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Who Will Be the Next President?

The economy may not be at the top of voters' minds in every election, but it is rarely less than a close second. This is the principle underpinning the Moody's Analytics presidential election model. The model predicts whether the incumbent presidential candidate will win the popular vote in each state and the District of Columbia, and thus the necessary Electoral College votes to win the election. And the winner is…

Who Will Be the Next President?

BY MARK ZANDI, BRENDAN LACERDA AND JUSTIN BEGLEY

The economy may not be at the top of voters' minds in every election, but it is rarely less than a close second. This is the principle underpinning the Moody's Analytics presidential election model. The model predicts whether the incumbent presidential candidate will win the popular vote in each state and the District of Columbia, and thus the necessary Electoral College votes to win the election.

This type of presidential election analysis is not new. The first was in the late 1970s by Yale economist Ray Fair. However, his seminal work was based on relating national economic conditions with presidential election outcomes. What sets apart our work from similar efforts is a focus on regional economic conditions that are the basis for state-by-state projections of the Electoral College.[1 2 3]

This state-level approach has an impressive, though no longer perfect, track record. It incorrectly predicted that former President Donald Trump would win re-election in 2020.[4] He did not. The political fallout from the pandemic and extraordinary turnout by Democrat voters upended his re-election bid. Our model could not pick up the impact of the pandemic black swan, and while we controlled for turnout, we had assumed turnout would be historically typical.

Given the results of recent party primaries, the most likely scenario is that this election will be a rematch between current President Joe Biden and former President Donald Trump. While the election will almost certainly be a nail-biter, we feel confident in the model's 2024 prediction for who will be the next president. That is, President Biden will win re-election.

To be sure, the election hinges on our forecast for the strength of the economy between now and Election Day, and various political assumptions regarding voter turnout and the prevalence of third-party candidates. In the analysis that follows, we describe our election model, discuss the results, and assess the sensitivity of the model's results to our forecasts and assumptions. Each month leading up to the election, we will update our presidential election results as more economic data come in and our economic forecast evolves.

1 Robert Dye, "The Next President," Regional Financial Review, February 2004, p. 28-30.
2 Augustine Faucher, "U.S. Presidential Election Model," Regional Financial Review, April 2008, p. 29-33.
3 Daniel White and Michael Brisson, "It's the Economy Stupid!" Regional Financial Review, September 2015, p. 41-45.
4 Mark Zandi et al., "2020 Presidential Election Model," Regional Financial Review, September 2019, p. 11-22.

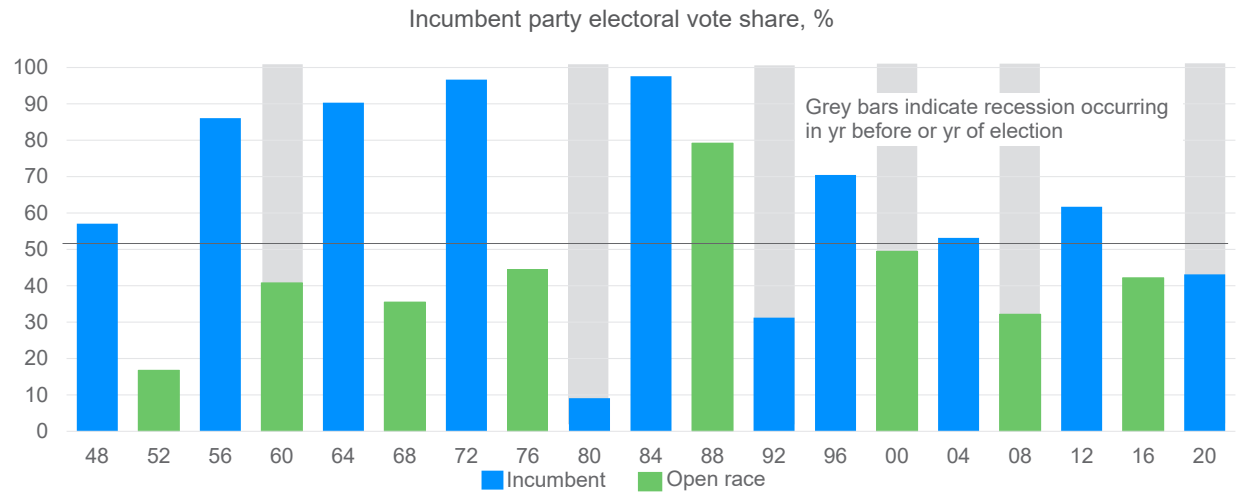
Presidential election model

The Moody's Analytics presidential election model accounts for both political and economic factors. While the economy's performance and perceptions of this performance are critical to deciphering the behavior of undecided voters, making them crucial to predicting close elections, political variables are also potent for predicting votes on a state-by-state basis. Controlling for these political factors is also crucial to precisely identifying the marginal effects of the economic factors on voting.

Previous share of popular vote

Most voters tend to favor the same party or candidate in successive elections. To capture the effect of this political loyalty, our model includes the share of the popular vote that the current incumbent party received in a given state during the prior presidential election. This is the most statistically significant variable in the model (see Appendix). A simple regression analysis indicates that the incumbent party is expected to capture almost 90% of the votes it accrued in the previous election, although this varies somewhat across states. In other words, this is the variable that is intended to explain why Texas almost always shows up in red on election maps, and California almost always blue. It also helps explain why incumbents typically win re-election, save for when the economy has suffered a recession (see Chart 1).

