



Adjustments to Convert Reported Net Income to NOPAT

This backtest data set contains the adjustments we make to convert reported net income to [NOPAT \(Net Operating Profit After Tax\)](#). This data set contains point-in-time data. See below.

This data is available through our [API](#) in the [Net Income to NOPAT Reconciliation endpoint](#). Historical data provided through the API is best-available data as of today, not the point-in-time data presented in this backtest data set.

Economic Rationale for NOPAT - Why NOPAT Matters

NOPAT represents the unlevered, normalized, recurring after-tax cash flows of the business. Also known as NOPLAT, NOPAT is the numerator in the return on invested capital calculation ([ROIC](#)), which is considered the most robust measure of profitability by fundamental researchers. We did not invent NOPAT. While the NOPAT concept has been part of fundamental research for decades, it has failed to enter more mainstream areas of equity research because of the difficulty in calculating it consistently and accurately across large numbers of companies. Our [Robo-Analyst technology](#) allows us to scale the most sophisticated calculation of NOPAT across thousands of companies. More [details](#).

Reported Net Income to NOPAT Adjustment Calculation

In general, we make 8 types of adjustment to convert reported Net Income to NOPAT:

Reported GAAP Net Income

- + Total Net Non-Operating Expense Hidden in Operating Earnings
- + Reported Net Non-Operating Expense
- + Change in Total Reserves
- + Goodwill Amortization
- ESO Expense (Employee Stock Options)
- + Interest for PV of Operating Leases
- + Non-Operating Tax Adjustment
- + Net After-Tax Non-Operating Expense/(Income)
- = **NOPAT (Net Operating Profit After Tax)**

Total Net Non-Operating Expense Hidden in Operating Earnings are the net of losses and gains that do not appear directly on the income statement. These items are bundled inside other line items that appear on the income statement. Hidden items are found only in the Management Discussion & Analysis (MD&A) or in the footnotes to the financial statements. An example of a Hidden Non-Operating Expense is a non-recurring acquisition integration charge that is bundled into selling, general, and administrative (SGA) expense on the income statement and is disclosed only in a footnote detailing the acquisition. More [details](#).

Reported Net Non-Operating Expense are the net of non-operating charges and gains that appear directly on the income statement. An example of a Reported Non-Operating Expenses is a restructuring charge that appears directly on the income statement. We present the net of non-operating expenses less non-operating charges. More [details](#).

Change in Total Reserves captures changes in LIFO reserves, other inventory reserves, and loan loss reserves. More [details](#).

Goodwill Amortization is a gradual, formulaic reduction in goodwill asset value using any of the several GAAP amortization methods. In 2002, FASB did away with Goodwill amortization and replaced it with the practice of goodwill impairment. This adjustment only appears in historical filings prior to adoption of the new accounting standards. More [details](#).



Unrecorded Employee Stock Options Expense is the cost of issuing (at-the-money) employee stock options (ESOs) to employees before companies were required to expense ESOs. Prior to 2006, businesses were not required to record any cost for issuing ESOs. Using data provided only in footnotes, we charge companies for the cost of all ESO issuances long before FASB required companies to report the expense. This charge only appears in historical filings prior to adoption of the new accounting standards. More [details](#).

Interest for PV of Operating Leases is the implied interest expense added back to NOPAT for the capitalization of operating leases, a form of off-balance sheet debt. As of 2019, FASB requires [operating leases to be on balance sheet](#). In the meantime, we capitalize all operating leases to make them like capital leases to ensure apples-to-apples comparability between companies employing different accounting techniques (i.e. capital leases vs operating leases) for the same economic activity. More [details](#).

The Non-Operating Tax Adjustment normalizes the reported income tax provision and accounts for the effects of non-operating items and deferred taxes. [More details](#).

Net After-Tax Non-Operating Expense/(Income) are the net of non-operating expenses and income that appear directly on the income statement after tax. An example of a Non-Operating After-Tax Expense is an after-tax charge for preferred dividends that is reported below the income tax provision. More details.

Coverage

New Constructs covers:

~2800 currently active stocks.

~2700 currently inactive stocks that appear in the historical data

Coverage information is updated daily and available on our website:

<https://client.newconstructs.com/nc/coverage/view.htm>

Time Frame - 1998 to Present

Our company data sets begin in 1998 when SEC filings were made available in electronic form.

Source

We source all data directly from the annual and quarterly SEC filings using our proprietary [Robo-Analyst technology](#). All calculations are our own.

Point-in-Time Data

New Constructs NOPAT Adjustment data is provided as of the data availability date presented in the data. See information on data availability dates below.

Data Fields

ticker - The ticker for the security on the file generation date. Tickers that include a colon are currently inactive stocks. They are no longer traded because they were acquired, went bankrupt, etc. We assign the last used ticker to the security followed by a colon and a number that increments for each new company that becomes inactive with that ticker. For example, XYZ Corp uses ticker XYZ and goes inactive. We assign the company the ticker XYZ:1 because it is the first company in our system to go inactive using ticker XYZ. If a different company, XYZ Technology, starts using ticker XYZ and goes inactive, it will be assigned XYZ:2.

