Measures of Corporate Earnings

Revised
May 14, 2002

Originally released November 7, 2001

David M. Blitzer, Ph.D.
Robert E. Friedman, CPA
Howard J. Silverblatt

Standard & Poor’s
55 Water Street
New York, NY 10041
Table of Contents

Measures Of Corporate Earnings 1

INTRODUCTION 1

EARNINGS MEASURES CURRENTLY IN USE 3

Table 1: Summary Income Statement 5

General Approach 5

Table 2: Items included in and excluded from Core Earnings 6

Items Included in Core Earnings 6

Employee stock option grant expense 6
Restructuring charges from on-going operations 8
Write-downs of depreciable or amortizable operating assets 8
Pension costs 9
Purchased research & development expenses 9

Items Excluded from Core Earnings 9

Goodwill impairment charges 9
Gains/losses from asset sales 10
Pension gains 11
Unrealized gains/losses from hedging activities 11
Merger/acquisition-related expenses 12
Litigation or insurance settlements and proceeds 12

STANDARD & POOR’S NEXT STEPS 13

ACKNOWLEDGMENTS 14
Measures of Corporate Earnings

Introduction

Over the last decade, intensifying pressure to meet Wall Street earnings expectations led more and more companies to introduce new and different earnings measures and reporting approaches. At the same time, many members of the investment community expressed concern that earnings reports are becoming harder to understand, more difficult to compare across companies, and less useful to analysts and investors. A number of recent high-profile bankruptcies and accounting investigations have renewed investors’ concerns about the reliability of corporate reporting.

Many observers agree that an impartial organization should act as a forum for discussions of how earnings should be defined and measured. In the last few years, a number of Wall Street firms have encouraged Standard & Poor’s to take on this role. As the publisher of the leading database of corporate financial data (Standard & Poor’s Compustat) and the provider of the S&P 500, the principal index and performance benchmark for U.S. equities, Standard & Poor’s is well positioned for this task.

In November 2001, Standard & Poor’s responded by publishing a short note on earnings calculations that included a suggested approach to calculating operating earnings. The purpose of the note was to generate discussion that would lead to a consensus on how earnings should be calculated, thus bringing more uniformity and clarity to earnings analyses and forecasts.
The response to that short note — which was released as an e-mail to analysts, commentators, and journalists Standard & Poor’s believed would be interested — was much stronger and much more positive than anyone expected. While some open issues about accounting details certainly remain, virtually no one argued that there isn’t a problem or that all investors and analysts understand currently available corporate reports and disclosures. News events since then have pushed earnings reporting and related corporate transparency and accounting issues to the forefront of discussions and have moved concerns about costs related to employee stock options from the footnotes to the headlines.

This paper is a revision to Standard & Poor’s November 7, 2001 note on Measures of Corporate Earnings. Since the original note was published, Standard & Poor’s Investment Services group consulted with a wide range of interested parties, including securities and accounting analysts, portfolio managers, corporate executives, academic researchers, and other investment professionals. These consultations were designed to gather comments from the investment community regarding proper earnings definitions and to build a consensus for reform. The people and organizations we contacted were generous with their time and knowledge, and Standard & Poor’s would like to acknowledge the assistance and the ideas and suggestions it has received. However, Standard & Poor’s is responsible for the proposal published here.

We begin our discussion by identifying and defining the three general measures of earnings currently in use — as reported earnings, operating earnings, and pro forma earnings. The uses of each are described.

The sections that follow present Standard & Poor’s proposed definition of Core Earnings. Included are detailed comments on a number of specific areas, including employee stock options, pension costs and gains, restructuring charges, and goodwill impairment.

Standard & Poor’s takes no position on the tax treatment of employee stock option grants. While we recognize the widespread use of option grants and their
significant utility in many compensation plans, any comments about either tax
treatment or the advisability of including options in employee compensation are
outside the scope of this analysis.

The final section of this report discusses steps Standard & Poor’s expects to
take over the remainder of this year and into 2003 to provide further support for
accurate measures of corporate earnings.

An accepted definition for Core Earnings will make it much easier for
analysts and investors to evaluate varying investment opinions and
recommendations and form their own views of which companies are most
attractive. Of course, everyone will still be able to take their own analytical
course, but they will know where they started. Standard & Poor’s is providing a
framework for how investment analyses can be done, and the data and benchmarks
needed to support these analyses.

