Rubicon Annual Results Release

Year ended 31 March 2019

Rubicon Annual Results Release

12 Months ended 31 March 2019

Table of Contents

FORWARD LOOKING STATEMENTS

There are statements in this Report that are 'forward looking statements.' As these forward-looking statements are predictive in nature, they are subject to a number of risks and uncertainties relating to Rubicon and ArborGen, many of which are beyond our control.

In particular, ArborGen's operations and results are significantly influenced by the general level of economic activity in the various sectors of the economies in which it competes, particularly in the United States, Brazil, New Zealand and Australia. Fluctuations in industrial output and the impact that has on global demand for wood fibre and hence harvest and reforestation levels, government environmental and regional development policies, capital availability, relative exchange rates, interest rates, the profitability of our customers, can each have a substantial impact on our operations and financial condition. ArborGen-specific risks and uncertainties include (in addition to those broad economic factors noted above) the global markets and geographies in which it operates, intellectual property protection, regulatory approvals, public and customer acceptance of genetically engineered products, the rate of customer adoption of advanced seedling products, the success of its research and development activities, weather conditions, cone and seed inventory, biological matters, and the fact that ArborGen's annual crops and seed orchards are not the subject of insurance cover.

As a result of the foregoing; actual results, conditions and conclusions may differ materially from those expressed or implied by such statements.

All references to currencies in this document are in US dollars (US$) unless otherwise stated.

Dear Shareholder,

In our last report to you (the September 2018 Interim Review), we highlighted a number of goals and initiatives we were actively pursuing in order to position Rubicon for the next stage of development following our acquisition of 100% of ArborGen.

The discussion below canvasses both the achievements over the last twelve months, and, importantly, our longer-term assessment for the Company.

You will recall that in our past discussions with you, we had indicated we would be undertaking a planned restructuring of the Rubicon Group that would allow us to take advantage of the synergies arising from our 100% ownership of ArborGen. We have referred to this before as our One-Company program, the purpose of which is to streamline our activities in order to optimise the efficiency and structure of the combined Rubicon-ArborGen Group. In the period under review, this has resulted in cash restructuring costs of $1.5 million, and an accounting restructuring expense of $3.1 million, which together with Rubicon / ArborGen transaction-related costs of $1.0 million during the period, brought the Group net earnings result to a loss of $4.3 million for the year ended 31 March 2019. With this restructuring process now behind us, it is important to note that the $1.5 million of cash restructuring spend incurred will result in cash savings for the Group of approximately $2.0 million per annum on a go-forward basis – i.e. a cash pay-back of less than 12 months.

Normalised cash from operating activities (after allowing for restructuring, transaction-related costs and cost-outs)[1] was $7.4 million, compared with the $4.1 million reported.

As a result of the historic changes in balance date, results comparisons with prior periods is problematic. The comparative period shown in our financial statements is for the six months to 31 March 2018, which from a revenue perspective includes nearly all of ArborGen's sales in the US, half of its Brazil's sales and minimal Australia and New Zealand (ANZ) sales (*please refer to note 24 for a geographic segment breakdown*). Moreover, the prior year opening balance sheet is as at 1 October 2017, which is very different to the current period opening balance sheet date of 1 April 2018 given the end of March marks the near-completion of the US seedling sales lifting season. For these reasons we use pro-forma comparatives in the discussion below to provide users with relevant and understandable information [2].

Record ArborGen results in spite of challenges

ArborGen recorded US-GAAP underlying earnings of US$6.1 million[3]. This result is in line with the updated guidance we provided to the market in January of this year of circa US$6.0 million[3] and includes a circa US$1 million loss in our developing market in Brazil. While ArborGen achieved record seedling production from its nurseries in the 2019 season, as explained in our January release, the reduction in sales volume was due to the impact of major hurricanes and other extreme weather events. Unfortunately these resulted in many of ArborGen's customers being unable to plant seedlings in certain parts of their estates due to sustained high levels of water destroying planting acreage they had already prepared. In short, the impact of extreme weather in the US-South (which resulted in the write-off of a substantial number of seedlings in the US and adversely impacted US gross margin percentage by circa 2.3%, or 37.1% in the current period versus the 34.8% as reported and compared to 35.8% in 2018), combined with uncertainty in the Brazilian eucalyptus market due to recent forest ownership changes, prevented us from achieving our initial US-GAAP underlying earnings target.

That said, it is important to acknowledge that despite two severe hurricanes and record rainfall during the year, ArborGen still achieved US-GAAP underlying earnings 40% higher than prior year (FY 2018 US-GAAP underlying earnings were $4.3 million[3] demonstrating consistently improving underlying operational performance. With ArborGen established as the clear market leader in the US loblolly pine market, our focus is on operational execution, managing every aspect of our business to validate our position and differentiate ourselves from the competition, while driving sales and controlling costs. We are confident this focus is bearing results.

In terms of unit sales performance for the 12 months to 31 March 2019, ArborGen sold 352 million seedlings globally – 280 million seedlings in the US including 247 million loblolly pine seedlings (of which 37.25% were MCP and varietals), 19 million in Australasia, and 50 million seedlings in Brazil. In the US, we achieved total record sales volume and revenue, including ArborGen's advanced genetics sales (MCP and Varietals) as a percentage of its total loblolly pine sales increasing from 31% to 37% (and MCP sales up 25%) on the prior year, despite the challenging weather conditions noted above. This increase was due in large part to our increased emphasis on the private, non-industrial land owners, who comprise more than 50% of the total US loblolly pine seedling market. Our Acquire, Build Confidence, Convert (i.e. ABC) strategy underpins our customer marketing plan, emphasising the need to acquire new customers and gain market share. Investing the resources necessary to demonstrate the clear benefits of our advanced genetics products offering is an integral part of this program.

While the markets in Australia and New Zealand have seen some challenging times over the past few years, we are now beginning to see the payoff from our willingness to stay the course in both countries. Market recoveries in Australia and New Zealand, combined with our leading market position and solid execution of our plan, have allowed us to achieve our financial targets there, and position ourselves for future growth. By way of example, our pre-eminent position in New Zealand has allowed us to play a key role in the NZ Government's 1 billion tree planting program. In Brazil, pine sales exceeded our projections, while eucalyptus sales continued to be challenging due to the Brazilian macro-economic environment, and also to changes in the ownership of several major forest owners which caused them to slow or temporarily cease their planting programs.

Outlook

Looking to the next fiscal year, with the restructuring of Rubicon and ArborGen complete, the focus now is on execution – specifically converting our leading market position in each of the markets in which we operate into continued improvement in financial and operating performance. Unfortunately, the extreme hurricane event of last year, together with freeze damage experienced in the prior year, will impact our MCP seed availability over the next couple of years – i.e. until our younger (and more advanced genetics) seed orchards mature. Absent these events, we would have forecast double-digit US-GAAP underlying earnings for our March 2020 fiscal year, however lower MCP seed availability requires us to now reduce this target. Whilst not providing specific numeric guidance for 2020, what we can say is that despite the reduced MCP seed availability that will see MCP volumes "flattish", we still believe that US-GAAP underlying earnings will be materially higher y-o-y. To round out this discussion, it is important to note that, as a result of ArborGen's significant investment in orchards over the past few years, near-term MCP supply constraints will dissipate as our vast younger seed orchards approach maturity in the next two years, allowing us to meet projected demand growth as well as build our MCP seed inventory.

While we obviously need to qualify our projections with the normal caveats about weather, we are pleased to report that we are seeing strong early season sales in every market region in which we operate in the US-South, driven by improving timber prices in some areas (which implicitly increase the underlying value of our advanced genetics product offerings), higher rates of replanting due to damage caused by Hurricane Michael, and “catch-up” from delays due to the near record rainfall in much of the market in 2019.

In New Zealand, our sales are beginning to reflect the impact of the “wall of wood” being harvested from plantings made in the early 1990s, with the added growth from the NZ Government’s 10-year one billion tree planting programme under which Crown Forestry awarded a 12 million seedling supply agreement to ArborGen-NZ (described in our last report). As the only seedling company in New Zealand with a national nursery footprint, we are well positioned to benefit from this upsurge in reforestation. In Australia the industry is recovering as new forest investors begin to replant land acquired from Management Investment schemes. As a result we expect to achieve record sales and profits in both our Australian and New Zealand operations for the fiscal year ended 31 March 2020.

In Brazil, we expect pine seedling sales to continue to increase, as the value of ArborGen’s proprietary products becomes clearer every year as our trees mature in demonstration and commercial plantations. With respect to our eucalyptus seedling sales, after a challenging 2018/19, we expect to see greater stability in 2019/20 as the outlook for both the wider economy and the forestry sector become more certain.

Capturing core growth opportunities

As reported in our interim report, following on from the Taylor nursery announcement earlier in calendar year 2018, in November 2018 we announced that ArborGen had entered into an agreement with TexMark Timber Treasury LP (“TTT”) – a joint venture between the CatchMark Timber Trust and a consortium of large institutional investors, that had completed the acquisition of Campbell Global’s US$1.4 billion of timberlands located in Texas. The primary agreement is a five-year lease, pursuant to which ArborGen will lease the TTT nursery and seed orchard properties located in Texas, and gives ArborGen the right to acquire the leased properties for US$2.5 million payable upon the expiration of the 5-year lease period. The lease agreement) increases ArborGen’s annual nursery production capacity and sales by approximately 30 million seedlings per annum effective from the production season beginning 1 April 2019, and also immediately expands our productive seed-orchard capacity (including advanced genetics seed) in the important Texas region. Related to this, ArborGen also entered into an exclusive multi-year agreement to supply TTT all of its Texas seedling requirements for an initial term of five years, with term-renewal periods thereafter.

We are pleased to report that the integration of these two new nurseries is now largely complete, which has extended our production platform, in turn extending our reach and allowing us to be more competitive for customers in the markets those nurseries serve.

Rubicon and ArborGen are now “One-Company”

As explained earlier, the implementation of the One-Company approach to managing Rubicon and ArborGen saw planned changes in Rubicon’s and ArborGen’s management over the period, amongst them the departure of Luke Moriarty, Mark Taylor and Bruce Burton. Each made extensive contributions to Rubicon over their tenure and were involved with Rubicon since its founding. They devoted tremendous time, energy and commitment to the Company on behalf of all of the Company's shareholders, for which we are very thankful. We wish the best for them in their future endeavours.

To conclude, Rubicon and ArborGen have gone through a period of tremendous change over the last year. With that process now complete, we believe the foundation is firmly established for the Company to offer increasing value to shareholders in the future.

As always, I would like to thank all our stakeholders for their continued support – it is very much appreciated.

Sincerely,

Dave Knott
Chairman (on behalf of the Board)

29 May 2019

[1] Reported cash from operating activities $4.1 million: add back restructuring cash cost $1.5 million, transaction-related costs $1.0 million and one-company cost savings $0.8 million (salaries) to give normalised operating cash of $7.4 million.

