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The role of minor party candidates as potential spoilers has been a topic of concern since Ralph Nader’s role in denying Al Gore the victory in Florida and thus denying him the presidency. As a consequence of Nader’s taking votes from the Democratic candidate, much of the subsequent hullaballoo has been about Green candidates costing Democrats votes. In 2016 there were assertions –-incorrect ones -- that Jill Stein, the 2016 Green Party Candidate was a “spoiler” for Hillary Clinton (see e.g., Devine and Kopko, 2021; Herron and Lewis 2007; Magee 2003, and discussion below)**.**[[1]](#footnote-1)But, even if minor party candidates did not change the presidential election outcome in 2016, can we say the same for 2020? Unlike the election in 2016, the 2020 election did not exhibit an Electoral College inversion of the popular vote. Nonetheless, despite Joe Biden having won the national popular vote by more than seven million votes, the outcome was very close in many states, as in 2016, including the pivotal states of Michigan, Pennsylvania, and Wisconsin. Indeed, with only a few thousand changes in votes, Trump would have been re-elected in 2020. Moreover, as we show below, there was an even greater scope for minor party candidates to have affected the election outcome in 2020 than was the case for 2016.

Here, after reviewing work on the effects of minor party candidacies in 2016, and then examining the probable effects of minority party candidacies in 2020 under the present election rules, we consider what might have happened in 2020 had presidential voting taken place under *rank-choice voting* (RCV), an electoral reform recently implemented in Maine, and adopted in Alaska for federal elections beginning in 2022. While this reform is generally touted in terms of its impact in promoting minor parties by allowing voters to cast votes for the candidates of minor parties without harming the chances of major party candidates who would be the voter’s second choice, we believe it fair to say that most of the enthusiasm for rank-choice voting has come from those whose second choice would be a Democratic nominee, since rank choice voting can also be thought of as an “anti-spoiler” reform. But one should also be careful about what one wishes for. Here, building on Devine and Kopko (2021), we show that at the presidential level, based on the most recent presidential elections, RCV is actually likely to benefit the Republican nominee.

## The presidential election of 2016

In 2016 there were two minor party candidates who received [at least a million votes](https://uselectionatlas.org/RESULTS/national.php?f=1&off=0&year=2016): Gary Johnson, running as a Libertarian, won million votes and Jill Stein running as the Green candidate, with million votes.[[2]](#footnote-2) It is common to think of Libertarians as being ideologically closer to Republicans (in part because some high profile Libertarians are former Republicans, e.g. Gary Johnson was the Republican governor of New Mexico before being the Libertarian presidential candidate in 2012 and 2016), while Greens are seen as being ideologically closer to Democrats since Green candidates tend to have platforms that are uniformly to the political left of the Democrats.[[3]](#footnote-3)

Had Johnson’s voters all instead chosen Trump and Stein’s all chosen Clinton, Trump would have now lost the popular vote by only votes, rather than themillion by which he actually lost the popular vote. Moreover, under this strong assumption, the outcomes would have changed in four states. Trump would have won additional electors in Maine, and won Minnesota, Nevada, and New Hampshire for an additional 22 EC votes. In contrast, under the above assumptions there are no additional Clinton victories. Thus, under the assumptions most favorable to minority party impact, the absence of minority party candidates would have significantly benefited Trump in terms of both popular vote and Electoral College seat share, but still would not have changed the outcome. On the other hand, if only Jill Stein not run, but Johnson remained, Clinton would have likely picked up electors in at least one state, Michigan (Devine and Kopko 2021).

But assuming that all minor party supporters would have shifted their support to a major party candidate if their preferred choice were not in the contest is unrealistic. Supporters of minor parties can exhibit negative affect toward both major parties (cf. Abramowitz and Webster, 2016), leading to abstention. Building upon Lacy and Burden’s (1999) analysis of the 1992 presidential election, Devine and Kopko (2021) estimate, using a multinomial probit model, that about half of the minority party supporters would not have voted had their own candidate not been in the race. They also estimate that in 2016 about 60% of the voters who ranked the Libertarian candidate, Gary Johnson, first would have ranked Trump second, and about 32-33% would have ranked Clinton second. Similarly in 2016, they estimate that about 75-80% of the voters who ranked the Green candidate Jill Stein first would have ranked Clinton second, and about 20% would have ranked Trump second. Doing the arithmetic, we find that, on balance, at least vis-à-vis the popular vote, minor party candidacies in 2016 hurt Trump more than they hurt Clinton.

## The presidential election of 2020

In 2020 there was again a Green Party candidate for president, Howie Hawkins, and again a Libertarian candidate, Jo Jorgensen. However, in 2020, Green supporters were more anxious to defeat Trump and now recognized his victory in 2020 as a real possibility and thus were more likely to choose to vote strategically. Thus, the votes for Green candidate were fewer in 2020 than in 2016 ( versus ). However, Jorgensen did almostas well as Johnson in terms of raw votes, with votes, compared to 4.5 million votes for Johnson in 2016; thus, the gap between Libertarian Support and Green Party support was much larger in 2020 than it was in 2016. This difference between 2016 and 2020 meant that the Libertarian presence on the ballot had a greater chance to affect election outcomes by denying votes to Trump.