A list of tickers and company names is available on our website at <https://client.newconstructs.com/nc/coverage/view.htm> or through the coverage endpoint of our API, see <https://client.newconstructs.com/nc/documentation/api.htm>

company_name - The name of the company on the file generation date.

cik - The Central Index Key (CIK) used by the SEC to identify corporations and individuals who have filed with the SEC. We do not provide CUSIPs or other industry identifiers for securities. CIK is provided to help map securities from New Constructs to other data sets. For active companies, the CIK is the one in use by the SEC on the data generation date. For inactive companies, the CIK is the last one in use by the company prior to its being inactivated.

figi - The Financial Instrument Global Identifier (FIGI) is an established global standard issued under the guidelines of the Object Management Group (OMG.org, an international, non-profit standards organization),



founded in 1989. FIGI is provided to help map securities from New Constructs to other data sets. Please see <https://www.openfigi.com/> and <https://www.openfigi.com/assets/local/figi-allocation-rules.pdf> for details on OpenFIGI and its use.

stock_exchange - The exchange on which a ticker trades. For active stocks, the exchange is the one on which the ticker was traded on the data generation date. For inactive stocks, the exchange is the last one on which the ticker was traded prior to its being inactivated.

company_status_current - Actively traded stocks are marked as 'live'. Inactive stocks are marked as 'inactive'. This is the status of the security on the data generation date.

fiscal_year - The fiscal year of the most recent filing used in the model.

fiscal_quarter - The fiscal quarter of the most recent filing used in the model. If the most recent filing is an annual filing, this field will be null, indicating the data belongs to an annual model. If the most recent filing is a quarterly filing, this field will show the quarter: 1, 2, or 3, indicating the data belongs to a TTM model.

filing_type - The filing type of the most recent filing used in the model - generally a 10-K or 10-Q, though other filing types are also used.

filing_date - The date the most recent filing used in the model was filed with the SEC.

period_end_date - The period end date of the most recent filing used in the model.

actual_data_availability_date - The date that New Constructs provided this data to clients on our website, in data feeds, or any other distribution method. The data availability date is the real historical date this data was available to clients. For companies added to coverage, the `data_availability_date` for all historical data will be the date we added the company to coverage. For example, we added Summit Materials, Inc. (SUM) to coverage in January 2018, so the `data_availability_date` for all SUM data prior to January 2018 is January 2018. SUM's data was made available to clients on that date. The data set includes data for SUM back to the first date we can generate a model for SUM in 2016. For backtest purposes, we also provide an implied data availability date. See below.

implied_data_availability_date - The date that New Constructs would have provided this data to clients on our website, in data feeds, or any other distribution method assuming that we covered the security at the time with our current system & [Robo-Analyst technology](#). For backtesting purposes, this date is most similar to the `data_availability_dates` for SEC filings filed today. It is provided as a reasonable data availability date for historical data to most closely match current practices and technology. See `data_availability_date` above for information.

model_date - The historical date for which the model was generated. In the data set, there is one `model_date` at the beginning of every other month for each security. New Constructs backtest data is bimonthly recalculated data. The backtest data in this file are as calculated by our system on the indicated `data_generation_date`, once for every other month on the first trading date over the historical period. Only data available on the `model_date` is used to calculate our ratings and metrics. No future data is used.

data_generation_date - The date on which the data was generated.

Data Value Data Fields - The following data fields are columns in the data set. All values are reported in ones units.



Basic Reported Net Income to NOPAT Adjustments

Name	Datapoint	Example (AAP 2004)
GAAP Net Income	INCOME_NET	\$187,988,000
Total Net Non-Operating Expense Hidden in Operating Earnings	EXPENSES_PRE_TAX_HIDDEN_TOTAL	\$1,265,000
Reported Net Non-Operating Expense	EXPENSES_NON_OPERATING	\$23,010,000
Change in Total Reserves	RESERVES_YOY_DELTA	(\$5,294,000)
Goodwill Amortization	GOODWILL_AMORTIZATION_ADJUSTED	\$0
ESO Expense (Employee Stock Options)	ESO_EXPENSE	\$14,265,352
Interest for PV of Operating Leases	LEASES_OPERATING_OBLIGATION_INTEREST_IMPLIED	\$52,886,828
Non-Operating Tax Adjustment	NON_OPERATING_TAXES	(\$24,393,869)
Net After-Tax Non-Operating Expense/(Income)	CHARGE_AFTER_TAX	\$39,000
NOPAT (Net Operating Profit After Tax)	NOPAT	\$221,235,607
NOPAT (Net Operating Profit After Tax) Financing Approach	NOPAT_FINANCING	\$221,235,607

Sources: New Constructs, LLC and company filings