

Shareholders who are overweight in Investment Shares are, on the other hand, more likely to view LIC as a commercial investment and will be focused on generating a commercial return from that investment. The analysis summarised in Figure 10 shows that the aggregate control position of these shareholders will also increase as a result of the Proposal. On that basis, the potential influence of these commercially-focused shareholders will increase.

The question remains as to what practical impact this change will have on all shareholders. Those shareholders who are underweight Investment Shares are potentially the most adversely affected; they are effectively being asked to convert their interest in the Company from simple co-operative participation (via Co-operative Control Shares) to one which preserves access to LIC services and which also has a commercial focus (via Ordinary Shares). On balance we think that the benefits of moving to a single share structure outweigh the possible detriments relating to the aggregate changes in the control position. At an individual farmer level, the control impacts are limited and the single share structure means that all shareholders will be treated equally in the future.

4.4. Other Implications for LIC Shareholders

4.4.1. Changes in Share Standard

The Proposal necessitates a change to the Share Standard in order to maintain the 18/82% Share Ownership Ratio. At an Exchange Ratio of 4.0, the Share Standard is effectively increasing by a factor of 4 times. However, in order to reduce the impact on existing LIC Co-operative Control Shareholders, a number of features have been proposed to reduce the immediate impact of the Proposal. These features include:

- Increasing the minimum Qualifying Expenditure from \$500 to \$1,000.
- Utilising a 3-year average of Qualifying Expenditure to determine the Share Standard rather than the preceding year's Qualifying Expenditure.
- The Share Standard will be set in \$5,000 bands (other than for the initial \$1,000 to \$5,000 band) of Qualifying Expenditure, reducing the frequency of having to share up or down as Qualifying Expenditure fluctuates season to season. That means that shareholders will only need to acquire additional shares if they increase their 3-year average Qualifying Expenditure above the upper band, while there will be no need to sell surplus shares if they fall below the lower band.
- Shareholders have more time to meet the Share Standard, with compliance now necessary by mid-October in each year rather than the current deadline of mid-July.

Note that immediately after implementation of the Proposal, all existing shareholders will meet the Share Standard because Nil Paid Shares qualify. LIC is essentially providing all shareholders interest free loans to increase their investment in order to meet the new Share Standard. Consequently, there will be no immediate need to share up or down to meet the new Share Standard.



Table 12 provides a summary of the changes to the Share Standard under the Proposal and hypothetical examples of how it impacts new customers (existing customers are not immediately impacted). This illustrates that while on the face of it the Proposal increases the Share Standard by 4 times, the 3-year averaging and banding reduces the immediate financial commitment necessary from customers. In the example above, the requirement in year 1 is actually lower than the current Share Standard and the total requirement at year 3 is less than 4 times the current Share Standard (2.9 times) due to the banding (i.e. only having to hold shares at the bottom of the \$10k - \$15k band rather than meeting the requirements for a \$14k spend) and averaging of the Qualifying Expenditure to meet the Share Standard.

Table 12: Summary Changes to LIC's Share Standard and Hypothetical Shareholder Examples

	Existing Standard	New Standard
Summary Features		
Minimum Qualifying Expenditure	\$500	\$1,000
Qualifying Expenditure to Share Standard	1:1 (i.e. share requirement increases linearly with spend, subject to rounding)	Bands of \$5,000
Required to Sell Shares if Reduce Qualifying Expenditure	Yes	No (surplus shares may be retained – effectively analogous to Investment Shares)
Share Standard Measurement Period	12 months	36 months
Annual Compliance Date for Standard	15 July	15 October
Exiting Shareholders Compulsory Disposal Period	24 months	15 months
Implications		
Increase in Share Standard	NA	4.0x
Customer spend per share	\$25.00	\$6.25
Number of shares needed for each \$25 of spend	1	4
Price of shares at implementation	\$1.00	\$1.00
Cost to acquire shares at implementation of Share Simplification	\$1.00	\$4.00
Cost to acquire shares after implementation of Share Simplification	\$1.00	Market price
Hypothetical Example New Customer		
Customer Spending Year 1	\$10,000	\$10,000
Customer Spending Year 2	\$12,000	\$12,000
Customer Spending Year 3	\$14,000	\$14,000
Qualifying Expenditure Year 1	\$10,000	\$3,333
Qualifying Expenditure Year 2	\$12,000	\$7,333
Qualifying Expenditure Year 3	\$14,000	\$12,000
Share Standard Requirements Year 1	400	160 (\$1k - \$5k band)
Share Standard Requirements Year 2	480	800 (\$5k - \$10k band)
Share Standard Requirements Year 3	560	1,600 (\$10k-\$15k band)
Cost to Meet Standard Requirements Year 1	\$400	\$160
Cost to Meet Standard Requirements Year 2	\$80	\$640
Cost to Meet Standard Requirements Year 3	\$80	\$800
Total Capital Commitment in LIC at End of Year 3	\$560	\$1,600

