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

**Dylan G. Rassier**

U.S. Department of Commerce
Bureau of Economic Analysis
Washington, DC
dylan.rassier@bea.gov

Proceedings of the 2013 Federal Committee on Statistical Methodology Research Conference

**Abstract**

The U.S. Bureau of Economic Analysis (BEA) uses quarterly source data to measure quarterly U.S. corporate profits. Consistent with international guidelines, BEA adjusts the source data to remove holding gains and losses; however, fair value accounting (FVA) practices call into question the completeness of the adjustments. This paper evaluates the source data that underlie quarterly measures of corporate profits in the financial industries. The primary objective is to identify FV gains and losses that may lead to measurement error in quarterly corporate profits. A secondary objective is to question the exclusion of FV gains and losses related to operations that may rely on FV gains in lieu of service fees for funding. The results reveal significant FV losses reported in source data for the recessionary period 2007Q4 to 2009Q2. In addition, some evidence suggests that not all FV losses are removed and may affect published quarterly corporate profits. Finally, the complete exclusion of FV gains and losses yields persistently negative measures of economic profits for firms that engage in some types of activities. The results indicate that current source data available to measure quarterly corporate profits in the financial industries are inadequate without significant efforts made to adjust the data, which are often not practical or possible during a typical estimation cycle. The extent of the inadequacy was highlighted during the 2008 financial crisis. Thus, quarterly source data based on surveys designed for statistical purposes would be a valuable alternative to source data currently available to measure quarterly corporate profits in the financial industries.

**JEL Codes:** E01, E23, M41
**Keywords:** measurement, national accounts, production, fair value accounting

*The views expressed in this paper are solely those of the author and not necessarily those of the U.S. Department of Commerce or the Bureau of Economic Analysis.

## 1. Introduction

Under U.S. financial accounting rules, fair value accounting (FVA) is a practice in which an asset or liability is treated as sold at fair value even when no sale takes place. As a result, related holding gains and losses may be recognized in a firm's income statement. In contrast to financial accounting rules, international guidelines for national accounting require statisticians to exclude holding gains and losses from national income and product statistics because holding gains and losses reflect changes in prices but do not reflect transactions and do not arise from production. Thus, where U.S. national income and product statistics rely on data sourced from financial accounting records, adjustments are required to remove holding gains and losses attributable to FVA practices. Given the size of financial assets and liabilities subject to FVA at some U.S. financial firms, potentially misleading effects of FVA on measured performance of the firms has been an area of increased scrutiny since the 2008 financial crisis (Bhat, et al., 2011; Laux and Leuz, 2010). Likewise, challenges associated with identifying FV gains and losses in U.S. financial-based source data call into question the completeness of the adjustments required for national accounting purposes (Rassier, 2012).[1]

In the U.S. National Income and Product Accounts (NIPAs), gross domestic product (GDP) and its components reflect the production of goods and services for final consumption and investment; gross domestic income (GDI) and its components reflect the related income generated in production. Consistent with international guidelines, the U.S. Bureau of Economic Analysis (BEA) makes a point of removing holding gains and losses from source data. In the case of quarterly GDP, BEA generally measures components with source data based on surveys that are designed to be consistent with national accounting concepts. In the case of quarterly GDI, BEA measures some components with survey-based source data and other components with financial-based source data. In particular, the corporate profits component of GDI is measured on a quarterly basis with financial data reported on firms' quarterly income statements. The financial data include holding gains and losses attributable to FVA practices.[2]

As a simple illustration, imagine during a given accounting period a firm uses cash to purchase equity securities for trading purposes. Under international guidelines for national accounts and under U.S. financial accounting rules, the securities are recognized as an asset at the market value on the acquisition date. At the end of the accounting period, any change in value is recorded under the U.S. rules as a gain or loss in the firm's income statement, regardless of whether the securities have been sold. In contrast, the international guidelines treat the change in value as a revaluation, which by design does not affect income because there is no corresponding production. Thus, using the firm's income statement to measure corporate profits that are consistent with the international guidelines requires an adjustment to remove the gain or loss.

Approximately 10 percent of GDI is attributable to corporate profits in recent periods. However, during the recent recession that began in the fourth quarter of 2007 and ended in the second

[1] In addition, Palumbo and Parker (2009) suggest changes to the international guidelines for national accounting in response to the 2008 financial crisis.

[2] In addition to quarterly financial data used to measure quarterly corporate profits, BEA measures annual corporate profits using data reported on firms' annual corporate income tax returns. While corporate income tax returns may also include FV gains and losses, the scope of this paper is limited to quarterly measures.

quarter of 2009 (i.e., 2007Q4 to 2009Q2), corporate profits as a share of GDI decreased to as little as 4.6 percent in 2008Q4. Shares for the other components of GDI either increased or remained relatively steady. In addition, shares of corporate profits earned in domestic financial industries and domestic non-financial industries are approximately 25 percent and 60 percent, respectively, in recent periods with the remaining earned in the rest of world (RoW).[3] However, also in 2008Q4, corporate profits earned in financial industries decreased to negative 10.0 percent and corporate profits earned in non-financial industries increased to 75.5 percent.

While there should be no surprise that aggregate GDI decreased during the recession, the disproportionate decrease in corporate profits relative to the other components of GDI is worthy of further scrutiny in light of source data that include FV gains and losses. Likewise, the significant decline in the share of corporate profits earned in the financial industries provides incentive for further inquiry because the removal of FV losses by BEA was particularly important but challenging in the financial industries during the recession. Thus, declines in corporate profits in the financial industries may reflect FV losses to the extent that losses were not identified in quarterly financial-based source data.

This paper evaluates quarterly financial-based source data that underlie quarterly measures of U.S. corporate profits in the financial industries. The primary objective of the paper is to identify FV gains and losses that may lead to measurement error in quarterly corporate profits. To that end, the paper reports results from three quarterly data sources for the first quarter of 2006 to the fourth quarter of 2010 (i.e., 2006Q1 to 2010Q4): quarterly financial reports filed with the Securities and Exchange Commission (SEC), quarterly call reports filed with the Federal Deposit Insurance Corporation (FDIC), and quarterly insurance data reported by the Insurance Services Office, Inc. (ISO). While failure to completely remove FV gains and losses may not have a significant effect on aggregate GDI, the effect on corporate profits could be substantial, and corporate profits alone are an important and closely watched statistic.

A secondary objective of the paper is to question the exclusion from income and product measures of FV gains and losses related to some types of activities. Some firms appear to use FV gains in lieu of service fees to fund operations such as market making activities or capital raising activities, but the international guidelines for national accounting exclude holding gains and losses from national income and product statistics regardless of the underlying purpose. Thus, using a small sample of individual firms, the paper explores an alternative to the complete exclusion of holding gains and losses related to some types of activities.

The results reveal significant FV losses reported in quarterly source data for the recessionary period 2007Q4 to 2009Q2. While the results confirm that source data have been adjusted by BEA to remove FV losses, some evidence suggests that not all FV losses are removed, which may affect published quarterly U.S. corporate profits. Finally, the analysis of some types of activities at individual firms suggests that the complete exclusion of FV gains and losses yields persistently negative measures of economic profits. The paper concludes that current quarterly source data available to measure quarterly corporate profits in the financial industries are inadequate without significant efforts made to adjust the data, which are often not practical or

[3] In the NIPAs, financial industries include financial and insurance firms as well as bank and other holding companies.

possible during a typical estimation cycle. The extent of the inadequacy was highlighted during the 2008 financial crisis. Thus, quarterly source data based on surveys designed for statistical purposes would be a valuable alternative to source data currently available to measure quarterly corporate profits in the financial industries.

The paper is organized in four sections that follow. The next section presents a summary of the treatment of corporate profits and holding gains and losses in the *System of National Accounts 2008* (*SNA*). The third section outlines the measurement framework for corporate profits in the U.S. national accounts and discusses characteristics of data sources underlying the corporate profits measures. The fourth section presents results of the data analysis. The last section concludes.

## 2. Corporate Profits and Holding Gains and Losses in the *SNA*

To provide some context for corporate profits in national accounts generally and the NIPAs specifically, this section provides a brief overview of the *SNA* with emphasis on the *SNA* treatment of corporate profits and holding gains and losses. The *SNA* is a sequence of accounts that reflect stocks of assets and liabilities and related economic flows. The sequence includes three categories of accounts: 1) balance sheets, 2) current accounts, and 3) accumulation accounts. Balance sheets reflect stocks of assets and liabilities; the difference between assets and liabilities is net worth. Current accounts include a production account, which reflects production, and income accounts, which reflect the generation and distribution of income earned in production. Accumulation accounts reflect changes in assets, liabilities, and net worth as a result of volume changes, price changes, and saving from production.

Each account in the sequence yields a balancing item or residual that is carried forward to the next account in the sequence. The sequence starts with the production account and ends with the balance sheets. To understand the role of corporate profits and holding gains and losses in the *SNA* requires only a summary limited to three accounts in the sequence: 1) the production account, 2) the primary distribution of income account, and 3) the revaluation account. Corporate profits are generated through production or property income, which may or may not result from production, and are recorded in the primary distribution of income account. Holding gains and losses are generated by holding assets and liabilities and are recorded in the revaluation account.[4]

### 2.1. Corporate Profits in the *SNA*

Figure 1 shows a summary of the production account and the primary distribution of income account of the *SNA*. The production account yields value-added as a residual between output and intermediate consumption of materials, energy, and purchased services. Value-added is referred

[4] The summary here is simplified in four ways. First, the summary is limited to a national level without making distinctions for institutional units, sectors, establishments, and industries. Second, the summary is limited to gross measures without including net measures. In the *SNA*, the difference between gross and net is consumption of fixed capital. Third, potential flows to and from RoW are omitted. Fourth, "operating surplus" includes both incorporated and unincorporated enterprises. In the *SNA*, "operating surplus" is the surplus from production accruing to incorporated enterprises, and "mixed income" is the surplus from production accruing to unincorporated enterprises owned by households.

to in the *SNA* as gross domestic product or GDP. Value-added is carried forward to the primary distribution of income account, which shows the generation of income from production and the allocation of income to the primary factors involved in production: labor, capital, and government. Income accrues to primary factors of production as a result of their direct contribution to production or through the ownership of assets used in production.

In concept, value-added equals the primary income generated from production. The generation of income account, which is one of two subaccounts in the primary distribution of income account, shows value-added used up by producers through payments of compensation to employees and payments of production taxes to governments (net of subsidies received from governments). Property income payments are excluded from uses in the generation of income account because not all property income payments are attributable to assets used in production. The balancing item in the generation of income account is operating surplus, which is the surplus from production prior to any deductions for property income payments.

