

The Periodic Table Turns 20

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No one is more surprised than I am at the longevity and usefulness of the Callan Periodic Table of Investment Returns. I put the table together in 1999 as a lark, in an effort to convince our clients' investment committees that U.S. large cap growth stocks were not always going to be the best-performing asset class. Recall that 1999 was close to the peak of the Dot-Com Bubble, and the tail end of a long run of very strong growth outperformance. At the time, clients constantly asked: Is value dead? Why bother with non-U.S. equity?

(Estimated reading time: 2 min 19 sec)

The goal of the table was to show how asset classes and particular equity styles (growth and value, large and small cap, U.S. and non-U.S.) go in and out of favor, and how stocks and bonds interact over market cycles. The table was also designed to convey the strong case for diversification, and its original title was the rather mundane "The Benefits of Diversification." After putting the chart together, however, it looked to me just like the Periodic Table of the Elements that I used to stare at in high school chemistry class—and so the Callan Periodic Table of Investment Returns was born.

The Callan Periodic Table of Investment Returns

Annual Returns for Key Indices Ranked in Order of Performance (1999–2018)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Non-U.S. Equity	27.92%	13.84%	8.43%	22.37%	55.62%	37.26%	34.00%	42.12%	33.39%	5.24%	78.61%	36.85%	7.84%	27.72%	38.92%	16.02%	1.39%	21.31%	37.25%	1.87%
U.S. Fixed Income	11.83%	5.20%	18.36%	47.26%	26.65%	16.35%	32.13%	12.44%	4.39%	69.21%	19.63%	-8.80%	18.20%	32.33%	11.49%	9.85%	17.13%	24.21%	Non-U.S. Fixed Income	9.83%
Small Cap Equity	21.26%	11.83%	5.20%	18.36%	47.26%	26.65%	16.35%	32.13%	12.44%	4.39%	69.21%	19.63%	-8.80%	18.20%	32.33%	11.49%	9.85%	17.13%	24.21%	Non-U.S. Fixed Income
Large Cap Equity	21.44%	11.83%	5.20%	18.36%	47.26%	26.65%	16.35%	32.13%	12.44%	4.39%	69.21%	19.63%	-8.80%	18.20%	32.33%	11.49%	9.85%	17.13%	24.21%	Non-U.S. Fixed Income
Cash Equivalent	21.44%	11.83%	5.20%	18.36%	47.26%	26.65%	16.35%	32.13%	12.44%	4.39%	69.21%	19.63%	-8.80%	18.20%	32.33%	11.49%	9.85%	17.13%	24.21%	Non-U.S. Fixed Income
Real Estate	9.97%	-3.02%	2.49%	1.78%	39.42%	18.33%	4.91%	18.37%	6.97%	-26.16%	33.67%	15.12%	2.11%	18.93%	7.44%	-8.89%	-0.79%	11.18%	11.65%	-2.15%
Emerging Market Equity	4.85%	-2.81%	-1.37%	29.87%	12.84%	4.55%	15.73%	5.49%	-33.78%	27.17%	15.69%	9.10%	18.93%	3.47%	-2.45%	-3.04%	4.08%	Fixed Income	20.83%	-4.29%
High Yield	2.99%	-8.68%	-3.78%	28.68%	11.13%	3.07%	11.88%	5.90%	-27.00%	26.47%	8.95%	-4.16%	16.81%	9.07%	6.03%	-4.41%	2.75%	10.36%	High Yield	-6.62%
U.S. Fixed Income	-0.93%	-0.11%	-3.81%	-16.80%	19.36%	2.74%	8.16%	1.97%	-43.86%	7.55%	6.84%	-1.44%	4.21%	-2.02%	-2.19%	-4.47%	2.68%	7.89%	U.S. Fixed Income	-11.81%
Non-U.S. Fixed Income	-0.93%	-0.11%	-3.81%	-16.80%	19.36%	2.74%	8.16%	1.97%	-43.86%	7.55%	6.84%	-1.44%	4.21%	-2.02%	-2.19%	-4.47%	2.68%	7.89%	U.S. Fixed Income	-11.81%
Non-U.S. Equity	-11.89%	-13.37%	-20.48%	4.12%	4.34%	2.42%	4.89%	-1.37%	-46.21%	49.21%	9.33%	4.85%	-12.21%	4.89%	-2.69%	-8.99%	-8.20%	1.49%	Non-U.S. Equity	-14.68%
Large Cap Equity	-22.10%	-1.16%	1.33%	-8.65%	4.33%	-7.39%	-53.33%	0.21%	0.13%	-10.42%	6.11%	-3.08%	-4.32%	-14.82%	0.33%	0.86%	-14.89%	Large Cap Equity	-14.68%	-14.68%

The Callan Periodic Table of Investment Returns conveys the strong case for diversification across asset classes (stocks vs. bonds), capitalizations (large vs. small), and equity markets (U.S. vs. non-U.S.). The Table highlights the uncertainty inherent in all capital markets. Rankings change every year. Also noteworthy is the difference between absolute and relative performance, as returns for the top-performing asset class span a wide range over the past 20 years.

20th Anniversary Edition

The table can also provide other useful insights for investors, such as the importance of understanding the difference between absolute and relative performance.

For instance, the ranking for fixed income (as described by the Bloomberg Barclays US Aggregate Bond Index) during 2006-09 shifted from **worst** in 2006 to **best** in 2008 back to **worst** in 2009 (excluding cash), even though the returns only ranged from 4.33% to 6.97%. The best-performing asset class in 2006,

nearly 2007, and 2009 was emerging markets, clocking 32%, 39%, and 78% (!), but emerging was also the worst-performing asset class in 2008, losing 53%, the year bonds ranked first. In this instance, the table provides a clear demonstration of just what it means to take on equity risk versus fixed income risk.

Over time, the table has expanded to include other liquid market strategies—high yield,

emerging market equity—and spawned tables that include more asset classes (real estate, hedge funds, private equity, commodities) and broader definitions of asset classes to more broadly compare market betas, rather than equity styles. Our full collection is available on our website [here](#) .

The Periodic Table, in all its variations, has become one of the most popular pieces of research that Callan produces every year. It has also been widely copied throughout the industry—and as the saying goes, “Imitation is the sincerest form of flattery!”

The enduring appeal of the table in my mind is its ability to be understood at a glance—it conveys a lot of information—and once you’ve seen it and absorbed it, you can refer to it again and again. New insights still come to me, the author, even 20 years later!

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