



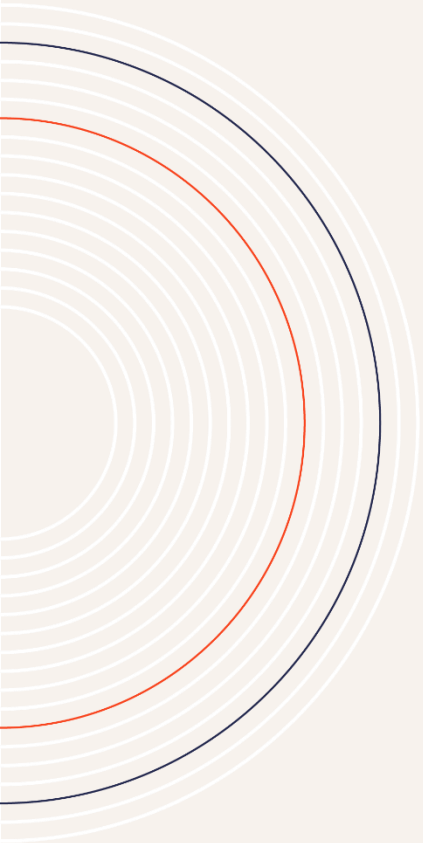
Monthly Valuation Analysis

As of April 30, 2021

Wilshire



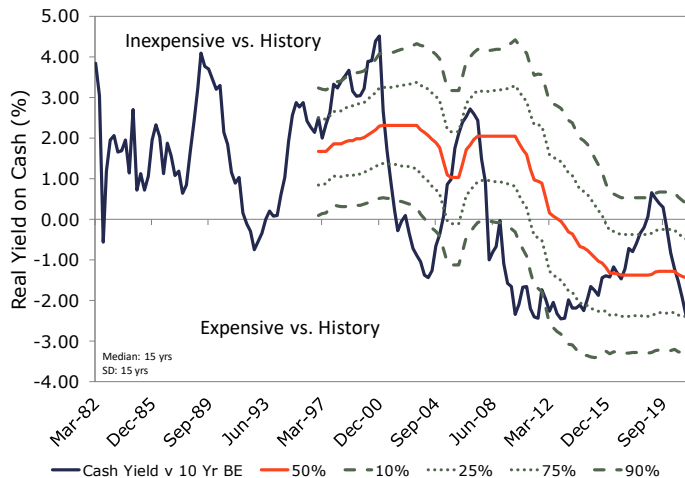
Introduction



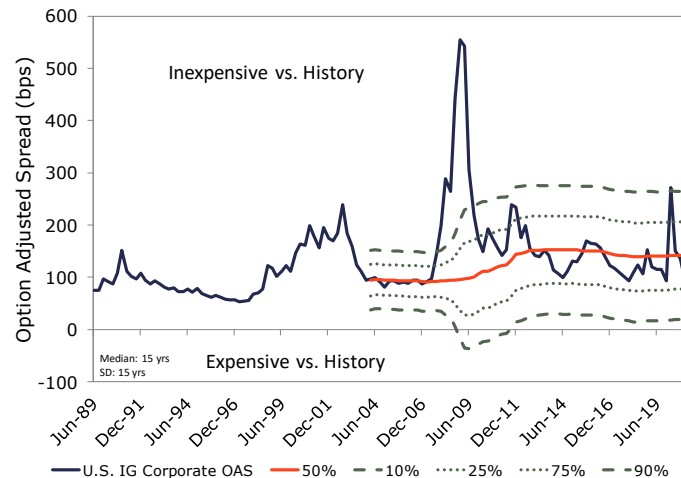
- Analysis includes current valuation levels versus historical norms within and among various asset classes
- Historical time period used is the past 15 years ending the most recent quarter-end
- Most exhibits include a ‘median’ line along with breakpoints calculated assuming a normal distribution:
 - Conditions are expressed as probabilities with the low end (1%) implying an “expensive” situation and the high end (99%) as “inexpensive” versus history
 - +/- 0.67 standard deviations represents the 75/25% outcomes
 - +/- 1.28 standard deviations represents the 90/10% outcomes

