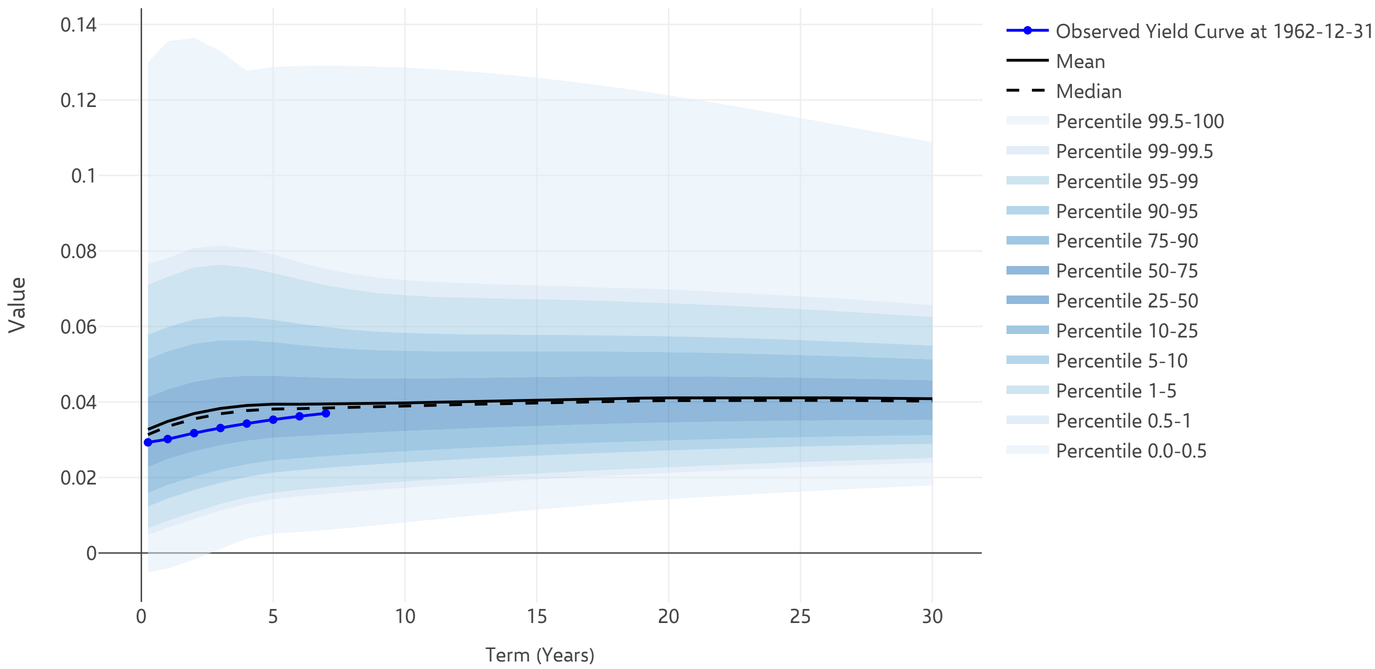
USD Nominal Interest Rates Backtesting

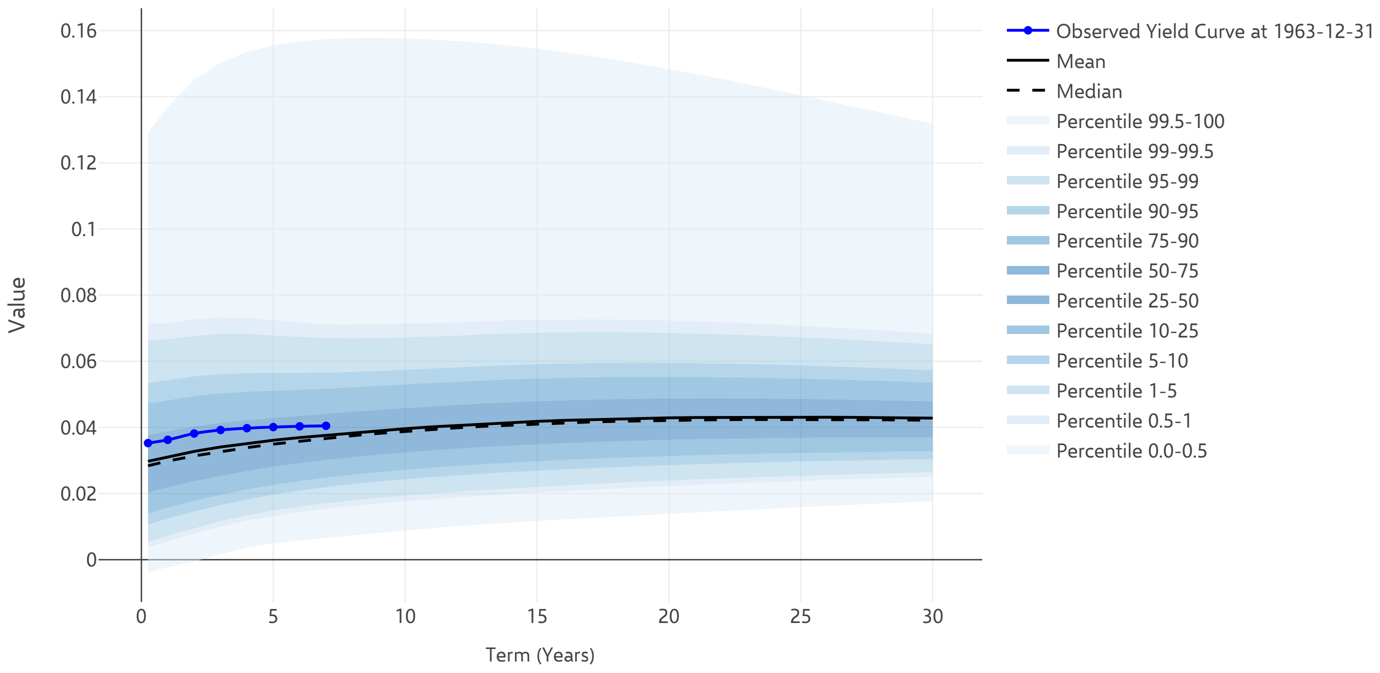
PROTEUS

1961 - 1962 Backtest



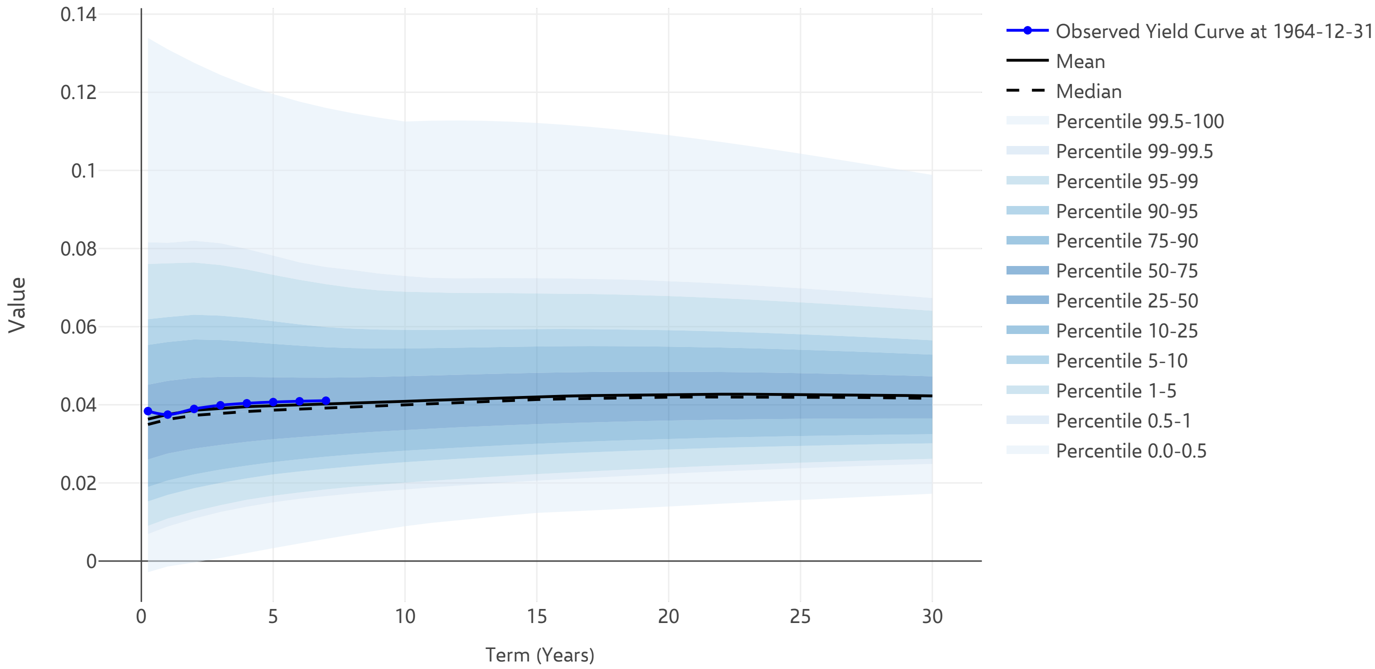
Term (Years)	Yield at End-1961	Yield at End-1962	Simulated Percentile
0.25	2.68%	2.93%	43.87%
2.0	3.42%	3.17%	38.70%
5.0	3.85%	3.53%	40.44%

1962 - 1963 Backtest



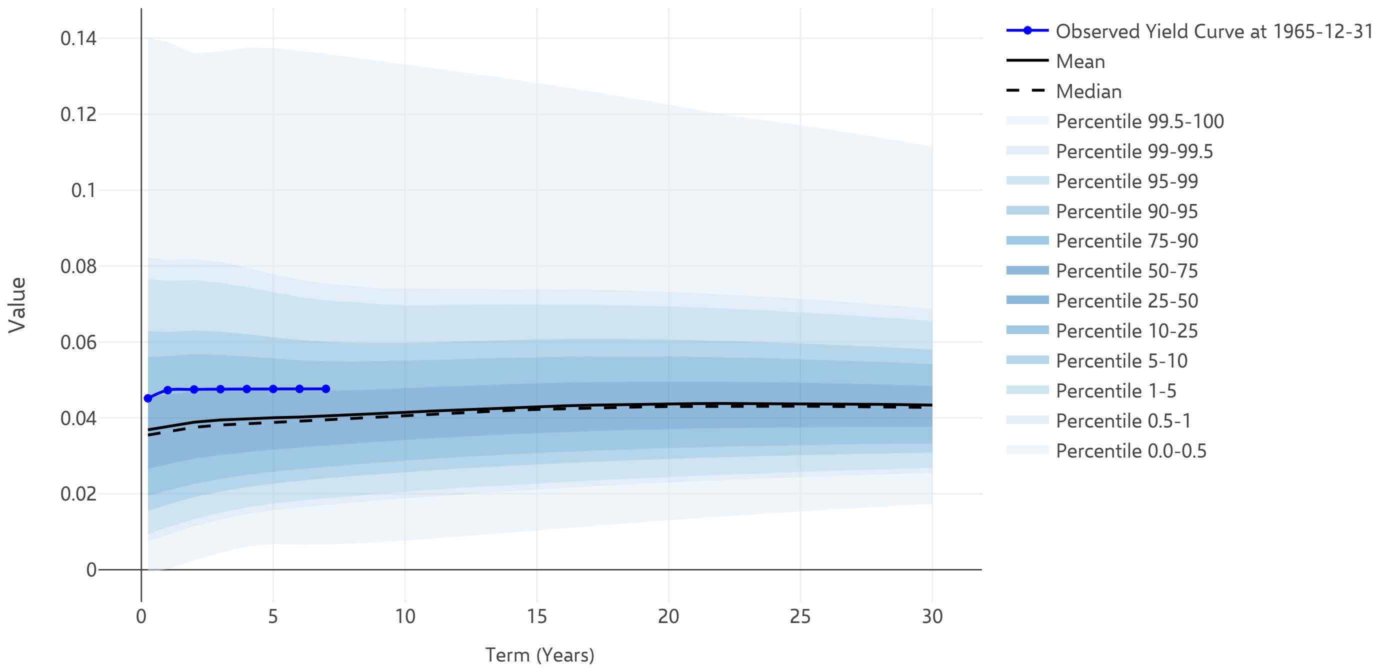
Term (Years)	Yield at End-1962	Yield at End-1963	Simulated Percentile
0.25	2.93%	3.53%	69.23%
2.0	3.17%	3.82%	69.86%
5.0	3.53%	4.01%	67.39%

1963 - 1964 Backtest



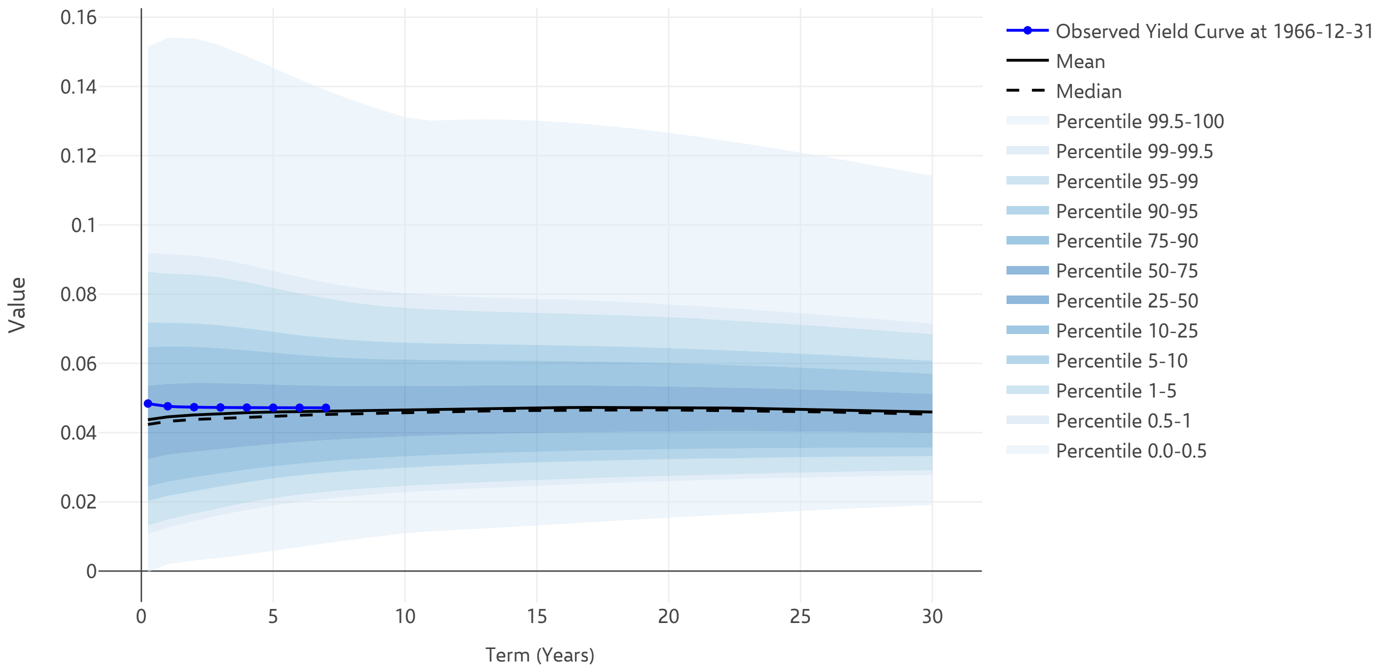
Term (Years)	Yield at End-1963	Yield at End-1964	Simulated Percentile
0.25	3.53%	3.84%	59.27%
2.0	3.82%	3.89%	54.91%
5.0	4.01%	4.07%	56.85%

1964 - 1965 Backtest



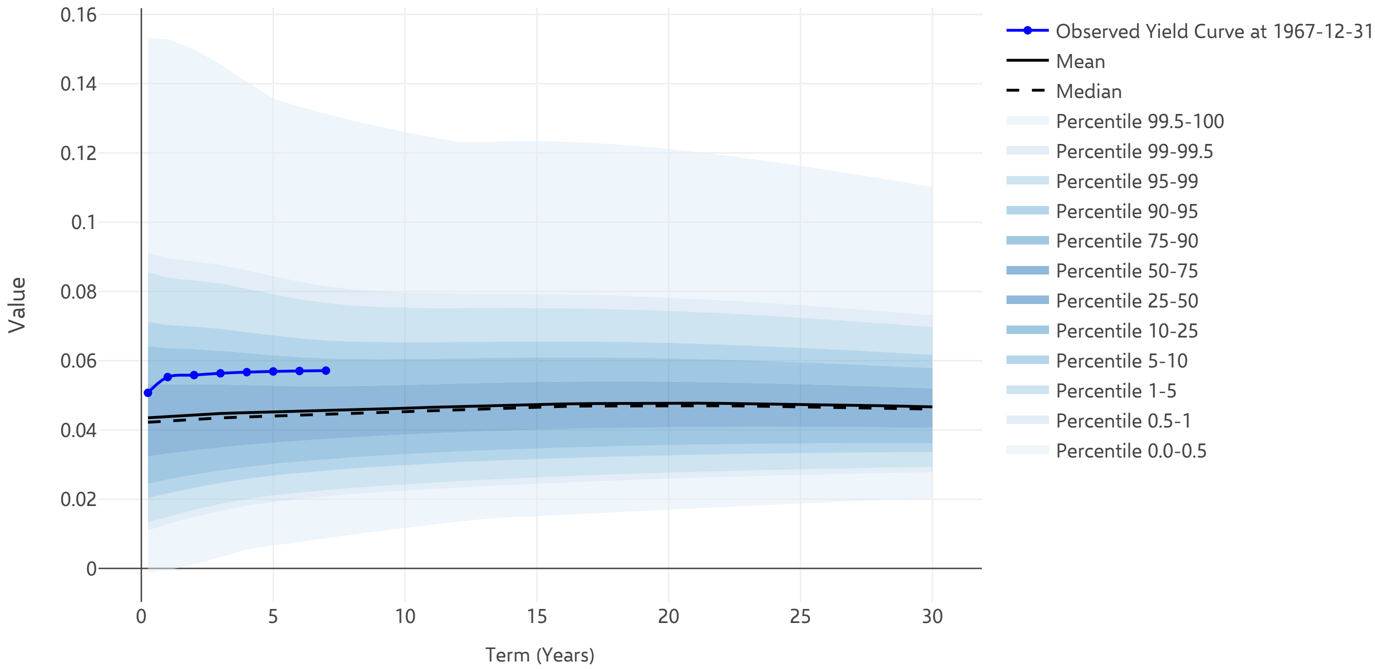
Term (Years)	Yield at End-1964	Yield at End-1965	Simulated Percentile
0.25	3.84%	4.52%	73.91%
2.0	3.89%	4.75%	75.94%
5.0	4.07%	4.76%	75.94%

1965 - 1966 Backtest



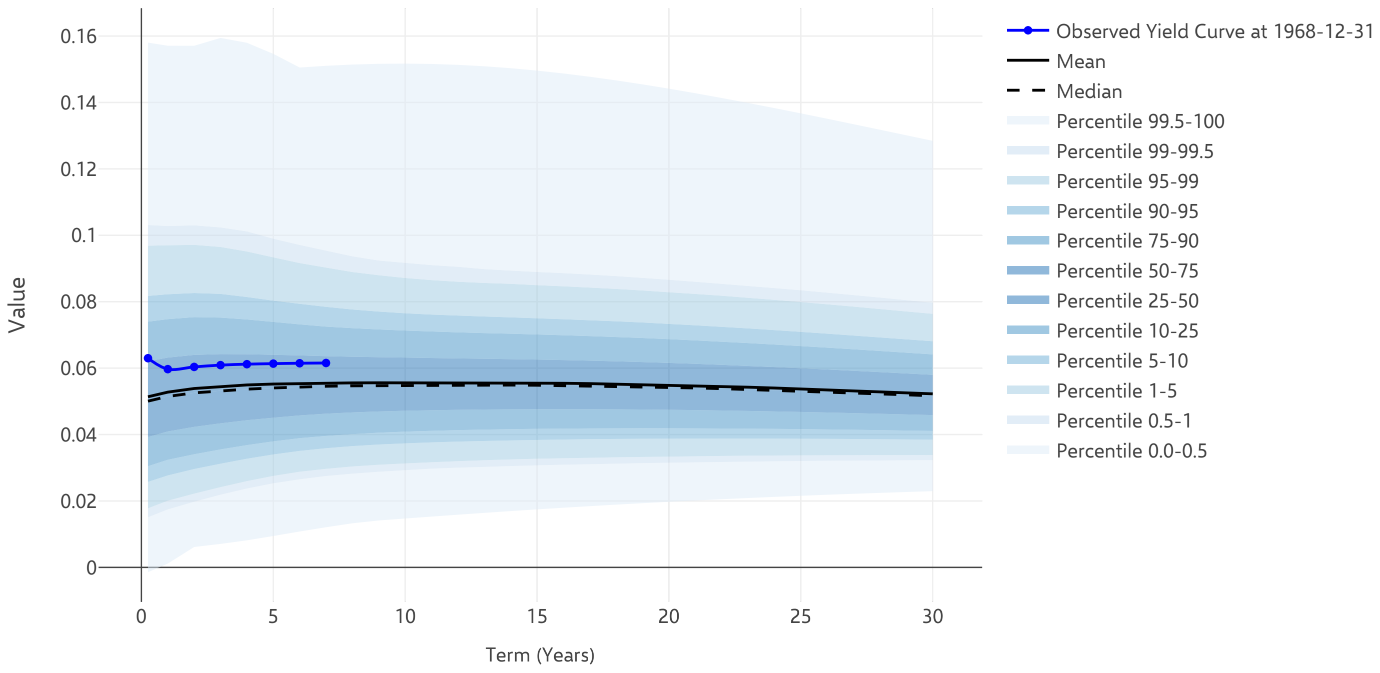
Term (Years)	Yield at End-1965	Yield at End-1966	Simulated Percentile
0.25	4.52%	4.84%	64.46%
2.0	4.75%	4.73%	59.39%
5.0	4.76%	4.72%	57.43%

1966 - 1967 Backtest



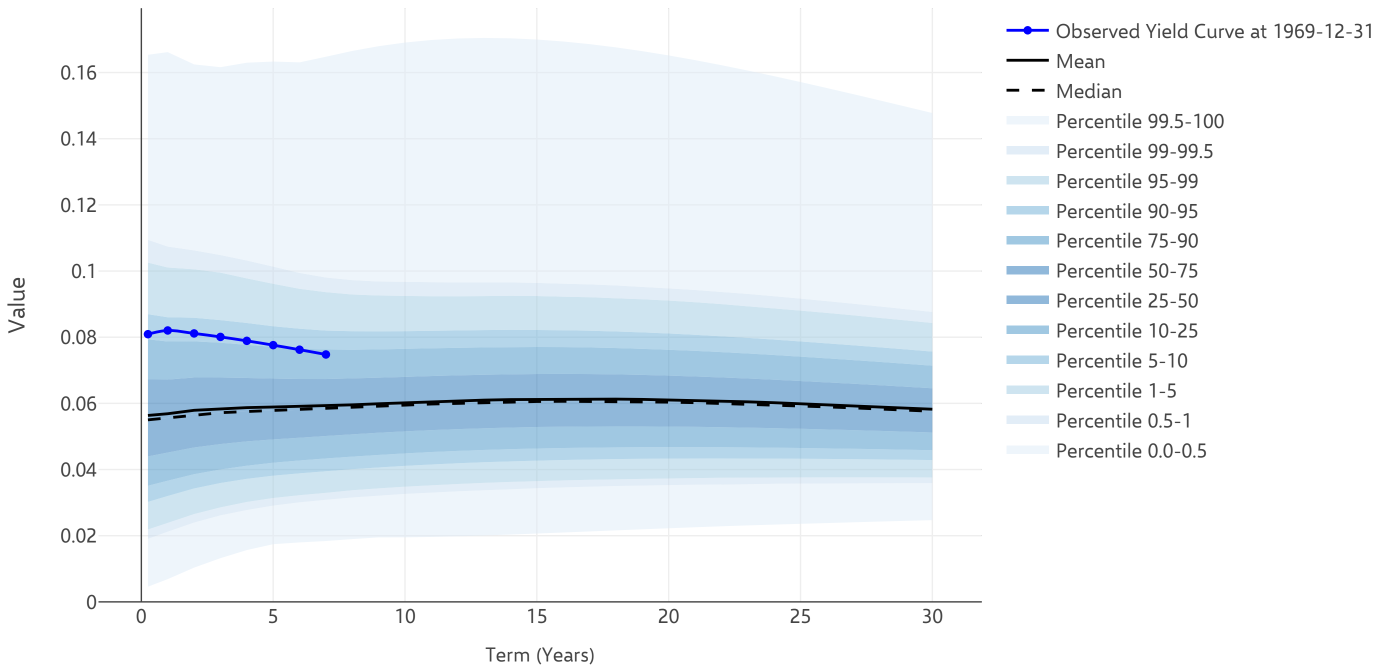
Term (Years)	Yield at End-1966	Yield at End-1967	Simulated Percentile
0.25	4.84%	5.07%	70.17%
2.0	4.73%	5.58%	79.88%
5.0	4.72%	5.69%	83.30%

1967 - 1968 Backtest



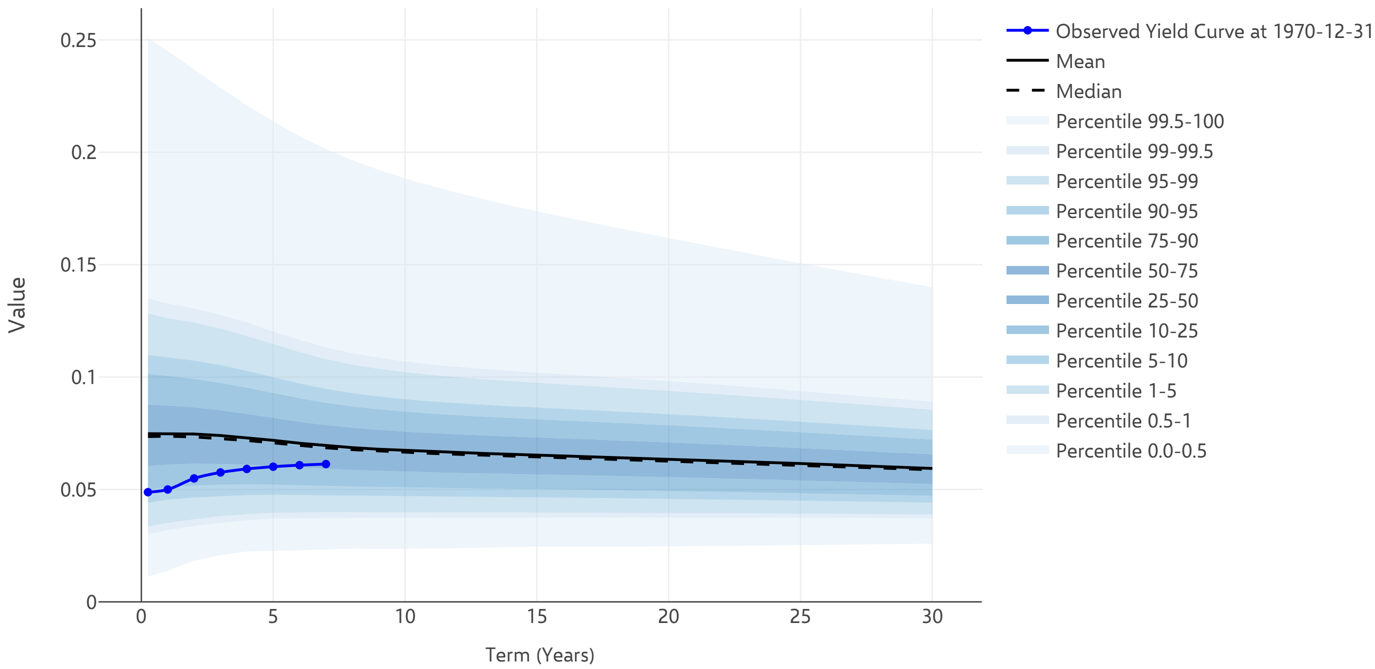
Term (Years)	Yield at End-1967	Yield at End-1968	Simulated Percentile
0.25	5.07%	6.30%	76.64%
2.0	5.58%	6.04%	68.11%
5.0	5.69%	6.14%	69.29%