Source: LIC, Northington Partners

The change to the Share Standard will not affect existing customers because they will automatically meet the standard immediately following the simplification process. However, the new Share Standard will require new customers to invest close to three times as much to procure LIC services as is required now. This impact is somewhat mitigated by the fact that the required investment is spread over three



years and is effectively smoothed via the introduction on the spending bands. We also suggest that the quantum of the required investment is still relatively modest in the context of the scale of a typical dairy farming business. In effect, the modified Share Standard is mandating that new shareholders invest the same amount in LIC as they would have under the existing system if they had invested in Co-operative Control Shares and Investment Shares in a ratio of 18%/82%.

On balance, we therefore consider the changes to the Share Standard under the Proposal are reasonable.

4.4.2. Share Price Uncertainty

All fully paid Ordinary Shares (but not the Nil Paid Shares) will trade on the NZAX platform following the Proposal. The price of those shares will move up and down over time depending on a wide range of factors, including the operational and financial performance of LIC and broader macro-economic and geo-political conditions.

This means that any shares that shareholders require in order to meet the Share Standard will need to be purchased on-market through a broker intermediary or directly off-market from a selling shareholder. The transaction price will reflect the prevailing market price of LIC shares at the time, and this may be significantly higher or lower than the initial nominal issue price of \$1.00. Similarly, for exiting shareholders, shares will have to be sold in the same way.

While Investment Shares are already exposed to this type of market price risk, the Co-operative Control Shares can currently be purchased and redeemed at a fixed price (\$1.00). For those shareholders who only own Co-operative Control Shares, the Proposal means that they will now be exposed to market price risk in relation to their shareholding in LIC (via Ordinary Shares), particularly when they exit their farming business and are required to sell the shares.

The market price of the Ordinary Shares following implementation of the Proposal is therefore important to all shareholders. While this will ultimately be a function of Company performance and broader market factors, the market price in the short term will also potentially be impacted by the adopted Exchange Ratio.

There is a risk that the market price of Ordinary Shares following the Proposal will trade materially below \$1.00 (implying the Exchange Ratio was potentially set too high) or will trade materially above \$1.00 (implying the Exchange Ratio was potentially set too low). Either outcome will result in a wealth transfer between the Co-operative Control and Investment Shareholders; if the Exchange Ratio is set too high, more of the economic value of LIC is transferred to Investment Shares while if it is set too low, more economic value is transferred to Co-operative Control Shares.

The post-implementation trading price of the Ordinary Shares is especially relevant to those who will hold a large position in Nil Paid Shares (resulting from a large holding in Co-operative Control Shares). These shareholders will receive Nil Paid Shares at no cost but with a legal obligation to pay-up to \$1.00, and are exposed to the risk that the market price immediately following the Proposal will be less than \$1.00. Any shareholders who cease to be a customer of LIC and who are obligated to sell their shares may realise an immediate loss if they have to fully pay their Nil Paid Shares to \$1.00 but can only sell on-market at less than \$1.00. Conversely, if the Exchange Ratio is set too low and the Ordinary Shares trade over \$1.00, shareholders will benefit from an immediate capital gain.

The potential for a short-term value gain or loss arising from mispricing of the Exchange Ratio is difficult to predict. As set out above in Section 4.2, the adopted Exchange Ratio of 4.0x is close to the mid-point of our valuation range for the Investment Shares and we therefore believe that it is fair to both classes of shareholder. However, we also note that the Exchange Ratio of 4.0x can be compared directly to the current market value of the Investment shares of \$2.25, implying a market-based Exchange Ratio of 2.25. While we do not believe that the current market value of the Investment Shares fully reflects their underlying fair value (for the reasons identified in Section 3.0), there is a chance that the market price of the Ordinary Shares will trade lower than our assessed value.

