



SIFMA Insights

Market Volatility around US Presidential Elections

A Look at Past Elections and Why This Time is Different

October 2020

Please see companion note **SIFMA Insights: Market Performance around US Presidential Elections**

Key Takeaways

- YTD 2020 VIX (vs. FY19): avg. 30.26, +96.6%; peak 82.69, +224.9%; trough 12.10, +4.9%
- Highest Nov. election year VIX: 2008, global financial crisis = 62.64; 2000, Dot.com bubble burst = 26.38
- Election day VIX: > 2 weeks prior; declines after election days, continues to settle over next 2 weeks
- No discernable VIX pattern whether an incumbent wins or not, nor if the winner is Democrat or Republican
- Disputes around vote counting & a potentially contested election result could keep 2020 VIX on its wild ride



Contents

Executive Summary	3
Recapping 2020 Heightened Volatility.....	4
VIX Down from Peak but Still Elevated	4
2020 Monthly Average View.....	5
Where Volatility Stands Currently.....	6
2020 vs. 2019 Comparison.....	7
Volatility Patterns in Election Years	8
2020 Not the Highest Average VIX.....	8
2020 vs. 2008, Not a Perfect Comparison.....	9
Comparing Election Period Volatility	11
Appendix: Historical Election Volatility Graphs	19
Appendix: SIFMA Insights Research Reports	23
Author.....	24

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Executive Summary

As we head in the 2020 U.S. presidential election, we are in an environment of heightened political discourse. We are also heading toward an election where many predict a delay in calling the election due to a substantial increase in mail-in/absentee balloting and a potential for contested results. This is all happening in a year of already heightened volatility given COVID-19, albeit down from spring levels.

Typically, volatility increases as we head election day and then comes down after. Market participants are wondering what 2020 will bring. Inside this note, we update trends on the path of volatility in 2020 and compare volatility patterns in prior election years to extrapolate what could happen over the next few weeks. We highlight the following: (through October 19)

- YTD 2020 VIX: avg. 30.26, +96.6% to FY19; peak 82.69, +224.9% to FY19; trough 12.10, +4.9% to FY19
- October 2020 VIX remains elevated at 27.22: +95.2% to January average, but -52.9% to March peak
- Compared to 2019, monthly average VIX trended 98% above last year
- While 2020 exhibits heightened volatility, it is not the highest on record
 - 2008 was the highest average at 32.69, +8.1% to the 2020 average
 - Yet 2020 does hold the highest peak on record at 82.69
 - 2008 not the same – VIX peaked in the spring in 2020 but in the fall of 2008
- Highest November average VIX in elections years were during times of market turmoil: 2008, the global financial crisis (VIX 62.64); 2000, the Dot.com bubble burst (26.38)
 - 2020 YTD average +14.7% to November 2000, -51.7% to November 2008
- October and November volatility versus the annual average:
 - October < full year 57% of the time
 - November < full year 71% of the time
 - November > October 57% of the time
- Election day VIX: > two trading weeks prior to the day; declines after election days and continues to settle over the next two trading weeks
- Does the winner matter? No discernable VIX pattern whether or not an incumbent wins or not, nor if the winner is a Democrat or Republican (incumbent race 57% of time periods analyzed, won 75% of the time)

Will 2020 be different? Disappointingly, the one example of questions around vote counting was in 2000, which was already experiencing turmoil from the Dot.com bubble burst. While it is difficult to separate other contributing factors from election related volatility, 2020 VIX could continue its wild ride over the next few weeks.

Recapping 2020 Heightened Volatility

VIX Down from Peak but Still Elevated

Continuing the work from our April note, SIFMA Insight [Spotlight: The VIX's Wild Ride](#)¹, we look back at volatility through October 2020. The emergence of the global pandemic Covid-19 in the first quarter of 2020 caused severe economic and capital markets shocks. This turmoil was evidenced by historically high volatility and sharp price declines – yet spikes in volumes – in equities and options markets. While market metrics have settled since the spring, volatility and volumes continue to ebb and flow with each economic report or update on developing a viable virus vaccine, whether positive or negative news. We also note that market metrics ticked up again in September, albeit down from peak volatility and volumes².

We started the year in a benign environment, with the VIX at 12.47 on January 2 (-19.0% to the 2019 average.) The VIX went on a wild ride in 2020, reaching historical highs in the spring during the height of the market turmoil. As of October 19, the VIX was at 28.76 (+86.9% to the 2019 average). We highlight the following trends in the VIX for YTD 2020 (through October 19):

- Average = 30.26, +96.6% to 2019 average (15.39)
- Peak = 82.69, +224.9% to 2019 peak (25.45)
- Trough = 12.10, +4.9% to 2019 trough (11.54)



Source: Bloomberg, SIFMA estimates (as of October 19)

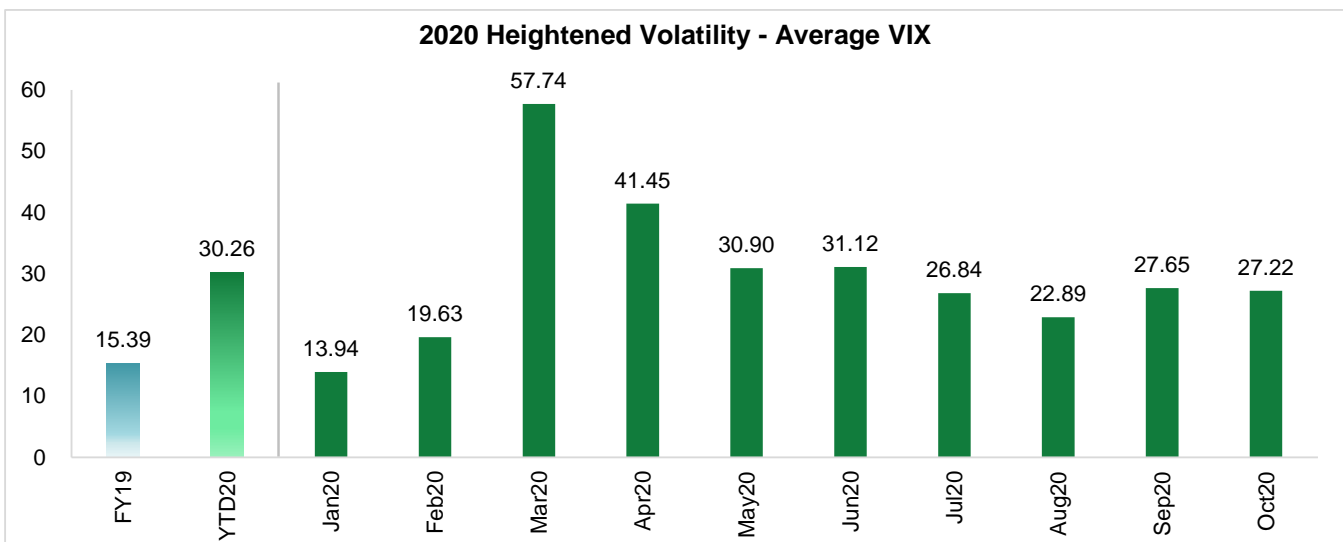
¹ CBOE Volatility Index: A real-time market index that represents the market's expectation of 30-day forward looking volatility, as derived from the price inputs of S&P 500 index options. It measures market risk and investor sentiment (fear, stress) and is often called the fear index

² Please see SIFMA [Insights: Market Structure Download](#)

2020 Monthly Average View

Looking at monthly average volatility, we note the following trends in the VIX:

- January monthly average was 13.94, beginning the year down 28.8% Y/Y
- The VIX peaked with a monthly March average of 57.74, +298.6% Y/Y
- Volatility began its decline over the summer, until ticking up again in September
 - September monthly average 27.65, +77.7% Y/Y
 - October monthly average 27.22, +76.9% Y/Y

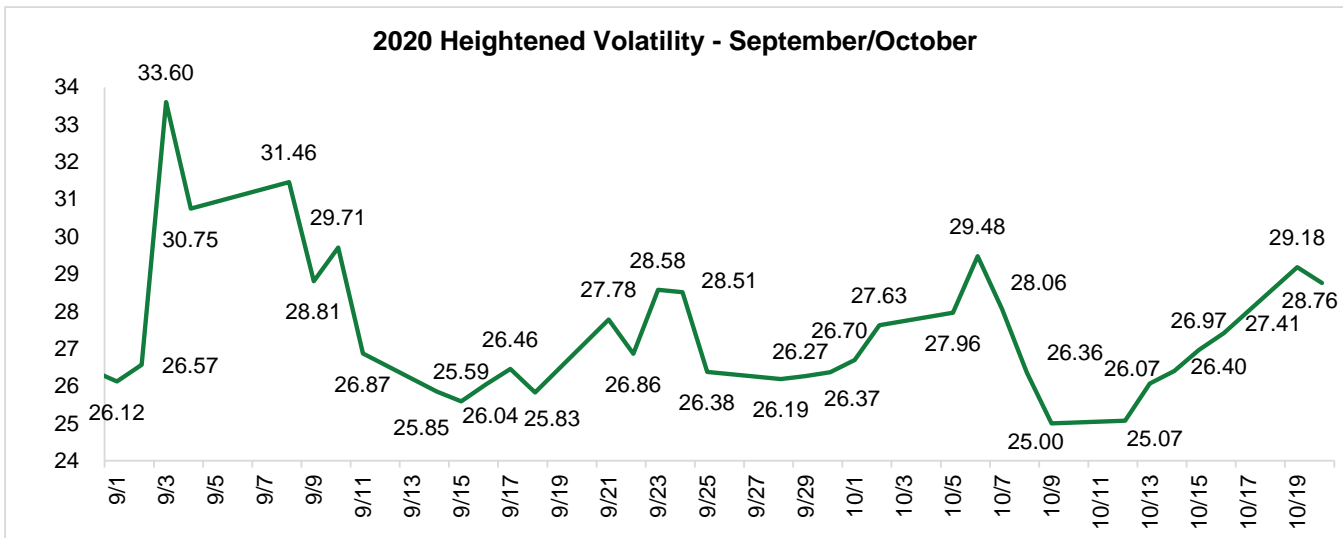


Source: Bloomberg, SIFMA estimates (as of October 19)

Where Volatility Stands Currently

Looking at where we stand now, we note the following trends:

- September began with a spike to above the YTD 2020 average 30.37, settling to a 27.65 monthly average
 - -9.0% to the YTD 2020 average
 - +98.3% to the January 2020 monthly average
 - Yet -52.1% to the March 2020 peak monthly average
- October remains in this range at a 27.22 monthly average
 - -10.0% to the YTD 2020 average
 - +95.2% to the January 2020 monthly average
 - Yet -52.9% to the March 2020 peak monthly average
- September/October trends include (Sept 1 to Oct 19): average 27.48, peak 33.60, trough 25.00