Fixed Income Environment

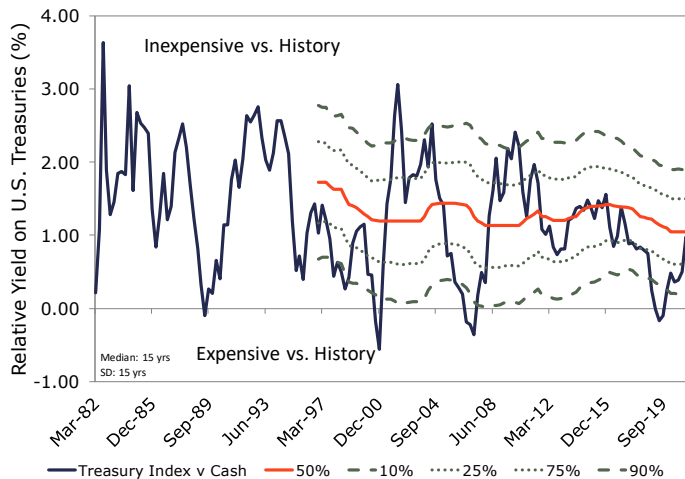
CASH YIELD VS 10-YEAR BREAKEVEN



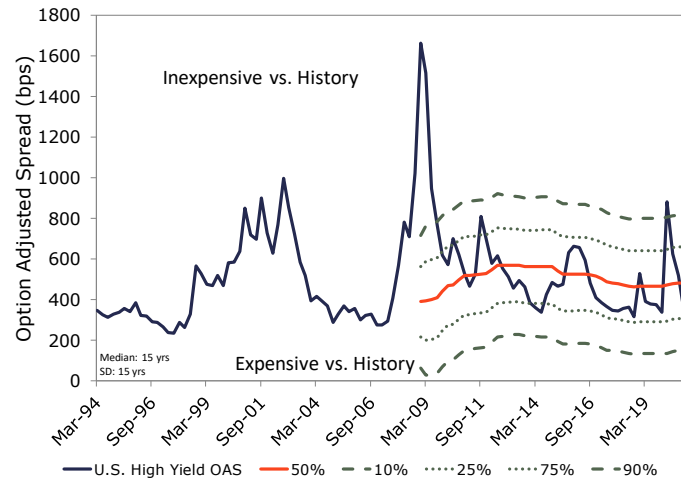
INVESTMENT GRADE CORPORATE OAS



TREASURY INDEX VS CASH

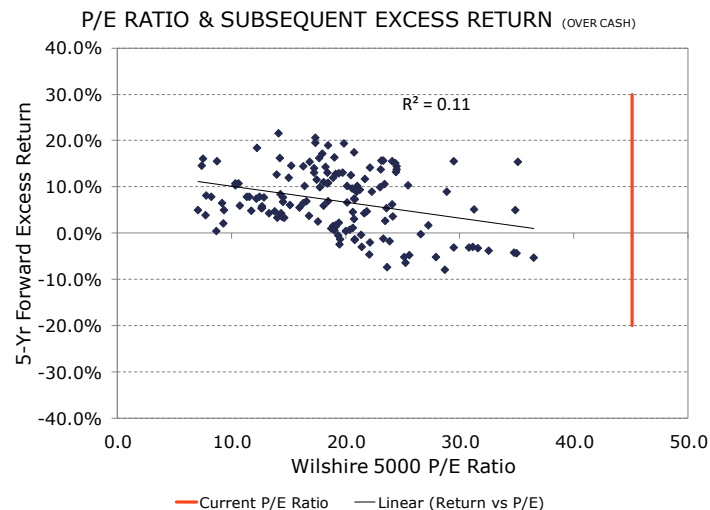
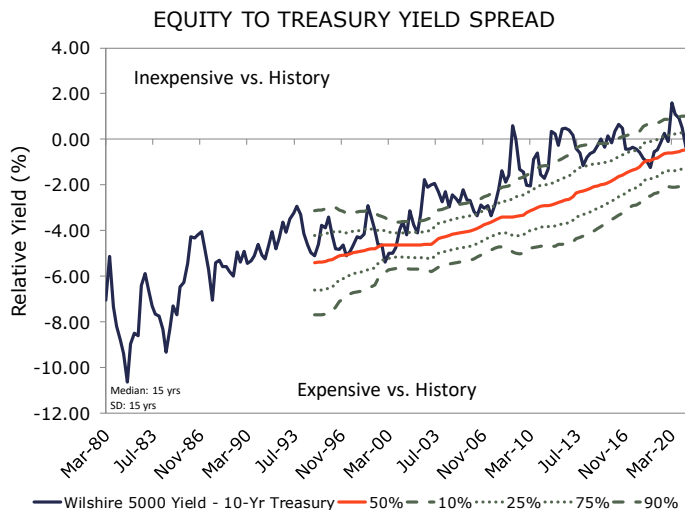
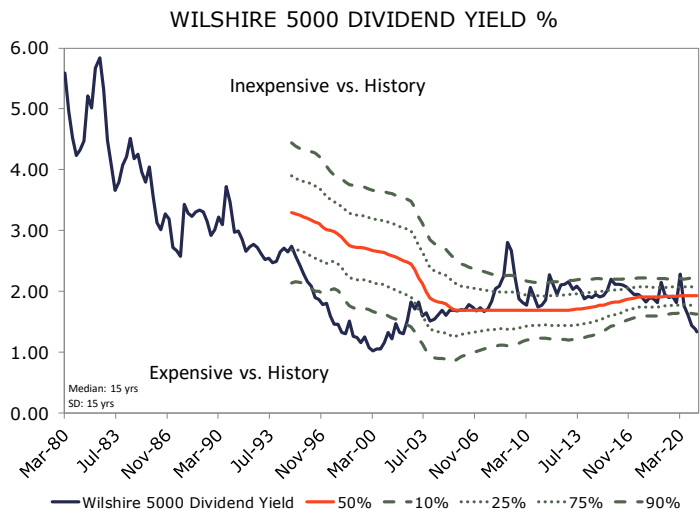