[2] Refer to note 30 Non-GAAP measures and Pro-Forma.

[3] Non-GAAP information does not have a standardised meaning prescribed by GAAP, and may not be comparable to similar financial information presented by other entities. EBITDA (i.e. Earnings before Interest, Taxation, Depreciation and Amortisations) is a non-GAAP measure. 'US-GAAP underlying earnings' is a non-GAAP earnings figure. It can be reconciled to our IFRS Net Earnings figure as per Note 30 to these Financial Statements.

Rubicon Limited and Subsidiaries
Consolidated Income Statement
For the year ended 31 March 2019

		RUBICON GROUP	
	Notes	Year ended March 2019 US$m	6 Months March 2018 US$m
Revenue	24	49.1	35.4
Cost of sales	7	(32.0)	(20.4)
Gross profit		17.1	15.0
Change in fair value of biological assets	11	0.8	(3.4)
Administration expense	7	(16.8)	(9.2)
Operating earnings excluding items below		1.1	2.4
Impairment	7	-	(0.8)
Restructuring and transaction-related expenses	7	(4.1)	(0.6)
Gain on sale		0.5	-
Operating earnings (loss) before financing expense		(2.5)	1.0
Financing expense		(2.2)	(1.4)
Earnings (loss) before taxation		(4.7)	(0.4)
Tax benefit	8	0.5	2.6
Net earnings (loss) after taxation from continuing operations		(4.2)	2.2
Net earnings after taxation from discontinued operations	31	(0.1)	(0.4)
Net Earnings / (loss)		(4.3)	1.8

Basic/diluted earnings (loss) per share information (cents per share)	(0.9)	0.4
Continuing operations	(0.8)	0.5
Weighted average number of shares outstanding (millions of shares)	496.9	488.0

The accompanying notes form part of, and are to be read in conjunction with, these financial statements.

Rubicon Limited and Subsidiaries
Consolidated Statement of Comprehensive Income
For the year ended 31 March 2019

		RUBICON GROUP	
		Year ended March 2019 US$m	6 Months March 2018 US$m
Net Earnings		(4.3)	1.8
Items that may be reclassified to the Consolidated Income Statement:			
Movement in currency translation reserve	19	(0.8)	(0.1)
Other comprehensive income (net of tax)		(0.8)	(0.1)
Total comprehensive income / (expense)		(5.1)	1.7
Total comprehensive income attributable to:			
Rubicon shareholders		(5.1)	1.7
Minority shareholders		-	-
Total comprehensive income		(5.1)	1.7

Rubicon Limited and Subsidiaries
Statement of Changes in Equity
For the year ended 31 March 2019

		RUBICON GROUP	
	Notes	Year ended March 2019 US$m	6 Months March 2018 US$m
Total comprehensive income		(5.1)	1.7
Movement in Rubicon shareholders' equity:			
Issue of shares	18	-	-
In share based payment reserve	18 & 19	1.3	-
Movement in minority shareholders' equity:			
Disposal of TCLP minority	20	-	(7.5)
Deconsolidation of Tenon minority	20	-	(2.0)
Distribution paid by TCLP	20	-	(0.9)
Total movement in shareholder equity		(3.8)	(8.7)
Total movement in shareholder equity attributable to:			
Rubicon shareholders' equity		(3.8)	1.7
Minority shareholders' equity		-	(10.4)
Opening equity attributable to:			
Rubicon shareholders		151.4	149.7
Minority shareholders		-	10.4
Opening total Group equity		151.4	160.1
Closing equity attributable to:			
Rubicon shareholders		147.6	151.4
Minority shareholders	20	-	-
Closing Total Group Equity		147.6	151.4

The accompanying notes form part of, and are to be read in conjunction with, these financial statements.

Rubicon Limited and Subsidiaries
Consolidated Statement of Cash Flows
For the year ended 31 March 2019

	Notes	RUBICON GROUP Year ended March 2019 US$m	 Re-presented[1] 6 Months March 2018 US$m
Cash was provided from operating activities			
Receipts from customers		51.4	28.1
Cash provided from operating activities		51.4	28.1
Payments to suppliers, employees and other		(47.3)	(24.6)
Cash (used in) operating activities		(47.3)	(24.6)
Net cash from (used in) operating activities		4.1	3.5
Sale of assets		0.8	-
Investment in fixed assets	13	(2.7)	(0.3)
Deferred settlement		(10.0)	(5.0)
Investment in intellectual property	14	(4.7)	(2.7)
Net cash from (used in) investing activities		(16.6)	(8.0)
Debt drawdowns		9.0	5.4
Debt repayment		(18.9)	(7.4)
Interest paid		(2.1)	(1.4)
Net cash from (used in) financing activities		(12.0)	(3.4)
Net cash from discontinued operations	31	2.4	5.9
Net movement in cash		(22.1)	(2.0)
Opening cash, liquid deposits and restricted cash		29.0	31.2
Effect of exchange rate changes on net cash		0.3	(0.2)
Closing Cash, Liquid Deposits and restricted cash		7.2	29.0
Net Earnings		(4.3)	1.8
Adjustment for:			
Financing expense		2.1	1.4
Depreciation and amortisations	7	8.7	4.3
Taxation		(0.5)	(2.6)
Foreign exchange		(0.5)	(0.1)
Change in fair value of biological assets		(0.8)	3.4
Other non cash items		0.5	0.9
Cash flow from operations before net working capital movement		5.2	9.1
Trade and other receivables		(1.4)	(4.6)
Inventory		(3.7)	0.4
Trade and other payables		4.0	(1.4)
Net working capital movement		(1.1)	(5.6)
Net cash from operating activities		4.1	3.5

(1) The 6 months ended 31 March 2018 has been re-presented to show cash flows from discontinued operations separatel

The accompanying notes form part of, and are to be read in conjunction with, these financial statements.

Rubicon Limited and Subsidiaries
Consolidated Balance Sheet
As at 31 March 2019

		RUBICON GROUP	
		March 2019	March 2018
	Notes	US$m	US$m
Current assets			
Cash and liquid deposits	9	3.2	23.0
Trade and other receivables	10	9.1	10.0
Inventory	11	29.4	24.8
Total current assets		41.7	57.8
Non current assets			
Restricted cash	9 & 17	4.0	6.0
Fixed assets	13	42.7	43.3
Intellectual property	14	105.6	106.7
Total non current assets		152.3	156.0
Total assets		194.0	213.8
Current liabilities			
Trade, other payables and provisions	16	(14.5)	(10.4)
Current lease obligation	22	(0.8)	(0.7)
Current debt	17	(0.5)	(15.1)
Deferred settlement	15	-	(10.0)
Total current liabilities		(15.8)	(36.2)
Term liabilities			
Term debt	17	(16.5)	(11.1)
Finance lease obligation	22	(11.2)	(11.7)
Deferred taxation liability	12	(2.9)	(3.4)
Total term liabilities		(30.6)	(26.2)
Total liabilities		(46.4)	(62.4)
Net Assets		147.6	151.4
Equity			
Share capital	18	201.0	201.0
Reserves	19	(53.4)	(49.6)
Total Group Equity		147.6	151.4
Net Asset Backing	29	US 30 cps	US 31 cps

Dave Knott Jr
Chairman of the Board

Paul Smart
Audit Committee Chairma

29 May 2019

Both of the above signatories certifies that these financial statements comply with generally accepted accounting standards and present a true and fair view of the financial affairs of the Rubicon Group.

The accompanying notes form part of, and are to be read in conjunction with, these financial statements.

1 GENERAL INFORMATION

Rubicon Limited (Rubicon) is an international forestry business. Rubicon, a limited liability company incorporated and domiciled in New Zealand, is listed on the New Zealand stock exchange. As at 31 March 2019 Rubicon had one investment ArborGen Inc (ArborGen) (95% economic interest (with 5% warrants outstanding relating to ArborGen's acquisition of Cellfor), and 100.0% voting interest and ownership of common stock).

Last reporting period Rubicon changed its balance date to 31 March (from 30 September), to align with that of its subsidiary ArborGen. Accordingly, the comparative financial statements presented are for the six months from 1 October 2017 to 31 March 2018.

The change in balance date has also created comparison issues in relation to the earnings of ArborGen. This is because the six month period to 31 March 2018 includes all the US revenue, due to timing of revenue recognition, whilst only costs relating to that half of the year are reported. The six month results makes any year-on-year comparisons problematic (refer to notes 11 Inventory and 30 Non GAAP measures and Pro-Forma for more detail).

2 APPROVAL OF ACCOUNTS

These consolidated financial statements have been prepared on a consolidated Group basis and were approved for issue by the Board of Directors on 29 May 2019.

3 BASIS OF PRESENTATION

The financial statements presented are those of Rubicon Limited (the Company) and Subsidiaries (the Group).

Basis of preparation
The Company is a FMC reporting entity for the purposes of the Financial Reporting Act 2013 and Financial Markets Conduct Act 2013.

The presentation currency used in the preparation of these financial statements is United States dollars (US$), rounded to the nearest hundred thousand dollars.

Statement of compliance
The financial statements have been prepared in accordance with New Zealand International Financial Reporting Standards (NZ IFRS) and other applicable financial reporting standards. The financial statements are in compliance with International Financial Reporting Standards (IFRS). The Group has designated itself as a profit-oriented entity for the purposes of compliance with NZ IFRS.

The financial statements have been prepared in accordance with the requirements of the Financial Reporting Act 2013, Financial Markets Conduct Act 2013 and the Companies Act 1993 and comply with generally accepted accounting practice in New Zealand (NZ GAAP).

Chief operating decision-makers
Rubicon's 'chief operating decision-makers' are the Board of Directors who jointly make strategic decisions for Rubicon.

4 SIGNIFICANT ACCOUNTING POLICIES

Accounting Policies
All significant accounting policies are set out on the following pages. Other than the first time adoption of NZ IFRS 15 *Revenue from Contracts with Customers* (NZ IFRS 15) and NZ IFRS 9 *Financial Instruments* (NZ IFRS 9), there have been no changes made to accounting policies during the year.

NZ IFRS 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. This new standard replaces the guidance in NZ IAS 18 *Revenue* (NZ IAS 18), which covers revenue from contracts for goods and services.

The Company has adopted NZ IFRS 15 using the modified retrospective method, with the effect of initially applying this standard recognised at the date of initial application at 1 April 2018. Accordingly, the information presented for 2018 has not been restated. It is presented, as previously reported, under NZ IAS 18 and related interpretations. There has been no change in the timing of revenue recognition as a result of adopting NZ IFRS 15.

NZ IFRS 9 sets out requirements for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. This standard replaces NZ IAS 39 *Financial Instruments: Recognition and Measurement* (NZ IAS 39).

The Company has applied the transition requirements of NZ IFRS 9. The Company has assessed that the new classification and measurement requirements will not have a material impact on its balance sheet or equity. Accordingly, the information presented for 2018 has not been restated.

