



SCA – You Wood Not Believe It

Outperforming growth, purchasing early cash flows, overharvesting, and the valuation ruse.

PLEASE READ IMPORTANT DISCLAIMER – PAGE 11

March 22, 2024 – SCA’s AGM gives investors the rare opportunity to press management for more clarity on their gravity defying forestry assets.

Viceroy dives into SCA’s ludicrous valuations, its acquisition strategy and cash flow timing, rampant overharvesting and comparison to peers. Investors do not have to believe Viceroy, but they do have to live with a yield diminishing asset.

SCA’s Forest Surveys: Beating Expectations

SCA’s 10-yearly forest surveys (FTAX) do not only establish inventory levels, but also lock-in growth and harvest rate simulations for extended periods of time. This is not unusual for a 100-year life cycle asset.

- SCA have significantly brought forward the timing of two FTAX surveys, the most recent in 2019.
- Each survey locks-in material improvements to standing timber inventory & growth rates.
- By locking-in increased long-term simulations of growth and inventory, SCA are able to materially increase harvesting rates, despite various restrictions on the harvest yield of the assets.

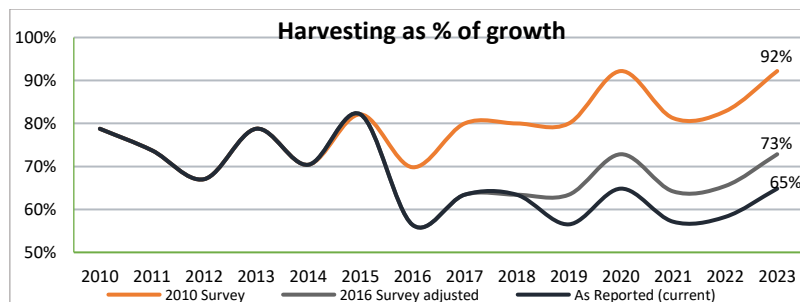


Figure 1 – Harvesting as % of growth per scenario

Given Nordic pine in Norrland is perhaps the most predictable, long-term asset in Sweden: **it beggars belief that management did not have a reliable understanding of its resources.**

On Being the Outlier...

Unsurprisingly: SCA is the outlier amongst peers in the growth of its productive forest assets in Norrland.

- If SCA’s data is true, it suggests that the productivity of all company-owned land in Norrland is decreasing, except for their own holdings. Obviously we don't believe that is the case.

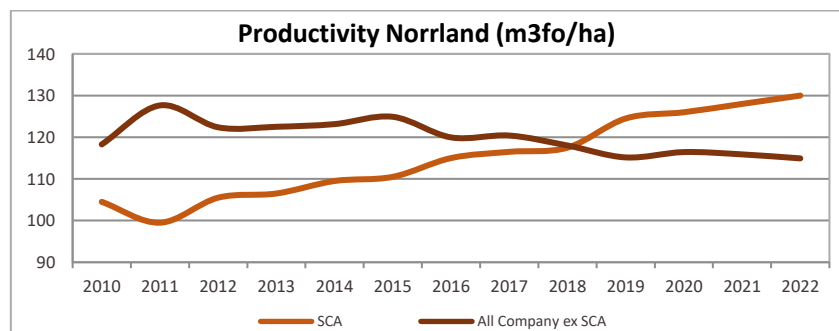


Figure 2 – Productivity Norrland

- When queried about this divergence, management tells investors to ask competitors why they are not performing to the same standard as SCA (the clear outlier).
- Surprisingly: this is achieved despite SCA’s higher yields.



Buying early cash flows

SCA's mark-to-market approach values standing timber against limited transactions on a "3-year average" 395 SEK/m3fo comps.

- SCA then **acquires standing timber (m3fo) at significant premiums to this valuation** and **sells m3fo at significant discounts to this valuation.**

Acquisitions & Divestments	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Acquisition										
Volume, thousand m3fo	1,655	185	123	261	197	429	288	467	448	183
Price, SEK/m3fo	264	273	263	259	286	334	294	379	453	396
Divestment										
Volume, thousand m3fo	1,405	270	176	385	192	959	319	255	602	440
Price, SEK/m3fo	322	310	274	270	268	264	259	198	386	225
Spread	22.0%	13.6%	4.2%	4.2%	(6.3%)	(21.0%)	(11.9%)	(47.8%)	(14.8%)	(43.2%)
Yearly valuation SEK/m3fo			263	286	334	292	312	368	418	398
3-year average valuation					294	304	313	324	366	395

- This spread exists because a SEK/m3fo incorrectly assumes that all m3fo is valued the same. If we assume m3fo exhibits linear growth across its asset cycle (it is slightly parabolic), the growth yield over 100 years (1%) is vastly outpaced by any reasonable discount rate.