Chart 1: Incumbents Typically Win, Except When There Is a Recession



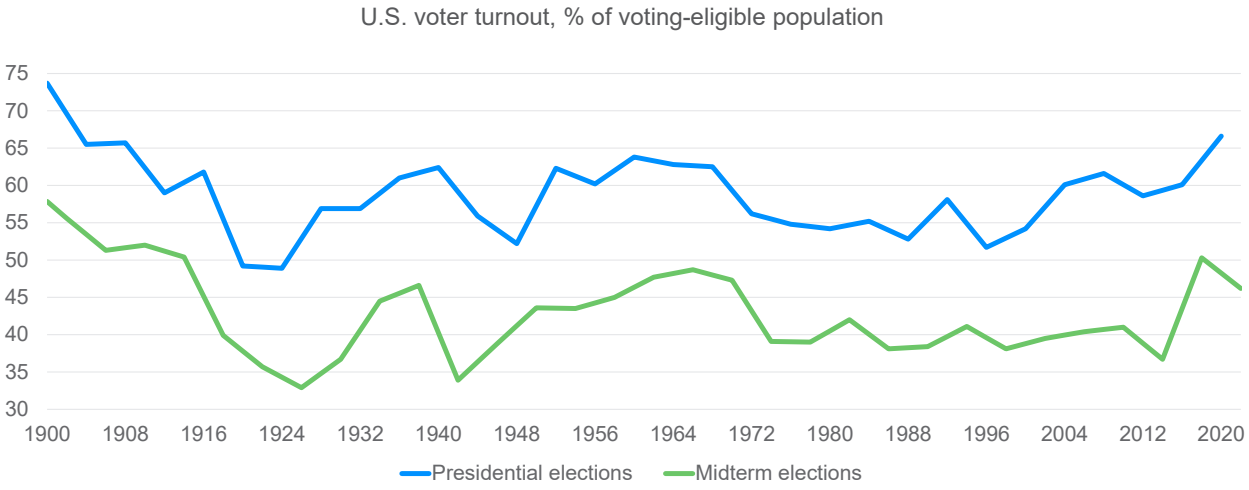
Sources: National Archives, Moody's Analytics

Non-incumbent party turnout

Voter turnout is also a critical variable in determining election outcomes, and even modest shifts in turnout can flip an election. The 2020 presidential election saw the second highest turnout since 1936, with well over two-thirds of the voting-eligible population casting votes (see Chart 2). Our model includes a state-level non-incumbent party turnout variable to capture this effect. This also allows us to stress the model results under various turnout scenarios, which we do later in this white paper.

This variable is defined as the product between the vote share captured by the party not in the White House in a given election year and the proportion of the voting-eligible population that voted in each state. We have not separately modeled turnout for 2024; instead we assume that voter turnout for the non-incumbent

Chart 2: Voter Turnout Should Be Strong This Election Year



Sources: U.S. Elections Project, Moody's Analytics

party, Republicans in this election, is the same as the turnout that the Republicans garnered in 2020. To clarify, this does not imply that we assume that total voter turnout will equate to 2020's multidecade high, but rather Republican turnout in 2024 will match Republican turnout in 2020. Given that it currently appears that the 2024 election will feature the same two candidates as the 2020 election, the assumption of identical Republican turnout seems reasonable.

The non-incumbent turnout variable is separately estimated in the model for Republicans and Democrats via interaction terms. The interaction terms include dummy variables for party identifiers. Non-incumbent turnout is separately estimated for each political party based on the theory that the parties have different degrees of success in motivating voters when their party is out of power.

The regression results support this claim. The estimated coefficients indicate that Republicans are more successful at boosting turnout when there is a Democratic incumbent than vice versa. One possible explanation for this is the Democrat Party has traditionally been a big-tent coalition, combining various interest groups from environmentalists to labor unions to ethnic minorities to college-age students, whereas the Republican Party has traditionally represented a more homogenous alliance of demographic groups and interests. The model suggests that the broadness of Democrats' coalition limits their success at getting their voters to the polls more than Republicans.

Political fatigue

Our model includes a variable to capture political fatigue, which occurs when the incumbent party has served in power for at least two consecutive terms. History shows that voters are reluctant to allow one party, Democrat or Republican, to remain in power for more than two consecutive terms. Since Harry Truman succeeded Franklin Delano Roosevelt's unprecedented four-term presidency, only once has the party stayed in office for more than eight consecutive years. Even then, the election of George H.W. Bush in 1988 was impacted by unique circumstances, particularly with regard to the end of the Cold War.

It is difficult for a two-term incumbent's party to win, according to our modeling. This weighed heavily against Hillary Clinton's election bid in 2016, which followed an eight-year Obama administration, thus contributing to her defeat. Political fatigue also contributed to President Barack Obama's victory, which was aided by a preceding eight-year George W. Bush presidency. Since President Biden has served only one term, political fatigue is not a factor in this election.

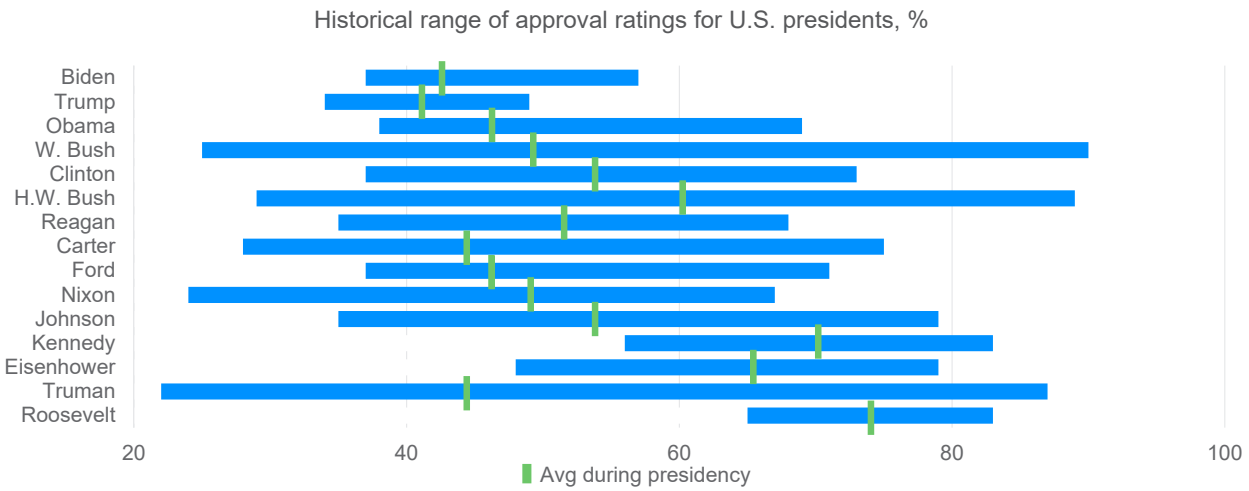
Approval rating

The incumbent president's approval rating is also included in our model. Approval is intended to capture political factors affecting the president's broad favorability among voters. Economics play a role in presidential approval, but approval can also be impacted by myriad other factors such as foreign policy, personal factors such as age, or political scandals. Most important, voter approval can also capture voters' sentiment and enthusiasm toward the incumbent and their party as the election approaches.