Use of Estimates and Judgement
The preparation of financial statements in conformity with NZ IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the

reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. The principal areas of judgement in preparing these financial statements are:

Investment impairment (notes 15)
The carrying value of investments is assessed at least annually to ensure there is no impairment. Performing these assessments generally requires management to estimate future cash flows to be generated by the investment, which entails making judgements about the expected future performance and cash flows of the investment and the appropriate discount rate to apply when valuing future cash flows. The carrying value of assets acquired are also effected by the estimates and judgements applied to capitalisation of developmental expenditure and the adopted amortisation policy.

Basis of Consolidation

Subsidiaries
Subsidiaries are entities that are controlled, either directly or indirectly, by the Company. Control exists when the Parent has the power, directly or indirectly, to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, potential voting rights that presently are exercisable or convertible are taken into account. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. ArborGen is a subsidiary of Rubicon Limited. Following Tenon entering in voluntary liquidation in December 2017, Tenon no longer meets the definition of a subsidiary and consequently it has been deconsolidated. After the sale of Rubicon's interest in TCLP, in January 2018, it is no longer a subsidiary.

Transactions and balances between subsidiaries or between the Parent and subsidiaries are eliminated on consolidation.

Functional Currency

Foreign operations
Items included in the financial statements of each entity in the Group are measured using the currency that best reflects the economic substance of the underlying events and circumstances relevant to that entity (the functional currency). The consolidated financial statements are presented in US$ (the presentation currency).

The assets and liabilities of all of the Group companies that have a functional currency that differs from the presentation currency, including goodwill and fair value adjustments arising on consolidation, are translated to the presentation currency at foreign exchange rates ruling at balance date. All exchange differences arising from the translation of foreign operations are recognised in the foreign currency translation reserve.

Transactions
Transactions in currencies other than the functional currency are translated at the foreign exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in currencies other than the functional currency at balance date are translated to the functional currency at the foreign exchange rate ruling at that date, with foreign exchange differences arising on translation being recognised in the income statement. Non-monetary assets and liabilities that are measured in terms of historical cost in a currency other than the functional currency are translated using the exchange rate at the date of the transaction. Non-monetary assets and liabilities that are stated at fair value in a currency other than the functional currency are translated using the exchange rate ruling at the date the fair value was determined.

Valuation of Assets
Land, buildings, plant and equipment
Land, buildings, plant and equipment are stated at historical cost less accumulated depreciation and impairment. Land is not depreciated. Depreciation on other fixed assets is calculated using the straight-line method. Expected useful lives are:

Buildings	25 years
Plant and equipment	3 to 15 years

Inventory
Trading inventory, raw materials and work in progress are valued at the lower of cost or net realisable value. Cost includes direct costs and overheads at normal operating levels, and excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business, less applicable variable selling costs.

Biological assets (such as seedlings or treestocks) are measured at the end of each reporting period at their fair value less costs to sell. Fair value is the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date.

Intellectual property
Intellectual property is amortised over the useful life of the assets. Intellectual property relates primarily to output from ArborGen's research and development activities and is reviewed at least annually for impairment, and otherwise is amortised (on average) over 20 years. The useful life is reviewed each balance date and adjusted if appropriate.

Trade and other receivables
Trade receivables are initially recognised at fair value and subsequently measured at amortised cost using the effective interest method, less any provision for expected credit losses.

The Company applies the simplified approach to measuring expected credit losses which uses a lifetime expected credit loss allowance for all trade receivables as they all display the same risk profile. The measurement of expected credit losses is a function of the probability of default, loss given default and the exposure at default. The Company considers an event of default as occurring when information obtained (internally and externally) indicates a debtor is unlikely to pay its creditors including the Company. The assessment of the probability of default and loss given default is based on historical data adjusted by forward looking information relating to the debtor and general economic conditions of the debtors. As for the exposure at default, this is represented by the assets' gross carrying amount at the reporting date.

Cash and cash equivalents
Cash and cash equivalents comprises, cash balances and call deposits. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are included as a component of cash and cash equivalents for the purpose of the statement of cash flows.

Assets held for sale and discontinued operations
Assets held for sale are assets whose carrying value will be recovered principally through sale rather than through continuing use. Assets held for sale are stated at the lower of their carrying amount and fair value less costs to sell and are not depreciated or amortised while they are classified as held for sale.

A discontinued operation is a component of the Group's business that represents a separate major line of business. Classification as a discontinued operation occurs upon disposal or when the operation meets the criteria to be classified as held for sale, if earlier.

Impairment
The carrying amounts of the Group's assets are reviewed regularly, including at each reporting date, to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated and whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount, an impairment loss is recognised. Impairment losses are recognised in the income statement.

Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to cash-generating units, and then to reduce the carrying amount of other assets in the cash-generating unit on a pro-rata basis.

The recoverable amount of non-financial assets is the greater of their fair value less costs to sell or value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a post-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate largely independent cash flows, the recoverable amount is determined for the cash-generating unit to which the asset belongs. With the exception of goodwill, an impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

Valuation of Liabilities

Trade and other payables
Trade and other payables are stated at cost.

Provisions
A provision is recognised in the balance sheet when the Group has a present legal or constructive obligation as a result of a past event, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are measured at the Group's best estimate of the expenditure required to settle the present obligation. Provisions are determined by discounting the expected future cash flows at a rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability.

Interest-bearing borrowings
Interest-bearing borrowings are recognised initially at fair value less attributable transaction costs. Subsequent to initial recognition, borrowings are stated at amortised cost with any difference between cost and redemption value being recognised in the income statement over the period of the borrowings on an effective interest rate basis.

Deferred income tax
Deferred income tax is provided in full, using the balance sheet method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. The deferred income tax is not accounted for if it arises from

initial recognition of an asset or liability in a transaction, other than a business combination, that at the time of the transaction affects neither accounting, nor taxable, profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the balance date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled. The measurement of deferred taxation assets and liabilities reflects the tax consequences that would follow from the manner that the Group expects, at balance date, to recover or settle the carrying amount of its assets and liabilities. Deferred income tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Income Determination

Revenue recognition
Revenue is measured based on consideration specified in a contract with a customer and is recognised when control over a good or service transfers to a customer. Revenue excludes amounts collected on behalf of third parties and is net of any value added tax, rebates, returns and discounts, and after eliminating sales within the Group.

The Group's revenues are earned from the sale of seedlings or treestocks and logistics services to some customers. Seedling or Treestock revenue is recognised, either when the goods are dispatched or when goods have reached their destination, depending on the terms and agreements with customers and when documentary evidence supports the customer taking ownership and control of the product. Logistics revenue is recognised over the period the service is provided.

The adoption of NZ IFRS 15 did not have a significant impact on the Group's revenue recognition.

Goods sold
Revenue from the sale of goods is recognised in the income statement when control over a good or service transfers to a customer. Products are generally sold with volume discounts and customers have a right to return faulty product. Sales are recorded based on the price negotiated with the customer, net of estimated volume discounts and returns. Historical experience is used to estimate the level of returns likely and volume rebates are calculated on a preset formula.

Investment income
Interest income is recognised in the income statement as it accrues, using the effective interest method. Dividend income is recognised in the income statement on the date the Group's right to receive payment is established.

Finance expense
Finance expenses comprise interest payable on borrowings calculated using the effective interest rate method.

Leasing commitments
The Group leases certain plant, equipment, land and buildings. Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Operating lease payments are charged to the income statement in the periods of expected benefit.

Leases in which the Group assumes substantially all the risks and rewards of ownership are classified as finance leases. Upon initial recognition the leased asset is measured at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the asset, leased under a finance lease, is accounted for in accordance with the accounting policy applicable to that asset.

Research and development costs
All research costs are recognised as an expense when incurred. When a project reaches the stage where it is reasonably certain that further expenditure can be recovered through the processes or products produced, development expenditure is recognised as a development asset. The asset is amortised from the commencement of commercial production of the product to which it relates, over the period of expected benefit.

Income tax
Income tax on the profit or loss for the year comprises current and deferred tax. Income tax is recognised in the income statement except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantially enacted at balance date, and any adjustment to tax payable in respect of previous years.

Employee Benefits

Share-based payments
The grant-date fair value of equity-settled share-based payment arrangements granted to employees is generally recognised as an expense, with a corresponding increase in equity, over the vesting period of the awards.

Segmental Reporting
Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-makers. The Group has one reportable segment, being forestry genetics (ArborGen). Previously the Group also had the appearance and wood products (Tenon Clearwood) segment. The Group's geographical segments are based on both the location of customers and primary location of assets (refer to note 24 segmental information summary).

Goods and Services Tax
The income statement and statement of cash flow have been prepared exclusive of goods and services taxation.

Comparatives
Changes in prior year disclosure comparatives have been made to align with the current year presentation.

Future NZ IFRS Pronouncements

Standards or interpretations issued but not yet effective and relevant to the Group.

The International Accounting Standards Board has issued a number of standards, amendments and interpretations which are not yet effective and which may have an impact on the Group's financial statements. None of these have been early adopted: NZ IFRS 16 Leases (NZ IFRS 16) NZ IFRS 16 is effective for annual periods beginning on or after 1 January 2019. The standard deals with the recognition, measurement, presentation and disclosure of leases and replaces the current guidance in NZ IAS 17 Leases (NZ IAS 17). The new standard introduces a single model for lessees which recognises all leases on the balance sheet through an asset representing the rights to use the leased item during the lease term and a liability for the obligation to make lease payments. This removes the distinction between operating and finance leases and aims to provide users of the financial statements relevant information to assess the effect that leases have on the balance sheet, income statement and cash flows of the reporting entity.

The Group reviewed leases where the Group is the lessee and these leases primarily relate to leases for land, farm equipment and vehicles, and to use the modified retrospective approach with the right-of-use (ROU) asset being equal to the lease liability as at date of initial application for all existing leases at 1 April 2019.

The ROU assets are subsequently depreciated using the straight line method over the shorter of the estimated useful lives of the ROU assets or the remaining estimated lease term. The estimated useful lives of ROU assets are determined on the same basis as similar owned assets within property, plant and equipment. The lease liabilities are initially measured at the present value of the unpaid lease payments at date of initial application, discounted using a single discount rate for all leases. The discount rate used are the Group's incremental borrowing rates, which is similar to the Group's term borrowing rate.

The estimated impact of adopting NZ IFRS 16 for the period beginning 1 April 2019 with respect to leases previously treated as operating leases is a ROU assets $3.3 million and a lease obligation of $3.3 million being included on the balance sheet, and in the cash flow, decreased cash used in operating activities of $0.9 million and increased cash used in financing activities by the same amount. The estimated impact on the income statement is not material.

Further, leases currently treated as finance leases (note 13) will be reclassified as ROU assets.

There are other standards, amendments and interpretations which have been approved but are not yet effective. The Group expects to adopt other standards when they become mandatory. None are expected to materially impact the Group's financial statements, although may result in change in disclosure.

