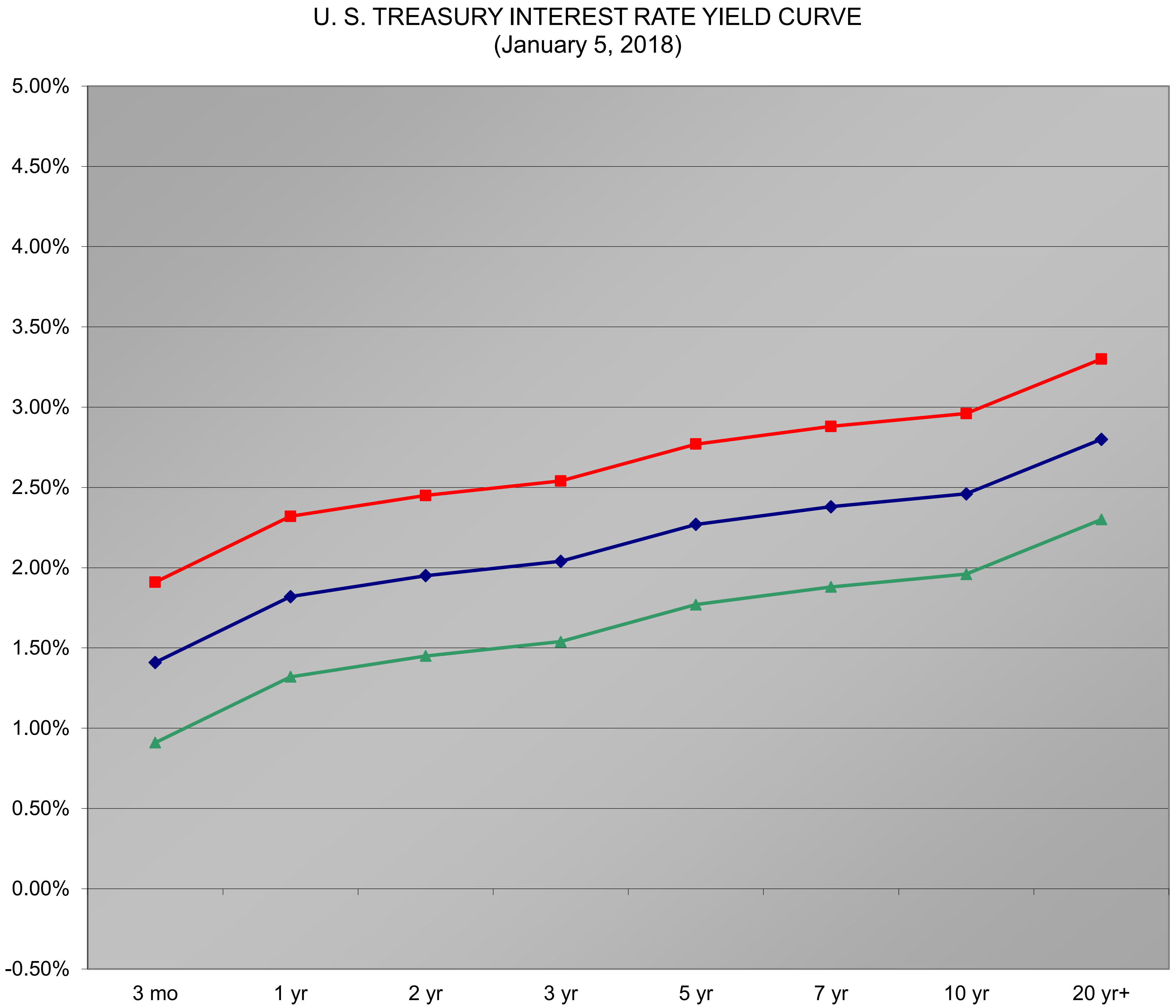