Our model uses the four-quarter change in the president's approval rating to capture how voter perceptions of the incumbent vary during an election year. The assumption is that voters experience a recency bias—that is, more recent changes in perceptions have a greater effect on voting. Also, testing of alternative model specifications with longer horizons for the change in approval rating demonstrated weaker relationships.

In the three years since he has taken office, President Biden's approval rating has been below average, but more stable than for previous presidents, according to the long-running Gallup survey. Since FDR, the average president has seen his approval rating fluctuate by 38 percentage points over the course of his presidency. In contrast, Biden's approval rating has varied by 20 percentage points (see Chart 3). Since the variation in Biden's approval rating has been below average, and we do not foresee much change between now and November, we assume that Biden maintains his current approval rating of 37% through November, implying a modest four-quarter decline.

Chart 3: Biden's Approval Rating Is Low, but Has Not Varied Much



Sources: Gallup, Moody's Analytics

Favorite son

Intuition suggests that voters favor candidates associated in some meaningful way with the state in which they live. Therefore, we include a state-level favorite-son dummy variable that is turned on in the state with which the candidate is most closely associated, whether by birth, residency, or previous public office. An important caveat is that our analysis has found that being a favored son is not especially helpful for the incumbent, but it is for the challenger. Therefore, only the challenger's favorite-son status is included in the model.

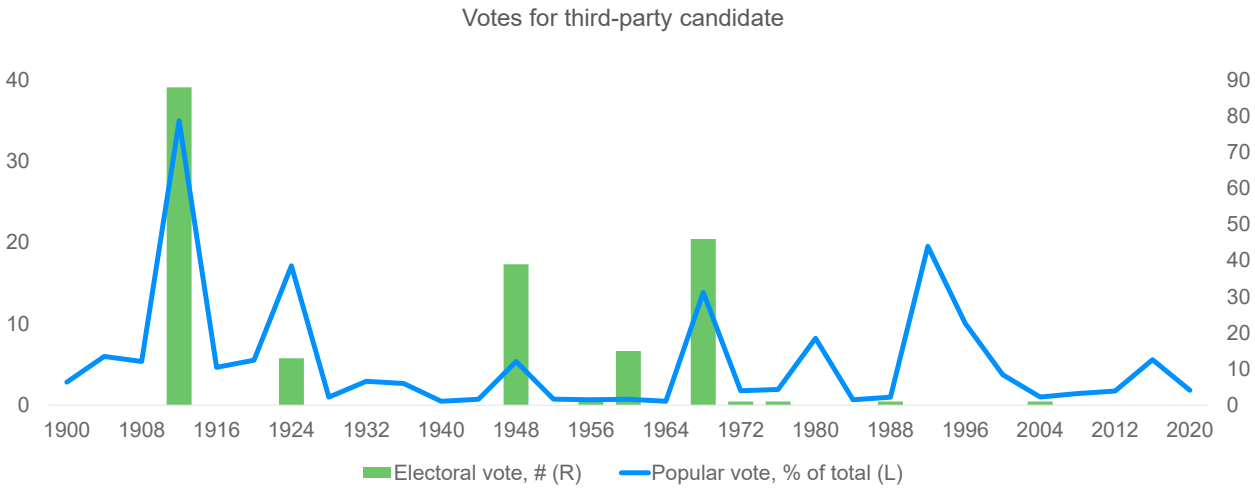
For instance, in 2020, Biden was the challenger to then-President Trump, and he was given favorite-son status in Delaware and Pennsylvania. Biden is a favorite son in both states given he was born in Pennsylvania, was the senator from Delaware, and closely associates himself with both states. But Biden is not given favorite-son status in this election because he is the incumbent. As shown later in the paper, Pennsylvania will likely be the most important swing state in this election, but since Biden is not given favorite-son status in this election it does not influence our results.

For the 2024 election, Trump is granted favorite-son status for the state of Florida. While not his birth state, we assess that Florida is the state currently most associated with Trump. For robustness, we tested whether Trump should also be given favorite-son status for New York, although this had no bearing on the result given New York's heavy Democratic lean.

Third-party vote share

There are only a few instances in modern history when a third-party candidate posed a serious challenge to the mainstream candidates. The most significant recent example is the 1992 election between incumbent President George H.W. Bush and Bill Clinton. Ross Perot, the third-party challenger, captured nearly 19% of the popular vote, but even with that unusually high margin, he did not win a single Electoral College vote. Indeed, no third-party candidate has won an Electoral College vote since 1968, when former Democrat Governor of Alabama George Wallace picked up 46 electoral votes in a race with Richard Nixon and Hubert Humphrey. Even then, Wallace's votes were concentrated in the Southeast (see Chart 4).

Chart 4: Third-Party Candidates Play Less of a Role in Recent Elections



Sources: The American Presidency Project, Moody's Analytics

The low approval ratings of both Biden and Trump suggest third-party candidates could mount a meaningful challenge in 2024. Indeed, well-known independent contenders such as Robert F. Kennedy Jr. and Cornel West are actively trying to get their names on state ballots, while No Labels, a self-identified bipartisan organization, appears set to put its own candidate forward. Given the mounting possibility of a serious third-party contender(s) in this election, we include the total share of the popular vote captured in previous elections by all third-party candidates in our model.

We do not forecast the proportion of the popular vote for third-party candidates in 2024. Instead, we assume that the share will be the same as in the 2020 presidential election. However, we use this variable to test the sensitivity of our model's results to a third-party vote and determine the minimum third-party vote share that would swing the election in favor of Trump.

Economic variables

While political factors are critical to determining election outcomes, economic factors can sufficiently sway undecided voters and decide the outcome of the election. Our model includes gasoline prices, fixed mortgage rates, real household income, and consumer confidence. We tested a range of other economic variables, including stock prices, housing values, unemployment and job growth, to name a few, but ruled them out based on the statistical results and back-testing of the model.

Gasoline prices

It is well known that gasoline prices, and especially the change in prices, play an outsize role in shaping voters' perceptions of inflation and their financial well-being. Most Americans purchase gas regularly and are well aware of the price and how it is changing, as many have no choice but to purchase gas at the prevailing price. To capture this, our election model includes the year-over-year percent change in national gas prices as reported by the Energy Information Agency.