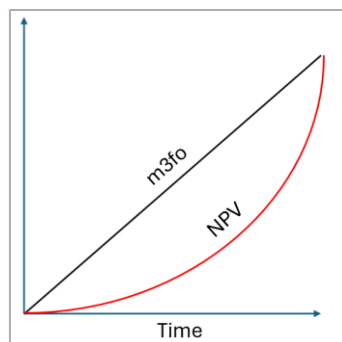


Figure 3 – Illustrative Example – m3fo vs NPV

Viceroy proposes that expensive acquisition of mature plots is a means to bring forward revenue timings. In other words: **SCA is buying early cash flows, and therefore the NPV, through cash acquisitions (outflows) which are not reflected in the NPV.**

- SCA is simultaneously selling plots of land at significant discounts to its book valuation. Per SCA's methodology, and especially if these plots were young or recently felled (some have been): the SEK/m3fo should not diverge from its valuation.
- If we assume otherwise, that the land has extensive residual value (which is the outcome of the M2M valuation), we would expect the SEK/m3fo to vastly exceed the 3-year average on low m3fo standing timber on young/felled plots.
- Clearly, **SCA's mark-to-market valuation approach has no place in a lucid valuation model.** The valuation (DCF) of SCA's assets is **vastly more aligned to the timing of cash flows** than the volume of timber on a 100-year asset cycle.

Investors must query management on the average vintage of acquired and disposed plots.

- We note that acquisition costs must be factored into SCA's NPV should our assumptions be correct (and we note there is no other reason for the discrepancy in acquisition/disposal valuations).
- We will evaluate in a later report how this NPV adjustment takes shape,.



1. The Data

The 2019 Forest Survey

In 2019, concurrent with the change in valuation methodology for forest assets SCA announced the results of its forest survey (FTAX): an 11m m3fo increase in standing volume with 6m m3fo attributable to higher growth and 5m m3fo to improved data measurement. This has contradicted their peers' assessments.

In their Q4 2023 earnings call SCA CEO Larsson acknowledged that the survey was "typically conducted every 10th year", and asserted the last one was conducted "between 2016 and 2018" with some "extra survey in 2019" for "calibration".

Linus Larsson
Analyst, Skandinaviska Enskilda Banken AB

Great. Thank you very much. And then maybe just one final question on forest valuation. Could you please remind us when you last did your forest survey and when the next one is coming up?

Ulf Örjan Larsson
President, Chief Executive Officer & Director, Svenska Cellulosa AB SCA

I mean, typically, I think we had the last one between 2016 and 2018. I mean, it takes a while. And then we did some extra survey back in 2019, I think, and that was also when we calibrated the - what we are on survey to Riksskogstaxeringen. So that's why I'm very sure that we - the standing volume that we have today, it's not overestimated, at least. It's not overestimated.

And typically, we do it every 10th year. But as you know, we have seen that the growth is, just now, a little bit faster than we thought in the past, and that might be due to the climate change. We have had a little bit of warmer climate for a while. And in order to find the right timing also for thinning operations and things like that, we have done it a little bit more - with a little bit higher frequency, so on, but typically so.

Linus Larsson
Analyst, Skandinaviska Enskilda Banken AB

And when do you think the next one is due?

Ulf Örjan Larsson
President, Chief Executive Officer & Director, Svenska Cellulosa AB SCA

Yeah. I think it - I'm not 100% sure. I have to come back on that one. But if we said 2016 to 2018, I suppose it will be 2026, around 2026 or something like that.

Figure 4 – SCA Q4 2023 earnings call transcript

The prior survey was conducted in 2012-13, meaning these 2016-2018 and 2019 surveys were brought forward significantly and coincided with a massive revaluation of SCA's book. That's too coincidental to be coincidence...

There is no need for Larsson to feign ignorance on the importance of these surveys: SCA itself pushed a press release on the completion of the 2019 survey (FTAX 10), which served the purpose of generating a SEK 16.7b gain on SCA's excruciatingly sensitive biological asset value that can hereon be marked-to-fantasy.

