

2026 FOREST VALUATION SUMMIT

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The Value of NPV_{2R+}

Bill Liley, Indufor Asia Pacific



Indufor

'22' in popular culture

The best known example , "Catch-22"



Critical reaction:

"Catch-22 is hailed as one of the greatest American novels. It is easy to understand why this is the case. This is not a novel to be read, but is rather one to be experienced."

"Never has a book been laughed and wept over so many times" The Guardian

Para '22' in IAS41 (Agriculture)

IAS 41

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from paragraph

INTERNATIONAL ACCOUNTING STANDARD 41 AGRICULTURE

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APPROVAL BY THE BOARD OF AGRICULTURE: BEARER
PLANTS (AMENDMENTS TO IAS 16 AND IAS 41) ISSUED IN JUNE 2014

FOR THE ACCOMPANYING GUIDANCE LISTED BELOW, SEE PART B OF THIS EDITION

ILLUSTRATIVE EXAMPLES

FOR THE BASIS FOR CONCLUSIONS, SEE PART C OF THIS EDITION

BASIS FOR CONCLUSIONS

BASIS FOR IASC'S CONCLUSIONS

DISSENTING OPINIONS

“An entity does not include any cash flows for financing the assets or re-establishing biological assets after harvest (for example, the cost of replanting trees in a plantation forest after harvest).”

Critical reaction:

“It says what??!”

Here is a seemingly official instruction that denies a central idea of plantation forestry.

Para '22' in IAS41

“An entity does not include any cash flows for financing the assets or re-establishing biological assets after harvest (for example, the cost of replanting trees in a plantation forest after harvest).”

Forest valuers could at least take some warm glow from having their professional activity recognised. Across wider expressions of standards – whether asset valuation or financial reporting – one doesn't find the words “tree” or “forest”.

But at what cost?

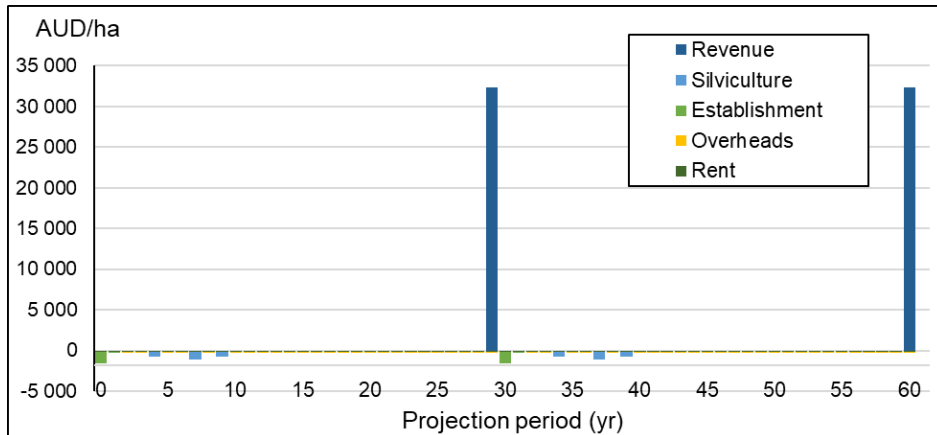
If the paragraph denies the prospect that the current rotation is likely to be followed by another, isn't it being just as perverse as its better known namesake?

Para '22' in IAS41

I don't find IAS41 perverse.