HIGH YIELD OAS



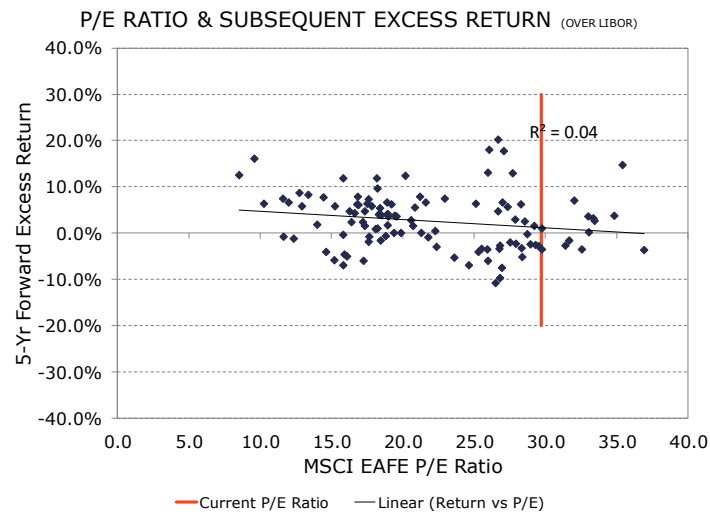
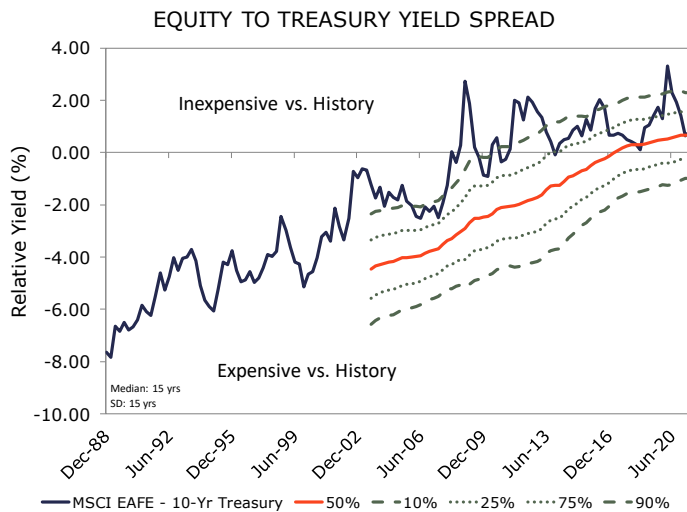
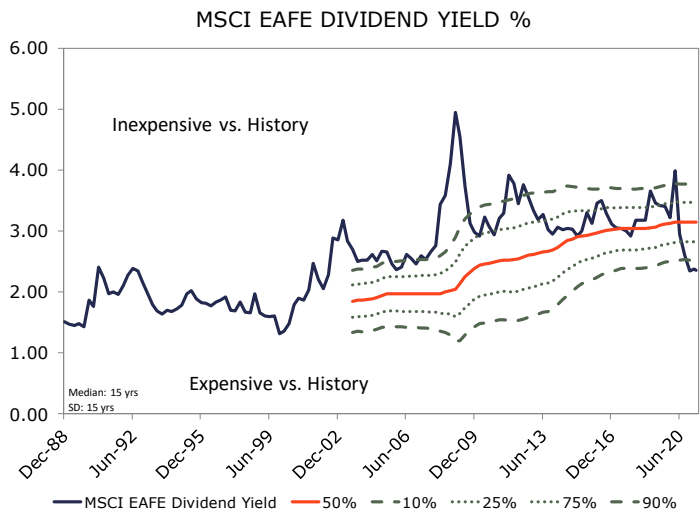
Data Source: Bloomberg