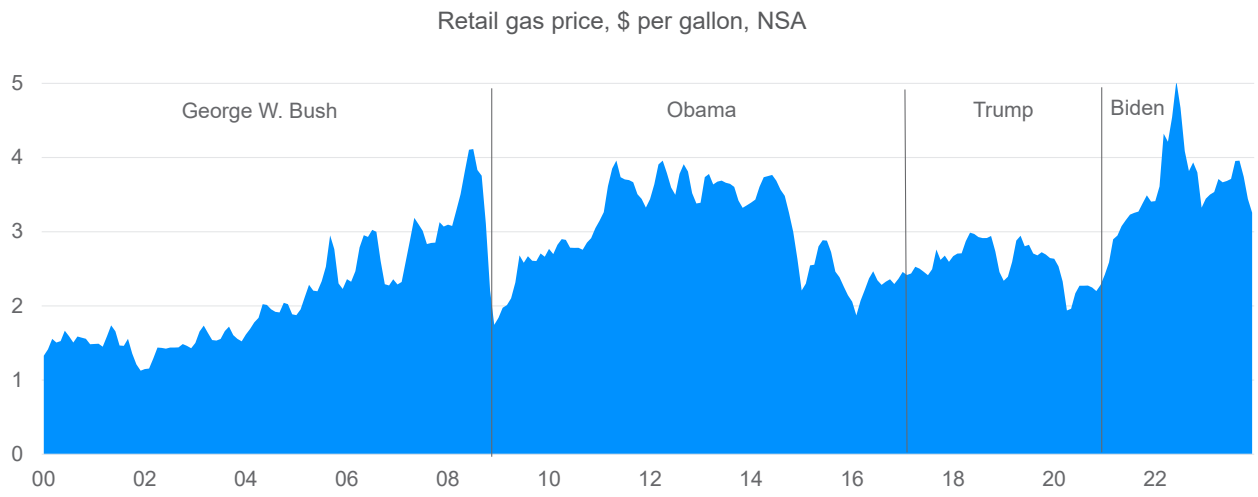
The Biden administration has faced several oil price shocks, from sanctions on Russian oil to OPEC+ production cuts, which sent gas prices to a historic high of more than $5 per gallon in summer 2022 (see Chart 5). Gas prices have since cooled to near $3 per gallon given big increases in production by U.S. frackers and the soft Chinese economy, which has dampened oil demand. However, we expect that these low oil prices will not prevail for long and will be closer to $3.50 by Election Day. Biden gets a small tailwind from the year-over-year decline in gasoline prices, but the expected late-2024 increase erodes much of the benefit. Having said this, forecasting oil prices is especially difficult, and if prices move up much more than anticipated, the damage to Biden's re-election bid will quickly mount.

Real household income

To capture the impact of labor market conditions and inflation on voters, we include the year-over-year percent change in real income per household at the state level in our model. Nominal income data are available from the Bureau of Economic Analysis, and we adjust for inflation using the consumer price index less energy. Real income is then divided by the number of households in each state reported by the U.S. Census Bureau to calculate a measure of real household income.

For 2024, we use our state-level forecasts for nominal income and the number of households as well as our national-level forecast of the consumer price index excluding energy. We exclude energy prices since we have gasoline prices in the model, and we want to avoid double-counting. Our state forecasts of nominal

Chart 5: Elevated Gas Prices May Ding Biden Despite Recent Declines

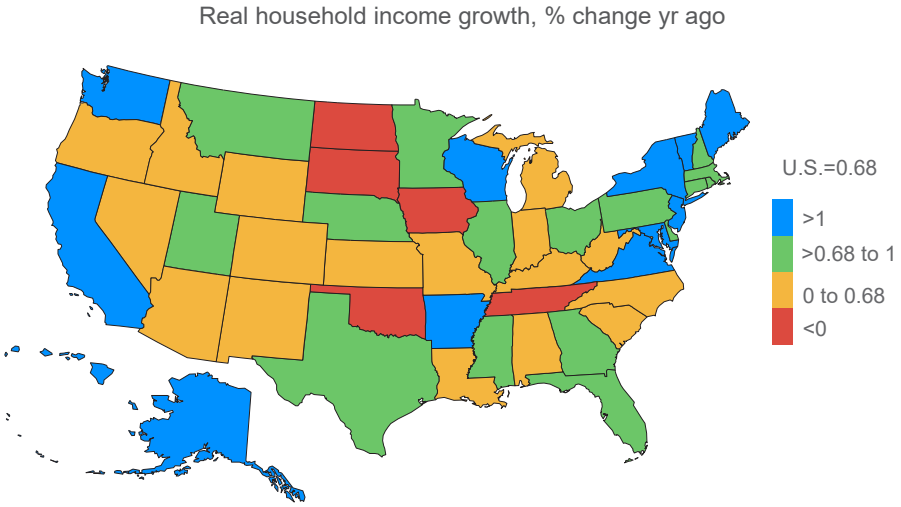


Sources: EIA, Moody's Analytics

income include forecasts for wages and salaries as well as nonwage income. We thus effectively control for a variety of economic factors important to elections. For instance, employment is a driver in our forecast for wages and salaries while asset price performance plays into our forecast for nonwage income, allowing us to control for stock and bond market performance through corporate dividend and interest payments.

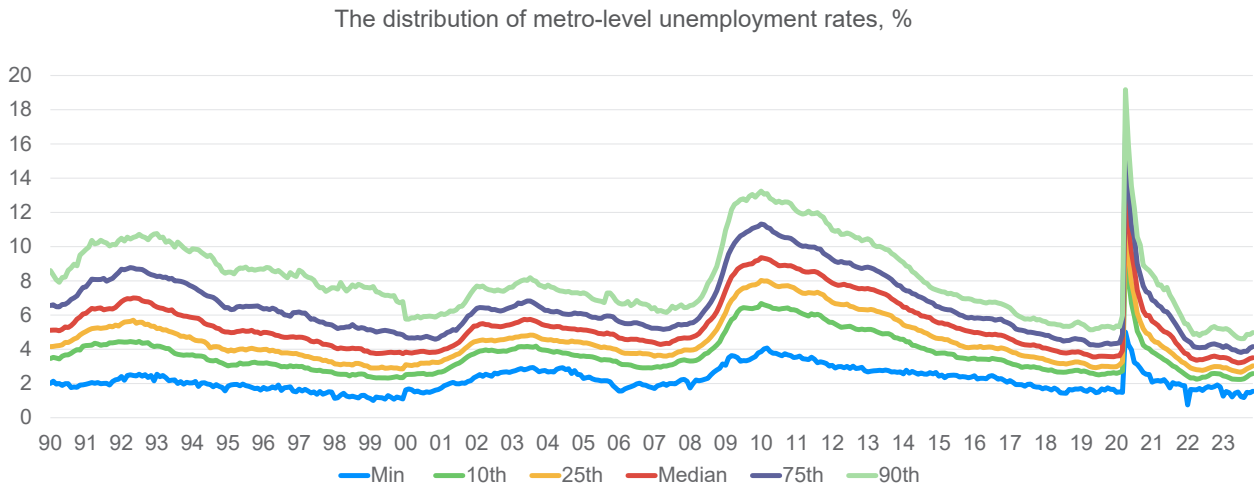
Voters' purchasing power is central to their thinking about for whom to cast their ballot. To Biden's benefit, after more than two years of high inflation, real wages are growing again and by Election Day will be well above pre-pandemic levels in most states (see Chart 6). Unemployment is extraordinarily low and stable across all states, which is supporting strong wage gains (see Chart 7). We also expect inflation to keep steadily decelerating toward the Federal Reserve's 2% target in coming months. Therefore, real income growth will be decidedly positive for Biden's re-election bid.

