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#DemNomination2020

It is time: How are FX markets pricing the Democratic primaries

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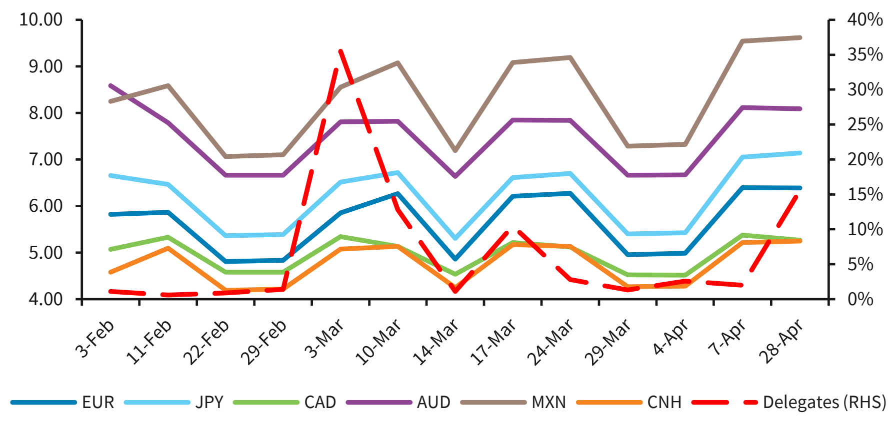
- With the Iowa caucuses less than a month away, markets are likely to increasingly focus on the Democratic primaries.
- **What we examined:** We use FX options data to examine how markets are pricing the magnitude and timing of risks associated with the Democratic nomination process. Using Predictit data, we study how the implied probability of a progressive candidate (e.g., Senator Sanders, Senator Warren) winning the nomination has affected event volatility and the distribution of expected moves for each early state caucus/primary.
- **Magnitude and timing**: We find the level of event vol tends to increase for contests that allocate a large share of delegates, while the first two – Iowa and New Hampshire – show elevated vol relative to later contests and to their delegate allocation. Furthermore, we find market pricing for Iowa and New Hampshire have been most sensitive to the implied probability of a progressive Democratic nominee.
- **Direction**: We find most USD-cross event vols, except for USDCNH, are positively related to an increased probability of a progressive candidate, whereas we find a large and significant negative beta of USDCNH event skew. We believe this may point to the market expectations of a potential shift towards more domestic issues in a presidential campaign under a progressive Democratic nominee and de-emphasis trade-related actions. Smaller but statistically significant negative effects on USDEUR and USDMXN skews and positive effects on USDJPY are consistent with this dynamic.

FIGURE 1

FX options market pricing of event vol over early Democratic nomination contests



Note: event vol is the 1d forward vol at the date of each contest. Source: Bloomberg, Barclays Research

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A new election year, a new market risk

The Democratic nomination for president is likely to gather attention in coming weeks, as the Iowa caucuses (the first stop in the months-long primary process) are less than one month away (February 3). The contest appears to be shaping up along ideological lines, in which the candidates of progressive wing of the party are calling for big structural changes, ranging from introducing wealth taxes and universal public health care to breaking up tech companies and student debt forgiveness, against the moderate candidates (e.g., Vice President Joe Biden, Senator Amy Klobuchar, Mayor Pete Buttigieg and Michael Bloomberg) calling for incremental change and more closely aligned to the center of the party's political spectrum. The implications for US domestic economic policy, the business environment, regulation, etc., have gathered attention, e.g., we have discussed the potential effects of a Warren nomination for credit and equities in previous research (*US Credit – Parsing Senator Warren's Policies*, and *U.S. Equity Strategy: Implications of the Warren Agenda*).

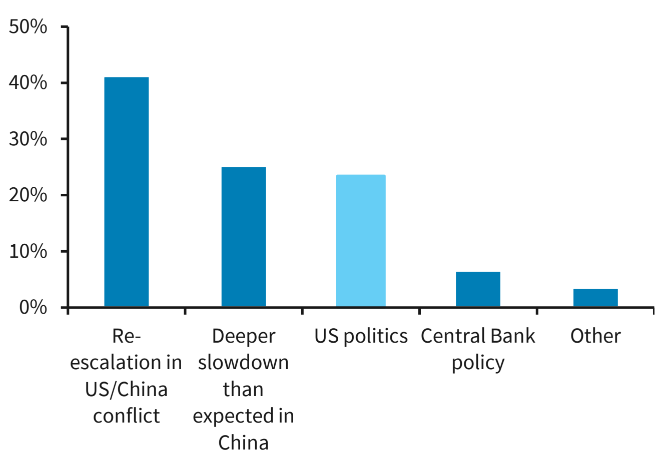
The delay of near-term risk events (e.g., Brexit and the US-China Phase 1 deal) and the recent stabilization in global data leave US politics as the major risk event in 2020, according to our data. The Democratic nomination and the US presidential elections will likely shape future US policy toward China, global trade, and US engagement in the global community (e.g., support for multilateral institutions such as NATO, WTO, etc.). Accordingly, our Global Macro Survey identifies US politics as the third biggest risk to markets (23% of respondents) after a re-escalation in US-China conflict and a much deeper slowdown in China (see Figure 2 and *Barclays Global Macro Survey: Investors expect more of the same*, 3 December 2019). As such, the Democratic nomination process is likely to elicit responses in FX markets and potential pricing in FX options. We analyze how FX options markets are pricing the upcoming electoral contests and have priced the Democratic nomination campaign so far.