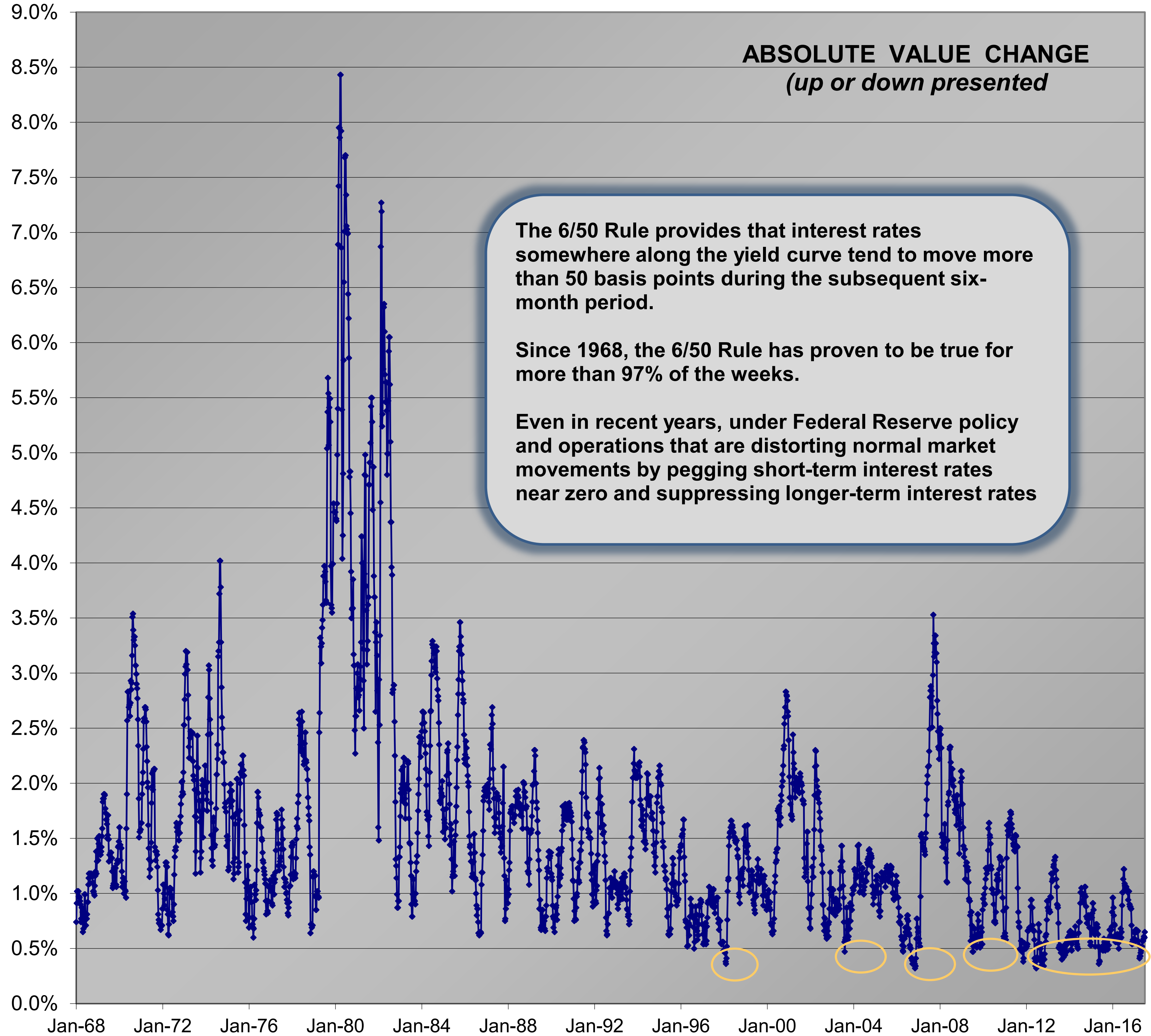