Chart 6: Real Income Gains Provide a Biden Tailwind



Sources: BLS, BEA, BOC, Moody's Analytics

Chart 7: Consistently Low Unemployment From Coast to Coast



Sources: BLS, Moody's Analytics

Mortgage rates

The 30-year fixed mortgage rate is another important factor in our election model and may play an even bigger role in this election given how quickly it has risen since Biden became president. Moreover, combined with the surge in house prices since the pandemic hit, housing affordability has been hammered. In a recent Morning Consult poll, housing affordability ranked as the second-highest economic concern among those 18 to 44 years old, the period in which most buy a first home. Many view the purchase of a first home in emotional terms, as an anchor in a good community, a vehicle to build wealth, and often a rite of passage into the middle class. Seeing homeownership drift out of reach often taps deeper feelings of economic insecurity and frustration.

While fixed mortgage rates remain elevated at just less than 7%, they are down considerably from their peak of closer to 8% late last year, and we expect them to move down to near 6.5% by Election Day. This is still above the rate, less than 6%, that we expect in the longer run, but any decline should be a modest plus for Biden's re-election chances. Biden may also get a lift if the Federal Reserve begins to cut short-term interest rates this spring, as is widely anticipated. We expect four 0.25-point rate cuts by Election Day. This will translate into lower interest rates on bank credit cards, consumer finance loans, and vehicle loans.

Consumer confidence

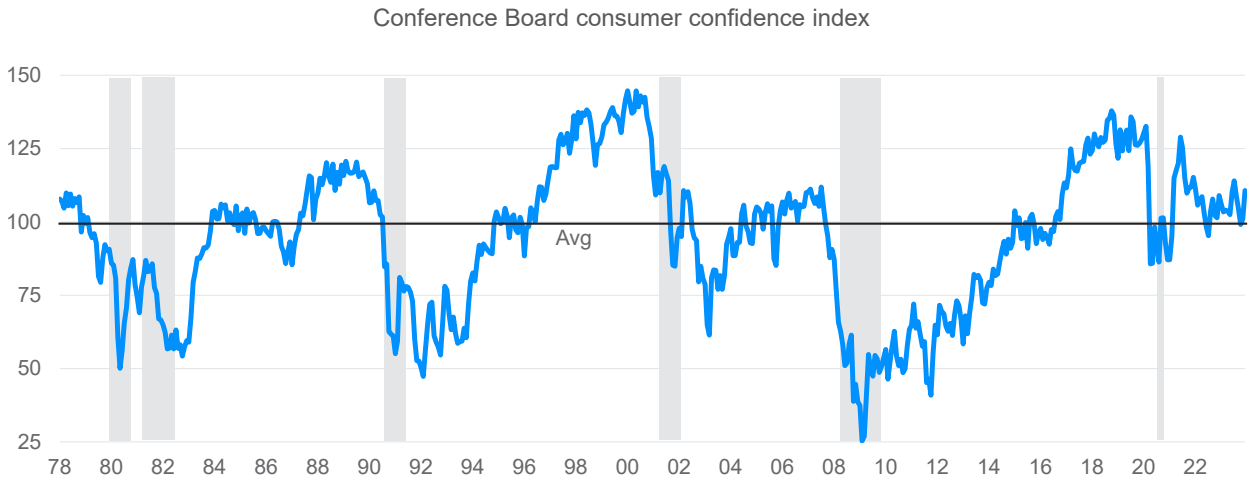
While the economy's performance is key to election outcomes, voters' perceptions of the economy's performance are arguably even more important. To capture voters' feelings about the economy, we include The Conference Board's monthly consumer confidence index in our election model. If the index is higher than a reading of 80—the threshold historically consistent with recession—consumer confidence favors the incumbent.

It is important to note that confidence differs from voter approval because there are myriad drivers of economic health than simply who occupies the White House. Further, we believe consumer confidence is more reflective of individual economic circumstances than a view on the president's job performance. Another popular measure of consumer sentiment from a University of Michigan survey shows that consumers are meaningfully

less upbeat. But that measure is likely politically biased given that it asks respondents for their party affiliation. Once asked, it is difficult for respondents not to respond to the other questions in the survey without considering the answer through a political prism.

Confidence as measured by The Conference Board survey is currently close to its decades-long average, well above the 80 threshold, and edging higher as the economic news continues to improve. This favors President Biden's election bid (see Chart 8).

Chart 8: Consumer Confidence Far From the Recession Threshold



Sources: The Conference Board, Moody's Analytics

Who will be the next president?

