

# Periodic Table of Style Rotation — Stocks

This style rotation table compares the returns of various indices. Fluctuations in market cycles demonstrate the importance of diversification. Diversification does not assure a profit nor does it protect against loss of principal. As with any investment, it is possible to lose money.

**Large Cap Stocks** are represented by the Russell 1000 Index, which measures the performance of the large-cap segment of the U.S. equity universe. It is a subset of the Russell 3000 Index and includes approximately 1,000 of the largest securities based on a combination of their market cap and current index membership. The Russell 1000 represents approximately 92% of the U.S. market.

**Large Growth Stocks** are represented by the Russell 1000 Growth Index, which measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

**Large Value Stocks** are represented by the Russell 1000 Value Index, which measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 1000 companies with lower price-to-book ratios and lower expected growth values.

**Mid Cap Stocks** are represented by the Russell Midcap Index, which measures the performance of the mid-cap segment of the U.S. equity universe. The Russell Midcap Index is a subset of the Russell 1000 Index. It includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. The Russell Midcap Index represents approximately 31% of the total market capitalization of the Russell 1000 companies.

**Small Cap Stocks** are represented by the Russell 2000 Index, which measures the performance of the small-cap segment of the U.S. equity universe. The Russell 2000 Index is a subset of the Russell 3000 Index, representing approximately 10% of the total market capitalization of that index. It includes approximately 2,000 of the smallest securities based on a combination of their market cap and current index membership.

**Foreign Stocks** are represented by the MSCI EAFE Index (Europe, Australasia, and Far East), which is a widely followed index of common stocks from 22 developed market countries.

**Emerging Markets** are represented by the MSCI Emerging Markets Index, which measures the performance of stocks in global emerging market countries.

**Real Estate** is represented by the Wilshire U.S. REIT Index, which measures the performance of U.S. publicly traded Real Estate Investment Trusts.

**Commodities** are represented by the Bloomberg Commodity Total Return Index, which is composed of futures contracts and reflects the returns on a fully collateralized investment in the BCOM. This combines the returns of the BCOM with the returns on cash collateral invested in 13 week (3 Month) U.S. Treasury Bills.

**Bonds** are represented by the Bloomberg Barclays U.S. Aggregate Bond Index, which covers the USD- denominated, investment-grade, fixed-rate, taxable bond market. The index includes government and corporate securities, mortgage-backed securities, and asset-backed securities, with maturities of at least one year.

The **Diversified Portfolio** is represented by an equal portion (10%) of the 10 indices in the periodic table.

A mutual fund's portfolio may differ significantly from the securities held in the indices. These indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the active management of an actual portfolio.

**Standard Deviation** measures how widely performance has varied from an average, and it is an indicator for potential volatility. A high standard deviation indicates that the range of performance has been wide, identifying greater potential volatility.

The standard deviations shown are calculated by Morningstar. Morningstar computes standard deviation using the trailing monthly total returns for the appropriate time period. All of the monthly standard deviations are then annualized.

