Assets and Liabilities: When do they Exist?

Nicole Cade, University of Pittsburgh
Kim Ikuta-Mendoza, University of Washington
Lisa Koonce, The University of Texas at Austin

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Familiar Definitions

- “Assets are probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events.” (FASB)
- “An asset is a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity.” (IASB)

... piece of cake, right?
What’s the Issue?

• Both the IASB and the FASB have long struggled with how to define assets and liabilities...

**QUESTION: Is a lottery ticket an asset?**
What’s the Issue?

Standard Setters’ Concern vs. Standard Setters’ Intention

- Misinterpretation of the words “probable” or “expected”
- Asset = “present right”
- Liability = “present obligation”

QUESTION: Is a lottery ticket an asset?
What’s the Issue?

“...it need not be certain, or even probable, that the resource will produce economic benefits. It is only necessary that the economic resource already exists and that there is at least one circumstance in which it would produce economic benefits.”

(IAASB Exposure Draft, 2015)

QUESTION: Is a lottery ticket an asset?
Why is this an Important Issue?

• Although many believe the Conceptual Framework is only used by standard setters, they are not the only ones.
  – E.g., preparers, auditors, lawyers, and students.

• If these parties understand assets and liabilities differently than standard setters intend, then:
  – Writing standards is more difficult than it needs to be.
    • E.g., written and purchased options and stand-ready obligations
  – Preparers may under-identify assets and liabilities.
  – Users’ expectations about the benefit transfers that underlie reported assets and liabilities may be incorrect.
The Proposed Solution

Standard Setters’ Objective

$p(benefit\ transfer)$

$0\% \quad 100\%$

Does NOT Exist

Does Exist

required $p$ threshold for existence
The Proposed Solution

Standard Setters’ Objective

- Make it clearer that:
  - For an asset to exist, it must only have the “potential to produce economic benefits” (IASB 2015, 40), and
  - For a liability to exist, it must only have the “potential to require the entity to transfer an economic resource to another party” (IASB 2015, 43).
Our Research Objectives

1. Determine whether individuals naturally use probability in a way that deviates from standard setters’ intentions.

2. Evaluate whether the probability terms in the existing definitions cause individuals to misuse probability.

3. Assess whether standard setters’ proposed change will alleviate their concerns regarding probability.
What We Did

• Conducted multiple experiments
• In each experiment, participants considered a single two-party business transaction, and indicated:
  a) Whether an asset exists for the payee, OR
  b) Whether a liability exists for the payer.

![Diagram showing two characters, one asking if the payee has an asset and the other asking if the payer has a liability, with a cash transfer occurring with probability $p$ between them. Experiments 1, 3, & 4 are shown on one side and Experiments 2 & 5 on the other.]
What We Did

- Manipulated probability level $p$: 1%, 20%, or 80%.
- Manipulated definition:
  - No definition,
  - An existing definition (includes the term *probable*), or
  - A proposed definition (includes the term *potential*).

Experiments 1, 3, & 4

Experiments 2 & 5
Our Research Objectives

1. Determine whether individuals naturally use probability in a way that deviates from standard setters’ intentions.

2. Evaluate whether the probability terms in the existing definitions *cause* individuals to misuse probability.

3. Assess whether standard setters’ proposed change will alleviate their concerns regarding probability.
How do Individuals use Probability?

- Research suggests individuals are not good at probabilistic reasoning (Bernstein 1998) and, thus, often simplify a given task to render the required judgment (Kahneman and Frederick 2002).

<table>
<thead>
<tr>
<th>Require Certainty</th>
<th>-OR-</th>
<th>Use a Probability Threshold</th>
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- **p(benefit transfer)**
  - Does NOT Exist
  - Does Exist

\[ p \text{ threshold} \]
How do Individuals use Probability?

- Do individuals judge assets and liabilities similarly?

**Symmetric Identification**

If \( p \) threshold for **ASSETS** here

\( p \) threshold for **LIABILITIES** here

**Asymmetric Identification**

If \( p \) threshold for **ASSETS** here

\( p \) threshold for **LIABILITIES** somewhere here
Study Participants

- **N** = roughly 50 per condition
- General MTurk population
  - Individuals with strong prior accounting knowledge may overweight this knowledge and underweight the experimental stimuli, weakening our tests.
  - Thus, we purposefully draw from a participant pool that is *not* contaminated by accounting knowledge.

Does the payee have an *asset*?

