THE DUPONT ANALYSIS: ONE OF THE MOST POWERFUL CONCEPTS IN FINANCE

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This article is relevant to financial professionals who are considering offering model portfolios to their clients. If you are an individual investor interested in WisdomTree ETF Model Portfolios, please inquire with your financial professional. Not all financial professionals have access to these model portfolios.

If, like me, you are a reader of my colleague Jeff Weniger's blog posts and social media posts, you know he makes regular <u>references to "The DuPont Analysis."</u> Those (also like me) with a background in corporate finance or commercial banking know exactly what he is referencing. But, given its relevance to the WisdomTree product suite and how we think about our Model Portfolios, I thought it would be worthwhile to offer a "primer" on what it is and why it matters.

The <u>DuPont Analysis</u> was created (naturally) by the DuPont Company back in the 1920s. The genesis idea is that the objective of any given firm is to maximize <u>return on equity (ROE)</u>—the return to shareholders on their invested capital.

It then breaks down ROE into three fundamental components that evaluate the profitability, operational efficiency and leverage of a given company. While it has myriad offshoots and derivatives that go increasingly "into the weeds," the fundamental "equation" breaks down like this:

Net Income	Sales	Assets
Sales	Assets	Equity

Let's look at each component:

- 1. Net Income/Sales: This is a measure of profitability—how much net income do you generate for each unit of sales? There is no "correct" answer to this: a large manufacturing company (e.g., Boeing) may generate huge net income on each airplane sold, while a fast-food franchise (e.g., McDonald's) may generate a small level of net income on each burger sold—but it sells far more burgers each year than Boeing sells airplanes. So, the metric is relevant to each company's peers. How profitable are you relative to your peers with respect to net income per unit of sale?
- **2. Sales/Assets:** This is a measure of operational **efficiency**—what level of sales do you generate relative to your reported assets? While, again, this varies from sector to sector and industry to industry, the bottom line is intuitive —you are doing better than your peers if you generate more sales relative to your asset base.
- **3. Assets/Equity:** This ratio is a measure of financial **leverage**—it indirectly measures how much debt with respect to equity you carry on your balance sheet relative to your asset base. While there are theories¹ that posit that investors should not focus on the capital structure of a company but rather on the present value of future cash flows, most investors intuitively understand that the more debt (leverage) relative to equity a company holds, the more susceptible it is to market or economic downturns. So, a company with a lower assets/equity ratio (i.e., more equity per unit of assets) may have a better ability to withstand economic or market disruptions.

Why Does Any of This Matter?

If you know WisdomTree, you know we are the "more than <u>beta"</u> ETF shop. Almost all our products, and therefore our Model Portfolios, have distinct factor tilts embedded into them, such as <u>value</u>, <u>dividends</u> and <u>size</u>.

And quality. When we say "quality," we mean companies with stronger <u>balance sheets</u>, earnings and cash flows. Many, if not most, of our products are filtered through a "<u>composite risk score</u>", which weeds out lower-quality companies and



results in custom Indexes that we then build and manage our ETFs around.

Our "house view" is that 2023 will be a year in which quality becomes increasingly important. As we sail into uncertain and <u>volatile</u> economic and market seas, companies with better balance sheets, earnings and cash flows should be better able to withstand whatever the market environment throws their way.

We saw signs of this in 2022 in both large-cap stocks:



Source: Y charts, performance for calendar year 2022. You cannot invest in an index and past performance does not guarantee future results.

And especially small-cap stocks (the S&P 600 Index is considered a "higher quality" index than the Russell 2000 Index because it filters out a higher percentage of negative earnings companies):





Source: Ycharts, performance for calendar year 2022. You cannot invest in an index and past performance does not guarantee future results.

Conclusion

The following chart illustrates comparative factor performance for the S&P 500 Index. Focus on the teal-colored line, which represents the quality factor. Specifically note that, while it rarely has been the best or worst performing factor, it has been the most consistent—it performed regardless of market environments.