New forest survey shows higher standing volume and higher growth in SCA's forests

REGULATORY PRESS RELEASE • 30/01/2020, 07:55 AM

SCA has performed a new forest survey in 2019. According to the new survey, SCA's standing timber volume is 11 million cubic metres (m³fo¹) higher than previously estimated. The survey also shows that the annual growth is 1 million cubic metres higher than the previous estimate.

"We manage our forests for the long term and for high growth, which this new survey confirms", says CEO Ulf Larsson. "A higher standing timber volume means that our forest resource has a higher value. A higher growth gives a higher yield over the long term and also means that our forests bring an increasing contribution to combatting climate change."

According to the new survey, SCA's standing volume in Sweden is estimated at 249 million m³fo as of December 31, 2019. This compares with the previous survey from 2012-2013 and which indicated standing volume of 238 million m³fo at the end of 2019. Of the 11 million m³fo increase, about 6 million m³fo is related to higher than expected growth during the period between surveys (six years) and about 5 million m³fo is related to improved data measurement compared with the previous survey.

The annual gross growth in Sweden amounted to approximately 10.5 million m³fo, 1 million m³fo higher than the estimate in the previous survey of about 9.5 million m³fo. Net growth amounted to approximately 4.0 million m³fo, compared with the previously estimated net growth of about 3.0 million m³fo.

Figures 5 & 6 – SCA Press Release 30/01/2020



We note that the forest survey is an *inventory & forecast simulation* of SCA's standing timber, which is then effectively locked until the date of the next survey.

The more credulous analysts and shareholders of SCA might think that the asset is vast and nature is fickle, so it is plausible that a well-managed operation would improve performance over time. However, **a new disclosure (or at least, very new language) in SCA's most recent (2023) Annual Report** reveals that both the current standing volume and future inventory are simulations based on SCA's 2019 survey.

D3 Forest assets

§ ACCOUNTING PRINCIPLES

The total value of the forest assets is based on transactions in the areas where SCA owns forest assets. To support this valuation, SCA retrieves statistics of transactions, which are available from a number of market sources. Price statistics from transactions are multiplied by SCA's standing volume; the level of the standing volume is based on an inventory and simulated growth. A large number of forest transactions are conducted in areas where SCA owns forest assets, and the value of larger forest holdings is generally at the same level or higher compared with smaller and mid-sized forest assets per m³fo.

SCA's timber stand in Sweden is inventoried at regular intervals (most recently in 2019). Between the inventories of the entire forest holding, forest growth is simulated each year based on the inventory. The simulation of SCA's growth is conducted by an external party. It is then fixed until the next inventory. In the Baltic region, SCA receives an estimate of growth from Norskog, which is an independent source in relation to SCA. The calculated market price used by SCA is based on forest transactions over the last three years to obtain an accurate overall view as individual transactions will not have a major impact on the outcome. Since transactions may take several months to complete, there is no isolated market value given at December 31.

Figures 7 & 8 – SCA Annual Report 2023

This creates a problem of phantom growth: if the simulation is exaggerated then some part of the volume and growth does not exist. An inconvenient ramification of creating phantom growth is that it also creates phantom volume. This becomes a compounding problem as an increasing proportion of the simulated inventory does not exist.

We believe the 2019 forest survey was a premature undertaking to support an increase in the harvest plan underpinning biological assets by inflating the company's standing timber volume.

This inflation has resulted in the departure of at least three key metrics from their expected behavior:

1. Divergence from Riksskogstaxeringen data.
2. Divergence between acquisition and divestment pricing.
3. Rapid and unexpected increases in growth and harvesting.

2. The Impact

Divergence from Riksskogstaxeringen data

The graph below shows Riksskogstaxeringen standing volume data for all company-owned land in Norrland broken down between SCA and all other company-owned land.

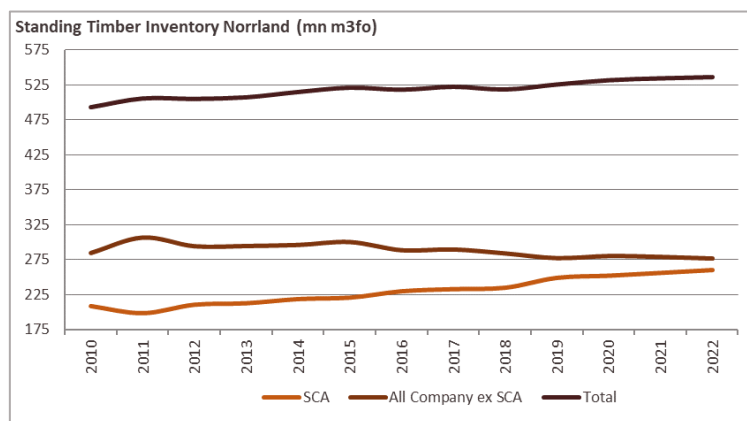


Figure 9 – Standing timber inventory for all company-owned land, SCA and ex SCA

There is a clear divergence when comparing standing volume per hectare figures between SCA and all company owned land in Norrland.

