Gambling and the National Accounts

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Discussion by
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Expectation?
Reality
“This isn’t betting. This is bookmaking. And that’s where our Trading team comes in. A big day on the trading floor creates an atmosphere to rival any stock exchange in the world.”
– Recruitment advert for UK bookmaker Ladbrokes.
This paper

• How should we think about gambling within the System of National Accounts (SNA)?
  
  – Wagers are like financial derivatives
  
  – New wagers (and thus new derivatives) are ‘purely speculative’ and should not be counted as output
This paper

• How should we think about gambling within the System of National Accounts (SNA)?

  – Wagers are like financial derivatives

  – New wagers (and thus new derivatives) are ‘purely speculative’ and should not be counted as output

   (in my opinion)
# Types of wagers

<table>
<thead>
<tr>
<th>Fixed-odds wagers</th>
<th>Casino wagers</th>
<th>Spread-betting wagers</th>
<th>Pool wagers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial stake paid by consumer.</td>
<td>Initial stake paid by consumer.</td>
<td>No initial stake paid by consumer.</td>
<td>Initial stake paid by consumer.</td>
</tr>
<tr>
<td>No explicit service charge.</td>
<td>No explicit service charge.</td>
<td>No explicit service charge.</td>
<td>Often an explicit service charge or a proportion of each stake is withheld as an explicit service charge.</td>
</tr>
<tr>
<td>Creditor and debtor position can change in magnitude but not direction.</td>
<td>Creditor and debtor position can change in magnitude but not direction.</td>
<td>Creditor and debtor can change in both magnitude and direction.</td>
<td>Individual creditor positions can change in magnitude but not direction. However total debtor position remains fixed at total staked.</td>
</tr>
<tr>
<td>Outcome determined by uncertain future event.</td>
<td>Outcome determined by uncertain future event.</td>
<td>Outcome determined by uncertain future event.</td>
<td>Outcome determined by uncertain future event.</td>
</tr>
<tr>
<td>Total cash pay-out can exceed total staked.</td>
<td>Total cash pay-out can exceed total staked.</td>
<td>Total cash pay-out can be unlimited.</td>
<td>Total cash pay-out cannot exceed total staked.</td>
</tr>
</tbody>
</table>

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**Labour leadership odds**

<table>
<thead>
<tr>
<th>Jeremy Corbyn</th>
<th>1/9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owen Smith</td>
<td>11/2</td>
</tr>
</tbody>
</table>
Current SNA treatment

- Focuses on lotteries (pool wagers)
  - Price of tickets = service charge + transfer of income to the winner
  - Either explicit service charge, or
  - Implicit service charge = gross gambling yield = \( \Sigma \)wagers – \( \Sigma \)payout
- Lottery as intermediary between participants
Questions

• Is the current SNA treatment comprehensive and sensible?
  – Are wagers financial instruments?
    • If so, which?
      • Is it sensible to treat all wagers like pool wagers?
    – How sensible is it to view service charges as output?
Wagers are financial instruments

• International Accounting Standards (IAS) 32:
  – A financial instrument is “any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity”, and
  – “the ability to exercise a contractual right may be contingent on the occurrence of a future event”

• Similar language in SNA (2.29, 3.33 & 3.35)
Specifically: a financial derivative

A financial derivative:

<table>
<thead>
<tr>
<th>IAS 39</th>
<th>SNA (11.11 &amp; 11.12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Require no (or little) investment</td>
<td>Requires no principal and no income accrues</td>
</tr>
<tr>
<td>Value depends on an underlying item</td>
<td></td>
</tr>
<tr>
<td>Settled at a later date</td>
<td></td>
</tr>
</tbody>
</table>

All wagers fit all three criteria
### What type of derivative?

<table>
<thead>
<tr>
<th></th>
<th><strong>Forward</strong></th>
<th><strong>Option</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Premium paid?</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Value at inception?</strong></td>
<td>Zero</td>
<td>Positive</td>
</tr>
<tr>
<td><strong>Position variability?</strong></td>
<td>Magnitude &amp; direction</td>
<td>Magnitude</td>
</tr>
<tr>
<td><strong>Obligation for transaction?</strong></td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Spread-bet wager? ⇒ forward-type contract

Fixed-odds/Casino wager? ⇒ options contract

Pool wager? ⇒ options contract, but capped in magnitude
Derivative or insurance?

- Accounting standards: gambling cannot be seen as insurance
  - IASB: gambling *creates* a risk, insurance *transfers* a risk
  - SNA: insurance covers against a loss, a wager does not cover against a loss

- Economic distinction is less clear-cut
Wagers: output or not?

- Explicit service charges: always output

- SNA: explicit + implicit service charges (i.e. gross gambling yield)

- Haynes: Wagers and creation of financial derivatives should be treated the same way
Output related to derivatives

- SNA chapter 17, part 4:
  - Options: use the premium or (if the financial institution acts as market maker), the bid/offer margin. (cf. 17.289)
  - Forwards: zero value at inception, so (effectively) no output associated with these.
Should there be output?

- **Haynes**: only if a service is provided
- Gambling and financial derivatives are ‘purely speculative’
  - Contrast to FISIM: resolving asymmetric information
  - Derivatives/wagers create a financial risk, rather than transfer a financial risk, as in insurance
  - With symmetric partners (e.g. a forward), who provides a service to whom?
- **Conclusion**: no implicit service charge, accept negative value added
Not so fast!

• **Inklaar:** the term ‘purely speculative’ is not a clear, unambiguous concept

  – Derivatives: typically a way of *hedging* risks, i.e. transferring existing risk rather than creating a new risk for the fun/heck/profit of it

  – Bank is either a market maker or an intermediary
Pool & casino wagers

- Pool wager: explicit service charge $\Rightarrow$ output

- Casino (or fixed-odd) wager:

  **Example:**
  Bet €1 on every number 1–36

  **Expected return:**
  \[
  \left[\left(\frac{36}{37}\right) \times €36\right] - €36 = -€0.027
  \]
Pool & casino wagers

• Casino (or fixed-odd) wager:

Slot machines have a pre-programmed pay-out rate of <100%
Pool & casino wagers

• Casino (or fixed-odd) wager:

• More in general: see e.g. Nevada’s ‘Gaming Revenue Information’ ([http://gaming.nv.gov/index.aspx?page=149](http://gaming.nv.gov/index.aspx?page=149)):
  – Average win percentage on Games & Tables: 13.35% (June 2016)
  – Average win percentage on slot machines: 6.92% (June 2016)

• If a negative expected return is not an implicit service charge for entertainment services, what is it?
  – Compare FISIM on deposits
Spread betting

- Spread-betting wagers: “no explicit service charge”
  - Not necessarily: bookmaker can charge a commission (explicit charge); also common for FX trades (and thus forwards)
- Or charge implicitly through a bid-offer spread
Derivatives

- Option premium > initial value (potentially)

- FX forward: commission or bid/offer spread

- These would be hard to measure, but may be quite important

- New derivatives can be economically indistinguishable from an insurance contract ⇒ there should be output associated with this
Summing up

- Thorough discussion of an under-explored area
  - Strong on accounting rules

- Provocative argument for zero output from wagers
  - But symmetry argument (implicit vs. explicit charges) holds greater sway for me