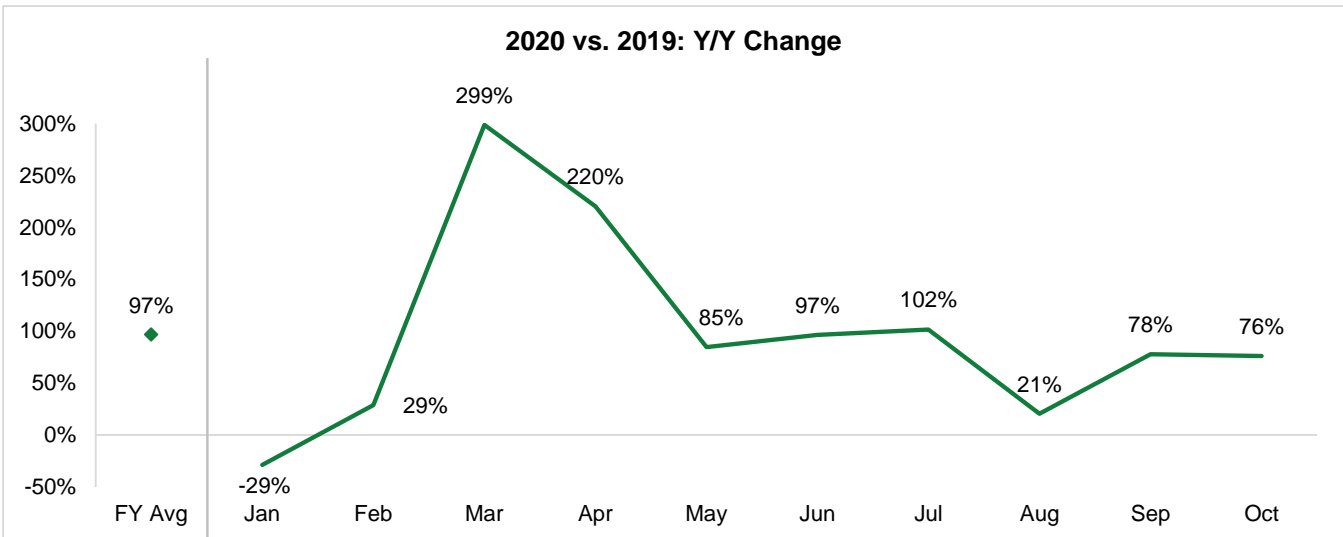
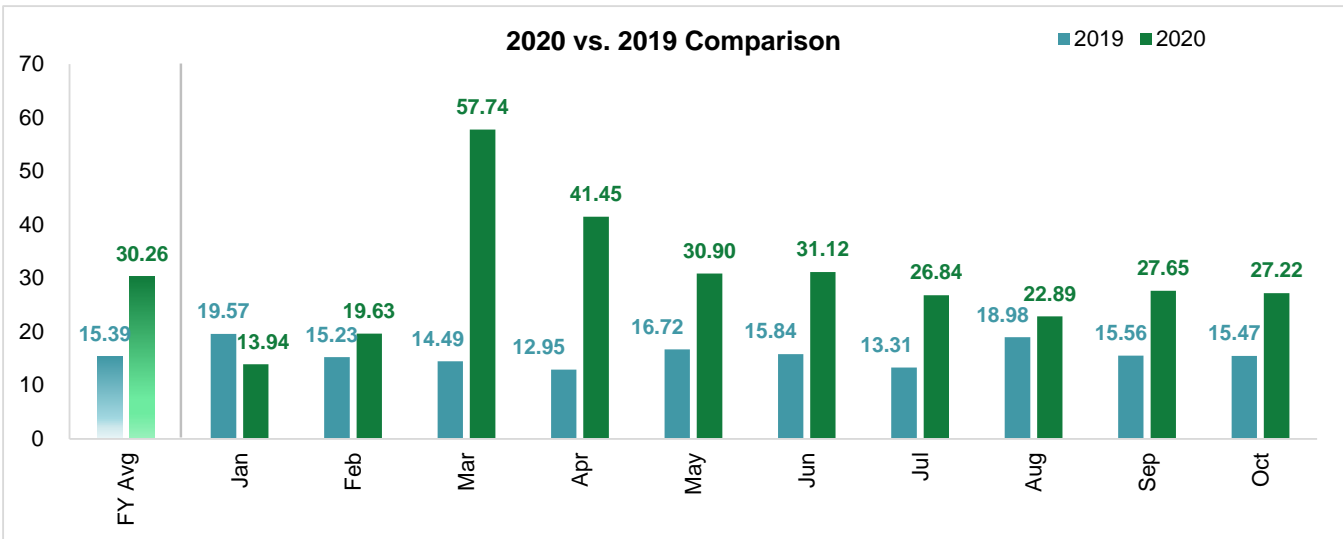


Source: Bloomberg, SIFMA estimates (as of October 19)

2020 vs. 2019 Comparison

Next, we compare 2020 to 2019. After beginning the year in a more benign environment, January monthly average VIX -28.8% Y/Y, every other month has been elevated to the prior year. We note the following trends in the VIX:

- On average, monthly VIX trended 98% above last year
- March was elevated almost 300% Y/Y, with April up over 200% Y/Y
- Elevation levels have settled in the mid-high 70% range currently



Source: Bloomberg, SIFMA estimates (as of October 19)

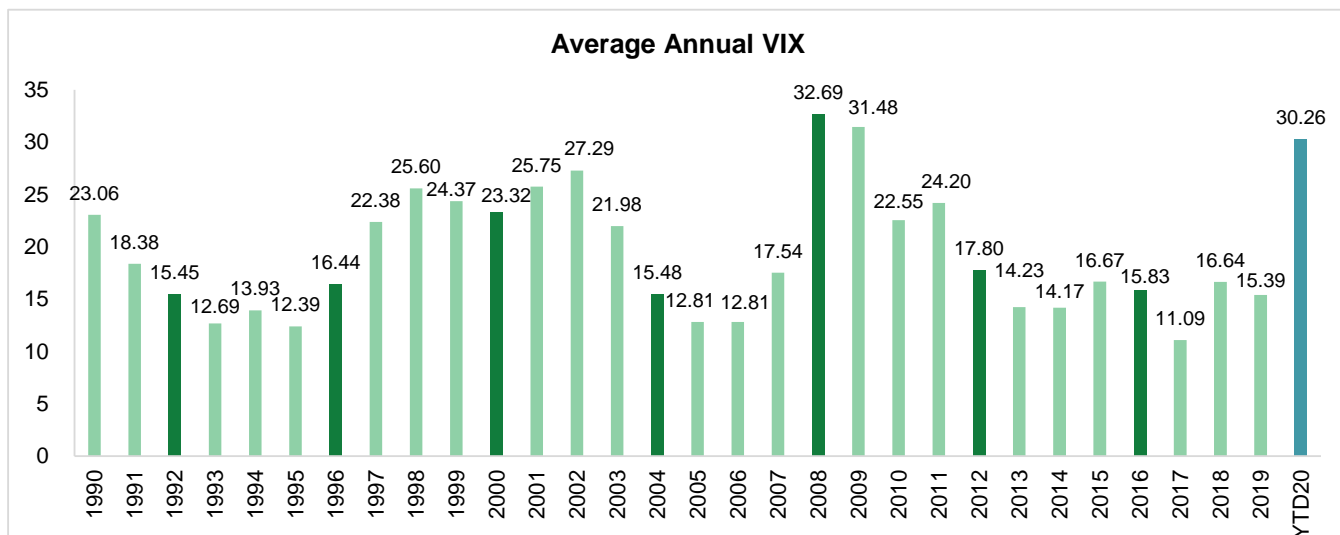
Volatility Patterns in Election Years

2020 Not the Highest Average VIX

While conversations about 2020 always include heightened volatility, at 30.26 (YTD average through October 19) it is not the highest annual average VIX on record (albeit the year is not over). With only three years where the average VIX was over 30, we note:

- 2008 holds the highest average at 32.69, +8.1% to the 2020 average
 - Followed by 2009 at 31.48, +4.0% to the 2020 average
 - Both years fell under the global financial crisis
- Yet 2020 does hold the highest peak on record at 82.69
 - +2.3% to the 2008 peak (80.86)
 - +46.0% to the 2009 peak (56.65)

	Average	Rank	Peak	Rank		Average	Rank	Peak	Rank
1990	23.06	10	36.47	12	2006	12.81	28	23.81	23
1991	18.38	14	36.20	13	2007	17.54	16	31.09	17
1992	15.45	22	21.02	26	2008	32.69	1	80.86	2
1993	12.69	29	17.30	29	2009	31.48	2	56.65	3
1994	13.93	26	23.87	22	2010	22.55	11	45.79	5
1995	12.39	30	15.74	31	2011	24.20	8	48.00	4
1996	16.44	19	21.99	24	2012	17.80	15	26.66	19
1997	22.38	12	38.20	10	2013	14.23	24	20.49	27
1998	25.60	6	45.74	6	2014	14.17	25	25.27	21
1999	24.37	7	32.98	16	2015	16.67	17	40.74	9
2000	23.32	9	33.49	15	2016	15.83	20	28.14	18
2001	25.75	5	43.74	8	2017	11.09	31	16.04	30
2002	27.29	4	45.08	7	2018	16.64	18	37.32	11
2003	21.98	13	34.69	14	2019	15.39	23	25.45	20
2004	15.48	21	21.58	25	YTD20	30.26	3	82.69	1
2005	12.81	27	17.74	28					