4.4.3. Redemption Risk

Under LIC's current capital structure, the Company is exposed to redemption risk which may be particularly acute in bad dairy seasons when LIC is required to redeem significant volumes of Co-operative Control Shares as customers exit the co-operative or reduce their level of spend. Exiting



shareholders are also required to sell any Investment Shares when they discontinue as a customer, and this selling pressure may affect the market value of Investment Shares.

The Proposal largely eliminates LIC's redemption risk and the associated impact on the Company's balance sheet. LIC will no longer have an obligation to buy and sell shares from shareholders under the Share Standard as all shares will be transacted on market. Effectively, LIC is transferring the redemption risk currently held at the company level to individual shareholders, who will now be subject to market price risk. Nonetheless, LIC retains the ability to compulsorily acquire or dispose sufficient shares, on the shareholder's behalf, sufficient for them to meet the Share Standard if it is not met within the required time.

4.4.4. Liquidity

We believe that the Proposal should help to improve the liquidity in LIC's shares, largely as a result of the following factors:

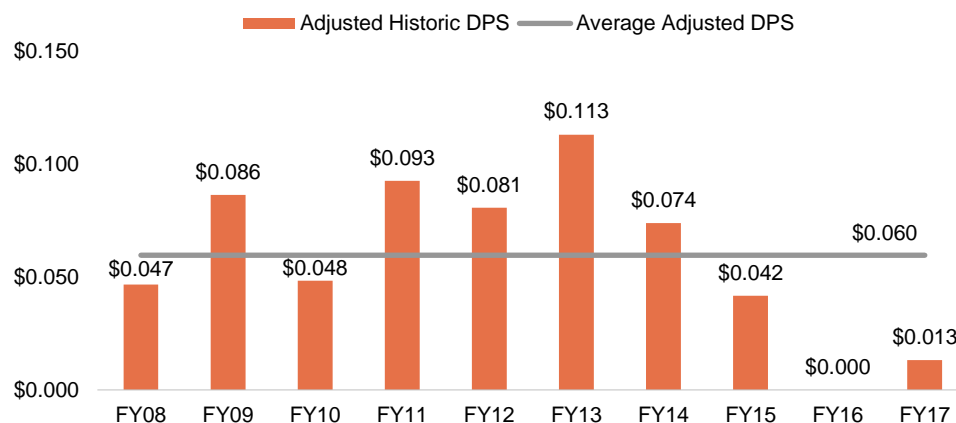
- All fully paid Ordinary Shares arising from the reclassification of the Co-operative Control Shares will need to be traded on market rather than issued / redeemed by LIC. This increases the tradeable number of shares by 5% immediately, and by 21% through time as the Nil Paid Shares are paid up (notwithstanding that the majority of shares will need to be retained to meet the Share Standard).
- Both Co-operative Control and Investment shareholders (including those with only Co-operative Control Shares) will have a more aligned interest in the commercial performance and prospects of LIC following the Proposal. We believe that the increase in the focus on the investment performance of the Ordinary Shares will in turn increase market liquidity over time.
- We expect that the Proposal should generate greater interest in LIC and its future strategy amongst both its shareholder base and potentially, the broader financial community.

However, the market liquidity of LIC's shares following the Proposal may also be impacted by a number of other factors including external economic and market driven factors. Therefore, improved liquidity cannot be guaranteed.

4.4.5. Dividends and Returns

LIC shareholders will receive an additional 3.0 nil paid Ordinary Shares for every Co-operative Control Share currently held, valued at the nominal value of \$1.00 per share. While these shares are nil paid when initially issued, the shareholder has the obligation to pay the \$1.00 subscription price via future dividend payments and is therefore effectively committed to the additional investment in LIC. Consequently, the expected level of LIC dividends following the Proposal will determine the time required to fully pay-up the shares (unless paid-up through other means). In addition, the Proposal dilutes dividends paid to Investment Shareholders who are effectively giving up economic value in exchange for more voting control.

