

The Role of Profits and Income in the Statistical Discrepancy

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Introduction

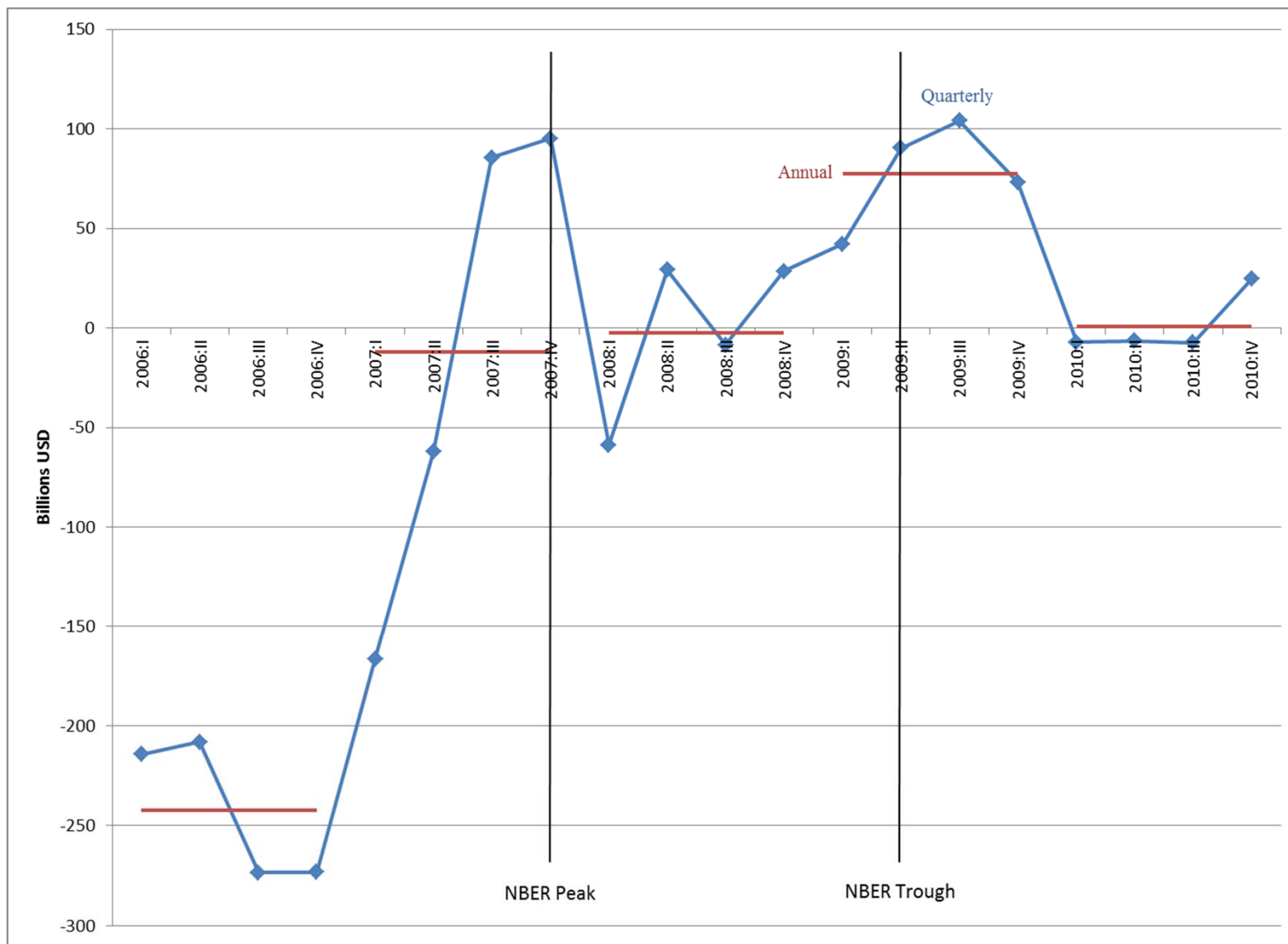
- Sources of Measurement Error in GDP and GDI
 - Timeliness
 - Completeness
 - Reliability
 - Conceptual inconsistencies
- BEA Recognizes Strengths and Weaknesses Underlying GDP and GDI
- BEA Records the SD with GDI