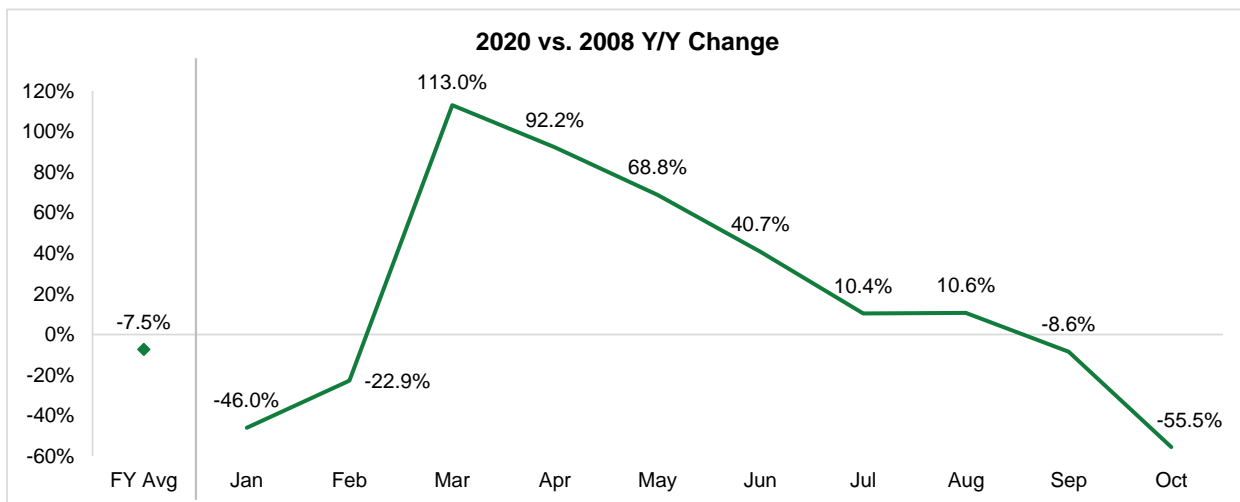
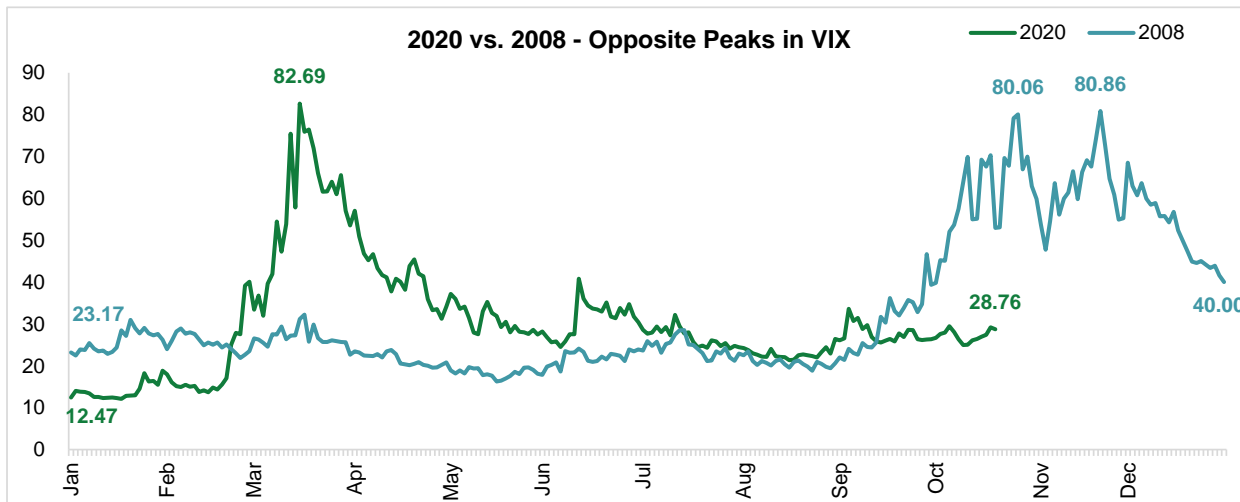
Source: Bloomberg, SIFMA estimates (as of October 19)

2020 vs. 2008, Not a Perfect Comparison

While both election years saw heightened volatility, with 2020 YTD average 30.26 versus 2008 average 32.69, the 2020 market turmoil differs from the 2008/2009 global financial crisis. This is true not just for fundamental reasons – 2020 was caused by a global pandemic not bank driven, 2020 to date remains a liquidity event rather than a solvency one – but also in calendar timing.

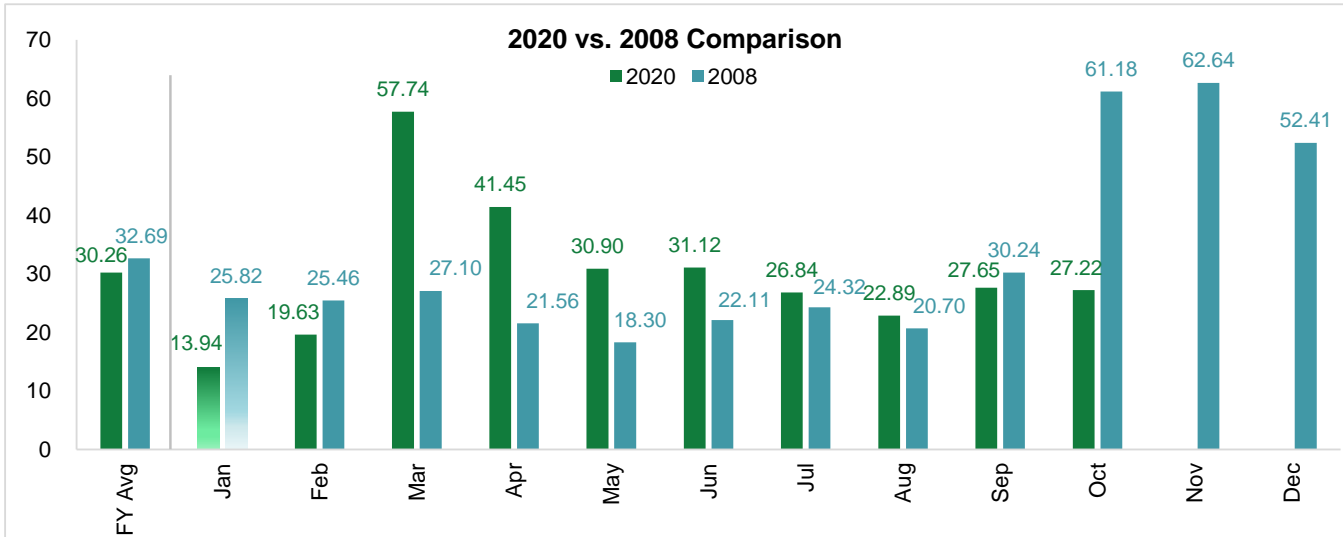
In the U.S., COVID-19 related market turmoil began in late-February/early-March. The VIX was elevated in February, with a monthly average of 19.63, and then peaked in March at 57.74 monthly average. The VIX settled into the fall, albeit still above historical non-crisis period averages (October monthly average to date 27.22, +76.9% to the 2019 average).

The elevated months were in the spring, versus higher volatility in the fall of 2008. Of note, 2008 did begin the year with higher volatility levels than 2020, as signs of market turmoil began in mid/late 2007. By the time we reached election day in 2008, the VIX had already spiked and hit one of its peaks.



Source: Bloomberg, SIFMA estimates (as of October 19)

As such, the November 2008 monthly average was +107.0% greater than the 2020 YTD average (through October 19). The November 2008 average was also 8.5% higher than the 2020 March monthly average peak of 57.74. this makes it difficult to separate out crisis-related volatility from election factors.



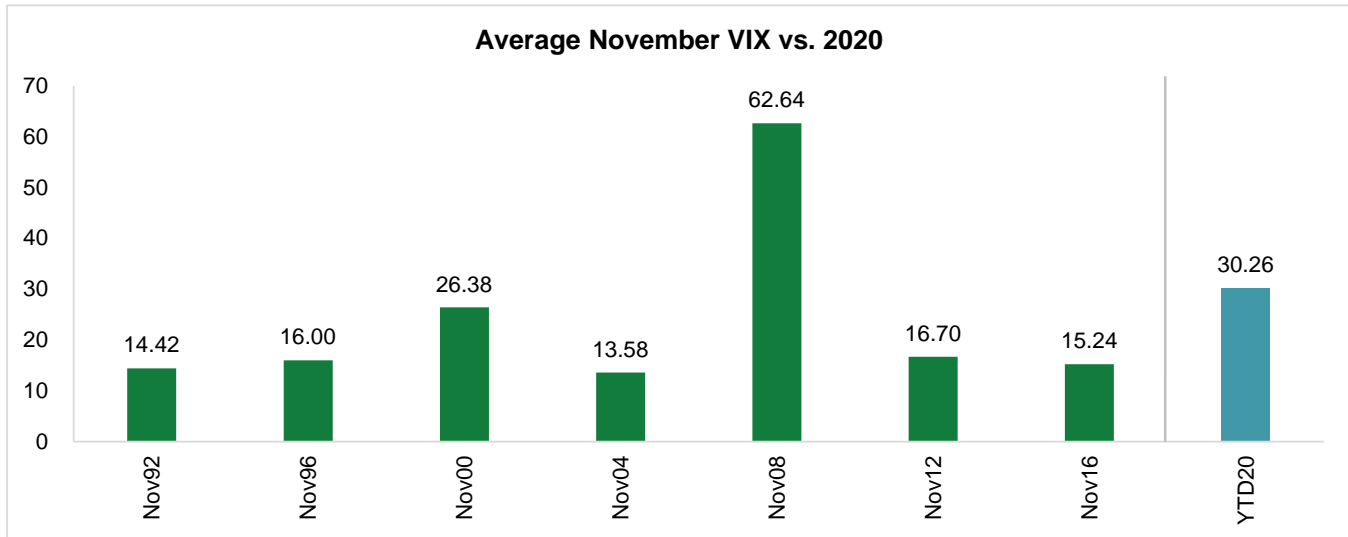
Source: Bloomberg, SIFMA estimates (as of October 19)

Comparing Election Period Volatility

Looking at election month volatility, the 2008 average November volatility of 62.64 was the highest in this time series. By the time of the election, financial markets were at the height of the global financial crisis volatility. Equity markets had crashed, many fixed income markets froze and the economy was in a downward spiral.³

The next highest year was 2000, at 26.38. This year saw the bursting of the Dot.com bubble beginning in the spring. By the time of the election and the bankruptcy of well-known and Amazon sponsored company Pets.com, most Internet stocks had lost 75% of their value from peak valuations, erasing almost \$2 trillion in market value.

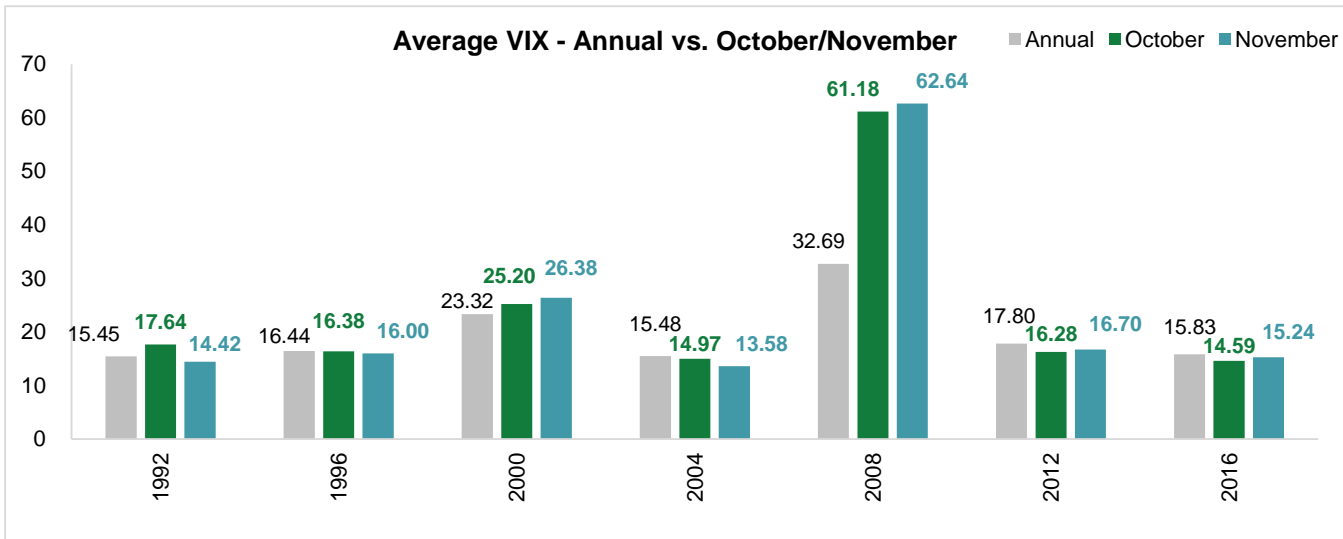
2020 average VIX (through October 19) is 14.7% above November 2000 but 51.7% below November 2008. Volatility remains elevated as we head into the election.