Dividing each category by their respective land holdings reaffirms that SCA’s claimed standing volumes are farcical.

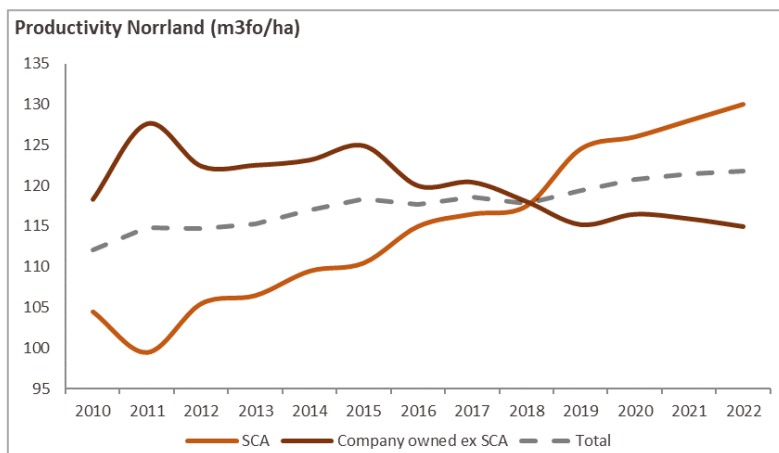


Figure 10 – Norrland Productivity for all company-owned land, SCA and ex SCA 1

If SCA’s data is true, it suggests that the productivity of all company-owned land in Norrland is decreasing, except for their own holdings. Obviously, we don't believe that is the case.

As we’ve previously detailed in our reports, there is no discernible reason for this outperformance. When queried about this divergence, management tells investors to ask competitors why they are not performing to the same standard as SCA (the clear outlier).

I'll start with the second one. And I mean, I cannot really talk for my colleagues, but I think when we have read through the report, we can see a lot of things that are not correct. So I mean – but we have to answer for ourselves. And as I said, we know pretty exactly what we have in our forest, both the standing volume, what we harvest, and what we will have in the future. We have done this since 1929, and we have step by step been underestimating the standing volume, but also the harvesting potential. And I'm 100% sure that that is the case also going forward here. So what I mean, our peers, they have to answer for themselves. But as I said, we haven't really bothered to get into details yet. But we will do that and we will release something in next week or the week after.

Figure 11 – Ulf Larson Answer in SCA Q4 2023 earnings call

1 *Amount of corporate land is fixed to 2022 AB Land Holdings - all AB land from 2010 to 2022 has grown by only 200,000 ha or 8.3%. Stating the higher ownership (2022 number) is conservative / beneficial to SCA.

** SCA Data not 5-year average

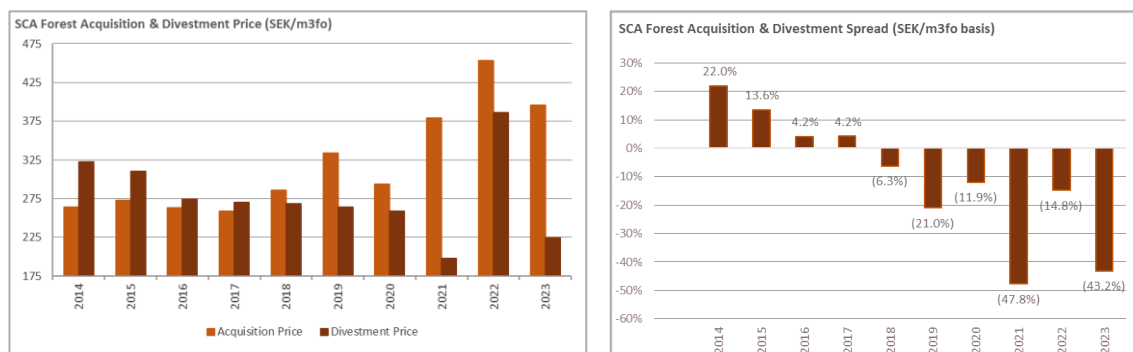


Divergence in acquisition and divestment

Starting in 2018, SCA began making negative margins on its acquisition and divestment operations. These margins really blew out in 2019 and again in 2021.