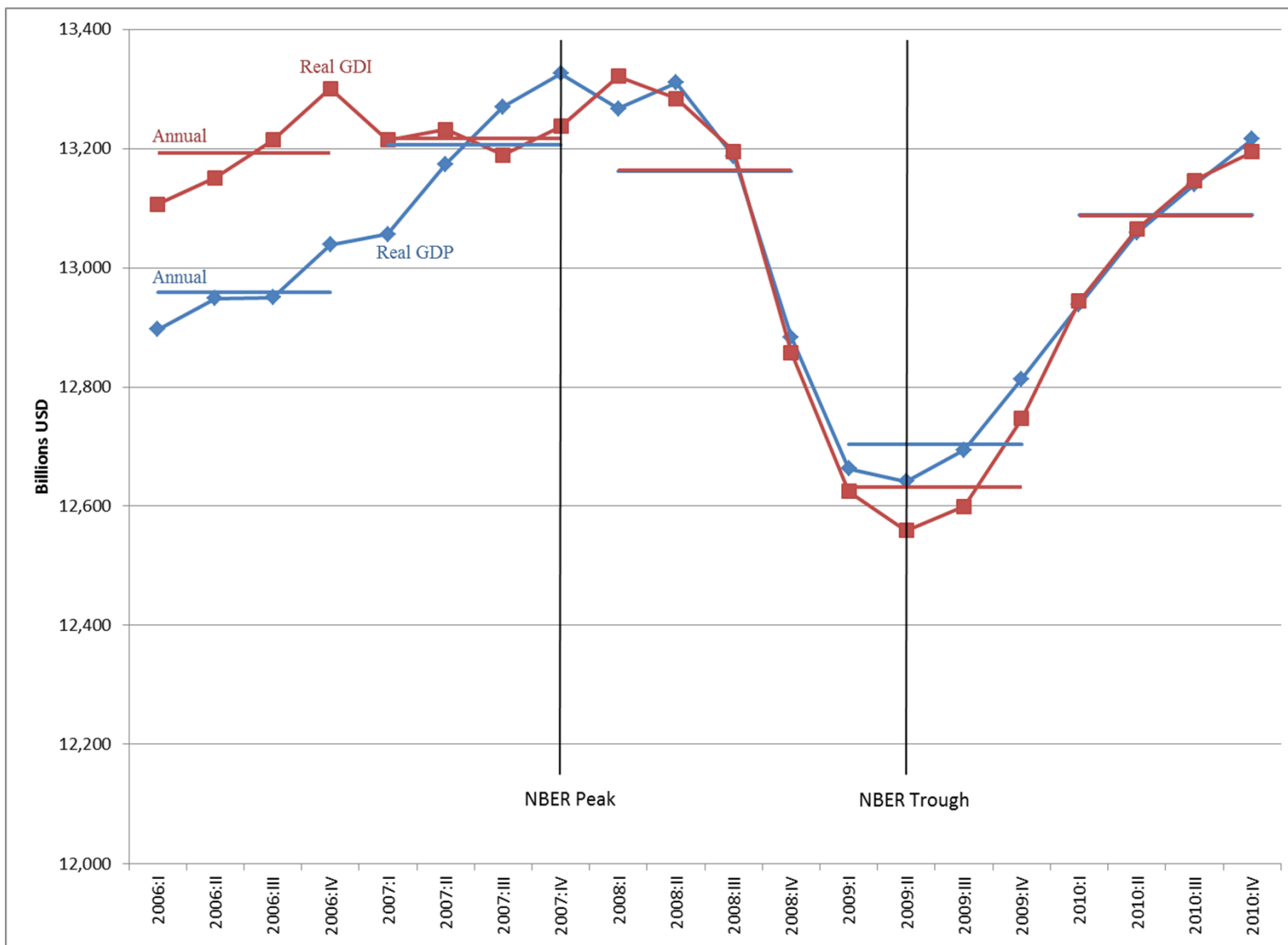
Related Work

- Research Estimating the SD
 - Klein and Makino (2000), Grimm (2007)
- Research Estimating True Output
 - Fixler and Nalewaik (2009), Nalewaik (2010), Greenaway-McGrevy (2011)
- Research Distributing the SD
 - Chen (2006, 2010)

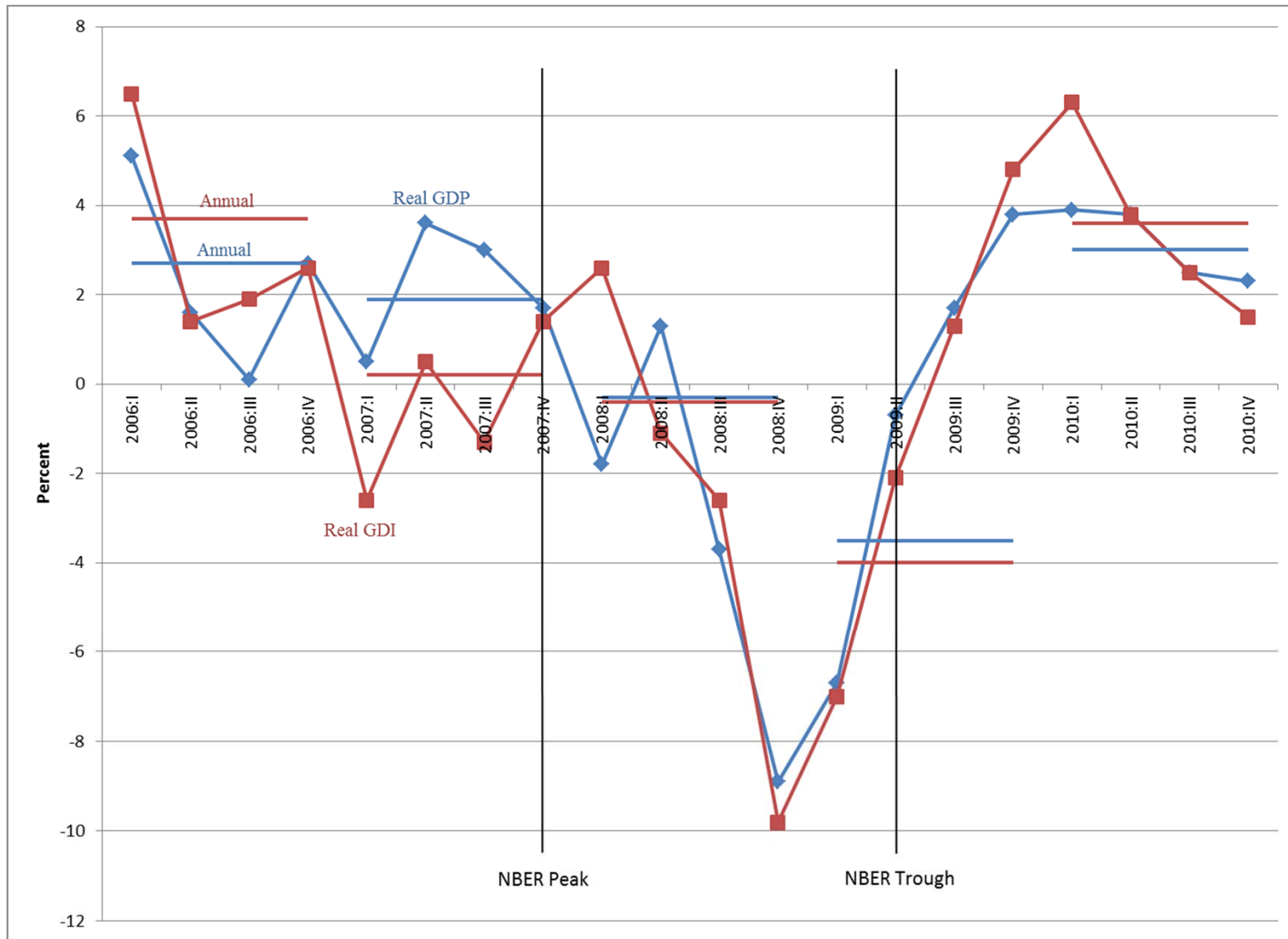
Recent Behavior: Statistical Discrepancy, 2006-2010