- Over the past 50 years, interest rates have moved more than 50 basis points (+/- 0.50%) at some point across the yield curve during every subsequent six-month period (except for twenty periods in the past 20 years that averaged less than 4 weeks and ranged from 1 to 13 weeks, the vast majority of which occurred since 2011).

- Based upon the history of interest rates, at least one interest rate point along the yield curve can be expected to exceed the upper boundary (red) or lower boundary (green) within the next 6 months (before the middle of the year).

Note: U.S. Treasury securities across the yield curve ranging from three months to 20+ years; weekly data (Friday) from the H.15 release.

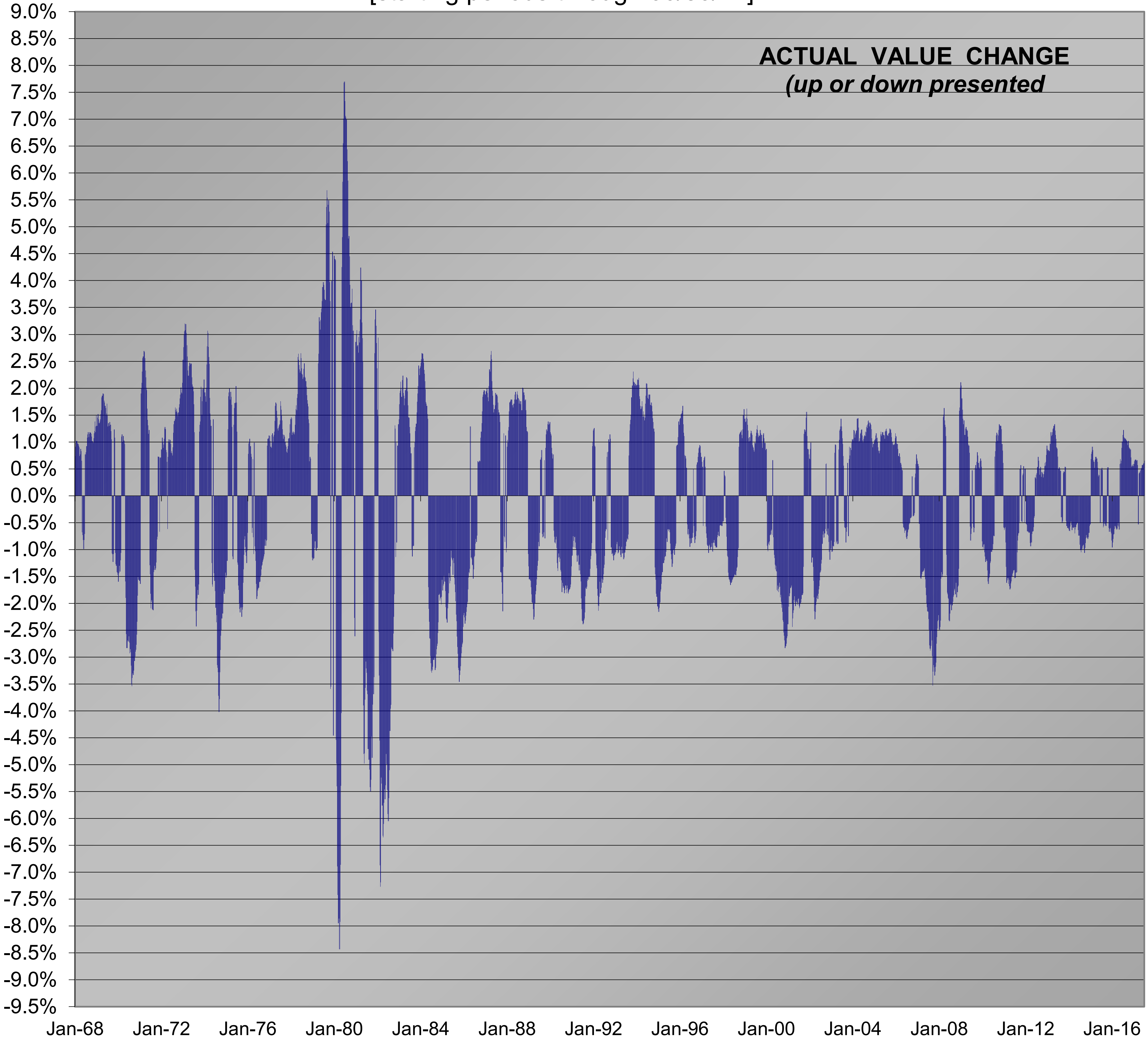
INTEREST RATE CHANGES WITHIN THE SUBSEQUENT 6 MONTHS
(rolling weekly periods over the past 50 years: 1968-01/05/18)
[starting periods through 06/30/17]



	Total	0.0% - 0.5%	0.5% - 1.0%	1.0% - 1.5%	1.5% - 2.0%	2.0% +
Periods	2,583	74	730	735	490	554
Percent	100.0%	2.9%	28.3%	28.5%	19.0%	21.4%