5 FINANCIAL RISKS

The Group's principal asset is its investment in ArborGen.

This note presents information about the Group's potential exposure to financial risks that the Group has identified; the Group's objectives, policies and processes for managing those risks; the estimation of fair values of financial instruments; and the Group's management of capital. Quantitative disclosures of some of the key financial risks are made below.

5.1 ArborGen

ArborGen has exposure to financial risks which are actively assessed and managed.

5.1(a) Foreign exchange risk

ArborGen is a US functional currency business, which operates in three geographies – the United States, Brazil and Australasia. Australasian operations are self-sufficient from a funding perspective, and generally there are no cash flows between Australasia and the US. Accordingly, the foreign exchange risk in Australasia is limited to the translation effect on its earnings and balance sheet from movements in the USD against the NZD and AUD. Similarly, the Brazil operations are to a large degree internally self-sufficient from a funding perspective, and in addition there has been a link between the Reais and the USD, which has largely limited the effect of relative currency movements to their translation impacts. There are no transactions in the US operations in a currency other than the USD.

5.1(b) Credit risk

ArborGen is at risk of customer default on payment for treestocks at the conclusion of a growing season. ArborGen mitigates this risk by dealing with a wide-range of customers in multiple markets and by securing up-front deposits from selected customers for the treestocks it grows each year. The nature of ArborGen's activity is that its customers tend to require yearly repeat business, and historically customer payment defaults have not been material to ArborGen's business. However, in the US market (ArborGen's largest market), as treestock orders are not considered to be unconditional until late in the season each year, there remains the risk that orders cancelled prior to collection may not be able to be sold to other customers during the remaining season.

5.1(c) Liquidity risk

ArborGen has banking facilities (in total $28 million (2018: $27 million)) with two banks in the United States. One of these facilities, a $11.0 million reducing loan, matures in May 2036 and the other, a $17 million revolver, expires in August 2020. These facilities are used to fund ArborGen's working capital and capital expenditure needs in its US activities. In December 2018 ArborGen NZ renewed a NZ$1.5 million line of credit facility, which is subject to renewal on an annual basis, which is used to fund its Australasian operations. If any of these facilities were not to be renewed then ArborGen would need to obtain similar facilities from other banks, or an equivalent amount of funding would need to be supplied by Rubicon, or through an ArborGen capital raising event. None of these ArborGen bank facilities have recourse to Rubicon Limited.

5.1(d) Interest rate risk

ArborGen's $11.6 million facility is at a fixed interest rate. Its US revolver facility is LIBOR + a margin, and is currently fully floating. The mix of fixed and floating in these two facilities balances ArborGen's relative US interest rate risk. This position is regularly reassessed based on underlying macro-economic conditions and ArborGen's cash flow projections.

5.2 Rubicon Limited

Rubicon's capital includes share capital, reserves and retained earnings, and Rubicon manages capital in such a manner as to maintain stakeholder confidence and safeguard Rubicon's ability to continue as a going concern, whilst also maximising the return for shareholders and sustaining resources for the future development of the business. In order to maintain or adjust the capital structure Rubicon may, pay dividends or return capital, or issue new shares or sell assets.

Liquidity risk management requires the maintenance of available cash combined with the availability of funding to meet the Company's needs as they develop. Rubicon prepares forecasts of its cash requirements and ensures it has financial resources in place to meet its day-to-day operating and investment needs.

In addition to the financial risks applicable to ArborGen, Rubicon is exposed to financial risk with respect to its cash and short-term deposits. At balance date Rubicon Limited had no borrowings (and $1.7 million in cash (2018: cash $14.0 million). Its cash is held in its functional currency, i.e. US dollars. It believes these resources will be sufficient to meet its funding needs through to 31 March 2020.

6 REPORTING CURRENCY

Rubicon reports in United States dollars (US$), consequently all financial numbers are in US$ unless otherwise stated.

7 OPERATING EXPENSES INCLUDE

		RUBICON GROUP	
	Refer to note	Year ended March 2019 US$m	6 Months March 2018 US$m
Depreciation and amortisations included in:			
Cost of sales expense		(1.7)	(1.0)
Distribution expense			
Administration expense: intellectual property	14	(5.8)	(2.6)
Other		(1.2)	(0.7)
Total depreciation and amortisations		(8.7)	(4.3)
Cost of inventory expensed in cost of sales		(32.0)	(20.4)
Employee related expenses (excluding restructuring and transaction-related expenses)		(18.7)	(11.6)
Transaction-related expenses incurred by ArborGen in relation to Rubicon acquisition	23	(1.0)	(0.6)
Restructuring expense (1)	18, 19, 23 & 25	(3.1)	-
Restructuring and transaction-related expenses		(4.1)	(0.6)
Impairment relating to the rationalisation of ArborGen's New Zealand varietal programme		-	(0.8)

(1) Restructuring expense includes severance payments made, and yet to be made, to former ArborGen and Rubicon employees ($1.8 million), plus the costs relating to settlement reached with the former CEO and CFO ($1.3 million; allotting 9 million new shares plus cash payments).

Expenses incurred also includes payments made and accrued for:

- Directors fees for non-executive Directors of Rubicon for the current period of $250,000 (paid in NZ$367,250) (2018 for six months: $163,000 (paid in NZ$207,636)). In addition non-executive Directors participate in a Directors share plan, $148,344 was accrued in relation to this share plan (NZ$218,156) (2018: nil). (refer to notes 18, 19 and 25)
- The statutory audit of the annual financial statements in the current period; for Rubicon $61,000 (Deloitte) (2018: $72,000 KPMG) and ArborGen $150,000 (Deloitte) (2018: $150,000 KPMG).
- Other services provided by the auditors for Rubicon in the current period were less than $27,000 (Deloitte) (2018: less than $27,000 KPMG), which include attendance at the annual meetings and agreed upon procedures relating to financial reporting and employment matters.
- Refer to Reporting and Disclosure and Auditors in the Corporate Governance section of the Annual Report for commentary on the Audit Committee process in managing the relationship with the Auditor and confirming their independence.
- In August 2018, following a competitive tender the Board appointed Deloitte to provide Audit services, prior to this KPMG were the Group Auditors.

8 INCOME TAX EXPENSE

	RUBICON GROUP	
	Year ended March 2019 US$m	6 Months March 2018 US$m
Earnings (loss) before taxation	(4.7)	(0.4)
Taxation at 28%	1.3	0.1
Adjusted for:		
Change in deferred tax liability	0.6	2.6
Net taxation losses not recognised	(1.4)	(0.1)
Taxation (expense)/benefit	0.5	2.6

9 CASH, LIQUID DEPOSITS AND RESTRICTED CASH

At 31 March the Group held total cash, liquid deposits and restricted cash of $7.2 million (2018: $29.0 million) comprising cash held by: Rubicon $1.7 million (2018 $14.0 million), restricted cash of $4.0 million on deposit with Synovus to secure the ArborGen debt facility (2018: $6.0 million) (refer to note 17) and ArborGen $1.5 million (2018: $9.0 million).

10 TRADE AND OTHER RECEIVABLES

	RUBICON GROUP	
	March 2019 US$m	March 2018 US$m
Trade debtors	7.7	6.3
Prepayments	1.2	1.0
Other receivables (1)	0.2	2.7
Trade and other receivables	9.1	10.0

(1) The March 2018 balance included the estimated realisable value of Rubicon's net investment in Tenon Limited (in liquidation) of $2.6 million as a receivable, $2.4 million was received in July 2018 and unrealised Tenon liquidation proceeds written down to $0.1 million at year end (refer to notes 20 and 26).

11 INVENTORY

	RUBICON GROUP	
	March 2019 US$m	March 2018 US$m
Finished goods - seedlings	1.0	0.7
Work in progress - seedlings (1)(4)	7.3	7.2
Finished goods - seed	13.4	11.7
Work in progress - seed (2)	6.2	4.5
Fair value on biological assets (3)(4)	1.5	0.7
Inventory	29.4	24.8

(1) Work in progress - seedlings, is principally growing seedling crop.

(2) Work in progress - seed, is principally harvesting seed to be sown as a future crop.

(3) Fair value adjustment on biological assets reflects the change in fair value less costs to sell of biological assets (seedlings) as at balance date.

(4) Seedlings in progress are treated as biological assets for financial reporting purposes and are recognised at fair value less costs to sell, $8.8 million (2018: $7.9 million). Biological assets will be transferred to finished goods seedlings at lifting, for dispatch to customers and sale.

Fair value adjustment on biological asset	March 2019 US$m	March 2018 US$m
Opening balance	0.7	4.1
Change in fair value of biological assets recognised in income statement		
Fair value change for crop to be lifted in the coming period	1.5	0.7
Reversal of prior period fair value change	(0.7)	(4.1)
Change in fair value of biological assets recognised in income statement	0.8	(3.4)
Closing fair value uplift biological asset	1.5	0.7

The change in balance date from September 2017 to March 2018 effected the fair value adjustment because of where (which geography) the crops were established and were fair valued as a consequence. At 30 September 2017 only the US crop (which was lifted prior to 31 March 2018) was established and fair valued, this fair value was reversed in March 2018. At both 31 March 2018 and 31 March 2019, only the Australasian crops was established and fair valued. The Australasian crops are primarily lifted from late May through until September each year.

12 TAXATION

Deferred taxation (liability)

	Refer to note	RUBICON GROUP	
	Refer to note	March 2019 US$m	March 2018 US$m
Opening provision for deferred taxation		(3.4)	(6.0)
Change in liability due to change in United States tax rate (1)		-	2.6
Current taxation (expense)/benefit in the income statement	8	0.5	-
Deferred taxation (liability)		(2.9)	(3.4)

(1) In January 2018 the Tax Cuts and Jobs Act was enacted in the US. One of the effects of this Act is to reduce the Federal corporate tax rate down from 35% to 21%. This resulted in a reduction in the deferred tax liability balance in relation to ArborGen's US activities (deferred taxation relates to timing differences on intellectual property and product development).

NZ IFRS only allows the recognition of taxation assets when utilisation is considered probable, which is subject to the future earnings of the Group and on meeting shareholder continuity and loss carry forward expiry dates. The Group had taxation losses (gross after valuation adjustments) at 31 March 2019 of $86.2 million, predominately in the United States (2018: $85.3 million). Following the Rubicon acquisition of ArborGen INC, tax loss utilisation in ArborGen, of it's unrecognised losses of $29.5 million, is limited to $1.4 million per annum (gross) on pre-acquisition losses of $26.9 million. Rubicon has unrecognised tax losses in New Zealand of $33.4 million (2018: $33.3 million) and in the US of $23.3 million (2018: $23.3 million). Future utilisation of Rubicon's US losses is less certain than those of ArborGen INC. Rubicon also has imputation credits available to Rubicon shareholders of $3 million (2018: $3 million).