Recent Behavior: Real GDP and Real GDI Levels, 2006-2010



Recent Behavior: Real GDP and Real GDI Percent Changes, 2006-2010

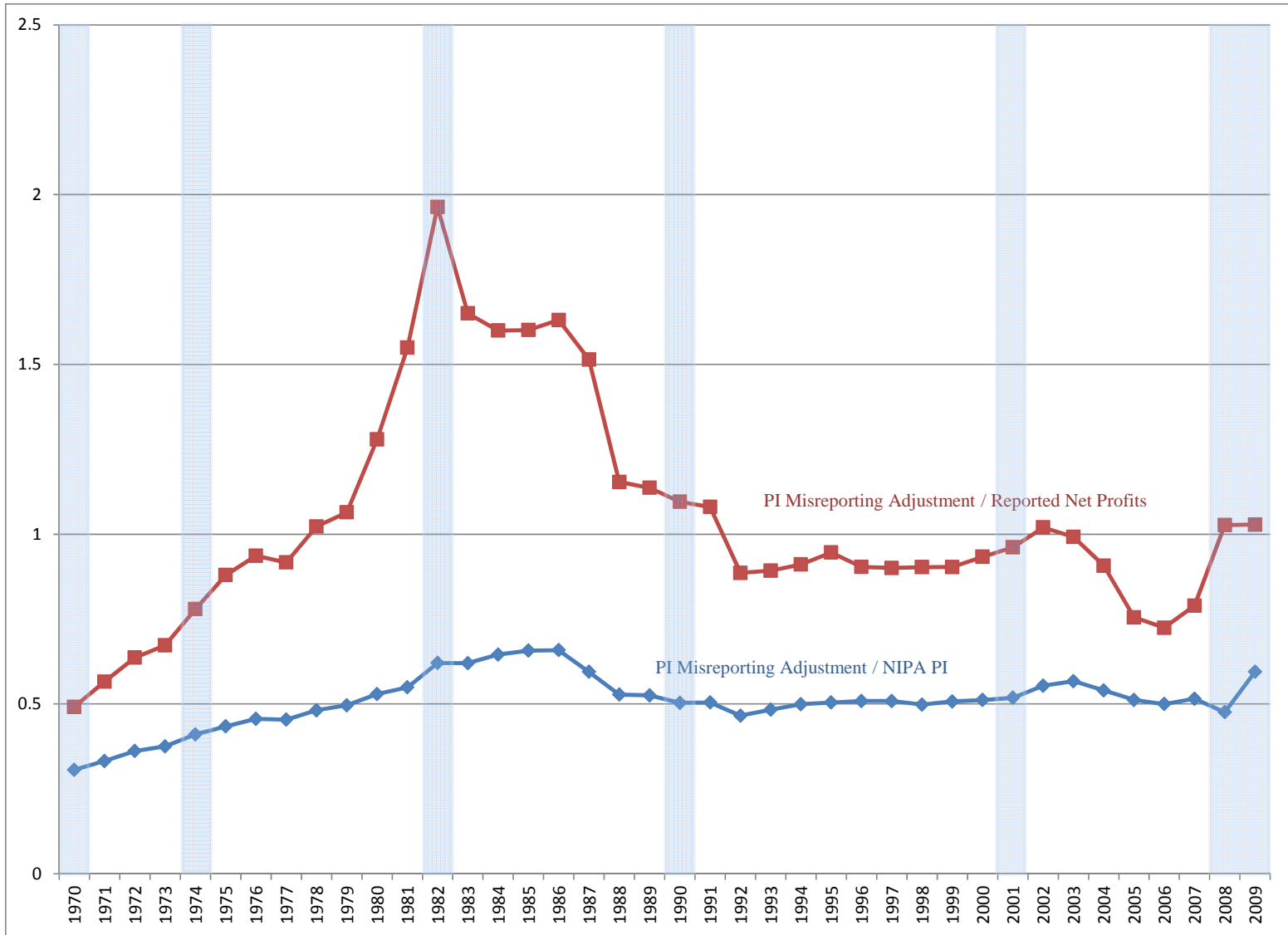




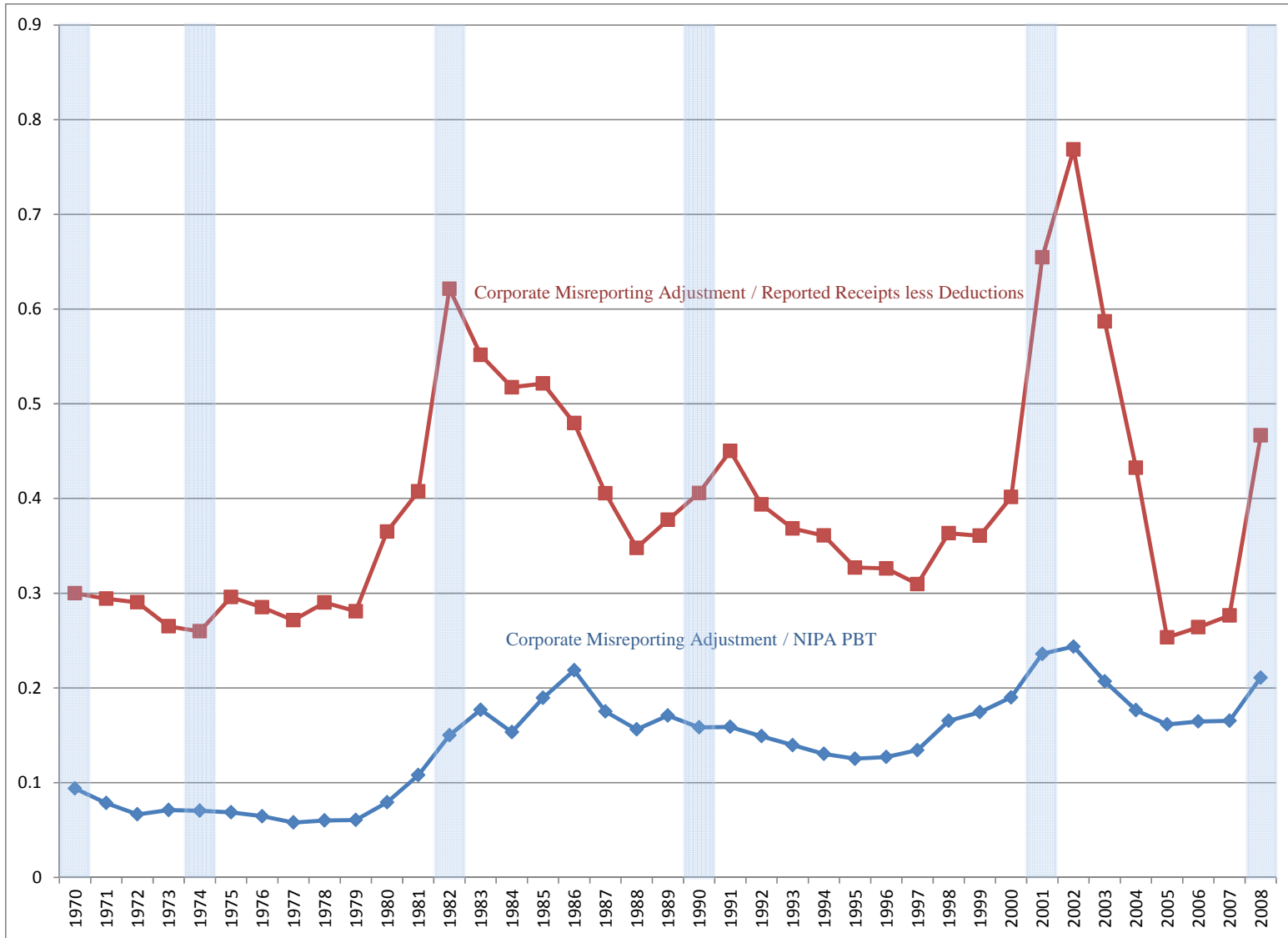
Contributing Factors: Misreporting Adjustments