U.S. Equity Valuations



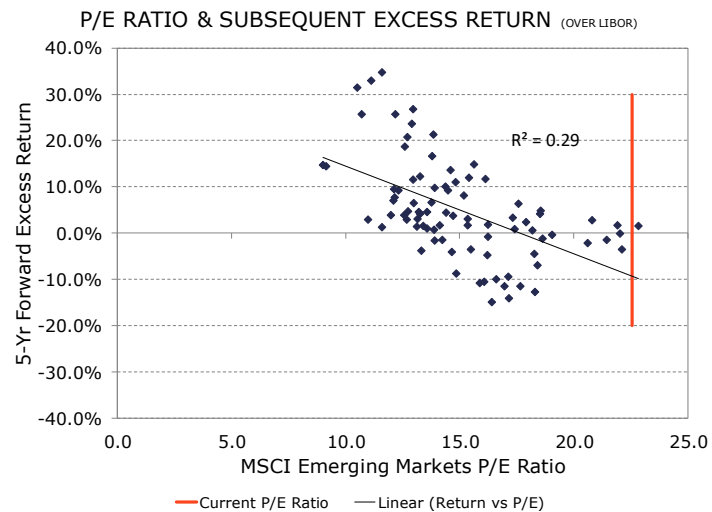
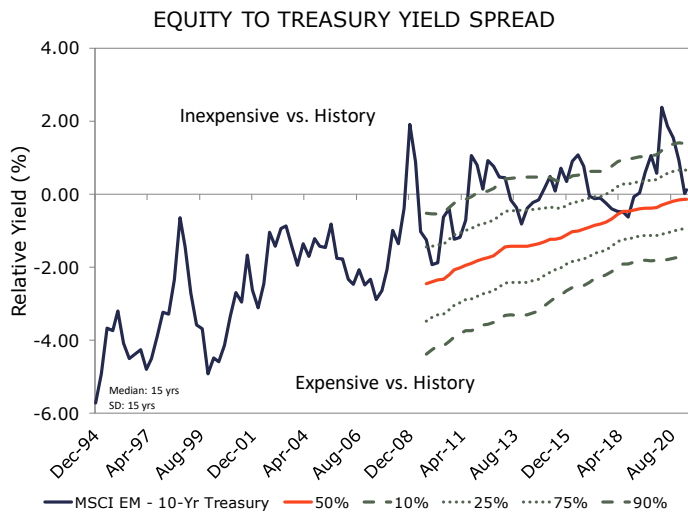
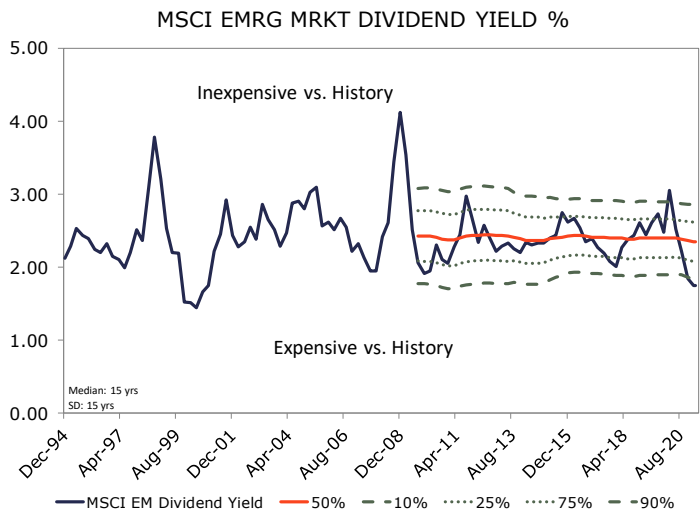
Data Source: Wilshire Atlas

Developed Market Valuations



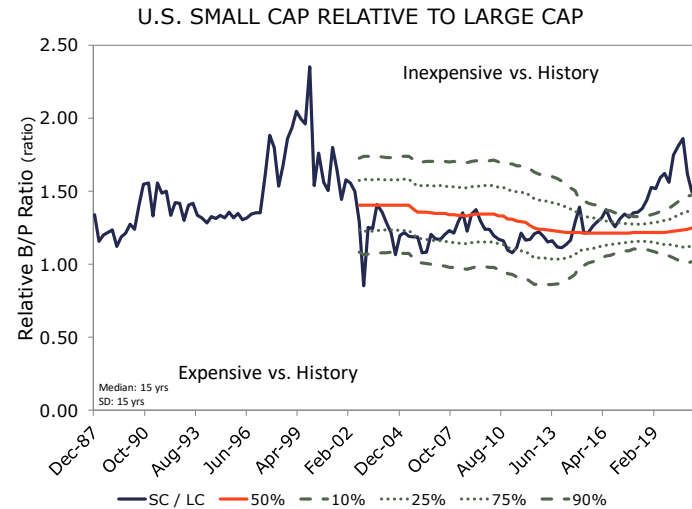
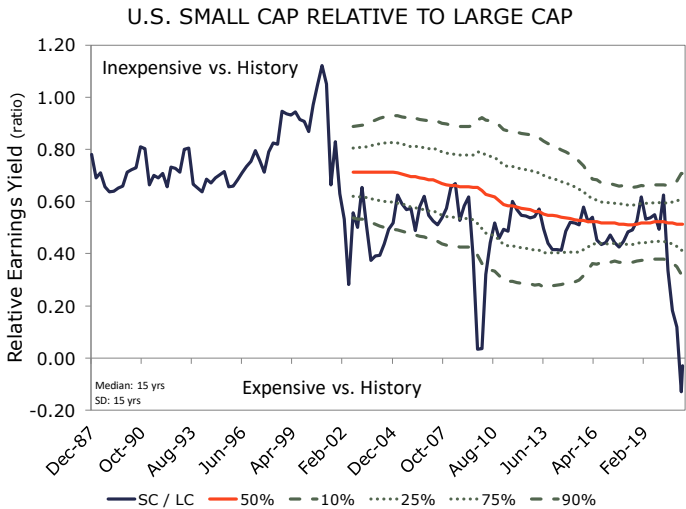
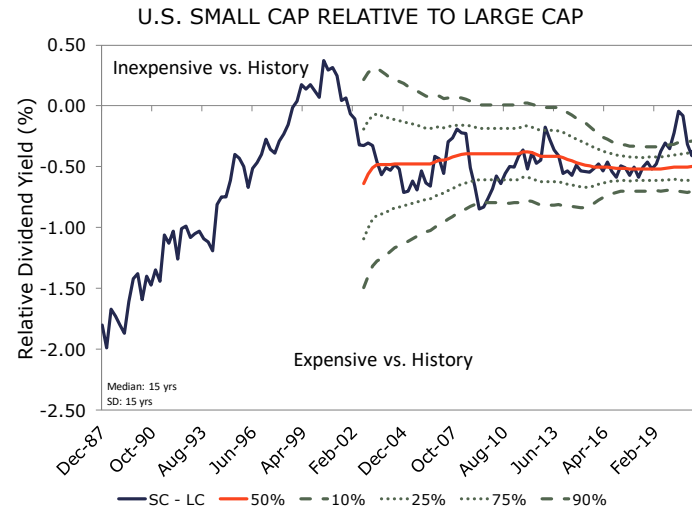
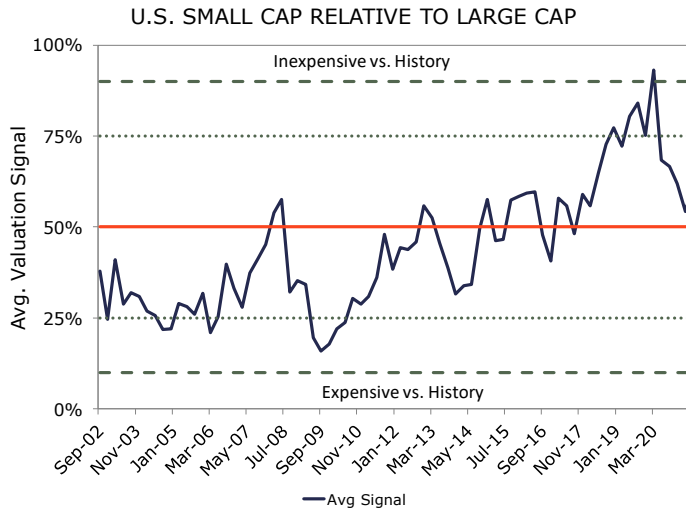
Data Source: Wilshire Atlas