1968 - 1969 Backtest



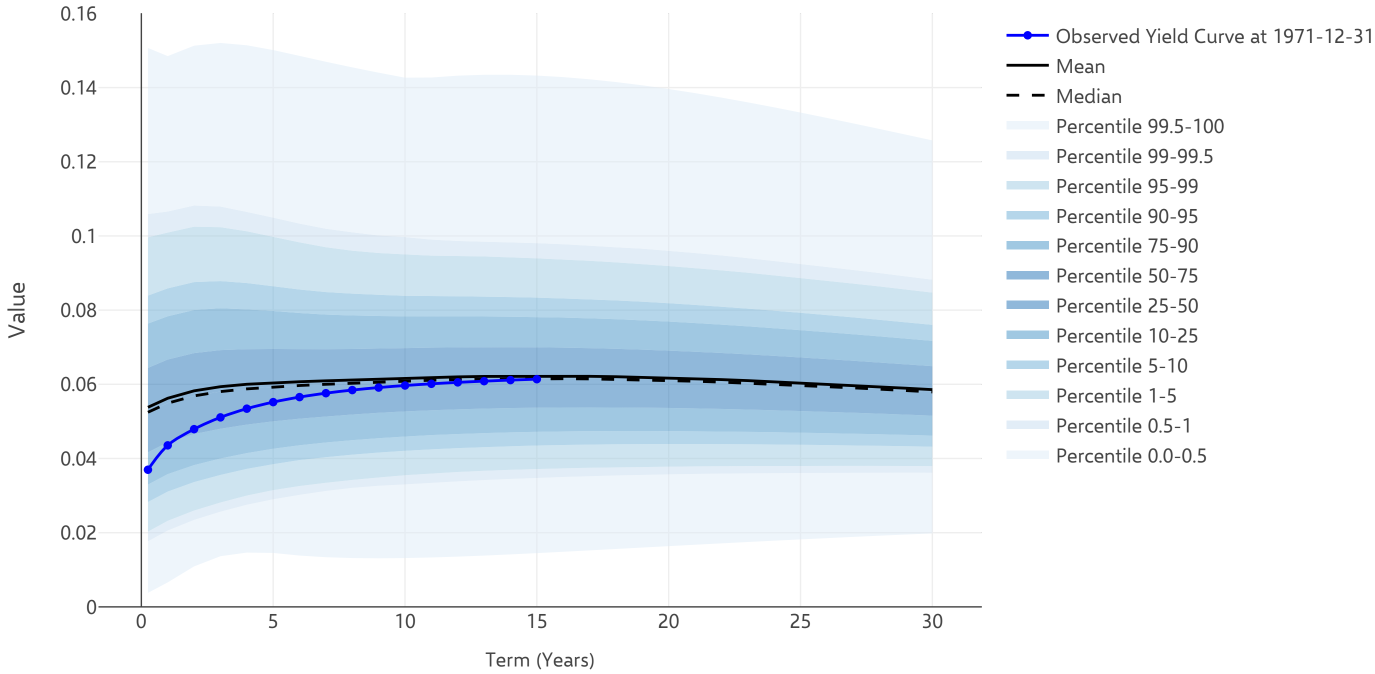
Term (Years)	Yield at End-1968	Yield at End-1969	Simulated Percentile
0.25	6.30%	8.09%	91.27%
2.0	6.04%	8.11%	92.01%
5.0	6.14%	7.76%	90.52%

1969 - 1970 Backtest



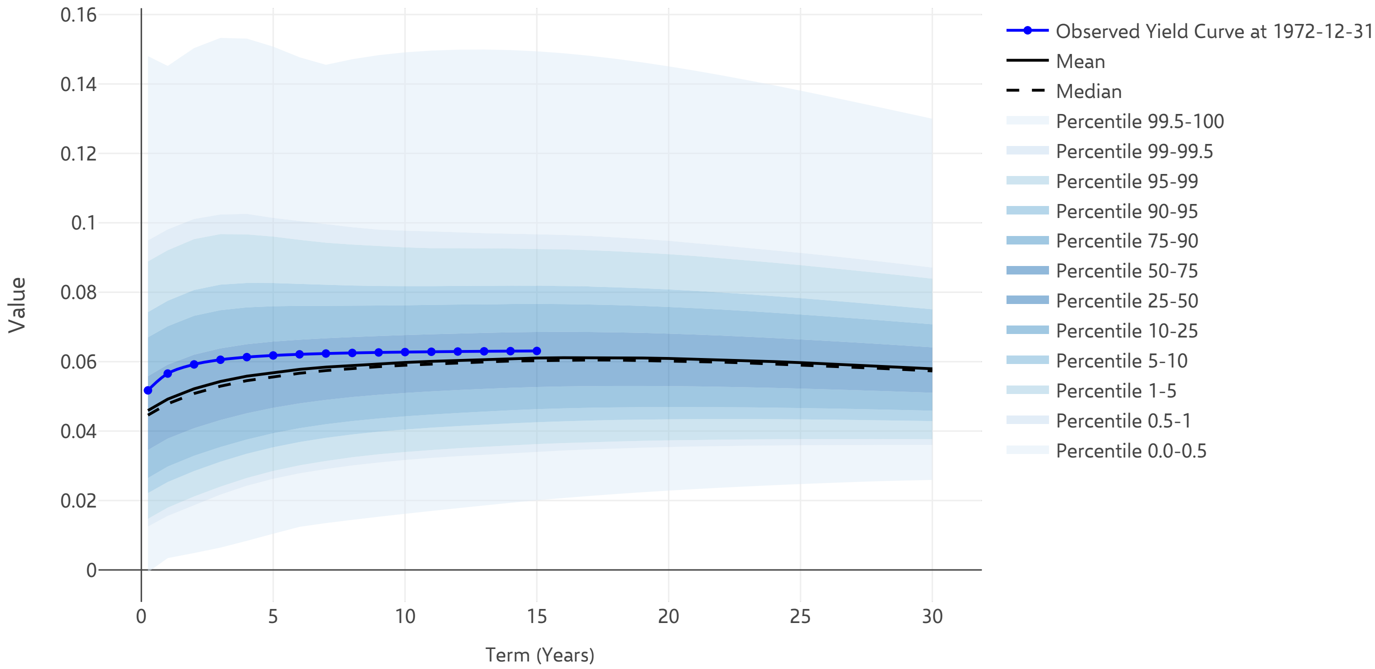
Term (Years)	Yield at End-1969	Yield at End-1970	Simulated Percentile
0.25	8.09%	4.88%	8.88%
2.0	8.11%	5.49%	14.12%
5.0	7.76%	6.01%	24.08%

1970 - 1971 Backtest



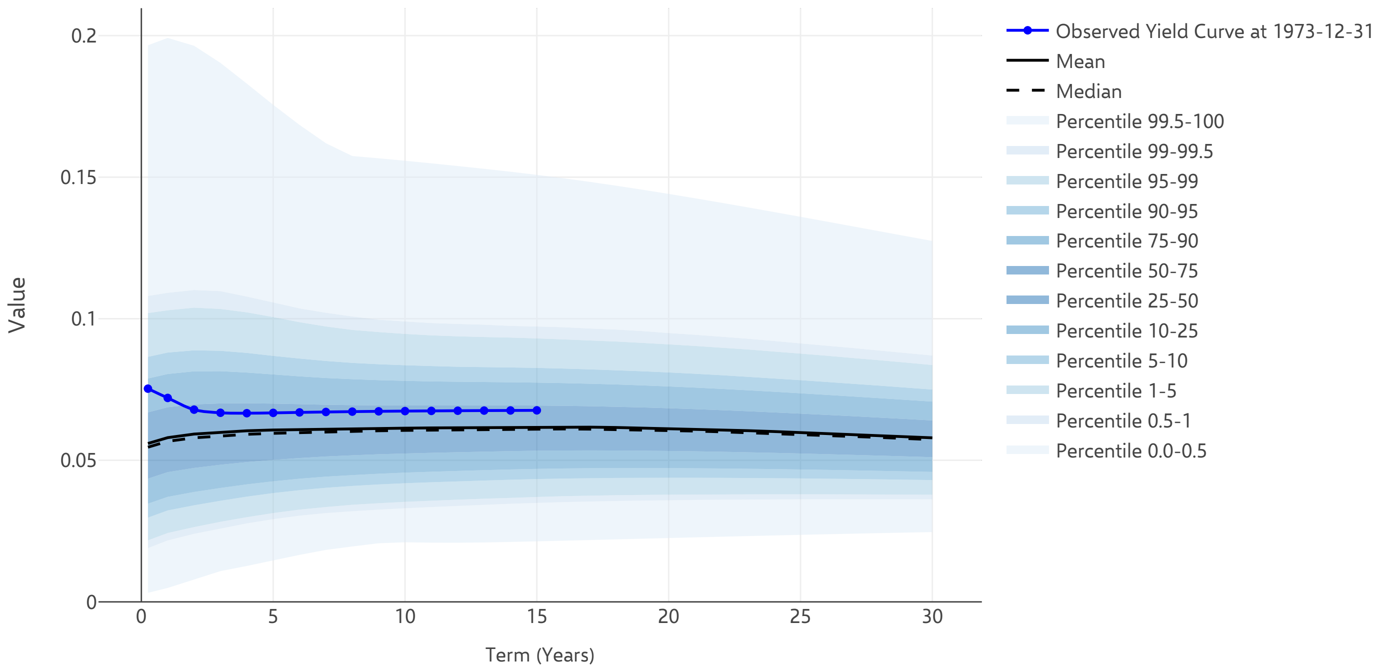
Term (Years)	Yield at End-1970	Yield at End-1971	Simulated Percentile
0.25	4.88%	3.70%	15.95%
2.0	5.49%	4.79%	28.08%
5.0	6.01%	5.52%	38.92%

1971 - 1972 Backtest



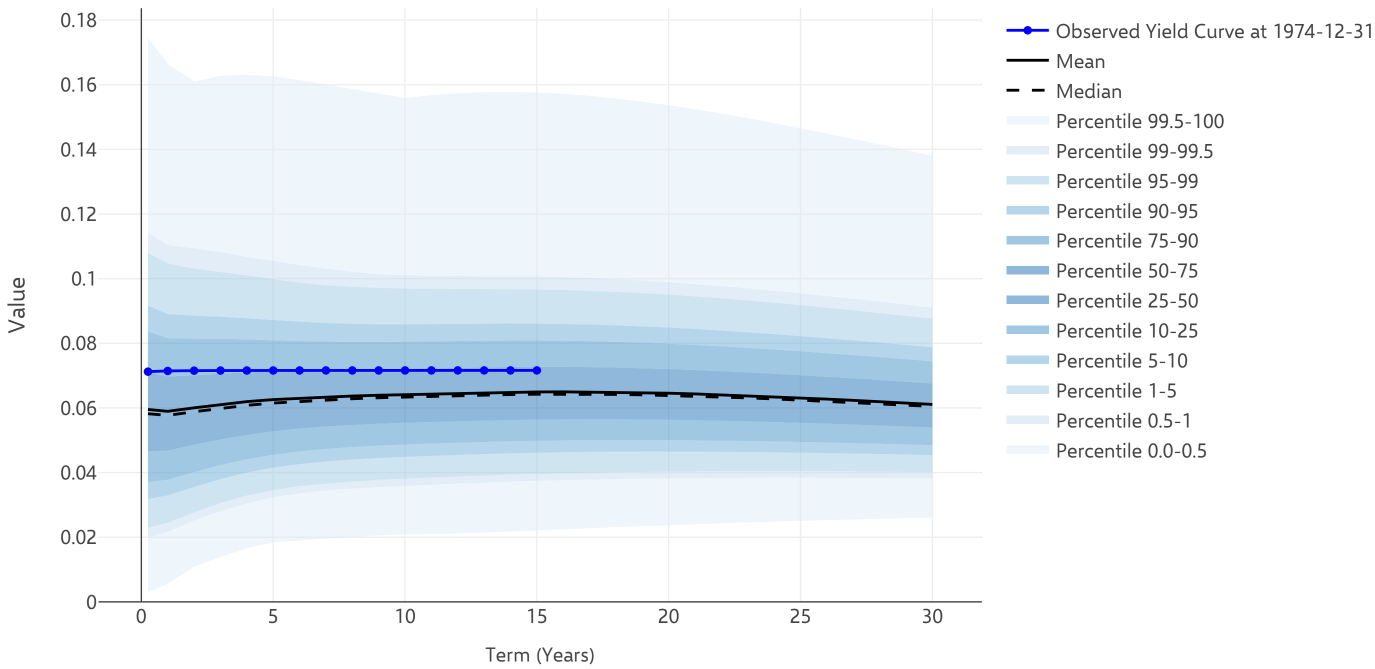
Term (Years)	Yield at End-1971	Yield at End-1972	Simulated Percentile
0.25	3.70%	5.17%	67.03%
2.0	4.79%	5.92%	69.55%
5.0	5.52%	6.18%	65.98%
10.0	5.97%	6.28%	61.79%

1972 - 1973 Backtest



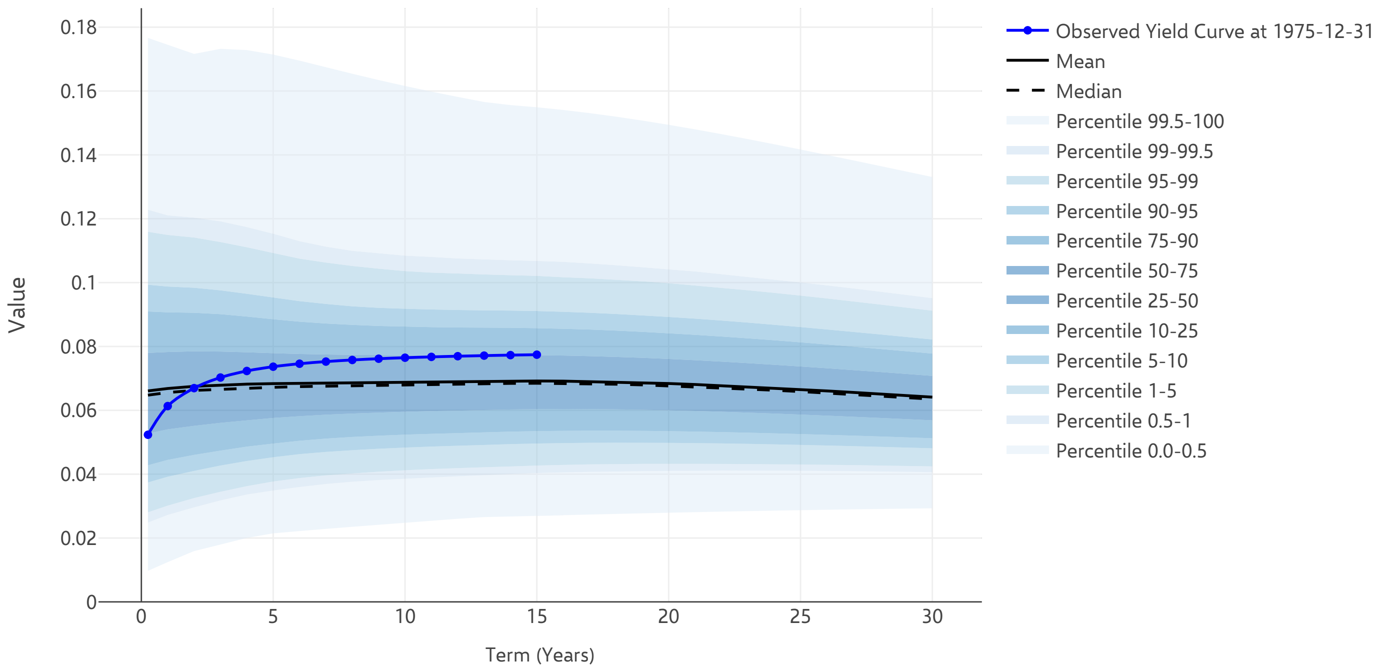
Term (Years)	Yield at End-1972	Yield at End-1973	Simulated Percentile
0.25	5.17%	7.53%	86.52%
2.0	5.92%	6.79%	71.64%
5.0	6.18%	6.67%	68.27%
10.0	6.28%	6.74%	70.05%

1973 - 1974 Backtest



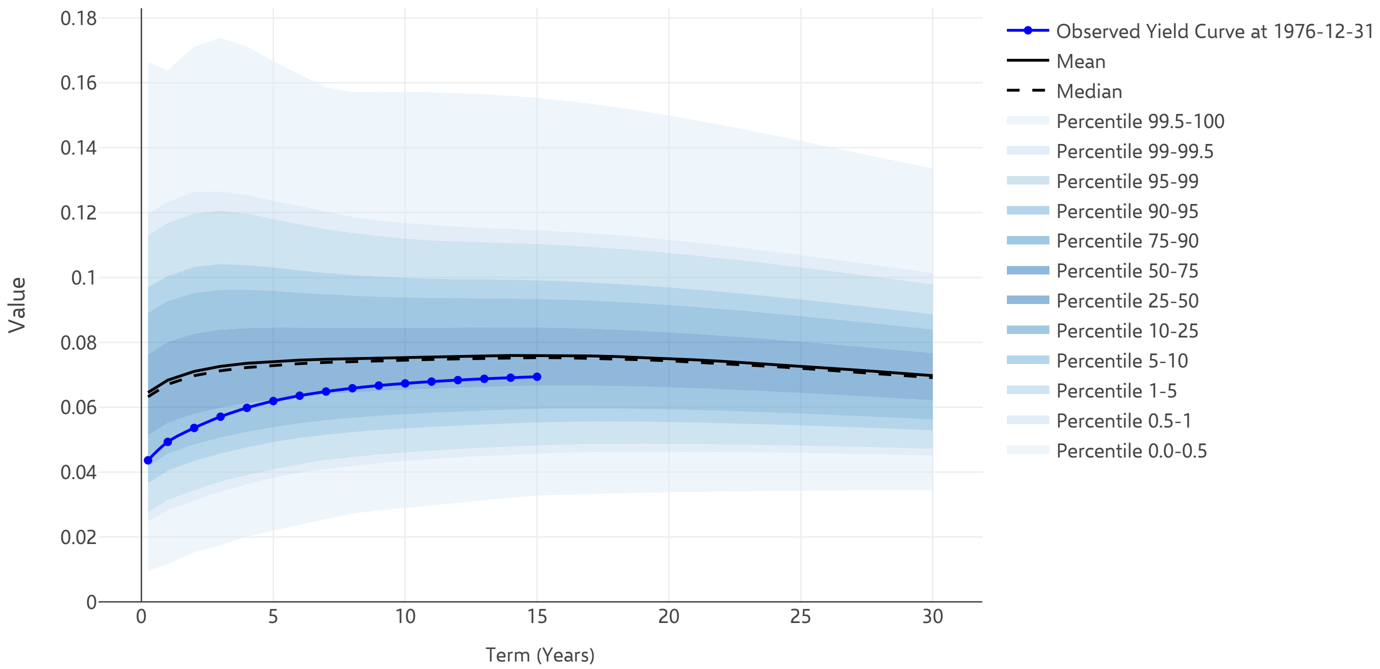
Term (Years)	Yield at End-1973	Yield at End-1974	Simulated Percentile
0.25	7.53%	7.12%	75.20%
2.0	6.79%	7.15%	77.44%
5.0	6.67%	7.16%	75.69%
10.0	6.74%	7.16%	73.81%

1974 - 1975 Backtest



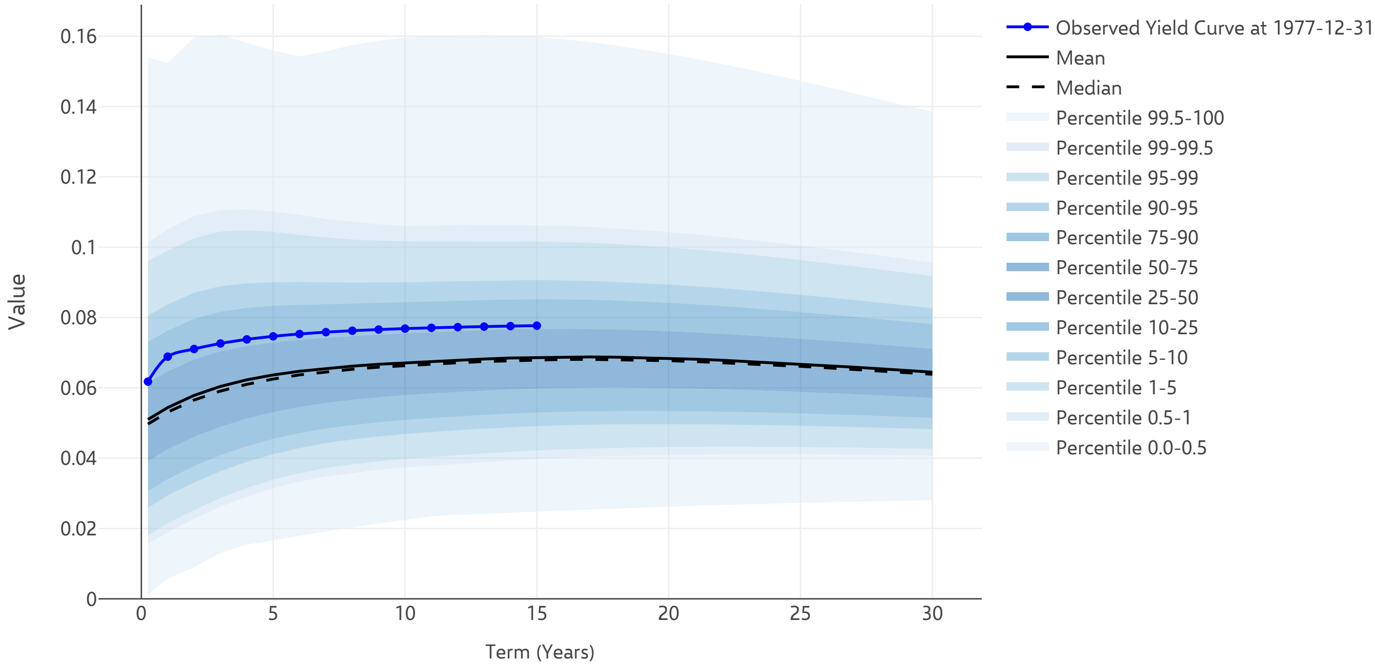
Term (Years)	Yield at End-1974	Yield at End-1975	Simulated Percentile
0.25	7.12%	5.23%	24.31%
2.0	7.15%	6.69%	51.61%
5.0	7.16%	7.37%	66.04%
10.0	7.16%	7.65%	73.32%

1975 - 1976 Backtest



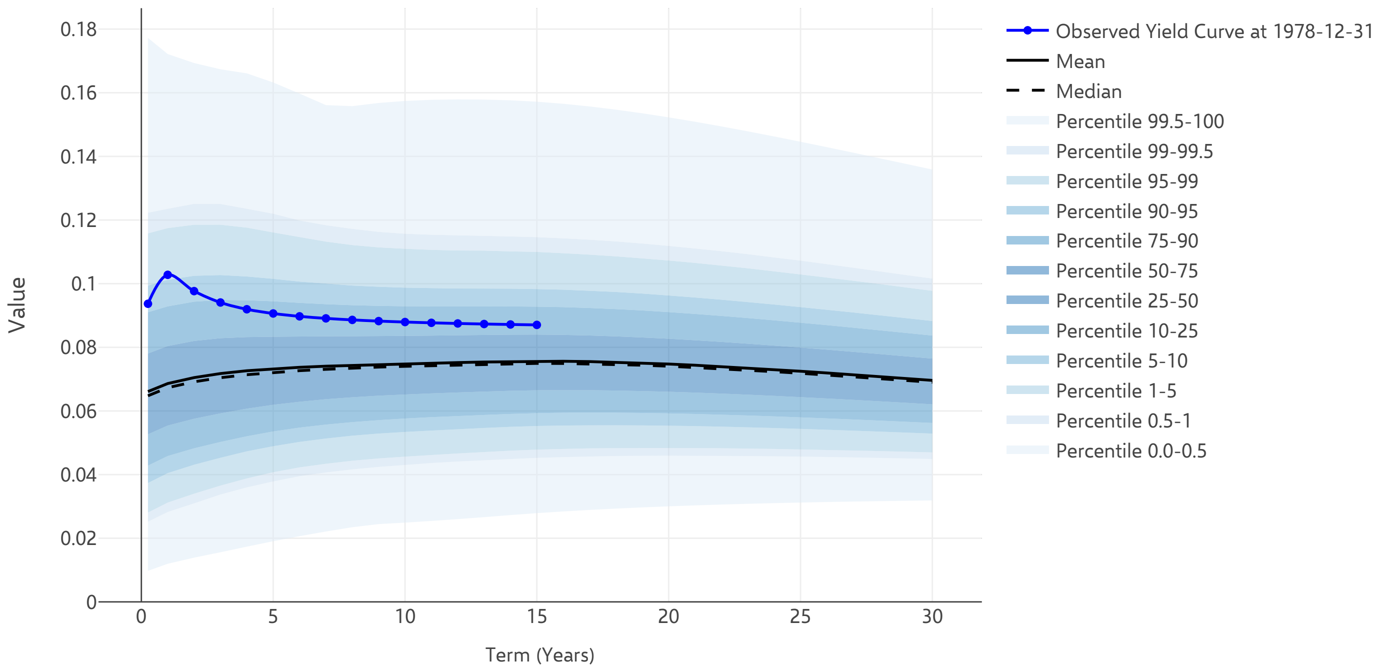
Term (Years)	Yield at End-1975	Yield at End-1976	Simulated Percentile
0.25	5.23%	4.36%	12.43%
2.0	6.69%	5.36%	17.24%
5.0	7.37%	6.19%	24.00%
10.0	7.65%	6.73%	29.89%