Figure 11: LIC's Historic Dividend Performance (Adjusted by Exchange Ratio)



Source: Northington Partners. Historic LIC dividends divided by 4.85 reflecting an Exchange Ratio of 4.0x and after allowing for the dilution from the conversion of Co-operative Control Shares into ordinary shares.



The potential level of future dividends under the Proposal is therefore an important consideration to both classes of shareholders. Figure 11 highlights LIC's dividend history for the Investment Shares based on an assumed Exchange Ratio of 4.0.

The average historical dividend over the period was 6.0 cents per share after allowing for the impact of the Share Simplification (29.0 cents pre-adjustment). If that level of dividend was maintained in the future, it would take over 16 years to pay up the Nil Paid Shares. While we would expect LIC's financial performance and dividends to improve over time, particularly following recent initiatives under Project Pace and once the benefits of the Share Simplification are realised, future dividends cannot be guaranteed. Therefore, shareholders should recognise that it may take a number of years to repay the Nil Paid Shares unless the remaining liability is partially paid from other sources. As previously discussed, many shareholders may also exit LIC prior to having fully paid the Nil Paid Shares, meaning that they will be left with a liability to pay-up on exit. These shareholders are therefore exposed to the risk that the Ordinary Share price will be less than \$1.00 on exit, in which case the shareholders will realise a cash loss.

The dividend return implications for Investment Shareholders differ depending on an individual's Share Ownership Ratio (as highlighted in Section 4.1, Table 11):

- Shareholders with no Investment Shares effectively give up the preferred dividend on their Co-operative Control Shares for ordinary dividends. While these shareholders (and others that are underweight in Investment Shares) will now receive a greater share of ordinary dividends, the dividends will be used to pay up Nil Paid Shares required to meet the Share Standard before any cash is received;
- Shareholders with a balanced shareholding (18%/82% Share Ownership Ratio) will receive similar dividend returns before and after the Proposal; and
- Shareholders overweight in Investment Shares will suffer some dilution, the extent of which will depend on their particular position.

Table 13: Impact of the Proposal On Dividend Investment Returns

	No Investment Shares		Balanced Shareholding (18%/82% Share Ownership Ratio)		Overweight Investment Shares (5%/95% Share Ownership Ratio)	
	Pre	Post	Pre	Post	Pre	Post
Co-operative Control Shares Held	500		500		500	
Investment Shares Held	0		2,350		9,500	
Total Shares	500		2,850		10,000	
Fully Paid Ordinary Shares		500		9,900		38,500
Nil Paid Ordinary Shares		1,500		1,500		1,500
Total Ordinary Shares		2,000		11,400		40,000
Co-operative Control Dividends	\$40.00	NA	\$40.00	NA	\$40.00	NA
Investment Share Dividends	\$0.00	NA	\$1,057.50	NA	\$4,275.00	NA
Ordinary Share Dividends – Cash	NA	\$0.00	NA	\$888.01	NA	\$3,589.83
Ordinary Share Dividends – Applied to Nil Paid Shares	NA	\$188.94	NA	\$188.94	NA	\$188.94
Total Dividend Returns	\$40.00	\$188.94	\$1,097.50	\$1,076.95	\$4,315.00	\$3,778.77

Source: Northington Partners. Assumes Co-operative Control Shares held are equal to the number required to meet the Share Standard and a 70% dividend payout ratio, being the mid-point of LIC's current policy of distributing between 60% - 80% of normalised profit.

Although no dividends were paid on Co-operative Control or Investment Shares in FY16, Table 13 illustrates the total potential dividend returns for the above shareholding scenarios before and after the Proposal based on the following assumed dividend returns:

- Dividend returns of 8% on Co-operative Control Shares in line with the current Westpac farm first mortgage rate; and



- Dividend returns of 45 cents on Investment Shares, consistent with LIC's FY19 outlook of \$18 - \$26 million in underlying earnings after allowing for a dividend payout of 60% – 80%. This translates to a dividend of approximately 9.4 cents per share following the Proposal after allowing for dilution and the after-tax impact of eliminating the preferred dividend to Co-operative Control Shares.

