



## Return on Invested Capital (ROIC) Calculation & Variations

This backtest data set contains the data we use to calculate [ROIC](#). This data set contains point-in-time data. See below.

This data is available through our [API](#) in the [Return on Invested Capital 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.

### Backtest Dataset General Information

See our [detailed documentation](#) explaining the fields in a backtest dataset file.

### Economic Rationale for ROIC - Why ROIC Matters

Return on invested capital (ROIC) is the primary driver of valuation and most important measure of corporate performance. Put simply, ROIC measures how much profit a company generates for every dollar invested in the company. The difference between our ROIC and other firms' ROIC is that ours is based on better data. Our [Robo Analyst technology](#) allows us to scale the most accurate calculation of ROIC across thousands of companies.

### ROIC Datapoints

Invested Capital is the year-end value of the money invested in a business over its lifetime.

Average Invested Capital is the average value of invested capital over the year, adjusted for acquisitions. The denominator of our ROIC calculation.

Average GAAP-Based Invested Capital is the average invested capital calculated based only on reported GAAP data from the financial statements. GAAP-Based Average Invested Capital is what is generally provided by other data providers. This is compared to New Constructs' Average Invested Capital, which is based on critical information from the MD&A and footnotes.

Beginning Invested Capital is the value of invested capital at the beginning of the year.

GAAP-Based Invested Capital is invested capital calculated based only on reported GAAP data from the financial statements. GAAP-Based Invested Capital is what is generally provided by other data providers. This is compared to New Constructs' Invested Capital, which is based on critical information from the MD&A and footnotes.

Gross Invested Capital is calculated like our regular Invested Capital calculation, but also includes accumulated depreciation and amortization. We use Average Gross Invested Capital as the denominator in our ROIC calculation.



Average Gross Invested Capital is calculated like our regular Average Invested Capital calculation, but also includes accumulated depreciation and amortization. We use Average Gross Invested Capital as the denominator in our ROGIC calculation.

Average Invested Capital Using Last 4 Quarters is the average invested capital of the last four quarters.

Average Invested Capital Using Year-over-Year Data is the average invested capital using the year-over-year period-beginning and -ending values.

NOPAT (Net Operating Profit After Tax) represents the unlevered, normalized, recurring after-tax cash flows of the business.

GAAP-Based NOPAT is NOPAT calculated based only on reported GAAP data from the financial statements. GAAP-Based NOPAT is what is generally provided by other data providers. This is compared to New Constructs' NOPAT, which is based on critical information from the MD&A and footnotes.

Gross NOPAT (Net Operating Profit After Tax) is calculated like our regular NOPAT calculation but with depreciation and amortization expense added back.

Return on Gross Invested Capital (ROGIC) is Gross NOPAT divided by Average Gross Invested Capital. Gross NOPAT is calculated like our regular NOPAT calculation but with depreciation and amortization expense added back. Gross Invested Capital is calculated like our regular Invested Capital calculation, but also includes accumulated depreciation and amortization.

ROIC (Return On Invested Capital) is return on invested capital, calculated using NOPAT / average invested capital.

ROIC (Return On Invested Capital) Using Ending Invested Capital is the return on invested capital using period-end invested capital.

ROIC (Return On Invested Capital) Using Beginning Invested Capital is the return on invested capital using period-beginning invested capital.

ROIC (Return On Invested Capital) Using Average Quarterly Invested Capital is the return on invested capital using the average invested capital of the last four quarters.

ROIC (Return On Invested Capital) Using Year-over-Year Average Invested Capital is the return on invested capital using the year-over-year average invested capital.

GAAP-Based ROIC is the return on Invested Capital calculated based only on reported GAAP data from the financial statements. GAAP-Based NOPAT and Average Invested Capital is what is generally provided by other data providers. This is compared to New Constructs' NOPAT and Average Invested Capital, which are based on critical information from the MD&A and footnotes.

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



Datapoints that are impacted by stock price changes are marked with an asterisk (\*) in the table below.

### ***ROIC Variations***

<b>Name</b>	<b>Datapoint</b>	<b>Example (LEG 2016)</b>
Invested Capital	CAPITAL_INVESTED	\$3,085,850,440
Average Invested Capital	CAPITAL_INVESTED_ADJUSTED	\$3,104,394,024
Average GAAP-Based Invested Capital	CAPITAL_INVESTED_ADJUSTED_GAAP	\$2,069,400,000
Beginning Invested Capital	CAPITAL_INVESTED_BEGINNING	\$3,075,737,977
GAAP-Based Invested Capital	CAPITAL_INVESTED_GAAP	\$2,071,600,000
Gross Invested Capital	CAPITAL_INVESTED_GROSS	\$4,251,250,440
Average Gross Invested Capital	CAPITAL_INVESTED_GROSS_ADJUSTED	\$4,268,219,024
Average Invested Capital Using Last 4 Quarters	CAPITAL_INVESTED_Q_AVG	\$3,104,394,024
Average Invested Capital Using Year-over-Year Data	CAPITAL_INVESTED_YOY_AVG	\$3,080,794,209
NOPAT (Net Operating Profit After Tax)	NOPAT	\$380,509,804
GAAP-Based NOPAT	NOPAT_GAAP	\$363,633,237
Gross NOPAT (Net Operating Profit After Tax)	NOPAT_GROSS	\$442,247,072
Return on Gross Invested Capital (ROGIC)	ROGIC	10.36%
ROIC (Return On Invested Capital)	ROIC	12.26%
ROIC (Return On Invested Capital) Using Ending Invested Capital	ROIC_CAPITAL_INVESTED	12.33%
ROIC (Return On Invested Capital) Using Beginning Invested Capital	ROIC_CAPITAL_INVESTED_BEGINNING	12.37%
ROIC (Return On Invested Capital) Using Average Quarterly Invested Capital	ROIC_CAPITAL_INVESTED_Q_AVG	12.26%
ROIC (Return On Invested Capital) Using Year-over-Year Average Invested Capital	ROIC_CAPITAL_INVESTED_YOY_AVG	12.35%
GAAP-Based ROIC	ROIC_GAAP	17.57%



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4. **Relevant** - Empirical evidence must provide [tangible, quantifiable correlation](#) to stock, ETF or mutual fund performance.

### ***Value Investing 2.0: Diligence Matters: Technology is Key to Value Investing With Scale***

Accounting data is only the beginning of fundamental research. It must be translated into economic earnings to truly understand profitability and valuation. This translation requires deep analysis of footnotes and the MD&A, a process that our [robo-analyst technology](#) empowers us to perform for thousands of stocks, ETFs and mutual funds.



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