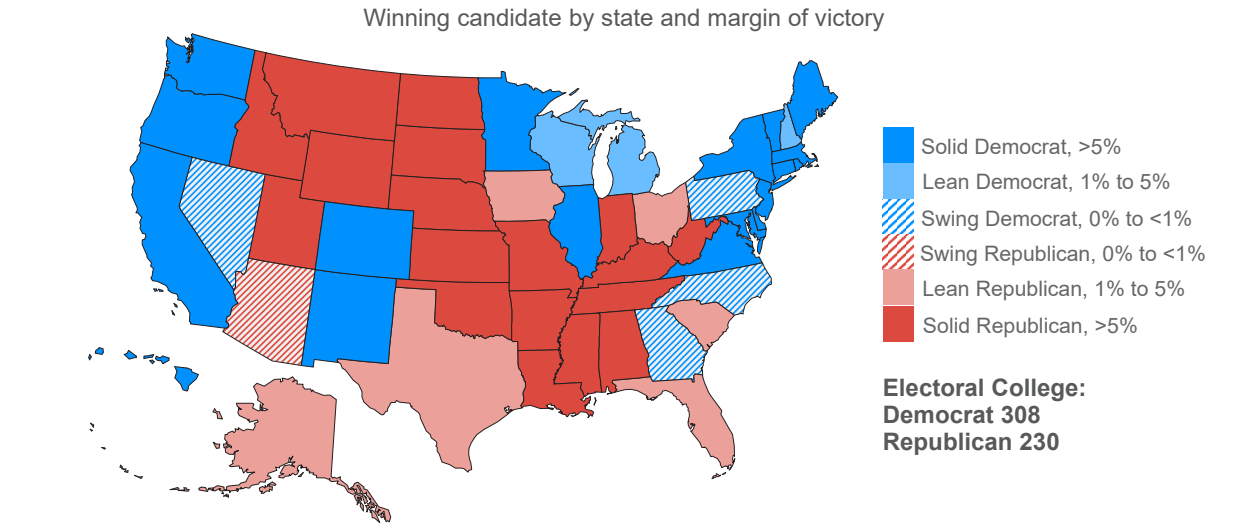
President Biden is expected to win re-election but by a thin margin, and the election could easily flip with only small shifts in the economy's performance, his approval rating, voter turnout, and how well third-party candidates do. On the margin, political factors favor Trump's candidacy, while economic factors favor Biden's.

More precisely, Biden is expected to win 308 electoral votes, 38 more votes than the 270 needed to win re-election. This is nearly identical to his tally in 2020, when he won 306 votes. But compared with the 2020 election, Biden picks up a new win in North Carolina and narrowly loses in Arizona, a state he carried in 2020. These swings should not be surprising. North Carolina was Trump's narrowest victory in 2020 with a 1.3-percentage point win. Democratic presidential candidates have failed to win in the Tar Heel State since Obama's first run in 2008. However, the composition of North Carolina's electorate is evolving. Population growth in the state has been among the strongest nationally since the last election due to a large influx of immigrants and residents from other states prompted by the pandemic and remote work. Trump won Arizona in 2016 by 3.5 percentage points while Biden's margin of victory in 2020 was a scant 0.3 percentage point. Since the immigration debate will likely be at the forefront of 2024's presidential raceand given the recent conservative drift of the Hispanic vote, the results in these key states will likely be very close.

Similar to 2020's close and contentious race, the 2024 election will be determined in a few battleground states (see Chart 9). On the state level, the outcome is likely to be even closer than in 2020 with five states

decided by less than 1 percentage point compared with only three in the previous election. The narrowness of Biden's margins in Georgia (+0.9 ppt), North Carolina (+0.3 ppt), Nevada (+0.2 ppt), Pennsylvania (+0.8 ppt), and Arizona (-0.8 ppt) suggests that the outcome may not be determined on election night as several states face the prospect of automatic recounts and court challenges—a situation likely to raise anxieties given the aftermath of the 2020 election.

Chart 9: Biden Wins Narrow Re-Election With Average Turnout



Source: Moody's Analytics

Biden's projected 308 electoral vote tally provides some cushion. If we start flipping the results of his slimmest victories, the loss of North Carolina and Nevada would trim his vote total to 286, still enough to achieve victory. Losing Georgia, which has 16 electoral votes, would then bring Biden to the exact threshold he needs to win a second term. Therefore, Pennsylvania appears to be the key to winning or losing the 2024 election. Losing the Keystone State's 19 electoral votes would drop Biden to 267 votes, if he also loses North Carolina and Nevada, and 251 votes, if he also loses Georgia, swinging the election to Trump. In other words, our model suggests that the upcoming presidential election will likely be determined in Pennsylvania.

One caveat is that the model does not consider that Nebraska and Maine split their electoral votes according to their congressional districts. Biden picked up one of Nebraska's electoral votes in 2020 while Trump claimed one of Maine's votes. Depending on the split, there is a realistic scenario where the electoral vote count is tied, 269-269. In such a scenario, the U.S. Constitution dictates that a vote in the House of Representatives decides the presidential election. The election is conducted by the newly elected House, not the pre-election members. Given Republicans' thin current majority in the House, the future balance of power in Congress is equally uncertain.

However, such an event has only occurred twice in U.S. history, in the election of 1800, when Thomas Jefferson bested Aaron Burr, and in the "Corrupt Bargain" of 1824, when a four-way race for the presidency led to no candidate garnering a majority of the electoral votes, leaving the House of Representatives to choose between John Quincy Adams and Andrew Jackson to be the next president. John Quincy Adams won the vote.

Also of note, in the event of a tie in the Electoral College, the Senate separately conducts the election for vice president, raising the possibility of a president and vice president from different parties.

What could swing the election?

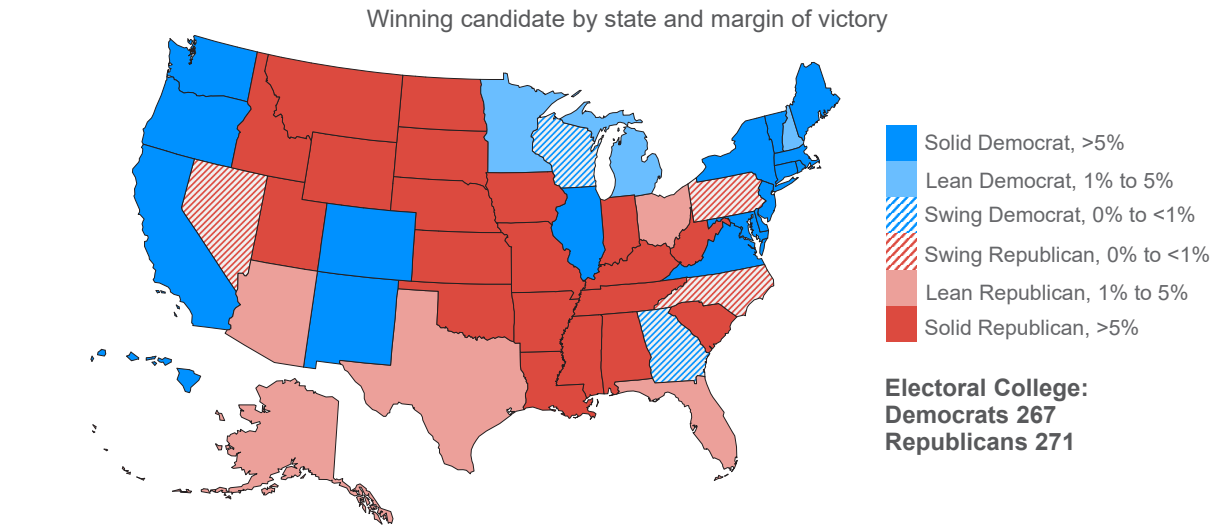
Given how close the election appears to be, it is important to assess the sensitivity of the results to our assumptions of the various political and economic factors in the model. Recall, for the political variables, we base our assumptions for non-incumbent turnout, third-party vote share, and approval rating on recent historical experience. The economic variables are our current baseline forecasts for gasoline prices, 30-year fixed mortgage rates, real income per household by state, and consumer confidence. For each of these variables, we determine the change necessary to flip the results of the election, resulting in a Trump victory, all else equal.