1976 - 1977 Backtest



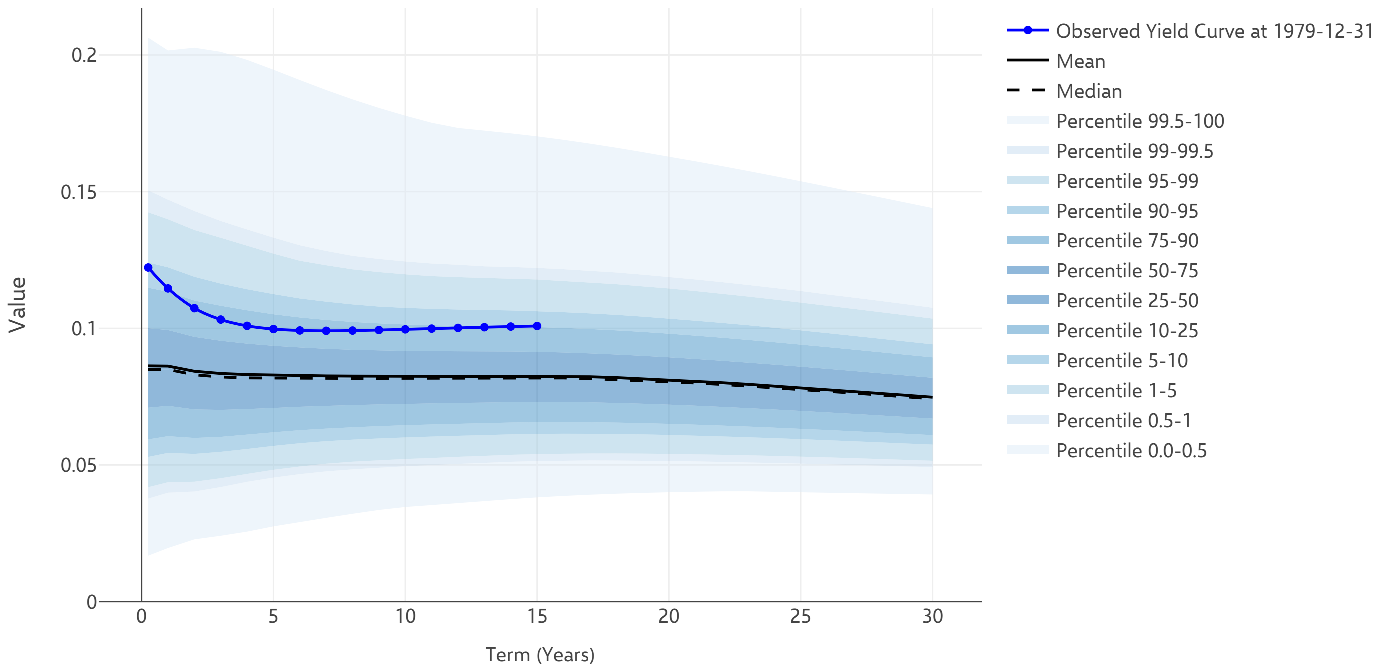
Term (Years)	Yield at End-1976	Yield at End-1977	Simulated Percentile
0.25	4.36%	6.18%	75.61%
2.0	5.36%	7.10%	79.84%
5.0	6.19%	7.46%	78.13%
10.0	6.73%	7.68%	77.81%

1977 - 1978 Backtest



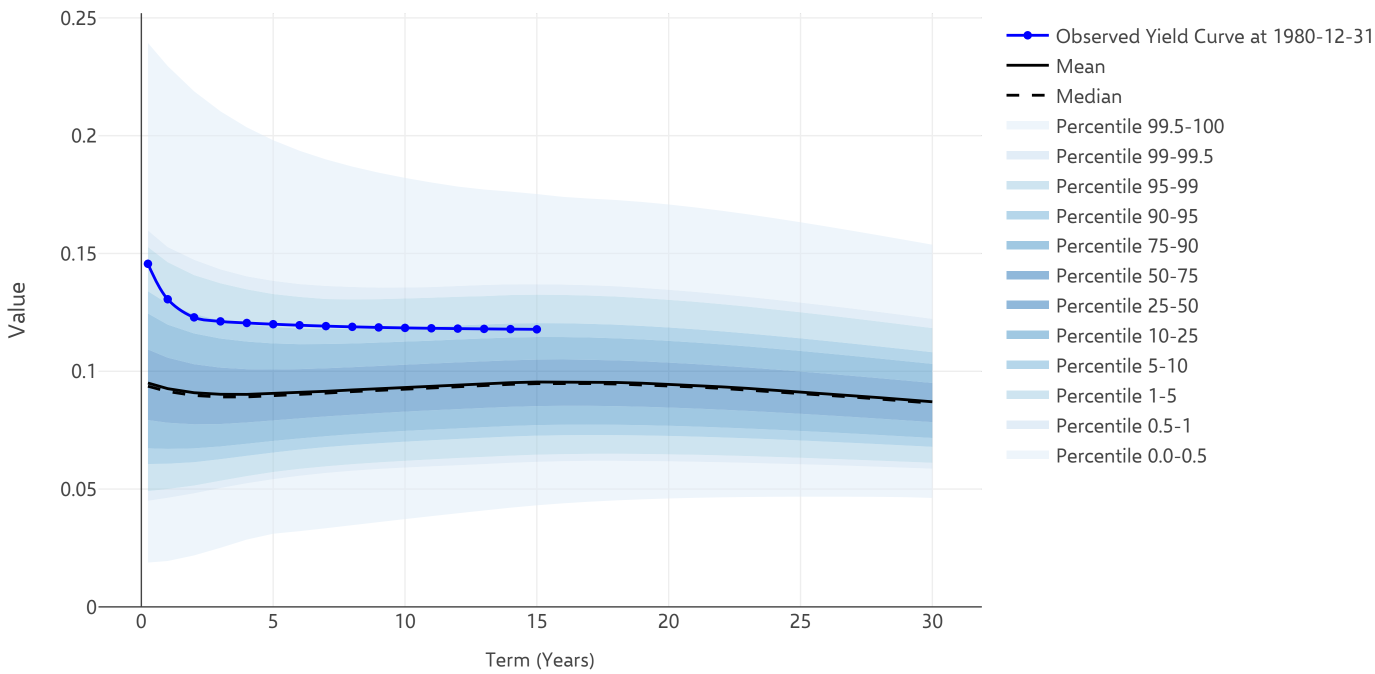
Term (Years)	Yield at End-1977	Yield at End-1978	Simulated Percentile
0.25	6.18%	9.37%	91.92%
2.0	7.10%	9.77%	92.47%
5.0	7.46%	9.06%	86.02%
10.0	7.68%	8.79%	83.18%

1978 - 1979 Backtest



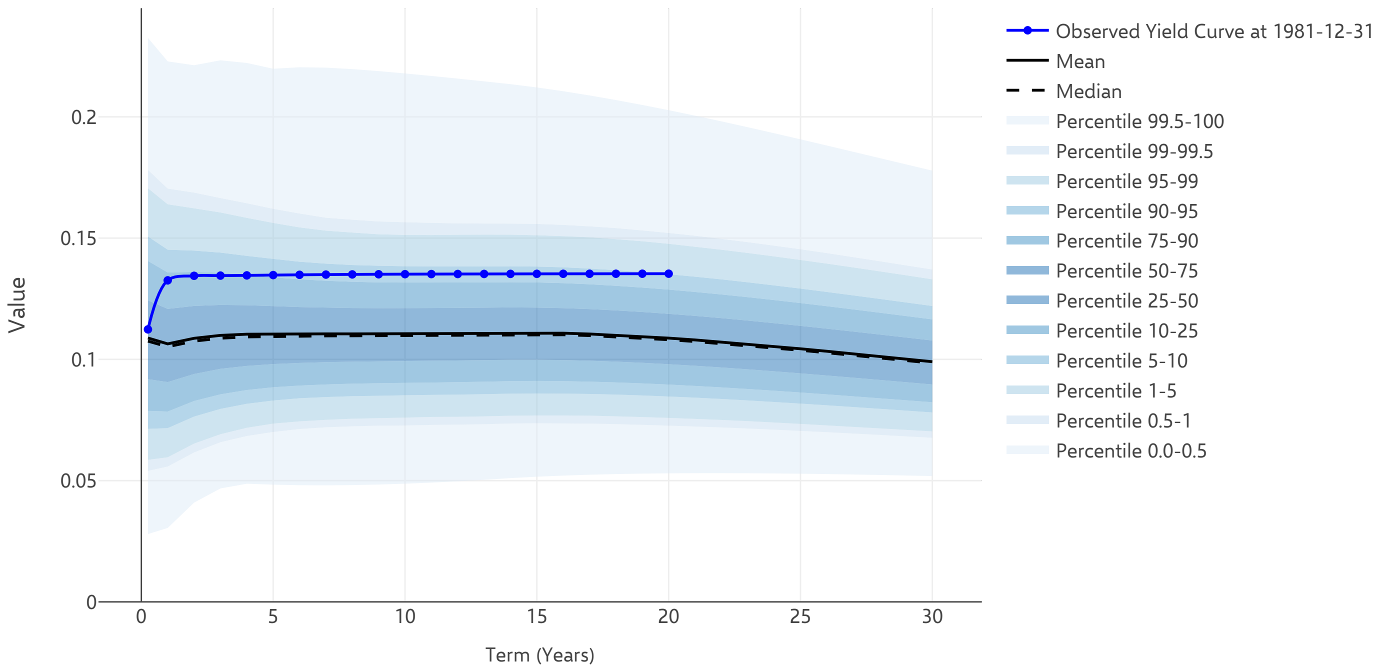
Term (Years)	Yield at End-1978	Yield at End-1979	Simulated Percentile
0.25	9.37%	12.22%	94.23%
2.0	9.77%	10.74%	87.63%
5.0	9.06%	9.97%	84.12%
10.0	8.79%	9.96%	87.93%

1979 - 1980 Backtest



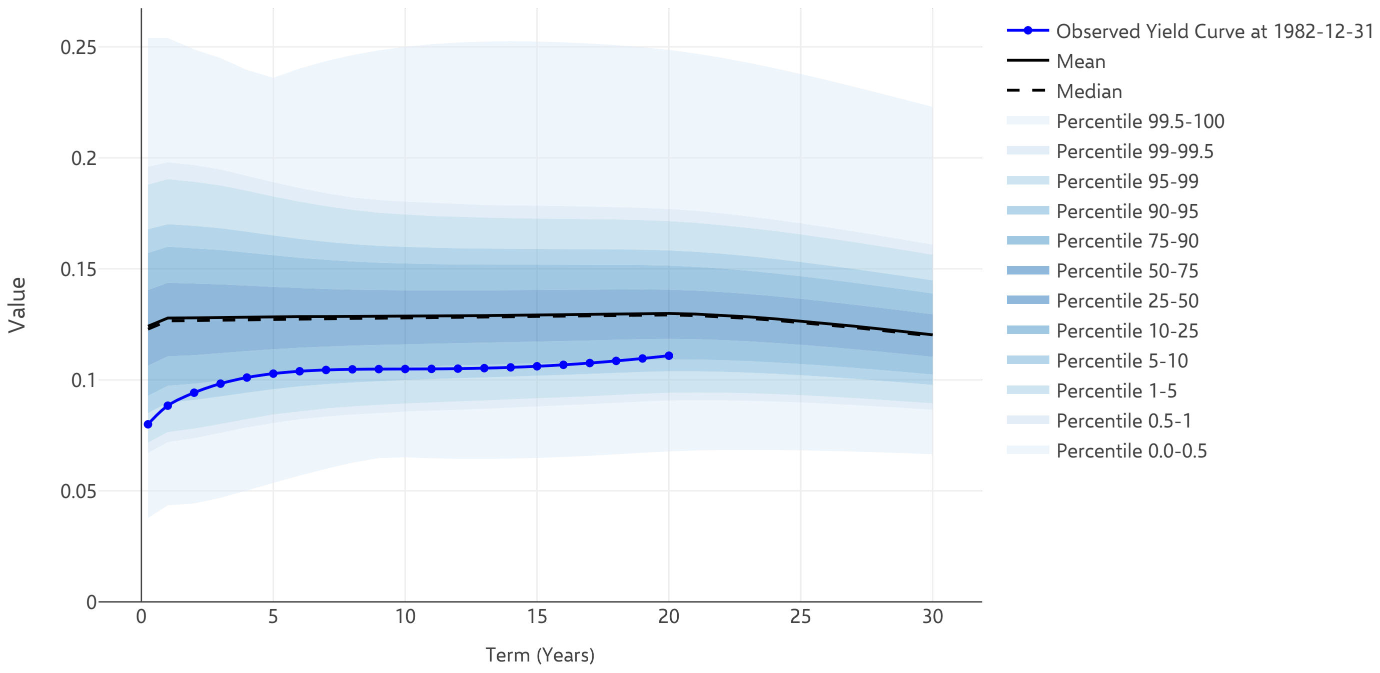
Term (Years)	Yield at End-1979	Yield at End-1980	Simulated Percentile
0.25	12.22%	14.56%	98.08%
2.0	10.74%	12.29%	94.31%
5.0	9.97%	12.00%	95.59%
10.0	9.96%	11.84%	94.89%

1980 - 1981 Backtest



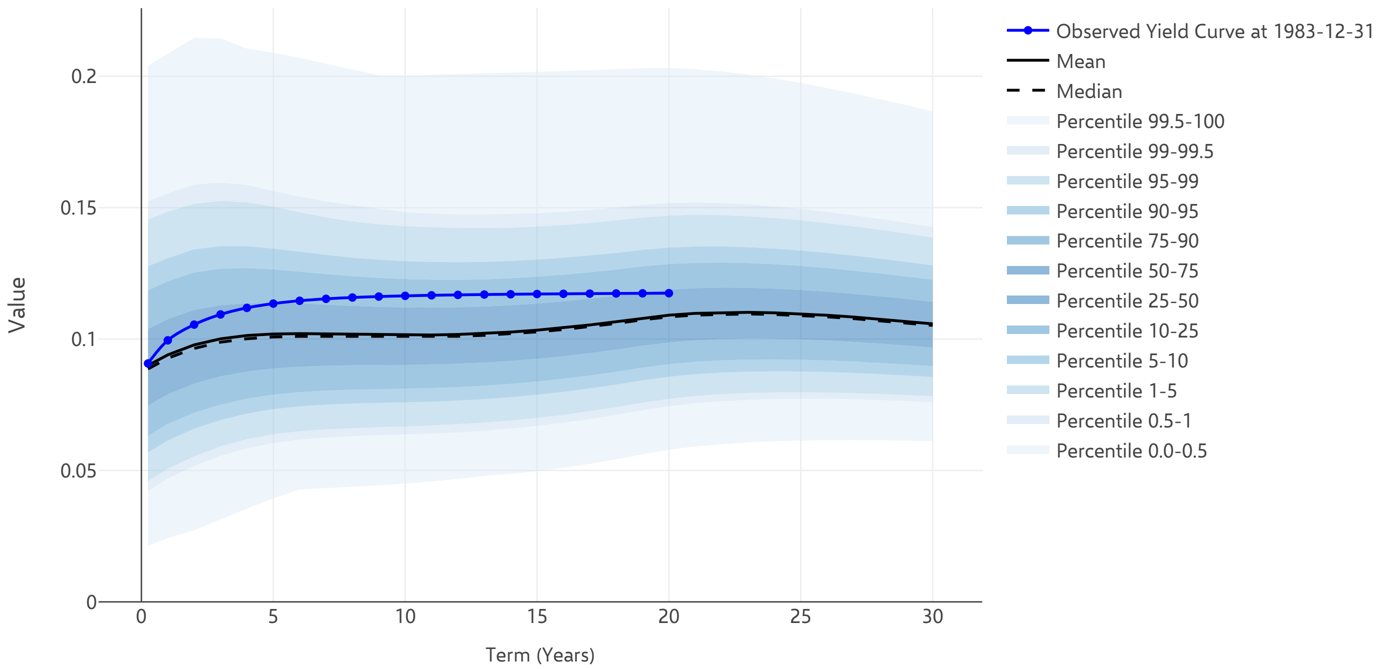
Term (Years)	Yield at End-1980	Yield at End-1981	Simulated Percentile
0.25	14.56%	11.24%	58.00%
2.0	12.29%	13.44%	88.74%
5.0	12.00%	13.48%	90.77%
10.0	11.84%	13.51%	92.94%

1981 - 1982 Backtest



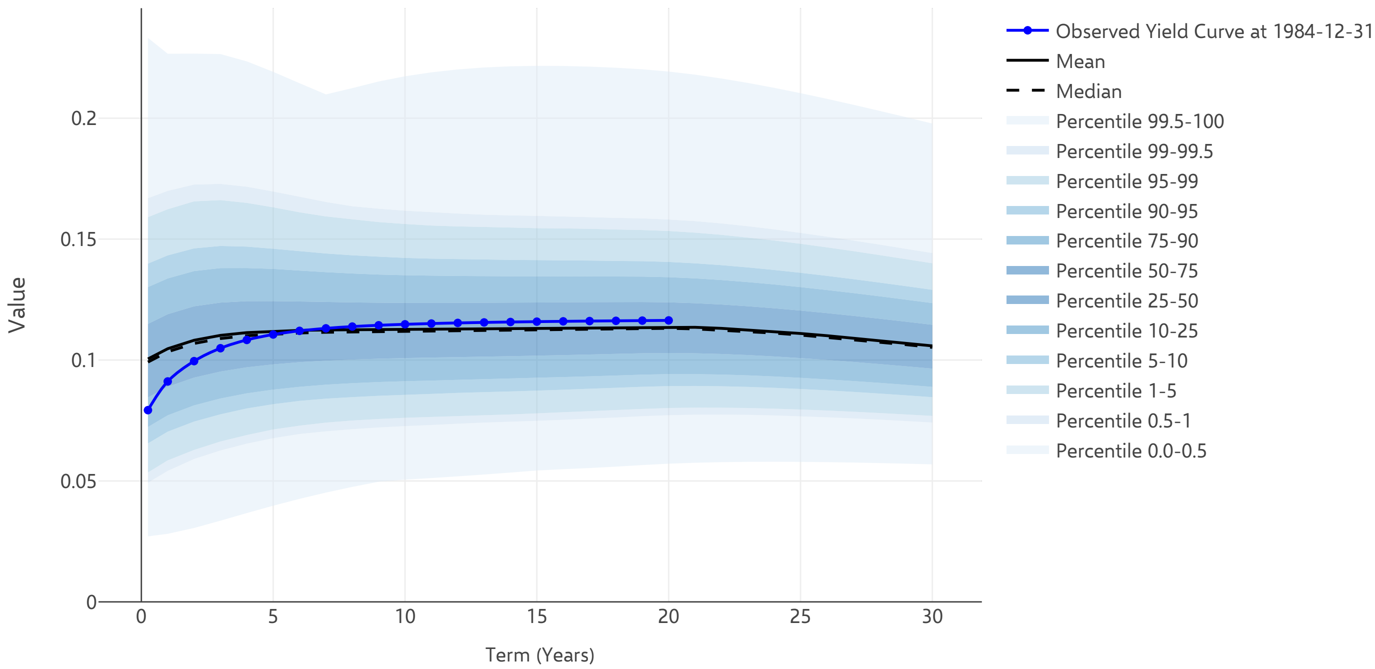
Term (Years)	Yield at End-1981	Yield at End-1982	Simulated Percentile
0.25	11.24%	8.00%	2.90%
2.0	13.44%	9.42%	6.94%
5.0	13.48%	10.28%	10.55%
10.0	13.51%	10.49%	9.07%
20.0	13.53%	11.09%	12.11%

1982 - 1983 Backtest



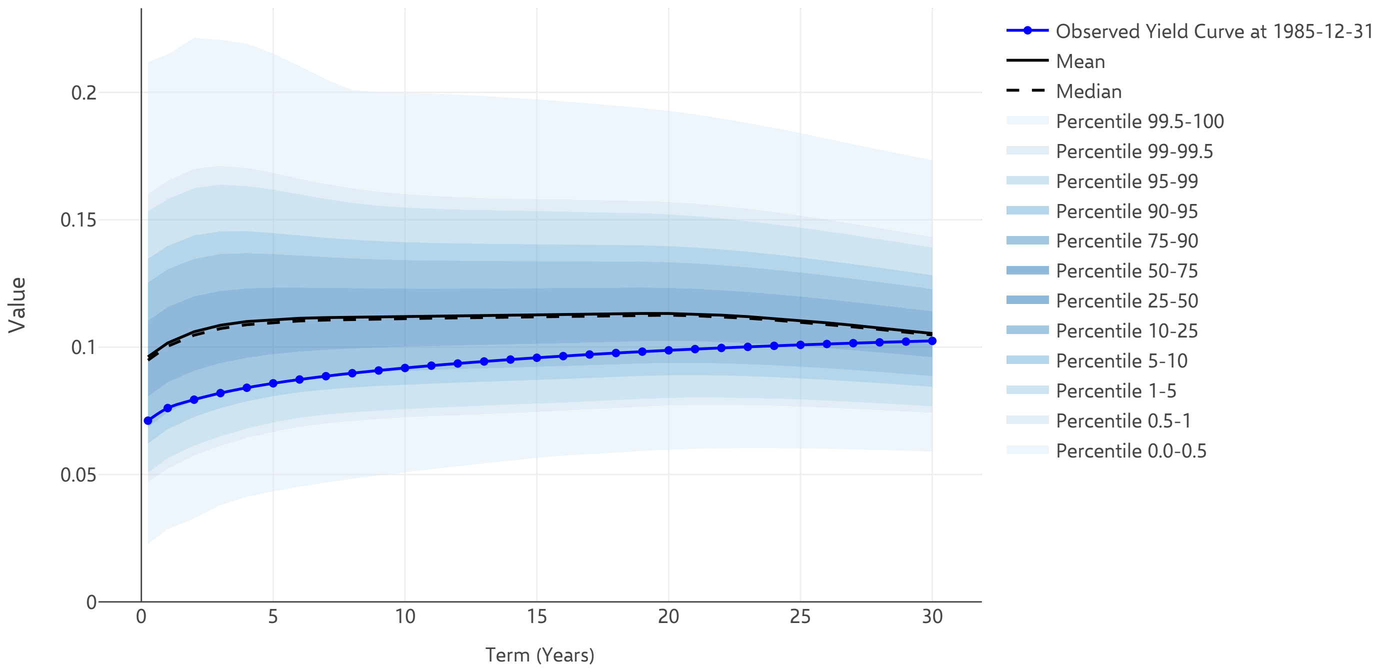
Term (Years)	Yield at End-1982	Yield at End-1983	Simulated Percentile
0.25	8.00%	9.07%	53.75%
2.0	9.42%	10.55%	66.32%
5.0	10.28%	11.35%	74.57%
10.0	10.49%	11.64%	82.28%
20.0	11.09%	11.75%	72.24%

1983 - 1984 Backtest



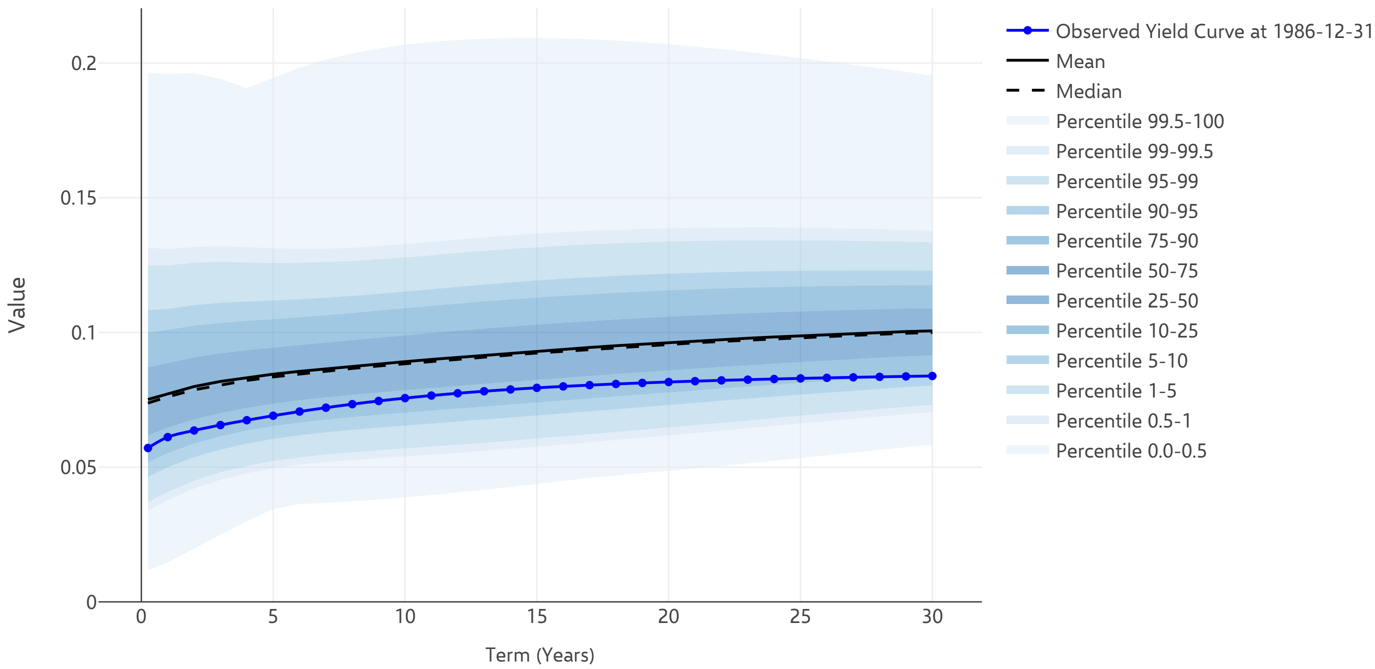
Term (Years)	Yield at End-1983	Yield at End-1984	Simulated Percentile
0.25	9.07%	7.93%	17.67%
2.0	10.55%	9.95%	36.62%
5.0	11.35%	11.06%	49.55%
10.0	11.64%	11.48%	56.66%
20.0	11.75%	11.64%	58.34%

1984 - 1985 Backtest



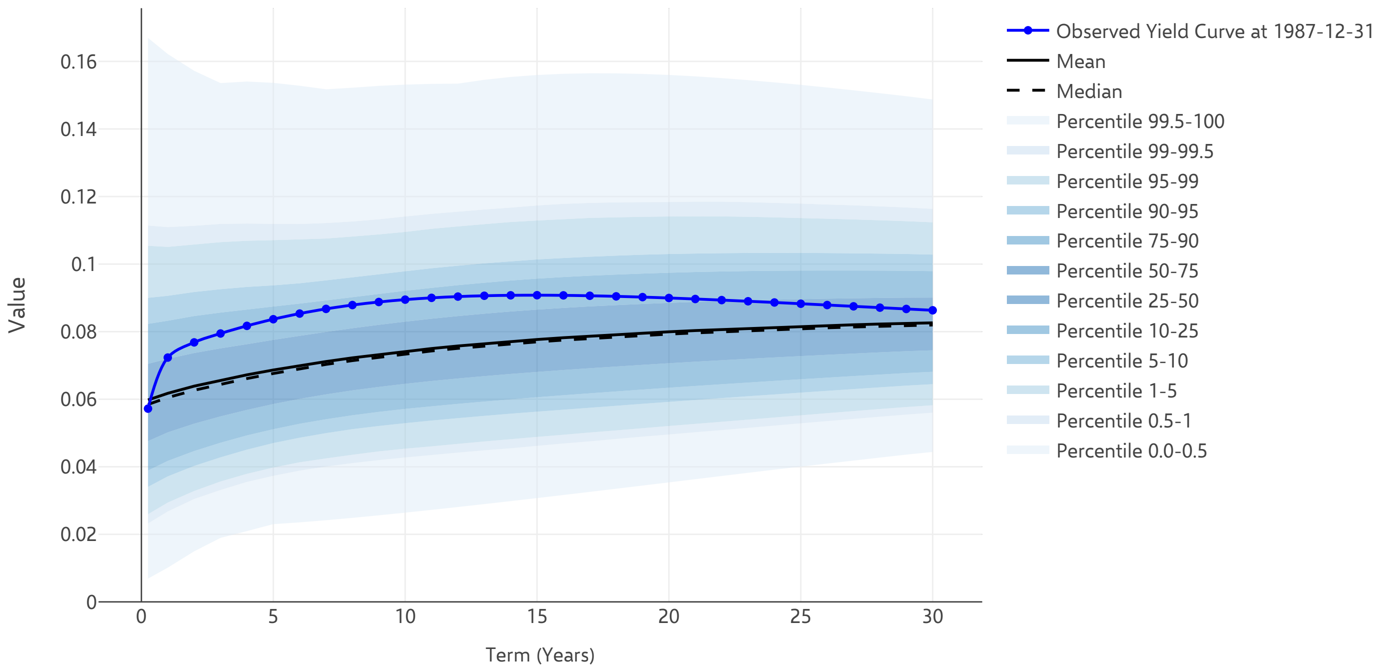
Term (Years)	Yield at End-1984	Yield at End-1985	Simulated Percentile
0.25	7.93%	7.11%	12.56%
2.0	9.95%	7.94%	10.39%
5.0	11.06%	8.58%	9.10%
10.0	11.48%	9.18%	11.38%
20.0	11.64%	9.87%	17.66%