Based on this potential scenario, it would take less than 11 years to repay the Nil Paid Shares with an implied cash dividend yield of over 9% on the \$1.00 nominal value per Ordinary Share.

Appendix 1. Comparable Company Information

Table 14 below summarises EBIT trading multiples for New Zealand Agricultural and Dairy listed companies comparable to LIC. Table 5 summarises comparable international companies in the Genetics and Production Animal Health services.

Table 14: Comparable New Zealand Agricultural and Dairy Listed Companies

Company	Country	Primary Activity	Market Capitalisation (NZ\$m)	Enterprise Value (NZ\$m)	EV / EBIT (LTM)	EV / EBIT (NTM)
Fonterra Co-operative Group Limited	New Zealand	Dairy products	10,467	16,456	14.7x	13.4x
PGG Wrightson Limited	New Zealand	Agricultural services	438	565	10.4x	10.2x
Scales Corporation Limited	New Zealand	Agricultural produce	678	748	14.2x	14.6x
Seeka Limited	New Zealand	Agricultural produce	109	204	12.0x	12.0x ¹
Synlait Milk Limited	New Zealand	Dairy products	1,264	1,346	20.0x	14.3x
Average					14.3x	12.9x
Median					14.2x	13.4x

Source: Capital IQ, publicly available company announcements, Northington Partners Analysis. Data as at 18 January 2018.

LTM = Last Twelve Months. NTM = Next Twelve Months. Where possible calculations have used an EBIT calendarized to a May year-end (i.e. such that NTM reflects the 12 months to May 2018) to align to LIC's year-end.

¹ NTM for Seeka set to equal LTM as broker forecasts are not available for the company.

Table 15: Comparable International Genetics and Production Animal Health Listed Companies

Company	Country	Primary Activity	Market Capitalisation (NZ\$m)	Enterprise Value (NZ\$m)	EV / EBIT (LTM)	EV / EBIT (NTM)
Apium Animal Health Limited	Australia	Agricultural services	100	127	17.7x	12.6x
Elders Limited	Australia	Agricultural services	1,091	1,198	17.5x	15.0x
Genus plc	United Kingdom	Genetic and biological products	2,951	3,168	30.3x	31.5x
National Milk Records plc	United Kingdom	Agricultural services	35	43	14.6x	14.6x ¹
Average					20.0x	18.4x
Median					17.6x	14.8x

Source: Capital IQ, publicly available company announcements, Northington Partners Analysis. Data as at 18 January 2018.

LTM = Last Twelve Months. NTM = Next Twelve Months. Where possible calculations have used an EBIT calendarized to a May year-end (i.e. such that NTM reflects the 12 months to May 2018) to align to LIC's year-end.

¹ NTM for National Milk Records set to equal LTM as broker forecasts are not available for the company.

Table 16 provides a description of these companies.

Table 16: Detailed Listed Company Descriptions

Company	Description
Fonterra Co-operative Group Limited	Fonterra Co-operative Group Limited, together with its subsidiaries, collects, manufactures, and sells milk and milk derived products. It operates through five segments: Global Ingredients and Operations, Oceania, Asia, Greater China, and Latin America. The company offers everyday dairy ingredients, including whole and skimmed milk powder; dairy nutrition products, such as protein ingredients, milk protein concentrates, and whey protein concentrates; and cheese, butter, dairy spreads, cream, coffee, whey, flavored milk, bakery butter, cream cheese, specialty whipping and culinary cream, mozzarella, and other dairy commodities. Further, it is involved in the quick service restaurant business. Fonterra Co-operative Group Limited was founded in 2001 and is based in Auckland, New Zealand.