13 FIXED ASSETS

	RUBICON GROUP	
	March 2019 US$m	March 2018 US$m
Cost		
Land	15.3	15.7
Buildings	11.1	10.8
Building - finance lease	13.4	13.0
Plant and equipment	7.0	5.7
Total cost	46.8	45.2
Accumulated depreciation		
Buildings	(1.2)	(0.6)
Building - finance lease	(1.9)	(0.8)
Plant and equipment	(1.0)	(0.5)
Total accumulated depreciation	(4.1)	(1.9)
Net book value		
Land	15.3	15.7
Buildings	9.9	10.2
Building - finance lease	11.5	12.2
Plant and equipment	6.0	5.2
Fixed assets net book value	42.7	43.3
Domicile of fixed assets		
Australasia	9.7	9.6
United States	33.0	33.7
Fixed assets net book value	42.7	43.3

13 FIXED ASSETS continued

RUBICON GROUP

Fixed assets net book value	Land US$m	Buildings US$m	Building - finance lease US$m	Plant and equipment US$m	Total US$m
31 March 2018					
Opening net book value	19.7	14.6	12.7	14.7	61.7
Additions	-	0.3	-	-	0.3
Disposition of TCLP operations	(4.0)	(4.3)	-	(9.2)	(17.5)
Depreciation charge	-	(0.4)	(0.5)	(0.3)	(1.2)
Fixed assets net book value as at 31 March 2018	15.7	10.2	12.2	5.2	43.3
31 March 2019					
Opening net book value	15.7	10.2	12.2	5.2	43.3
Exchange differences	(0.2)	(0.2)	-	(0.2)	(0.6)
Additions	-	0.7	0.4	2.0	3.1
Disposition	(0.2)	-	-	-	(0.2)
Depreciation charge	-	(0.8)	(1.1)	(1.0)	(2.9)
Fixed assets net book value as at 31 March 2019	15.3	9.9	11.5	6.0	42.7

14 INTELLECTUAL PROPERTY

RUBICON GROUP

	Refer to note	March 2019 US$m	March 2018 US$m
Opening balance		106.7	106.6
Capitalisation during period		4.7	2.7
Amortisation during period	7	(5.8)	(2.6)
Intellectual property		105.6	106.7

15 ARBORGEN INVESTMENT AND IMPAIRMENT

In June 2017 Rubicon acquired the 66.66% of the ArborGen shares held by its two co-partners International Paper (IP) and WestRock (WR), and increased its ownership to 100% of ArborGen's issued share capital. There are warrants outstanding equal to 5% of the issued ArborGen share capital, which reduces Rubicon's effective economic exposure to ArborGen to 95%. These warrants arose out of ArborGen's purchase of Cellfor in 2012, and represent part-consideration for that acquisition. The warrants are automatically exercised, for no payment, upon an IPO of ArborGen, or alternatively at any time if 66.67% of the warrant holders so elect. The warrants can also be exercised by ArborGen, upon either a sale of substantially all of the ArborGen business or of a sale of 50.01% or more of ArborGen's share capital. In addition, the ArborGen senior management team hold options in respect of 4.5% (2018: 5.3% prior to restructuring) of ArborGen's issued share capital. These options are fully vested and can be exercised (subject to service conditions) by the holders, at $423 per share (5,640 options on issue), upon an IPO of ArborGen, a sale of substantially all of the assets of ArborGen, or upon a sale or restructuring event (including the issuance of new share capital to a third party) where following such event Rubicon holds less than a 50.01% ownership position.

We regularly review the carrying value of the ArborGen cash generating unit to determine whether there has been a subsequent change in circumstances or conditions that requires an impairment to be taken through earnings. Our impairment review is undertaken on a 'Value-in-use' (VIU) basis, which is the estimated value to be derived from our continued ownership and operation of the ArborGen business. Following Rubicon's acquisition of 100% of ArborGen, the Rubicon Board adopted a budget for the fiscal year ending 31 March 2019 and a 10-year Plan prepared by ArborGen and adopted by the Board in the 31 March 2018 fiscal year (i.e. the 2018 Plan) for ArborGen's business. The 2018 Plan served as inputs to the 31 March 2018 impairment review which utilised a DCF approach. The key sensitivity to test impairment last year was to apply a discount rate that is considerably higher than the discount rate we believe is applicable to ArborGen, to derive a low case value that equated to our carrying value of $132 million. (i.e. a nominal pre-tax discount rate of 26%)

Consistent with the approach taken in the prior year, our impairment analysis utilises a 10-year plus terminal DCF valuation model. We use a 10-year period rather than a shorter time period because ArborGen's advanced genetic products, in the US market (ArborGen's largest and most material market) are in the early stages of adoption, and hence this period of time is deemed appropriate to adequately capture the scale-up of advanced genetics supply and adoption in the US. The same holds true for ArborGen's Brazil position; where projected growth in advanced genetics sales, market share expansion and continued recovery in the forestry sector from its current depressed state, necessitate the use of a 10-year model. We use a DCF methodology because ArborGen's advanced product adoption profile does not lend itself to the application of short-term market multiple metrics to determine valuation, given the relatively early-stage of ArborGen's revenue, earnings and cash profile. With time these metrics will become directly applicable, but for now the Board believes a 10-year DCF approach is the most appropriate to use to assess impairment.

Our DCF impairment model values only the projected cash flows from ArborGen's existing core markets (i.e. Australia, New Zealand, United States and Brazil), with growth market opportunities outside of the core excluded from the analysis. Separate demand projections are determined for each geography and end-use market. ArborGen's total addressable seedling market for each geography is then estimated, as is seedling type, production technology employed, production cost and sales price.

Last year we ran sensitivities against the key financial drivers of a base case DCF model to ensure that there was no impairment of our carrying value. This year, our approach has instead been to utilise a set of cash flow assumptions that have already been sensitised for more conservative outcomes, particularly in the largest and most material market for ArborGen – the US (i.e. a conservative case is adopted for impairment testing, which implicitly takes into account the potential downsides). To highlight the assumptions that have been utilised to derive the Conservative Case, the model assumes -

- Limited organic growth in ArborGen's US loblolly market share outside of recent acquisitive growth – i.e. the growth that is assumed is derived primarily from recent acquisition activity already undertaken and in place – i.e. the Jasper nursery in Texas, and the Taylor nursery in Edgefield, South Carolina;

15 ARBORGEN INVESTMENT AND IMPAIRMENT continued

- A more modest recovery in the overall US loblolly market, with no assumed growth from the replanting of extensive timberland estates in the US South damaged by recent Hurricanes;
- No 'real' price increases in ArborGen US products despite the projected recovery in US saw timber prices supported by continued growth in US South sawmill capacity and saw timber demand, the introduction of higher value premium genetic products over the next 10 years, and continued US R&D investment of $4 million per annum rising to over $5 million per annum;
- That in the terminal year ArborGen's total advanced genetics seedlings sales in the US represent only 55% (primarily mass control pollinated (MCP) adoption) of its total US loblolly sales. This adoption rate is significantly lower than ArborGen's projected US MCP seed supply as younger seed orchards mature and near-term supply constraints are overcome, and compares with a NZ adoption rate of over 80% of sales in recent years;
- Limited recovery in the overall Brazilian eucalyptus forestry markets from current recessionary levels (i.e. the Conservative Case assumes total addressable eucalyptus market size that is only 55.5% of the 2018 Plan market size assumption by terminal year); and
- ArborGen's advanced genetics sales as a percentage of its total eucalyptus in Brazil dropping from the current 80+% to 77% in the terminal year.

These cash flows are then discounted at a cost of capital that reflects the underlying risk inherent in the cash flow assumptions. Specifically, the discount rate applied to the DCF analysis was calculated using a derived weighted average cost of capital (WACC), with the cost of equity calculated using the Capital Asset Price Model and the cost of debt based on the risk-free rate plus the option adjusted spread for BBB rated bonds. Specifically, we applied a derived nominal post-tax nominal WACC of 11.4% (i.e. pre-tax WACC of 13.5%).

The table below shows the conservative case assumptions and sensitivities for the critical US loblolly market compared with those used in last year's assessment. As an added sensitivity to test impairment, a change in discount rate is the simplest sensitivity to apply particularly given the conservative case DCF model assumes inputs at the conservative end of the spectrum of outcomes. In this instance, the post-tax WACC applied to the conservative case DCF model would need to increase to 15.4% (or pre-tax WACC of 18.0%) before an impairment would arise, which we do not believe is within a reasonable range given the sector ArborGen operates in, and the conservative nature of the inputs that underlie the Conservative case.

US$ millions	2019 Conservative Case	2018 Plan
US Loblolly Market - terminal year assumptions		
Loblolly market size - millions	905	1,032
ArborGen market share %	40.7%	39.8%
ArborGen unit sales - millions	368	411
% advanced genetics MCP	53%	55%
% advanced genetics Varietal	2%	10%
% traditional genetics	45%	35%
Change in MCP ASP (1)	-31%	
Total ArborGen valuation		
Terminal Growth rate (TGR) (2)	3.0%	3.8%
Nominal post-tax discount rate	11.4%	15.3%
Nominal pre-tax discount rate	13.5%	17.8%
ArborGen implied enterprise valuation (3)	$258.7	$382.0
less net debt	$23.5	$37.0
ArborGen equity valuation	$235.2	$345.0
Discount Rate Sensitivity		
Nominal post-tax discount rate	15.4%	22.0%
Nominal pre-tax discount rate	18.0%	26.0%
ArborGen equity valuation	$131.2	$131.8
Rubicon's carrying value of ArborGen	$131.2	
Terminal year sensitivities equity value impact	Equity value increased by	
Increase total market size - 25 million	$5.4	
Improvement market share by 1%	$4.8	
Increase advanced genetics adoption by 1%	$2.3	
Increase real MCP price by 5%	$10.0	

(1) The weighted average sale price (ASP) reflects the underlying MCP sales mix, assuming varying degrees of genetic gains (e.g. select, advanced, elite).
(2) A TGR of 3% in a 3% inflation environment equates to a 0% real TGR assumption.
(3) This represents the total ArborGen valuation and not just the US market.

16 TRADE, OTHER PAYABLES AND PROVISIONS

	RUBICON GROUP March 2019 US$m	RUBICON GROUP March 2018 US$m
Trade creditors	(6.6)	(4.2)
Accrued employee benefits (1)	(3.8)	(3.9)
Other payables	(0.5)	(0.3)
Seedling deposits from customers (2)	(3.6)	(2.0)
Trade, other payables and provisions	(14.5)	(10.4)

(1) Includes accrued expense relating to options issued to ArborGen Senior management in respect of 4.5% of ArborGen's issued share capital. (refer notes 15 and 25)
(2) The deposits from customers will be recognised as revenue within 12 months as the seedlings are transferred to the customer.