Acquisitions & Divestments - Viceroy Analysis										
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Acquisition										
Volume, thousand m3fo	1,655	185	123	261	197	429	288	467	448	183
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Spread	22.0%	13.6%	4.2%	4.2%	-6.3%	-21.0%	-11.9%	-47.8%	-14.8%	-43.2%

Figure 12 – Acquisitions and Divestments Viceroy analysis



Figures 13 & 14 – SCA Forest Acquisition & Divestment Price and SCA M&A Spread, respectively

This poses a conundrum for SCA:

- Real arm's length buyers of established forest land & vintages would, according to SCA, pay a price based on the standing timber volume of the land.
 - This implies that SEK/m3fo on SCA's books is overstated, as SCA land sales are yielding significantly less value (numerator, SEK) per standing timber volume (m3fo) than implied by SCA's book.
- As SCA is selling land it has recently felled, there should be less standing timber (denominator, m3fo) against the value of the felled forest land (numerator, SEK), resulting in a *higher* SEK/m3fo.
 - We can see from satellite data that SCA does indeed sell recently felled land.
- SCA is buying SEK/m3fo for significantly more than it is selling it.

Thus, the conundrum: the growth rate, vintage/age of the standing timber, and harvesting rate of standing timber is clearly paramount in the valuation of SCA's forest assets. Despite this, SCA marks its standing timber to market on purely a SEK/m3fo basis.

Even if we assume standing timber growth is linear (and it almost is), it is vastly outpaced by the discount rate on a 100-year asset cycle.

There are no more words to describe how ludicrous SCA's valuation method is.

We note that this spread coincides with the 2018 increase in harvest rate suggesting that SCA is attempting to meet its harvest criteria by acquiring **mature forests**. The prospect of bringing forward harvests, and therefore value, can be partially attributable to SCA acquisitions and disposals. The spread must be considered an operating expense.



Overharvesting

SCA's forestry surveys incorporate new simulated growth rates and harvest rates, both of which have increased ~40% and ~25% respectively between surveys in 10 years. How this happens in the ultimate predictable long-term asset such as 100-year asset cycle forests evades us.

This consistent outperformance in tree-growing contradicts the company's claim of having a reliable understanding of its resources and we believe it is a cover to increase its harvesting to boost valuations.

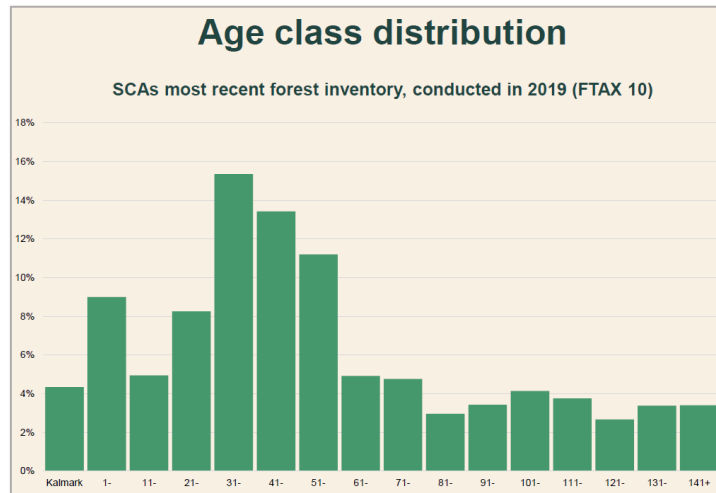


Figure 15 – SCA FTAX forest inventory age

We have mapped SCA's various growth rate assumptions for standing timber across three forest surveys in order to demonstrate that the ultimate long-term 100 year predictable asset is **purportedly** significantly overperforming;

- Scenario 1: the growth rate from 2010 is applied to present.
- Scenario 2: the growth rate from 2010 is applied to 2015, and the 2016 growth rate is applied to present.
- Scenario 3: the growth rate from 2010 is applied to 2015, the 2016 growth rate is applied to 2019 and the 2019 growth rate is applied to present.