1985 - 1986 Backtest



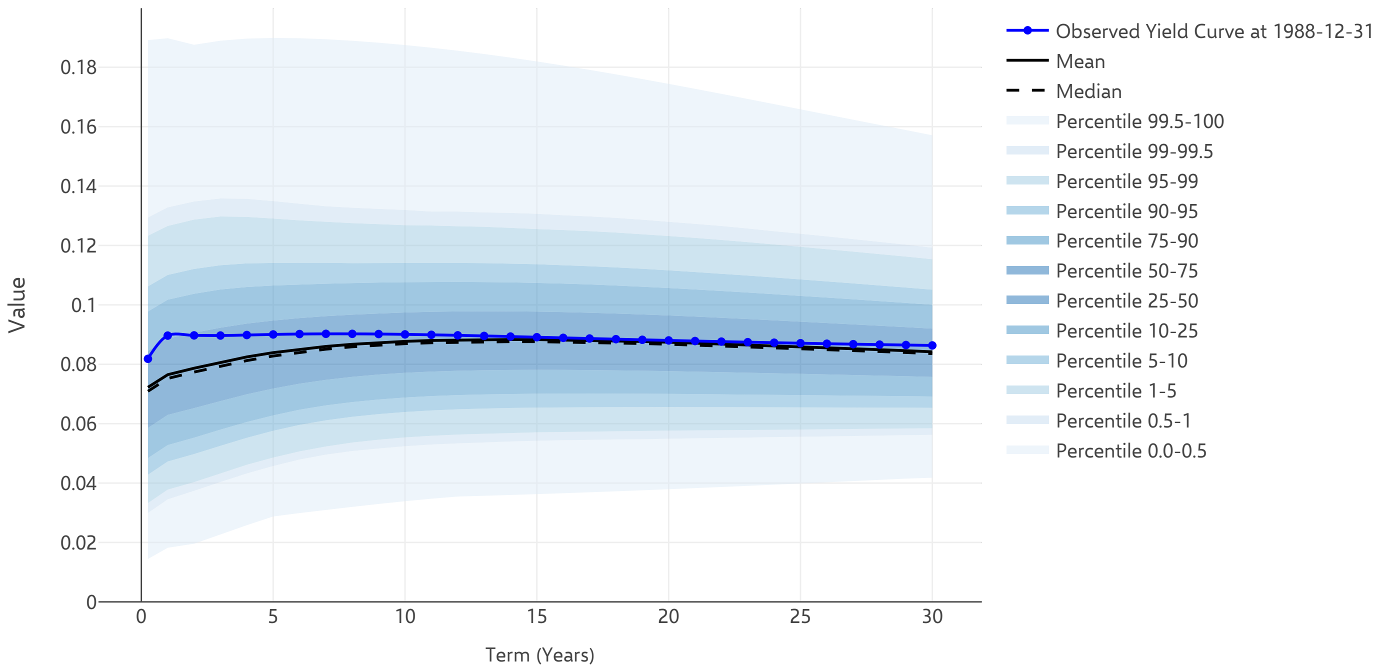
Term (Years)	Yield at End-1985	Yield at End-1986	Simulated Percentile
0.25	7.11%	5.71%	17.05%
2.0	7.94%	6.36%	17.22%
5.0	8.58%	6.91%	16.03%
10.0	9.18%	7.56%	18.88%
20.0	9.87%	8.16%	16.19%

1986 - 1987 Backtest



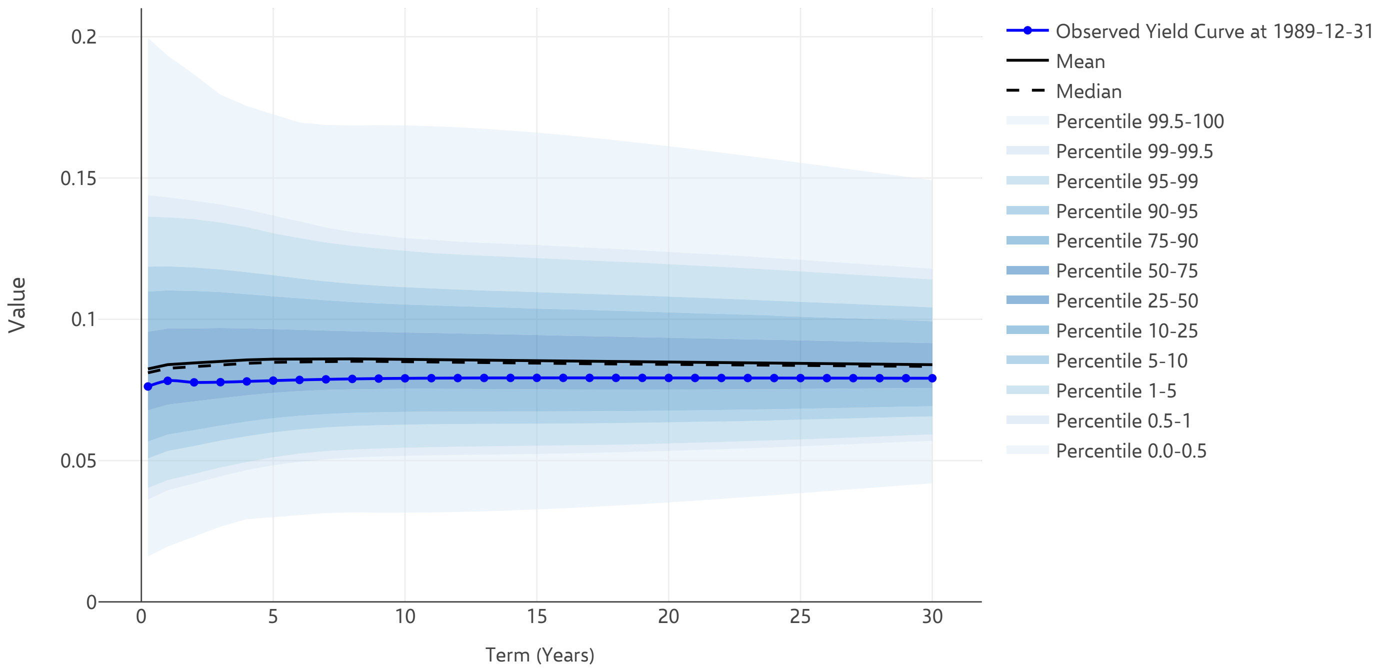
Term (Years)	Yield at End-1986	Yield at End-1987	Simulated Percentile
0.25	5.71%	5.72%	47.06%
2.0	6.36%	7.68%	80.52%
5.0	6.91%	8.37%	85.43%
10.0	7.56%	8.95%	86.67%
20.0	8.16%	9.00%	78.06%

1987 - 1988 Backtest



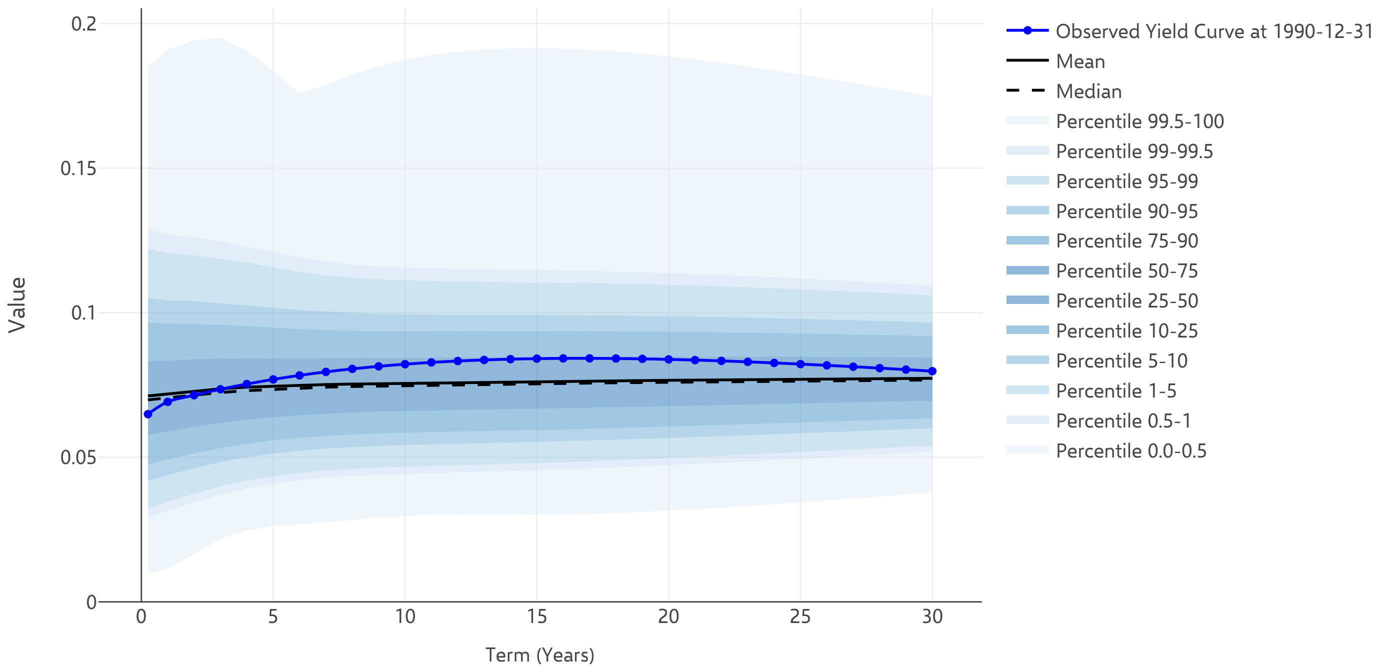
Term (Years)	Yield at End-1987	Yield at End-1988	Simulated Percentile
0.25	5.72%	8.18%	70.80%
2.0	7.68%	8.97%	73.52%
5.0	8.37%	9.00%	66.12%
10.0	8.95%	9.01%	58.03%
20.0	9.00%	8.80%	53.71%

1988 - 1989 Backtest



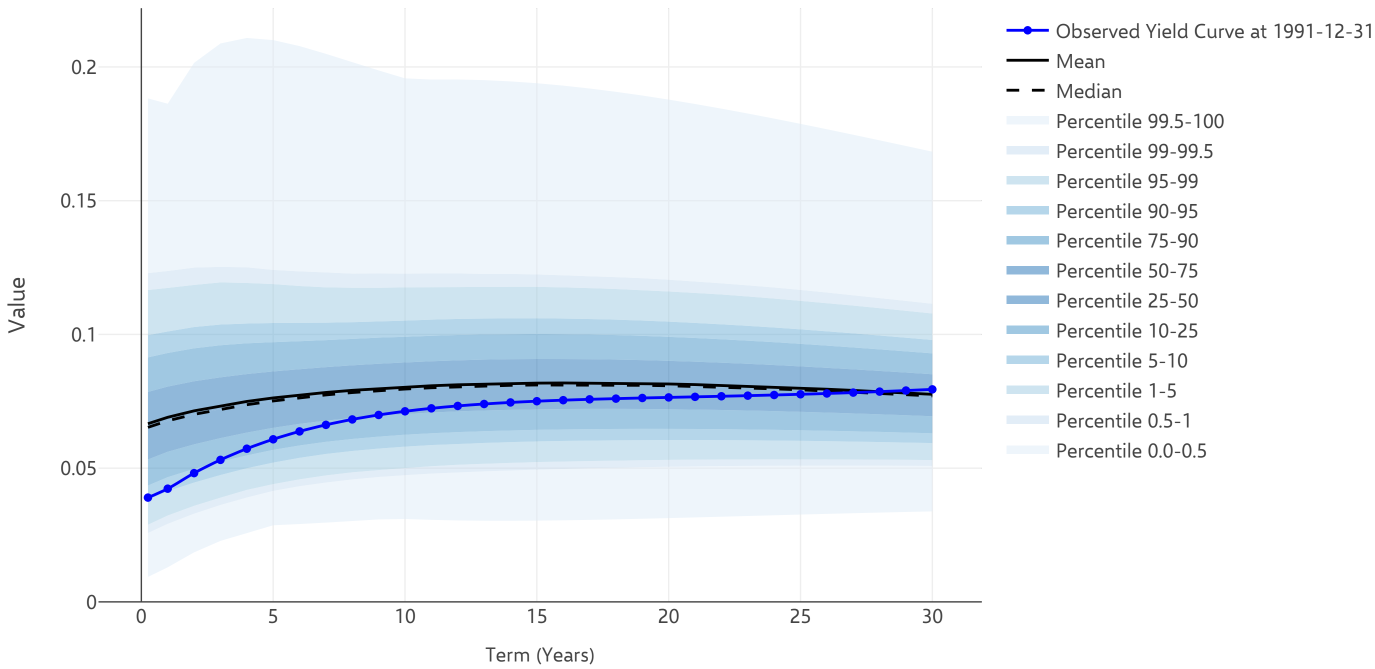
Term (Years)	Yield at End-1988	Yield at End-1989	Simulated Percentile
0.25	8.18%	7.62%	40.43%
2.0	8.97%	7.77%	38.29%
5.0	9.00%	7.83%	34.70%
10.0	9.01%	7.91%	34.00%
20.0	8.80%	7.93%	36.07%

1989 - 1990 Backtest



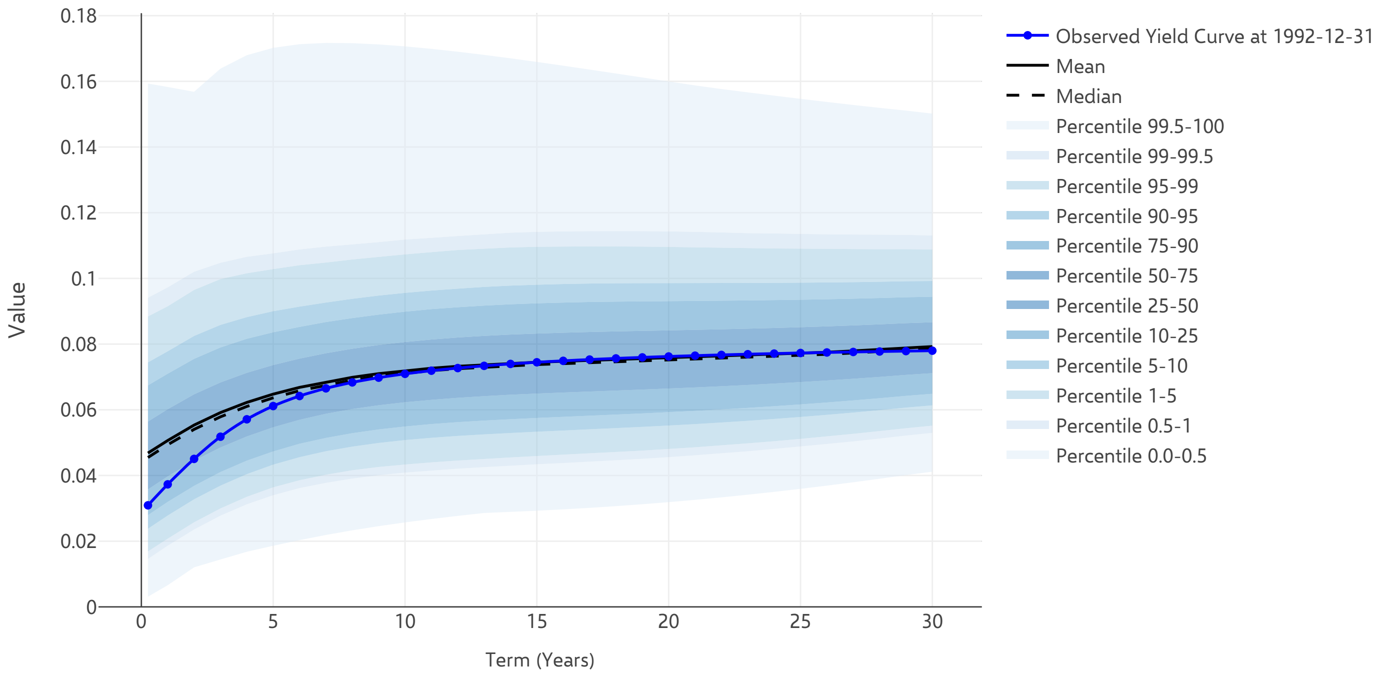
Term (Years)	Yield at End-1989	Yield at End-1990	Simulated Percentile
0.25	7.62%	6.49%	39.62%
2.0	7.77%	7.15%	49.53%
5.0	7.83%	7.69%	58.71%
10.0	7.91%	8.22%	69.91%
20.0	7.93%	8.38%	72.48%

1990 - 1991 Backtest



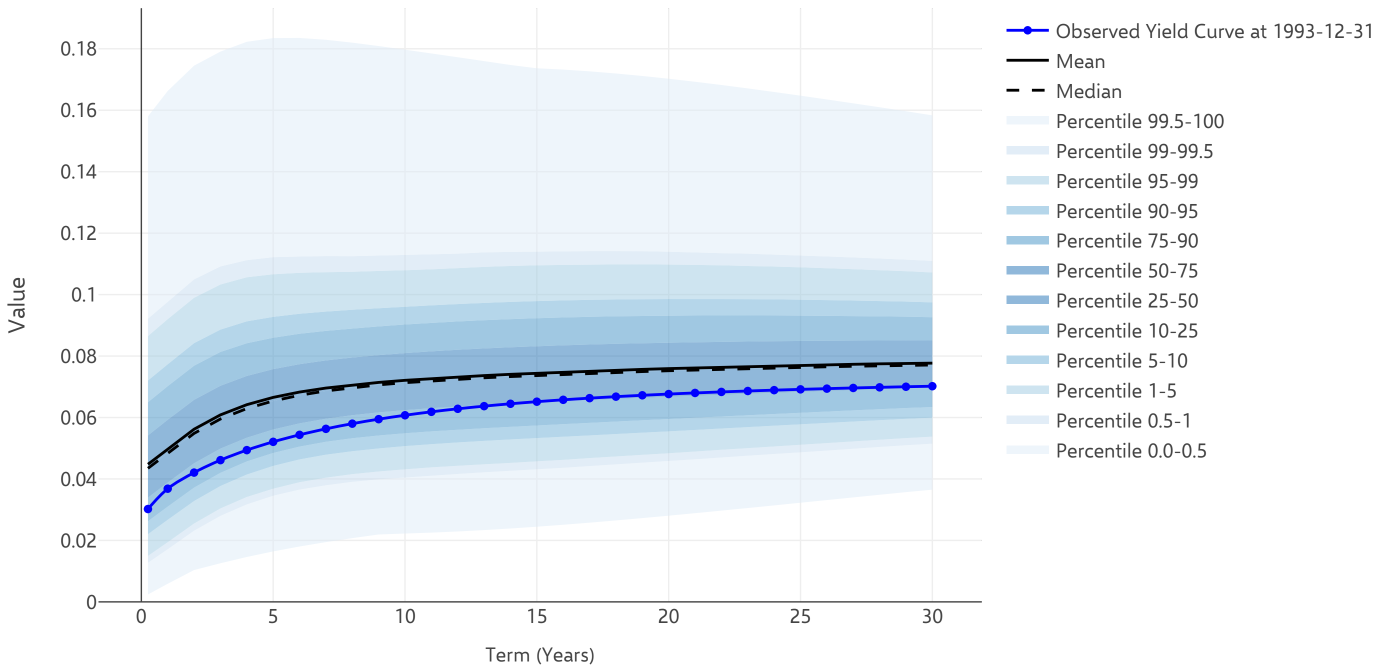
Term (Years)	Yield at End-1990	Yield at End-1991	Simulated Percentile
0.25	6.49%	3.90%	5.62%
2.0	7.15%	4.81%	8.25%
5.0	7.69%	6.08%	16.27%
10.0	8.22%	7.13%	27.42%
20.0	8.38%	7.64%	37.18%

1991 - 1992 Backtest



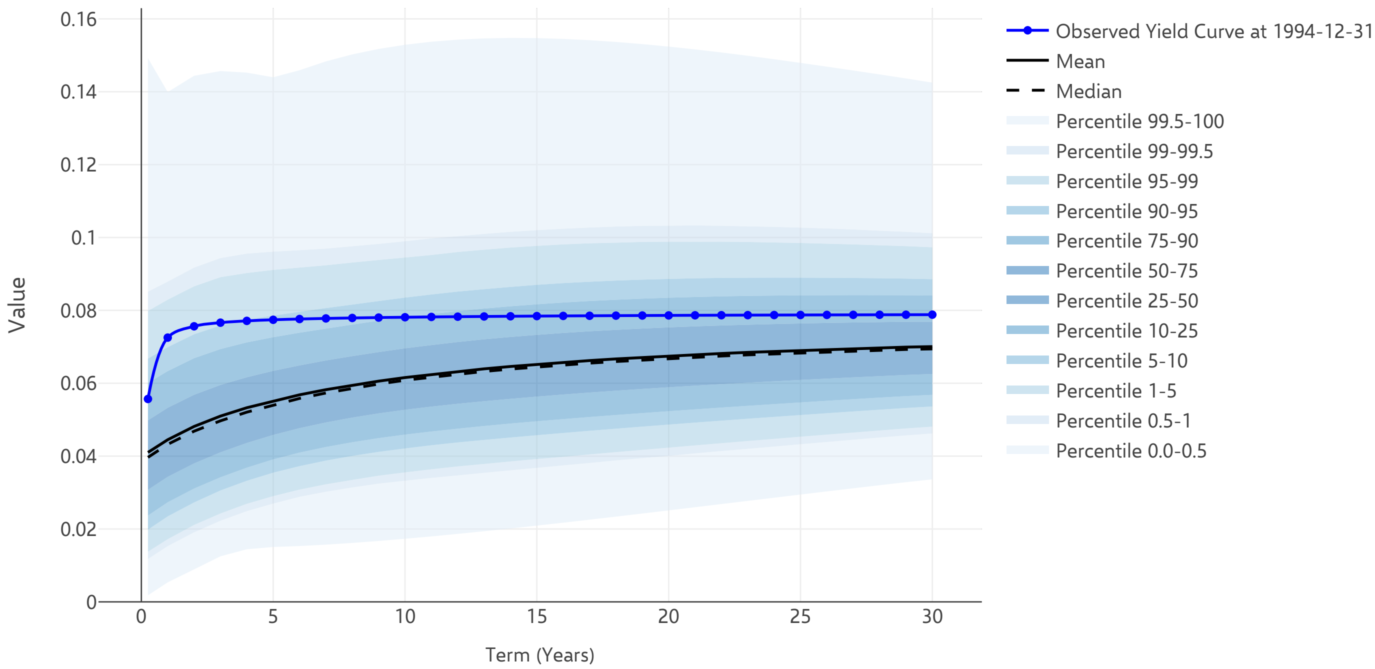
Term (Years)	Yield at End-1991	Yield at End-1992	Simulated Percentile
0.25	3.90%	3.09%	14.85%
2.0	4.81%	4.51%	26.29%
5.0	6.08%	6.11%	42.77%
10.0	7.13%	7.09%	49.40%
20.0	7.64%	7.62%	53.62%

1992 - 1993 Backtest



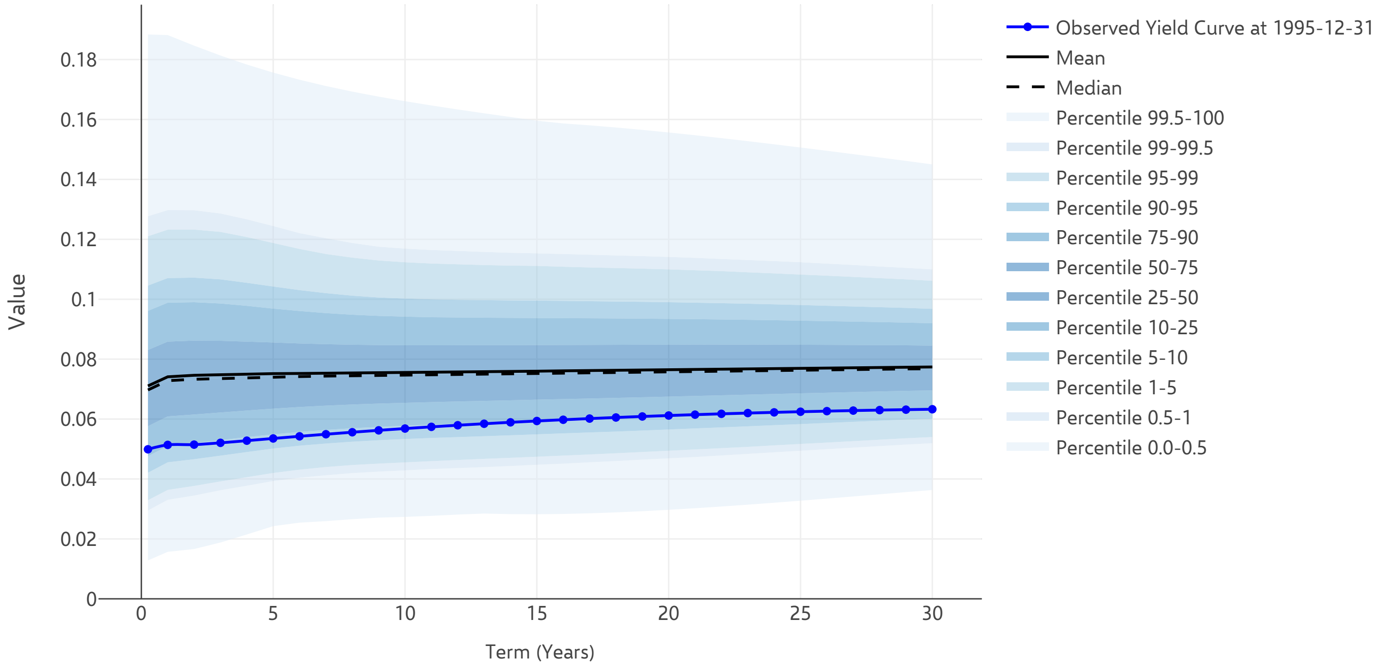
Term (Years)	Yield at End-1992	Yield at End-1993	Simulated Percentile
0.25	3.09%	3.02%	16.86%
2.0	4.51%	4.21%	18.35%
5.0	6.11%	5.21%	16.15%
10.0	7.09%	6.07%	21.04%
20.0	7.62%	6.76%	27.46%

