Fair Value Accounting and Measures of Corporate Profits in the U.S. National Accounts

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International Guidelines on National Accounts

- **System of National Accounts 2008 (SNA)**
  - Production account
  - Income accounts
  - Revaluation account

- **Corporate Profits in the SNA**
  - Component of operating surplus
  - Part of entrepreneurial income

- **Holding Gains and Losses in the SNA**
  - Reflect changes in prices but do not arise from production
  - Recorded in the revaluation account
Accounting Framework

- **Accounting Identity**
  - \( V^* = W^* + \Pi^* + R^* + T^* - S^* \)
  - Asterisks denote actual values

- **Direct Measurement of Entrepreneurial Income**
  - \((V + \varepsilon_V) = (W + \varepsilon_W) + (\Pi + \varepsilon_\Pi) + (R + \varepsilon_R) + (T + \varepsilon_T) - (S + \varepsilon_S)\)
  - \(\varepsilon\) denotes measurement error
  - BEA methodology

- **Indirect Measurement of Entrepreneurial Income**
  - \(\Pi = V - W - R - T + S + (\varepsilon_V - \varepsilon_W - \varepsilon_R - \varepsilon_T - \varepsilon_S)\)
  - Net measurement error attributed to entrepreneurial income
U.S. Corporate Profits in the NIPAs

- Direct Measurement
  - Quarterly financial-based source data for quarterly estimates
  - Annual tax-based source data for annual estimates
  - Quarterly source data used to extrapolate and interpolate
  - BEA adjusts source data to remove holding gains and losses

- Quarterly Source Data
  - Census Bureau QFRs
  - SEC financial reports
  - FDIC call reports
  - ISO insurance data
  - Fair value accounting affects source data and introduces practical challenges
Practical Considerations

- **Fair Value Accounting (FVA)**
  - Certain assets and liabilities treated as sold at fair value
  - Generates holding gains and losses
  - Affects financial-based and tax-based source data

- **U.S. Financial Accounting Rules for FVA**
  - Apply to financial assets and liabilities
  - Characterization of gains and losses
    - Net income
    - Other comprehensive income
  - Trading securities
  - Under increasing scrutiny
  - Financial industries particularly affected in recent recession
Quarterly U.S. Corporate Profits
Quarterly U.S. Corporate Profits

Percentage of All Industries

Non-Financial

Financial

RoW

www.bea.gov
Quarterly U.S. Corporate Profits

Percentage of GDI

CFC
Other NOS
Corporate Profits
Taxes less Subsidies
Compensation

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Quarterly Source Data: SEC Data for NAICS 52
Quarterly Source Data: SEC Data for NAICS 52229, 523, 52411, 52599

Unadjusted vs. Adjusted.
Quarterly Source Data: FDIC Data for NAICS 5221
Quarterly Source Data: ISO Data for NAICS 524126

Adjusted
Unadjusted

Billions USD


-250 -200 -150 -100 -50 0 50 100
FV Gains and Losses in Lieu of Service Fees

Income Statements from SEC Data for NAICS 523

<table>
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<tr>
<th>Line</th>
<th>2006</th>
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<th>2009</th>
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<td>(billions USD)</td>
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<td>Other</td>
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<td><strong>Net Revenues</strong></td>
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<td><strong>85.2</strong></td>
<td><strong>34.4</strong></td>
<td><strong>98.1</strong></td>
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<td>Expenses:</td>
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<td><strong>Total Non-Interest Expenses</strong></td>
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<td><strong>Income before Income Taxes</strong></td>
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<td><strong>8.2</strong></td>
<td><strong>-37.2</strong></td>
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- Removal of FV gains and losses yields persistently negative profits
- Service fees may not adequately compensate risks assumed
- Calls into question SNA guidance on holding gains and losses
Results and Conclusions

- Published U.S. corporate profits experience a disproportionate decline relative to other GDI components.

- The magnitude of adjustments required to remove FV losses is significant for the recessionary period 2007Q4 to 2009Q2.

- The patterns of unadjusted series and adjusted series suggest published quarterly U.S. corporate profits may reflect FV losses.

- NAICS 523 firms appear to use FV gains in lieu of service fees.

- Current quarterly source data available to measure quarterly corporate profits are inadequate without significant adjustments.

- Quarterly source data based on surveys designed for statistical purposes would be a valuable alternative to current source data.