The 2020 data for four key states are shown in the table below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| State | Electors | Biden (D) | Trump (R) | Biden minus Trump | Jorgensen (L) | Hawkins (G) |
| Arizona | 11 | 1,672,143 | 1,661,686 | 10,457 | 51,465 | 1,557 |
| Georgia | 16 | 2,473,633 | 2,461,854 | 11,779 | 62,229 | 1,013 |
| Pennsylvania | 20 | 3,458,229 | 3,377,674 | 80,555 | 79,380 |  |
| Wisconsin | 10 | 1,630,866 | 1,610,184 | 20,682 | 38,491 | 1,089 |
| NATIONAL EC | 538 | 306 | 232 | - | 0 | 0 |

We see from this table that Jorgensen’s votes could, in principle, have affected the outcome in three states (Arizona, Georgia, and Wisconsin), with a combined total of 37 electors. In these states, the margin of Biden’s victory was not only less than the Jorgensen vote share, but less than the Jorgensen vote share minus the vote share of Howie Hawkins --sometimes markedly so. These are the only three states won by Biden where the Jorgensen vote relative to Biden’s vote margin is large enough to plausibly affect the outcome. The 37 Electoral College votes in these three states would have been enough to change the EC outcome to a tie had all three states gone for Trump. If there had been a tie in the Electoral College, voting would have gone to Congress and there, with each state’s delegation in the House voting as a bloc, with votes in tied state delegations not counted, Trump would have won, since Republicans control more *delegations* in more states. Note that, because of this state-basedbloc voting rule, the party that holds the majority in the House could still fail to elect its preferred presidential candidate (Foley 2020).[[4]](#footnote-4)

Of course, positing that all the Hawkins vote would go to Biden and that all of Jorgensen’s vote would go to Trump is highly unrealistic. While only voters know for sure how they would vote had certain candidates not been on the ballot, plausible inferences are possible.What is likely to have happened if Jorgensen (or perhaps both Jorgensen and Hawkins) had not been on the ballot in 2020 and there was no other Libertarian candidate to replace Jorgensen?

Let us imagine that Hawkins remains in the race in 2020 but there is no Libertarian candidate. If we posit the same second preference rankings found by Devine and Kopko (2021) for 2016 apply to Libertarian voters in 2020, and posit that half the Libertarian voters would have abstained if their candidate had not been in the race in 2020, we would now find that no states shift in 2020.[[5]](#footnote-5) On the other hand, if we posit a zero rate of abstention for former Jorgensen voters, then there are two states that shift to Trump: Arizona and Georgia. And these two states would still shift to Trump even if all of the Hawkins voters in them shifted to Biden. But these two states would still not be enough to change the EC outcome.[[6]](#footnote-6)

We might think that these latter results tell us that, as in 2016, minority party candidates did not have any real impact in 2020. But that is far too strong a conclusion. Even under the Devine and Kopko (2021) assumptions about 50% abstention if the most preferred minor party candidate were not on the ballot, that implies nearly net votes would have shifted to Trump if there were no Libertarian option in 2020. Moreover, had there been no Libertarian candidates on the ballot, and those voters had zero abstention rather than 50%, with Trump receiving 60% of the votes, then Arizona and Georgia would have flipped in 2020, and Trump would have increased his popular vote by .

## Rank Choice Voting

Let us ask a different but related question about the 2020 presidential election. What might have happened in 2020 had Rank Choice Voting (RCV) been used instead of plurality? RCV asks voters to rank the candidates. Under the Maine rules for RCV for federal elections (Akula et al 2020), if no candidate receives a majority of first choice votes, then the candidate with fewest first choice votes have the votes on the ballots which ranked that candidate first reallocated to the voter’s second choice on the ballot. And the process continues in this way until one candidate has a majority of the then valid votes. If it has not already been decided by one candidate receiving a majority of the votes at an earlier stage, this process must eventually lead to a two-candidate contest and thus a clear winner. Rank Choice voting has been supported by liberal reformers because it makes it easier for voters to express their true preferences without worrying whether their vote will be wasted on a candidate who has no real chance of winning. It presents a way to make a dent in the two-party cartel that has dominated American politics for the past 150+ years. Reformers also see RCV as a way to foster more moderate politics (though that claim has been challenged: **﻿**Fraenkel and Grofman 2006, 2007). And RCV mitigates the potential for spoiler candidates.

In 2020, since the two major parties received the vast majority of the votes cast, it would be the voters who had selected a minor party as their first choice that would have their second (or third) choice counted in the final round. Is it plausible to assume that the Jorgensen vote would have gone disproportionately to Trump under RCV? Well, the answer to that is yes -- at least again using the 2016 estimates of Libertarian voting behavior from Devine and Kopko (2021) as our guide.