1993 - 1994 Backtest



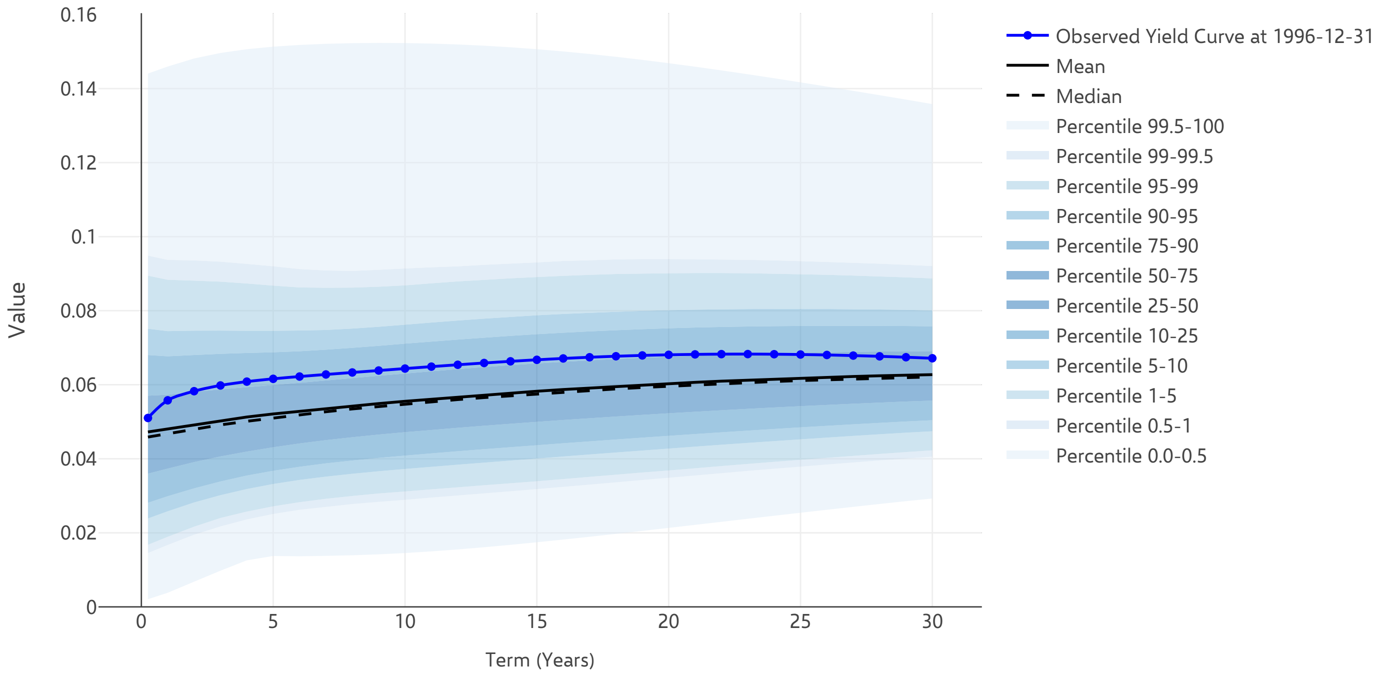
Term (Years)	Yield at End-1993	Yield at End-1994	Simulated Percentile
0.25	3.02%	5.57%	84.84%
2.0	4.21%	7.56%	96.05%
5.0	5.21%	7.74%	94.25%
10.0	6.07%	7.81%	89.98%
20.0	6.76%	7.86%	82.25%

1994 - 1995 Backtest



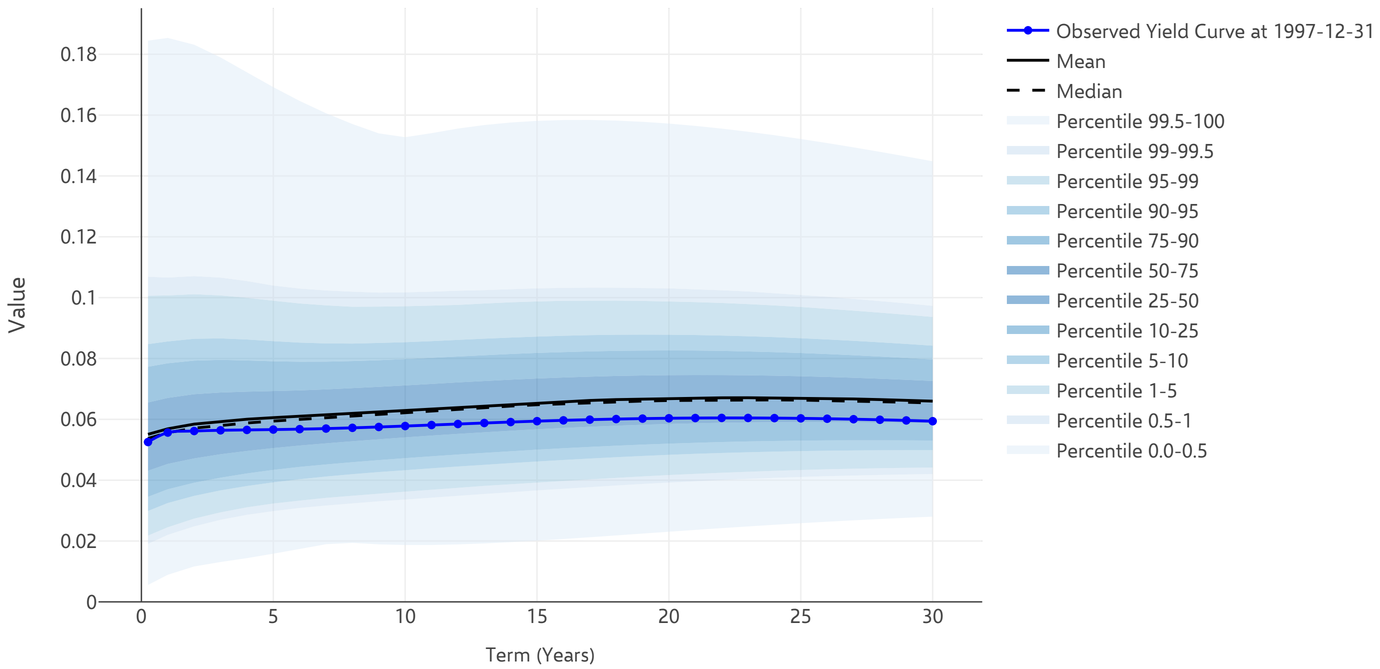
Term (Years)	Yield at End-1994	Yield at End-1995	Simulated Percentile
0.25	5.57%	4.99%	12.76%
2.0	7.56%	5.15%	9.50%
5.0	7.74%	5.35%	8.29%
10.0	7.81%	5.68%	8.72%
20.0	7.86%	6.12%	11.12%

1995 - 1996 Backtest



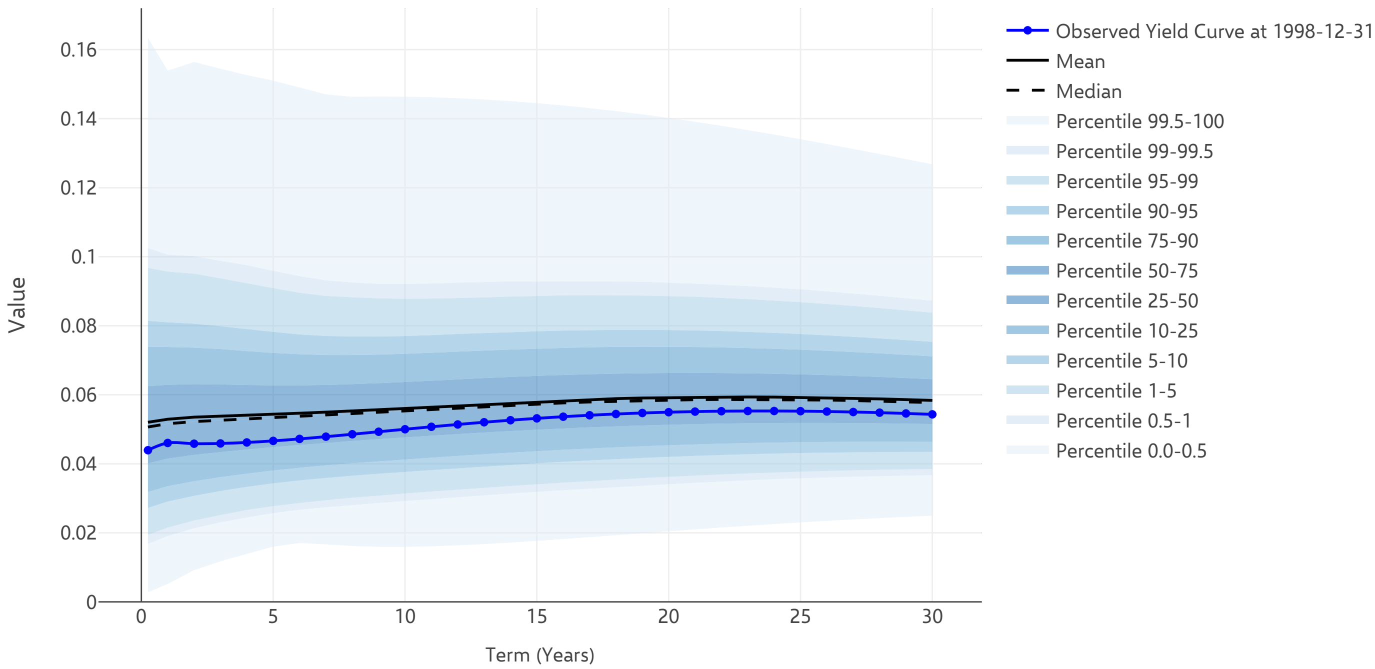
Term (Years)	Yield at End-1995	Yield at End-1996	Simulated Percentile
0.25	4.99%	5.10%	62.53%
2.0	5.15%	5.83%	75.31%
5.0	5.35%	6.16%	78.69%
10.0	5.68%	6.44%	78.17%
20.0	6.12%	6.81%	76.39%

1996 - 1997 Backtest



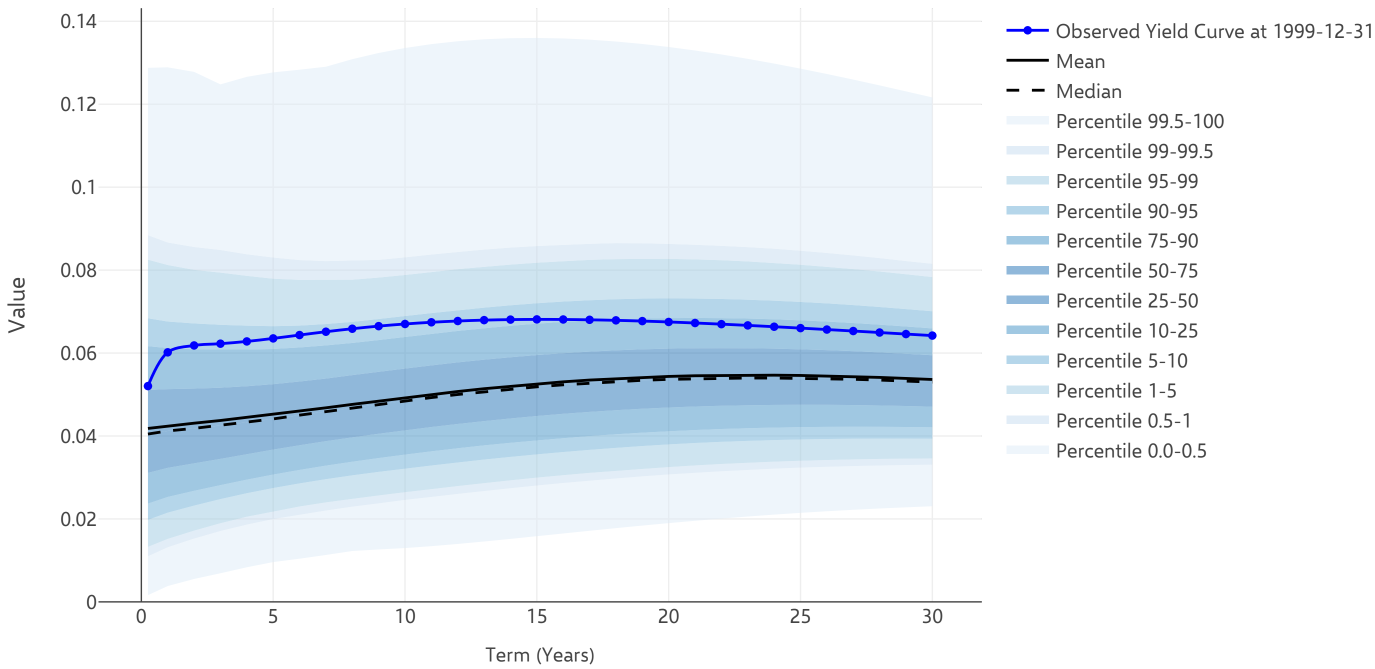
Term (Years)	Yield at End-1996	Yield at End-1997	Simulated Percentile
0.25	5.10%	5.25%	47.11%
2.0	5.83%	5.62%	47.57%
5.0	6.16%	5.66%	41.98%
10.0	6.44%	5.78%	35.91%
20.0	6.81%	6.04%	30.73%

1997 - 1998 Backtest



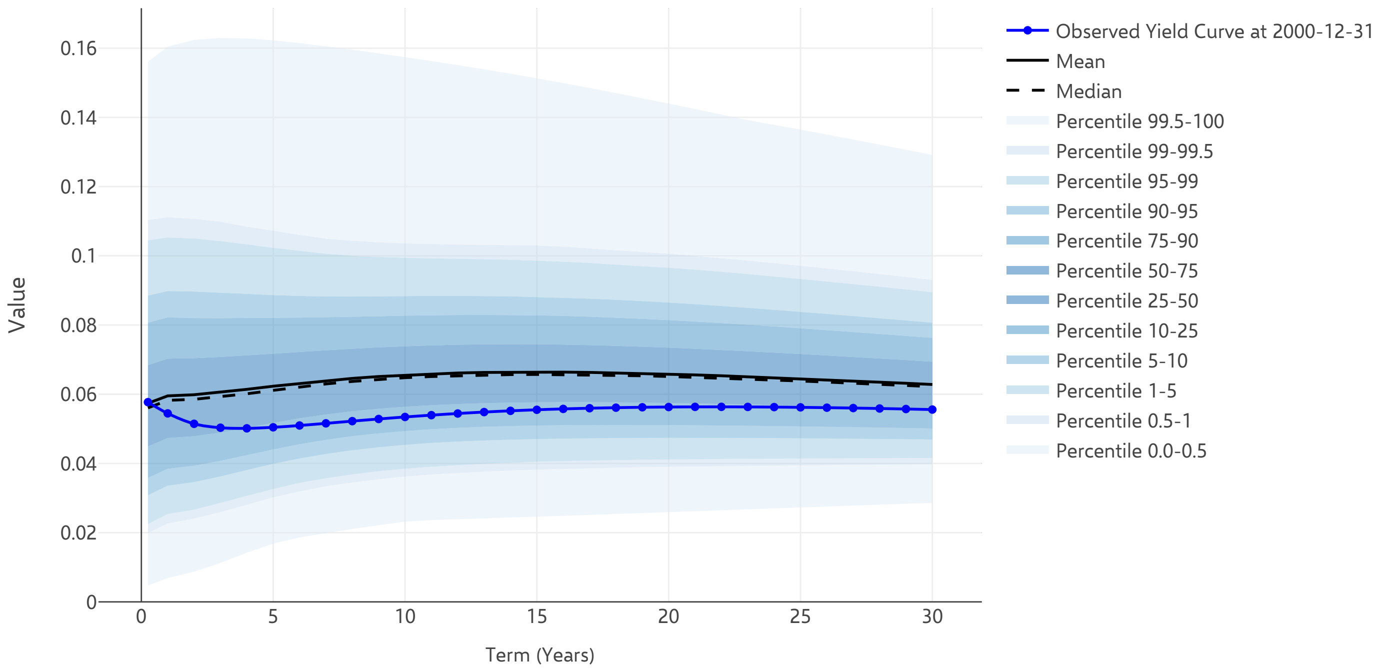
Term (Years)	Yield at End-1997	Yield at End-1998	Simulated Percentile
0.25	5.25%	4.39%	33.79%
2.0	5.62%	4.58%	32.95%
5.0	5.66%	4.66%	30.11%
10.0	5.78%	5.00%	32.24%
20.0	6.04%	5.50%	37.14%

1998 - 1999 Backtest



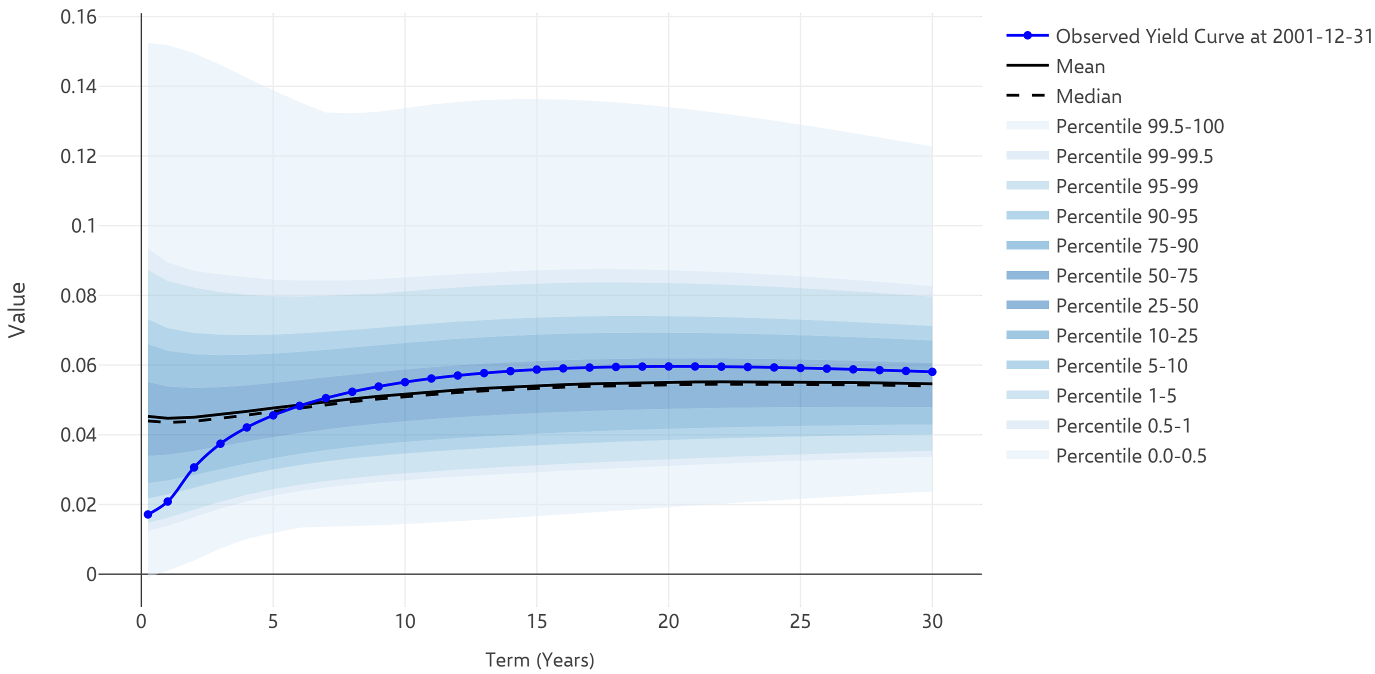
Term (Years)	Yield at End-1998	Yield at End-1999	Simulated Percentile
0.25	4.39%	5.20%	76.79%
2.0	4.58%	6.18%	90.93%
5.0	4.66%	6.35%	92.65%
10.0	5.00%	6.70%	93.44%
20.0	5.50%	6.75%	88.62%

1999 - 2000 Backtest



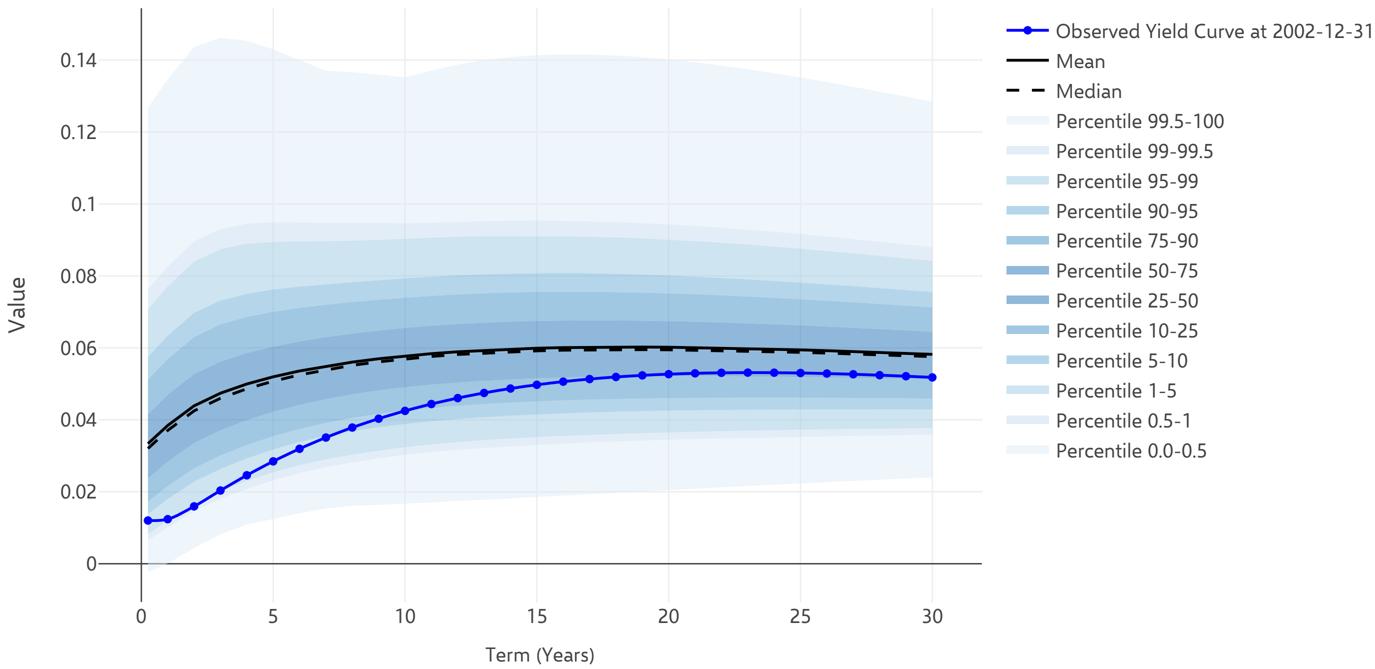
Term (Years)	Yield at End-1999	Yield at End-2000	Simulated Percentile
0.25	5.20%	5.77%	53.73%
2.0	6.18%	5.15%	32.99%
5.0	6.35%	5.04%	22.12%
10.0	6.70%	5.34%	17.79%
20.0	6.75%	5.63%	21.78%

2000 - 2001 Backtest



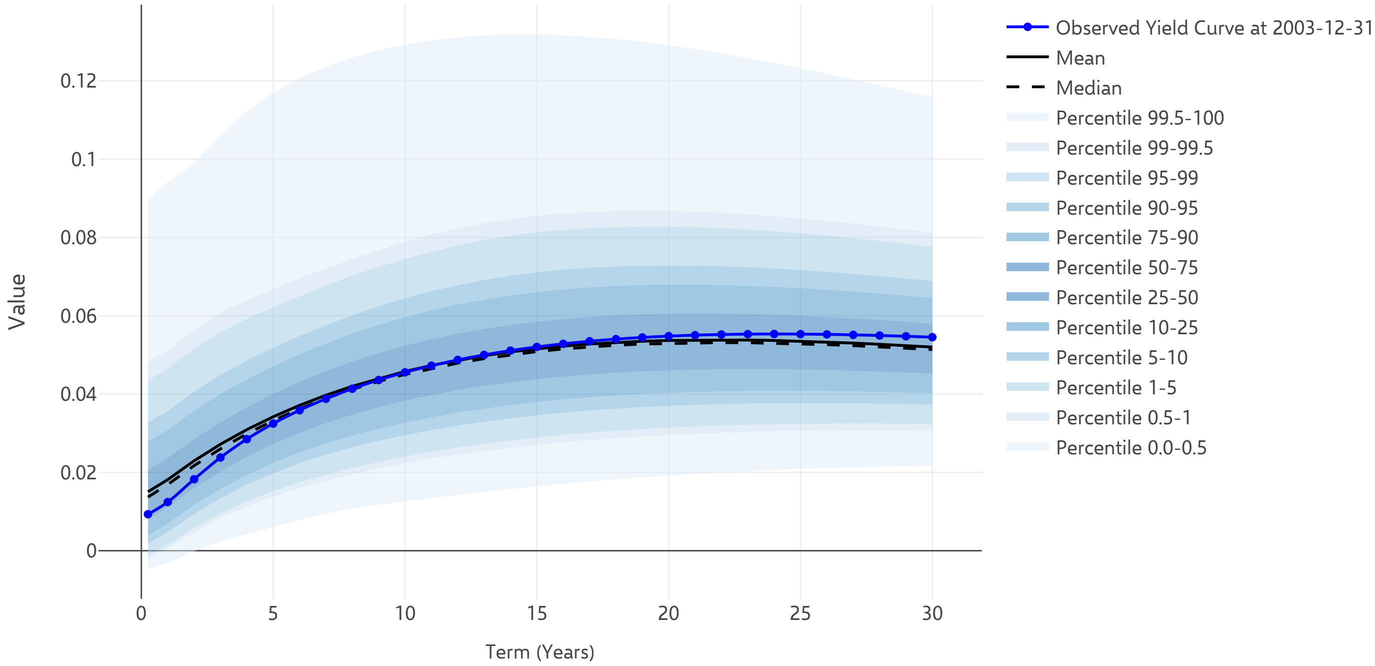
Term (Years)	Yield at End-2000	Yield at End-2001	Simulated Percentile
0.25	5.77%	1.71%	1.85%
2.0	5.15%	3.06%	13.98%
5.0	5.04%	4.56%	45.99%
10.0	5.34%	5.51%	64.36%
20.0	5.63%	5.96%	68.18%