Non-incumbent turnout

In 2020, we incorrectly anticipated that President Trump would win re-election. However, as we demonstrated at the time, a large increase in turnout by Democrats would flip the result to Biden. And indeed, the Democrat Party's ability to engineer one of the largest turnouts of voters in living memory powered Biden to victory.

In this election, a larger Republican turnout could swing the results to Trump. Indeed, our election model indicates that, all else equal, a 2-percentage point increase in Republican turnout would turn the election in his favor. He would then pick up Nevada (+0.64 ppt), North Carolina (+0.53 ppt), and the deciding state, Pennsylvania (+0.05 ppt), to secure 271 electoral votes (see Chart 10). This is a plausible increase in turnout, as polling shows Trump's voter base is highly enthusiastic about its candidate. Besides, this increase in turnout is only a bit more than half a standard deviation above the typical turnout in presidential elections. However, we are making the simplifying assumptions that the increase in turnout is the same across states, and those additional Republicans who do turn out will vote Republican.

Chart 10: Modest Increase in Republican Turnout Swings Key States, Election



Source: Moody's Analytics

Also consider that if we raise our assumption for third-party vote share to the middle of its historical range, Trump would only need a 1-percentage point increase in Republican turnout to secure victory. And this does not consider the possibility that enthusiasm for President Biden among Democrats could be low, weighing on their turnout, and lowering the bar for a Trump victory.

Third-party vote share

President Biden's re-election also hinges on how much of the vote third-party candidates capture in 2024. We expect him to win, but this assumes that the third-party vote share is the same 1.8% as in the 2020 election. But that share was atypically low by historical standards, and simply increasing the national third-party vote share by one standard deviation to 7.5%, flips the election in favor of Trump, all else equal. For context, a 7.5% third-party share would rank fourth among elections since 1980, behind Ross Perot in 1992 and 1996 and John Anderson in 1980. While a high bar, it is conceivable.

Third-party votes are not as directly beneficial to Trump since alternative candidates would take votes from both Republicans and Democrats. Nonetheless, with Robert F. Kennedy Jr., Cornel West, and a potential No Labels candidate entering the race, a high third-party vote share is likely a meaningfully bigger threat to Biden.

One caveat is that, historically, third parties have tended to experience limited success in battleground states. They typically accumulate most of their votes in uncompetitive states, including Alaska, Vermont, Utah, Montana and Idaho, where the Green and Libertarian parties have a more established presence. For a third-party candidate to swing the results, they would need to secure a meaningful vote share in one or multiple contentious battleground states, similar to Ralph Nader in Florida during the 2000 election (see Table 1).

Approval rating

Based on our election model, President Biden would need to suffer a large decline in his approval rating to lose the election, all else equal. Indeed, flipping the result of the election to Trump would require a difficult-to-see 34-point drop in approval by November.

Table 1: Historical Third-Party Performance

Cumulative % vote share for all third parties

	2020	Median, 1980-2020
Alaska	4.39%	4.39%
Utah	4.22%	4.22%
Oregon	3.18%	3.61%
New Mexico	2.21%	3.55%
Wyoming	3.51%	3.51%
Washington	3.26%	3.26%
Vermont	3.24%	3.24%
Montana	2.53%	3.24%
North Dakota	3.10%	3.10%
Maine	2.89%	2.89%
Idaho	3.09%	2.85%
Colorado	2.70%	2.70%
California	2.20%	2.64%
Nebraska	2.61%	2.61%
Arkansas	2.83%	2.55%
Maryland	2.49%	2.49%
Nevada	2.28%	2.46%
District of Columbia	2.45%	2.45%
Minnesota	2.32%	2.39%
Kansas	2.35%	2.35%
Massachusetts	2.26%	2.26%
South Dakota	2.63%	2.24%
Rhode Island	2.00%	2.08%
Iowa	2.02%	2.02%
Hawaii	2.00%	2.00%
Indiana	2.01%	1.95%
New Hampshire	1.94%	1.94%
Illinois	1.90%	1.90%
Virginia	1.89%	1.89%
Missouri	1.79%	1.79%
Arizona	1.58%	1.76%
Connecticut	1.55%	1.74%
Wisconsin	1.73%	1.73%
Kentucky	1.76%	1.71%
West Virginia	1.68%	1.70%
Louisiana	1.69%	1.66%
Ohio	1.49%	1.64%
Michigan	1.54%	1.61%
New York	1.39%	1.54%
Delaware	1.48%	1.48%
Texas	1.47%	1.47%
South Carolina	1.46%	1.46%
Pennsylvania	1.46%	1.46%
Tennessee	1.89%	1.45%
New Jersey	1.27%	1.27%
North Carolina	1.48%	1.26%
Georgia	1.29%	1.22%
Alabama	1.40%	1.18%
Mississippi	1.34%	1.04%
Florida	0.92%	0.92%
Oklahoma	2.34%	0.79%

Grey-shaded states are battleground states, decided by less than 5 ppts in 2020.

Source: Moody's Analytics

George H.W. Bush did suffer such a drop in the lead-up to the 1992 election, but the circumstances in that election were unique. His approval rating soared in early 1991 following the victory over Iraq in the first Gulf War, but subsequently cratered with the recession that hit in 1991 and the Los Angeles race riots of 1992.