How are FX markets pricing the upcoming Democratic nomination process?

The Democratic Party nomination process involves a series of electoral contests (primaries and caucuses) covering all 50 states, beginning with the Iowa caucuses on February 3. Each primary/caucus allocates a number of pledged delegates chosen based on a candidate's share of the vote. The process culminates with the Democratic presidential nominee being

FIGURE 2

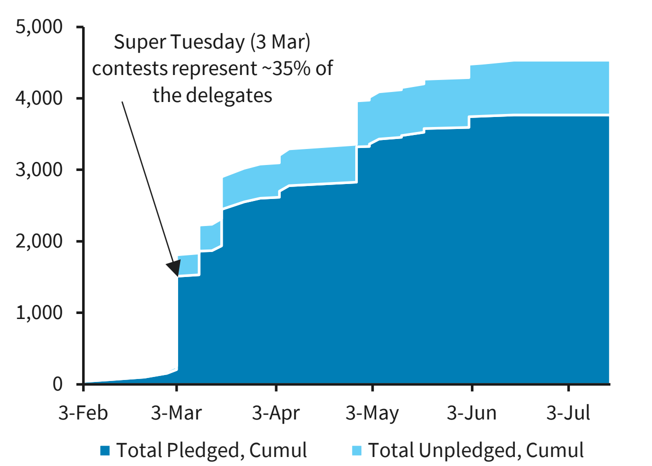
What is the biggest risk to markets over the next 12 months?



Source: Barclays Research

FIGURE 3

Percentage of pledged and unpledged delegates over time



Source: The Green Papers, Barclays Research formally elected by delegates and proclaimed at the Democratic Party National Convention (July 13-16). Following that the presidential election campaign then begins in earnest, culminating with Election Day on November 3.

Traditionally, early-voting states shape the trend of the contest, as candidates are likely to build momentum leading to the Super Tuesday (March 3), when 14 states vote, including California and Texas (see Figure 3). Primary elections and caucuses then continue until June 6, but 40% of pledged delegates will have their vote locked up for the nomination contest by Super Tuesday. We note that early state electoral contests and pledged delegates are perhaps even more important in the 2020 electoral cycle following the 2018 superdelegate reform, which provides them a role only in the event of a contested convention (i.e., no candidate wins more than 50% of pledged delegates). As a result, we focus on the early nomination contests in our analysis of FX options market pricing. One caveat is that the allocation of delegates based on vote share (instead of, for example, a winner-takes-all approach) may lead to a protracted nomination procedure.

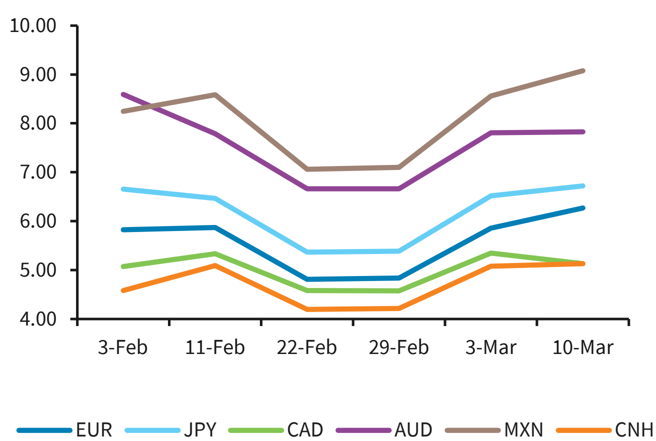
We find that event volatility (1d forward implied vol) appears to follow the share of delegates that are pledged at each electoral contest, increasing as primary elections with many delegates at play get closer (Figure 4). This is clearer for Super Tuesday and the vote after it (March 10), which account for 36% and 13% of pledged delegates, respectively, and for April 28 (16% of delegates). We also find higher levels of event vol for the first two contests (Iowa and New Hampshire) relative to the latter ones and to the share of delegates allocated, highlighting the importance that the market assigns to the very early primary contests.

How are FX markets pricing the eventual Democratic nominee?