2001 - 2002 Backtest



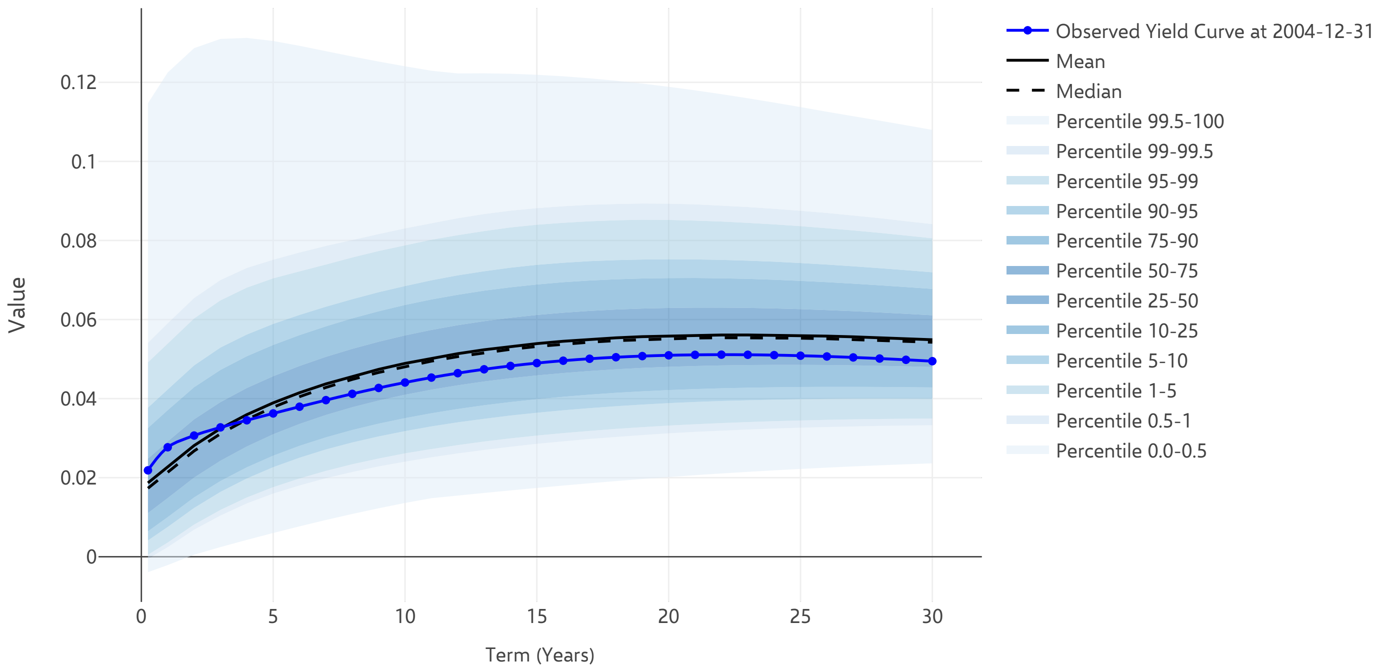
Term (Years)	Yield at End-2001	Yield at End-2002	Simulated Percentile
0.25	1.71%	1.20%	3.19%
2.0	3.06%	1.59%	0.79%
5.0	4.56%	2.85%	2.30%
10.0	5.51%	4.25%	9.87%
20.0	5.96%	5.27%	26.67%

2002 - 2003 Backtest



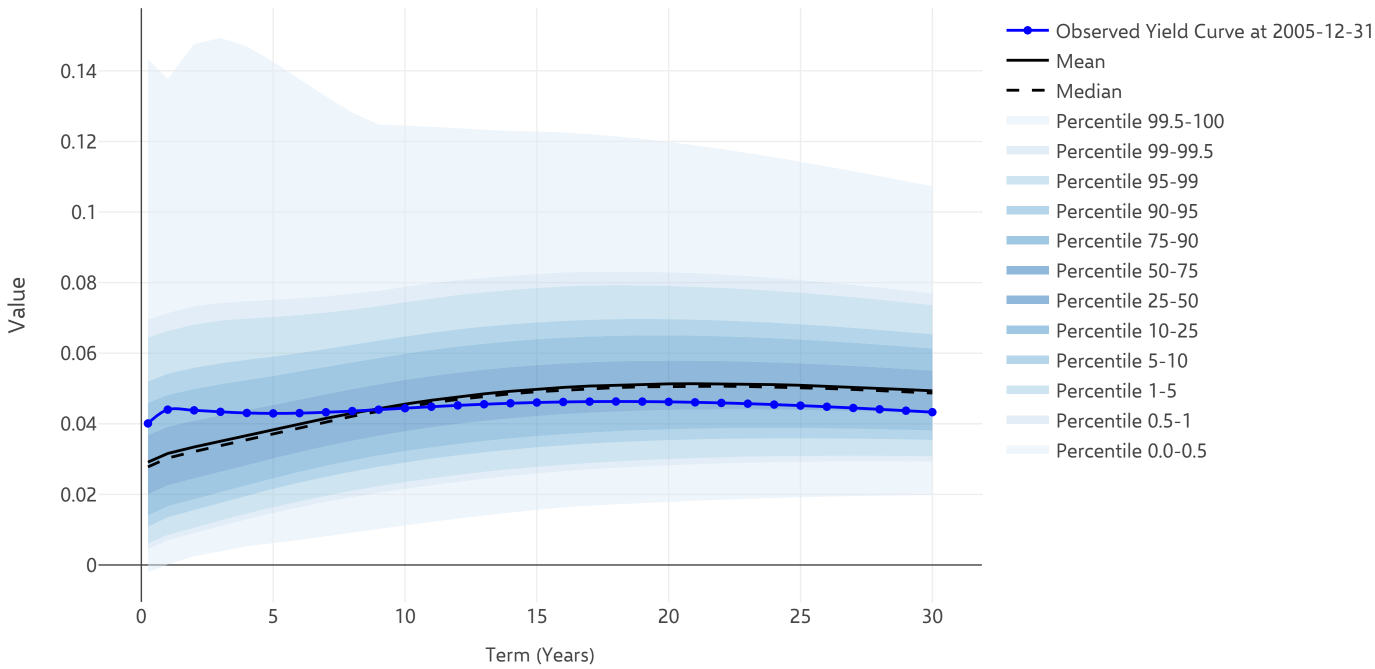
Term (Years)	Yield at End-2002	Yield at End-2003	Simulated Percentile
0.25	1.20%	0.93%	30.63%
2.0	1.59%	1.82%	34.76%
5.0	2.85%	3.25%	46.67%
10.0	4.25%	4.55%	51.96%
20.0	5.27%	5.48%	56.57%

2003 - 2004 Backtest



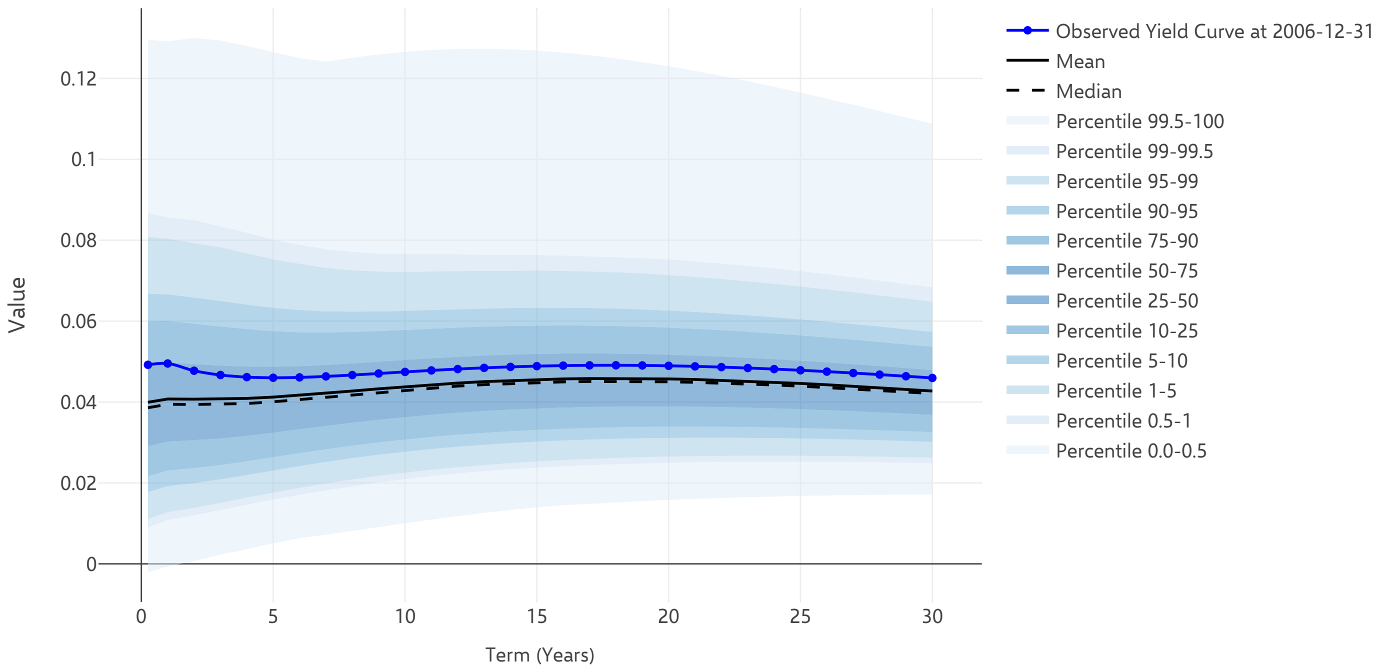
Term (Years)	Yield at End-2003	Yield at End-2004	Simulated Percentile
0.25	0.93%	2.19%	66.31%
2.0	1.82%	3.07%	63.38%
5.0	3.25%	3.62%	44.08%
10.0	4.55%	4.41%	35.32%
20.0	5.48%	5.10%	34.81%

2004 - 2005 Backtest



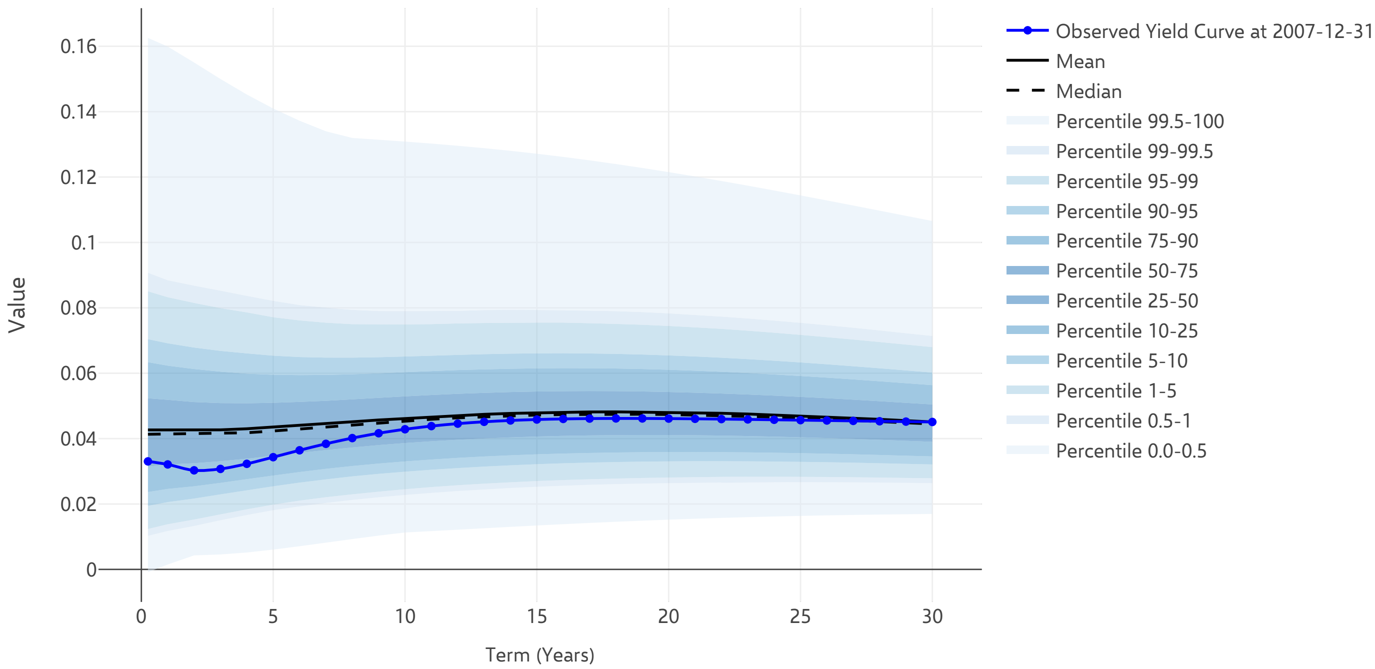
Term (Years)	Yield at End-2004	Yield at End-2005	Simulated Percentile
0.25	2.19%	4.01%	81.74%
2.0	3.07%	4.38%	81.16%
5.0	3.62%	4.29%	68.53%
10.0	4.41%	4.44%	48.65%
20.0	5.10%	4.62%	33.15%

2005 - 2006 Backtest



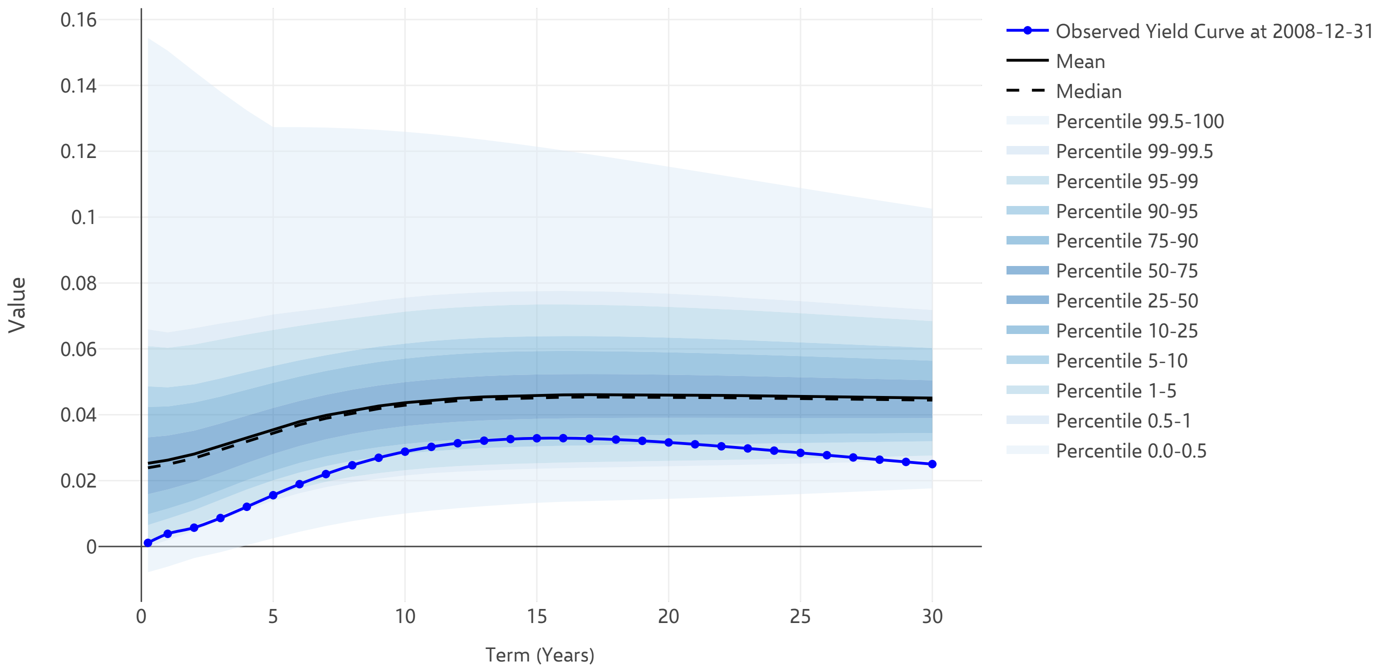
Term (Years)	Yield at End-2005	Yield at End-2006	Simulated Percentile
0.25	4.01%	4.92%	74.73%
2.0	4.38%	4.77%	71.50%
5.0	4.29%	4.60%	68.11%
10.0	4.44%	4.74%	66.04%
20.0	4.62%	4.90%	65.69%

2006 - 2007 Backtest



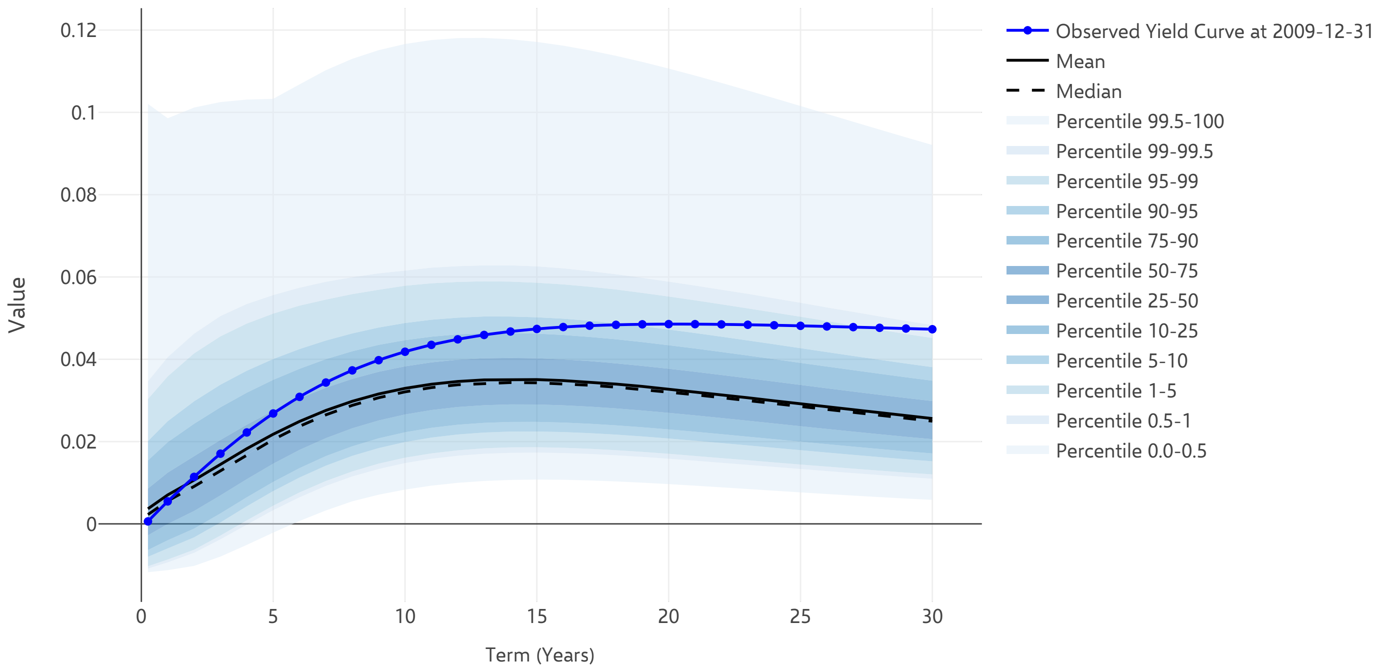
Term (Years)	Yield at End-2006	Yield at End-2007	Simulated Percentile
0.25	4.92%	3.30%	28.67%
2.0	4.77%	3.03%	19.76%
5.0	4.60%	3.43%	23.71%
10.0	4.74%	4.29%	40.27%
20.0	4.90%	4.61%	44.80%

2007 - 2008 Backtest



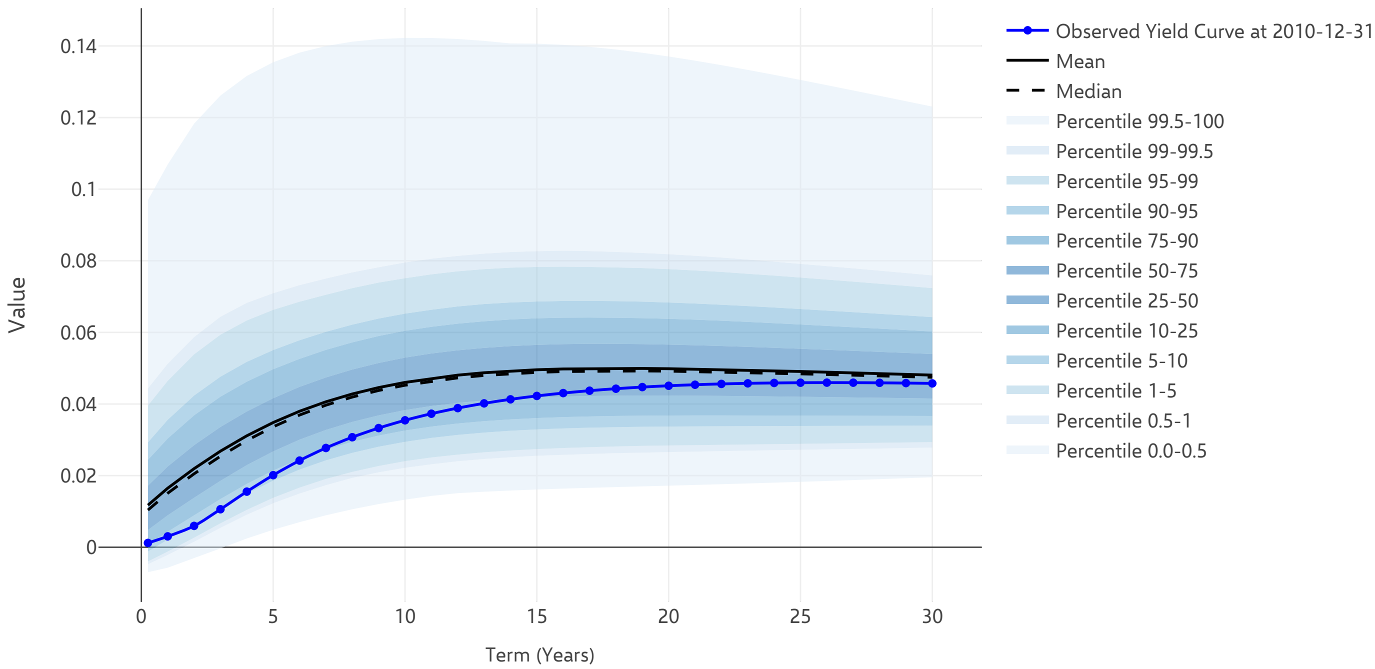
Term (Years)	Yield at End-2007	Yield at End-2008	Simulated Percentile
0.25	3.30%	0.11%	0.83%
2.0	3.03%	0.57%	0.77%
5.0	3.43%	1.56%	1.09%
10.0	4.29%	2.88%	5.86%
20.0	4.61%	3.16%	5.88%

2008 - 2009 Backtest



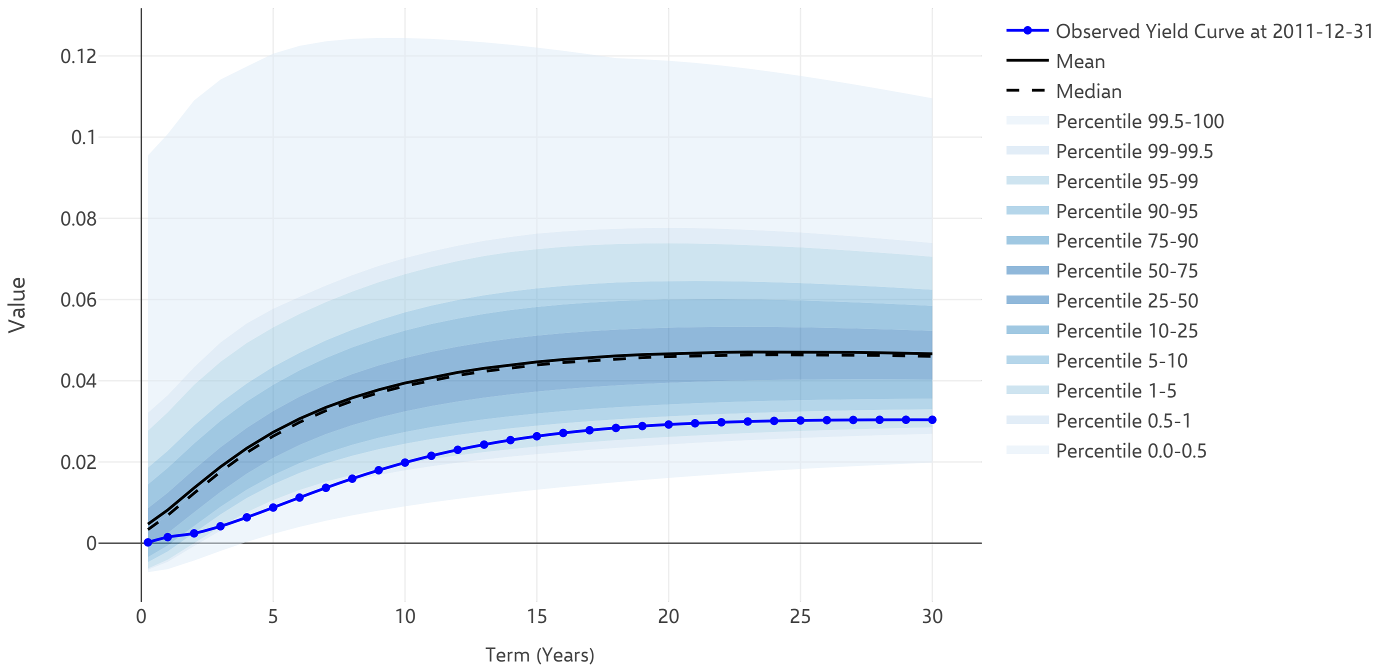
Term (Years)	Yield at End-2008	Yield at End-2009	Simulated Percentile
0.25	0.11%	0.06%	41.79%
2.0	0.57%	1.14%	59.01%
5.0	1.56%	2.68%	73.08%
10.0	2.88%	4.18%	84.55%
20.0	3.16%	4.85%	96.17%

2009 - 2010 Backtest



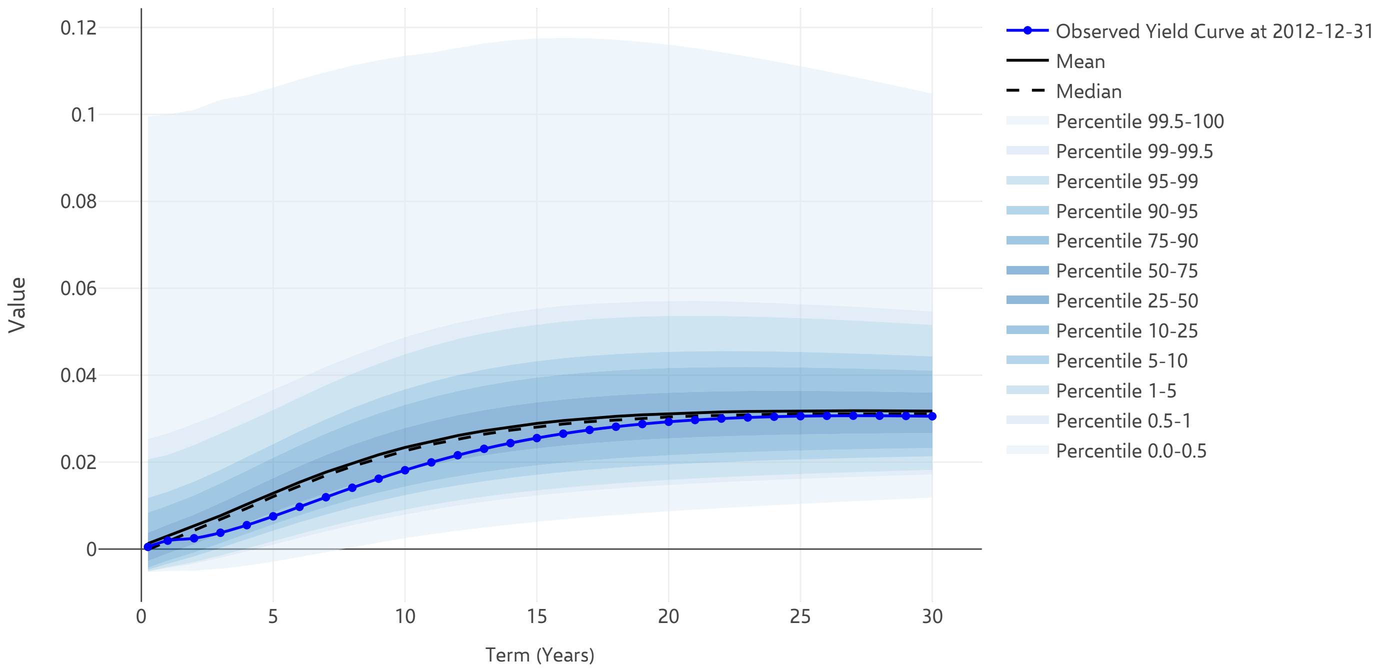
Term (Years)	Yield at End-2009	Yield at End-2010	Simulated Percentile
0.25	0.06%	0.12%	11.42%
2.0	1.14%	0.60%	4.30%
5.0	2.68%	2.01%	7.45%
10.0	4.18%	3.54%	16.69%
20.0	4.85%	4.51%	34.59%

