Carbon credit accounting: Evidence of asset features in Brazilian markets that do not perfectly qualify as intangibles

Discussion

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Context: Transparency about corporate climate targets

- More and more firms are publishing **net-zero targets** (Comello et al. 2023; Desai et al. 2023).
- Conceptually, these targets are voluntary, long-term, and highly **uncertain** forecasts of a firm's net GHG emissions.
- Most firms (must) rely on **voluntary carbon credits** (VCCs) to meet their targets.
- The **quality of VCCs** varies widely, as do their prices (Comello et al. 2023, 2022)
- Further, the voluntary carbon market is widely **unregulated** (the "Wild West"; Reichelstein 2022)
- Thus, the use of VCCs adds further **opacity** to corporate net-zero targets.
- Prior literature provides **limited evidence** on the use of VCCs and the drivers of supply and demand.
- Yet understanding VCC usage and how investors perceive it, is crucial for assessing whether VCCs contribute to credible net-zero pledges – or indicate greenwashing.

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The paper in a nutshell

WHAT (research interest)

- A description of the Brazilian carbon credit market
- A small-sample analysis of Brazilian firms' accounting for carbon credits

WHY (motivation)

- Little extant knowledge about the workings of (voluntary) carbon credit markets
- Diversity in firms' accounting for carbon credits

HOW (methods)

- Description of market features
- Discussion of accounting treatments in the light of IFRS guidance
- Manual analysis and verbal description of four companies' accounting for carbon credits

My comments in summary

(realizing that I am not a coauthor or editor – just a lowly discussant)

- I learned a lot about VCCs – **thank you** for the opportunity to read this paper!
- **Focus** and explicate the research interest (and how it relates to accounting)
- Specify the **contribution** over and above existing studies
- Motivate **Brazil** as a setting and explain how insights may (not) generalize
- Consider a more **systematic** discussion of VCC-related accounting issues (and an example)
- Consider analyzing **more (buyer) firms** to show variation
- **Restructure** the paper and remove redundancies

Focus and explicate the research interest (and how it relates to accounting)

You currently seem to mix two areas:

- Describing and discussing carbon credit **markets** – both voluntary and mandatory
- Describing and discussing the **accounting** for carbon credits – by both buyers and sellers

Within the "accounting" focus, you seem to try to do two things:

- Provide **descriptive** ('positive') documentation of how carbon credits *are, in fact*, accounted for
- Provide **conceptual** ('normative') reasoning related to how carbon credits *should be* accounted for

This results in a long and somewhat unfocused paper. You could consider **focusing** on:

- **Voluntary** (versus mandatory) carbon credits – largest literature gap and greatest need in practice
- **Buyers'** (versus sellers') accounting practices – highest relevance to standard-setting debate

Doing so might also end up suggesting a **different title.**

Specify the contribution over and above existing studies

- You state: “Our study contributes to enriching the scientific conversation on the financial accounting of carbon credit assets and liabilities” (p. 5).
- Can you show more precisely how you add to the many existing studies?
- Is Table 1 (intended to be) complete?
- Greater focus (see previous slide) should help.

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Motivate the Brazilian setting and explain how insights may (or may not) generalize

- Given that the "*lack of regulation on carbon credit accounting in Brazil, as well as the low knowledge and disclosure of carbon credit markets, hinder achieving standardization and even consensus on accounting practices*" (p. 22), what can we learn from this specific market that might transfer to other markets?
- "*there is an important difference in the Brazilian context*" (p. 4) – what exactly is this difference, and how does it affect the generalizability of the Brazilian analysis to other jurisdictions?
- Brazil as "*one of the main destinations for carbon credit projects from all over the world*" (p. 3) – but why limit analysis to <u>Brazilian</u> buyers?

Consider a more systematic discussion of VCC-related accounting issues (and an example)

Distinguish (even more) clearly between **mandatory and voluntary** carbon credits

- Which differences between mandatory and voluntary carbon credits imply differences in accounting?
  - *"The main difference between the regulated and the voluntary market is that in the latter there is no centralization, inspection, or even a standard for these operations."* (p. 5)
- But is that all?
  - Mentioned in passing on p. 15: *"The voluntary participation of companies is explained by the expected social, environmental, and economic benefits, both by the carbon offsetting itself and by the greener image that companies have been pressured to achieve (Oliveira, 2022; Jiang et al., 2021)"* – Can these justify the asset definition and/or some specific asset class? Also, when are assets recognized? When derecognized?
- Related, **timing** matters: Discuss accounting at purchase vs retirement more clearly
- Consider a **worked example** with journal entries

Consider a more systematic discussion of VCC-related accounting issues (and an example) (cont'd)

- Section 2.1: Where do the **future economic benefits** come from? What is the business model for VCCs?
  - For example, mandatory carbon credits have future economic benefits because they can be used to settle obligations under a mandatory emissions trading scheme – but what exactly are the future economic benefits embodied in voluntary carbon credits, in particular for firms not included in a mandatory emissions trading scheme? Do such benefits derive exclusively from trading?

- Section 2.2: Where do **obligations** arise? The discussion seems to mix VCC and MCC arguments.
  - Interesting, however, for VCCs: "as companies, committed to reducing GHG, emit them" (p. 11) – the precise nature of the net-zero targets seems to matter
  - Recognition: Is there a constructive obligation at all (expectations, no practical ability to avoid)?
  - Measurement: How many VCCs are needed as of the balance sheet date, at what price?

Consider a more systematic discussion of VCC-related accounting issues (and an example) (cont'd)

Obligations arising from voluntary net-zero targets (NZTs) – the most interesting aspect (I agree with the authors' statement on p. 27 – consider new illustrative example #15 for IAS 37 ("Net zero commitment")

- *„The manufacturer recognises a provision as a result of its net zero commitment: (a) when it has emitted the greenhouse gases it has committed to offset; and (b) if at that time, management judges that its announcement has given rise to a constructive obligation to meet the net zero commitments."*
- Do firms already do this? *Natura* is one example – an ‚outlier'? Can you deep-dive into this? – Do firms with similar NZTs also recognize provisions (or at least contingent liabilities)? If not, why not?

Confusion in the *Natura* case

- *„Thus, the company accounts annually for liability increase, as opposed to recognizing an expense, measured by the expectation of disbursement*" (p. 26) – Isn't expense the debit? Or is asset recognition the debit? What, then, when cash is spent, and upon retirement? ("*and recognizes the decrease of the cash balance with the expenses incurred as assets*"; p. 26
- What does the liability reflect: The need to purchase (obligation) or to retire (no obligation)? ("recognized liability is reduced through emission neutralization with the retirement of the purchased carbon credits… Therefore, asset balances are offset against liability balances")
- Fig. 4 helps, but even better to show a worked example with journal entries

Consider analyzing more (buyer) firms to show variation

- Consider going large-scale
- Move beyond Brazilian buyers – rather, the largest buyers globally?
- Exploit variation in possible determinants of the relevant accounting decisions

Restructure the paper and remove redundancies

Understanding accounting requires understanding the underlying events and transactions – **reverse order** of sections 2 and 3

- For example, the three stages on pp. 15-16 matter for the accounting

Possible **revised structure**

- Introduction
- Features of voluntary carbon credit markets
- Buyer‘s accounting for VCCs according to IFRS (much of sections 5 and 6 could go here)
  - Buyers‘ business models for VCCs
  - Assets and liabilities
  - Income and expense
- Empirical study
- Conclusion

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Many thanks and good luck with the paper!

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