Without harvesting, these growth rate changes have ~15% impact on SCA's current standing volume.

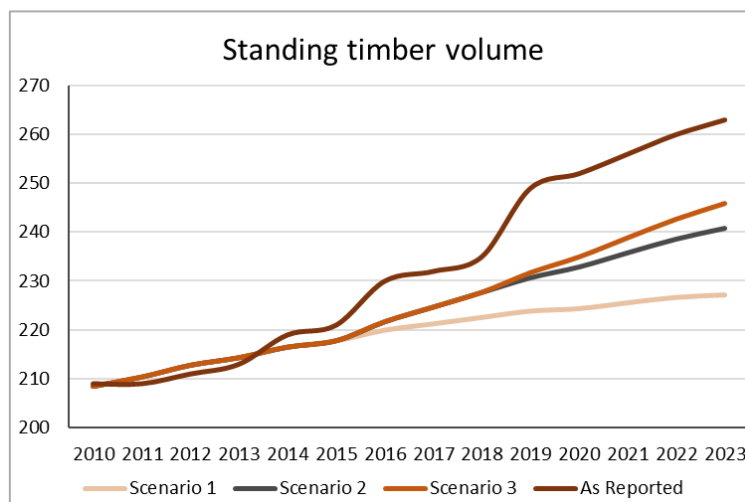


Figure 16 – Standing timber volume per scenario



However, when we subtract SCA's **reported harvests** from the above scenarios we get the following chart with significant divergence in scenarios.

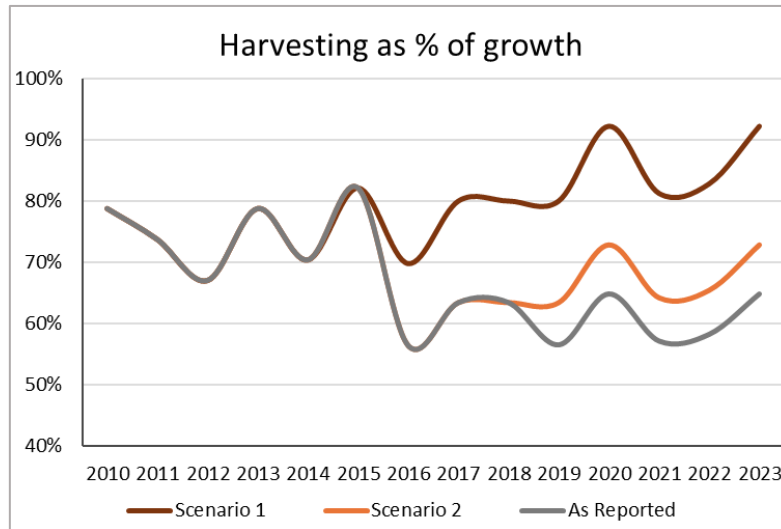


Figure 17 – Harvesting as % of growth per scenario

Using the 2010 growth rate, **SCA would now be harvesting >90% of growth**. We believe the sole purpose of SCA's drastic growth rate revisions is to enable overharvesting and inflate its asset base.

Alongside its buying of mature plots and sale of immature plots: we believe the sole purpose of SCA's drastic growth rate revisions is to enable overharvesting, bring forward revenues, and inflate its asset base.

Discount rates

SCA has also failed to substantiate the use of unreasonably low discount rates used to value its biological assets.

Let's dig into this more: one of the assets whose sale was used to justify the 2019 valuation change, 317kha of forest sold to Billerud, has recently been written down specifically due to rising discount rates.



Figure 18 – 2019 Q2 Presentation

- In 2019 Bergvik Ost sold 317k ha of forest land to AMF through an 89.9% sale of holding company BSO Holding AB.
- Billerud marked down the value of its investment in the holding company of 317k ha of forest land in 2023 by SEK164m.
- Billerud CEO Ivar Vatne stated to Dagens Industri that an increase in discount rates was the culprit.



A major disappointment in Billerud's BILL +1.11% fourth quarter is the operating profit of minus SEK 191 million, where the average estimate in Infront's compilation was SEK 46.5 million.

The explanation is the 10 percent ownership in Bergvik Skog Öst, whose write-down of SEK 1.64 billion "costs" Billerud SEK 164 million.

"The discount factor for the value of forest has gone up a bit now. So it's a mathematical formula," says CEO Ivar Vatne to Di.

The group's turnover was nevertheless somewhat weaker than expected.