Company	Description
PGG Wrightson Limited	PGG Wrightson Limited provides various products, services, and solutions for growers, farmers, and processors worldwide. It operates through three segments: Agency, Retail and Water, Seed and Grain. The company operates rural supplies stores that offer a range of products and services, such as animal health and management, apparel and footwear, dairy hygiene and supplies, fencing products, fertilizers, nutrition and stockfeed products, pasture and crop protection products. It also provides agency services for the sale, purchase, and service of various categories of livestock, such as cattle, sheep, and deer at auction, private and on-farm sales, and online trading of livestock; and handles, markets, and exports wool to manufacturers and spinners. The company was founded in 1841 and is based in Christchurch, New Zealand. PGG Wrightson Limited is a subsidiary of Agria (Singapore) Pte Limited.
Scales Corporation Limited	Scales Corporation Limited engages in agribusiness activities in New Zealand. The company operates through Horticulture, Food Ingredients, and Storage & Logistics segments. The Horticulture segment is involved in growing, packaging, marketing, and exporting apples under Mr Apple brand name. The Food Ingredients segment processes and markets pet food ingredients for the pet food industry. This segment also manufactures and sells apple, kiwifruit, and pear juice concentrates. The Storage & Logistics segment provides supply chain services for exporters, importers, and FMCG businesses. The company was founded in 1897 and is based in Christchurch, New Zealand.
Seeka Limited	Seeka Limited, together with its subsidiaries, provides orchard lease and management, and post harvest services to the horticulture industry primarily in New Zealand. The Orchard Operations segment offers on-orchard management services to orchard owners who produce kiwifruit, avocado, and kiwiberry crops. The Post Harvest Operations segment provides post-harvest services to the kiwifruit, avocado, and kiwiberry industries that include crops from the company's orchard management and lease operations, as well as crops from independent orchard owners. Seeka Limited was incorporated in 1987 and is headquartered in Te Puke, New Zealand.
Synlait Milk Limited	Synlait Milk Limited manufactures and sells dairy products in New Zealand and internationally. It provides nutritional products, including infant nutritional powders and adult nutritional powders; ingredients comprising whole milk powders, skim milk powders, and anhydrous milk fat; and specialty products, such as lactoferrin. The company was founded in 2005 and is based in Rakaia, New Zealand. Synlait Milk Limited is a subsidiary of Bright Dairy & Food Co., Ltd.
Apiam Animal Health Limited	Apiam Animal Health Limited, a vertically integrated animal health company, provides veterinary products and services to production and companion animals in Australia. The company engages in veterinary wholesale, warehousing, logistics, and other ancillary activities. Its products and services include systems to assist in herd health programs; production advisory services; consulting services and products to assist in the prevention of animal diseases; technologies to manage compliance with legislative requirements on pharmaceutical use; and advice and services in respect of animal welfare compliance. The company operates production animal and mixed animal veterinary clinics in 28 locations. Apiam Animal Health Limited was founded in 1998 and is based in Bendigo, Australia.
Elders Limited	Elders Limited provides livestock, real estate, and wool agency services to rural and regional customers primarily in Australia. The company offers rural farm inputs, such as seeds, fertilizers, agricultural chemicals, animal health products, and general rural merchandise, as well as professional production and cropping advisory services. It also provides on-farm sales to third parties, regular physical, and online public livestock auctions, as well as directly sells through its owned and third-party feedlots and livestock exporters; real estate agency and property management services; agency services for the sale of greasy wool; brokering services for wool growers; and grain marketing services. Elders Limited was founded in 1839 and is headquartered in Adelaide, Australia.
Genus plc	Genus plc, together with its subsidiaries, engages in the application of quantitative genetics and biotechnology for animal breeding in the porcine and bovine sectors. The company sells sows, boars, and semen under the PIC name to breed pigs with various characteristics for pork production. It also sells bull semen and embryos that are delivered through artificial insemination to breed dairy and beef cattle with various characteristics for milk and beef production under the ABS name, as well as provides various in vitro fertilization services under the IVB name. Genus plc was incorporated in 1994 and is headquartered in Basingstoke, the United Kingdom.
National Milk Records plc	National Milk Records plc provides milk recording services in the United Kingdom and internationally. It offers payment testing, microbiology, fatty acids profiling, and pregnancy testing services for cows. The company also provides GeneTracker, a genomic testing service that identifies the genetic potential of the animal from a young age. Further, the company provides management information services on individual cow's performance in terms of milk quality, yield, and fertility; supplies aggregate data to dairy industry bodies, including milk buyers, and breed societies, as well as for advisors, such as vets and farm consultants; and services to the red meat industry. The company was founded in 1943 and is headquartered in Chippenham, the United Kingdom.

