

# Corporate performance valuations – EVA or GAAP

The fall of firms such as Enron and WorldCom was blamed on accounting for failure. But it was a misconception. Berardino blamed Enron's collapse on a failed business model, not accounting errors. "A company has failed and it has failed because the economics didn't work," he said. "To my knowledge, there was nothing that we've found that was illegal. The accounting reflects the results of business activities. And the way these events were being accounted for were clear to the management and to the

counting parameters are more relevant. Economic valuation is based on the assumption that all the companies are engaged in the business of allocation, managing and re-deploying scarce resources. Costs of using resources are a profit contribution.

Value maximisation is the key theme and there are four broad approaches to valuating a firm—adjusted book value, stock and debt approach, direct comparison approach and the discounted cash flow approach. According to noted economist Prasan Chan-

cerned about the realisable value and return.

## What is EVA?

Translating accounting profits into economic reality in calculating EVA (Economic Value Added), we first make a number of adjustments to conventional earnings in order to eliminate anomalies and bring them closer to true economic results. For example, GAAP requires companies to expense research and development outlays even though those expenditures are investments in future products or processes. In contrast, EVA capitalises R&D spending and amortises it over an appropriate period. Similar adjustments are made to the balance sheet to get a more accurate accounting of the total capital invested in an enterprise in order to assess the proper capital charge.

Stern Stewart has identified more than 160 potential adjustments in GAAP earnings and balance sheets in areas such as inventory costing, depreciation, bad debt reserves, restructuring charges, and amortisation of goodwill. Khusro Khan, MD Tata Tea, says, "An organisation that measures business performance purely in accounting terms will fall into the trap of taking decisions on the basis of 'impact on profit', a myopic way of running a business, rather than 'impact on wealth', a measure that forces one to think of the long-term consequences of every decision made."



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Accounting is like peering through the glass to get value information such as risk, performance, growth prospectus and valuation of the company. In continuous efforts, accounting is making constant changes in its reporting so as to provide the best. Certain other majors such as corporate governance also comes into the picture to provide information about the workings of its board of directors. The protection of interests of the owner in a proactive manner is one of the responsibilities of the accountant. The professional bodies are continuously developing accounting standards to guide its members for preparing the accounts in its framework.

board. But at its base, this is an economic failure." Enron senior management appears to be guilty of poor judgement and 'creative accounting'.

When the question arises about corporate performance evaluation there is divided opinion on whether formulae based on accounting profit (prepared in confirmation to GAAP) are reliable or economic profit, based on mixing non-financial ac-

dra, "The simplest approach is to rely on information found on its balance sheet, but this approach has very limited acceptability". The capital supplies by investors, matches the risk of the company and the cost associate is not cash cost but 'opportunity cost' that equals the rate of return investors expect in benchmarking portfolios. In the changing global scenario shareholders are more con-