17 TERM AND CURRENT DEBT

	RUBICON GROUP	
Summary of repayment terms	March 2019 US$m	March 2018 US$m
Due for Repayment:		
Less than one year	(0.5)	(15.1)
between one and two years	(6.6)	(0.6)
between two and three years	(0.6)	(0.6)
between three and four years	(0.6)	(0.6)
between four and five years	(0.6)	(0.6)
after five years	(8.1)	(8.7)
Total term and current debt	(17.0)	(26.2)

Summary of Interest Rates by Repayment Period	March 2019	March 2018
	%	%
Due for Repayment:		
Less than one year	5.05%	4.74%
between one and two years	5.06%	4.95%
between two and three years	4.95%	4.95%
between three and four years	4.95%	4.95%
between four and five years	4.95%	4.95%
after five years	4.94%	4.95%
Current debt - weighted average interest rate	5.05%	4.74%
Term debt - weighted average interest rate	4.95%	4.95%

The weighted average interest rates reflect the effective interest rate, inclusive of fee amortisations.

Total debt facilities available	US$m
March 2019	29.0
March 2020	27.5
March 2021	9.9
March 2022	9.3
March 2023	8.7

ArborGen has three debt facilities with the following banks: Synovus Financial Corporation (Synovus) and AgSouth Farm Credit (AgSouth) in the United States, and Westpac New Zealand Limited (Westpac) in New Zealand.

ArborGen has a non-revolving promissory note issued to AgSouth originally for $12.6 million (current available $11.0 million) bearing interest at 4.95%, with a maturity date of 1 May 2036, which is secured against ArborGen's US real estate properties. Annual principal repayments of $0.6 million are due 1 May each year.

ArborGen's revolving facility agreement with Synovus, was favourably amended in September 2018, increasing the letter of credit (LOC) facility from $15 million to $17 million, and the term to 31 August 2020. In addition, Synovus requires that ArborGen maintain a certificate of deposit (restricted cash) of $4 million (2018; $6 million), with a further reduction down to $2 million, to occur in August 2019, provided ArborGen achieves $5 million of EBITDA (as defined in the debt agreement) for the fiscal year to 31 March 2019. The LOC bears interest at the 30 day LIBOR base rate plus 2.75%, subject to a minimum annual rate of 4.75%, and is collateralised by all the United States assets not otherwise pledged under the AgSouth agreement. The terms of the LOC limit borrowings to $6 million for a continuous 60 day period between 1 March and 31 August of each year. The credit agreements with both Synovus and AgSouth include a covenant, which requires ArborGen to maintain a minimum net worth of $24 million, which was met at 31 March 2019.

ArborGen New Zealand Unlimited (ArborGen NZ) had an agreement with Westpac for a multi option credit facility for an amount up to NZ$3.75 million, which was repaid in full on 1 November 2018, through the utilisation of Rubicon Limited's surplus cash funds, under the Group's one-company cash optimisation programme.
In December 2018 ArborGen NZ renewed a NZ$1.5 million line of credit facility, which is subject to renewal on an annual basis.
ArborGen had bank debt of $17.0 million (2018: $26.2 million) and lease liability of $12.0 million (2018: $12.4 million).

18 CAPITAL

	RUBICON GROUP	
Share capital	March 2019 US$m	March 2018 US$m
Share capital at the beginning of the period	201	201
Issue of shares (1) (3)	-	-
Share capital	201	201

Number of shares	March 2019	March 2018
Opening shares on issue	487,908,343	487,908,343
Issue of shares		
Director share plan (1) (2)	1,666,050	-
Number of shares on issue	489,574,393	487,908,343
Unissued shares (3)	9,000,000	
	498,574,393	487,908,343

Treasury stock	March 2019	March 2018
Opening shares on issue	-	-
Issue of shares (1) (2)	1,666,050	-
Number of shares on issue	1,666,050	-

(1) In accordance with the shareholders resolution passed at Rubicon's Annual Shareholders' meeting held on 17 September 2018, on 18 September 2018 Rubicon issued 1,666,050 new shares to the Rubicon Non-Executive Directors Share Plan (the Trust). The Trust will hold the shares on behalf of the three newly appointed Directors (Tom Avery, Ozey Horton, and Paul Smart, equally) until the vesting terms are met. The shares will vest, to each Director, in three equal tranches on the first, second and third anniversaries following the date of issue (18 September 2018), provided that the Director remains a Director of the Company on the relevant anniversary date. For the period ended 31 March 2019 the value of the share based payment is recorded in the share based payment reserve. (refer to notes 19 and 23 for share based payment information)

(2) The new shares were issued at the NZX 20-day market VWAP for Rubicon shares of NZ27.01 cents per share, for a total value of NZ$450,000. These shares are accounted for as treasury stock until vesting.

(3) On 29 March 2019 Rubicon, Luke Moriarty and Mark Taylor amicably agreed a settlement in relation to the finalisation of their roles. Rubicon agreed to make to Messrs Moriarty and Taylor (in the aggregate) a net cash payment of NZ$100,000 and an allotment of nine million Rubicon ordinary shares. Four million of these new shares were issued on 1 April 2019, with the balance (five million) of the issuance and allotment to be completed by 1 April 2022. (refer to notes 19 and 23 for share based payment information)

19 RESERVES

	RUBICON GROUP	
Retained earnings	March 2019 US$m	March 2018 US$m
Opening balance	(49.5)	(51.3)
Net earnings	(4.3)	1.8
Closing balance	(53.8)	(49.5)
Share based payments reserve		
Opening balance	-	-
Non-executive Directors share plan (1)	0.1	-
Executive settlement share plan (2)	1.2	-
Closing balance	1.3	-
Currency translation reserve		
Opening balance	(0.1)	-
Translation of independent foreign operations	(0.8)	(0.1)
Closing balance	(0.9)	(0.1)
Total reserves	(53.4)	(49.6)

(1) Under the Rubicon Non-Executive Directors Share Plan in the current period $148,344 was accrued in relation to the cost of the share plan (NZ$218,156) (2018: nil), which is recorded in the share based payment reserve.

(2) On 29 March 2019 Luke Moriarty and Mark Taylor amicably agreed a settlement in relation to the finalisation of their roles. Rubicon agreed to an allotment of nine million Rubicon ordinary shares to Messrs Moriarty and Taylor (in the aggregate). Four million of these new shares were issued on 1 April 2019, with the balance (five million) of the issuance and allotment to be completed by 1 April 2022. The fair value of these shares was recorded at settlement, on 29 March 2019 at the then share price of NZ$0.193 per share. The cost of this aspect of the settlement $1,179,000 (NZ$1,737,000) is recorded in the share based payment reserve.

20 EQUITY ATTRIBUTABLE TO MINORITY SHAREHOLDERS

	RUBICON GROUP	
	March 2019 US$m	March 2018 US$m
Opening balance	-	10.4
Disposal of TCLP minority (1)	-	(7.5)
Deconsolidation of Tenon minority (2)	-	(2.0)
TCLP distribution	-	(0.9)
Equity attributable to minority shareholders	-	-

(1) In December 2017 Rubicon entered an agreement to sell its interest in TCLP to entities related to Rubicon's two largest shareholders and Directors (David Knott and Ranjan Tandon) together with existing TCLP investors. This transaction was approved by shareholders at a special shareholders meeting on 12 January 2018, and the transaction was completed on 31 January 2018.

(2) In December 2017 Tenon Limited (in which Rubicon is a 59.78% shareholder) entered into voluntary liquidation. The loss of control of Tenon meant that it no longer meets the definition of a subsidiary and it has therefore been deconsolidated. Rubicon's net investment in Tenon is recorded at estimated realisable value in trade and other receivables (refer to note 10).

21 CAPITAL EXPENDITURE COMMITMENTS

In November 2018 ArborGen entered into agreements with TexMark Timber Treasury, L.P. (TTT) to manage TTT's nursery and seed orchard facility located in Texas, up until 31 March 2019. Post that (i.e. from 1 April 2019) the agreement converts to a lease of the TTT facility, which allows ArborGen the right to acquire the leased properties for $2.5 million payable upon the expiration of the 5-year lease period. ArborGen's current intention is to exercise the call option at the end of the lease period. This will allow ArborGen to increase its annual nursery production capacity and sales by approximately 30 million seedlings per annum (effective from the next production season beginning 1 April 2019 when the lease agreement takes effect), and also expand its productive seed-orchard capacity (including advanced genetics seed) in the Texas region. ArborGen has also entered into an exclusive multi-year agreement to supply TTT all of its Texas seedling requirements for an initial term of 5 years, with term-renewal periods thereafter.

As a consequence of the TTT lease agreement and ArborGen's intention to exercise the call option, ArborGen has a $2.5 million capital expenditure commitments as at 31 March 2019.

At 31 March 2018 Rubicon had an outstanding deferred settlement payments of $10 million in relation to the ArborGen acquisition, which was settled on 30 June 2018.

22 GROUP LEASE COMMITMENTS

The expected future minimum rental payments required under leases (including capitalised finance leases) that have initial or remaining non-cancellable lease terms in excess of one year at 31 March 2019 are as follows:

		RUBICON GROUP	
	Refer to note	March 2019 US$m	March 2018 US$m
Operating lease commitments are as follows:			
Within one year		(1.1)	(0.6)
Between one and five years		(2.2)	(1.6)
After five years		(1.2)	(1.3)
Total operating lease commitments		(4.5)	(3.5)
Finance lease commitments are as follows:			
Within one year		(1.7)	(1.7)
Between one and five years		(6.0)	(6.0)
After five years		(11.0)	(12.5)
Total finance lease commitments		(18.7)	(20.2)
Finance lease commitments are reconciled as follows:			
Current finance lease obligations	27	(0.8)	(0.7)
Term finance lease obligations	27	(11.2)	(11.7)
Future interest payments		(6.7)	(7.8)
Total finance lease commitments		(18.7)	(20.2)

ArborGen has a 20-year lease agreement over its research, development and headquarters facility at its head office complex in Ridgeville South Carolina, which commenced in February 2012. Under the terms of the lease ArborGen is obligated to pay annual rent of $1.4 million, and has an option to purchase the facility at the higher of market value or the landlord's investment plus 5%. This lease is treated as a finance lease under NZ IFRS, which means that both the lease asset and liability are capitalised on the balance sheet. Over the term of the lease the asset is depreciated and the lease liability is amortised.

In order to provide the necessary level of support required to have the facility developed, in 2012 each of the ArborGen partners agreed to guarantee $2 million (each) of ArborGen's future lease payments. Under the ArborGen sale and purchase agreement, Rubicon assumed the guarantees of both International Paper and WestRock (given it would be the 100% owner of ArborGen, and in effect, economically exposed to the full lease commitment in any case). WestRock and International Paper each have the right to call for a $0.5 million payment from Rubicon on 30 June 2019, which if called would eliminate Rubicon's assumed partner guarantee.