The second subaccount in the primary distribution of income account is the allocation of primary income account. The allocation of primary income account records receipts of primary incomes and also records property income receipts and payments. The allocation of primary income account is split into an account for entrepreneurial income and an account for the allocation of other primary income. Entrepreneurial income reflects primary income received by businesses, adjusted by property income receipts and payments attributable to business. Corporate profits are part of entrepreneurial income. Entrepreneurial income is carried forward to the allocation of other primary income account, which records primary income received by labor and government and property income receipts and payments attributable to other than business. The balancing item in the allocation of other primary income account is national income.

### 2.2. Holding Gains and Losses in the *SNA*

In the *SNA*, the production and income accounts do not include holding gains and losses on assets and liabilities. Holding gains and losses result from merely holding assets and liabilities without any economic transformation. Holding gains and losses reflect changes in prices but do not reflect transactions and do not arise from production. Thus, rather than including holding gains and losses in production and income, the *SNA* records holding gains and losses in a separate account called the revaluation account.

Holding gains and losses include gains and losses attributable to FVA practices. The *SNA* does recommend recording memoranda in the balance sheet accounts to reflect FV losses associated with non-performing loans. Likewise, the research agenda to the *SNA* suggests a wider use of FVA for loans. However, no mention is made to expand the production and income accounts to include FV gains and losses generated in lieu of service fees as a regular course of business to fund operations.

## 3. Corporate Profits in the U.S. NIPAs

In the NIPAs, production is estimated with two conceptually equivalent measures: GDP and GDI. GDP is estimated based on expenditure for final consumption and investment; GDI is

estimated based on income generated in production. GDP and GDI are also conceptually equivalent to value-added. Value-added is measured every five years in the U.S. benchmark input-output accounts, which yield a balanced framework that also includes production measured by expenditures and income. Final consumption and investment expenditures are extrapolated forward in the NIPAs on a quarterly basis with revisions incorporated annually. Thus, from a practical perspective, U.S. GDP is an expenditure-based measure.

U.S. GDI from a practical perspective is an income-based measure. Rather than calculating operating surplus as a residual in the generation of income account, BEA calculates operating surplus as a sum of independently estimated components for entrepreneurial income and property income attributable to private enterprises. Compensation, taxes on production less subsidies, and the components of operating surplus are measured in the NIPAs annually and extrapolated forward on a quarterly basis. Improvements are introduced to GDI during annual revisions and during benchmark revisions approximately every five years.

### 3.1. Measurement of U.S. Corporate Profits

In the *SNA*, an identity exists between value-added in the production account and the generation of income in the primary distribution of income account. In particular, value-added ($V$) can be written as the sum of compensation ($W$), entrepreneurial income ($\Pi$), net property income ($R$), and taxes on production ($T$) less subsidies ($S$). If value-added and the income components are measured without error in accordance with economic accounting principles, the accounting identity is as follows:

$$V^* = W^* + \Pi^* + R^* + T^* - S^*. \tag{1}$$

The left side of equation (1) reflects production, and the right side reflects the related income generated in production.

The asterisks in equation (1) indicate actual values without measurement error. In practice, the production and income components in equation (1) are generally measured with some amount of random error ($\varepsilon$) attributable to imperfect data sources and estimation methodologies. The objective of national accounting statisticians is to minimize $\varepsilon$. Entrepreneurial income in equation (1) can be measured either directly or residually. If entrepreneurial income is measured directly, measurement error is directly attributable to entrepreneurial income as follows:

$$(V + \varepsilon^V) = (W + \varepsilon^W) + (\Pi + \varepsilon^\Pi) + (R + \varepsilon^R) + (T + \varepsilon^T) - (S + \varepsilon^S). \tag{2}$$

If entrepreneurial income is measured residually, measurement error related to production and the other income components is attributable to entrepreneurial income as follows:

$$\Pi = V - W - R - T + S + (\varepsilon^V - \varepsilon^W - \varepsilon^R - \varepsilon^T + \varepsilon^S). \tag{3}$$

Thus, entrepreneurial income is subject to measurement error whether it is measured directly or residually.

In the NIPAs, quarterly corporate profits are measured directly using data sourced from quarterly financial accounting records that reflect FV gains and losses. If FV gains and losses are not completely removed from the source data, $\varepsilon^{\Pi}$ in equation (2) is affected according to the *SNA* requirement to exclude all holding gains and losses. Thus, the primary objective of this paper is to identify FV gains and losses that may contribute to $\varepsilon^{\Pi}$ in equation (2).

If some firms use FV gains to fund operations in lieu of service fees that would otherwise be charged for services such as market making activities or capital raising activities, the *SNA* requirement to exclude all holding gains and losses is subject to question because the holding gains and losses may reflect returns to capital that are not reflected in traditional accounting measures of income. For example, a trading firm that assumes risks associated with market making activities receives some income from service fees charged to clients and some income from FV gains on the market making activities. In the absence of FV gains, either higher service fees would be required to compensate for the risks assumed or the firm may simply not assume the risk and, therefore, not engage in the activities.

For activities in which FV gains and losses (*G*) are generated in lieu of service fees, the accounting identity in equation (1) can be rewritten as follows:

$$V^* = W^* + (\Pi^* + G^*) + R^* + T^* - S^*. \tag{4}$$

From a practical perspective, the challenge is determining FV gains and losses attributable to production. Thus, equation (2) should be revised as follows to reflect the measurement error associated with determining *G* in equation (4):

$$(V + \varepsilon^V) = (W + \varepsilon^W) + (\Pi + \varepsilon^{\Pi}) + (G + \varepsilon^G) + (R + \varepsilon^R) + (T + \varepsilon^T) - (S + \varepsilon^S). \tag{5}$$

A secondary objective of this paper is to explore an alternative to the complete exclusion of holding gains and losses related to some types of activities. However, establishing criteria to determine *G* and minimize $\varepsilon^G$ in equation (5) is left for future work.

### 3.2. Source Data for U.S. Corporate Profits

BEA generally uses data sourced from financial accounting records for quarterly indicators of corporate profits.[5] In particular, BEA uses the following quarterly source data: 1) quarterly financial reports (QFRs) published by the U.S. Census Bureau, 2) financial reports filed with the Securities and Exchange Commission (SEC), 3) call reports filed with the Federal Deposit Insurance Corporation (FDIC), and 4) property and casualty insurance data reported by Insurance Services Office, Inc. (ISO).

Census Bureau QFRs: Census Bureau publishes QFRs for information, manufacturing, mining, retail and wholesale trade, and professional, scientific and technical industries. BEA uses the QFRs to construct quarterly indicators for corporate profits. QFRs include a sample of publicly

[5] For more information on corporate profits in the NIPAs, see Hodge (2011) and Bureau of Economic Analysis (2002).

owned and privately owned firms and also include adjustments to remove holding gains and losses for use in the NIPAs. Thus, this paper excludes an analysis of QFRs in order to focus on the other three data sources that are more likely to include FV gains and losses.

Quarterly SEC Financial Reports: Unaudited quarterly financial reports are filed by publicly owned firms with the SEC. BEA extracts income statement data from Compustat for some construction, financial, insurance, real estate, transportation, utilities, and other industries. For the financial and insurance industries, quarterly indicators for corporate profits come from Compustat for NAICS 52229 (other non-depository credit intermediation), NAICS 523 (securities, commodity contracts, and other financial investments and related activities), NAICS 52411 (direct life, health, and medical insurance carriers), and NAICS 52599 (other financial vehicles). The Compustat database does not provide a field to distinguish FV gains and losses included in earnings. Thus, for quarters with substantial changes in market values of securities, BEA can only resort to a small sample of quarterly financial reports filed with the SEC by individual firms to adjust for FV gains and losses.

Quarterly FDIC Call Reports: Depository institutions are required to file quarterly call reports with the FDIC. FDIC publishes financial data in their Statistics on Depository Institutions (SDI) for all FDIC-insured institutions. BEA extracts income statement data from SDI for some agriculture, financial, and other industries. For the financial industries, quarterly indicators for corporate profits come from SDI for NAICS 521 (monetary authorities-central bank), NAICS 5221 (depository credit intermediation), and NAICS 5223 (activities related to credit intermediation). The SDI provides fields to distinguish FV gains and losses on securities. However, FV losses (gains) recognized as impairments (recoveries) are indistinguishable from other noninterest expenses. Thus, for quarters with substantial FV losses (gains) charged to impairments (recoveries), BEA must resort to some other source such as quarterly financial reports filed with the SEC to adjust for impairments (recoveries).

Quarterly ISO Insurance Data: ISO reports quarterly data on underwriting income, investment income, and catastrophe losses for property and casualty insurance firms. BEA uses the ISO data to construct quarterly indicators of corporate profits for NAICS 524126 (direct property and casualty insurance carriers). The ISO data do not distinguish FV gains and losses. Thus, for quarters with substantial FV gains and losses, BEA must resort to some other source such as quarterly financial reports filed with the SEC to adjust for FV gains and losses.

### 3.3. FVA under U.S. Financial Accounting Rules

Under financial accounting rules, FVA is required on a recurring basis (i.e., periodically) for some financial assets and liabilities and may be elected for other financial assets and liabilities. Nonfinancial assets and liabilities are generally accounted for at historic cost with no adjustments for FV gains and losses. However, when the value of a nonfinancial asset or liability is considered to be "other-than-temporarily" impaired, FV gains and losses are recognized in net income. Since gains and losses associated with other-than-temporary impairment (OTTI) are only recognized on a nonrecurring basis, nonfinancial assets and liabilities are outside the scope of the present paper. Thus, the focus here is on financial

accounting rules that require or allow FVA for financial assets and liabilities.[6] Table 1 provides a summary of FVA under U.S. financial accounting rules.

Financial accounting rules distinguish three classes of debt and equity investment securities: 1) debt securities intended to be held to maturity (HTM securities), 2) debt and equity securities bought primarily for short-term trading purposes (trading securities), and 3) debt and equity securities that are available for sale but not classified in the previous two classes (AFS securities).[7] HTM securities are accounted for at historic cost. FVA is required on a recurring basis for trading securities and AFS securities. Trading securities include mortgage-backed securities that are held for sale in conjunction with mortgage banking activities.[8] FV gains and losses generated by trading securities are required under financial accounting rules to be included with earnings in the income statement. FV gains and losses generated by AFS securities are generally required to be included directly in the other comprehensive income (OCI) portion of shareholder's equity rather than in earnings.

Financial accounting rules also require FVA on a recurring basis for derivative assets and liabilities, including derivatives that qualify as hedges.[9] FV gains and losses generated by derivative assets and liabilities and derivatives qualified as hedges are required to be included with earnings in the income statement. In the aggregate, gains or losses associated with derivative assets should be offset by gains or losses associated with derivative liabilities. However, earnings available in disaggregated source data may include FV gains and losses associated with derivative instruments. Likewise, gains or losses associated with hedged assets or liabilities are presumably offset only to the extent of the gains or losses on the qualified derivative. Thus, earnings reported in financial statements may include FV gains and losses associated with derivative instruments and financial assets and liabilities that have not been offset by hedges.