Source: Bloomberg, SIFMA estimates (as of October 19)

³ 2008 events: Fed orchestrated the purchase of Bear Stearns to prevent bankruptcy (March); IndyMac Bank failed (April); U.S. Treasury nationalized Fannie Mae & Freddie Mac (early Sept.); Lehman Brothers filed for bankruptcy & the Fed bought AIG (mid-Sept.); WaMu filed for bankruptcy (late Sept.)

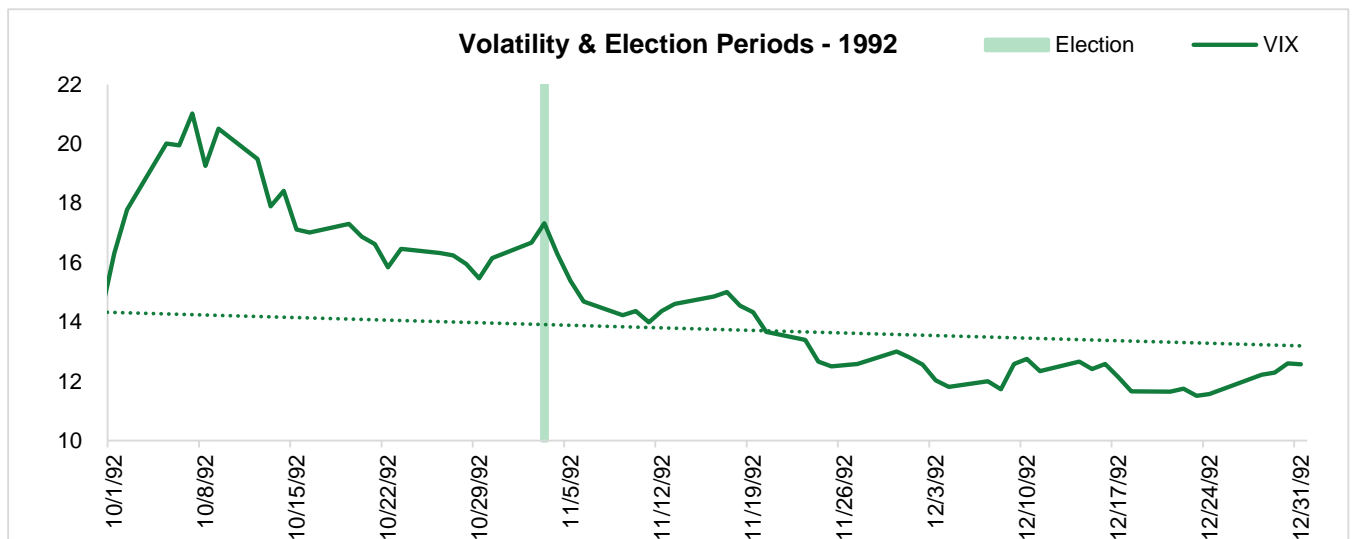
Next, we look at October and November volatility versus the annual average. We look for patterns to see if volatility just increased in October, leading into election day. Or did volatility increase in November, after election results were in. Or was it a continual increase in volatility.



Source: Bloomberg, SIFMA estimates

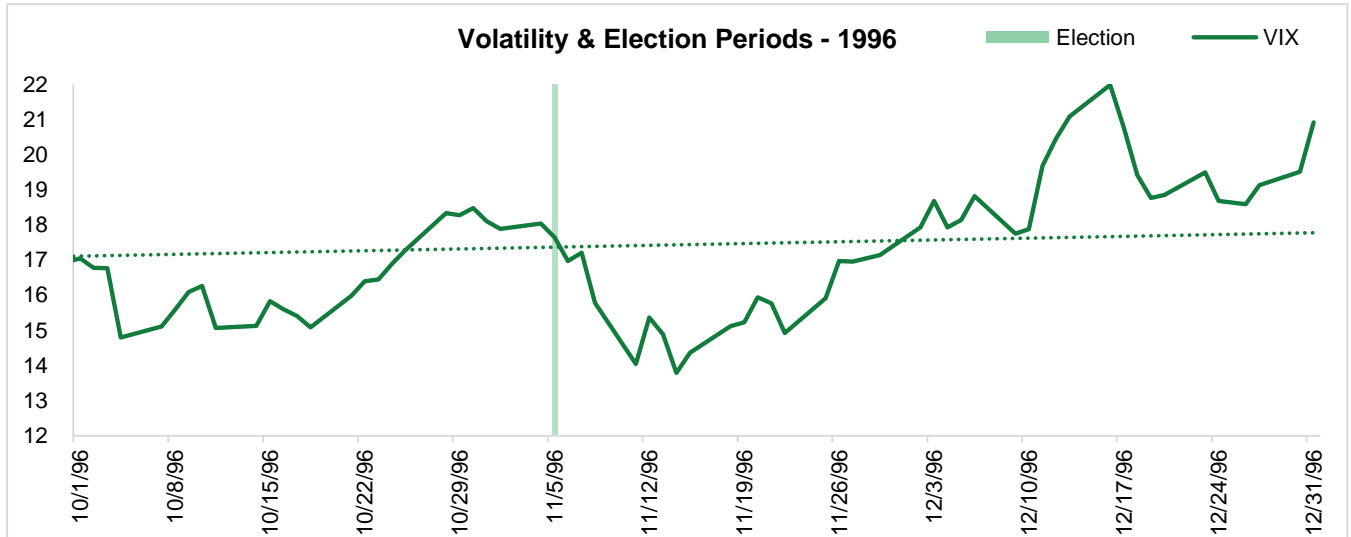
We note the following election year trends:

- 1992:** October started with an increase in liquidity, but then trended down into and after election day (downward sloping trendline) – annual average 15.45; October average 17.64, +14.1% to annual average; November average 14.42, -6.6% to annual average and -18.2% M/M



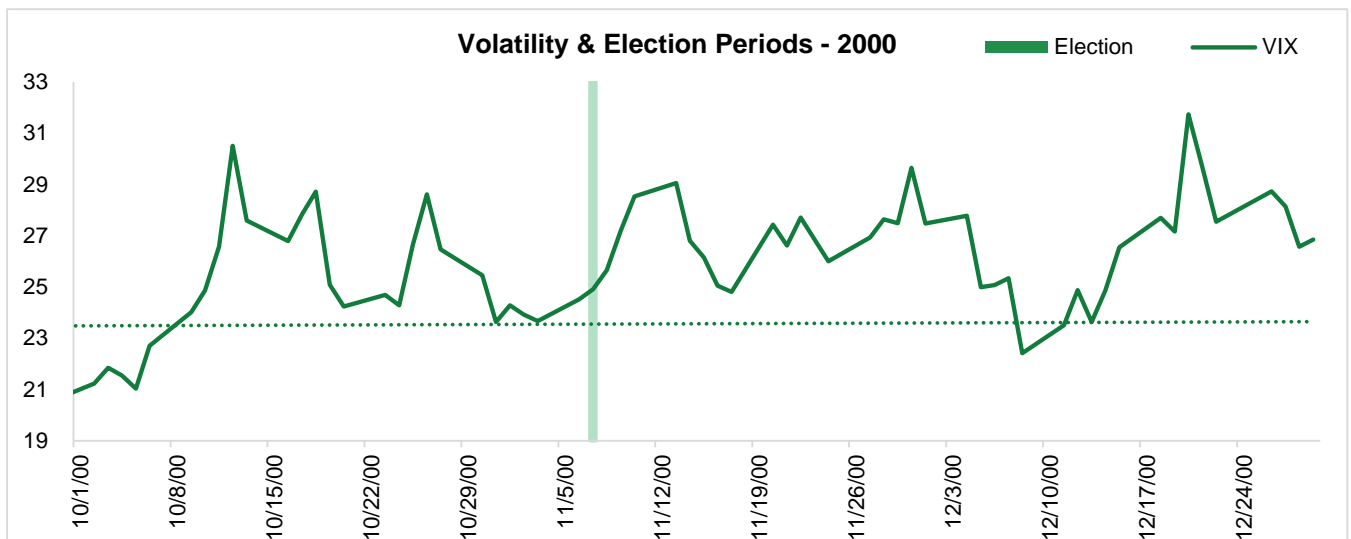
Source: Bloomberg, SIFMA estimates

- 1996:** The VIX had a bit of a roller coaster ride, increasing before/decreasing after election day before trending up to finish off the month (upward sloping trendline) – annual average 16.44; October average 16.38, -0.4% to annual average; November average 16.00, -2.7% to annual average and -2.3% M/M



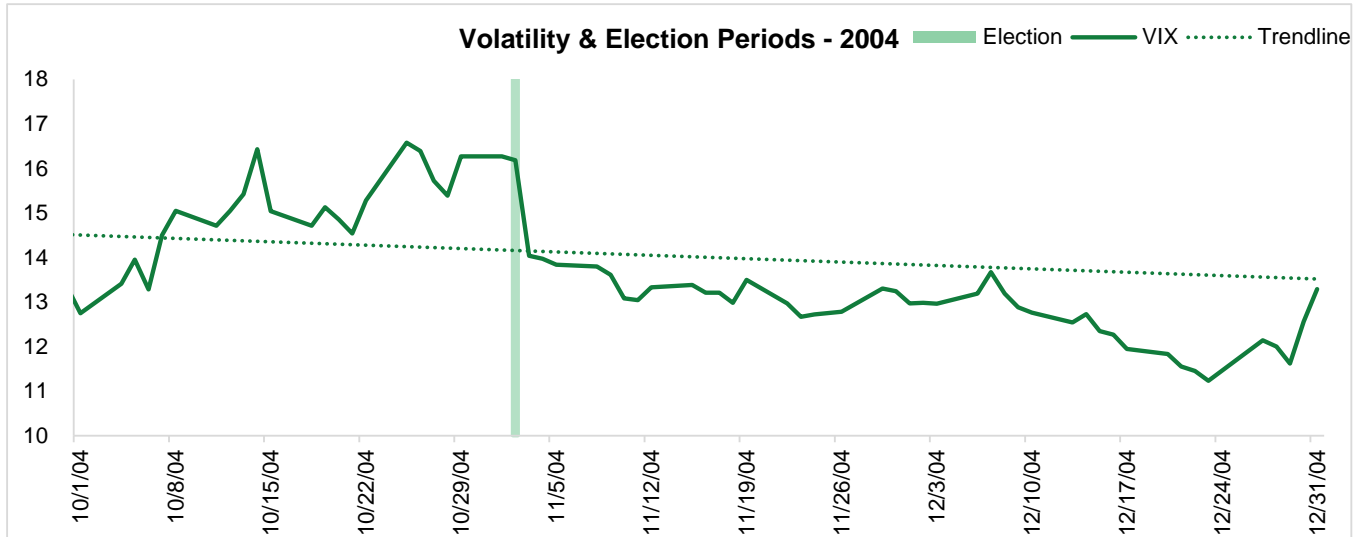
Source: Bloomberg, SIFMA estimates

- 2000:** The VIX was essentially flat on average, with ups and downs on a daily basis around the election; we note that markets were already volatile due to the bursting of the Dot.com bubble (flat slope for trendline) – annual average 23.32; October average 25.20, +8.1% to annual average; November average 26.38, +13.2% to annual average and +4.7% M/M