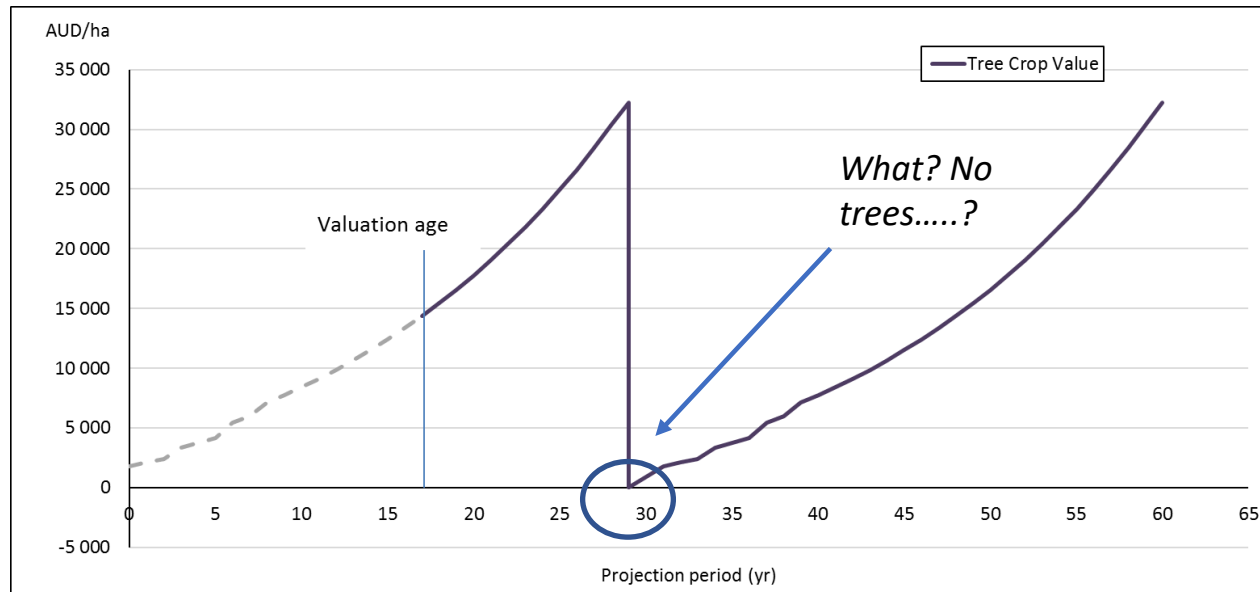
As its full name implies, *IAS41 Agriculture* becomes involved where it is necessary to attribute value to biological assets.

Let us look at the cashflows for a **single example hectare** over two rotations:



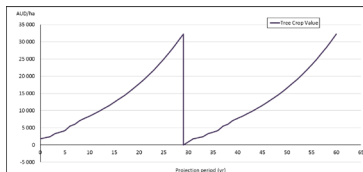
At the Single Example Hectare level

Tree Crop Value over two rotations: :



Crucially, immediately after the harvesting of the first rotation, there is no remaining biological asset to which to assign a value.

At the Single Example Hectare level



At the conclusion of the current rotation, there is no live asset. While there may be every intention of re-establishing the site, IAS41 is only concerned with the part of the forest that is alive.

As a standard for reporting the value of a *biological* asset, IAS41 makes sense.

Paraphrased:

“The value of the current rotation should be based on the cashflows associated with the current rotation”

IAS41 as a forest valuation standard...?

We find reference to “IAS41- compliant forest valuations”

But is IAS41 a pronouncement on valuation methodologies?

Here, the answer is a little messy - at its initial rollout in the early 2000s, IAS41 it did cover valuation methods.

IFRS 13	
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APPROVAL BY THE BOARD OF IFRS 13 ISSUED IN MAY 2011	

However, from 2011, we saw the release of IFRS13 Fair Value

This standard visibly took over the role of guiding how valuations were to be prepared.

Paragraphs referring to valuation methodology that had previously appeared in such standards as IAS41 and IAS16 were removed. The thorough documentation that accompanies the IASB standards records the process.

IFRS13 Fair Value – what does it say?

Essentially, IFRS13 encourages emulation of the practices demonstrated by the market .

IFRS 13 states that the determination of an appropriate measure of fair value must take into account the following:

[.....]

- ***The appropriate valuation technique(s) for the entity to use when measuring fair value, focusing on inputs a market participant would use when pricing the asset or liability.***
- ***Those assumptions that market participants would use when pricing the asset or liability.***

Indufor's experience with those parties involved in large forest transactions is that they prepare cashflow models involving multiple rotations.

Why prepare valuation models involving multiple rotations?

Identification of
free cash flow

Confirm the harvesting
strategy fits within
credible harvesting and
replanting constraints

Adequate
acknowledgement
of long term risk

Confirm the
capacity to
meet supply
obligations

Identify the status of the
resource at planned
resale

Confirm
sustainability

Confirm the
ongoing carbon
balance

Adhere to the cashflow
modelling norms
demonstrated by other
types of commercial
enterprise

IFRS13 vs IAS41

LHS		RHS	
IFRS13 Value of land, 1R and 2R+	$\neq$	IAS16 Value of land	IAS41 Value of 1R

To report under IFRS13, we need an additional amount, corresponding to NPV2R+

LHS		RHS		
IFRS13 Value of land, 1R and 2R+	$=$	IAS16 Value of land	IAS41 Value of 1R	Delta (value of 2R+)

We find no confident identification of a reporting category for the delta within the IFRS system.