Does the payer have a *liability*?
Experiment 1: Assets

- $2 \times 3$ ($Probability \times Definition$) between-participant design
- $Probability$: 20% or 80% chance that ABC Company will receive $50,000 from Master Miner Co.
- $Definition$:
  - No Definition
  - Existing Definition – “An item is an asset if it provides the company with a probable future economic benefit.”
  - Proposed Definition – “An item is an asset if it provides the company with a potential future economic benefit.”
- DV: Proportion of yes responses to “Would you consider the contract with Master Miner Co. to be an asset of ABC Co.?”
Experiment 2: Liabilities

- Same design, plus a 1% condition.
- Same case.
- Same definition conditions, except focus is on the future sacrifice of benefits.
- DV: Proportion of yes responses to “Would you consider the contract with ABC Co. to be a liability of Master Miner Co.?”
Asset Results: No Definition

- The majority of individuals use a high probability threshold to determine asset existence.
Asset Results: No Definition

- The majority of individuals use a high probability threshold to determine asset existence.
Asset Results: No Definition

The majority of individuals use a high probability threshold to determine asset existence.
Different from assets, the majority of individuals use a very low probability threshold to determine liability existence.

Liability Results: No Definition

![Graph showing the proportion of "Yes" responses for different probability thresholds.](image)

- **Experiment 2**

  Does the payer have a liability?
• Different from assets, the majority of individuals use a very low probability threshold to determine liability existence.
Our Research Objectives

1. Determine whether individuals naturally use probability in a way that deviates from standard setters’ intentions.
   - Many individuals use probability when determining asset and liability existence; although the threshold for liabilities is much lower.

2. Evaluate whether the probability terms in the existing definitions cause individuals to misuse probability.

3. Assess whether standard setters’ proposed change will alleviate their concerns regarding probability.
Do the Definitions cause Difficulties?

• If YES, then individuals would be even **less** likely to say an asset/liability exists after being given the definition.

• If **NO**, then individuals given and not given the definition should determine existence at the same rate.
• The existing definition has no incremental impact on asset existence judgments.
Liability Results: Existing vs. No Definition

- The existing definition has no incremental impact on liability existence judgments.
Our Research Objectives

1. Determine whether individuals naturally use probability in a way that deviates from standard setters’ intentions.
   - Many individuals use probability when determining asset and liability existence; although the threshold for liabilities is much lower.

2. Evaluate whether the probability terms in the existing definitions cause individuals to misuse probability.
   - The probability terms in the existing definitions are not the cause of individuals’ misuse of probability.

3. Assess whether standard setters’ proposed change will alleviate their concerns regarding probability.
Will the Proposed Change Help?

- If YES, then individuals given the proposed definition should be more likely to say an asset/liability exists than individuals given the existing definition.

- If NO, then individuals given either definition should determine existence at the same rate.
Asset Results: Proposed vs. Existing Definition

- The proposed wording helps, but does not eliminate, the problem for assets.

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Experiment 1

### Proportion of "Yes" Responses

- **Proposed Definition** ("Potential")
  - 20% Probability: 38%
  - 80% Probability: 95%

- **Existing Definition** ("Probable")
  - 20% Probability: 78%
  - 80% Probability: 94%

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Does the payee have an asset?
Liability Results: Proposed vs. Existing Definition

- The proposed wording helps, but does not eliminate, the problem for liabilities.
Our Research Objectives

1. Determine whether individuals naturally use probability in a way that deviates from standard setters’ intentions.
   - Many individuals use probability when determining asset and liability existence; although the threshold for liabilities is much lower.

2. Evaluate whether the probability terms in the existing definitions cause individuals to misuse probability.
   - The probability terms in the existing definitions are not the cause of individuals’ misuse of probability.

3. Assess whether standard setters’ proposed change will alleviate their concerns regarding probability.
   - The proposed wording helps (but does not eliminate) the problem.
Additional Experimentation

• [Experiment 3] Will experienced accountants be similarly affected by the proposed change?
  – Replicates existing vs. proposed definition asset results using participants with 3+ years of accounting experience.

• [Experiment 4] Does individuals’ sensitivity to expected value provide an alternative explanation for our findings?
  – Holding expected value constant, participants continue to respond to our probability manipulation.

• [Experiment 5] Do results generalize to other scenarios?
  – Replicates liability results using a case based on a financial guarantee.
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Conclusions

1. **A Problem Exists:** Many individuals use probability when determining asset and liability existence.
   - Although the majority of individuals employ a *much* lower probability threshold for liabilities than for assets.

2. **Unanticipated Cause:** The probability terms in the existing definitions are **not** the cause of individuals’ misuse of probability.

3. **One Possible Solution:** Still, replacing the term *probable* with the term *potential* **does** lower a significant number of (but not all) individuals’ probability thresholds.
   - But, maybe we could do *better*?
Piece of cake, right?

THANK YOU!

Next up: Lynn Rees & Mary Tokar