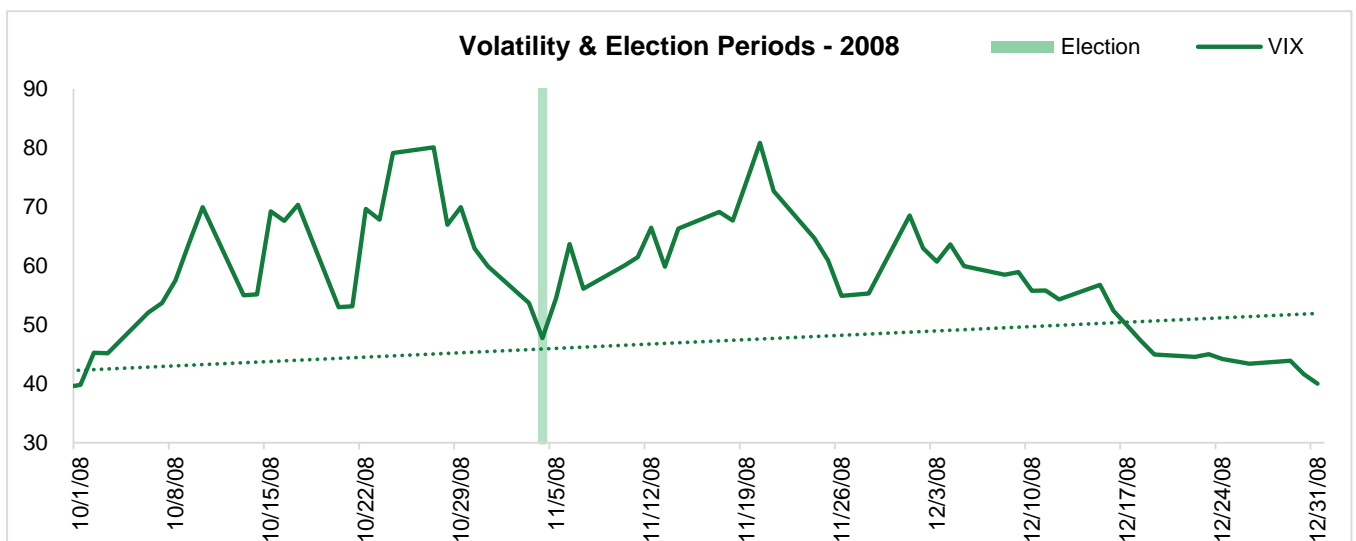
Source: Bloomberg, SIFMA estimates

- 2004:** The VIX increased into election day and then trended down for the month (downward sloping trendline) – annual average 15.48; October average 14.97, -3.3% to annual average; November average 13.58, -12.3% to annual average and -9.3% M/M



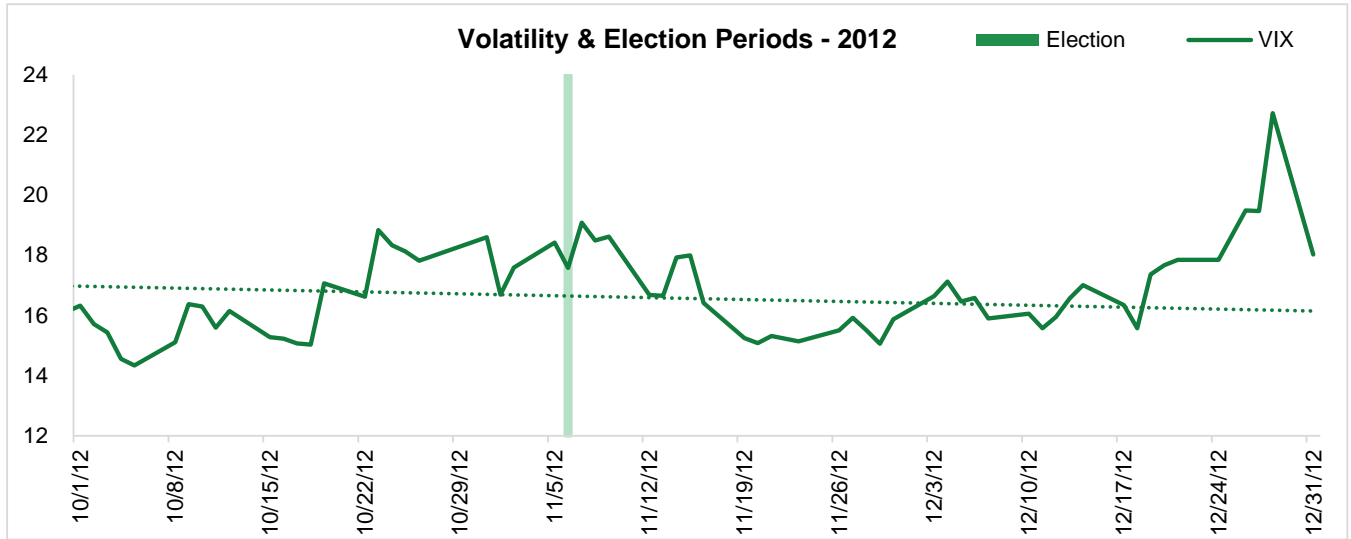
Source: Bloomberg, SIFMA estimates

- 2008:** The VIX increased to start the month and after election day, but came down right before election day we note that markets were already volatile due to the global financial crisis (upward sloping trendline) – annual average 32.69; October average 61.18, +87.1% to annual average; November average 62.64, +91.6% to annual average and +2.4% M/M



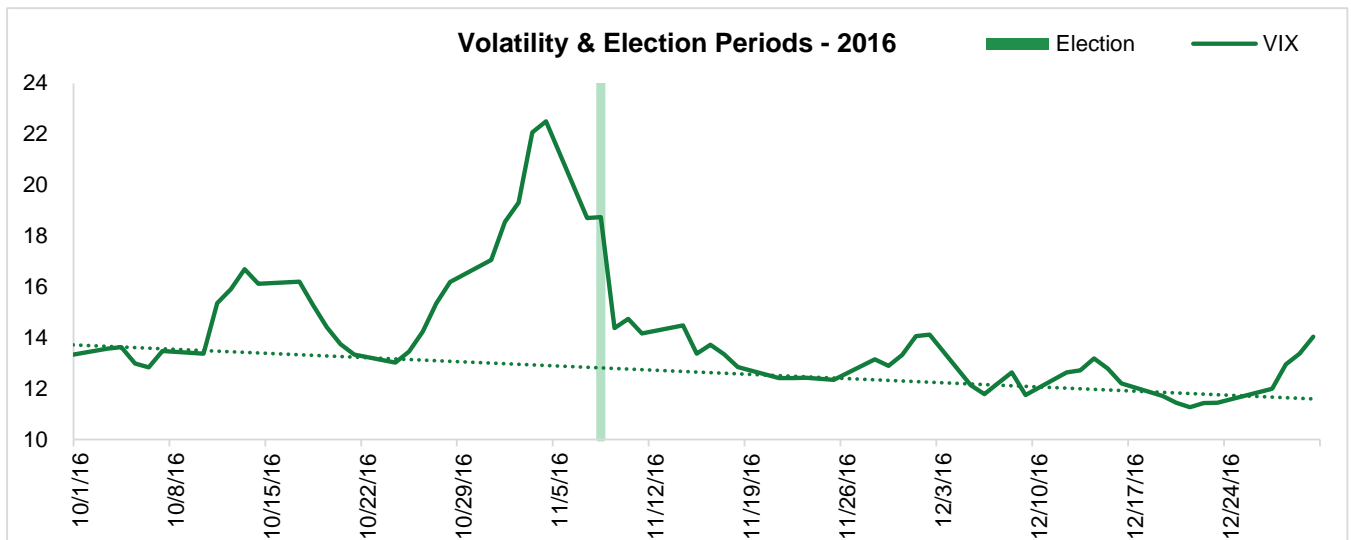
Source: Bloomberg, SIFMA estimates

- 2012:** The VIX went up into and then down after election day, before increasing at the end of the month (downward sloping trendline) – annual average 17.80; October average 16.28, -8.6% to annual average; November average 16.70, -6.2% to annual average and +2.6% M/M



Source: Bloomberg, SIFMA estimates

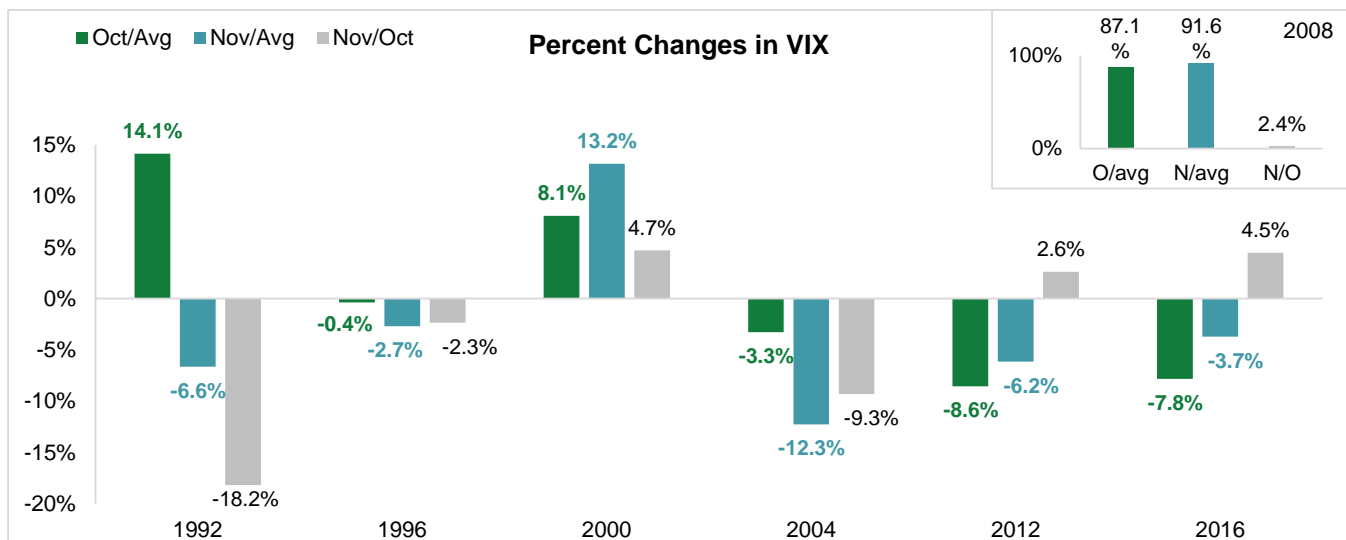
- 2016:** The VIX experienced a big increase into election day before trending down to a greater extent after election day (downward sloping trendline) – annual average 15.83; October average 14.59, -7.8% to annual average; November average 15.24, -3.7% to annual average and +4.5% M/M