**Earnings measures currently in use**

Standard & Poor’s review identified three general measures of earnings: as
reported earnings, operating earnings, and *pro forma* earnings. All three measures
have uses in the appropriate settings.

These measures, their use, and meaning are summarized here:

- **As reported earnings:** This is the broadest measure of corporate
  performance of the three considered here. As reported earnings are
  earnings including all charges except those related to discontinued
  operations, the impact of cumulative accounting changes, and
  extraordinary items, as defined by Generally Accepted Accounting
  Principles (GAAP). This is the traditional earnings measure and has
  a long history, having been used for the S&P 500 and company
  analyses for decades.

- **Operating earnings:** This measure focuses on the earnings from a
  company’s principal operations, with the goal of making the
  numbers comparable across different time periods. Operating
  earnings are usually considered to be as reported earnings with some
  charges reversed to exclude corporate or one-time expenses. Despite
  the lack of any generally accepted definition, operating earnings are
  increasingly popular in corporate reports. The use of this measure
seems to come from internal management controls used when a business unit manager is not responsible for managing corporate-level costs.

- **Pro forma earnings**: Originally, the use of the term *pro forma* meant a special analysis of a major change, such as a merger, where adjustments were made for an “as if” review. In such cases, *pro forma* measures are very useful. However, the specific items being considered in an “as if” review must be clear. In some recent cases, “as if” has come to mean “as if the company didn’t have to cover proper expenses.” In the most extreme cases, *pro forma* is nicknamed EBBS, or “earnings before bad stuff.”

  Such abuses notwithstanding, *pro forma* earnings do have a place and should be used for special analyses of potential changes in a corporation. In such cases, *pro forma* earnings are defined for the particular analysis.

Given the lack of any definition of operating earnings and the widespread and sometimes inconsistent use of the term, Standard & Poor’s felt that to use it might only add to the confusion. Therefore, the earnings measure proposed here is called Core Earnings. Core Earnings refer to the after-tax earnings generated from a corporation’s principal business or businesses. Since there is a general understanding of what is included in as reported earnings, the definition of Core Earnings begins with as reported earnings and then makes a series of adjustments. As Reported is earnings as defined by GAAP, with three exclusions — extraordinary items, cumulative effect of accounting changes, and discontinued operations, all as defined by GAAP.¹

---

¹ At times, keeping the pluses and minuses straight can be difficult. When an item is excluded from calculating earnings, it is not counted. If the excluded item is a cost or a charge, its exclusion makes earnings larger; if the excluded item is income, revenue or a credit, its exclusion makes earnings smaller.
Table 1 shows a sample income statement and provides a definition of as reported earnings:

<table>
<thead>
<tr>
<th>Table 1: Summary Income Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating revenues</td>
</tr>
<tr>
<td>(Cost of goods sold)</td>
</tr>
<tr>
<td>(Selling, general &amp; administrative expenses)</td>
</tr>
<tr>
<td>(Depreciation expense)</td>
</tr>
<tr>
<td>Earnings before interest and taxes [EBIT]</td>
</tr>
<tr>
<td>Interest income (expense)</td>
</tr>
<tr>
<td>(Amortization expense)</td>
</tr>
<tr>
<td>Dividend income</td>
</tr>
<tr>
<td>Royalty income</td>
</tr>
<tr>
<td>Pension gains (costs)</td>
</tr>
<tr>
<td>Income before taxes</td>
</tr>
<tr>
<td>(Taxes)</td>
</tr>
<tr>
<td><strong>Reported Net Income [the As Reported S&amp;P 500 EPS measure]</strong></td>
</tr>
<tr>
<td>Discontinued operations</td>
</tr>
<tr>
<td>Cumulative effect of accounting changes</td>
</tr>
<tr>
<td>Extraordinary items</td>
</tr>
<tr>
<td><strong>Net Income</strong></td>
</tr>
</tbody>
</table>

**General Approach**

Core Earnings focus on a company’s ongoing operations. They should include all the revenues and costs associated with those operations and exclude revenues or costs that arise in other parts of the business, such as unrealized gains or losses from hedging activities. Items that reflect ongoing operations include compensation of employees, expenditures for materials and supplies, and depreciation of capital equipment used in production.