The NPV_{2R+} contribution

Is it material?	It varies: 0 – 50% of NPV1R
Is it positive or negative?	It can be either – only coincidentally might it be nil
If it is negative, shouldn't that be a little unnerving?	Potentially, yes
What would it take to make it go away?	Revised inputs – yields, prices, production costs, growing costs, overheads
A different discount rate for 2R+?	Yes,but

A proposal that the NPV_{2R+} might simply be neutralised on the basis that it was both conjectural and hypersensitive has been previously presented. This did gain a certain traction.

The problem becomes that purchasers can't be reasonably expected to ignore 2R cashflows – they are justifiably concerned with free cashflow, and for a combination of reasons.

The NPV_{2R+} contribution

Shouldn't super-profitability find its way into the scarce resource – i.e. the land?	A reasonable question, but:
	It implies expectations of a competitive, frictionless, informed, rational and populous market for bare forestry land for replanting. This doesn't exist
	NPV _{2R+} is, inescapably both conjectural and hypersensitive
	Finding a home for super-profitability is one thing, but much of the time, NPV _{2R+} is negative
	If we are inviting the land valuers to opine on land value, it is not for the tree crop valuers to meddle with their results.

The Forest Valuation Standards do contain a full discussion of the issues that have been described.

What could be done...?

The NZIF Forest Valuation Working Party has previously considered the issues and pathways forward

Method
Current Rotation Value
2R + value
Land value
Delta
Forest Value
Valuation standards compliance
Forest valuation standards compliance
Land valuers' perspective
Financial reporting
Transaction advisor
Fund manager
Financial controller
Other comments

Method	Current Rotation Value	2R + value	Land value	Delta	Forest Value	Valuation standards compliance	Forest valuation standards compliance	Land valuers' perspective	Financial reporting	Transaction advisor	Fund manager	Financial controller	Other comments
1. In a separate case, where the value of the forest is not included in the current rotation value.	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included
2. With a separate case, where the value of the forest is not included in the current rotation value.	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included
3. With a separate case, where the value of the forest is not included in the current rotation value.	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included
4. With a separate case, where the value of the forest is not included in the current rotation value.	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included
5. With a separate case, where the value of the forest is not included in the current rotation value.	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included
6. With a separate case, where the value of the forest is not included in the current rotation value.	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included
7. With a separate case, where the value of the forest is not included in the current rotation value.	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included
8. With a separate case, where the value of the forest is not included in the current rotation value.	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included

Finding Delta

Method

Current Rotation Value

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IASB is lobbied to make a variation in IAS41 when applying it to forests. The current rotation stipulation is relaxed on the basis that forests have a distributed age-class profile.

It is asserted that the tree crop NPV is at the current rotation indeed a negative cost generated from 2R+ unavoidable cost as

8

Model cashflows for a long term. Contributions from respective rotations are distinguished, and subject to a different discount rate. Discount to present.

The value of the current rotation is explicitly identified

A conversation with IASB?

The previous slide suggested talking to the IASB. The NZIF Forest Valuation Working Party elected to defer such an approach.

The IASB was seen to be substantially pre-occupied with wider issues. (One example preoccupation was Para 21)

An opinion from within the New Zealand External Reporting Board suggested caution. Careful preparation might be required for what might be a fleeting moment of the Board's attention. *"There might be only one chance to get it right"*.

Forest valuers were continuing to gauge the perceived importance of the issue to the accounting and auditing professionals

The agreed path therefore, was to apply an interim solution and see how the issue progressed.

What is in the current version of the Standards?

A workaround

1. As indicated in the table, a value for the tree crop has been based on cashflows which are modelled for multiple rotations. The contributions from the respective rotations (1R & 2R+) may be identifiable within internal analysis.

Cashflows	Discount Rate	Net Present Value (NZD m)
Current rotation	7.5%	336.5
2R+	7.5%	(6.4)
		330.1

2. For reporting purposes and for assigning the cost of bush, the valuer calculates a discount rate at which the collective tree crop value corresponds to the NPV of just the current rotation cashflows.

Cashflows	Discount Rate	Net Present Value (NZD m)
Value derivation if confined to current rotation	7.7%	330.1

What is in the current version of the Standards?

A workaround(contd.)

3. The sensitivity analysis accompanying the report should, for completeness, offer further examination.

Component of NPV(2R+)	Level	Net Present Value of 2R+ (NZD m)
Log prices	+5%	0.0
Production costs	-8%	
Growing costs	-27%	
Discount rate	7.0%	

And how confident are we that these suggestions are being observed ?