- Proprietors' and Partnership Income
 - 2001 IRS NRP study
 - Annual Census exact-match studies
- Corporate Profits
 - Annual IRS corporate audit reports
 - Judgments regarding tax rates and universe of corporations
- Estimates Imprecise
 - Due to lack of timely, comprehensive source data
- Significant Amount of Profits and Income

Contributing Factors: Misreporting Adjustments

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Contributing Factors: Capital Gains/Losses

- Corporate Partners
 - Included in corporate and partnership tax data
 - Source data on corporate share include capital gains/losses
 - BEA approximates corporate share of capital gains/losses
 - Net capital gains attributable to partnerships as a proportion of net partnership income published by SOI

<i>Year</i>	<i>Net Capital Gains Proportion</i>
2008	1.6 %
2007	46.7
2006	39.3
2005	37.0
2004	34.9
2003	19.3
2002	1.6
2001	11.0
2000	37.4
1999	34.6



Contributing Factors: Capital Gains/Losses

- Mark-to-Market Accounting
 - Certain assets treated as sold at fair value
 - Generates holding gains/losses

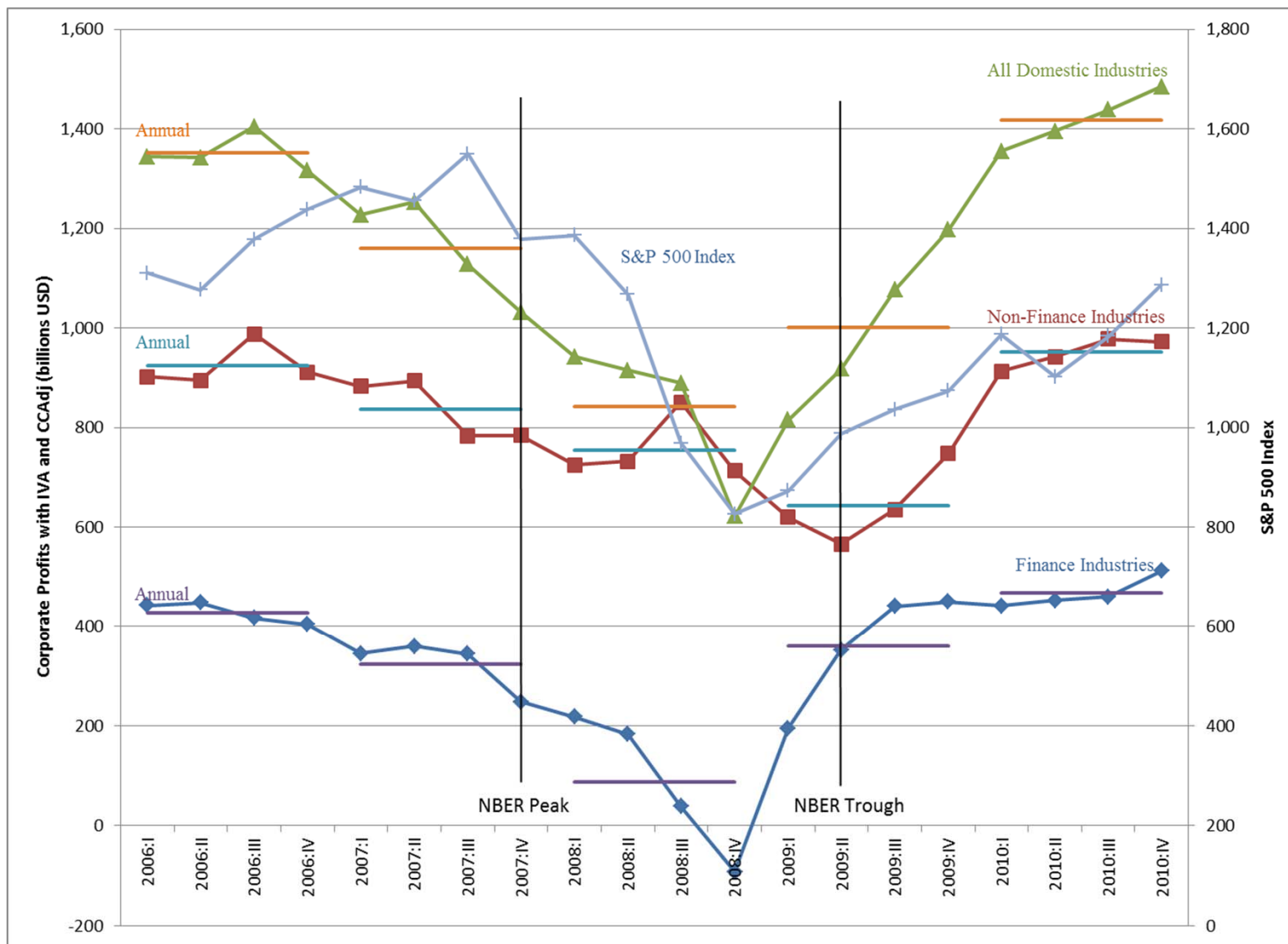
- Tax Accounting Rules
 - Taxpayers elect
 - Characterization of income/losses
 - Hedging transactions
 - Include fees and may include mark-to-market income/losses
 - Reported as ordinary income/losses for ordinary business purposes
 - BEA does not currently adjust for hedging transactions
 - \$95.1 billion in losses reported for 2008



Contributing Factors: Capital Gains/Losses

- Financial Accounting Rules
 - Apply to three classes of assets
 - Debt securities intended to be held to maturity
 - Debt and equity securities for short-term trading