Items that are not related to operations include litigation settlements, expenses related to mergers or acquisitions, and costs related to financing. These revenues or expenses are important and may be significant, but they are not representative of the company’s core operations.
At times, a business decision may affect the timing of certain revenues or expenses. A decision to write off the value of equipment or to take charges for restructuring an ongoing operation may cause future expenses to be brought into the present. However, if these expenses represent items that would be included in Core Earnings, a change in their timing does not mean they should be eliminated or ignored.

The specific items that should be included or excluded in calculating Core Earnings are listed in Table 2. Each item is discussed separately in the following sections.

<table>
<thead>
<tr>
<th>Included in Core Earnings</th>
<th>Excluded from Core Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee stock option grant expense</td>
<td>Goodwill impairment charges</td>
</tr>
<tr>
<td>Restructuring charges from ongoing operations</td>
<td>Gains/losses from asset sales</td>
</tr>
<tr>
<td>Write-downs of depreciable or amortizable operating assets</td>
<td>Pension gains</td>
</tr>
<tr>
<td>Pension costs</td>
<td>Unrealized gains/losses from hedging activities</td>
</tr>
<tr>
<td>Purchased research &amp; development expenses</td>
<td>Merger/acquisition related expenses</td>
</tr>
<tr>
<td></td>
<td>Litigation or insurance settlements and proceeds</td>
</tr>
</tbody>
</table>

**Items Included in Core Earnings**

**Employee stock option grant expense**

Stock options are granted to employees as part of their compensation packages. Other components of compensation include salaries, cash bonuses based on individual or corporate performance, medical and other employee benefits, and defined benefit and/or defined contribution pension plans. All parts of employee compensation, including stock options, should be included in Core Earnings.
Employee stock option reporting is subject to specific regulations under Financial Accounting Standards Board (FASB) Statement 123. This rule gives companies the choice of reporting employee stock option expense annually in the income statement or as a footnote in the annual report. Only two companies in the S&P 500 include employee stock option grants as an expense in their income statements. Furthermore, this information is often released after the press release with fiscal year-end earnings information. Companies determine the cost of employee stock option grants with an option pricing model such as the Black-Scholes model and report those costs together with the factors used in the calculations.

Standard & Poor’s believes that information on employee stock option grant expenses is important and should be available on a complete and timely basis. The information should be reported quarterly as part of the quarterly earnings release and filing, instead of once a year. In addition, the release should provide all the data necessary for an analyst to review the calculation of stock option expenses. This includes the number of options granted, their maturity, strike price, stock dividend rate, stock price at the time options were granted, and the assumptions required for an option pricing model such as the Black-Scholes model (risk-free rate and volatility). Finally, these data should be presented in a tabular form so that they are understandable.

Standard & Poor’s takes no position on questions of how employee stock options should be taxed, related questions of how to account for options, or issues of when they should or should not be used. However, we believe that their growing use means that investors and analysts should have the essential data needed to evaluate options and their impact on corporate profits. Research shows that options expense could lower Core Earnings by as much as 10%. Therefore, Standard & Poor’s intends to compile and report options-adjusted Core Earnings for its indices and its company coverage universe.
Restructuring charges from on-going operations

Standard & Poor’s believes restructuring charges from on-going operations should be included in the calculation of Core Earnings because they relate to the costs and expenses of activities involved in the process of creating products or services.

Restructuring charges from on-going operations are generally defined as those expenses, such as employee layoffs, maintenance costs, or early lease terminations, that arise when a company decides to close plants or other facilities. Since these assets would have been used up in the process of creating operating revenues, charges for restructuring these assets should be included in the calculation of Core Earnings. Large-scale employee layoffs and plant closings may suggest that the company doesn’t expect current and future levels of business to support current staffing levels and/or the operation of plants and their attendant machinery and equipment.

The calculation of Core Earnings should not make certain expenses vanish. Restructuring charges are real expenses. The benefit comes in future years: after the plant closings, employee reductions, lease terminations, and other adjustments, the business’s operating costs are lower. If there had been no restructuring activity and no restructuring costs or expenses, there would have been larger costs charged against future revenues in later years.

Write-downs of depreciable or amortizable operating assets

Asset write-downs occur when the fair market value of an asset drops below net book value and the firm takes a charge on its books. Since the write-down represents the accelerated reduction in the value of assets that would have been used up in the creation of operating revenues, the write-down should be included in Core Earnings.

Some write-downs may be one-time events. However, their apparently rare occurrence doesn’t change the facts — the assets in question are or were used in
generating revenues and Core Earnings, and the market value of the asset is less than its net book value.