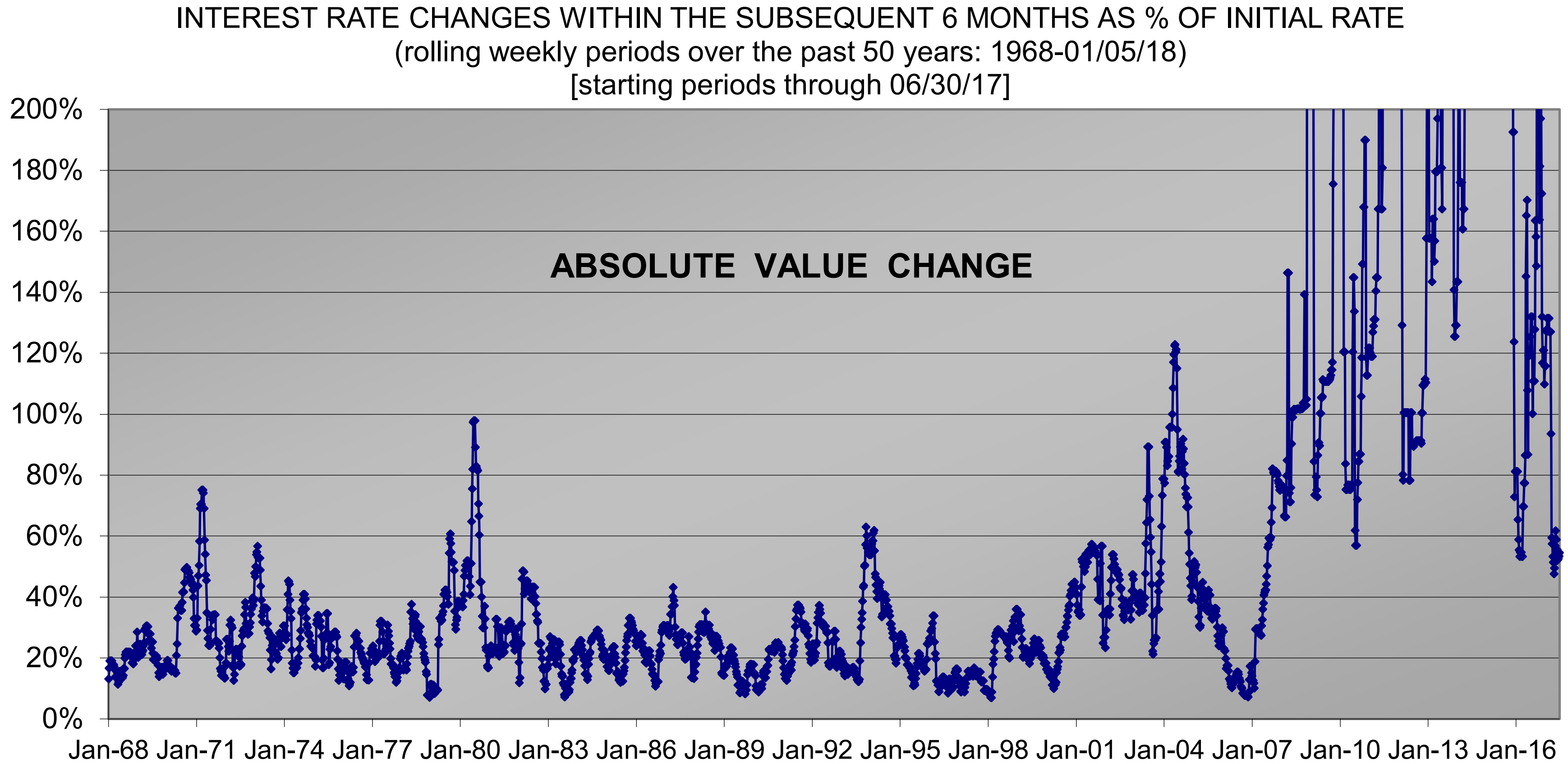
Note: U.S. Treasury securities across the yield curve ranging from three months to 20+ years; weekly data (Friday) from the H.15 release; the change represents either the maximum increase or decrease from the base period across the subsequent six months; five basis points are added to the range to reflect variations during the week. (Ver 1.1)