Table -1

### Reconciliation required for accounting (US GAAP) to calculate EVA

Adjustments needed	Why it is needed (EVA says)	Where accounting stands
1. Subtract the full cost of debt and equity capital from NOPAT to determine EVA	Don't count profits until shareholders earn a minimum return; encourage corporate managers to use capital wisely	Equity is any contract that evidences a residual interest in the assets of an enterprise after deducting all of its liabilities (IAS32.5). Therefore, charge on equity will be artificial not real accounting expenses.
2. Deduct the grant date, estimated market value cost of stock options from NOPAT	Stock option grants considered the same as compensating employees in cash and then compelling them to purchase employer options; options are valued from perspective of cost to the shareholders, not the value to the employees	As per Indian & IAS procedures, stock option in the form of option discount and accounted the expenses. Share option awarded to the employees should be treated as potential ordinary shares in computing diluted earnings per share (IAS 33.24). The GASB (US GAAP) has given two choices for accounting of ESOP: 1. To take the cost of the stock options to the financial statements directly. 2. To make pro forma disclosures of cost by way of notes to accounts. Almost all companies chose the second option, as it did not reduce the profit figures. So, it was found that FASB's accounting regulations for stock based compensation have some loopholes.
3. Include the present value of operating leases in capital, and add back the imputed interest in rents (after-tax) to NOPAT.	Neutralise rate of return comparisons for on – vs. off balance sheet debt financing	In US, the Securities and Exchange Commission and the FASB have handed down new rules and guidance aimed at improving the transparency of financial statements. The SEC is rewriting its guidance on MD&A disclosure, introducing Regulation G (practical result of a Sarbanes Oxley), and rewriting its rules governing Form 8-K. FASB is trained on consolidation of variable interest entities and on loan guarantees. Collectively, the new mandates are intended to help investors view companies through the "eyes of management". IAS and Indian Accounting standards suggesting disclosures for these operating leases like general description of significant leasing arrangements, including contingent rent provisions, renewal or purchase options, and restrictions imposed on dividends, borrowings, or further leasing.
4. Deduct from NOPAT the excess of assumed pension asset returns over the interest accrual on the pension liability	Don't subsidise corporate profits with assumed returns from risky, off-balance sheet assets; mitigate incentive for managers to speculate with pension assets	Pension accounting isn't on the FASB agenda yet. But the board did signal recently that it is receptive to new proposals. Convergence efforts in IAS and Indian AS also required
5. Exclude marketable securities from Capital, and after-tax investment income from NOPAT	Measure the returns and EVA of business operations undiluted by passive investments	Income from securities are also part of enterprises, overall revenue, however, disclosures of this non-operative gain/loss are always recommended, excluding marketable securities from capital is only economist thinking and can not be reality accounting
6. Exclude construction in progress from capital	Measure the returns and EVA of business operations undiluted by passive investments	Excluding construction in progress from capital is only economist thinking and cannot be reality accounting

7. Add bad debt and warranty reserves to capital, and changes to NOPAT.	Recognise timing of actual cash losses; see through earnings managements manipulations	The warranty costs included in selling price be deferred and amortised over warranty period. As this is just time and lead, partial treatment of expenses at cash basis is not fair
8. Add the LIFO inventory valuation reserve to capital, and the change to NOPAT	Measure current replacement cost of working capital, and recognise inventory holding gains as a profit to offset to the inflation premium built into the cost of capital	Under US GAAP LIFO is permitted but in international and Indian accounting the LIFO is not permitted. Continuous efforts are being put in to reconcile between US GAAP and IAS, once this is done this problem will also be overcome
9. Add after-tax research and development (and marketing and advertising) spending to NOPAT and Capital, and amortise it over 5 years (3 years)	More accurately measure the returns and EVA from investments in innovation and brand building; encourage managers to increase promising R&D and promotion spending, and discourage opportunistic cuts to meet reported earning goals	US GAAP R&D expenses are to be expensed except some software development cost if certain criteria are met under IAS & India standards the Research expenses to be expenses but development costs to be capitalized if certain criteria be met. According to IAS 38.7, research is defined as a planned activity with the aim of obtaining new scientific or technical knowledge or to find general alternative products or processes. Research expenses are always entered as expenses according to IAS. According to IAS 38.7, development is defined as the application of research results or of knowledge on the concrete design and implementation of new substantially improved products, processes or material and equipment for use in the manufacturing process for products. Only material costs are reported under this position.
10. Deduct taxes at statutory rate, and accumulate difference with actual cash taxes in a contra-capital account	Smooth tax impact on NOPAT, but recognise value of tax deferrals as offset to capital	As per IAS 12: The costs from forming reserves for deferred taxes is reported in the profit and loss account position 'taxes on income and revenue' in separate accounts. When the expected tax charge arises, the reserves for deferred taxes are redeemed to the profit and loss account position 'taxes on income and revenue'. If the reserves for deferred taxes are redeemed because the expected tax charge has failed to materialise, the income is also booked. Under IAS, temporary differences tax assets are provided but under US GAAP valuation allowance be provided if valuation is less than 50 per cent. But neither recognise offset to capital.
11. Remove gains (losses) on asset sales from NOPAT, and deduct cumulative gains (losses) from capital	Avoid mixing one-time capital gains with recurring profit flows; eliminate an earnings management device	Income/losses from assets are also part of enterprises overall revenue as assets are part of business. Decision of disposing off these assets are usually strategic decision, therefore, these are very well-operated expenses. However, disclosure of these gains/losses is always recommended. Excluding marketable securities from capital is only economist thinking and cannot be reality accounting
12. Add write-offs and restructuring provisions to NOPAT, and add the cumulative amounts to capital	Measure earnings normalised to exclude non-cash provisions	'Cookies jar' game of these provisions is mostly over, thanks to a new standard passed by the FASB. Now, when companies make plans to exit from or dispose of a business line, they aren't allowed to set up liabilities to reserve for the future costs. Still, as per IAS, provision for restructuring plans have to be formed if the company can demonstrate that it has decided to undertake restructuring.
13. Major overhaul component or restructuring charges costs	Measure earnings normalised to exclude non-recurring losses; treat overhauling as an investment to streamline costs and increase profit	In US, these costs are expensed but in international accounting the same are being shown as separate component of assets