**Pension costs**

Pensions are part of employee compensation, just like salaries, bonuses, benefits, employee stock option grants, and other forms; pension costs are contributions to the pension trust. Since pensions costs are obligations borne by the company, and thus by its shareholders, these costs should be included in Core Earnings.

Some may be concerned that pension income is excluded from Core Earnings, while pension costs are included. This apparent conflict is in reality no conflict at all. The two are not parallel because they arise in different places from different activities. Pension costs are part of employee compensation and arise because people are hired to work and, hopefully, produce revenues and Core Earnings. Pension gains, in contrast, have nothing to do with the corporation’s core business or the creation of Core Earnings. The size and timing of pension gains reflect the skill of the portfolio managers engaged to manage the pension plan and the foresight of the pension plan sponsor in establishing the investment policy and hiring the portfolio managers. Both the gains and the costs are related to the pension, but the similarity ends there.

**Purchased research & development expenses**

Since internally developed research and development costs are included in Core Earnings -- in the normal course of business, purchased research and development costs should be included in Core Earnings as well.

**Items Excluded from Core Earnings**

**Goodwill impairment charges**

Goodwill represents the difference between the price paid for an acquisition and the fair market value of identifiable assets of the acquisition. New rules for
the treatment of goodwill, under FASB 142, are effective this year. Under these rules, companies do not amortize goodwill. However, companies are required to take a write-off if the goodwill carried on its books is “impaired” — if its market value is less than its book value. Standard & Poor’s believes FASB 142 is correct because goodwill has an indefinite life.

Standard & Poor’s believes that write-offs related to the impairment of goodwill should not be included in Core Earnings. Since the amortization of goodwill is not considered a period cost expended in the creation of revenues, the inclusion of goodwill impairment charges would distort the company’s operating performance. Since any goodwill impairment implies that the company’s earnings will suffer in the future, including a charge for goodwill impairment in Core Earnings would doubly penalize the company’s performance.

Note that goodwill differs from the depreciation or amortization of assets. In the latter case, there are periodic charges, and a write-down changes the timing of these charges; with goodwill, in contrast, there are no periodic charges.

**Gains/losses from asset sales**

Gains and losses from sales of assets, including machinery and equipment, real estate, and salable intangible assets, should be excluded from the calculation of Core Earnings. Although the ultimate purpose of these assets is to create revenues and income, most companies are not in the business of buying and selling their own operating assets.

The exception to this rule is companies whose asset sales arise from the normal course of business. Such companies include financial entities such as banks, mortgage companies, and leasing companies, which buy or sell financial assets such as portfolios of loans or receivables; real estate development companies, which develop real estate properties for resale; and Real Estate Investment Trusts, which buy and sell real estate as part of their principal business.
**Pension gains**

The discussion of pension income relates to defined benefit plans. In a defined benefit plan, the corporation establishes a pension trust that manages financial assets for the benefit of current and future retirees. A pension plan estimates its future liabilities and compares them to its current assets. In some years, investment returns provide the fund with income that exceeds the net increase in its liabilities. At such times, the financial condition of the plan improves and the company has pension gains. However, these pension gains are the product of the financial markets and the investment skill of the portfolio managers hired to manage the pension trust; they are not a product of the company’s core business.

Moreover, it’s important to note that pension gains are not available to the corporation sponsoring the plan or to the shareholders of the corporation, except in rare cases where the plan is terminated. Because pension gains are not available to the corporation, they should not be included in the calculation of Core Earnings.

Furthermore, the corporation already benefits from a pension gain, so including it in Core Earnings would be double counting. If a pension plan enjoys several years of net gains, it will build up a surplus and become over-funded. In that case, the corporation will see a reduction in its pension contribution because the required pension contribution will be smaller or zero. Thus, although pension income should not be included in the calculation of Core Earnings, the corporation still benefits from it.

**Unrealized gains/losses from hedging activities**

FASB issued Statement 133 to boost balance sheet transparency and reporting conservatism. The rule requires companies to record hedging-related derivative instruments as on-balance sheet items at their fair market value. Consequently, companies must report any unrealized gains and losses from this “mark-to-market” mandate. Because efforts to mark-to-market the fair value of
derivative instruments speak to balance sheet conservatism and transparency, Standard & Poor’s believes unrealized gains and losses arising from mark-to-market positions should be excluded from the calculation of Core Earnings.