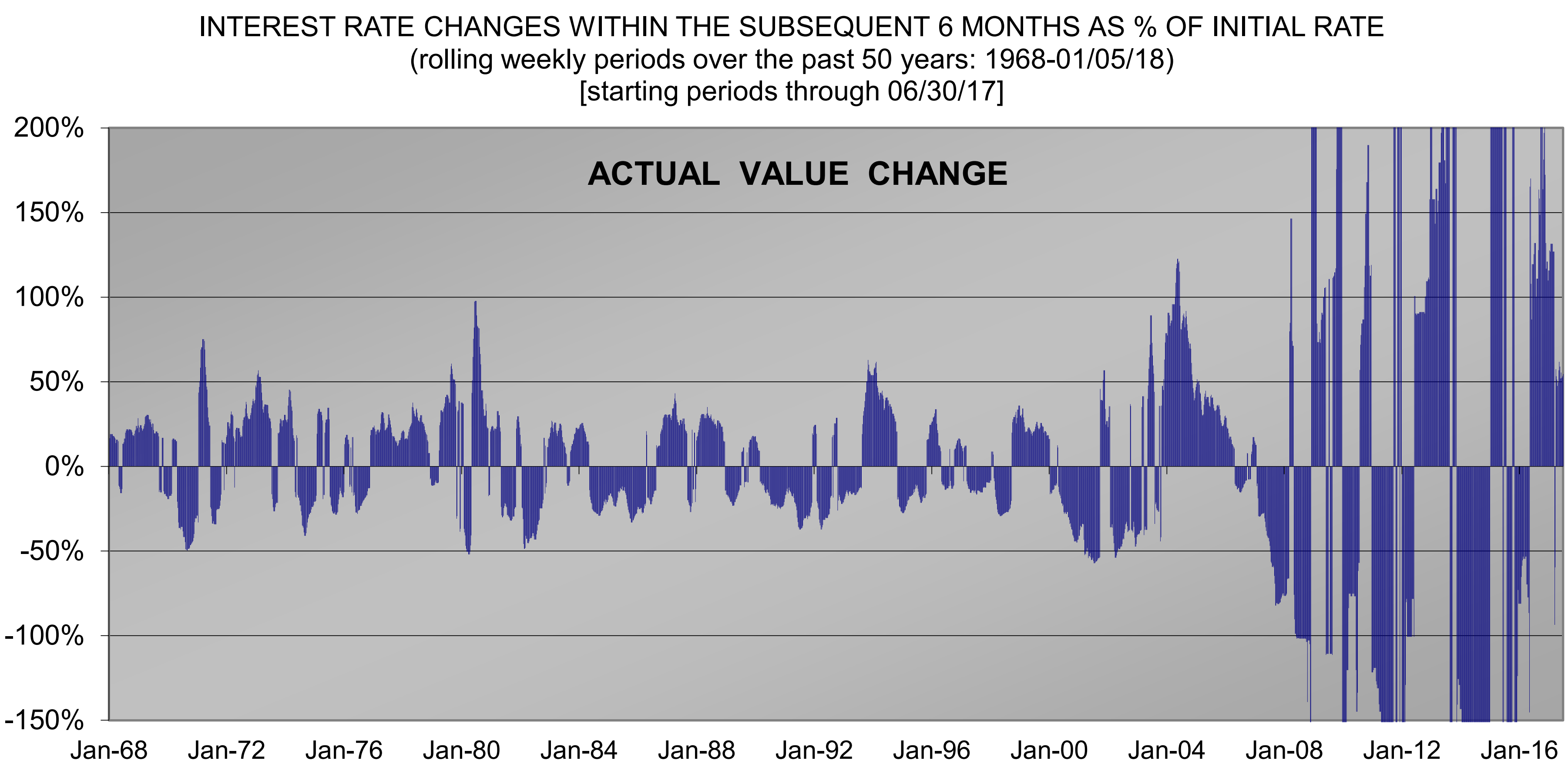
INTEREST RATE CHANGES WITHIN THE SUBSEQUENT 6 MONTHS
(rolling weekly periods over the past 50 years: 1968-01/05/18)
[starting periods through 06/30/17]



	Total	0.0% - 0.5%	0.5% - 1.0%	1.0% - 1.5%	1.5% - 2.0%	2.0% +
Periods	2,583	74	730	735	490	554
Percent	100.0%	2.9%	28.3%	28.5%	19.0%	21.4%