In addition to requiring FVA for investment securities and derivative instruments, financial accounting rules allow companies to elect a fair value option (FVO) for other financial assets and liabilities, such as receivables, payables, and debt instruments.[10] A FVO election is generally applied to an individual instrument and is irrevocable. In addition, similar to trading securities and derivative instruments, FV gains and losses associated with an election are required to be included with earnings in the income statement. The FVO has been broadly available since 2008, so earnings reported in recent financial statements may include FV gains and losses associated with the financial assets and liabilities covered by the accounting rules.

---

[6] Financial accounting rules for FV measurement are provided in *Statement of Financial Accounting Standards* (*SFAS*) number 157 or topic 820 in the new *Accounting Standards Codification (ASC)*.

[7] Financial accounting rules for investments in debt and equity securities are provided in *SFAS* number 115 or *ASC* topic 320.

[8] Financial accounting rules for certain mortgage banking activities are provided in *SFAS* number 65 or *ASC* topic 948-310.

[9] Financial accounting rules for derivative instruments and hedging activities are provided in *SFAS* number 133 or *ASC* topic 815.

[10] Financial accounting rules for the FVO for financial assets and liabilities are provided in *SFAS* numbers 159 and 65 or *ASC* topics 825 and 948-310, respectively.

## 4. Results

The primary goal of this paper is to identify FV gains and losses that may lead to measurement error in quarterly U.S. corporate profits for financial industries. The results include three quarterly data sources for 2006Q1 to 2010Q4: SEC, FDIC, and ISO. While the results do not indicate the magnitude of any measurement error, they do provide an appreciation of the extent to which source data require adjustments to remove FV gains and losses. In addition, the results help to draw inferences whether the adjustments are complete for the recessionary period 2007Q4 to 2009Q2.

The discussion of the results is divided into four subsections: 1) provide context based on published U.S. corporate profits statistics, 2) report adjustments for each source of data and the related adjusted and unadjusted data series, 3) discuss the treatment of FV gains and losses that appear to be generated in lieu of service fees, and 4) propose an alternative presentation of published U.S. corporate profits that includes information on holding gains and losses.

### 4.1. Quarterly U.S. Corporate Profits

Figure 2 reports published quarterly U.S. corporate profits from 2006Q1 to 2010Q4 for all industries, non-financial industries, financial industries, and rest of world (RoW). While corporate profits for RoW generally increase over the period, measures for non-financial industries and financial industries decrease to a low in 2009Q2 and 2008Q4, respectively. The decrease for financial industries clearly drives the decrease for corporate profits in all industries. Figure 3 shows published corporate profits by industry as a percentage of all industries. Corporate profits for financial industries are generally 20 to 30 percent of total corporate profits, but the percentage decreases to a low of negative 10 percent in 2008Q4 with offsetting increases in non-financial industries and RoW.

Figures 4 and 5 provide a breakdown of the component shares of U.S. GDI and U.S. net operating surplus (NOS), respectively. In figure 4, corporate profits are approximately 10 percent of GDI except during the recessionary period 2007Q4 to 2009Q2. Corporate profits fall to as little as 4.6 percent of GDI in 2008Q4, which is offset by increases in other components of GDI. Likewise, corporate profits are approximately 40 percent of NOS in figure 5 except during the recessionary period when the percentage falls to 22.2 percent in 2008Q4.

Figures 2 through 5 reveal two interesting patterns. First, corporate profits experience a disproportionate decline relative to other components of GDI and NOS during the recessionary period 2007Q4 to 2009Q2. Second, the disproportionate decline in corporate profits is driven largely by decreases in the financial industries. Given the inclusion of mortgage-backed securities in the accounting for trading securities and given the concentration of debt and equity securities purchased and sold for finance-related activities, financial firms are particularly affected by FVA practices.[11] For NIPA purposes, the removal of FV gains and losses was particularly important but challenging in the financial industries leading up to the cyclical peak

[11] Financial accounting rules for FVA have been under increasing scrutiny since the recession from 2007Q4 to 2009Q2 and the related subprime mortgage crisis because of the volatile impact the rules have on earnings during times of market volatility (Bhat et al., 2011; Laux and Leuz, 2010).

in 2007Q4 because of the lack of adequate data on FV gains and losses included in earnings reported in quarterly financial statements. Thus, declines in quarterly corporate profits in the financial industries may reflect FV losses to the extent losses were not identified by BEA, but the patterns shown in figures 2 through 5 are not enough to conclude that corporate profits include FV gains and losses.

### 4.2. Quarterly Source Data by Industry

BEA uses quarterly source data for two purposes in measures of U.S. corporate profits. First, the data are used to extrapolate quarterly corporate profits for current quarterly estimates of corporate profits. Second, BEA uses the data to interpolate quarterly corporate profits between annual estimates of corporate profits that are measured with annual tax-based source data during annual revisions. Figures 2 through 5 for the period 2006 to 2010 are compiled from data published in the 2013 NIPA comprehensive revision, which includes annual corporate profits measured with tax-based source data and quarterly corporate profits measured with financial-based source data. The results reported next focus on the quarterly source data that underlie NIPA measures of quarterly corporate profits.

Figures 6 through 11 report unadjusted and adjusted quarterly net income series from source data that BEA uses to extrapolate and interpolate quarterly profits for the financial industries. The unadjusted series are taken directly from data sources including SEC financial reports, FDIC call reports, and ISO insurance data. The adjusted series are the difference between the unadjusted series and adjustments for FV gains and losses and other holding gains and losses, provisions for credit losses, and income taxes. The adjustments are tabulated in tables 2 through 4 for each period and data source.

Figure 6 includes all firms classified in NAICS 52 (finance and insurance) that are required to file quarterly financial reports with the SEC. While BEA does not use the SEC data to measure quarterly corporate profits for all NAICS 52 industries, figure 6 demonstrates three points. First, firms generally assess the value of their financial assets and liabilities only once each year. For many firms, the assessment is at the end of the calendar year. Thus, the dips in the fourth quarters of 2007, 2008, and 2009 are presumably attributable to FV losses in addition to any changes in actual economic activity. Second, the difference between the unadjusted series and the adjusted series in figure 6 demonstrates that adjustments related to FV losses are significant during the recession. In 2008Q4, adjustments related to FV losses are almost $150 billion – or almost 15 percent of total corporate profits published in the NIPAs – which is determined by adding adjustments for gains on trading securities and gains on investments in tables 2 and 3. The third point from figure 6 is the sharp decline in 2008Q4 even after the series is adjusted. The sharp decline is consistent with corporate profits published in the NIPAs; however, corporate profits in the NIPAs are well below zero while the adjusted series in figure 6 is just less than zero, which suggests published quarterly U.S. corporate profits may reflect FV losses.

Figure 7 reports net income for firms classified in NAICS industries for which BEA uses SEC data to measure quarterly corporate profits. Patterns in figure 7 are similar to those in figure 6. The adjustments related to figure 7 are tabulated in table 2.

Figure 8 includes all depository institutions classified in NAICS 5221 (depository credit intermediation) that are required to file quarterly call reports with the FDIC. The adjustments related to figure 8 are tabulated in table 4. For comparison, figure 9 presents all firms classified in NAICS 5221 that are required to file quarterly financial reports with the SEC. The related adjustments are tabulated in table 3. While the firms included in figure 9 and table 3 are only a subset of the firms included in figure 8 and table 4, two observations are worth noting. First, the unadjusted series and adjusted series in figures 8 and 9 follow similar patterns—the declines in the fourth quarters of 2007 and 2008 completely disappear in both the FDIC and SEC adjusted series. Second, the underlying details in table 3 reveal considerable impairments reported in the SEC data for 2008Q2 to 2009Q1, and the underlying details in table 4 reveal considerable impairments reported in the FDIC data for 2008Q4 to 2009Q2. The impairments generally appear to be attributable to FV losses on assets and liabilities assumed under acquisitions completed in the previous 12 months, which is permitted under financial accounting rules. Thus, impairments are a significant source of FV losses in NAICS 5221.

Figure 10 presents net income compiled from quarterly data reported by ISO on underwriting income, investment income, and catastrophic losses for property and casualty insurance firms classified in NAICS 524126 (direct property and casualty insurance carriers). The adjustments related to the ISO data are tabulated in table 4 and calculated merely as the difference between the source data and BEA's indicator series. Figure 11 shows net income reported for all firms classified in NAICS 524126 that are required to file quarterly reports with the SEC; the related adjustments are included with NAICS 522110 in table 3. The series in figures 10 and 11 follow similar patterns and are not very different from the previously reported series.

### 4.3. FV Gains and Losses Generated in Lieu of Service Fees

The secondary goal is to explore an alternative to the complete exclusion of holding gains and losses related to some types of activities. The point of exploring an alternative can be demonstrated by looking at financial data reported to the SEC for firms classified in NAICS 523 (securities, commodity contracts, and other financial investments and related activities). Table 5 shows annual consolidated and segmented income statements for a small sample of firms classified in NAICS 523.[12]

Firms classified in NAICS 523 and included in table 5 engage primarily in two categories of activities: 1) investment banking and 2) trading and investing. Investment banking activities include activities such as acquisition advisory, underwriting, brokerage, investment advisory, financial planning, and wealth management.[13] Trading and investing activities include activities such as making markets, raising capital, trading, and merchant banking. In the case of investment banking, revenues are generally generated through service fees and commissions. Revenues may also be generated through service fees and commissions for trading and investing

[12] The same point could be demonstrated with quarterly financial data, but annual data allow a more simplistic exhibition for the five-year sample period.

[13] Firms may split investment banking and wealth management activities into two separate operating segments. The analysis here includes both investment banking and wealth management in one category in order to focus on the trading and investing category.

activities. However, as discussed below, firms in NAICS 523 also appear to rely on FV gains in lieu of charging service fees for services that they may not otherwise provide.

In the top panel of table 5, investment banking revenues, service fees, commissions, and other revenues are all positive and relatively steady over the five-year period. Investment banking revenues decline in 2008, which is a result of reduced economic activity according to the firms' annual reports. Service fees, commissions, and other revenues actually increase slightly in 2008. However, trading and investing revenues decline sharply in 2007 and 2008 and are actually negative in 2008. Trading and investing revenues do include some service fees and commissions, but FV gains and losses also make a significant contribution to trading and investing revenues. As a result, the declines in 2007 and 2008 are attributable in large part to FV losses as explained in the notes to the financial statements. If BEA completely removes trading and investing revenues to avoid the inclusion of FV gains and losses, income before income taxes will be negative in each year, which would presumably yield an inaccurate measure of economic profits since the firms would have no incentive to continue operating. In other words, the FV gains generated by trading and investing appear to be generated in lieu of charging service fees. Thus, in contrast to the recommendations of the *SNA*, the complete removal of FV gains and losses is subject to question in the case of trading and investing activities.