Figure 19 – Dagens Industri - Billeruds nye vd: "Ingen som ska tjäna pengar i ett sådant läge"²

Similarly, we can see that SCA's discount rate is significantly lower than peers, a reversal of historic trends³.

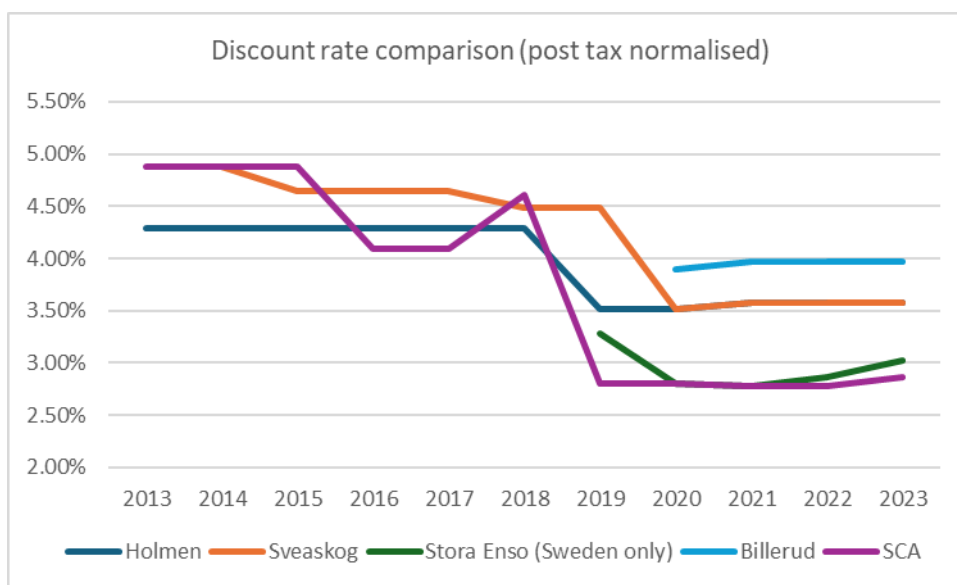


Figure 20 – SCA forest assets discount rate comparison

Meanwhile: the Riksbank policy rate has gone completely the opposite direction. The discount rate should be significantly more correlated to this policy rate than the baffling impact of covid.

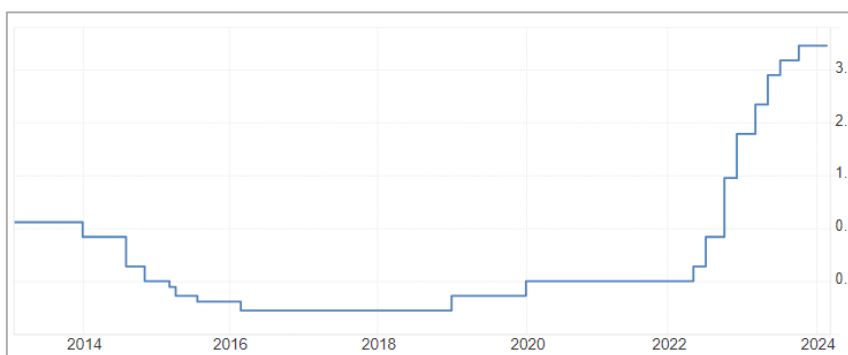


Figure 21 – Riksbank policy rate

We reiterate that SCA's discount rate of 3.5% is both absurdly low and completely divorced from reality.

² <https://www.di.se/nyheter/billeruds-nye-vd-ingen-som-ska-tjana-pengar-i-ett-sadant-lage/>

³ We note that these discount rates are only possible alongside short-term growth assumptions.



Conclusion

There is a clear divergence when comparing standing volume per hectare figures between SCA and all company owned land in Norrland. If SCA's data is true, it suggests that the productivity of all company-owned land in Norrland is decreasing, except for their own holdings. Obviously, we don't believe that is the case.

The prospect of bringing forward harvests, and therefore value, can be partially attributable to SCA acquisitions and disposals. We therefore suggest that short-term NPV assumptions must include acquisition/disposal net cash flows as OPEX. SCA is paying for performance.

We reiterate that SCA's valuation assumptions are absurd and not fit for purpose. It consists of unaudited data for a timeframe that does not align with its valuation methodologies, counties that do not align with their forest holdings, and valuation units that do not correspond with data stated in annual reports.

We stand by our research.



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