Source: Bloomberg, SIFMA estimates

Looking at this in a percent change perspective, we note the following October and November average monthly VIX trends:

- October vs. full year
 - Negative (volatility lower in October vs. FY) = 57%
 - Positive (volatility higher in October vs. FY) = 43%
- November vs. full year
 - Negative (volatility lower in October vs. FY) = 71%
 - Positive (volatility higher in October vs. FY) = 29%
- November vs. October
 - Negative (volatility lower in October vs. FY) = 43%
 - Positive (volatility higher in October vs. FY) = 57%
- The only years where all three measures were positive (increased volatility) were in 2000 and 2008, which were periods of market turmoil (Dot.com bubble burst and global financial crisis respectively)
- Outside of those periods, volatility more often than not settles after the election



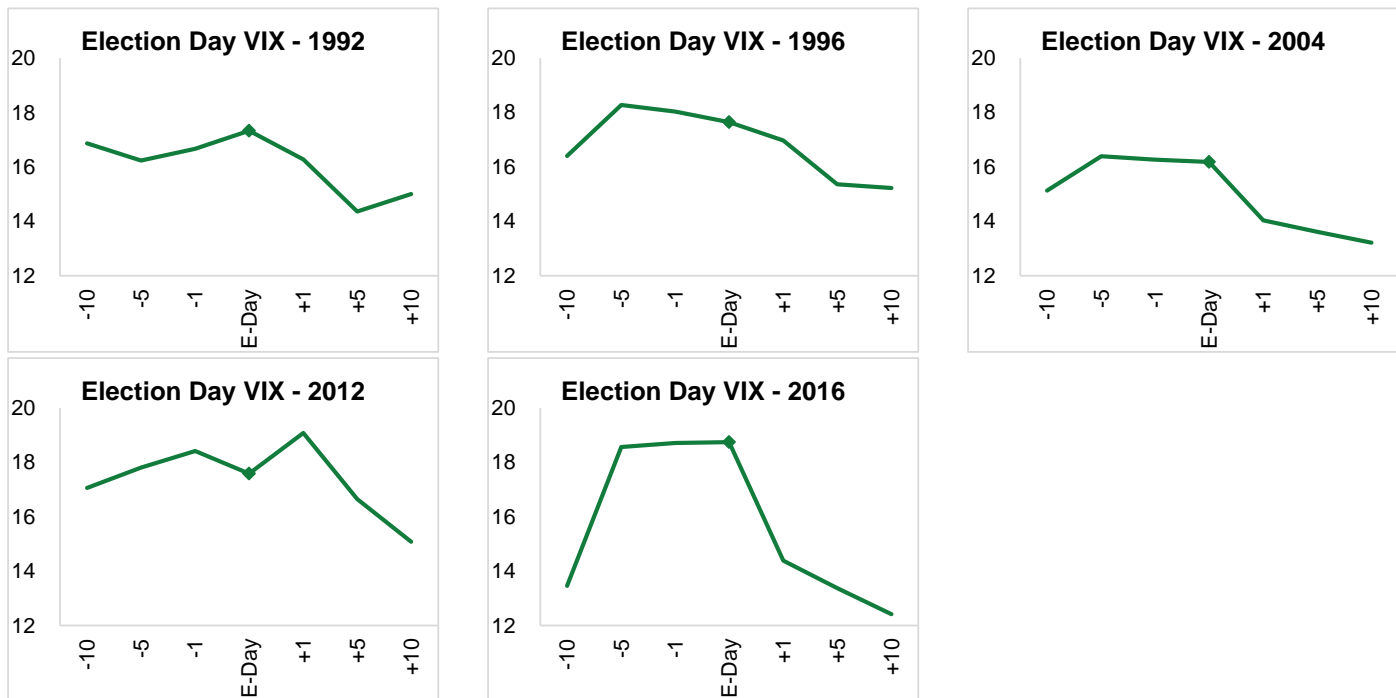
Source: Bloomberg, SIFMA estimates

Looking even more granularly at days before and after election day (E-Day). Given the difficulty in separating out market turmoil from election volatility, we exclude 2000 and 2008. We note the following trends:

	Days Before E-Day			Days After E-Day			Change Over Period
	-10	-5	-1	+1	+5	+10	
1992	2.7%	6.7%	4.0%	-6.1%	-17.1%	-13.4%	-11.0%
1996	7.6%	-3.4%	-2.2%	-3.9%	-13.0%	-13.7%	-7.1%
2000	2.6%	5.4%	1.6%	3.0%	7.6%	6.9%	9.6%
2004	6.9%	-1.3%	-0.6%	-13.2%	-15.9%	-18.4%	-12.7%
2008	-10.1%	-28.7%	-11.1%	14.3%	28.7%	41.7%	27.4%
2012	3.0%	-1.3%	-4.6%	8.5%	-5.3%	-14.2%	-11.6%
2016	39.2%	1.0%	0.2%	-23.3%	-28.7%	-33.8%	-7.8%

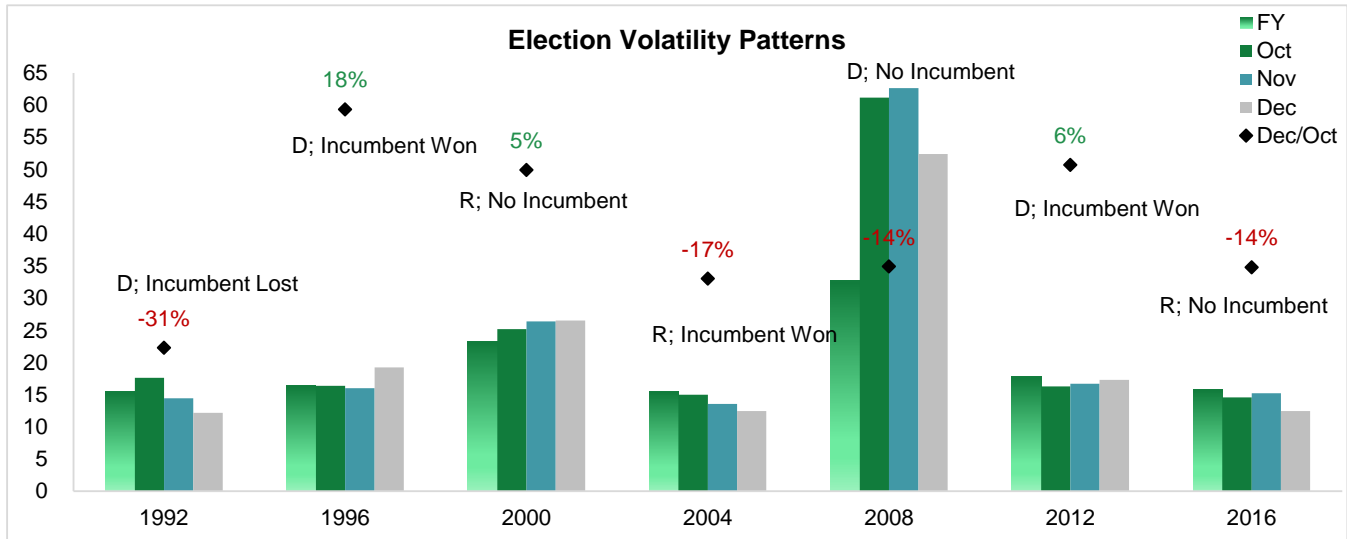
Source: Bloomberg, SIFMA estimates

- **Days Before E-Day:** Typically, election day VIX is higher than two trading weeks prior to the day; the pattern is not uniform looking at E-Day versus 1 or 5 days prior, meaning the volatility either settles as E-Day approaches or the level of the increase lessens
- **Days After E-Day:** Typically, volatility declines immediately after election days and continues to settle over the next two trading weeks (exception: 2012 saw an increase the day after E-Day but then declines into days 5 and 10)
- **Change Over Period:** All analyzed periods saw declines from 10 days after E-Day versus 10 days prior



Source: Bloomberg, SIFMA estimates

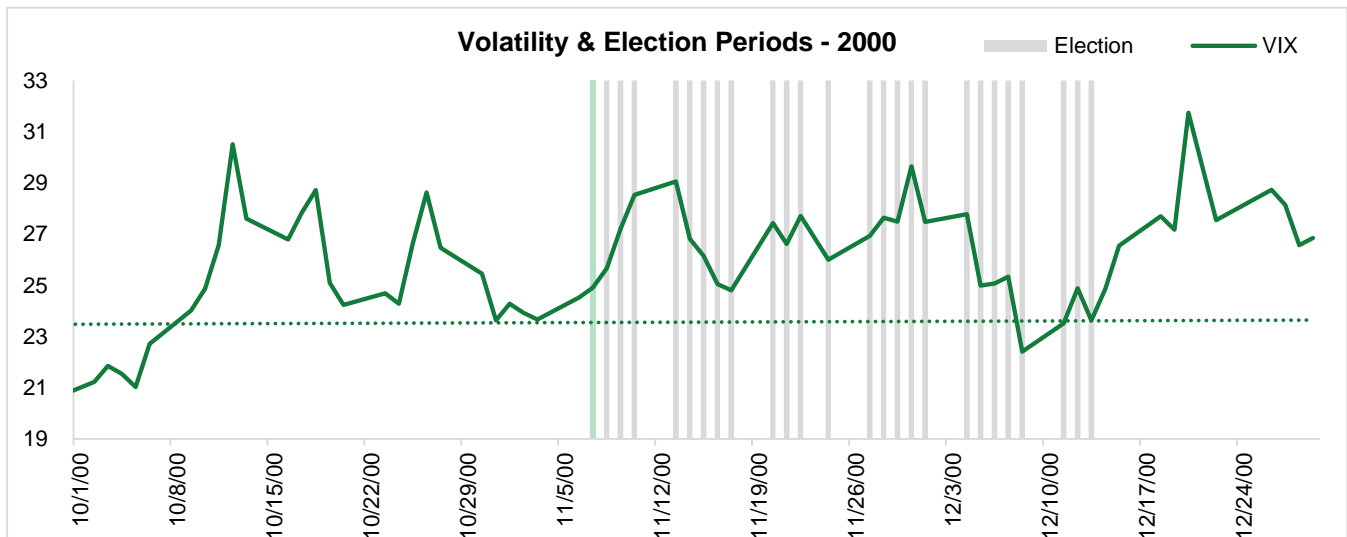
We look at one additional factor, whether it was an incumbent race and if that candidate won or not. In the time periods analyzed, there was an incumbent race 57% of the time. The incumbent won 75% of the time. There does not appear to be a discernable pattern in VIX movements whether an incumbent wins or not (nor if the winner is a Democrat or Republican). What we can conclude is that there is volatility heading into an election day, which then settles after the election.