Appendix 2. Sources of Information Used in this Report

Other than the information sources referenced directly in the body of the report, this assessment is reliant on the following sources of information:

- LIC's Annual Reports for FY2013 - FY2017, its interim report for FY2018 and other market announcements.
- LIC's Product Disclosure Statement 2017.
- Draft Notice of Special Meeting in relation to the Proposal.
- LIC Board Papers and Minutes in relation to the Proposal.
- Relevant documents provided by LIC including share registry, management accounts and internal assessments of strategic initiatives.
- Discussions with senior management of LIC.
- Various other documents that we considered necessary for the purposes of our analysis.

Appendix 3. Declarations, Qualifications and Consents

Declarations

This report is dated 9 February 2018 and has been prepared by Northington Partners at the request of the independent directors of LIC for the benefit for its shareholders in relation to the Proposal. This report, or any part of it, should not be reproduced or used for any other purpose. Northington Partners specifically disclaims any obligation or liability to any party whatsoever in the event that this report is supplied or applied for any purpose other than that for which it is intended.

Prior drafts of this report were provided to LIC for review and discussion. Although minor factual changes to the report were made after the release of the first draft, there were no changes to our methodology, analysis, or conclusions.

This report is provided for the benefit of all of the shareholders of LIC that are being asked to consider the Proposal, and Northington Partners consents to the distribution of this report to those people.

Our engagement terms did not contain any term which materially restricted the scope of our work.

Qualifications

Northington Partners provides an independent corporate advisory service to companies operating throughout New Zealand. The company specialises in mergers and acquisitions, capital raising support, expert opinions, financial instrument valuations, and business and share valuations. Northington Partners is retained by a mix of publicly listed companies, substantial privately held companies, and state owned enterprises.

The individuals responsible for preparing this report are Greg Anderson B.Com, M.Com (Hons) and Ph.D and Jonathan Burke B.Com (Hons), BCM. Each individual has a wealth of experience in providing independent advice to clients relating to the value of business assets and equity instruments, as well as the choice of appropriate financial structures and governance issues.

Northington Partners has been responsible for the preparation of numerous independent reports in relation to takeovers, mergers, and a range of other transactions subject to the Takeovers Code and NZX Listing Rules.

Independence

Northington Partners has not been previously engaged on any matter by LIC or (to the best of our knowledge) by any other party to the Proposal that could affect our independence. None of the Directors or employees of Northington Partners have any other relationship with any of the directors or substantial security holders of the parties involved in the Proposal.

The preparation of this independent report will be Northington Partners' only involvement in relation to the Proposal. Northington Partners will be paid a fixed fee for its services which is in no way contingent on the outcome of our analysis or the content of our report.

Northington Partners does not have any conflict of interest that could affect its ability to provide an unbiased report.

Disclaimer and Restrictions on the Scope of Our Work

In preparing this report, Northington Partners has relied on information provided by LIC. Northington Partners has not performed anything in the nature of an audit of that information, and does not express any opinion on the reliability, accuracy, or completeness of the information provided to us and upon which we have relied.

Northington Partners has used the provided information on the basis that it is true and accurate in material respects and not misleading by reason of omission or otherwise. Accordingly, neither Northington Partners nor its directors, employees or agents, accept any responsibility or liability for any such information being inaccurate, incomplete, unreliable or not soundly based or for any errors in the analysis, statements and opinions provided in this report resulting directly or indirectly from any such circumstances or from any assumptions upon which this report is based proving unjustified.

We reserve the right, but will be under no obligation, to review or amend our report if any additional information which was in existence on the date of this report was not brought to our attention, or subsequently comes to light.

Indemnity

LIC has agreed to indemnify Northington Partners (to the maximum extent permitted by law) for all claims, proceedings, damages, losses (including consequential losses), fines, penalties, costs, charges and expenses (including legal fees and disbursements) suffered or incurred by Northington Partners in relation to the preparation of this report, except to the extent resulting from any act or omission of Northington Partners finally determined by a New Zealand Court of competent jurisdiction to constitute negligence or bad faith by Northington Partners.

LIC has also agreed to promptly fund Northington Partners for its reasonable costs and expenses (including legal fees and expenses) in dealing with such claims or proceedings upon presentation by Northington Partners of the relevant invoices.