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## ANNUAL RETURNS FOR SELECTED ASSET CLASSES

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		10-Year Annualized Return	10-Year Standard Deviation	
Real Estate	31.78	Large Growth Stocks 5.67	Small Cap Stocks 21.31	Emerging Markets 37.28	Bonds 0.01	Large Growth Stocks 36.39	Large Growth Stocks 38.49	Real Estate 46.18	Commodities 16.09	Large Growth Stocks 42.68	BEST PERFORMANCE ↑	Large Growth Stocks 14.86	Small Cap Stocks 20.24	HIGHEST VOLATILITY ↑
Large Value Stocks	13.45	Real Estate 4.23	Large Value Stocks 17.34	Large Growth Stocks 30.21	Large Growth Stocks -1.51	Large Cap Stocks 31.43	Large Cap Stocks 20.96	Large Growth Stocks 27.60	Large Value Stocks -7.54	Large Cap Stocks 26.53		Large Cap Stocks 11.80	Real Estate 17.89	
Large Cap Stocks	13.24	Large Cap Stocks 0.92	Mid Cap Stocks 13.80	Foreign Stocks 25.03	Large Cap Stocks -4.78	Mid Cap Stocks 30.54	Small Cap Stocks 19.96	Commodities 27.11	Bonds -13.01	Foreign Stocks 18.24		Mid Cap Stocks 9.42	Mid Cap Stocks 17.25	
Mid Cap Stocks	13.22	Bonds 0.55	Large Cap Stocks 12.05	Large Cap Stocks 21.69	Real Estate -4.84	Large Value Stocks 26.54	Emerging Markets 18.31	Large Cap Stocks 26.45	Foreign Stocks -14.45	Mid Cap Stocks 17.23		Large Value Stocks 8.40	Emerging Markets 17.22	
Large Growth Stocks	13.05	Foreign Stocks -0.81	Commodities 11.77	Mid Cap Stocks 18.52	Diversified Portfolio -7.91	Real Estate 25.76	Mid Cap Stocks 17.10	Large Value Stocks 25.16	Diversified Portfolio -15.18	Small Cap Stocks 16.93		Real Estate 7.72	Large Growth Stocks 16.96	
Diversified Portfolio	7.15	Mid Cap Stocks -2.44	Emerging Markets 11.19	Diversified Portfolio 17.05	Large Value Stocks -8.27	Small Cap Stocks 25.52	Diversified Portfolio 12.19	Mid Cap Stocks 22.58	Mid Cap Stocks -17.32	Real Estate 16.10		Small Cap Stocks 7.16	Large Cap Stocks 15.47	
Bonds	5.97	Large Value Stocks -3.83	Diversified Portfolio 10.54	Small Cap Stocks 14.65	Mid Cap Stocks -9.06	Diversified Portfolio 23.30	Foreign Stocks 7.82	Diversified Portfolio 19.71	Large Cap Stocks -19.13	Diversified Portfolio 15.66		Diversified Portfolio 7.13	Large Value Stocks 15.39	
Small Cap Stocks	4.89	Diversified Portfolio -3.97	Real Estate 7.24	Large Value Stocks 13.66	Small Cap Stocks -11.01	Foreign Stocks 22.01	Bonds 7.51	Small Cap Stocks 14.82	Emerging Markets -20.09	Large Value Stocks 11.46		Foreign Stocks 4.28	Foreign Stocks 15.24	
Emerging Markets	-2.19	Small Cap Stocks -4.41	Large Growth Stocks 7.08	Real Estate 4.18	Commodities -11.25	Emerging Markets 18.44	Large Value Stocks 2.80	Foreign Stocks 11.26	Small Cap Stocks -20.44	Emerging Markets 9.83		Emerging Markets 2.66	Commodities 14.28	
Foreign Stocks	-4.90	Emerging Markets -14.92	Bonds 2.65	Bonds 3.54	Foreign Stocks -13.79	Bonds 8.72	Commodities -3.12	Bonds -1.54	Real Estate -26.76	Bonds 5.53		Bonds 1.81	Diversified Portfolio 13.13	
Commodities	-17.01	Commodities -24.66	Foreign Stocks 1.00	Commodities 1.70	Emerging Markets -14.58	Commodities 7.69	Real Estate -7.90	Emerging Markets -2.54	Large Growth Stocks -29.14	Commodities -7.91		Commodities -1.11	Bonds 4.76	LOWEST VOLATILITY ↓
Average Annualized Inflation Rate	1.6	0.1	1.3	2.1	2.4	1.8	1.2	4.7	8.0	4.1				
Year End Fed Funds Rate	0.00-0.25%	0.25-0.50%	0.50-0.75%	1.25-1.50%	2.25-2.50%	1.50-1.75%	0.00-0.25%	0.00-0.25%	4.25%-4.50%	5.25-5.50%				

Returns shown for selected stock indices are total returns, and thus include dividends. Past performance is no guarantee of future results. This information is for illustrative purposes only and is not intended to represent any particular investment product. It is not possible to invest directly in an index.

Sources: U.S. Bureau of Labor Statistics; Federal Reserve.

# Periodic Table of Sector Rotation — Bonds

This sector rotation table compares the returns of various indices. Fluctuations in market cycles demonstrate the importance of diversification. Diversification does not assure a profit nor does it protect against loss of principal. As with any investment, it is possible to lose money.