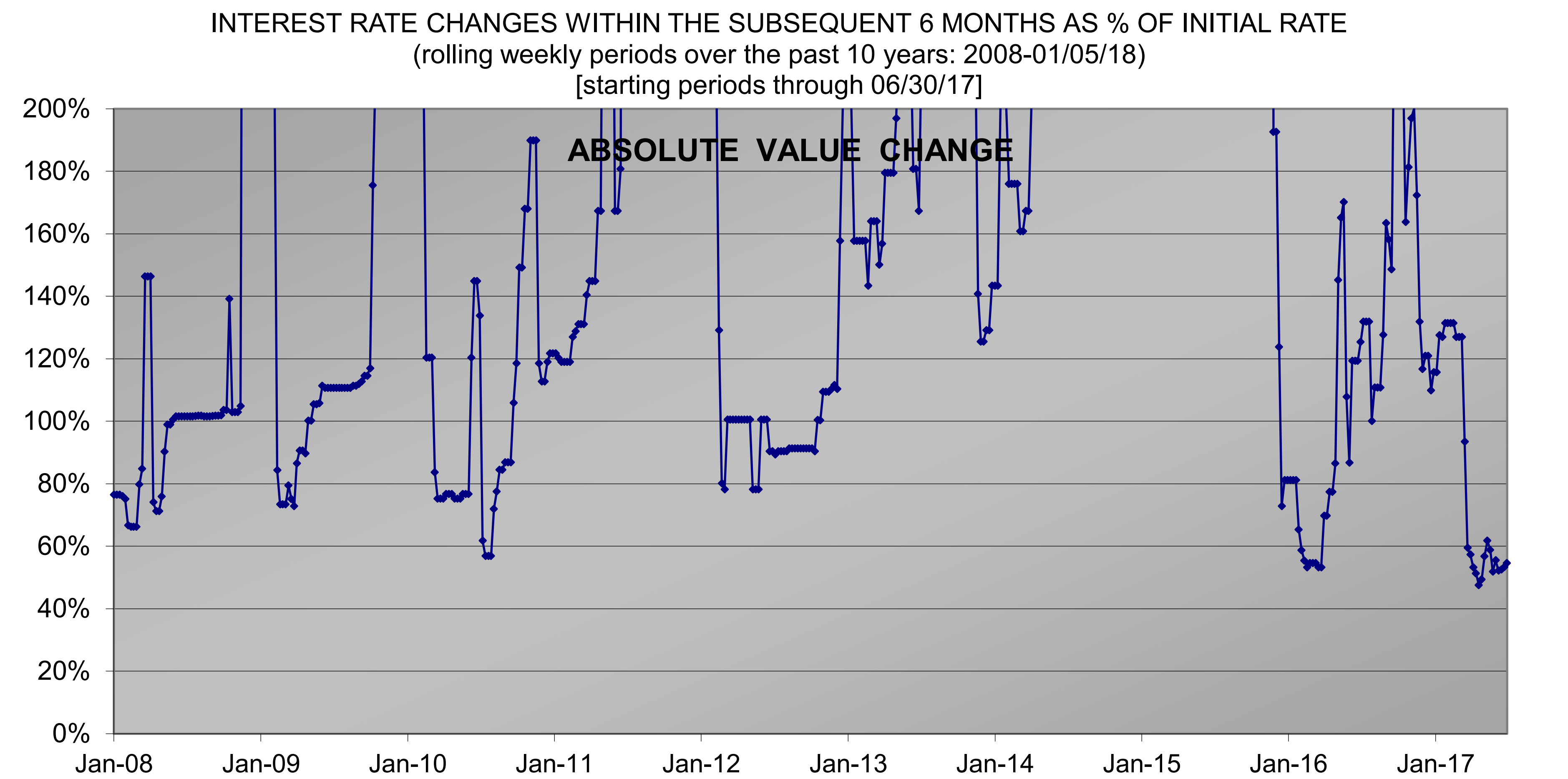
Note: U.S. Treasury securities across the yield curve ranging from three months to 20+ years; weekly data (Friday) from the H.15 release; the change represents the maximum increase or decrease from the base period across the subsequent six months; five basis points are added to the range to reflect variations during the week. (Ver 1.1)