The latter point is demonstrated in the segmented income statements in the lower panels of table 5. Net revenues include net interest income and non-interest revenues shown in the consolidated income statements. Non-interest expenses presumably include the same operating expenses itemized in the consolidated income statements, but no detail is reported by segment for non-interest expenses. Income before income taxes declines for the investment banking segments in 2008, which presumably reflects less economic activity during the recession. Income before income taxes also declines sharply for the trading and investing segments in 2007 and 2008, which is attributable to declines in net revenues that include significant FV losses. Non-interest expenses do not decline in 2007 and 2008. From a national accounting perspective, positive returns to the factors of production other than entrepreneurial capital should be offset by negative returns to entrepreneurial capital in 2007 and 2008. Likewise, positive returns to the factors of production other than entrepreneurial capital should be supplemented by positive returns to entrepreneurial capital in 2006, 2009, and 2010. Thus, if FV gains and losses are completely removed, corporate profits do not accurately reflect the returns accruing to entrepreneurial capital.

### 4.4. An Alternative Presentation of U.S. Corporate Profits

This section briefly proposes an alternative presentation of U.S. corporate profits for the financial industries that reflects adjustments for holding gains and losses and reflects the inclusion of holding gains and losses that are generated in lieu of service fees.[14] As shown in table 6, corporate profits are reported initially without adjustments for holding gains and losses. Separate adjustments are then shown for two types of holding gains and losses: 1) holding gains and losses not generated as a direct result of production and 2) holding gains and losses

[14] Corrado et al. (2012) propose an alternative presentation of the production account and the income accounts for the financial industries. The proposal includes information presented on trading gains and losses required to be removed for the determination of output, but the proposal does not affect the presentation of corporate profits.

generated as a direct result of production. The former holding gains and losses are not included in primary incomes, but the latter may be included based on their purpose to replace service fees. The remaining line items in table 6 are consistent with current presentation in the NIPAs.

## 5. Summary and Conclusions

This paper evaluates quarterly source data that underlie quarterly measures of U.S. corporate profits in the financial industries. The primary objective is to identify FV gains and losses that may lead to measurement error in quarterly corporate profits. A secondary objective is to question the exclusion of FV gains and losses related to operations that may rely on FV gains in lieu of service fees for funding. In addition to summarizing patterns in published quarterly U.S. corporate profits for the period 2006Q1 to 2010Q4, the paper reports unadjusted net income series and net income series adjusted for FV gains and losses for three quarterly data sources: SEC financial reports, FDIC call reports, and ISO insurance data.

The results reveal four core observations. First, published U.S. corporate profits experience a disproportionate decline relative to other components of GDI and NOS during the recessionary period 2007Q4 to 2009Q2, which is driven largely by decreases in the financial industries. Second, the magnitude of adjustments required to remove FV losses is significant for the recessionary period – almost 15 percent of total corporate profits published in the NIPAs for 2008Q4 – and impairments are a significant source of FV losses in some industries. Third, the unadjusted source data series fall well below zero in 2008Q4, but the adjusted series are either positive or just less than zero for the same period. The patterns of unadjusted series and adjusted series suggest published quarterly U.S. corporate profits may reflect FV losses. Finally, completely removing FV gains and losses for firms engaged in trading and investing activities yields persistently negative measures of economic profits. Thus, firms engaging in trading and investing activities appear to generate FV gains in lieu of charging service fees.

The results indicate that current quarterly source data available to measure quarterly corporate profits in the financial industries are inadequate without significant efforts made to adjust the data, which are often not practical or possible during a typical estimation cycle. The extent of the inadequacy was highlighted during the financial crisis. Thus, quarterly source data based on surveys designed for statistical purposes would be a valuable alternative to source data currently available to measure quarterly corporate profits in the financial industries.

**References**

Bhat, Gauri, Richard Frankel, and Xiumin Martin. 2011. "Panacea, Pandora's Box, or Placebo: Feedback in Bank Mortgage-Backed Securities Holdings and Fair Value Accounting." *Journal of Accounting and Economics*, 52(2-3), pp. 153-173.

Bureau of Economic Analysis. 2002. *Corporate Profits: Profits before Tax, Profits Tax Liability, and Dividends*. Methodology paper available at www.bea.gov/scb/pdf/national/nipa/methpap/methpap2.pdf. Washington, DC.

Corrado, Carol A., Marshall Reinsdorf, and Kyle Hood. 2012. "Expanding the Definition of Financial Intermediation Services in the U.S. National Accounts." Paper presented at the 32nd General Conference of the International Association for Research in Income and Wealth. Boston, MA.

European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, and World Bank. 2009. *System of National Accounts 2008*. New York, NY: United Nations.

Financial Accounting Foundation, Financial Accounting Standards Board. Statement of Financial Accounting Standards. Numbers 65 (September 1982), 115 (May 1993), 133 (June 1998), 157 (September 2006), and 159 (February 2007).

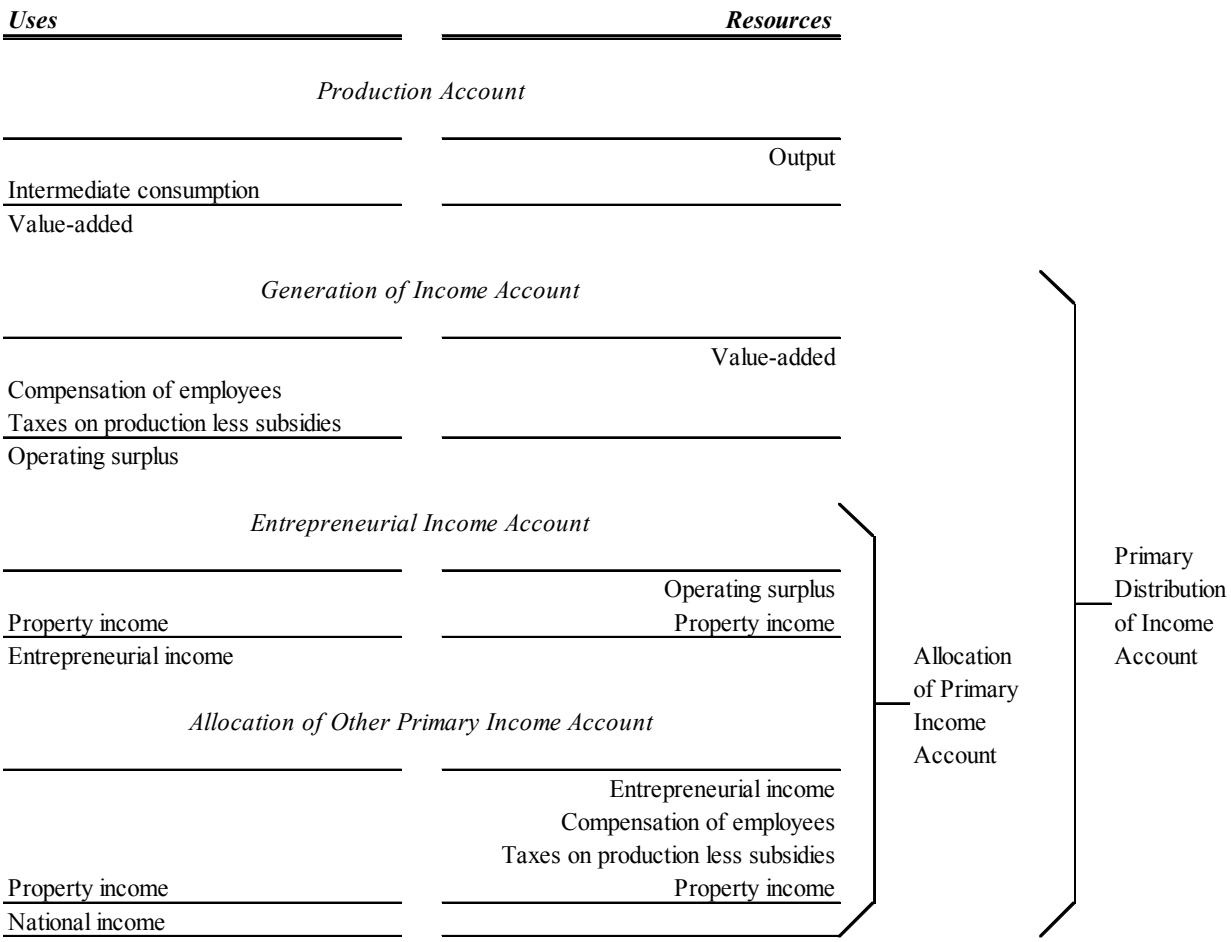
Hodge, Andrew W. 2011. "Comparing NIPA Profits with S&P 500 Profits." *Survey of Current Business*, 91(3), pp. 22-27.

Laux, Christian and Christian Leuz. 2010. "Did Fair-Value Accounting Contribute to the Financial Crisis?" *Journal of Economic Perspectives*, 24(1), pp. 93-118.

Palumbo, Michael G. and Jonathan A. Parker. 2009. "The Integrated Financial and Real System of National Accounts for the United States: Does it Presage the Financial Crisis?" *American Economic Review: Papers & Proceedings*, 99(2), pp. 80-86.