Emerging Market Valuations



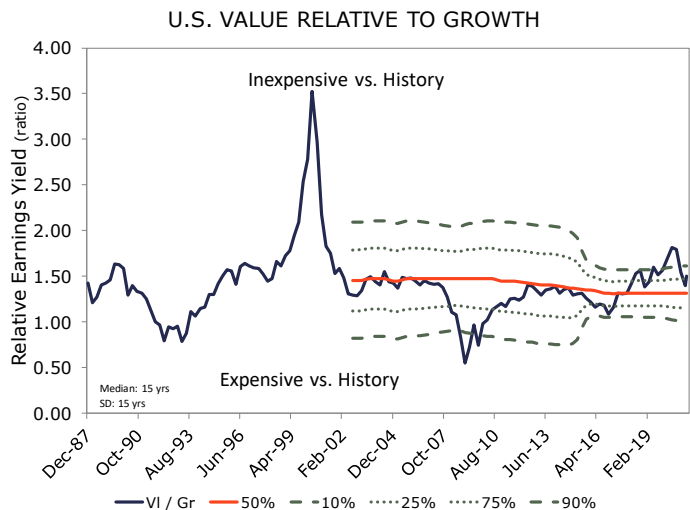
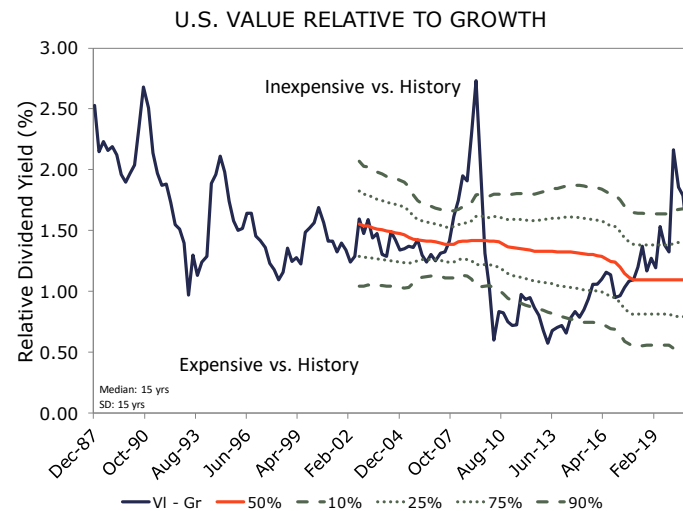
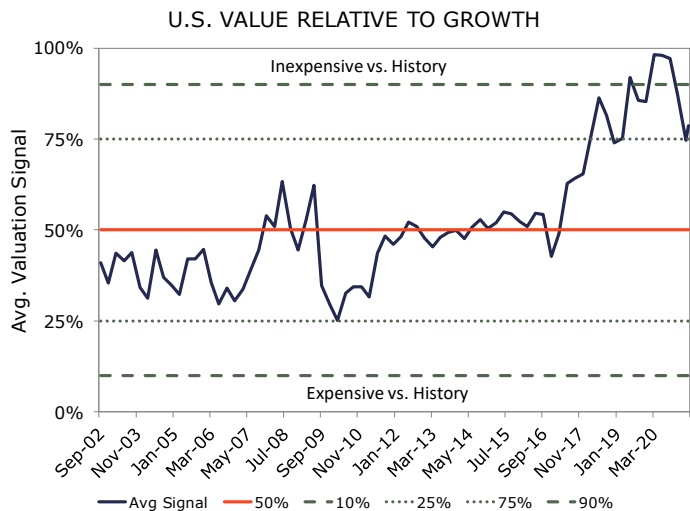
Data Source: Wilshire Atlas