Source: Bloomberg, SIFMA estimates

Note: Wins by Democrats = 57%, Republicans = 43%, incumbents = 75%

When extrapolating historical results to 2020, it is disappointing that the one example of questions around vote counting was in 2000. During this year, markets were already experiencing turmoil from the Dot.com bubble burst. Going back to the chart, we note the VIX ebbs and flows from election day until the candidate Gore conceded on December 13. We did see volatility come down as we neared a conclusion, but it then quickly increased. Again, it is difficult to separate other contributing factors from election related volatility.



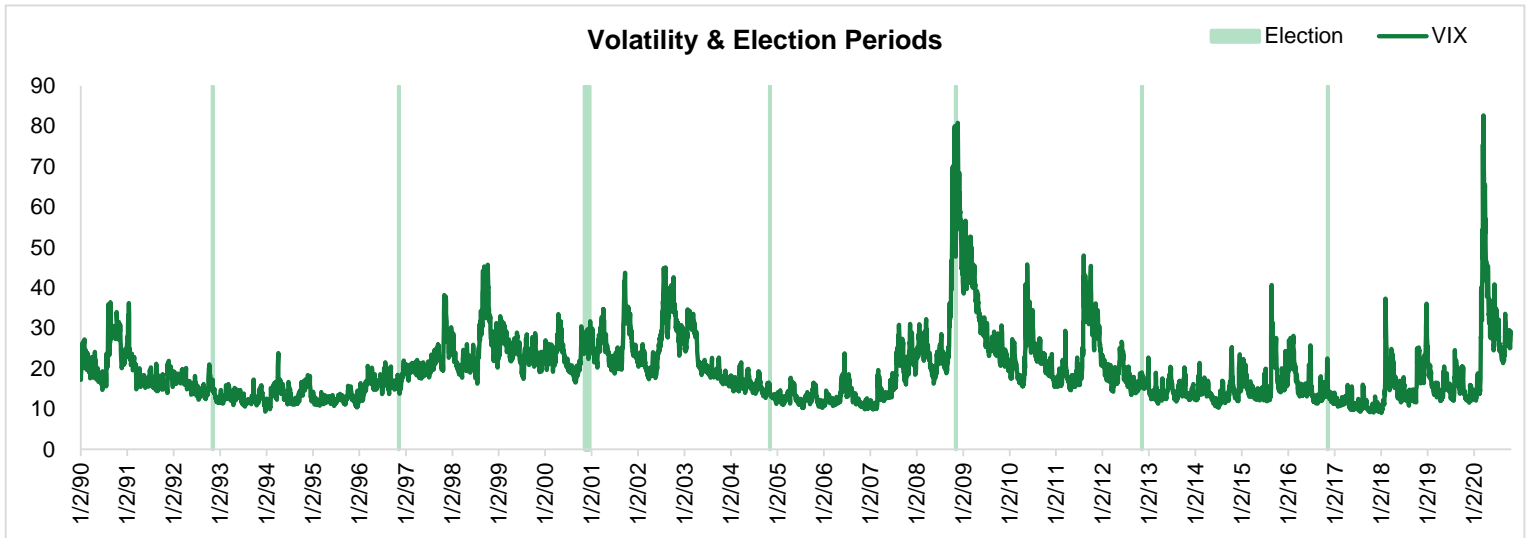
Source: Bloomberg, SIFMA estimates

Appendix: Historical Election Volatility Graphs

For reference, we provide graphs for each election period back to 1992, showing annual volatility and more granularly the October volatility heading into the election through the end of the year.

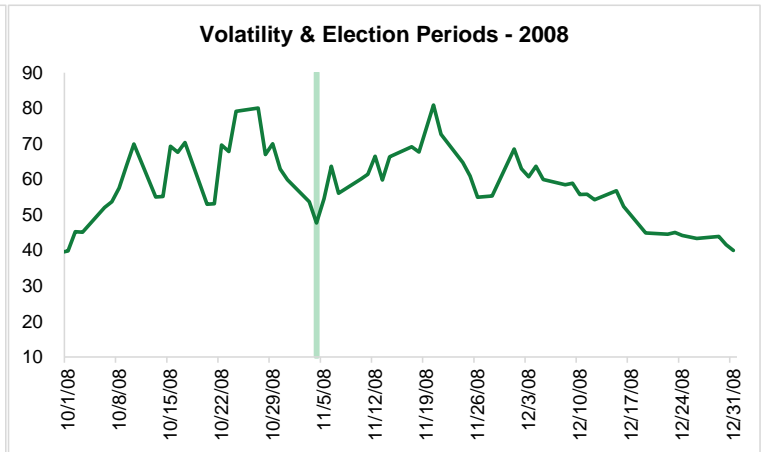
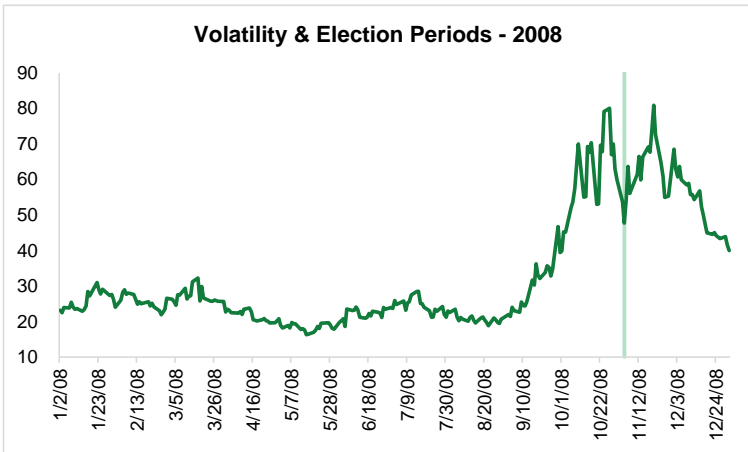
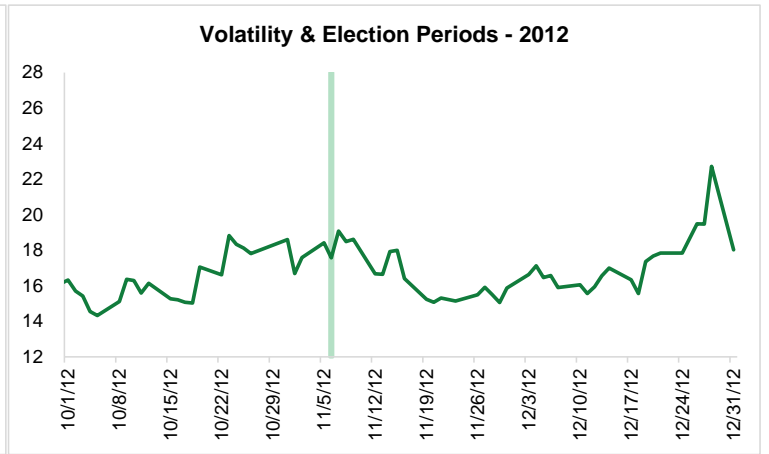
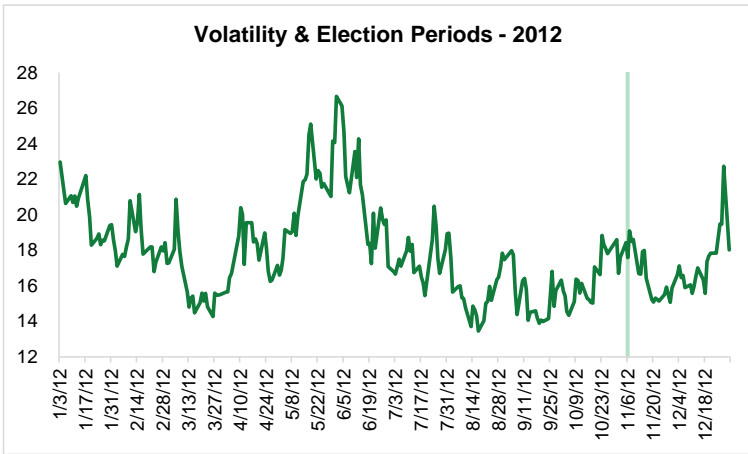
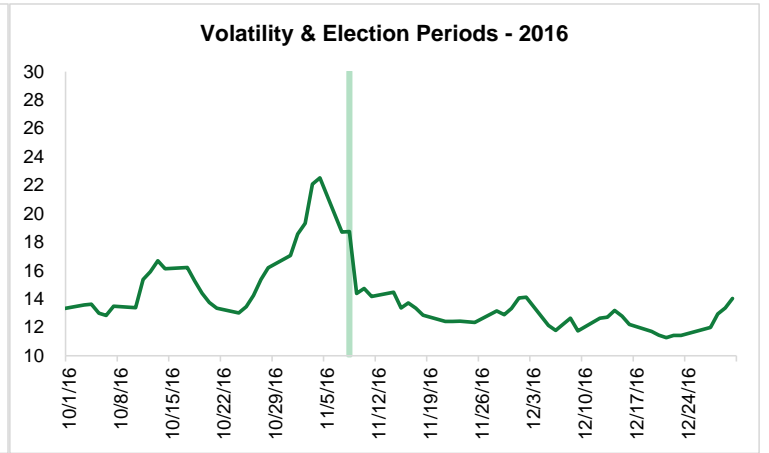
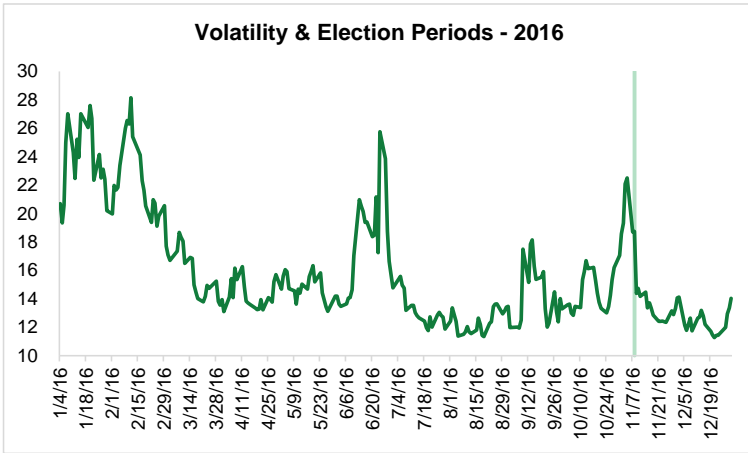
US Presidential Elections