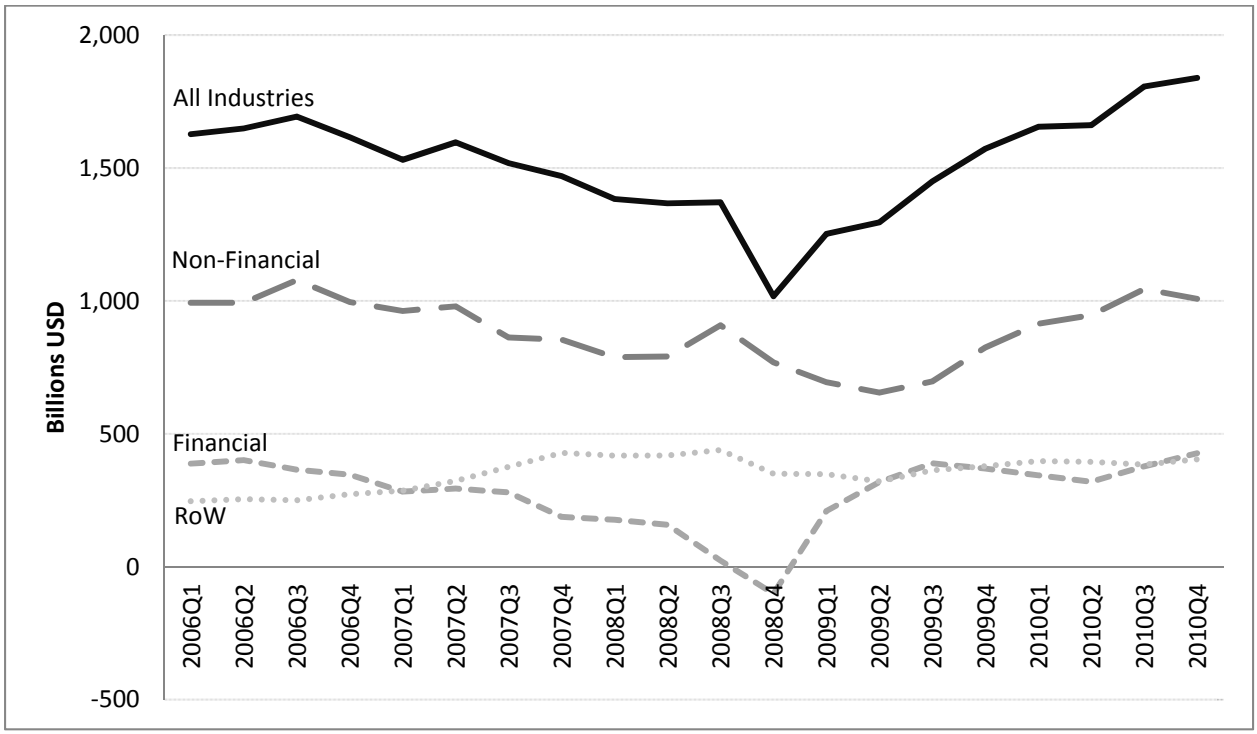
Rassier, Dylan G. 2012. "The Role of Profits and Income in the Statistical Discrepancy." *Survey of Current Business*, 92(2), pp. 8-22.

**Figure 1: Summary Production and Primary Income Accounts of the *SNA***



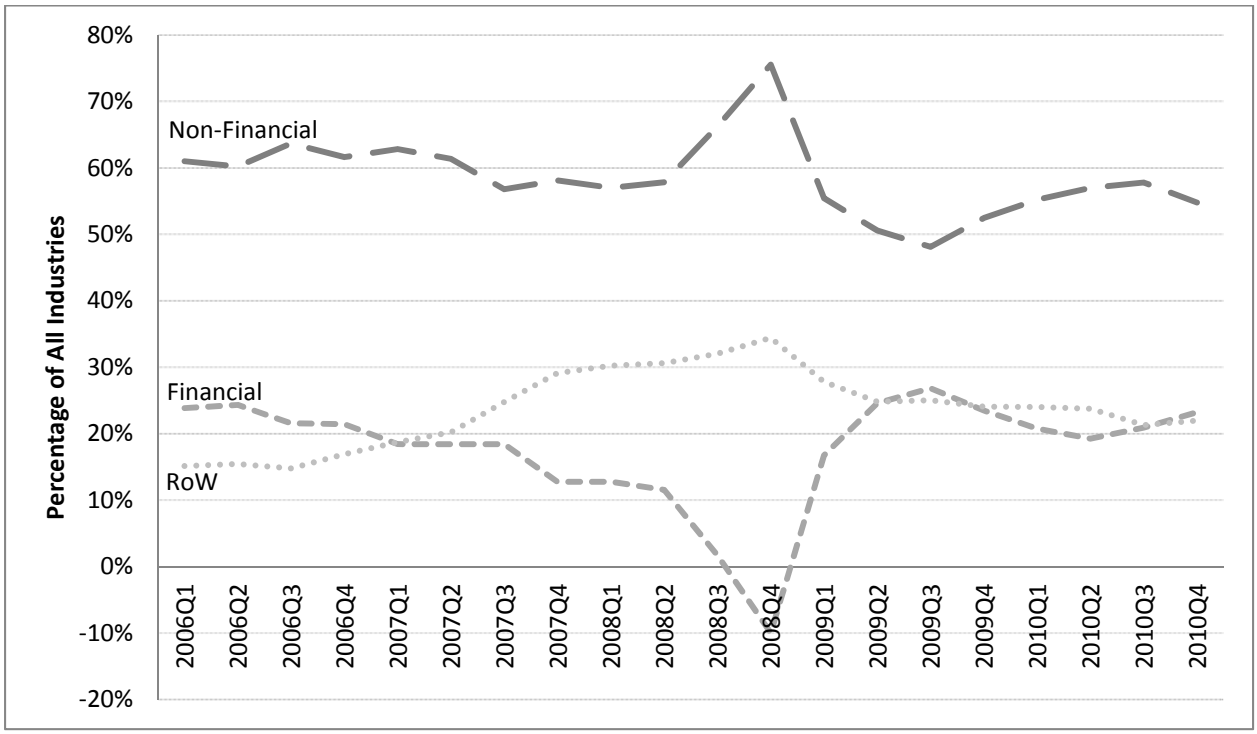

Source: *SNA 2008*.

**Figure 2: U.S. Corporate Profits with IVA and CCAdj**



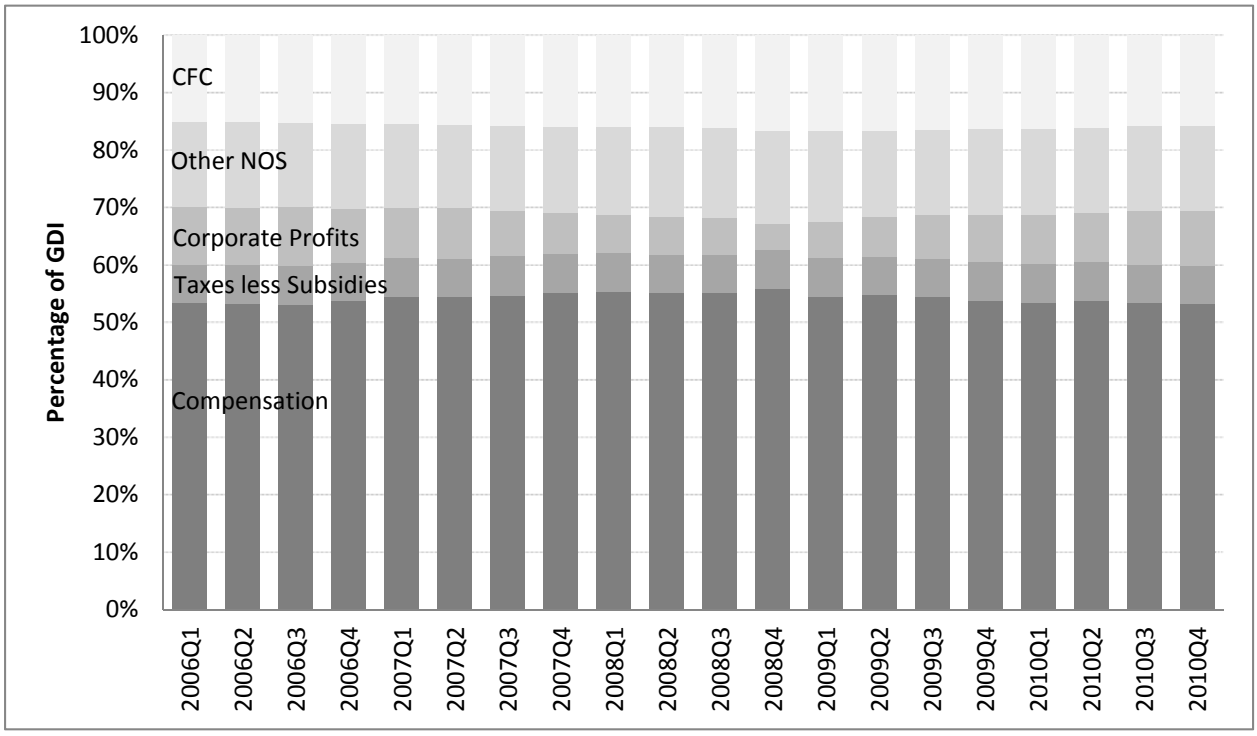

Source: BEA NIPA table 6.16.

**Figure 3: Industry Shares of U.S. Corporate Profits**



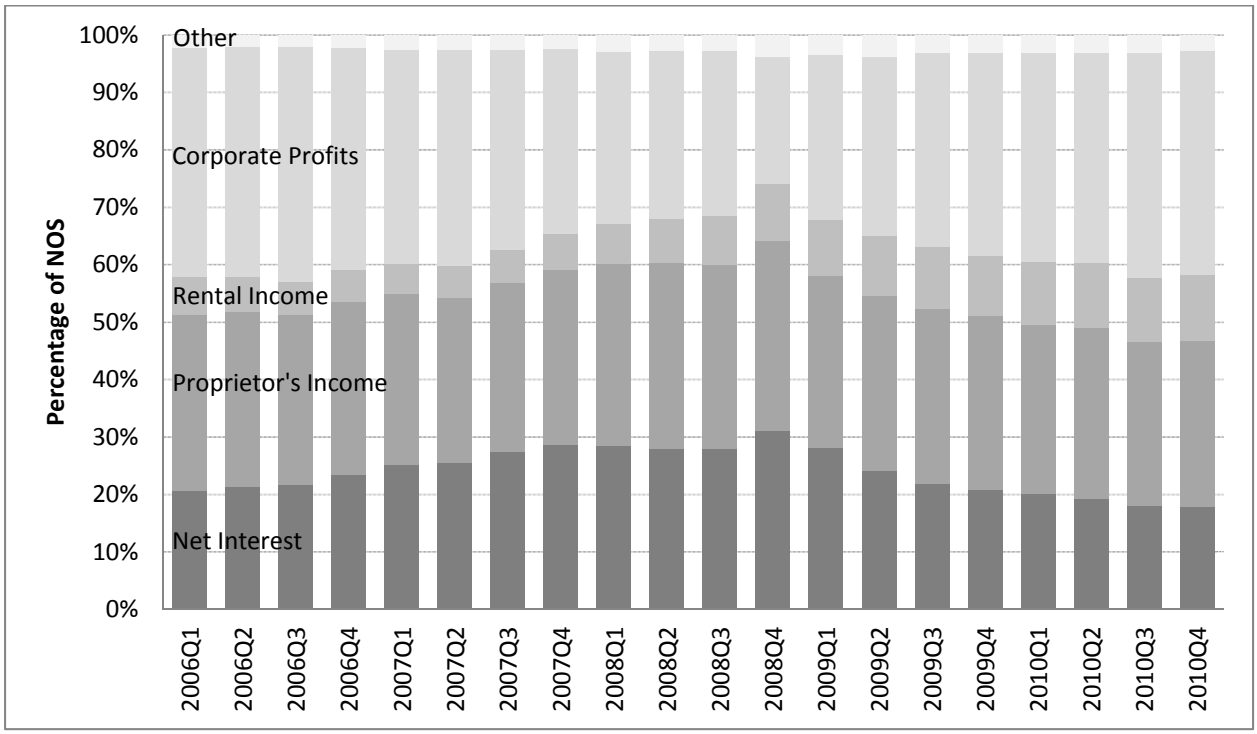

Source: BEA NIPA table 6.16.