Relative U.S. Equity: Size



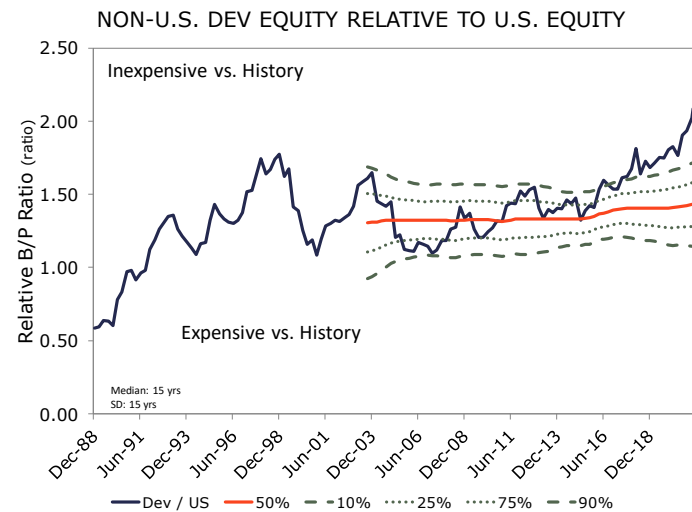
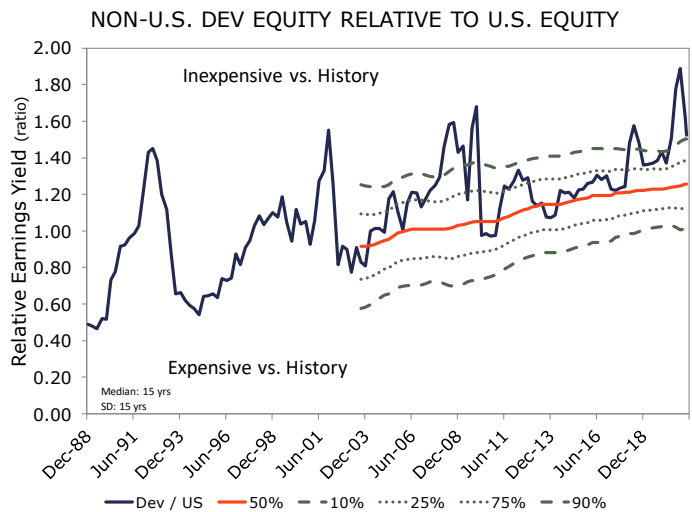
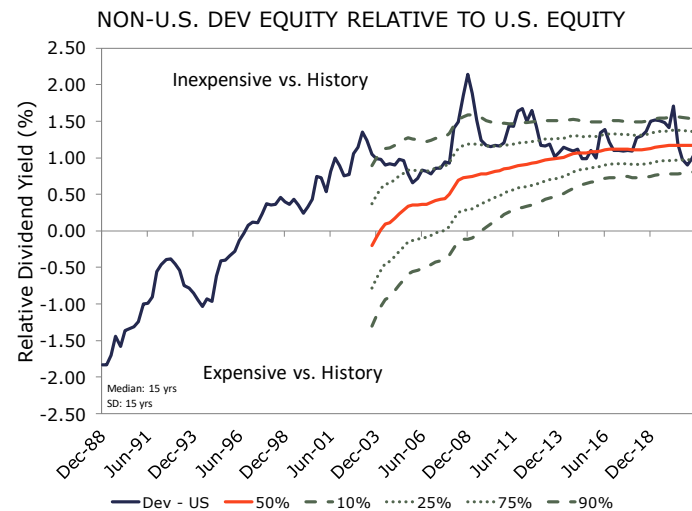
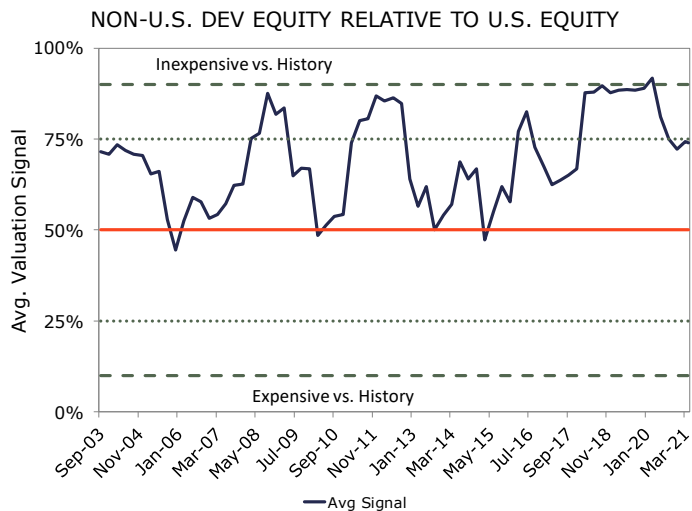
Data Source: Bloomberg, Wilshire Atlas