2010 - 2011 Backtest



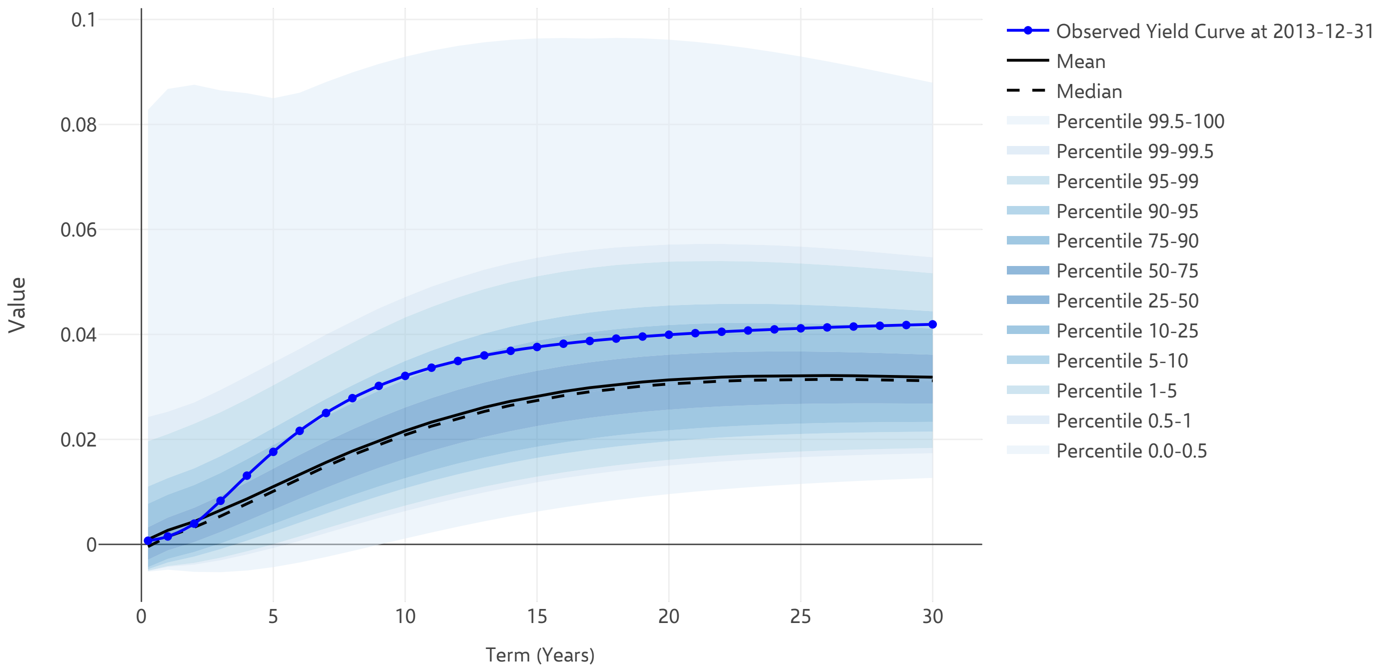
Term (Years)	Yield at End-2010	Yield at End-2011	Simulated Percentile
0.25	0.12%	0.02%	30.89%
2.0	0.60%	0.24%	4.74%
5.0	2.01%	0.88%	0.34%
10.0	3.54%	1.98%	1.10%
20.0	4.51%	2.92%	2.91%

2011 - 2012 Backtest



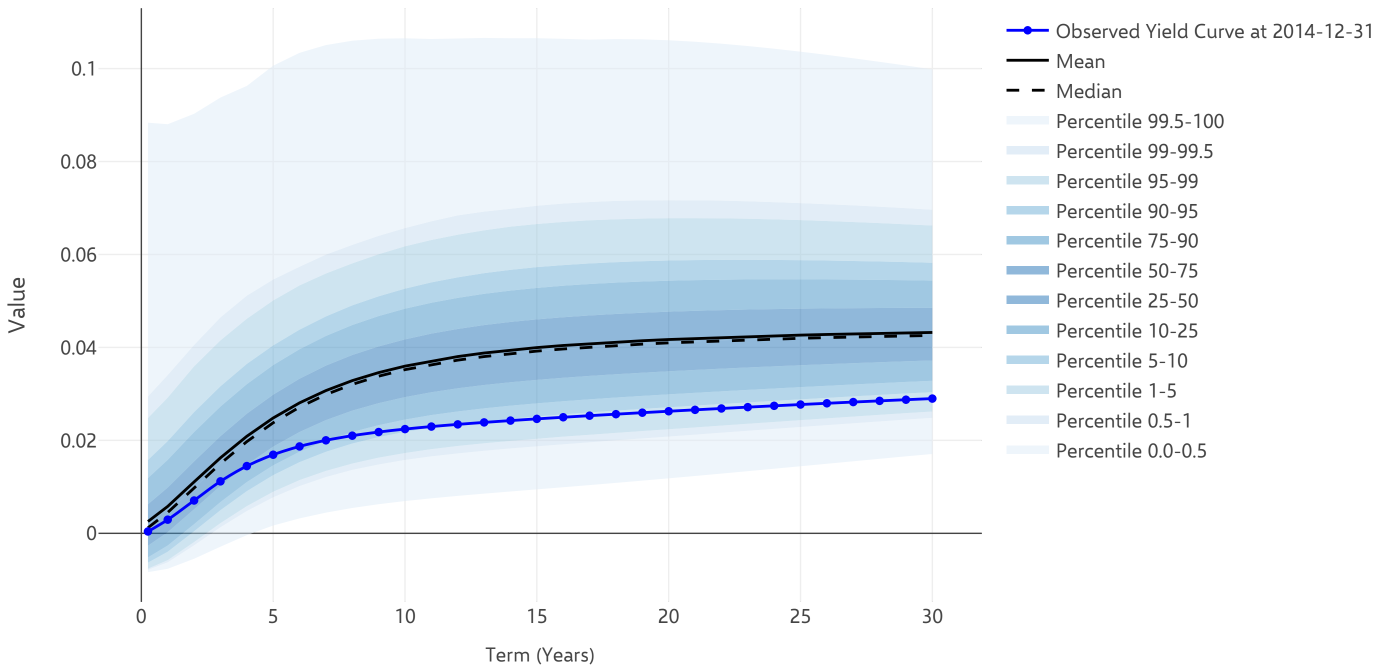
Term (Years)	Yield at End-2011	Yield at End-2012	Simulated Percentile
0.25	0.02%	0.05%	54.94%
2.0	0.24%	0.25%	36.76%
5.0	0.88%	0.75%	19.40%
10.0	1.98%	1.81%	25.66%
20.0	2.92%	2.93%	44.13%

2012 - 2013 Backtest



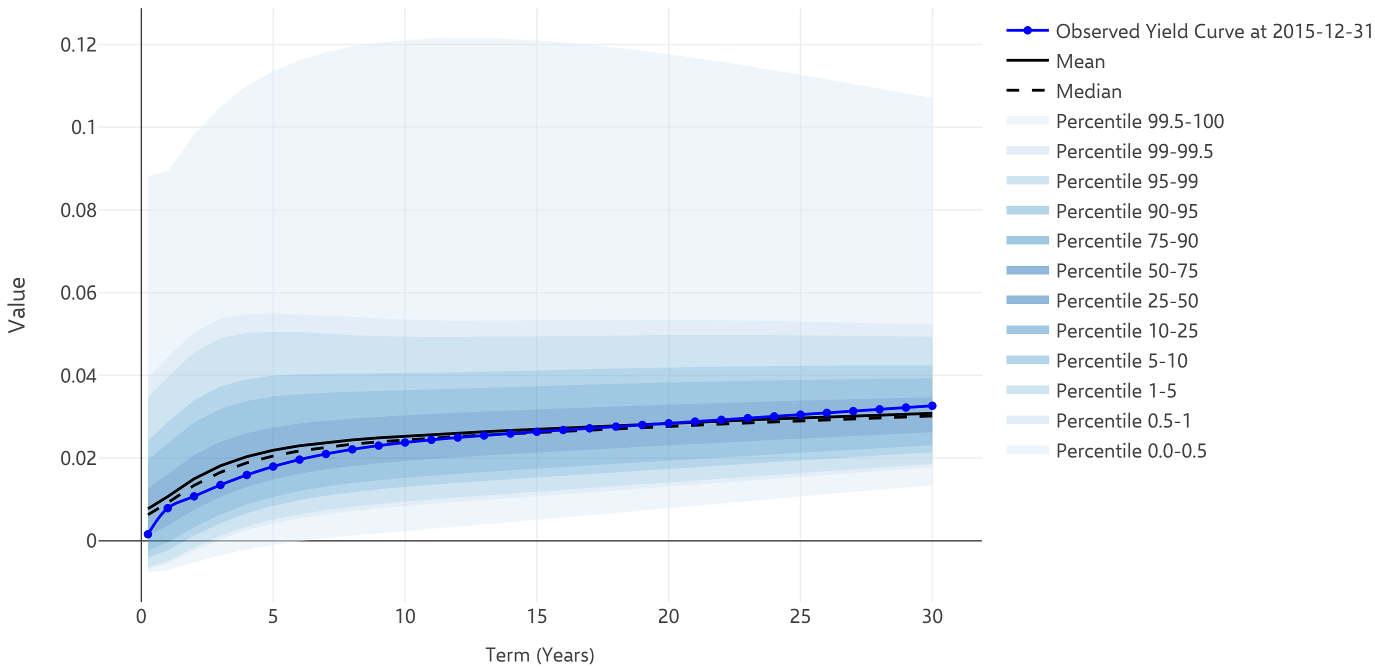
Term (Years)	Yield at End-2012	Yield at End-2013	Simulated Percentile
0.25	0.05%	0.07%	59.20%
2.0	0.25%	0.40%	55.67%
5.0	0.75%	1.76%	86.77%
10.0	1.81%	3.21%	91.22%
20.0	2.93%	3.99%	86.20%

2013 - 2014 Backtest



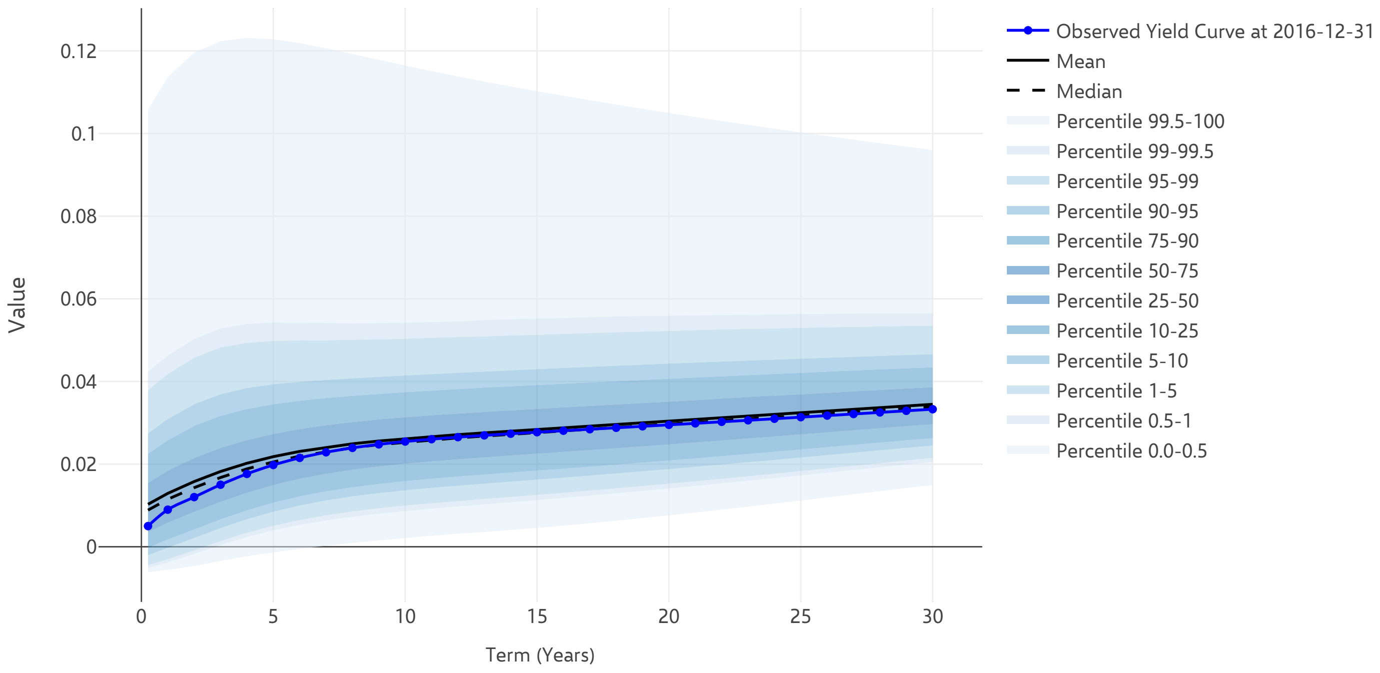
Term (Years)	Yield at End-2013	Yield at End-2014	Simulated Percentile
0.25	0.07%	0.04%	45.11%
2.0	0.40%	0.71%	35.40%
5.0	1.76%	1.69%	17.77%
10.0	3.21%	2.24%	5.96%
20.0	3.99%	2.63%	3.92%

2014 - 2015 Backtest



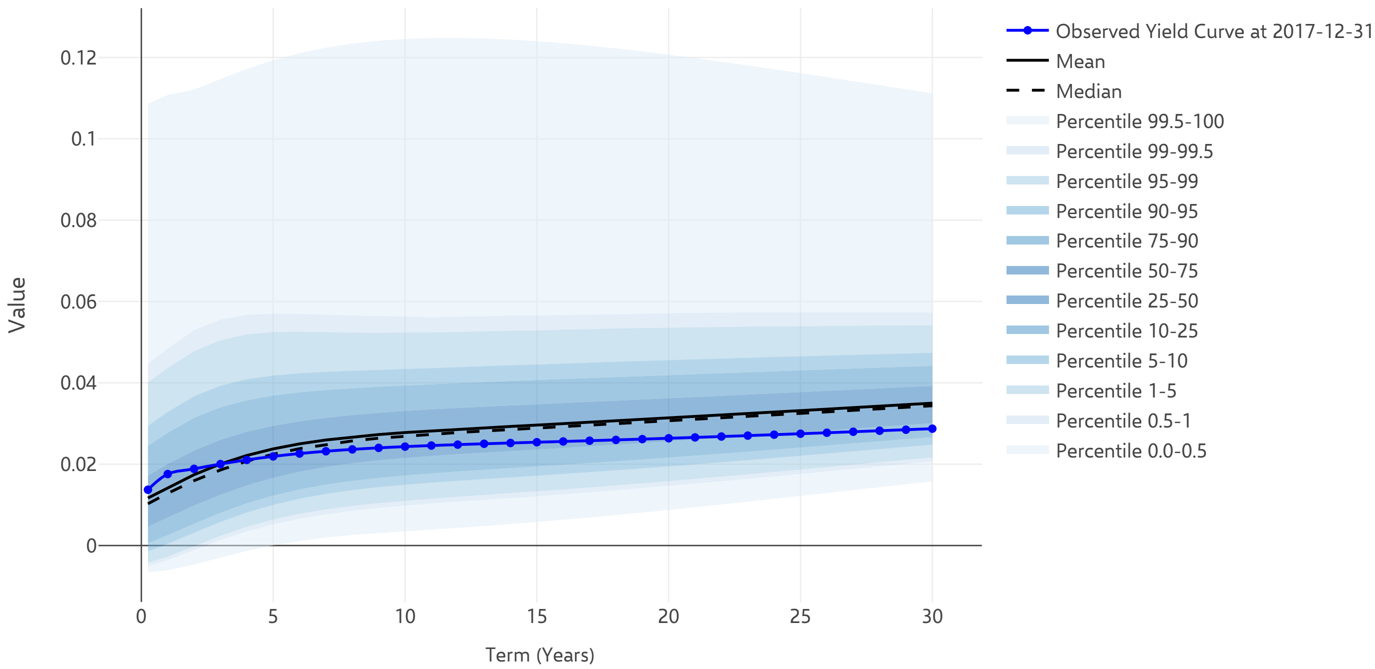
Term (Years)	Yield at End-2014	Yield at End-2015	Simulated Percentile
0.25	0.04%	0.16%	27.01%
2.0	0.71%	1.08%	38.71%
5.0	1.69%	1.80%	38.67%
10.0	2.24%	2.38%	46.75%
20.0	2.63%	2.84%	54.01%

2015 - 2016 Backtest



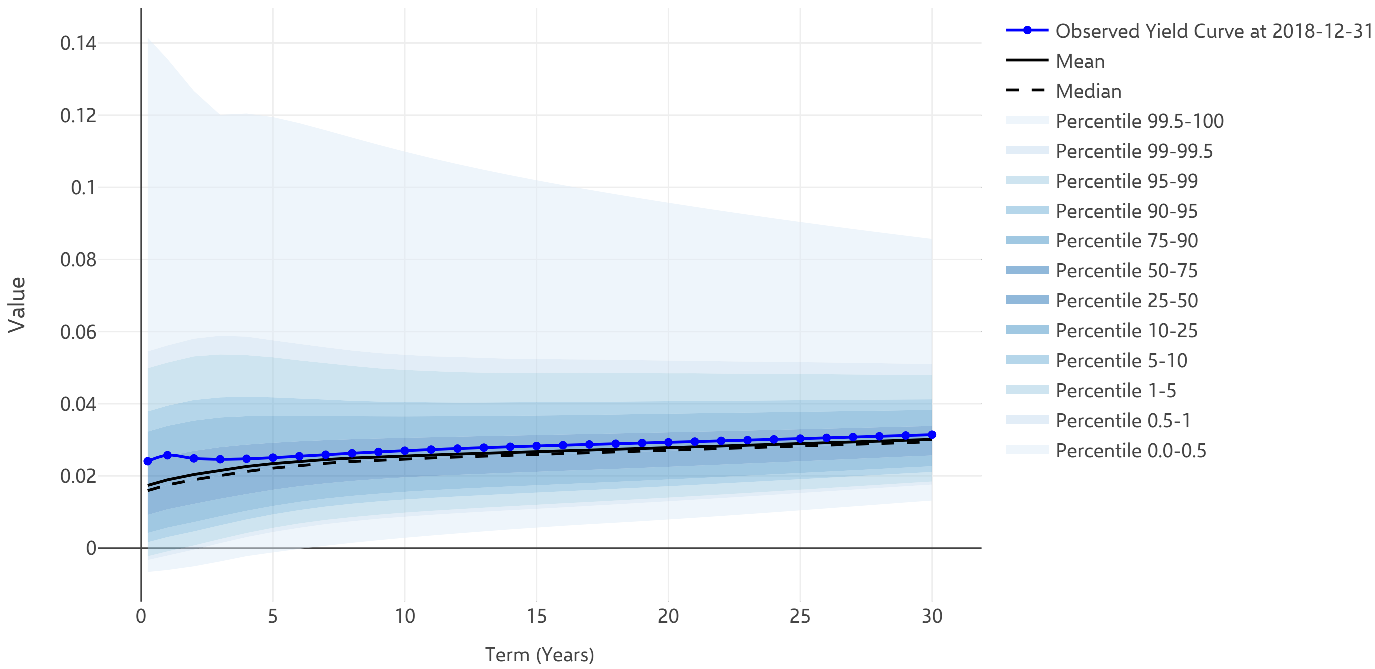
Term (Years)	Yield at End-2015	Yield at End-2016	Simulated Percentile
0.25	0.16%	0.50%	31.87%
2.0	1.08%	1.20%	40.21%
5.0	1.80%	1.98%	46.62%
10.0	2.38%	2.55%	50.61%
20.0	2.84%	2.95%	49.41%

2016 - 2017 Backtest



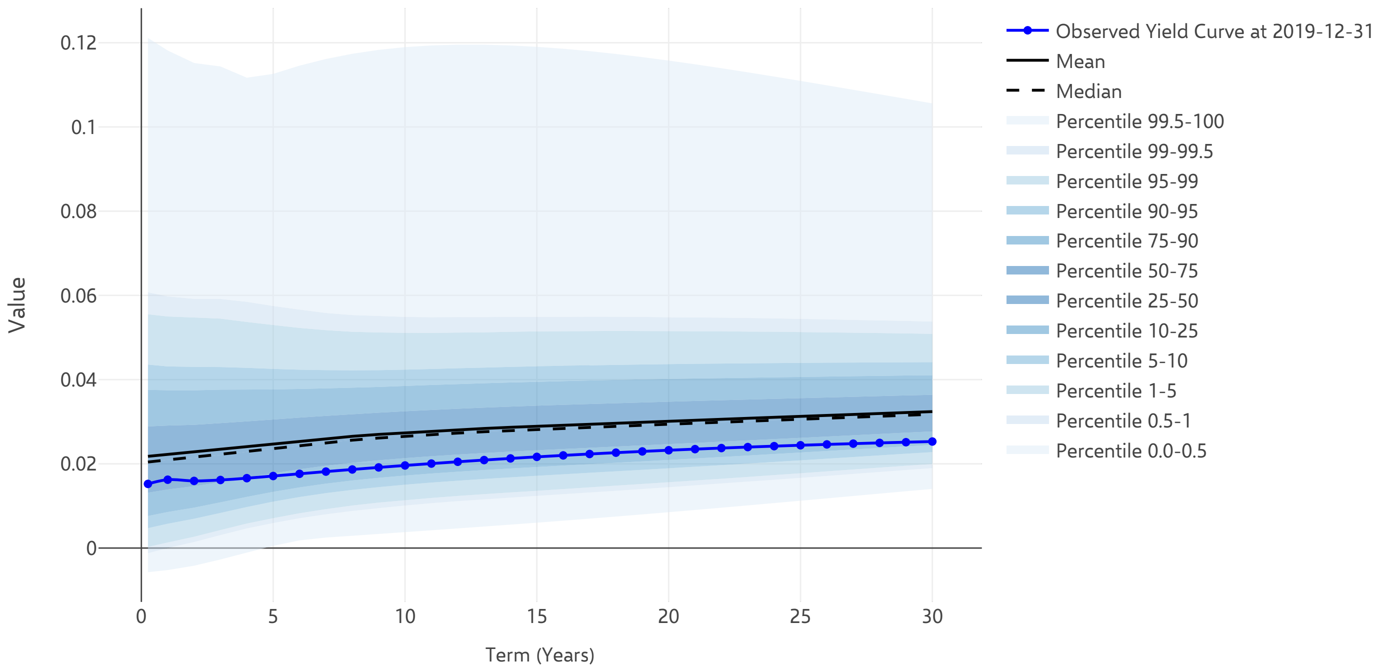
Term (Years)	Yield at End-2016	Yield at End-2017	Simulated Percentile
0.25	0.50%	1.37%	63.63%
2.0	1.20%	1.89%	61.01%
5.0	1.98%	2.19%	47.61%
10.0	2.55%	2.43%	37.62%
20.0	2.95%	2.64%	28.60%

2017 - 2018 Backtest



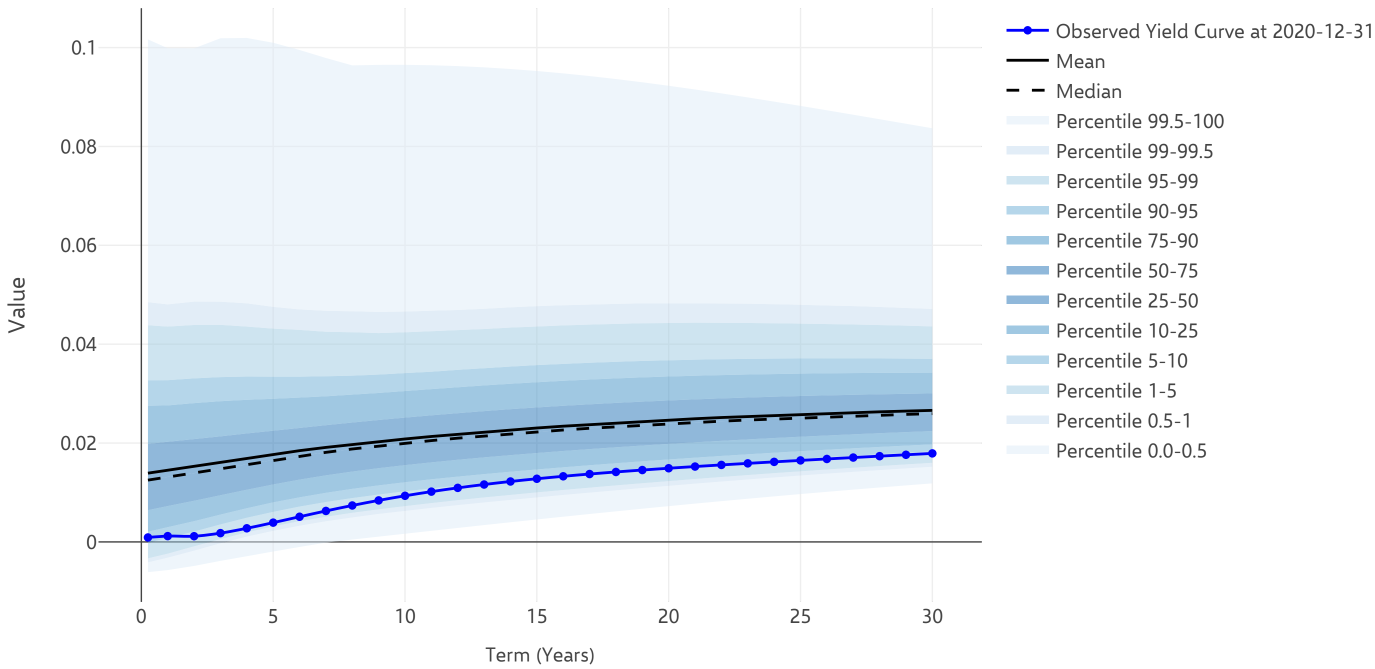
Term (Years)	Yield at End-2017	Yield at End-2018	Simulated Percentile
0.25	1.37%	2.41%	75.26%
2.0	1.89%	2.49%	69.54%
5.0	2.19%	2.51%	61.52%
10.0	2.43%	2.70%	60.77%
20.0	2.64%	2.93%	62.52%