We study how the event volatility (1d forward implied vol) on the day of each early primary election up to Super Tuesday has reacted to incoming information on the nomination campaign. Given the wide array of candidates and the diversity of their views, we concentrate on the relative prospects for the two groups of candidates: progressives and moderates. The moderate wing includes candidates who are more aligned with the middle of the party's political spectrum such as former Vice President Biden, former mayors Buttigieg and Bloomberg, and Senator Klobuchar. We assign the remainder of candidates to the progressive wing, which includes established progressive candidates such as senators Warren and Sanders as well as other lower-polling candidates who have espoused more progressive policies such as Andrew Yang and Tom Steyer (see *US Public Policy Analyzing a Warren Administration*). Figure 5 shows that the implied probability of a progressive candidate winning the Democratic

FIGURE 4

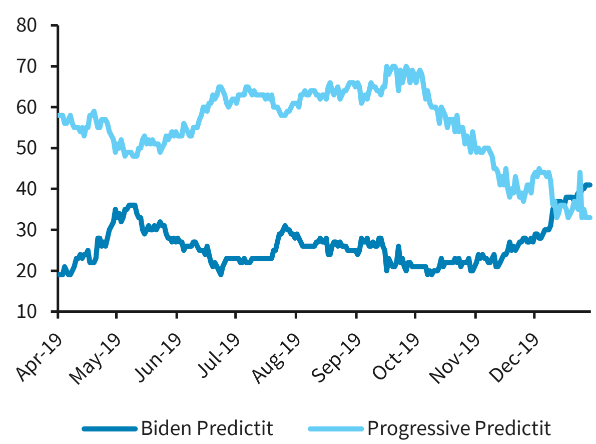
Event vol is high for Iowa and New Hampshire, declines afterwards and bounces back for Super Tuesday



Source: Bloomberg, Barclays Research

FIGURE 5

Implied probability of Democratic nomination outcomes



Source: Predictit, Barclays Research

nomination (based on data from prediction markets - PredictIt as of January 7) has declined since October 2019, when Senator Warren's likelihood of clinching the nomination peaked amid a slump in Biden's likelihood, but remains near 40% and points to a wide open contest.

We estimate the sensitivity (betas) of one-day forward ATM volatility over the specific dates of early primary contests for EURUSD, USDJPY, USDCAD, USDMXN and USDCNH, to changes in the implied probability of a progressive candidate clinching the nomination. The results for a moderate candidate are the mirror image, because an increase in the likelihood of a progressive candidate is an identical decline in the likelihood of a moderate candidate. Figure 6 shows that the beta is positive and significant for all USD crosses except CNH, which has a very small beta across different primary dates. The relative sizes of the betas over the different electoral dates suggest that the market assigns more importance to the early primary contests than the later ones. This is consistent with historical experience of the Iowa and New Hampshire contests often setting the tone for the rest of the primary process and seen as strong indicators of how candidates will perform at later stages. It is notable, however, that despite having a significant share of delegates on Super Tuesday, it is not currently being priced as a particularly high risk event given its relatively low beta to incoming information on the nomination campaign.

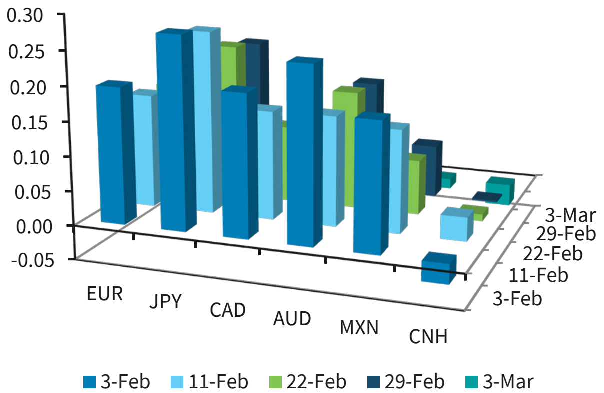
The positive beta of most USD-cross event vols to the increased probability of a progressive candidate versus a muted response for USDCNH event vol may indicate market expectations of a shift in the policy debate as a result of such a nomination. We think this dynamic points to a more progressive Democratic nominee potentially shifting the focus of the presidential election toward domestic economic and social policy issues (such as inequality, redistribution policies, healthcare, student debt, climate change, etc.) and taking some attention away from China and the trade conflicts. As such, the increase in event volatility for all USD crosses ex-CNH corresponds to a wider set of potential policy outcomes for the US and is therefore associated with increased uncertainty on domestic policy front. On the flipside, arguably a shift in focus towards domestic policy may alleviate concerns of a potential for escalation in the US-China trade conflict and hence result in a remarkably more muted pricing in of uncertainty for USDCNH vol.