**Figure 4: Component Shares of U.S. GDI**




Source: BEA NIPA table 1.10.

**Figure 5: Component Shares of U.S. NOS**

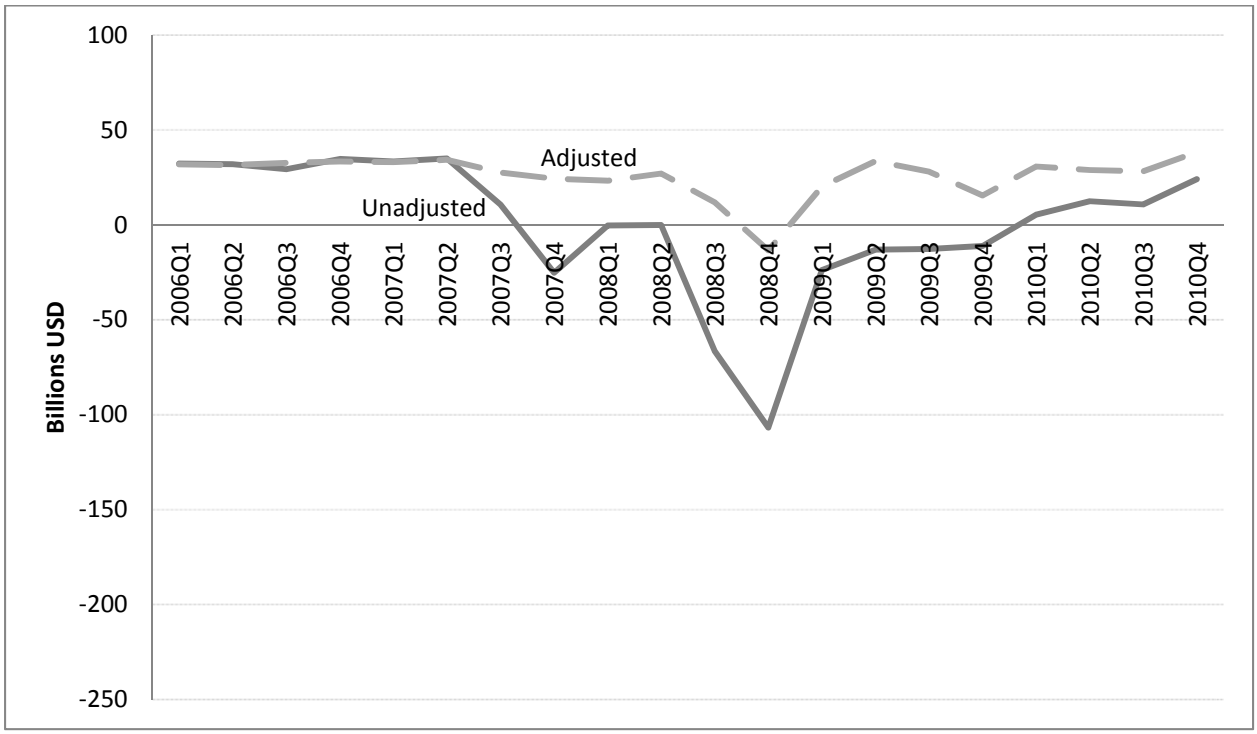



Source: BEA NIPA table 1.10.

**Figure 6: SEC Data Series for NAICS 52**

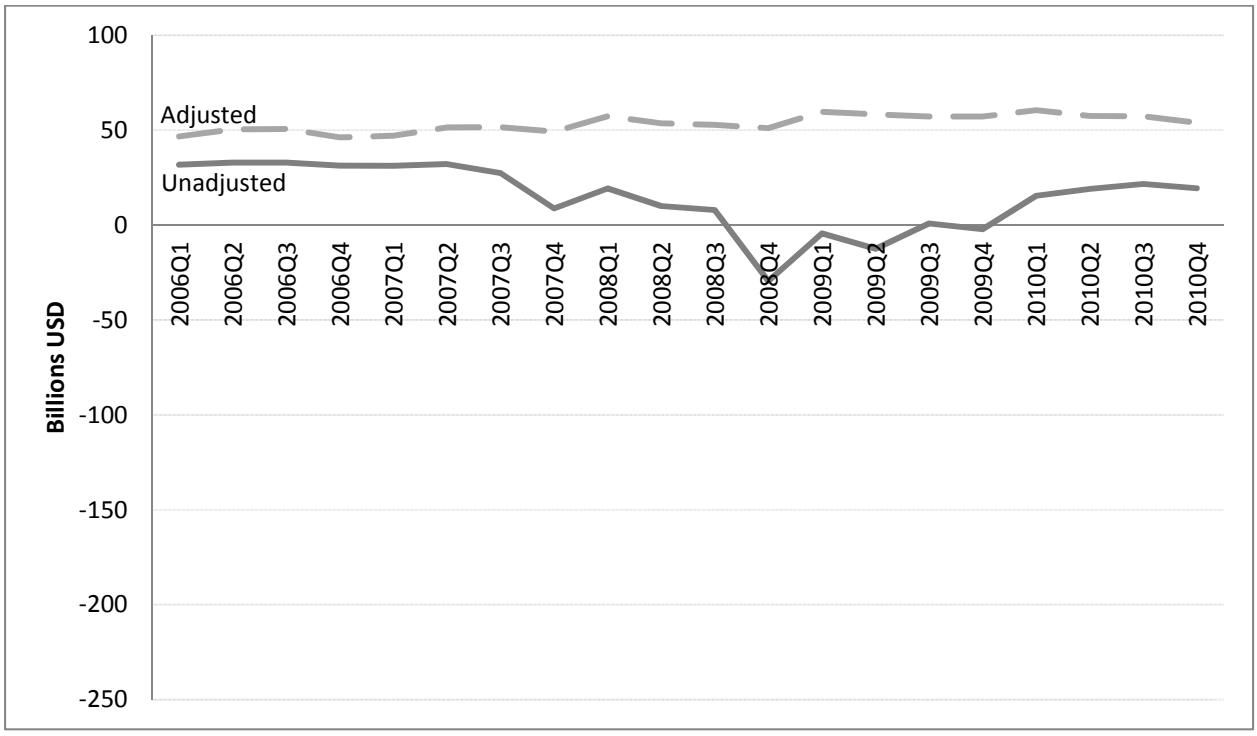

Source: Author's computations based on SEC data.

**Figure 7: SEC Data Series for NAICS 52229, 523, 52411, 52599**



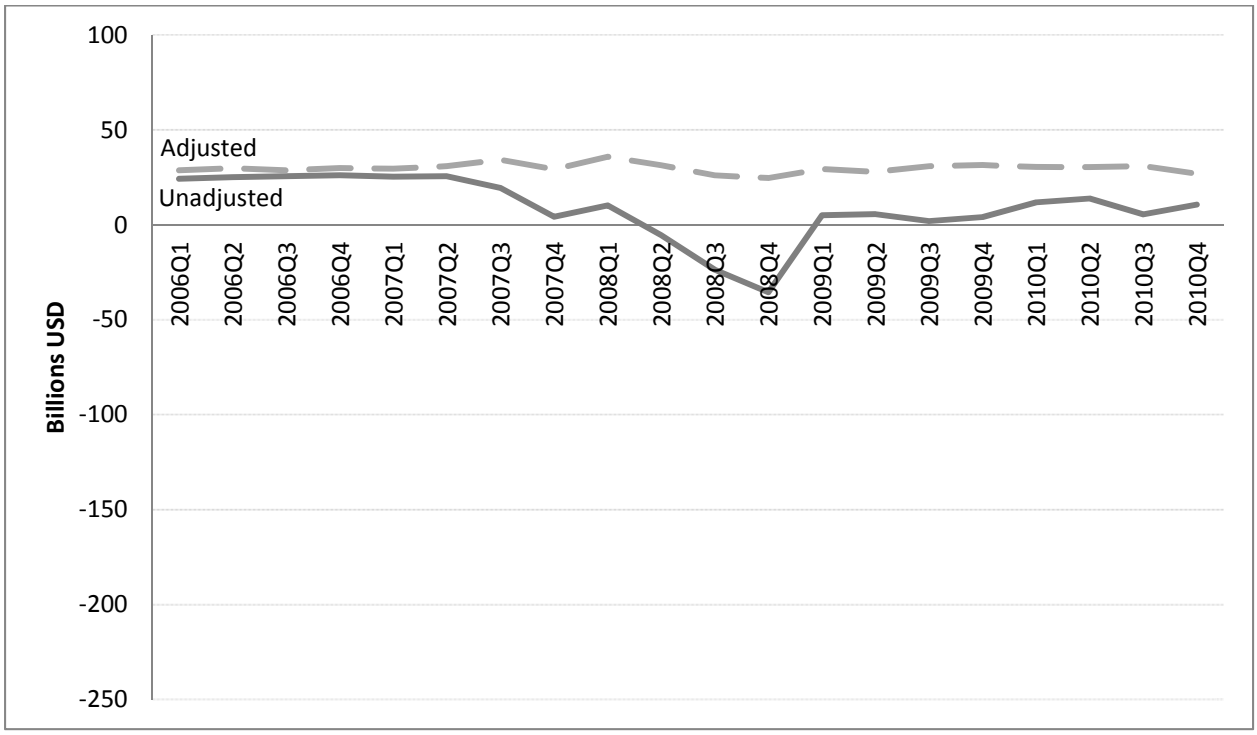

Source: Author's computations based on SEC data.