Relative U.S. Equity: Style



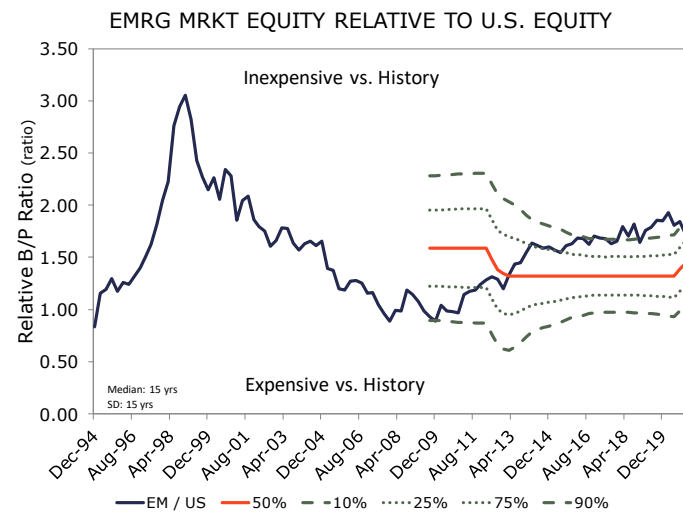
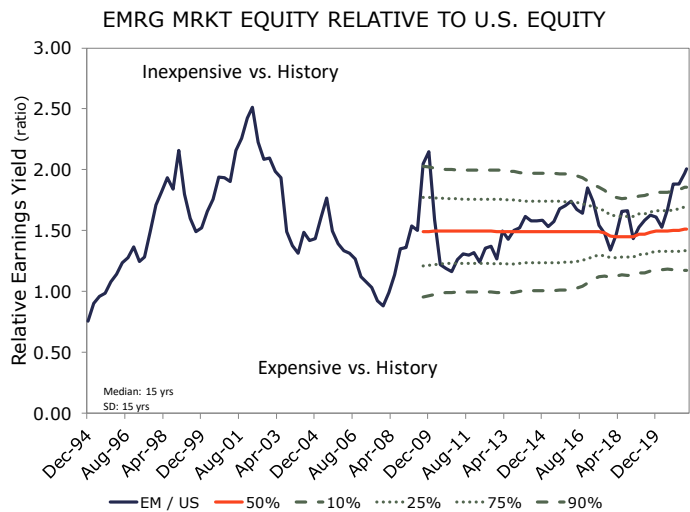
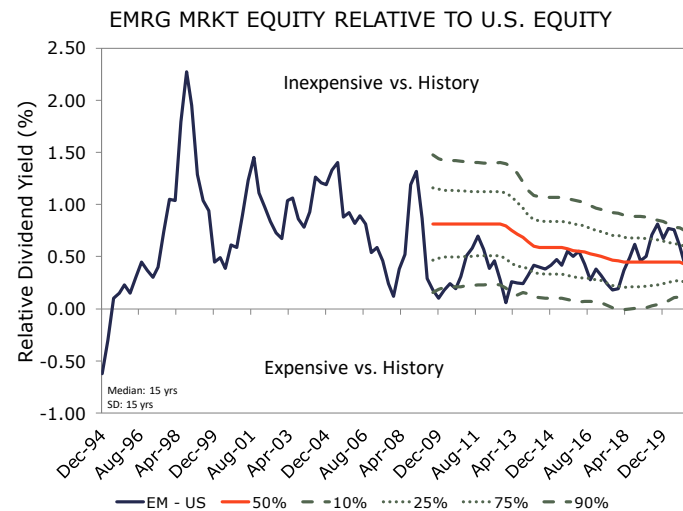
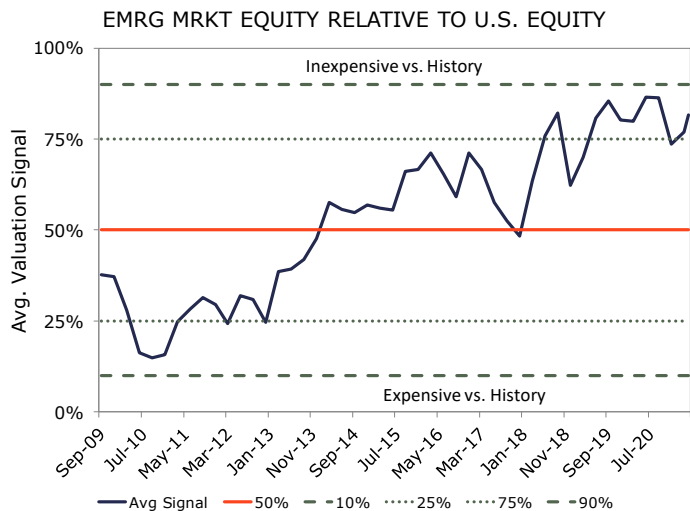
Data Source: Bloomberg