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### Formulae used to calculate EVA

Economic Value Added:  
Net operating profit after tax  
– average economic capital  
\* weighted average cost of capital.

Net operating profit after tax (NOPAT) + (profit after tax + non-recurring expenses + revenue expenditure on R&D + interest expenses + provision for taxes) – non-recurring income – R&D amortisation – cash operating taxes.)

Economic capital: Net fixed assets + capital work in progress + investments + current assets – non-interest bearing current liabilities + miscellaneous expenditure written off + cumulative non-recurring losses + capitalised expenditure on R&D – revaluation reserve – cumulative non-recurring items.

### Accounting or EVA

In the past, equity has been termed as the cheapest financing instrument since the equity such as GAAP has no charge. The projects financed through a low debt equity ratio is termed as successful as the accounting profit for the initial years were more attractive than vice versa. But the promoters and investors have faced the music on the points of conflict between the promoters and investors for servicing the investors or creating value for them. The progressive promoter always seeks to dilute the stake and gain control over the corporate through divesting and investing in more and more to projects that provide more returns than the existing ones on their stakes. The response of the investor always depends on the service on their investment and the net

realisable value including the returns. If the service is more than the alternate, they are happy to invest more or stay invested with company.

The whole process is a part of value creation and accountants have to play an important role to provide necessary information to all concerned and to analyse the information and present the same, to come to a concrete conclusion.

### Charges against accounting

Accounting is more inclined towards an industrial mindset in which the only investment that gain admission to the balance sheet are those in hard tangible assets, the kind that are most likely to have a value in the event of liquidation of the firm. The accounting principle thus penalises companies that step up intangible investments, making them seem less profitable than they really are, and scaring many a CEO away from boldly remaking their company until it is too late. Accounting typically charges all outlays on intangibles such as research and development, market developments and employees trainings. They follow the principle, ‘provide for all possible losses and anticipate no gains’. Ehrbar Puts says, “Accounting statements provide a portrait of a company from an undertakers point of view. Securities laws also play a major role as an accountant may be blamed if earning or assets are overstated but not if understated.”

It also leads to an overstatement of the returns that established companies are really earning, particularly those that are resting on their laurels and curtailing investments in innovation.

Despite its conservative bias, accounting is not consistently conservative. Although it may be changing, current rules do not require a deduction for granting employees stock options, even though options obviously have an economic cost to a company and its shareholders.

What's worse, current pension accounting permits corporate managers to assume that they can earn a higher return investing pension assets in equities than they will have to pay as interest on its pensions liability, to book the spread into reported earnings (as a reduction in pension cost), and to smoothen out any return shortfalls in an off-balance sheet reserve.

Most of the investors have fallen into the trap of judging true value with an accounting model of value, by analysing and capitalising reported earnings and earning per share and variants such as ROCE EBITDA, etc when profit is measured according to GAAP. The investors feel that the GAAP profits are not a true indicator of the intrinsic value of the enterprise. Enron, Tyco and WorldCom are prime examples of ‘executive malfeasance’ when by a management game, executives worship EPS because they think the analyst also do the same.

