
Depolarizing the COVID Vaccine Passport

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ABSTRACT. Vaccine passports are a hotly debated and highly polarizing issue in U.S. politics. Proponents of vaccine passports have emphasized that they can create a brighter future; this Essay suggests that these proponents would be well-advised to point to the past as well. Public and private institutions have long required proof of vaccination both to engage in certain activities on U.S. soil and to travel internationally. We conducted an experiment with a sample of approximately 3,200 Americans to investigate whether explaining that vaccine passports are not a novel idea can (1) increase support for COVID-19 vaccine passports, (2) increase the number of people who intend to get vaccinated if a COVID-19 vaccine passport were introduced, and (3) depolarize views on COVID-19 vaccine passports. We find strong evidence that status quo bias—bias arising from knowledge that requiring proof of vaccination from other diseases is a well-established practice—will help to achieve all three goals. Our results are statistically significant and robust to a battery of controls and suggest that status quo bias can help depolarize the policy discourse surrounding vaccine passports.

INTRODUCTION

Governments and private entities around the world have entertained and adopted COVID-19 immunity passports (hereinafter “COVID passes”).¹ COVID passes require that individuals show proof of immunization against

1. Other terms such as “COVID passports,” “immunity passports,” and “vaccine passports” have been adopted. For the sake of consistency, we always refer to them as “COVID passes” both in the Essay and in our experiment.

COVID-19 in order to engage in certain activities, such as flying,² attending bars and clubs,³ attending sport events,⁴ and going to school.⁵

While COVID passes come in countless varieties, they can largely be divided into two categories: international and domestic. International COVID passes limit the immunity requirement to international travel. The European Union, for instance, has implemented a “Digital COVID Certificate,” which is available to people who are vaccinated against COVID-19, have recovered from it, or have recently tested negative.⁶ Carriers of the certificate face less stringent travel restrictions and requirements (such as quarantining) in all member states,⁷ although having the pass is not a requirement to enter a participating country.⁸

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2. See, e.g., *Cathay Pacific Pursues the Adoption of Digital Travel Passes to Facilitate International Travel*, CATHAY PAC. (Mar. 17, 2021), <https://news.cathaypacific.com/cathay-pacific-pursues-the-adoption-of-digital-travel-passes-to-facilitate-international-travel> [<https://perma.cc/U36S-BSHY>] (“Cathay Pacific strongly supports the introduction of digital health platforms that securely validate compliance with the health-related entry requirements set by different governments, including negative COVID-19 tests and vaccination, enabling [travelers] to go overseas with reassurance and convenience.”).
 3. See Alyson Krueger, *Want to Party? You Might Need a ‘Vaccine Passport.’*, N.Y. TIMES (June 15, 2021), <https://www.nytimes.com/2021/05/07/style/covid-vaccine-parties.html> [<https://perma.cc/Y67G-W6YS>] (describing “vaccinated-only parties” in New York City and pointing out that New York Governor “Andrew M. Cuomo announced that places where proof of vaccination or a negative Covid-19 test is required can operate at a greater capacity”).
 4. See Louise Radnofsky & Anne Steele, *The Miami Heat Run a Tricky Play: Prime Seats for the Vaccinated*, WALL ST. J. (Apr. 1, 2021, 12:36 PM ET), <https://www.wsj.com/articles/miami-heat-prime-seats-for-the-vaccinated-11617148308> [<https://perma.cc/XX7G-3AE9>] (“The Miami Heat are about to become the first sports franchise to attempt a groundbreaking play: requiring some fans to show proof of vaccination in order to get into games.”); see also *Fans Must Show They’re Virus-Free to Attend Roland Garros—Organisers*, FRANCE24 (May 12, 2021, 1:16 PM CEST), <https://www.france24.com/en/live-news/20210512-fans-must-show-they-re-virus-free-to-attend-roland-garros-organisers> [<https://perma.cc/LC2S-V8L2>] (“French tennis federation director-general Amelie Oudea-Castera said potential spectators at the [Roland Garros] Grand Slam must demonstrate proof that they had a negative PCR or antigen test within 48 hours of attendance, or bear a certificate of vaccination.”).
 5. See Yoree Koh, *More Colleges to Require Student Covid-19 Vaccinations*, WALL ST. J. (Apr. 14, 2021, 10:36 AM ET), <https://www.wsj.com/articles/more-colleges-to-require-student-covid-vaccinations-11618408641> [<https://perma.cc/ANC7-3953>] (“A small but growing number of colleges will require students to receive a Covid-19 vaccine, saying it is the most assured way of returning to some semblance of pre-pandemic campus life.”).
 6. See Regulation (EU) 2021/953 of the European Parliament and of the Council of 14 June 2021 on a Framework for the Issuance, Verification and Acceptance of Interoperable COVID-19 Vaccination, Test and Recovery Certificates (EU Digital COVID Certificate) to Facilitate Free Movement During the COVID-19 Pandemic, 2021 O.J. (L 211) 1, 13.
 7. *Id.* at 18–19.
 8. *Id.* at 13.