**Figure 8: FDIC Data Series for NAICS 5221**



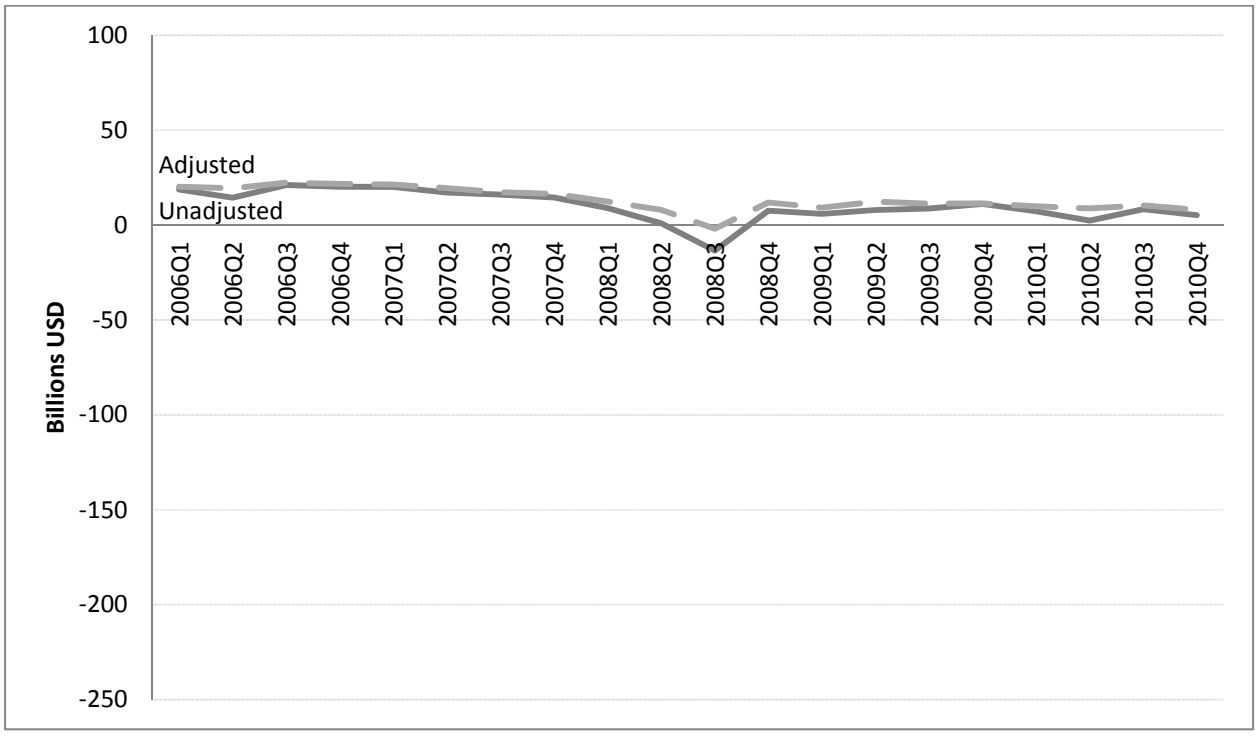

Source: Author's computations based on FDIC data.

**Figure 9: SEC Data Series for NAICS 5221**



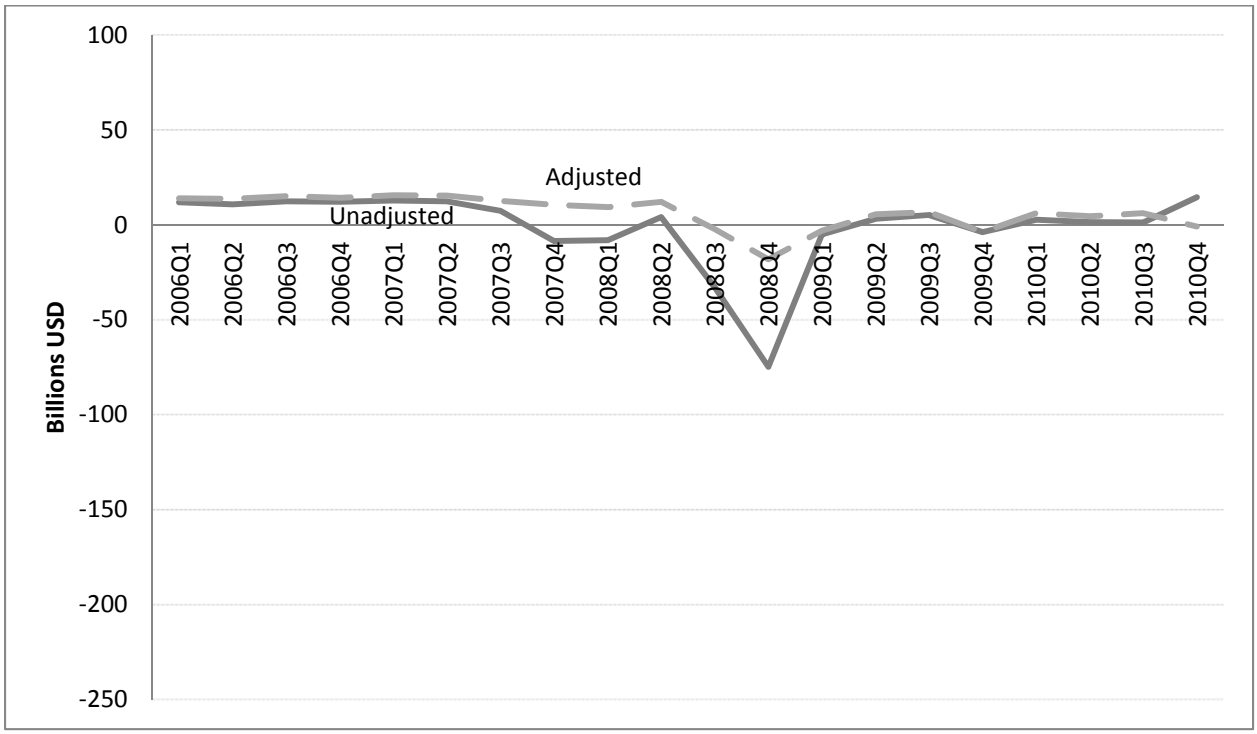

Source: Author's computations based on SEC data.

**Figure 10: ISO Data Series for NAICS 524126**




Source: Author's computations based on ISO data.

**Figure 11: SEC Data Series for NAICS 524126**




Source: Author's computations based on SEC data.

**Table 1: Summary of FVA under U.S. Financial Accounting Rules**

| ***Type of Financial Instrument*** | ***Scope*** | ***Accounting Treatment with no Impairment*** | ***Accounting Treatment with OTTI*** | ***SFAS#*** |
|---|---|---|---|---|
| HTM securities | Debt securities with intent and ability to hold to maturity | Amortized cost with gains and losses included in earnings | FV with losses included in earnings | 115 |
| Trading securities | Debt and equity securities bought and held to sell in the near term | FV with realized and unrealized gains and losses included in earnings | FV with losses included in earnings | 115 |
| AFS securities | Debt and equity securities not classified as HTM or trading | FV with unrealized gains and losses included in OCI and realized gains and losses included in earnings | FV with losses included in earnings | 115 |
| HFI loans | Direct investment in a loan that is held for investment | 1) Amortized cost with realized gains and losses included in earnings or 2) FVO | Probable credit losses included in earnings | 65 |
| HFS loans | Direct investment in a loan that is held for sale | 1) LCMV with realized and unrealized gains and losses included in earnings or 2) FVO | FV with losses included in earnings | 65 |
| Derivatives not designated as hedges | Financial assets and liabilities generated in a derivative | FV with gains and losses included in earnings | N/A | 133 |
| Derivatives designated as FV hedges | Derivatives to hedge exposures to change in FV of assets or liabilities | FV with gains and losses included in earnings to the extent the hedges are not effective at offsetting changes in FV | N/A | 133 |
| Derivatives designated as cash flow hedges | Derivatives to hedge exposures to variable cash flows of forecasted transactions | FV with ineffective portion of gains and losses reported in earnings and effective portion of gains and losses included initially in OCI and reclassified to earnings when the forecasted transaction affects earnings | N/A | 133 |
| Derivatives designated as foreign currency hedges | Derivatives to hedge exposures to changes in foreign currency exchange rates | FV with gains and losses included in OCI | N/A | 133 |
| Other financial assets and liabilities | Financial assets and liabilities elected for fair value | FVO | N/A | 159 |

Source: Author's summary of *SFAS* and *ASC*.

**Table 2: Adjustments to SEC Data for NAICS 52229, 523, 52411, 52599 (billions USD)**

| *Adjustment* | *2006Q1* | *2006Q2* | *2006Q3* | *2006Q4* | *2007Q1* | *2007Q2* | *2007Q3* | *2007Q4* | *2008Q1* | *2008Q2* |
|---|---|---|---|---|---|---|---|---|---|---|
| Gains on Trading Securities | 6.6 | 8.1 | 6.9 | 10.4 | 12.2 | 10.0 | -0.5 | -36.2 | -7.2 | -11.8 |
| Gains on Investments | 1.0 | 2.2 | -4.3 | -1.7 | -0.9 | 3.1 | -3.6 | -11.0 | -9.8 | -2.0 |
| Other Gains | 0.1 | 0.3 | 2.4 | 1.8 | 0.0 | -0.3 | -0.8 | -0.7 | -0.1 | -0.7 |
| Recoveries (Impairments) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.3 | -4.4 | -0.1 | -0.7 |
| Provisions for Credit Losses | -2.4 | -3.0 | -3.5 | -4.6 | -5.0 | -5.4 | -10.5 | -15.7 | -13.4 | -18.4 |
| Income Tax Benefit (Expense) | -4.9 | -7.2 | -4.9 | -4.6 | -6.1 | -6.7 | -0.2 | 18.4 | 6.9 | 6.6 |
| Total Adjustments | *0.4* | *0.4* | *-3.4* | *1.3* | *0.3* | *0.7* | *-16.9* | *-49.6* | *-23.6* | *-27.1* |

| *Adjustment* | *2008Q3* | *2008Q4* | *2009Q1* | *2009Q2* | *2009Q3* | *2009Q4* | *2010Q1* | *2010Q2* | *2010Q3* | *2010Q4* |
|---|---|---|---|---|---|---|---|---|---|---|
| Gains on Trading Securities | -7.5 | -37.0 | 9.2 | 3.9 | 7.9 | 5.9 | 12.9 | 6.2 | 3.8 | -0.4 |
| Gains on Investments | -18.3 | -44.9 | -7.6 | -0.9 | -2.7 | -2.6 | -5.4 | -2.3 | -0.9 | 3.6 |
| Other Gains | -0.1 | 3.1 | -0.5 | -3.9 | -1.9 | 0.4 | -0.2 | 0.2 | -1.1 | -0.3 |
| Recoveries (Impairments) | -6.1 | -1.8 | -1.8 | -5.5 | -2.9 | -5.6 | -1.2 | -1.0 | -2.2 | -2.5 |
| Provisions for Credit Losses | -28.0 | -34.8 | -42.9 | -39.3 | -41.5 | -30.3 | -28.3 | -18.0 | -16.1 | -13.3 |
| Income Tax Benefit (Expense) | -18.5 | 22.1 | -0.4 | -1.0 | 0.4 | 5.5 | -3.1 | -1.5 | -0.9 | -1.3 |
| Total Adjustments | *-78.4* | *-93.4* | *-43.9* | *-46.7* | *-40.8* | *-26.6* | *-25.4* | *-16.4* | *-17.5* | *-14.2* |

Source: Author's computations based on SEC data.
Note: "Other Gains" includes extraordinary items, discontinued operations, and minority interests.