Rolling 10-Year Excess Return vs. Market



Source: WisdomTree, Ken French, data as of 11/30/21, the most recent data available. You cannot invest in an index and past performance does not guarantee future results.

During the period between the global financial crisis of 2008 and, roughly, November 2021, a low interest rate environment powered large-cap growth stocks. The last two years of this rally—2020–2021—were also marked by a distinct "junk rally"; that is, the market rewarded companies that were lower quality, delivered few (if any) dividends and were dependent on low interest rates to support higher <u>P/E multiples</u>, since distant future cash flows discounted at low rates = higher present value of those cash flows.



But times have changed. Over the past 12+ months, interest rates have moved steadily higher, and fundamentals have come back into popularity. Investors have shown a distinct preference for value and dividends—and quality. We believe this trend will continue for several years at least.

This is why we are optimistic about the relative performance of the WisdomTree product set and our Model Portfolios, as they tilt exactly toward the factors we believe will be rewarded for many years.

In other words, higher quality = better resilience in what we believe will be a volatile and uncertain economic and market environment.

The DuPont Analysis, though simple in design, remains one of the most powerful analytical concepts in all of finance. My colleagues and I have been in the investments and corporate finance game a long time—we've all lived through multiple economic and investment regimes, including recessions and severe market disruptions. As the above chart supports, we will never apologize for having a quality tilt within our products and portfolios.

The DuPont Analysis provides an excellent tool for identifying higher-quality securities, products and model portfolios.

For standardized performance and the most recent month-end performance click <u>here</u> NOTE, this material is intended for electronic use only. Individuals who intend to print and physically deliver to an investor must print the monthly performance report to accompany this blog.

View the online version of this article here.



¹ See the Modigliani-Miller Theorem: Https://www.investopedia.com/terms/m/modigliani-millertheorem.asp.

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You cannot invest directly in an index.



DEFINITIONS

DuPont Equation: At the DuPont Corporation, Donaldson Brown created the concept that Return on equity (ROE) is broken down into the interaction between profit margin, by asset turnover, and the equity multiplier. These three pieces multiplied together are equal to ROE. .

Return on Equity (ROE): Measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

Beta: A measure of the volatility of a security or a portfolio in comparison to a benchmark. In general, a beta less than 1 indicates that the investment is less volatile than the benchmark, while a beta more than 1 indicates that the investment is more volatile than the benchmark.

Value: Characterized by lower price levels relative to fundamentals, such as earnings or dividends. Prices are lower because investors are less certain of the performance of these fundamentals in the future. This term is also related to the Value Factor, which associates these stock characteristics with excess returns vs the market over tim.

Dividend: A portion of corporate profits paid out to shareholders.

Size: Characterized by smaller companies rather than larger companies by market capitalization. This term is also related to the Size Factor, which associates smaller market-cap stocks with excess returns vs the market over time.

Quality: Characterized by higher efficiency and profitability. Typical measures include earnings, return on equity, return on assets, operating profitability as well as others. This term is also related to the Quality Factor, which associates these stock characteristics with excess returns vs the market over tim.

Balance sheet: refers to the cash and cash equivalents part of the Current Assets on a firms balance sheet and cash available for purchasing new position.

Volatility: A measure of the dispersion of actual returns around a particular average level. .

The Global Financial Crisis: Refers to the period of extreme stress in global financial markets and banking systems between mid 2007 and early 2009.

Interest rates: The rate at which interest is paid by a borrower for the use of money.

Large-Capitalization (Large-Cap): A term used by the investment community to refer to companies with a market capitalization value of more than \$10 billion. Large cap is an abbreviation of the term "large market capitalization". Market capitalization is calculated by multiplying the number of a company's shares outstanding by its stock price per share.

Price-to-earnings (P/E) ratio: Share price divided by earnings per share. Lower numbers indicate an ability to access greater amounts of earnings per dollar invested.