2018 - 2019 Backtest



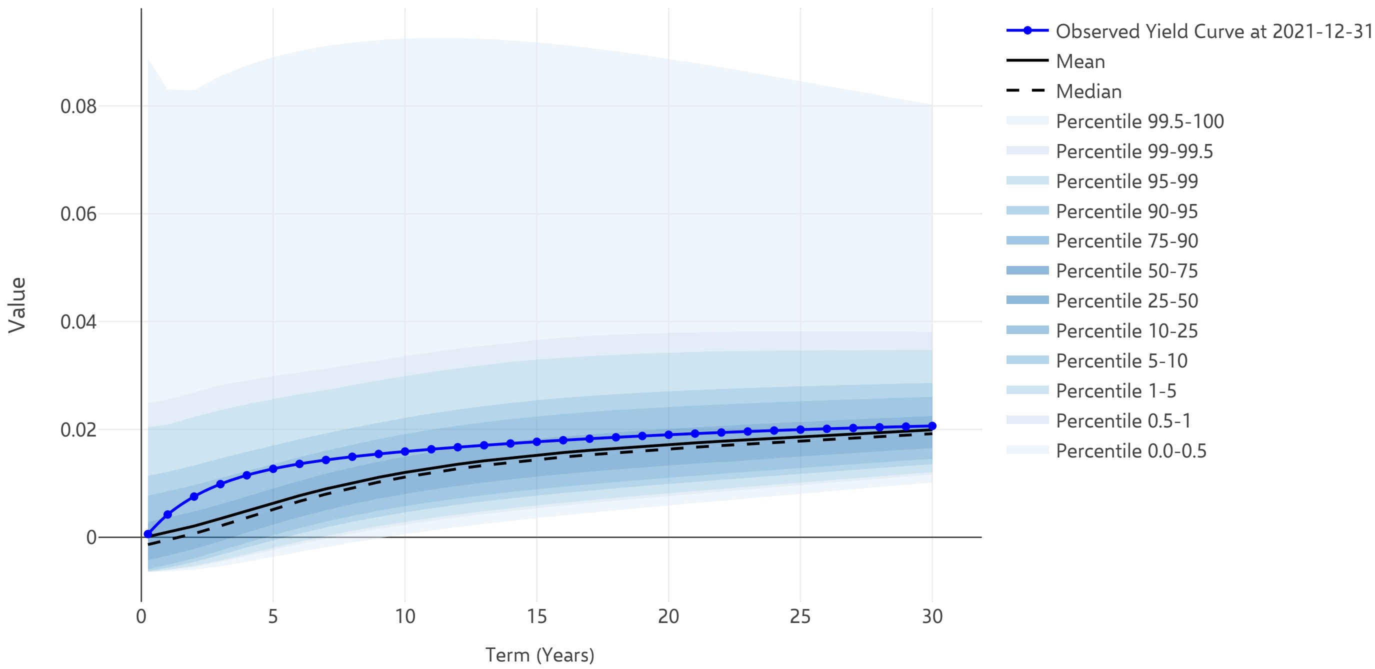
Term (Years)	Yield at End-2018	Yield at End-2019	Simulated Percentile
0.25	2.41%	1.52%	31.89%
2.0	2.49%	1.59%	29.53%
5.0	2.51%	1.71%	22.43%
10.0	2.70%	1.96%	17.75%
20.0	2.93%	2.32%	18.35%

2019 - 2020 Backtest



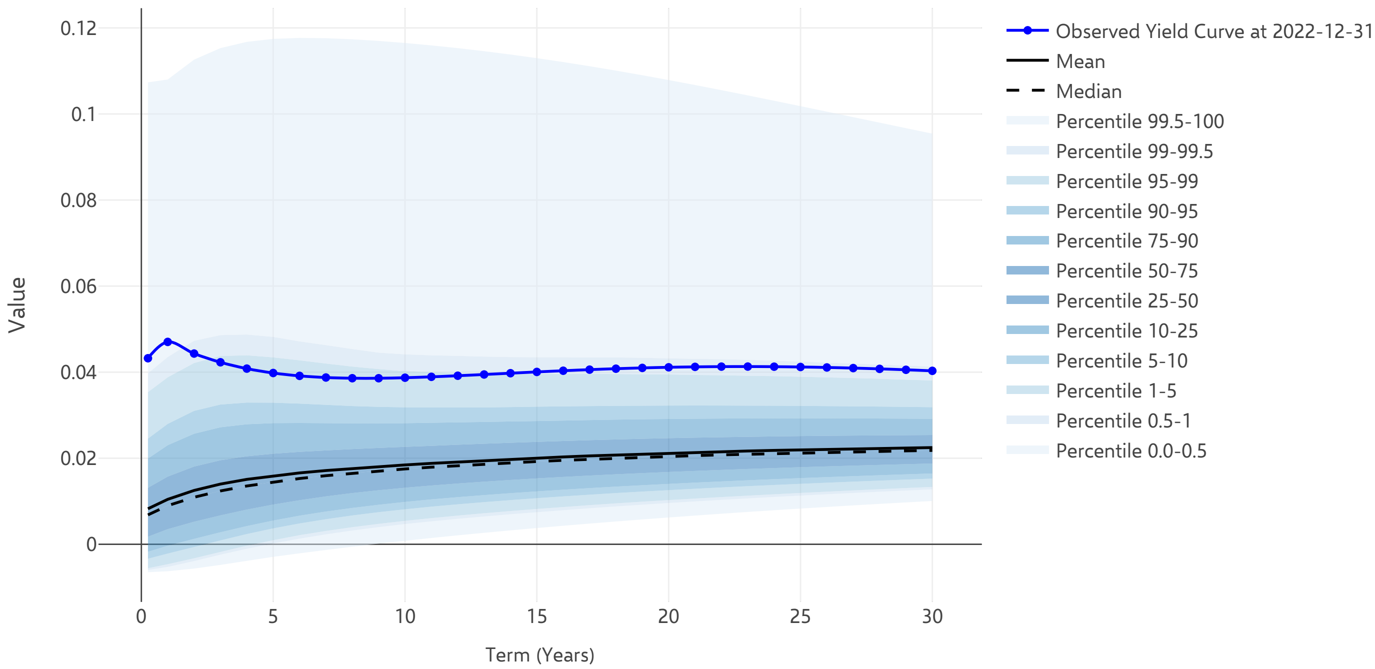
Term (Years)	Yield at End-2019	Yield at End-2020	Simulated Percentile
0.25	1.52%	0.09%	7.18%
2.0	1.59%	0.12%	3.34%
5.0	1.71%	0.39%	1.63%
10.0	1.96%	0.93%	3.31%
20.0	2.32%	1.49%	4.73%

2020 - 2021 Backtest



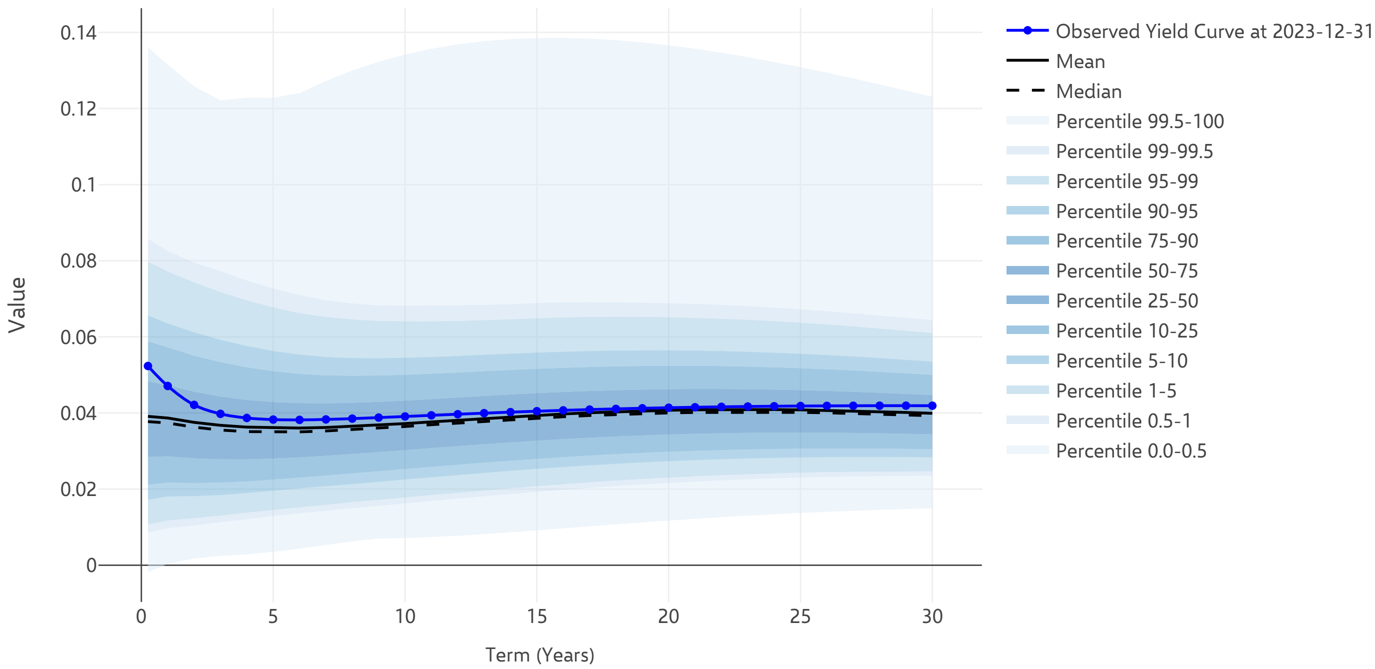
Term (Years)	Yield at End-2020	Yield at End-2021	Simulated Percentile
0.25	0.09%	0.06%	63.15%
2.0	0.12%	0.76%	84.89%
5.0	0.39%	1.27%	88.00%
10.0	0.93%	1.59%	79.36%
20.0	1.49%	1.90%	68.49%

2021 - 2022 Backtest



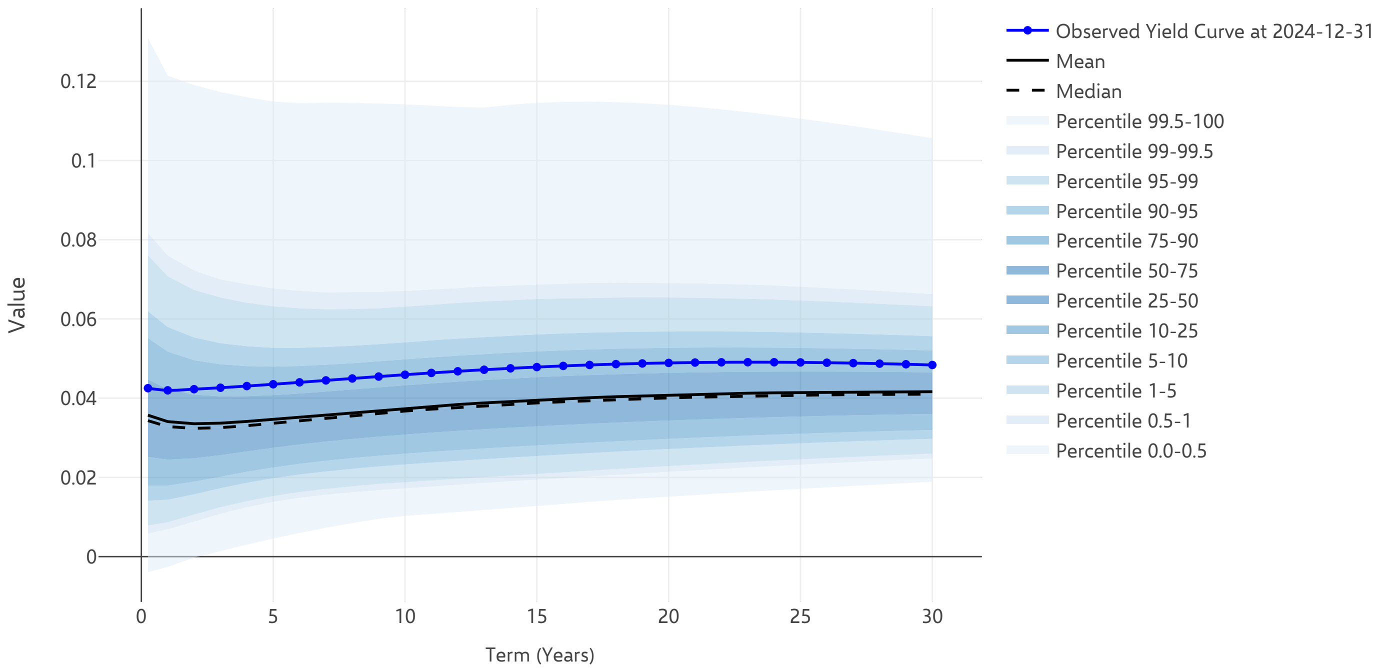
Term (Years)	Yield at End-2021	Yield at End-2022	Simulated Percentile
0.25	0.06%	4.32%	99.71%
2.0	0.76%	4.43%	99.27%
5.0	1.27%	3.98%	98.30%
10.0	1.59%	3.87%	98.66%
20.0	1.90%	4.11%	99.28%

2022 - 2023 Backtest



Term (Years)	Yield at End-2022	Yield at End-2023	Simulated Percentile
0.25	4.32%	5.23%	82.01%
2.0	4.43%	4.21%	66.88%
5.0	3.98%	3.83%	61.48%
10.0	3.87%	3.91%	60.59%
20.0	4.11%	4.14%	56.11%

2023 - 2024 Backtest



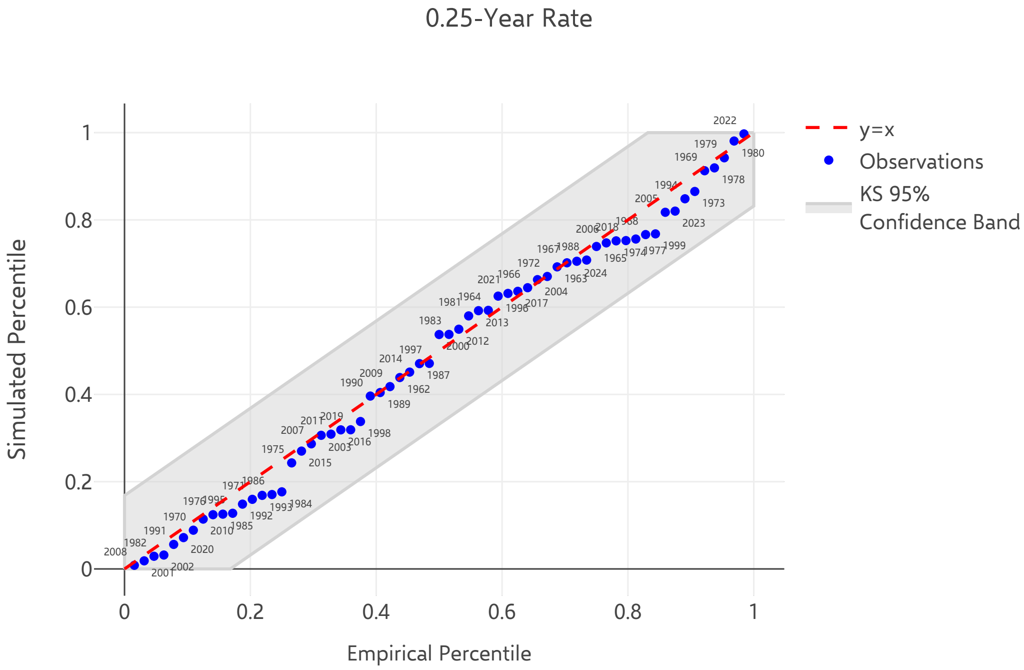
Term (Years)	Yield at End-2023	Yield at End-2024	Simulated Percentile
0.25	5.23%	4.25%	70.52%
2.0	4.21%	4.23%	78.09%
5.0	3.83%	4.35%	81.98%
10.0	3.91%	4.59%	82.45%
20.0	4.14%	4.89%	82.23%

P-P Plots

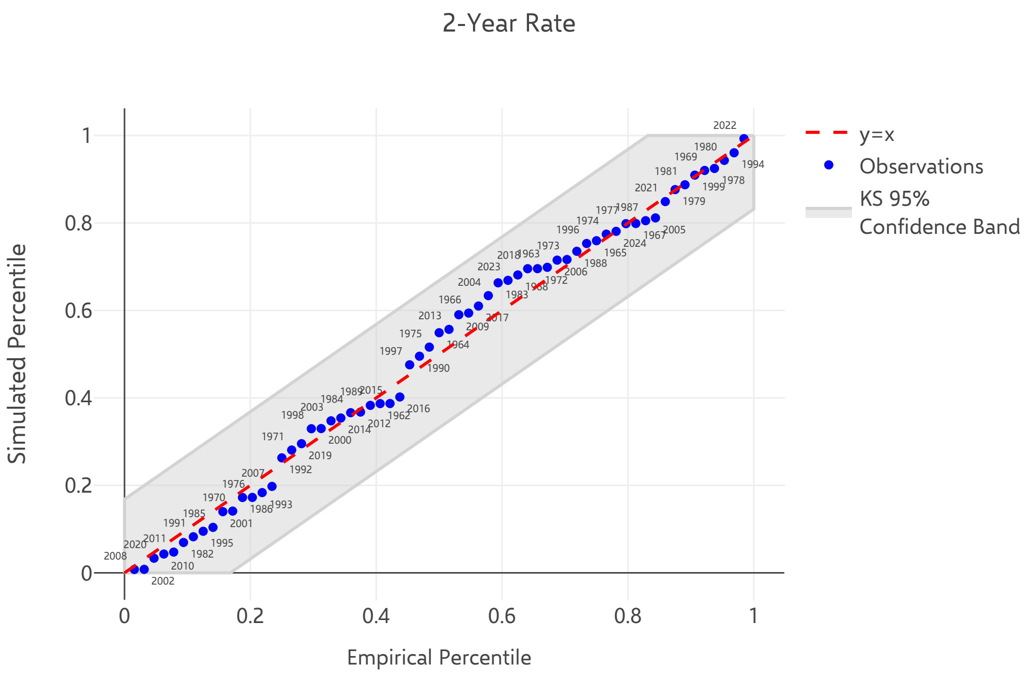
The P-P plots (Probability-Probability plots) in this section are a graphical summary of the backtesting results which can be used to assess the distributional fit of the model's predictions against actual outcomes. Each plot below shows a P-P plot for a given key rate. The y-axis shows the percentile of the observed year-end rate on the predictive distribution forecast of the model from one year earlier. The x-axis shows the observed (empirical) probability of the observed outcome being less than or equal to that percentile.

If the model is perfect, all the points would be expected to lie on the straight line y=x. That is to say, when the model predicts that something should occur with a probability of 25% (say), it would actually occur 25% of the time. However, in small samples, there will be some variation around the straight line, even if the model is perfect, due to random variation. The Kolmogorov-Smirnov (KS) bands show the 95% critical values for the Kolmogorov-Smirnov test statistic. If the points lie within the bounds of the critical values, it suggests that the deviations from the diagonal line are not statistically significant at the 95% confidence level, indicating a good fit between the actual outcomes or predictions and the assumed distribution. Conversely, points falling outside the critical values indicate statistically significant deviations at the 95% confidence limit, implying potential issues with the distributional assumptions or the model's fit.

0.25-Year Rate

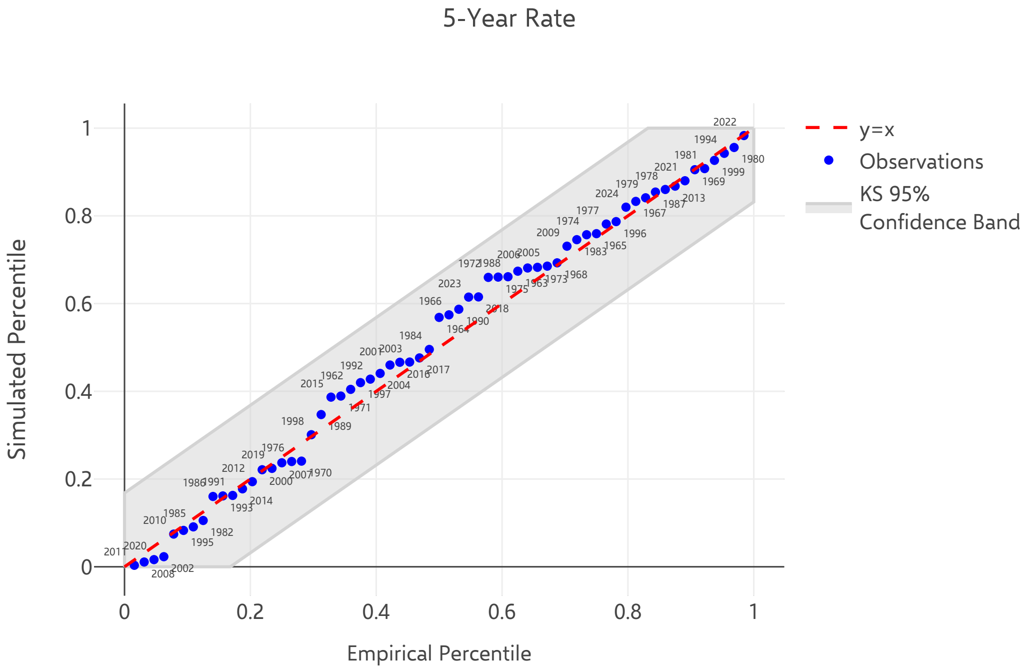


2-Year Rate



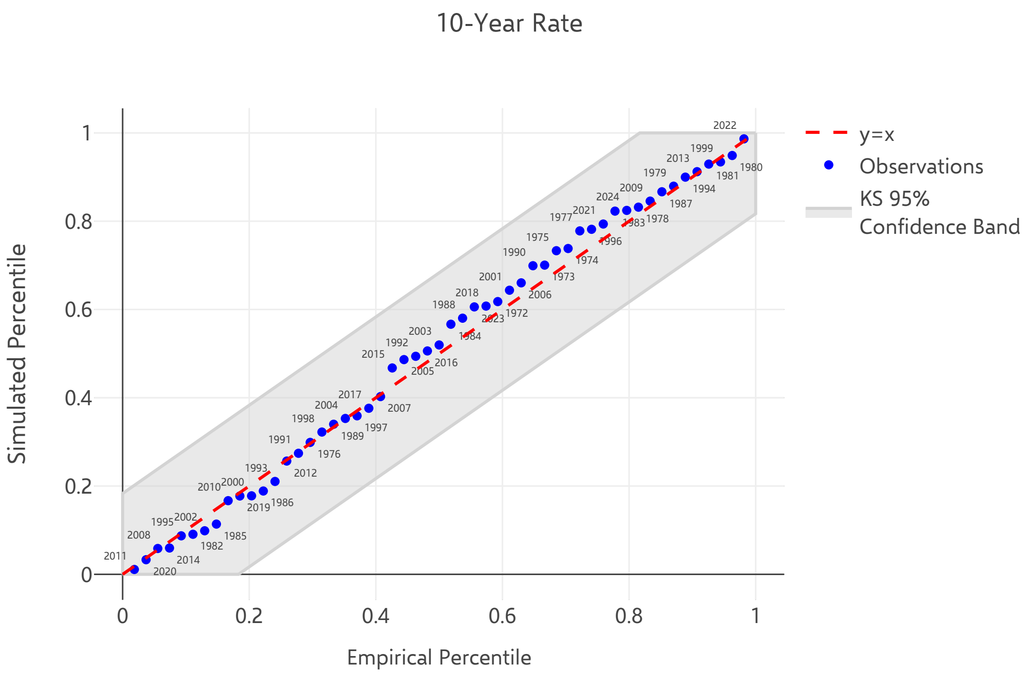
2-Year Rate
Simulated Percentile
Empirical Percentile
0
0.2
0.4
0.6
0.8
1
y=x
Observations
KS 95% Confidence Band

5-Year Rate



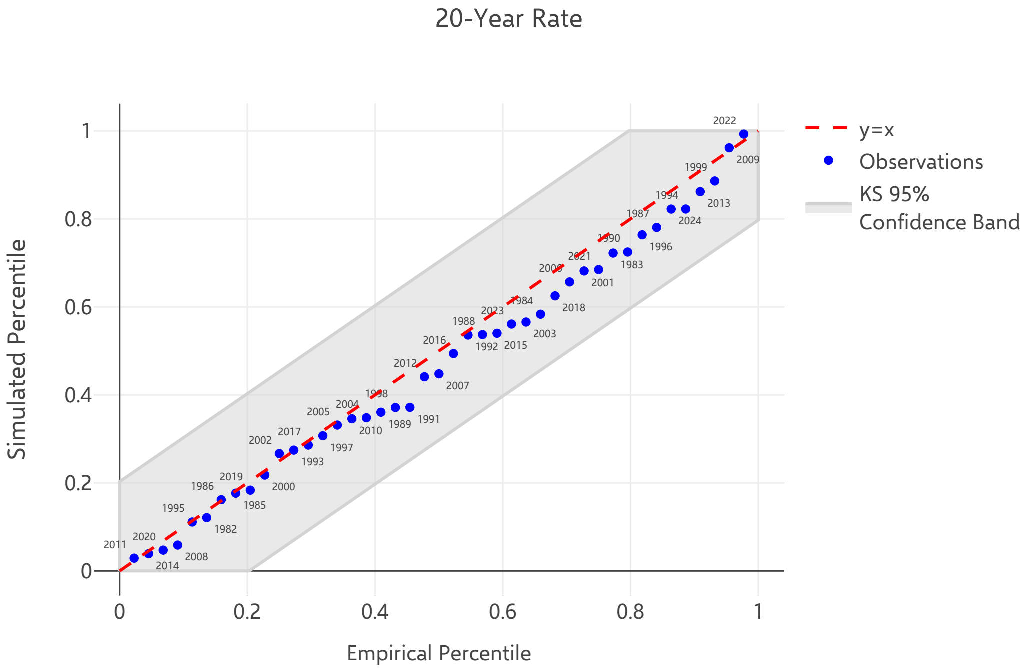
5-Year Rate
Simulated Percentile
Empirical Percentile
0
0.2
0.4
0.6
0.8
1
y=x
Observations
KS 95% Confidence Band

10-Year Rate



10-Year Rate
Simulated Percentile
Empirical Percentile
y=x
Observations
KS 95% Confidence Band

20-Year Rate



20-Year Rate
Simulated Percentile
Empirical Percentile
y=x
Observations
KS 95% Confidence Band

Data Sources

Zero Coupon Yields: Board of Governors of the Federal Reserve System (US), Nominal Yield Curve, https://www.federalreserve.gov/data/nominal-yield-curve.htm

3 Month Treasury Bill: Board of Governors of the Federal Reserve System (US), 3-Month Treasury Bill Secondary Market Rate, Discount Basis [DTB3], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/DTB3, converted to continuously compounded rate

Percentiles: Proteus Scenario Generator