 - Debt and equity securities available for sale
 - Trading securities
 - Include mortgage-backed securities
 - Characterization of income/losses
 - Financial-based source data
 - Quarterly Financial Reports (QFRs) from Census Bureau
 - Compustat
 - Finance industries
 - Mark-to-market rules under increasing scrutiny

Contributing Factors: Capital Gains/Losses Corporate Profits with IVA and CCAAdj



Contributing Factors: Employee Stock Options

- Source Data for Profits
 - Financial-based data measure fair market value over vesting period on grant date
 - Tax-based data measure market price less strike price on exercise date

- Source Data for Wages and Salaries
 - CES excludes income from stock options
 - QCEW measured consistently with tax-based data

- Differences Affect Quarterly Estimates

- Moylan (2008)



Contributing Factors: Produced Intangibles

- Expensed Intangibles
 - Seller's revenue offsets buyer's expense
- Capitalized Intangibles
 - BEA assumes low capitalization rate for purchased software
- Acquisition Year
 - Profits and income overstated if capitalization rate is too low
- Depreciation Year
 - CCAdj absorbs difference between actual and assumed depreciation



Summary and Conclusions

- Profits and income play a significant role in the determination of GDI.
- Measurement error in profits and income affect BEA's decision to record the SD on the income side of the accounts.
- BEA will continue to compile and report separate estimates of GDP and GDI, showing the SD with GDI.
- More attention should be given to describing GDI estimates in a manner that will inform the public about this alternative source of macroeconomic information.
- Additional research is warranted.