**T-Bills** are represented by the FTSE Treasury Bill 3 Month Index, an index of three-month Treasury Bills.

**Treasuries** are represented by the Bloomberg U.S. Treasury Index, which is comprised of U.S. Treasury securities with a remaining maturity of at least one year.

**TIPS** are represented by the Bloomberg U.S. Treasury Inflation-Protected Securities Index, which measures the return of U.S. Treasuries with fixed-rate coupon payments that adjust for inflation as measured by the Consumer Price Index for All Urban Consumers (CPI-U).

**Mortgages** are represented by the Bloomberg U.S. Mortgage-Backed Securities (MBS) Index, which is comprised of 30- and 15-year fixed-rate agency mortgage-backed pass-through securities issued by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC), as well as hybrid adjustable-rate mortgage (ARM) pass-through securities.

**Investment Grade Corporates** are represented by the Bloomberg U.S. Corporate Investment-Grade Index, which tracks the performance of publicly issued, USD-denominated, fixed-rate, investment-grade corporate debt.

**High Yield Corporates** are represented by the Bloomberg U.S. Corporate High-Yield Index, which tracks the performance of publicly issued, USD-denominated, fixed-rate, below investment-grade corporate debt.

**Unhedged Foreign Bonds** are represented by the Bloomberg Global Treasury ex-U.S. Index, which tracks the performance of investment-grade, fixed-rate, local-currency-denominated sovereign debt from certain foreign countries.

**Investment Grade Municipals** are represented by the Bloomberg Municipal Bond Index, which is a market value-weighted index designed for the long-term, investment-grade, tax-exempt bond market.

**High Yield Municipals** are represented by the Bloomberg High Yield Muni Index, which is composed of U.S. non-investment grade municipal securities with a remaining maturity of one year or more.

**Aggregate Bond Index** is represented by the Bloomberg U.S. Aggregate Bond Index, which covers the USD-denominated, investment-grade, fixed-rate, taxable bond market. The index includes government and corporate securities, mortgage-backed securities, and asset-backed securities, with maturities of at least one year.

**Emerging Markets Bonds** is represented by the J.P. Morgan Emerging Markets Bond Index Global Diversified which tracks total returns for U.S. dollar denominated debt instruments issued by emerging market sovereign and quasi-sovereign entities: Brady bonds, loans, Eurobonds. The diversified index limits the exposure of some of the larger countries.

A mutual fund's portfolio may differ significantly from the securities held in the indices. These indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the active management of an actual portfolio.

**Inflation** is represented by the Consumer Price Index for All Urban Consumers (CPI-U). CPI-U measures changes in the prices paid by urban consumers for a representative basket of goods and services.

The **federal funds rate** is the interest rate at which depository institutions lend balances at the Federal Reserve to other depository institutions overnight.

Sources: U.S. Bureau of Labor Statistics; Federal Reserve; Bloomberg; Morningstar; Russell Investments