Indeed, this is validated by the significant negative sensitivity of the 1d forward implied USDCNH skew to the probability of a progressive candidate (measured using 25D risk reversals, Figure 7). The negative sign suggests that as the probability of a progressive candidate rises, the market is ascribing a higher likelihood for downside USDCNH moves than upside. Increased likelihood for USDCNH downside is therefore consistent with the market expecting a shift away from trade policy to domestic issues if a progressive candidate becomes the eventual Democratic nominee.

Turning to the sensitivity of 1d forward implied risk reversals for other USD crosses on the event dates, we find statistically significant negative betas for USDEUR and USDMXN, whereas positive ones for USDJPY, albeit smaller than those for USDCNH. The negative beta for the USDEUR and USDMXN may be explained by a similar shift in focus toward domestic political issues and hence reduced likelihood of US trade related action (e.g., as has been threatened by the US on European autos) and likely resultant risk-off market moves if a progressive does capture the nomination. For USDJPY, the directional effect would tend to be positive, given that the JPY has generally traded as a safe haven proxy amidst rising US trade policy related actions.

FIGURE 6

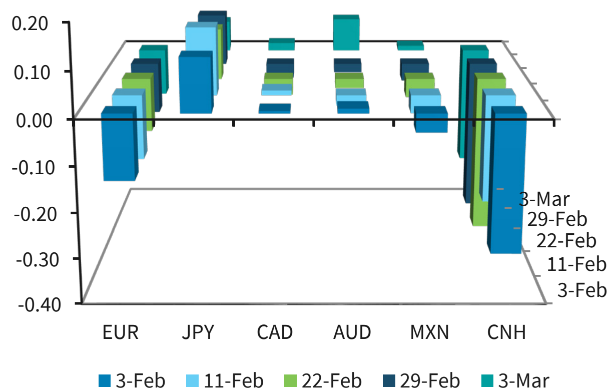
Beta of the 1d fwd event volatility to a 10% increase in the probability of a progressive nominee



Note: We regress the 5d change in the 1d forward ATM volatility for the date of each event against 5d change in the implied probability of a progressive nominee. Source: Predictit, Bloomberg, Barclays Research

FIGURE 7

Beta of the normalized USDXXX skew to a 1% increase in the probability of a progressive nominee



Note: All currencies are USDXXX. We regress the 5d change in the 1d forward 25d risk reversal/ATM volatility for the date of each event against 5d change in the implied probability of a progressive nominee. Source: Predictit, Bloomberg, Barclays Research

Appendix

FIGURE 8

Democratic primaries calendar

Election date	Jurisdictions
3-Feb	Iowa
11-Feb	New Hampshire
22-Feb	Nevada
29-Feb	South Carolina
3-Mar	Alabama, American Samoa, Arkansas, California, Colorado, Democrats Abroad, Maine, Massachusetts, Minnesota, North Carolina, Oklahoma, Tennessee, Texas, Utah, Vermont, Virginia
10-Mar	Idaho, Michigan, Mississippi, Missouri, North Dakota, Ohio, Washington
14-Mar	Northern Marianas
17-Mar	Arizona, Florida, Illinois
24-Mar	Georgia
29-Mar	Puerto Rico
4-Apr	Alaska, Hawaii, Louisiana, Wyoming
7-Apr	Wisconsin
28-Apr	Connecticut, Delaware, Maryland, New York, Pennsylvania, Rhode Island
2-May	Guam, Kansas
5-May	Indiana
12-May	Nebraska, West Virginia
19-May	Kentucky, Oregon
2-Jun	Montana, New Jersey, New Mexico, South Dakota
6-Jun	District of Columbia, Virgin Islands

Source: Barclays Research

FIGURE 9

Beta of 1d fwd ATM vol and risk reversal at different primary contest dates

	ATM vol (10x)						Risk reversal (100x)					
	EUR	JPY	CAD	AUD	MXN	CNH	EUR	JPY	CAD	AUD	MXN	CNH
3-Feb	0.20***	0.28***	0.20***	0.25***	0.18	-0.03	-0.15**	0.12*	0.01	0.01	-0.04	-0.31***
11-Feb	0.16**	0.26***	0.16**	0.16*	0.15	0.03	-0.14**	0.15**	0.01	-0.02	-0.04	-0.24**
22-Feb	0.16**	0.22*	0.11**	0.17*	0.08	0.01	-0.12*	0.11**	-0.04*	-0.02	-0.04*	-0.36***
29-Feb	0.15**	0.21*	0.11**	0.16*	0.08	0.00	-0.12*	0.12***	-0.03*	-0.02	-0.04*	-0.35***
3-Mar	0.02	0.06	0.02	0.04	-0.01	-0.03	-0.11	0.07	0.02	0.08*	0.01	-0.28**

Note: * 5% significance, ** 1%, *** 0.1%. Source: Barclays Research

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