The exception to this rule is companies for which derivatives activities are part of their normal business, rather than only a function of risk management. For these firms, any subsequent realized gains and losses should be included in calculating Core Earnings. Such cases are most likely limited to financial firms engaged in certain trading operations and may possibly include commodity firms that derive a significant portion of their earnings from trading in derivatives and other financial instruments.

**Merger/acquisition-related expenses**

Expenses related to mergers and acquisitions (investment banking fees and legal costs, for example) should not be included in the calculation of Core Earnings.

**Litigation or insurance settlements and proceeds**

Since gains or losses from litigation settlements do not arise from the normal course of business, such gains or losses should be excluded from the calculation of Core Earnings. Consistent with this, provisions to boost litigation settlement reserves should be excluded from Core Earnings as well. Finally, gains from reversals of litigation settlement reserves should not be added back into Core Earnings. Insurance costs or proceeds, where the insurance is not integral to the company’s operations (such as life insurance on employees other than that included in employee benefits), are not part of Core Earnings.
Standard & Poor’s Next Steps

Even with the increased discussion of earnings reporting and related corporate transparency and accounting issues in recent months, the financial community is a long way from agreement on how earnings should be reported and analyzed. Equally distant is the rebuilding of trust among investors after a long bear market.  Given these conditions, Standard & Poor’s believes that continued work toward more reliable earnings information is essential.

Standard & Poor’s will take a number of steps to improve the information available to analysts and investors:

- Discussions on earnings issues with industry associations, analysts, commentators, and investors begun since August, 2001 will continue and expand. These discussions will build on the growing consensus for more accurate earnings reporting.
- Standard & Poor’s Compustat will include relevant data to permit the calculation and analysis of Core Earnings. Standard & Poor’s Compustat covers more than 10,000 U.S.  corporations.
- Standard & Poor’s equity analytical group will adopt Core Earnings in their own analyses.
- Core Earnings will be calculated and reported for Standard & Poor’s U.S. equity indices, including the S&P 500.  Because current regulations do not require quarterly options expenses to be reported, Standard & Poor’s will publish Core Earnings excluding options expense and, annually, will also publish options expense adjusted Core Earnings.

Standard & Poor’s continues its efforts to support research and discussion of earnings reporting and related issues. The financial market is more than a market of financial instruments; it is a market of ideas and analyses as well. Because no one organization or individual has a corner on the market of ideas, active participation by all will lead to improvements in analyses and more predictable and reliable results for investors.
# Acknowledgments

Standard & Poor's is pleased to acknowledge the assistance of the following people who graciously contributed their time and insights to the review of earnings measurements. Standard & Poor's is solely responsible for the opinions expressed in this report.

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles Alsdorf</td>
<td>Director, Corporate Value Consulting, Standard &amp; Poor’s</td>
</tr>
<tr>
<td>Joseph P. Joseph, CPA</td>
<td>Managing Director &amp; Portfolio Manager, Putnam Investment Management</td>
</tr>
<tr>
<td>Eli Bartov, CPA, Ph.D.</td>
<td>Professor of Accounting, Director, Accounting Doctoral Program, Leonard N. Stern School of Business, New York University</td>
</tr>
<tr>
<td>David A. Levy</td>
<td>Chairman, The Jerome Levy Forecasting Center</td>
</tr>
<tr>
<td>Gabrielle Napolitano, CFA</td>
<td>Managing Director, Global Investment Research, Goldman Sachs &amp; Co.</td>
</tr>
<tr>
<td>Warren E. Buffett</td>
<td>Chairman, Berkshire Hathaway Inc.</td>
</tr>
<tr>
<td>Srinivas Thiruvadanthai, Ph.D.</td>
<td>Director of Research, The Jerome Levy Forecasting Center</td>
</tr>
<tr>
<td>Robert Willens, CPA</td>
<td>Managing Director &amp; Tax and Accounting Analyst, Lehman Brothers, Inc.</td>
</tr>
<tr>
<td>Stephen C. Gerard</td>
<td>Managing Director, Corporate Value Consulting, Standard &amp; Poor’s</td>
</tr>
<tr>
<td>David A. Zion, CFA</td>
<td>Managing Director &amp; Accounting Analyst, Equity Research, Bear Stearns &amp; Co.</td>
</tr>
</tbody>
</table>