## ANNUAL RETURNS FOR SELECTED BOND SECTORS

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		10-Year Annualized Return	10-Year Standard Deviation	
	High Yield Municipals 13.84	Investment Grade Munis 3.30	High Yield Corporates 17.13	Emerging Markets Bonds 10.26	High Yield Municipals 4.76	Emerging Markets Bonds 15.04	TIPS 10.99	High Yield Municipals 7.77	T-Bills 1.50	High Yield Corporates 13.44	BEST PERFORMANCE ↑	High Yield Municipals 5.00	Emerging Markets Bonds 9.05	HIGHEST VOLATILITY ↑
	Investment Grade Munis 9.05	High Yield Municipals 1.81	Emerging Markets Bonds 10.15	High Yield Municipals 9.69	T-Bills 1.86	Investment Grade Corps 14.54	Investment Grade Corps 9.89	TIPS 5.96	Investment Grade Munis -8.53	Emerging Markets Bonds 11.09		High Yield Corporates 4.60	Unhedged Foreign Bonds 8.15	
	Investment Grade Corps 7.46	Mortgages 1.51	Investment Grade Corps 6.11	Unhedged Foreign Bonds 9.31	Investment Grade Munis 1.28	High Yield Corporates 14.32	Unhedged Foreign Bonds 9.54	High Yield Corporates 5.28	High Yield Corporates -11.19	High Yield Municipals 9.21		Emerging Markets Bonds 3.22	High Yield Municipals 7.82	
	Emerging Markets Bonds 7.43	Emerging Markets Bonds 1.18	TIPS 4.68	High Yield Corporates 7.50	Mortgages 0.99	High Yield Municipals 10.68	Treasuries 8.00	Investment Grade Munis 1.52	Mortgages -11.81	Investment Grade Corps 8.52		Investment Grade Munis 3.03	High Yield Corporates 7.62	
	Mortgages 6.08	Treasuries 0.84	High Yield Municipals 2.99	Investment Grade Corps 6.42	Treasuries 0.86	Aggregate Bond Index 8.72	Aggregate Bond Index 7.51	T-Bills 0.05	TIPS -11.85	Investment Grade Munis 6.40		Investment Grade Corps 2.95	Investment Grade Corps 6.82	
	Aggregate Bond Index 5.97	Aggregate Bond Index 0.55	Aggregate Bond Index 2.65	Investment Grade Munis 5.45	Aggregate Bond Index 0.01	TIPS 8.43	High Yield Corporates 7.11	Mortgages -1.04	Treasuries -12.46	Aggregate Bond Index 5.53		TIPS 2.42	TIPS 5.05	
	Treasuries 5.05	T-Bills 0.03	Unhedged Foreign Bonds 1.87	Aggregate Bond Index 3.54	Unhedged Foreign Bonds -0.89	Investment Grade Munis 7.54	Emerging Markets Bonds 5.26	Investment Grade Corps -1.05	Aggregate Bond Index -13.01	T-Bills 5.26		Aggregate Bond Index 1.81	Investment Grade Munis 5.05	
	TIPS 3.64	Investment Grade Corps -0.68	Mortgages 1.67	TIPS 3.01	TIPS -1.26	Treasuries 6.86	Investment Grade Munis 5.21	Aggregate Bond Index -1.54	High Yield Municipals -13.10	Mortgages 5.05		Mortgages 1.38	Aggregate Bond Index 4.76	
	High Yield Corporates 2.45	TIPS -1.44	Treasuries 1.04	Mortgages 2.47	High Yield Corporates -2.08	Mortgages 6.35	High Yield Municipals 4.89	Emerging Markets Bonds -1.80	Investment Grade Corps -15.76	Unhedged Foreign Bonds 4.24		Treasuries 1.27	Treasuries 4.69	
	T-Bills 0.03	High Yield Corporates -4.47	T-Bills 0.27	Treasuries 2.31	Investment Grade Corps -2.51	Unhedged Foreign Bonds 5.04	Mortgages 3.87	Treasuries -2.32	Emerging Markets Bonds -17.78	Treasuries 4.05		T-Bills 1.26	Mortgages 4.61	
	Unhedged Foreign Bonds -2.77	Unhedged Foreign Bonds -4.84	Investment Grade Munis 0.25	T-Bills 0.84	Emerging Markets Bonds -4.26	T-Bills 2.25	T-Bills 0.58	Unhedged Foreign Bonds -8.17	Unhedged Foreign Bonds -19.55	TIPS 3.90		Unhedged Foreign Bonds -0.99	T-Bills 0.46	LOWEST VOLATILITY ↓
Average Annualized Inflation Rate	1.6	0.1	1.3	2.1	2.4	1.8	1.2	4.7	8.0	4.1				
Year End Fed Funds Rate	0.00-0.25%	0.25-0.50%	0.50-0.75%	1.25-1.50%	2.25-2.50%	1.50-1.75%	0.00-0.25%	0.00-0.25%	4.25%-4.50%	5.25-5.50%				

Returns shown for selected stock indices are total returns, and thus include dividends. Past performance is no guarantee of future results. This information is for illustrative purposes only and is not intended to represent any particular investment product. It is not possible to invest directly in an index.