In November 2018 ArborGen entered into agreements with TTT. Up until 31 March 2019 the agreement was a management contract of the TTT facility, post that from 1 April 2019, the agreement converted to a lease of the TTT nursery and seed orchard properties located in Texas. (refer to note 21)

23 REMUNERATION

Key management compensation

	Refer to note	RUBICON GROUP Year ended March 2019 US$m	RUBICON GROUP 6 Months March 2018 US$m
Salaries and other short-term employee benefits		2.8	1.7
Termination benefits	7	1.8	-
Share based payments (executive settlement share plan) (1)	7, 18, 19 & 25	1.2	-
Other payments (2)	7	1.0	0.6
		6.8	2.3

Key management compensation excludes Directors. Directors remuneration is disclosed in notes 7 and 25.

(1) On 29 March 2019 Rubicon, Luke Moriarty and Mark Taylor amicably agreed a settlement in relation to the finalisation of their roles. Rubicon agreed to make to Messrs Moriarty and Taylor (in the aggregate) a net cash payment of NZ$100,000 and an allotment of nine million Rubicon ordinary shares. Four million of these new shares were issued on 1 April 2019, with the balance (five million) of the issuance and allotment to be completed by 1 April 2022. The fair value of these shares was recorded at settlement, on 29 March 2019 at the then share price of NZ$0.193 per share. The fair value of $1,179,000 (NZ$1,737,000) is recorded in the share based payment reserve. (refer note 19 above)

(2) Upon the 100% acquisition of ArborGen by Rubicon, a plan was put in place to retain ArborGen senior management. The benefit under this plan totals $2.0 million, and provides for the payment by ArborGen of up to $1.0 million on 1 July 2018 and another $1.0 million on 1 July 2019 to senior executives. The package is split across ten individuals, with the requirement being that an individual must still be employed by ArborGen on those respective dates in order for them to receive a payment on those dates. On 1 July 2018 $1.0 million was paid to the senior executives under the plan, with the final payment ($1.0 million) to be made in June 2019. If an individual is made redundant by ArborGen, then they will still receive the benefit of the plan.

24 SEGMENTAL INFORMATION SUMMARY

The Group has one reportable segment and the analysis is as follows:

	RUBICON GROUP Year ended March 2019 US$m	RUBICON GROUP 6 Months March 2018 US$m
Forestry genetics		
Operating revenue	49.1	35.4
Financing expense	(2.2)	(1.1)
Tax (expense) / benefit	0.5	2.6
Net earnings (loss) after taxation from continuing operations	(0.2)	4.0
Total assets	192.1	197.1
Liabilities	(45.9)	(51.8)
Capital expenditure	(7.4)	(3.0)
Depreciation and amortisation of intellectual property	(8.7)	(4.3)
Reconciliation		
Appearance and wood products		
Operating revenue - discontinued	-	19.3
Net earnings after taxation from discontinued operations	(0.1)	(0.4)
Total assets - discontinued	0.1	2.6
Corporate		
Financing expense	-	(0.2)
Net earnings (loss) after taxation from continuing operations	(4.0)	(1.8)
Total assets	1.8	14.1
Liabilities	(0.5)	(10.6)
Total Group		
Total revenue	49.1	54.7
Operating revenue - discontinued	-	19.3
Operating revenue - continuing - per income statement (1)	49.1	35.4
Financing expense	(2.2)	(1.3)
Tax (expense) / benefit	0.5	2.6
Net earnings (loss) after taxation from continuing operations	(4.2)	2.2
Net earnings after taxation from discontinued operations	(0.1)	(0.4)
Total assets - per balance sheet	194.0	213.8
Total assets - discontinued	0.1	2.6
Total assets - continuing	193.9	211.2
Total liabilities	(46.4)	(62.4)
Capital expenditure	(7.4)	(3.0)
Depreciation and amortisation of intellectual property	(8.7)	(4.3)

The Group's geographical analysis is as follows:

	Year ended March 2019 US$m	6 Months March 2018 US$m
Australasia		
Operating revenue	7.0	0.5
Non current assets	9.7	9.7
South America		
Operating revenue	6.1	3.6
Non current assets	0.4	0.4
North America		
Operating revenue	36.0	31.3
Non current assets	142.2	145.9
Total Group		
Operating revenue (1)	49.1	35.4
Non current assets	152.3	156.0

(1) The Group's revenue represents sales of seedlings and treestock of $47.9 million (2018: $34.3 million) and the provision of logistic services $1.2 million (2018: $1.1 million).

25 RELATED PARTY TRANSACTIONS AND BALANCES

		RUBICON GROUP	
	Refer to note	Year ended March 2019 US$m	6 Months March 2018 US$m
Non-executive Directors share plan (1)	18 & 19	(0.1)	-
Directors remuneration (excluding Non-executive Directors share plan)	7	(0.3)	(0.2)
Executive settlement share plan	7, 18, 19 & 23	(1.2)	-
Management fees from Tenon Clearwood Limited Partnership (TCLP) (2)		0.3	0.1
ArborGen senior management share option scheme (3)	15	(0.3)	(0.3)

(1) On 17 September 2018 (at Rubicon's Annual Shareholders' meeting) shareholders passed a resolution approving the Rubicon Non-Executive Directors Share Plan. Under the share plan, 1,666,050 new shares were issued to the Trust on 18 September 2018. The Trust will hold the shares on behalf of the three Directors (Tom Avery, Ozey Horton, and Paul Smart, equally) until the vesting terms are met. The shares will vest, to each Director, in three equal tranches on the first, second and third anniversaries following the date of issue (18 September 2018), provided that the Director remains a Director of the Company on the relevant anniversary date. In the current period $148,344 was accrued in relation to the total cost of this share plan (NZ$218,156) (2018: nil). $0.1 million is recorded in the share based payment reserve (refer note 19) and $0.05 million is the tax cost of the plan.

(2) Rubicon (Rubicon Clearwood GP Limited) remained the general partner for its former subsidiary TCLP until 31 March 2019, following the sale of Rubicon's 44.88% interest in January 2018. Rubicon received management fee for services provided of $250,000 in the current period and $125,000 in the previous period. As of 31 March 2019 Rubicon is no longer the general partner and other than the final months fees ($20,833), had received payment for all other monthly fees.

(3) ArborGen senior executive team hold options in respect of 4.5% of ArborGen's issued share capital. These options are fully vested and can be exercised (subject to service conditions) by the holders, at $423 per share (5,640 options on issue), upon an IPO of ArborGen, a sale of substantially all of the assets of ArborGen, or upon a sale or restructuring event (including the issuance of new share capital to a third party) where following such event Rubicon holds less than a 50.01% ownership position.

26 PRINCIPAL OPERATIONS

Rubicon Limited (a New Zealand incorporated limited liability company) is the holding company of the Rubicon Group.
The principal subsidiaries, as at 31 March 2019, were:

	Country of Domicile	*Interest % March 2019*	*Interest % Mar 2018*	*Balance Date*	*Principal Activity*
Principal subsidiaries					
Rubicon Forests Holdings Limited	NZ	100	100	31 March	Holds a 59.78% interest in Tenon (in liquidation)
Rubicon Clearwood GP Limited (1)	NZ	100	100	31 March	General Partner to TCLP
Tenon Limited (2)	NZ	59.78	59.78	30 June	In liquidation
Rubicon Industries USA LLC	USA	100	100	30 June	Holds ArborGen, Inc investment
ArborGen Inc (3)	USA	100	100	31 March	Forestry genetics
ArborGen Inc subsidiaries					
ArborGen Comercie de Produtos Florestal Importacao e Exportacao LTDA	Brazil	100	100	31 March	Forestry genetics
ArborGen Technologia Florestal LTDA	Brazil	100	100	31 March	Holding company
ArborGen New Zealand Holding LLC	USA	100	100	31 March	Holding company
ArborGen New Zealand Unlimited	NZ	100	100	31 March	Forestry genetics
ArborGen Australia Holdings Pty Ltd	Aust	100	100	31 March	Holding company
ArborGen Australia Pty Ltd	Aust	100	100	31 March	Forestry genetics

(1) Rubicon (Rubicon Clearwood GP Limited) retired as the general partner of TCLP on 31 March 2019.
(2) Refer to note 4, Basis of Consolidation - Subsidiaries above.
(3) In June 2017 Rubicon, acquired the 66.66% of ArborGen shares held by its then partners International Paper and WestRock, and as a result increased Rubicon's 33.34% ownership interest to 100% of ArborGen's issued share capital, or 95% by economic interest (given the 5% warrants outstanding to third parties relating to the ArborGen acquisition of Cellfor in 2012). The final $10 million of the purchase price for ArborGen was paid on 30 June 2018.

27 FINANCIAL INSTRUMENTS

(a) Market risk

(i) *Exposure to currency risk*

The functional currency of the Group is the US$ and the risk to the Group's equity and earnings are from assets, liabilities, revenues and costs in currencies denominated in currencies other than US$. The Group's exposure to foreign currency risks on financial instruments is shown in the following:

	RUBICON GROUP			
in US$m	March 2019		March 2018	
	US$	Non US$	US$	Non US$
Cash, liquid deposits and restricted cash	6.1	1.1	28.3	0.7
Trade debtors and other receivables	7.0	0.9	8.4	0.6
Trade creditors and other payables	(9.5)	(5.0)	(6.8)	(3.6)
Current debt	(0.5)	-	(11.5)	(3.6)
Non current debt	(16.5)	-	(11.1)	-
Lease finance obligation	(12.0)	-	(12.4)	-
Gross balance sheet exposure		(3.0)		(5.9)

27 FINANCIAL INSTRUMENTS (continued)

(a) Market risk

(ii) *Exposure to currency risk*

The following exchange rates applied during the year:

	Average rate (1)		Spot rate	
	March 2019	March 2018	March 2019	March 2018
NZ$:US$	0.6815	0.7126	0.6790	0.7205
US$:R$	0.2649	0.3079	0.2571	0.3026
US$:AU$	0.7276	0.7774	0.7104	0.7690

(1) These are merely arithmetical averages not hedged rates.

Foreign exchange contracts

As at 31 March 2019, the Group had no foreign exchange contracts outstanding. As at 31 March 2018, the Group had one foreign exchange contract outstanding converting NZ$3.5 million (being the expected proceeds from the liquidation of Tenon, received in July 2018) into US$2.4 million.

Sensitivity Analysis - gross balance sheet exposure

Given the small size of the gross balance sheet exposure shown above, any movement in the NZ$, R$ and AU$ against the US$ is unlikely to be material.
Rubicon has nil debt (2018: nil) at 31 March 2019 and ArborGen had $17 million (2018: $26.2 million), drawn at a mix of fixed and floating rates.
The weighted average interest rate of borrowings and interest rate hedges are shown in note 17 term and current debt.