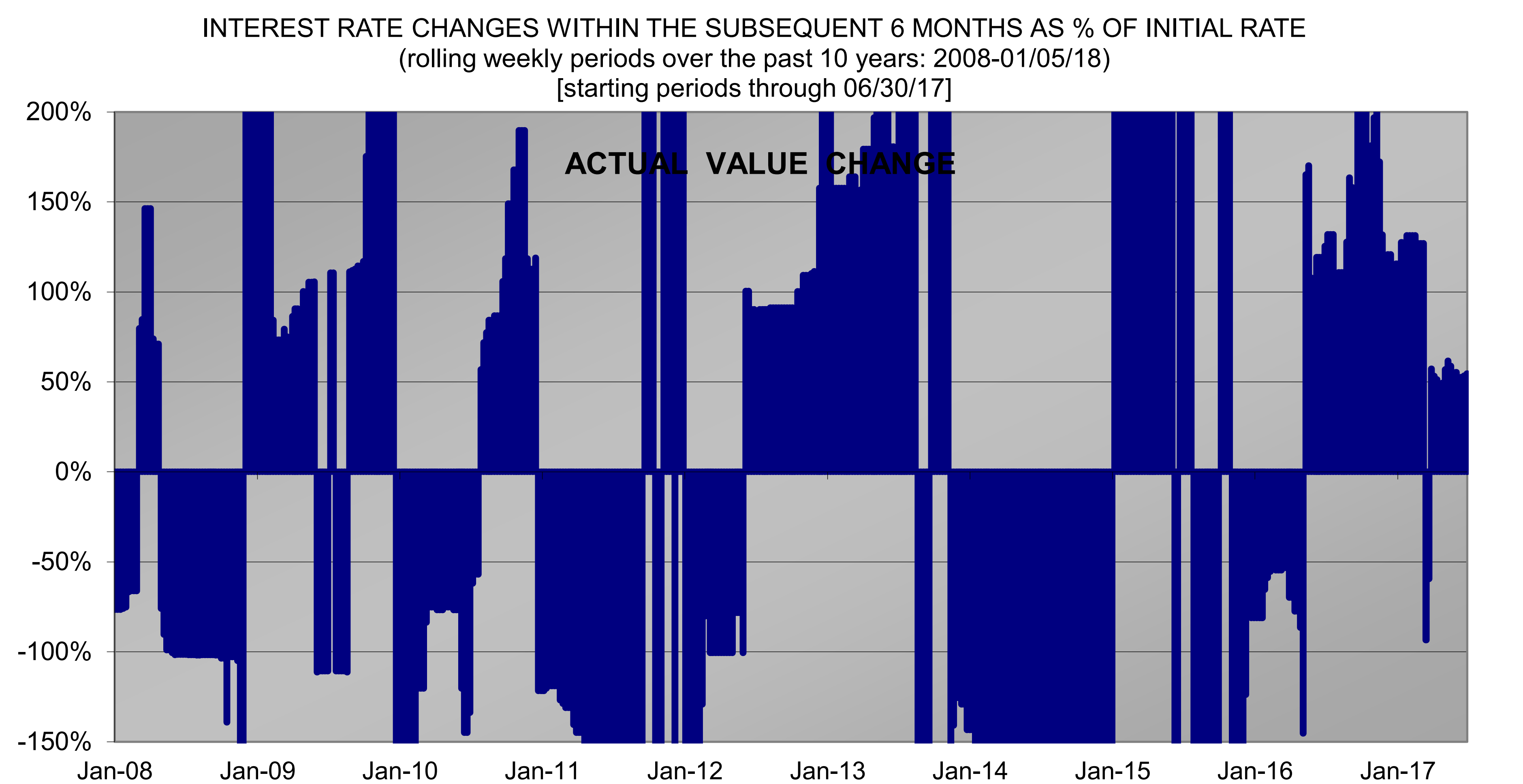




	Total	0% - 10%	10% - 20%	20% - 30%	30% - 50%	50% +
Periods	2,583	71	609	694	519	690
Percent	100.0%	2.7%	23.6%	26.9%	20.1%	26.7%

Note: U.S. Treasury securities across the yield curve ranging from three months to 20+ years; weekly data (Friday) from the H.15 release; the change represents the maximum increase or decrease from the base period across the subsequent six months as a percent of the base interest rate; five basis points are added to the range to reflect variations during the week. (Ver 1.1)





Note: U.S. Treasury securities across the yield curve ranging from three months to 20+ years; weekly data (Friday) from the H.15 release; the change represents the maximum increase or decrease from the base period across the subsequent six months as a percent of the base interest rate; five are basis points added to the range to reflect variations during the week.