..... Not very confident

How is the workaround working?

Valuers' adherence to the process seems mixed

Disclosure obligations mean that we feel obliged to explain that we have shoehorned a multiple rotation result into the current rotation, in order to meet reporting dictates

There is a not insignificant challenge to keep explaining the process to financial reporting personnel, auditors, investment managers

The apparent precision of the back-solved discount rates is unnerving

The approach creates issues in comparing and interpreting reported rates – are these 'pure' 1R rates or do they arise from 'back-solving'?

Reported rates - what basis?

Company	2020 ^(a)	2021 ^(a)	2022 ^(a)	2023 ^(a)	2024 ^(a)	Cashflow basis
ANZFF2 ^(b) (New Forests)	7.50% (Taupo 7.00%)	6.50% (Otago 7.00%)	6% (Otago not stated)	6% (Otago not stated)	(c)	Pre-tax, Current
ANZFF3 (New Forests)		6.50% (Kakapo 7.00%)	6.50%	6.50%	7.0% (Marberry 6.5%) (Kakapo 6.3%)	Pre-tax, Current
Aratu Forests Limited	7.00%	7.00%	7.00%	8.00%	7.50%	Pre-tax, Current
CFPC New Zealand	7.00%	6.50%	6.50%	6.50%	(d)	Pre-tax, Current
China Forestry Group New Zealand	7.00%	6.50%	6.50%	6.50%	(d)	Pre-tax, Current
Corisol		(e)	8.25%	8.00%	(e)	Pre-tax, Current
Ernslaw One	7.00%	7.00%	6.75%	6.75% (7.25% Gisborne)	6.50% (7.25% Gisborne)	Pre-tax, Perpetual 2018-2022, Current 2023-2024
Greenheart	7.25%	7.25%	7.00%	7.00%	(d)	Pre-tax, Perpetual 2018-2021, Current 2022
GTI 8 New Zealand Limited	7.00%	7.00%	6.50%	(i)	(i)	Pre-tax, Current
Kaingaroa Timberlands	6.25%	6.00%	5.75%	5.50%	5.50%	Pre-tax, Current
Matariki	6.50%	6.25%	6.25%	(d)	(d)	Pre-tax, Current
Nelson Forests Limited	7.50%	6.50%	6.50%	6.50%	6.50%	Pre-tax, Current
OTPP	7.02%	6.49%	6.58%	OTPP 4.7% / WFI 6.0% (i)	(d)	Pre-tax, Current
Pan Pac Forest Products	6.75%	6.50%	6.50%	6.50%	6.50%	Pre-tax, Current
Southland Plantation Forest Company of NZ Ltd	8.30%	8.40%	8.50%	8.30%	8.20%	Post-tax, Current
Sun&L New Zealand	7.30%	(f)	(f)	(f)	(f)	Pre-tax, Current
Wenita Forest Products Limited	6.50%	(f)	6.50%	6.50%	(d)	Pre-tax, Current
Taumata Plantations Ltd	7.00%	6.50%	6.50%	6.00%	5.70%	Pre-tax, Current
Te Waihou Plantations	7.00%	7.00%	6.50%	6.50%	(d)	Pre-tax, Current
The New Zealand Redwood Company	8.50%	8.50%	7.50%	(g)	(g)	Pre-tax, Current

Discount rates from
Financial Reports
lodged with the NZ
Companies Office

Are these “pure” rates
for 1R, or the result of
back-solving from
multi-rotation
cashflows?

Time to talk with the IASB?

It seems time to find a home for NPV_{2R+} . It has become time to have a discussion with the authors of the standards.

Discussions with New Zealand's XRB (External Reporting Board) indicate that a suitable opportunity to advance discussions is coming up in the first half of 2027.

Summary

Accusations of perversity directed at IAS41 are misplaced - it is appropriate that a value for 1R is based on the cashflows for 1R

IAS41 is not an instruction for valuing *forests*. In a forestry environment, it is a standard that guides reporting of the value of the *current crop*

We have grounds for some frustration that the IFRS standards have not provided a clear home for NPV_{2R+}

NPV_{2R+} is too important to be ignored

We need to make our case with IASB. Things are unlikely to progress, unless forest valuers take the initiative

We are advised that a suitable opportunity to advance discussions is coming up in the first half of 2027.

If you have the capacity to assist, it would be useful to have your support.



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