

EBITDA

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Where to start on this one? EBITDA ? Earnings Before Interest, Taxes, Depreciation, and Amortization (also, Operating Income plus Depreciation) is a currently white-hot subject and much maligned in the financial media. We have touched on EBITDA in several articles over the years, but I thought given its current level of interest, that we should look at this popular financial metric in more detail.

EBITDA, like most other measures of financial performance, is only a tool and the financial media is both right and wrong about EBITDA. EBITDA, without a sufficient understanding of its limitations and in the wrong hands, is indeed a dangerous measure of performance. This is true of most anything when it is your sole focus. In the proper context and with its limitations fully exposed, however, EBITDA is a very valuable financial tool. There are at least two implicit assumptions that must be considered when using EBITDA. 1) That working capital needs are self-funding over time. GAAP operating cash flow is defined as net income, plus depreciation, plus or minus changes in working capital items such as inventory, accounts receivable and the like (it also considers other changes in current assets and liabilities). EBITDA, of course, does not include changes in working capital. 2) That the current capital structure and tax structure are irrelevant.

The problem is that interest and taxes must usually be paid in cash and EBITDA is grossed up for these legitimate expenses that must be paid. But, GAAP operating cash flow already has interest and taxes subtracted because it starts with net income. Therefore, EBITDA does not reflect changes in working capital needed to finance inventory and receivable growth, nor does it reflect legitimate expenses like interest and taxes.

What good is EBITDA then? EBITDA is a great measure of what I will call economic cash flow. That is, the cash flow available to the owner of a business to actually pay for such things as interest expense, income taxes, and capital expenditures. EBITDA is also a good way to compare similar companies with vastly different capital structures and to compare companies among different industries when searching for investment opportunities.

Take Coke and Pepsi in fiscal 2001, for example. Both of these companies operate businesses that are easy to understand.

	Coke	Pepsi
Revenue	20,092	26,935
Cost of Goods	6,044	10,754
Gross Profit	14,048	16,181
Selling & Admin. Exp.	8,696	11,608
Operating Income	5,352	4,021
Depreciation & Amort.	803	1,082
EBITDA	6,155	5,103

For you purists out there who will actually look at the entire income statement, both Coke and Pepsi have items like interest income, equity income in affiliates and other non-operating gains and losses that I have excluded from the above to keep it simple.

Assuming you could place your own capital structure on either of the companies above and assuming only the information given, which company would you buy? How about Coke? Why? Several reasons. First, Coke generates over \$1 billion more than Pepsi in economic cash flow that you could use to pay interest, taxes, and other stuff. EBITDA as a percentage of sales was 30.58% for Coke and 18.95% for Pepsi. Second, operating income for Coke is greater by more than \$1.3 billion and as a percentage of sales is 26.64% for Coke versus 14.93% for Pepsi. Additionally, the ratio of Gross Profit to Selling expense is 1.62x for Coke and only 1.39x for Pepsi. Coke is much more efficient in operating its business than is Pepsi. It generates both higher operating income margins and uses fewer dollars of selling expense to generate a dollar of gross profit than does Pepsi.

Don't fall into the EBITDA trap however. GAAP operating cash flow for both companies is essentially equal in fiscal 2001. Take a look.

	Coke	Pepsi
Net Income	3,969	2,662
Dep. & Amort.	803	1,082
Other Gains/Losses	-200	373
Changes in Work. Cap.	-462	84
GAAP Oper. Cash Flow	4,110	4,201

Coke had \$200 million in other losses versus \$373 million in other gains for Pepsi, making for a \$573mm swing to Pepsi's advantage. Likewise, Coke invested \$462mm in working capital for such things as inventory and accounts receivable on an aggregated basis. Pepsi generated \$84 million in cash from similar items, providing a \$546 million advantage for Pepsi. So, as Coke was more operationally efficient as demonstrated above, Pepsi did a much better job at generating other gains and losses and at managing their investment in working capital (inventory and receivables, primarily) than did Coke.

I tried to simplify this but I know it's a lot more complicated than it looks and financial analysis must look at a myriad of factors, not just those mentioned above. When reviewing all the many other factors that go into an investment decision, you may conclude that Pepsi is in fact the better buy. The point is, you won't know from EBITDA alone. If you've read this far, here is the take-away from this article. Don't immediately dismiss or embrace anything in the financial media. Use EBITDA for what it is: only one of many investment tools and understand its limitations. Most of the media have the ability to explain the pros and cons of EBITDA, they just don't have the time. They operate in 30 second sound bites. Good or bad, that's the nature of the beast.