Global Equity: Developed



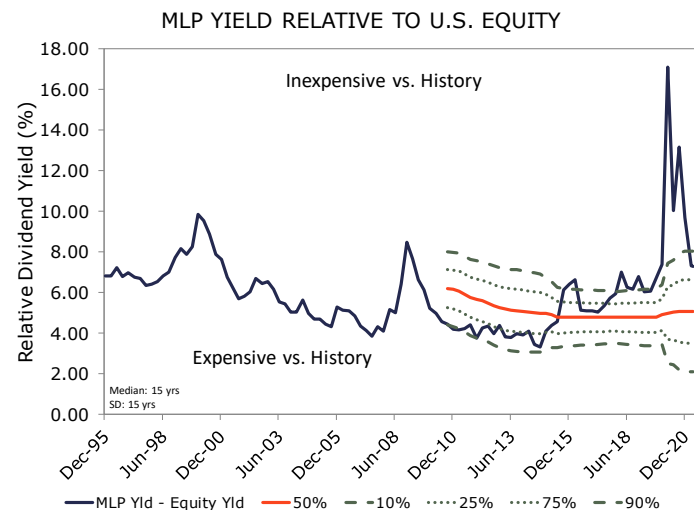
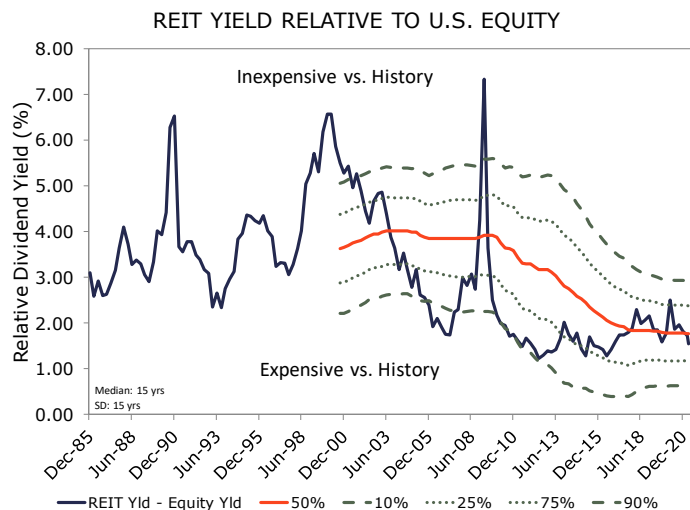
Data Source: Bloomberg

Global Equity: Emerging



Data Source: Bloomberg

Real Assets & Summary



ASSET CLASS	FACTOR	CURRENT	HISTORICAL MEDIAN	CURRENT FROM MEDIAN (SD)	CURRENT VALUATION %
Cash	Real Yield	-2.40	-1.44	(0.68)	25%
U.S. Treasuries	Relative Yield to Cash	0.94	1.05	(0.17)	43%
U.S. IG Corporate	Spread to Treasuries	88	142	(0.56)	29%
U.S. High Yield	Spread to Treasuries	291	482	(0.73)	23%
U.S. Equity	Dividend Yield	1.33	1.93	(2.51)	1%
Non-U.S. Dev. Equity	Dividend Yield	2.35	3.15	(1.64)	5%
Non-U.S. Emrg Mrkt	Dividend Yield	1.75	2.35	(1.49)	7%
U.S. REITs	Relative Yield to Eqty	1.54	1.77	(0.25)	40%
MLPs	Relative Yield to Eqty	7.28	5.07	0.96	83%
Small v. Large	Relative Yield	-0.37	-0.50	0.79	79%
Value v. Growth	Relative Yield	1.20	1.10	0.22	59%
Non-U.S. Dev. v. U.S.	Relative Yield	1.02	1.17	(0.53)	30%
Emrg Mrkt v. U.S.	Relative Yield	0.42	0.42	0.00	50%

Data Source: Bloomberg, Wilshire Atlas

Cross-Asset Class Valuation

- **Matrix below summarizes relative relationships among asset classes**
- **15 years of yield data is used for each median calculation; 15 years for the standard deviation**
- **Difference in yield is calculated and the resulting percentile of each outcome is included in the matrix, based on the historical median and standard deviation**

AS OF APRIL 30, 2021	ASSET CLASS RELATIONSHIP RELATIVE TO EACH OF THE FOLLOWING:									
	Inflation	Cash	Treasury	Core Bonds	High Yield	REITs	MLPs	U.S. Stocks	Non-U.S. Dev.	Emrg Mrkt
Cash	25%		57%	67%	76%	60%	22%	60%	63%	59%
Treasury	10%	43%		75%	77%	54%	19%	46%	52%	47%
Core Bonds	9%	33%	25%		77%	43%	17%	37%	41%	35%
High Yield	14%	24%	23%	23%		10%	7%	17%	20%	16%
REITs	16%	40%	46%	57%	90%		11%	40%	43%	39%
MLPs	70%	78%	81%	83%	93%	89%		83%	86%	83%
U.S. Stocks	4%	40%	54%	63%	83%	60%	17%		70%	50%
Non-U.S. Dev.	8%	37%	48%	59%	80%	57%	14%	30%		21%
Emrg Mrkt	11%	41%	53%	65%	84%	61%	17%	50%	79%	

Data Source: Bloomberg, Wilshire Atlas