- **1992:** Bill Clinton (Democrat) defeated George H. W. Bush (Republican, incumbent)
- **1996:** Bill Clinton (Democrat, incumbent) defeated Bob Dole (Republican)
- **2000:** George W. Bush (Republican) defeated Al Gore (Democrat)
- **2004:** George W. Bush (Republican, incumbent) defeated John Kerry (Democrat)
- **2008:** Barack Obama (Democrat) defeated John McCain (Republican)
- **2012:** Barack Obama (Democrat, incumbent) defeated Mitt Romney (Republican)
- **2016:** Donald Trump (Republican) defeated Hillary Clinton (Democrat)
- **2020, TBD:** Donald Trump (Republican, incumbent) versus Joe Biden (Democrat)



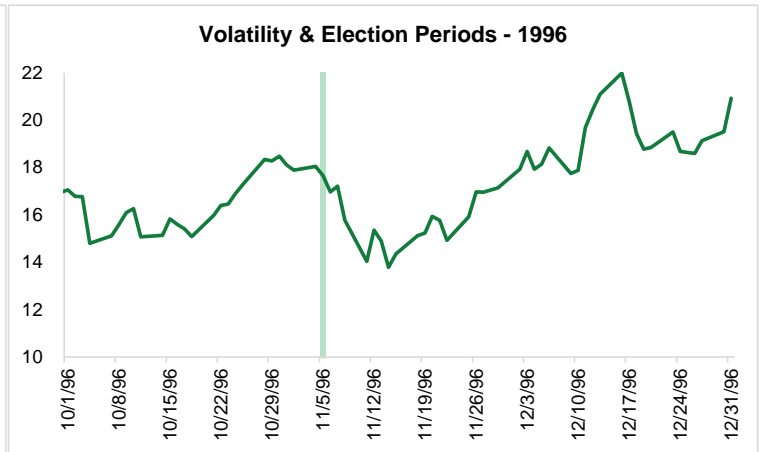
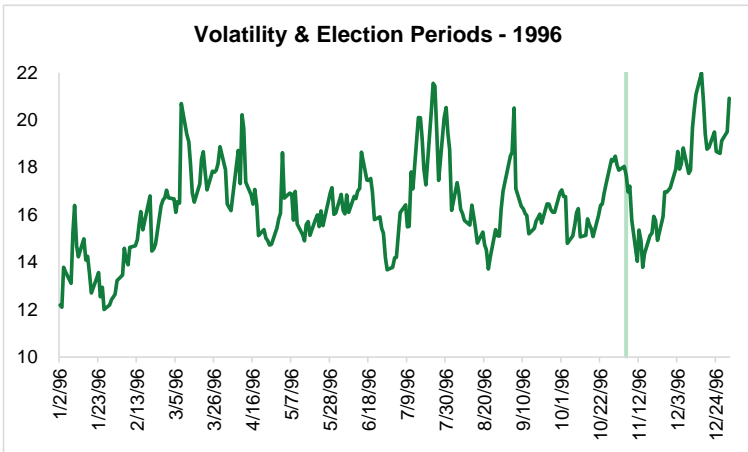
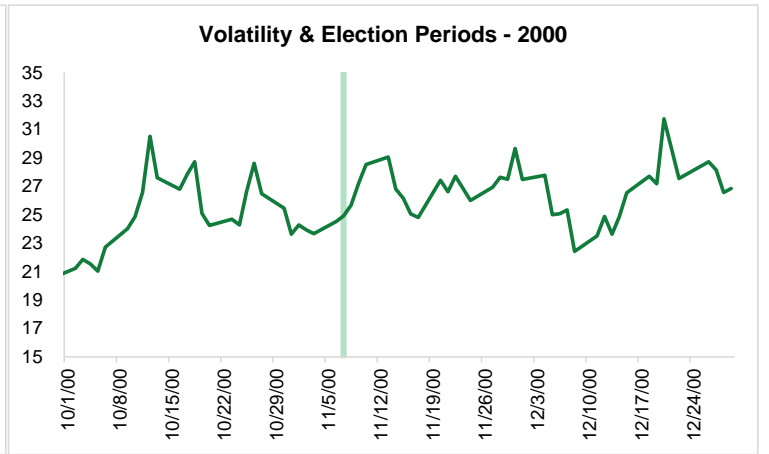
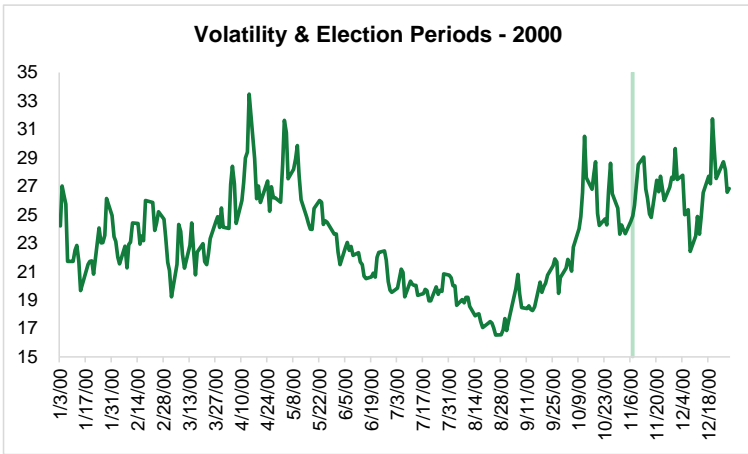
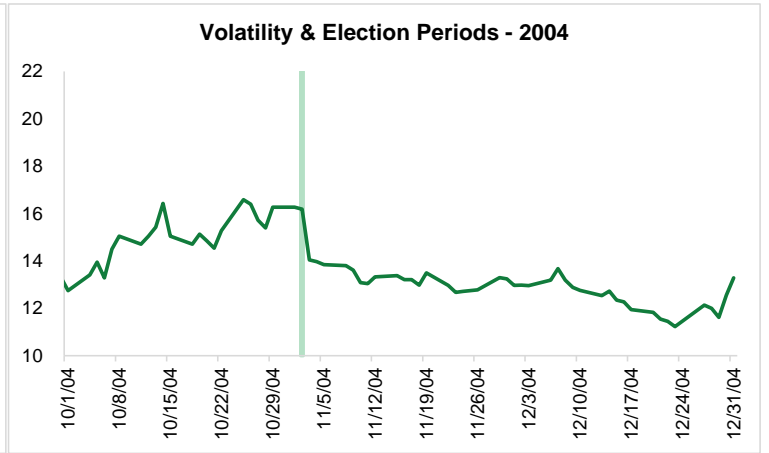
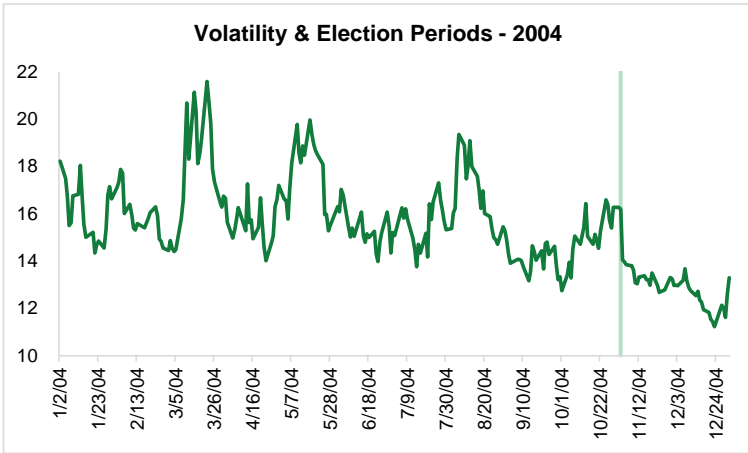
Source: Bloomberg, SIFMA estimates (as of October 19)

Appendix: Historical Election Volatility Graphs



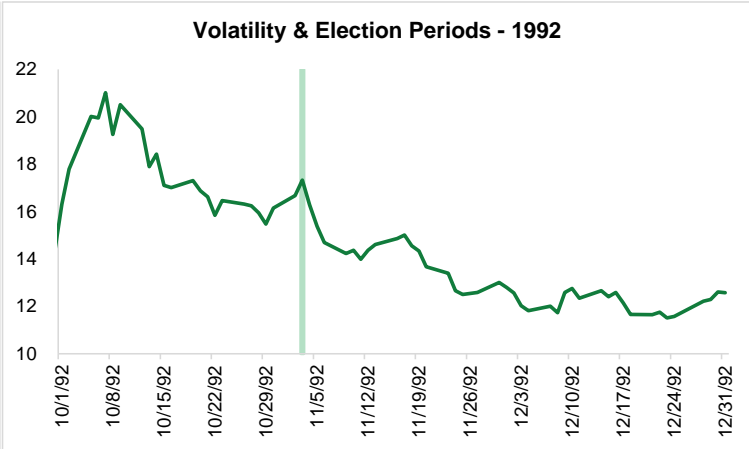
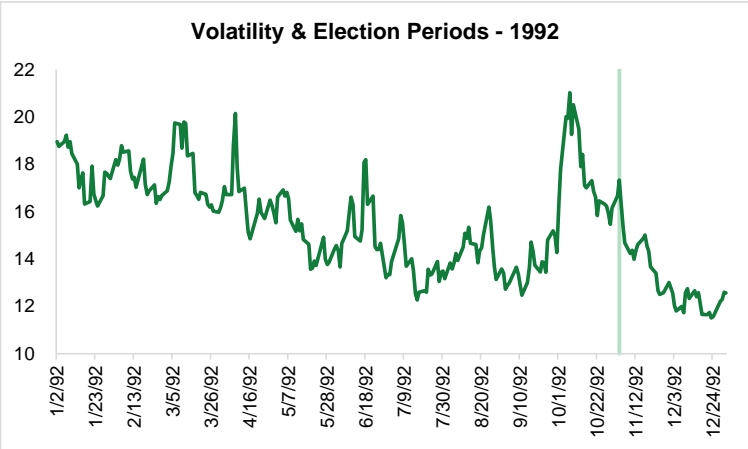
Source: Bloomberg, SIFMA estimates

Appendix: Historical Election Volatility Graphs



Source: Bloomberg, SIFMA estimates

Appendix: Historical Election Volatility Graphs



Source: Bloomberg, SIFMA estimates

Appendix: SIFMA Insights Research Reports

SIFMA Insights Market Structure Primers: www.sifma.org/primers

- Global Capital Markets & Financial Institutions
- Electronic Trading
- US Capital Formation & Listings Exchanges
- US Equity
- US Multi-Listed Options
- US ETF
- US Fixed Income
- SOFR: The Transition from LIBOR
- The Evolution of the Fintech Narrative

SIFMA Insights: www.sifma.org/insights

- Market Structure Download
- A Deeper Look at US Listed Options Volumes
- The Cboe Trading Floor Reopened – Revisiting Volume Data
- NYSE Goes All Electronic – What Does It Mean?
- The NYSE Trading Floor Reopened – Revisiting Market Share Data
- COVID-19 Related Market Turmoil Recap: Part I (Equities, ETFs, Listed Options & Capital Formation)
- 2020, the Year of the SPAC
- The 2020 Market Madness
- The VIX's Wild Ride
- The 10th Anniversary of the Flash Crash
- DTCC's Important Role in US Capital Markets

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SIFMA Insights

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