The accounting model mixes financing and operating decision together whereas economic valuation keeps them separate. The economic valuation stresses on financing strategy rather than financing companies. The economic valuation stresses on overall valuation of enterprise rather than valuating per share as in GAAP.

The difference between present value of economic valuation and book value (being historical value) is a benchmark for investors whether the value has been added to or subtracted from their wealth, whereas accounting only provides historical value (book value).

The corporate investment decision has to be taken as a NPV rule to finance strategies that would produce the largest spread between initial cash outflow and present value of ensuring cash generation (*non-'net cash inflow' as net cash flow in great strategy financing companies are negative – Microsoft*). The decisions that produce the greatest growth rate, form finite resources. The Enron case where GAAP was in place, profits and valuations had been done as per GAAP. There the decisions were board driven where independent directors were present, corporate governance structure was in place. But the disclosure of information about financing strategy was not presented and the investors felt duped when they came to know that the company's scarce resources were invested into less percentile productive strategy than cost of the capital.

Restructuring charges as per GAAP are expensed out but shown as investment as the revenue from it would be invested into more productive strategies.

#### Pitfalls

- i. Dependence on accounting profits (which is not very relevant than cash profits and the level of risk and return in that kind of risky business)
  - ii. EPS may be driven by restructuring and weakening (manipulating) the balance sheet by playing accounting game and not creating value for enterprises.
  - iii. Accounting profits are opinions and judgements not 'returns' (value)
  - iv. EPS ignores cost of capital
- A good example of stakeholder non-reliability on ac-



counting is Microsoft. Microsoft's stock rose by 13 per cent versus the market in a month leading up to the July 8, 2003 announcement of the decision to replace stock option grants with restricted stock. As restricted grants can be expensed out and stock options are not, investors were able to see through the accounting appear-

ances to the more meaningful fact that Microsoft's decision to expense stock options had actually improved the quality of its future earnings by making the earnings more transparent and truthful and by switching employee incentives to a more reliable incentive vehicle.

Although as an accountant, I am not accepting any of the charges outright, still for development of accounting vis-à-vis economics, reconciliation is very much needed. The reconciliation provides the economist (EVA) also a true picture of realty accounting and they may also start changes in their mindset.

From the Table-1 in previous pages, we may find that the valuation mismatching that exists in one GAAP (US or IAS) is not present in GAAP. Therefore, I strongly feel that convergence between US GAAP and international and Indian standards will definitely improve valuation accounting.

The EVA also suffers from not only the wrong periodising, but certain other distortions as well. As ROI fails (on average) to estimate the underlying true return, so does the periodic EVA figure fail to estimate (on average) the value added to shareholders, because of the inflation and other factors. EVA valuation formula has two interacting components (book value and future EVA). By increasing book value we decrease the future EVA values through increased capital costs (and vice versa). The EVA should correct itself and should also try to know in-depth accounting and mould itself to present the best information to the stakeholder, truly reconciled with accounting.

It is, however, reasonable to admit that difference between accounting and EVA is usually so small that no adjustments are necessary, (which again may not be present in other GAAP). EVA can be and also has been applied successfully in many companies without any special adjustments to capital base. Stern Stewart has identified more than 160 potential adjustments. In most real life situations, however, five to six adjustments are being used.

The converged GAAP will definitely emerge above all valuation methods including EVA (which in turn will depend on GAAP) and gain its lost brightness among the stakeholders. For the global economy to grow and develop, it is vital that countries move toward a uniform, international set of accounting standards. The debate about which standard to adopt goes on but the European Union had already decided that by 2005 all of the Europe's listed companies use International Accounting Standards (IAS). FASB and the IASB, the two boards have begun identifying areas where divergent US and International Standards can be reconciled. The boards also are tailoring new standards to avoid major difference.

The aim to provide transparent information to all stakeholders is prime focus of global accounting. The information should have the vide acceptability where for calculating economic profits or otherwise, the stakeholder's trust be built by convergence of all global accounting bodies along with economic analysers such as EVA. □