(b) Credit Risk

(i) *Exposure to credit risk*

The carrying amount of financial assets represents the maximum credit exposure, which at 31 March 2019 was $15.1 million of trade and other receivables, and cash, liquid deposits and restricted cash (2018: $38.0 million).
US cash,liquid deposits and restricted cash are only held with banks that are part of the Group's banking consortiums. In the event of default, cash balances may be set off against obligations owing by the Group to its lenders. Moody's credit ratings of the counterparties for cash and liquid deposits are all rated as investment grade.
The status of trade debtors, is as follows:

		RUBICON GROUP	
		March 2019 US$m	March 2018 US$m
Neither past due or impaired		4.1	2.7
Past due but not impaired -	1 month	2.3	2.5
	2 month	1.4	1.2
		7.8	6.4
Less provision for doubtful debts		(0.1)	(0.1)
Net trade debtors (1)		7.7	6.3

ArborGen has a strong history of trade debtor collections and there is no reason to believe that the debtors will not be collected.

(c) Liquidity risk

The following are contractual maturities of financial liabilities and net settled derivatives (excluding estimated interest payments). The amounts disclosed are the contractual undiscounted cash flows.

Financial liabilities	Carrying value US$m	Fair value US$m	0-6 months US$m	6-12 months US$m	1-2 years US$m	2-5 years US$m	Over 5 years US$m
31 March 2018							
Non derivative financial liabilities							
Trade and other payables	(8.1)	(8.1)	(7.8)	-	-	(0.3)	-
Debt	(26.2)	(30.2)	(11.8)	(3.7)	(0.6)	(2.1)	(12.0)
Finance Lease obligation	(12.4)	(20.2)	(0.9)	(0.8)	(1.6)	(4.4)	(12.5)
Deferred Settlement	(10.0)	(10.0)	(10.0)	-	-	-	-
Financial liabilities as at 31 March 2018	(56.7)	(68.5)	(30.5)	(4.5)	(2.2)	(6.8)	(24.5)
31 March 2019							
Non derivative financial liabilities							
Trade and other payables	(10.4)	(10.4)	(9.3)	(0.2)	(0.3)	(0.6)	-
Debt	(17.0)	(20.4)	(0.5)	-	(6.9)	(2.2)	(10.8)
Finance Lease obligation	(12.0)	(18.6)	(0.8)	(0.8)	(1.6)	(4.4)	(11.0)
Financial liabilities as at 31 March 2019	(39.4)	(49.4)	(10.6)	(1.0)	(8.8)	(7.2)	(21.8)

28 CONTINGENT LIABILITIES

There are no known contingent liabilities in the Rubicon Group as at 31 March 2019 (2018: nil). (refer also to note 22, which outlines lease commitment guarantees)

29 ASSET BACKING - NON-GAAP MEASURE

At 31 March 2019 the net asset backing was 30 cents per share (cps) (NZ$44 cps), (2018: 31 cps, NZ$43 cps); and net tangible asset backing was 8 cps (NZ$12 cps) (2018: 9 cps, NZ$12 cps), calculated on the basis of 496,908,343 shares on issue.

30 EARNINGS - NON-GAAP MEASURE AND PRO-FORMA

Rubicon shareholders and users of the financial statements are very interested in ArborGen's underlying earnings performance under US-GAAP (as well as under IFRS), as that is the result that ArborGen would report in a US 'listing' situation. Rubicon believes 'US-GAAP underlying earnings' provides useful information, as it is used internally to evaluate performance, and it is also a measure that equity analysts focus on for comparative company performance purposes, as the measure removes distortions caused by different depreciation policies and debt:equity structures.

In contrast with US-GAAP, IFRS requires the capitalisation of ArborGen's development spend, the amortisation of intellectual property, and the accrual of the change in fair value of biological assets on the seedling crop each year prior to its sale. Because of these differences, US-GAAP results, and in particular 'US-GAAP underlying earnings' cannot be easily derived from reported IFRS numbers. In addition, as a result of the historic changes in balance date, comparing results with previous periods is problematic, because the comparative period shown is for the 6 months to 31 March 2018, which from a revenue perceptive encompasses nearly all US, half of Brazil and minimal Australia and New Zealand (ANZ) turnover (refer to note 24 geographic segment for an analysis). For these reasons and in order to provide users with relevant and understandable information we are providing the pro-forma comparatives and reconcilations below.

EBITDA, US-GAAP EBITDA and US-GAAP underlying earnings are all non-GAAP financial measure and are not recognised under NZ IFRS. As they are not necessarily uniformly defined or utilised and these measures may not be comparable with similarly titled measures used by other companies. Non-GAAP financial measures should not be viewed in isolation or considered as a substitute for measures reported in accordance with GAAP.

The following table provides users useful pro-forma ArborGen information for year-on-year comparison and reconciles net earnings to 'US-GAAP underlyings earnings' .

ArborGen	Refer to note	Year ended March 2019 US$m	Pro-forma [1] Year ended March 2018 US$m
Revenue	24	49.1	46.1
Cost of sales	24	(32.0)	(29.6)
Gross profit		17.1	16.5
Net earnings (loss) after taxation from continuing operations	24	(0.2)	-
less Tax benefit	24	(0.5)	(2.6)
plus Financing expense	24	2.2	2.0
Operating earnings (loss) before financing expense		1.5	(0.6)
plus Depreciation and amortisations	7	8.7	8.1
EBITDA (NZ IFRS)		10.2	7.5
Add back NZ IFRS adjustments			
Investment in intellectual property	14	(4.7)	(5.6)
Change in fair value of biological assets	11	(0.8)	-
Other IFRS adjustments		0.3	0.3
US-GAAP EBITDA		5.0	2.2
Add back significant non-recurring items			
Impairment	7		0.8
Transaction-related costs	7	1.0	1.3
Restructuring costs	7	0.6	-
Less Gain on sale		(0.5)	-
US-GAAP underlying earnings		6.1	4.3

(1) The pro-forma result is a construct of the consolidated 6 months to 31 March 2019 and 3 months to 30 September 2017, plus the 3 months to 30 June 2018 (prior to acquisition) not previously consolidated, prepared on a basis consistent with both consolidated periods.

31 DISCONTINUED OPERATIONS

In the prior period, Rubicon disposed of its interest in TCLP, and Tenon went into voluntary liquidation. Both of these operations are classified as discontinued in these financial statements.

Income Statement for the period ended	RUBICON GROUP Year ended March 2019 US$m	6 Months March 2018 US$m
Operating revenue	-	19.3
Profit before taxation	-	0.6
Loss on disposal	(0.1)	(1.0)
Net profit (loss) after taxation from discontinued operations	(0.1)	(0.4)

Statement of cash flows for the period ended	Year ended March 2019 US$m	6 Months March 2018 US$m
Net cash from:		
Operating activities	-	0.5
Investing activities	2.4	7.0
Financing activities	-	(1.6)
Net cash from discontinued operations	2.4	5.9

32 SUBSEQUENT EVENTS

On 1 April 2019, pursuant to the 29 March 2019 settlement agreement with Luke Moriarty and Mark Taylor; a net cash payment of NZ$100,000 was made and four million new Rubicon ordinary shares (of the allotted of nine million) were issued. (refer to notes 18 and 19 for more detail)

Deloitte.

Independent Auditor's Report

To the Shareholders of Rubicon Limited

Opinion

We have audited the consolidated financial statements of Rubicon Limited and its subsidiaries (the 'Group'), which comprise the consolidated balance sheet as at 31 March 2019, and the consolidated income statement, statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements, on pages 6 to 26, present fairly, in all material respects, the consolidated financial position of the Group as at 31 March 2019, and its consolidated financial performance and cash flows for the year then ended in accordance with New Zealand Equivalents to International Financial Reporting Standards ('NZ IFRS') and International Financial Reporting Standards ('IFRS').

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing ('ISAs') and International Standards on Auditing (New Zealand) ('ISAs (NZ)'). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

We are independent of the Group in accordance with Professional and Ethical Standard 1 (Revised) *Code of Ethics for Assurance Practitioners* issued by the New Zealand Auditing and Assurance Standards Board and the International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants*, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Other than in our capacity as auditor and the provision of certain agreed procedures, we have no relationship with or interests in the Company or any of its subsidiaries. These services have not impaired our independence as auditor of the Company and Group.

Audit materiality

We consider materiality primarily in terms of the magnitude of misstatement in the financial statements of the Group that in our judgement would make it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced (the 'quantitative' materiality). In addition, we also assess whether other matters that come to our attention during the audit would in our judgement change or influence the decisions of such a person (the 'qualitative' materiality). We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

We determined materiality for the Group financial statements as a whole to be US$2m.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter	How our audit addressed the key audit matter

Intangible assets – impairment assessment
 	
As set out in note 14 of the financial statements the Group has US$105.6m of intellectual property recorded on its balance sheet relating to the ArborGen business.
 	
The impairment assessment in relation to the ArborGen business, or Cash Generating Unit (CGU) is considered to be a key audit matter as a result of the significance of the intellectual property asset to the Group, and the level of judgement required when determining the value in use of ArborGen.
 	
The value in use of ArborGen is determined by undertaking a discounted cash flow analysis which involves management making a number of assumptions in relation to forecast future cash flows, determining an appropriate weighted average cost of capital (WACC) and terminal value (TV) growth rate. Each of these inputs requires judgement to be applied.
	In performing our audit procedures in this area we:
	
	• Assessed the appropriateness of the valuation methodology applied by management;
	• Examined the robustness of the financial model used by management to calculate ArborGen's value in use;
	• Tested the key assumptions driving the forecast future cash flow. Of particular importance are;
	  ○ changes in market share;
	  ○ average selling prices and gross margin linked to the projected uptake of Mass Controlled Pollinated (MCP) product primarily in the US market;
	• Undertook sensitivity analysis on key assumptions to assess the impact on the carrying value of ArborGen;
	• Tested the calculation of the WACC and TV growth rate, including obtaining input from our valuation specialists; and
	• Ensured the disclosures in the financial statements properly reflect the judgements and estimates made by management.

Other information

The directors are responsible on behalf of the Group for the other information. The other information comprises the information in the Chairman's letter that accompanies the consolidated financial statements and the audit report, and the Annual Report, which is expected to be made available to us after the date of the audit report.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and consider whether it is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If so, we are required to report that fact. We have nothing to report in this regard.

When we read the Annual Report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to the directors and consider further appropriate actions.

Directors' responsibilities for the consolidated financial statements

The directors are responsible on behalf of the Group for the preparation and fair presentation of the consolidated financial statements in accordance with NZ IFRS and IFRS, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the directors are responsible on behalf of the Group for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and ISAs (NZ) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

A further description of our responsibilities for the audit of the consolidated financial statements is located on the External Reporting Board's website at:

https://www.xrb.govt.nz/standards-for-assurance-practitioners/auditors-responsibilities/audit-report-1

This description forms part of our auditor’s report.

Restriction on use

This report is made solely to the Company’s shareholders, as a body. Our audit has been undertaken so that we might state to the Company’s shareholders those matters we are required to state to them in an auditor’s report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company’s shareholders as a body, for our audit work, for this report, or for the opinions we have formed.

Deloitte Limited

Peter Gulliver, Partner
for Deloitte Limited
Auckland, New Zealand
29 May, 2019