That it takes such a large change in the president's approval rating to flip the election results goes to the weak explanatory power of the approval rating in the model. This is likely because the approval rating is closely related to the other variables. In other words, since gasoline prices and real household income growth affect a president's favorability among voters, the inclusion of the approval rating in the model provides limited explanatory power beyond what these other variables are already capturing. Further, approval ratings may be becoming less informative as a gauge of voter preferences given the increase in party polarization.

Economic stress test

President Biden's expected re-election rests in part on gasoline prices remaining in the $3 per gallon range. All else equal, if gas prices surge back close to $4 per gallon, Trump will win. Given the cross-currents in global oil demand and supply, it is very difficult to gauge the outlook for gas prices, and such an increase in prices cannot be ruled out.

For mortgage rates to undo Biden's expected victory, they would have to rise to more than 8.5%, all else equal. This would crush housing affordability, completely locking out aspiring first-time homebuyers, and likely also causing house prices to fall, as they did briefly when rates first increased in 2022, to the consternation of existing homeowners.

For real household incomes to end Biden's presidency, they would have to suffer a significant decline by Election Day, consistent with a meaningful recession characterized by significant layoffs and surging unemployment, all else equal. Of course, this likely overstates the decline in real incomes necessary to flip the election to Trump, because in the dynamic world we live in, the deteriorating economy would also damage Biden's approval rating, stoke higher turnout among Republican-leaning voters, and undermine consumer confidence.

Conclusion

Under any scenario, the upcoming presidential election will be close. If the economy continues to perform well as we anticipate and voter turnout and third-party vote share remain close to their recent historical norms, President Biden should win re-election. But these are big assumptions in a highly uncertain economic time and given our highly fractured and contentious politics. We will update the results of our model each month up through Election Day based on incoming economic data and the latest economic outlook. These updates, as well as more in-depth analysis on individual swing states and counties and the implications for fiscal policy, will be available in coming months.

Appendix: Moody's Analytics Presidential Election Model

The Moody's Analytics presidential election model is estimated as a pooled ordinary least-squares regression with state fixed effects (see Table A1). The model is estimated over 10 previous elections, beginning with the 1980 Reagan-Carter contest and up to the 2016 Clinton-Trump face-off. Given the geographic realignment of the political parties in the 1960s and 1970s, we only use the post-realignment period in our estimation. We also do not incorporate the 2020 election in our estimation because it is our judgment that the economic environment of that election was an extreme outlier given the volatility generated by the COVID-19 pandemic and the ensuing fiscal support programs. The fixed effects in the model are included to capture unobserved or omitted state-specific preferences of the electorate to vote for the incumbent party, such as race and other demographics, and educational attainment.

Table A1: U.S. Presidential Election Model Regression Statistics

Pooled least squares regression
51 cross-sections
Estimation sample 1980 to 2016
Total pool 510 observations
Dependent variable: Incumbent share of vote

	Coefficient	Std error	T-statistic
Constant	0.34	0.03	13.4
Gasoline prices, 1-yr % change	-0.06	0.01	-6.0
Real income per household, 1-yr % change	0.00	0.00	3.2
30-yr mortgage rate	-0.00	0.00	-8.0
Consumer confidence indicator	-0.01	0.01	-2.0
Gallup presidential approval rating, 1-yr difference	0.00	0.00	1.1
Political Fatigue dummy	-0.05	0.00	-13.5
Nonincumbent party turnout, %, when incumbent is Democrat	-0.42	0.04	-10.7
Nonincumbent party turnout, %, when incumbent is Republican	-0.38	0.04	-9.7
Third-party vote share	-0.16	0.04	-3.6
Favorite son dummy	-0.02	0.01	-1.8
R-squared	0.93		
Adjusted R-squared	0.92		
Durbin-Watson statistic	2.20		

Independent coefficient for each state, all close to 1 and highly significant

Source: Moody's Analytics

To assess the performance of the model, we perform a back-testing exercise and benchmark the results against the three models deployed in our analysis of the 2020 election. A summary of the model's performance is shown in Table A2. The model successfully predicts the winner in 10 out of the last 11 elections. We also assess the model's accuracy by comparing the margin of error on the electoral vote count with those of the models used in our 2020 iteration. The average error of the model is about 45 electoral votes, while the median error is 38 votes.

Notably, the model's only error was in the 2020 presidential election, when it projected that President Trump would win re-election with 356 electoral votes. A review of the model's key drivers sheds some light on the source of the misprediction. First, gasoline prices plunged in 2020, as consumers sharply curtailed

Table A2: Moody's Analytics U.S. Presidential Election Model Results

Historical test results and forecast

Actual election results			Predicted election results	
Year	Incumbent party's electoral votes	Winning party	2024 model	Predicted winner
1980	49	Republican	105	Republican
1984	525	Republican	503	Republican
1988	426	Republican	483	Republican
1992	168	Democrat	206	Democrat
1996	379	Democrat	459	Democrat
2000	266	Republican	248	Republican
2004	286	Republican	300	Republican
2008	173	Democrat	164	Democrat
2012	332	Democrat	272	Democrat
2016	233	Republican	247	Republican
2020	232	Democrat	356	Republican
2024	TBD	TBD	308	Democrat
		Avg error for electoral vote total:	45	
		Overall winner accuracy:	91%	

**Grey-shaded cells denote forecast error for overall winner

Source: Moody's Analytics

their travel during the pandemic. Given the unusual circumstances and the reality that consumers were not reaping the benefits of cheaper gasoline to travel, the electoral benefits are significantly overstated. Second, fiscal support payments artificially inflated real income per household. Voters knew that their incomes were temporarily inflated, but the model does not. Third, rock-bottom mortgage rates boosted Trump's expected performance. However, again, low borrowing costs stemmed from the Federal Reserve's extraordinary policy intervention.

The extraordinarily strong turnout by Democrats also confounded the results. We had assumed more typical turnout. And an additional factor to note is the threshold for victory. The incumbent is deemed to be the winner in each state if his popular vote share exceeds 50%. However, President Biden won three states in 2020 with less than 50% of the vote—Arizona, Wisconsin and Georgia—and Trump won North Carolina with less than a majority. A significant third-party vote share can change the threshold to win a state, complicating the projection for the electoral vote count.

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Moody's Analytics added the economic forecasting firm Economy.com to its portfolio in 2005. This unit is based in King of Prussia PA, a suburb of Philadelphia, with offices in London, Prague and Sydney. More information is available at www.economy.com.

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