Let us assume that the same set of voters vote in our hypothetical 2020 RCV election, i.e., there are no abstentions, since their preferred candidates are on the ballot, and let us further assume that minor party supporters rank candidates in the fashion posited by Devine and Kopko.[[7]](#footnote-7) Of course, these are strong assumptions, but two states would flip to Trump under RCV even if 50% of the minor party candidate voters “undervote”.[[8]](#footnote-8) Even though the use of RCV rather than plurality could be expected to have changed the nature of the campaigning and thus the ultimate vote distribution, it is still is not unreasonable to believe that had the election in 2020 been held under RCV, Trump would have captured two states that he in fact lost, and come within eleven votes of an Electoral College victory.So, based on this analysis, in looking forward to a potential 2024 third Trump presidential campaign, Trump should worry a lot about a Libertarian spoiler. Given this distinct possibility, he should be a strong supporter of Rank Choice Voting being used in 2024, since that will mitigate the spoiler effect.[[9]](#footnote-9)

Minor party candidacies benefited Republicans in 2000 and there is the (false) perception that Jill Stein cost Hillary Clinton the 2016 election.[[10]](#footnote-10)As noted earlier, RCV largely eliminates the problem of spoilers.But it is useful to remember that no reform comes without unintended consequences. It would be ironic, indeed, if a reform supported by liberals and adopted in cities such as San Francisco for local elections, ended up in a Trump restoration if it were used to elect a president in 2024.

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1. See e.g., Tina Nguyen. 2016. “Gary Johnson and Jill Stein Handed the Presidency to Donald Trump.” *Vanity Fair*, November 10. https://www.vanityfair.com/news/2016/11/gary-johnson-jill-stein-election-2016. [↑](#footnote-ref-1)
2. Evan McMullin won an additional 731,991 votes, 243,690 of which were cast in Utah. He was considered the alternative to Donald Trump in that state, and while his votes were a very significant 22% of all Utah votes, Trump was able to win Utah by over 200,000 votes anyway. Election results can be found at https://www.fec.gov/resources/cms-content/documents/federalelections2016.pdf [↑](#footnote-ref-2)
3. While there is good reason to think that a Libertarian candidate would be the obvious second choice of Republican voters, or vis versa, as Devine and Kopko (2021) and Lacy and Burden (1999) before them show, non-trivial percentages of Libertarian voters would vote for the Democrat over the Republican. This is likely determined by whether the voter places more salience on economic issue or social issues. Libertarians do not fall neatly on a one-dimensional line of ideology the way Democrats and Republicans tend to. [↑](#footnote-ref-3)
4. It is also worth noting the potential importance of minor party votes in Pennsylvania. If every Jorgensen voter in that state had been switched to Trump, the state outcome would have very close, with a gap of only 1,175 votes. One can imagine the furor had such a close election been one that determined whether there was a clear EC winner. [↑](#footnote-ref-4)
5. Devine and Kopko (2021) specifically advise against extrapolating their results to other elections, but we argue that 2020 offers similar circumstances which make that comparison particularly useful. For instance, Donald Trump was the Republican nominee in both elections, so concerns about an anti-Trump vote driving the Libertarian ballots applies in both cases. Additionally, voters are relatively stable in their preferences and there are few swing voters (Gelman et al 2016). Thirdly, estimates of abstains would be conservatively biased, since turnout in 2020 was much higher than in 2016. [↑](#footnote-ref-5)
6. Under this hypothetical, Trump would now win 259 electors, while Biden wins 279. [↑](#footnote-ref-6)
7. As the analysis above shows, this assumption is irrelevant. So, a voter might have selected the Libertarian candidate first, but ranked no other candidate. Once the Libertarian candidate is eliminated, that voter’s ballot is exhausted and not vote will count in the final round. [↑](#footnote-ref-7)
8. Undervoting occurs when some rank is left blank (Kilgour et al 2020). [↑](#footnote-ref-8)
9. In an op-ed for the USA Today, former presidential candidate and 2021 candidate for Mayor of New York City (which for the first time will use RCV) Andrew Yang, and 2016 Libertarian vice presidential candidate Bill Weld advocate a switch to RCV in presidential primaries. Yang, Andrew, and Bill Weld. 2020. “Why Ranked Choice Voting Will Improve America’s Elections.” *USA Today*. [↑](#footnote-ref-9)
10. Both in perception and in actuality, as shown above. This has not always been the case. In 1992, Ross Perot’s Reform Party candidacy is widely viewed to have taken votes that otherwise would have gone to George H.W. Bush. Though, as Lacy and Burden (1999) show, Perot increased overall turnout and *reduced* Clinton’s vote, contrary to popular perception. [↑](#footnote-ref-10)