

DILIGENCE PAYS 4/8/16

Net Operating Profit After-Tax (NOPAT): Explanation & Examples

Net operating profit after-tax (NOPAT) is the unlevered, after-tax operating cash generated by a business. It represents the true, normal and recurring profitability of a business. GAAP earnings or, even worse, non-GAAP earnings, are highly unreliable and are subject to misleading management manipulation.

As the numerator in our return on invested capital (ROIC) calculation, NOPAT is a very important value, and we place a great deal of importance on getting it right.

We calculate NOPAT in two ways, from an operating and financing perspective. See Figure 1. Figure 1 shows the basic calculations. On page 2, we share the complete calculations for specific companies.

Figure 1: How To Calculate NOPAT

Operating	Financing		
Operating Revenue	Net Income		
 Operating Expenses 	+ Adj. for Capitalized Expenses		
Hidden Items	Adjusted Net Income		
EBIT	+ Increase in Equity Equivalents		
+ Goodwill Amortization	- Other Income		
EBITA	+ Other Expenses		
+ Adj. for Capitalized Expenses	- Hidden Items		
+ Income Equivalents	+ Interest Expense After Taxes		
NOPBT	NOPAT		
 Cash Operating Taxes 			
NOPAT			

Sources: New Constructs, LLC and company filings

When we calculate NOPAT, we make <u>numerous adjustments</u> to close accounting loopholes and ensure apples-to-apples comparability across thousands of companies. A company shouldn't be able to hide from its mistakes, for instance, <u>hidden</u>, <u>unusual losses</u>.

Figure 2 shows the companies with the most under/overstated GAAP earnings as compared to NOPAT.

Figure 2: Companies With Most Understated/Overstated Earnings

Ticker	Name	NOPAT	GAAP Net Income	Misleading Earnings
Most Understated Earnings				
APA	Apache Corp	(\$233)	(\$23,119)	\$22,885
CHK	Chesapeake Energy	\$205	(\$14,856)	\$15,061
DVN	Devon Energy	\$133	(\$14,459)	\$14,592
GE	General Electric	\$6,822	(\$6,144)	\$12,966
FCX	Freeport-McMoRan	\$24	(\$12,293)	\$12,263
Most Overstated Earnings				
GSK	GlaxoSmithKline	\$6,845	\$12,474	(\$5,628)
CVX	Chevron Corp	(\$1,508)	\$4,587	(\$6,095)
LYG	Lloyds Banking Group	(\$7,108)	\$2,239	(\$9,438)
NVS	Novartis AG	\$8,341	\$17,783	(\$9,441)
ETR	Entergy Corporation	(\$25,047)	(\$177)	(\$24,871)

Sources: New Constructs, LLC and company filings. Only includes companies with positive NOPAT



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Per Figure 2, Entergy Corporation's NOPAT is \$24.8 billion less than its already negative GAAP earnings. Our NOPAT calculation for ETR <u>can be seen here</u>. You can see that due to large losses from unconsolidated subsidiaries, Entergy's operating expenses were significantly higher than in previous years, which lead to the drastic decline in NOPAT from the prior year.

Novartis (NVS), Lloyds Banking Group (LYG), Chevron (CVX) and GlaxoSmithKline (GSK) also have significantly overstated GAAP net income after adjustments for <u>non-operating expenses</u>, <u>expenses or income hidden in operating earnings</u>, or <u>asset write downs</u> are made. <u>Here's the Adjustment Page from our model</u>, which shows exactly how we adjust Chevron's GAAP Net Income to calculate NOPAT. We also show how to convert Total Assets to Invested Capital.

On the other hand, Apache Corp's (APA) GAAP net income greatly understates its NOPAT. See our NOPAT calculation for APA each year <u>dating back to 1998 here</u>. In 2015, Apache Corp had write-downs totaling over \$27 billion. Because asset write-downs are an unusual charge and distort recurring core profitability, we remove them from our NOPAT calculation. To ensure profitability metrics aren't distorted, our models capture the after-tax value of write-downs in <u>invested capital</u>. Such large write-downs in 2015 may have kept Apache's NOPAT higher, but they drove down its return on invested capital (ROIC) from 4% in 2014 to -0.4% in 2015.

Chesapeake Energy (CHK), Devon Energy (DVN), General Electric (GE), and Freeport-McMoRan (FCX) each reported GAAP net income that understated the true recurring profits of their business operations as well. See the conversion of General Electric's GAAP net income to NOPAT here.

Our models and calculations are 100% transparent because we want our clients to know how much work we do to ensure we give them the best earnings quality and valuation models in the business.

Disclosure: David Trainer and Kyle Guske II receive no compensation to write about any specific stock, sector, style, or theme.



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ANSWER: They should not.

Don't judge a fund by its cover. Take a look inside at its holdings and understand the quality of earnings and valuation of the stocks it holds. We enable you to choose the best fund based on its stock-picking merits so you do not have to rely solely on backward-looking technical metrics.

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Accounting data is not designed for equity investors, but for debt investors. Accounting data must be translated into economic earnings to understand the profitability and valuation relevant to equity investors. Respected investors (e.g. Adam Smith, Warren Buffett and Ben Graham) have repeatedly emphasized that accounting results should not be used to value stocks. Economic earnings are what matter because they are:

- 1. Based on the complete set of financial information available.
- 2. Standard for all companies.
- 3. A more accurate representation of the true underlying cash flows of the business.

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