**Table 3: Adjustments to SEC Data for NAICS 522110, 524126 (billions USD)**

| *Adjustment* | *2006Q1* | *2006Q2* | *2006Q3* | *2006Q4* | *2007Q1* | *2007Q2* | *2007Q3* | *2007Q4* | *2008Q1* | *2008Q2* |
|---|---|---|---|---|---|---|---|---|---|---|
| Gains on Trading Securities | 6.1 | 4.8 | 6.2 | 6.4 | 7.6 | 8.2 | -1.2 | -8.9 | -6.0 | 2.2 |
| Gains on Investments | 1.3 | 1.9 | 2.2 | 2.3 | 1.7 | 1.5 | -1.6 | -22.0 | -16.4 | -12.1 |
| Other Gains | 0.5 | 0.5 | 1.8 | 1.7 | 0.8 | 0.7 | -0.1 | 0.2 | 1.0 | 0.0 |
| Recoveries (Impairments) | -0.3 | -0.1 | -0.4 | -0.4 | -0.7 | -0.8 | -1.6 | -6.5 | -1.6 | -8.3 |
| Provisions for Credit Losses | -3.2 | -2.8 | -3.5 | -5.1 | -4.2 | -5.8 | -8.4 | -15.1 | -23.8 | -30.2 |
| Income Tax Benefit (Expense) | -11.1 | -12.0 | -12.2 | -10.7 | -12.1 | -12.2 | -7.1 | 8.1 | 3.8 | 3.6 |
| Total Adjustments | *-6.6* | *-7.6* | *-5.9* | *-5.9* | *-6.9* | *-8.3* | *-20.0* | *-44.1* | *-43.1* | *-44.8* |

| *Adjustment* | *2008Q3* | *2008Q4* | *2009Q1* | *2009Q2* | *2009Q3* | *2009Q4* | *2010Q1* | *2010Q2* | *2010Q3* | *2010Q4* |
|---|---|---|---|---|---|---|---|---|---|---|
| Gains on Trading Securities | -7.1 | -19.1 | 7.5 | 8.9 | 9.1 | 3.8 | 11.5 | 1.2 | 6.7 | 3.9 |
| Gains on Investments | -32.3 | -44.7 | 3.5 | 2.8 | -6.0 | 2.8 | -3.4 | 6.5 | -2.2 | 19.8 |
| Other Gains | -3.2 | -11.8 | 3.2 | 1.9 | 0.1 | -2.3 | 1.7 | -1.4 | -1.8 | 1.5 |
| Recoveries (Impairments) | -22.2 | -8.2 | -5.3 | -2.8 | -2.3 | -1.8 | -1.5 | 0.0 | -11.0 | -3.4 |
| Provisions for Credit Losses | -25.5 | -37.4 | -32.1 | -32.6 | -32.3 | -29.7 | -26.7 | -19.8 | -15.9 | -14.6 |
| Income Tax Benefit (Expense) | 9.9 | 4.4 | -3.1 | -2.8 | 1.0 | -0.2 | -3.8 | -6.2 | -6.3 | -8.0 |
| Total Adjustments | *-80.3* | *-116.8* | *-26.3* | *-24.6* | *-30.4* | *-27.4* | *-22.1* | *-19.7* | *-30.3* | *-0.7* |

Source: Author's computations based on SEC data.
Note: "Other Gains" includes extraordinary items, discontinued operations, and minority interests.

**Table 4: Adjustments to FDIC Data for NAICS 5221 and ISO Data for NAICS 524126 (billions USD)**

| *Adjustment* | *2006Q1* | *2006Q2* | *2006Q3* | *2006Q4* | *2007Q1* | *2007Q2* | *2007Q3* | *2007Q4* | *2008Q1* | *2008Q2* |
|---|---|---|---|---|---|---|---|---|---|---|
| *FDIC Data* | | | | | | | | | | |
| Gains on Trading Securities | 5.7 | 4.8 | 4.6 | 4.1 | 7.1 | 6.3 | 2.7 | -10.7 | 0.5 | 1.9 |
| Gains on Investments | -0.2 | -0.5 | -0.5 | -0.2 | 0.4 | -0.2 | 0.2 | -1.2 | 0.7 | -1.8 |
| Other Gains | 0.2 | 0.2 | 0.1 | 2.1 | -0.7 | -0.2 | -1.0 | 0.2 | -0.1 | -0.3 |
| Recoveries (Impairments) | -0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.8 | -0.5 | -2.2 |
| Provisions for Credit Losses | -5.3 | -5.6 | -6.5 | -8.2 | -7.9 | -9.8 | -13.1 | -26.6 | -29.4 | -36.0 |
| Income Tax Expense | -15.0 | -16.4 | -15.4 | -12.8 | -14.8 | -15.4 | -12.9 | -0.4 | -9.2 | -5.1 |
| *Total Adjustments* | *-15.0* | *-17.6* | *-17.7* | *-14.9* | *-15.9* | *-19.3* | *-24.2* | *-40.4* | *-38.1* | *-43.5* |
| *ISO Data* | | | | | | | | | | |
| *Total Adjustments* | *-1.5* | *-5.0* | *-1.3* | *-1.5* | *-1.3* | *-2.3* | *-1.3* | *-1.9* | *-3.5* | *-7.1* |

| *Adjustment* | *2008Q3* | *2008Q4* | *2009Q1* | *2009Q2* | *2009Q3* | *2009Q4* | *2010Q1* | *2010Q2* | *2010Q3* | *2010Q4* |
|---|---|---|---|---|---|---|---|---|---|---|
| *FDIC Data* | | | | | | | | | | |
| Gains on Trading Securities | 5.8 | -9.3 | 10.2 | 5.5 | 5.7 | 1.9 | 8.3 | 6.7 | 4.1 | 3.5 |
| Gains on Investments | -6.6 | -8.1 | 1.5 | -0.9 | -3.8 | 0.6 | 1.4 | 2.1 | 2.8 | 2.1 |
| Other Gains | 1.1 | 4.7 | 0.0 | -3.7 | 0.0 | -0.2 | 0.0 | -0.2 | -0.3 | 0.0 |
| Recoveries (Impairments) | -2.2 | -20.4 | -16.5 | -9.7 | -1.7 | -2.9 | -0.1 | -0.4 | -0.3 | -1.2 |
| Provisions for Credit Losses | -41.4 | -60.3 | -55.2 | -62.1 | -57.3 | -58.5 | -48.3 | -37.7 | -32.4 | -29.8 |
| Income Tax Expense | -1.5 | 12.8 | -4.0 | 0.1 | 0.9 | -0.3 | -6.2 | -8.9 | -9.5 | -9.1 |
| *Total Adjustments* | *-44.8* | *-80.6* | *-64.0* | *-70.8* | *-56.2* | *-59.3* | *-45.1* | *-38.5* | *-35.6* | *-34.5* |
| *ISO Data* | | | | | | | | | | |
| *Total Adjustments* | *-11.5* | *-4.3* | *-3.3* | *-4.4* | *-2.6* | *-0.2* | *-2.6* | *-6.4* | *-2.0* | *-2.8* |

Source: Author's computations based on FDIC data.
Note: "Other Gains" includes extraordinary items, discontinued operations, and minority interests.

**Table 5: Income Statements from SEC Data for NAICS 523 (billions USD)**

| *Consolidated* | *2006* | *2007* | *2008* | *2009* | *2010* |
|---|---|---|---|---|---|
| Revenues: | | | | | |
| Investment Banking | 15.0 | 19.5 | 13.0 | 15.4 | 15.2 |
| Trading and Investing | 47.8 | 21.9 | -27.9 | 43.8 | 48.2 |
| Service Fees and Commissions | 26.3 | 30.3 | 31.7 | 26.2 | 27.5 |
| Other | 0.5 | 1.2 | 6.1 | 0.8 | 1.2 |
| Total Non-Interest Revenues | 89.7 | 72.9 | 22.9 | 86.2 | 92.2 |
| Interest and Dividends Income | 117.8 | 163.0 | 109.7 | 37.1 | 28.9 |
| Interest Expense | 108.2 | 150.7 | 98.2 | 25.3 | 22.8 |
| Net Interest Income | 9.6 | 12.3 | 11.5 | 11.8 | 6.1 |
| Net Revenues | 99.3 | 85.2 | 34.4 | 98.1 | 98.3 |
| Non-Interest Expenses: | | | | | |
| Compensation and Benefits | 47.3 | 52.6 | 38.0 | 44.0 | 46.8 |
| Occupancy | 2.8 | 3.2 | 3.6 | 3.8 | 4.0 |
| Brokerage, Clearing, and Exchange Fees | 4.4 | 5.8 | 6.1 | 4.6 | 4.7 |
| Communication and Technology | 3.5 | 3.9 | 4.2 | 4.1 | 4.4 |
| Marketing and Business Development | 1.8 | 2.2 | 1.9 | 1.2 | 1.5 |
| Professional Services | 3.3 | 3.9 | 3.7 | 3.1 | 3.7 |
| Other | 4.8 | 5.4 | 14.1 | 8.6 | 10.1 |
| Total Non-Interest Expenses | 67.8 | 77.0 | 71.6 | 69.4 | 75.2 |
| Income before Income Taxes | 31.5 | 8.2 | -37.2 | 28.7 | 23.0 |
| ***Trading and Investing Segments*** | | | | | |
| Net Revenues | 65.5 | 44.7 | -0.8 | 47.2 | 43.1 |
| Total Non-Interest Expenses | 41.5 | 47.0 | 40.3 | 28.8 | 29.4 |
| Income before Income Taxes | 24.0 | -2.3 | -41.0 | 18.3 | 13.6 |
| ***Investment Banking Segments*** | | | | | |
| Net Revenues | 33.7 | 40.6 | 35.1 | 50.9 | 55.2 |
| Total Non-Interest Expenses | 26.3 | 30.0 | 31.3 | 40.5 | 45.8 |
| Income before Income Taxes | 7.4 | 10.5 | 3.8 | 10.4 | 9.4 |

Source: Author's computations based on SEC data.

**Table 6: Alternative Presentation of U.S. Corporate Profits for the Financial Industries**

| *Line Item* | *Estimate* |
|---|---|
| Corporate profits with IVA and CCAdj before taxes, including holding gains | |
| Less: Adjustment for holding gains coincidental to production | |
| Equals: Corporate profits, including holding gains generated by production | |
| Less: Adjustment for holding gains generated by production | |
| Equals: Corporate profits, excluding holding gains | |
| Less: Taxes on corporate income | |
| Equals: Corporate profits after taxes | |
| Net dividends | |
| Undistributed corporate profits | |