Other countries, notably the United States,⁹ have also explored or implemented some form of an international COVID pass.¹⁰ Private airlines have taken the concept further, exploring the idea of requiring a COVID pass for boarding international flights.¹¹

Domestic COVID passes, on the other hand, condition access to a wide array of everyday domestic activities – such as attending public gatherings, concerts, or even school¹² – on confirmed vaccination status, recovery, or a negative test result. Israel was the first country to introduce a domestic COVID pass; known as the “Green Pass,” its proponents claim that it facilitated a quicker and safer return to normal.¹³ Other countries have followed Israel’s example¹⁴ or

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9. See Zolan Kanno-Youngs, Heather Murphy & Vjosa Isai, *Vaccinated Travelers from Abroad, Including Canadians with Mixed Doses, Can Enter the U.S. Starting Nov. 8*, N.Y. TIMES (Oct. 16, 2021), <https://www.nytimes.com/2021/10/15/us/politics/vaccine-mandate-travel-us.html> [<https://perma.cc/45P7-63YC>] (“International travelers fully vaccinated against the coronavirus who have been barred from entering the United States during the pandemic will be able to enter the country on Nov. 8.”).
 10. See, e.g., *Regulation Exempting Vaccinated Non-Schengen Travellers from Travel Restrictions to Come into Force on 6 April*, GOV’T ICE. (Mar. 25, 2021), <https://www.government.is/news/article/2021/03/25/Regulation-exempting-vaccinated-non-Schengen-travellers-from-travel-restrictions-to-come-into-force-on-6-April> [<https://perma.cc/UNP5-DFZ7>] (announcing that Iceland’s decision to “exempt from travel restrictions those who can provide proof of vaccination or prior infection will take effect on 6 April”); Mercedes Ruehl, *Singapore Launches Quarantine-Free Travel to 10 Countries*, FIN. TIMES (Oct. 18, 2021), <https://www.ft.com/content/70cbo75e-41e8-4edc-85a5-a14b70c8fb45> [<https://perma.cc/M9BE-VTS8>] (“Vaccinated people [in Singapore] will be able to travel freely to eight countries including the UK, US, France, Italy, the Netherlands and Canada.”).
 11. See Natasha Singer, *Vaccinated? Show Us Your App*, N.Y. TIMES (Apr. 6, 2021), <https://www.nytimes.com/2020/12/13/technology/coronavirus-vaccine-apps.html> [<https://perma.cc/CD4R-894E>] (“United and other airlines are preparing to use the app to confirm that passengers have negative coronavirus results.”).
 12. See, e.g., Rachel Wilf-Miron, Vicki Myers & Mor Saban, *Incentivizing Vaccination Uptake: The “Green Pass” Proposal in Israel*, 325 J. AM. MED. ASS’N 1503 (2021) (describing and discussing Israel’s “Green Pass”); see also Isabel Kershner, *As Israel Reopens, ‘Whoever Does Not Get Vaccinated Will Be Left Behind,’* N.Y. TIMES (June 1, 2021), <https://www.nytimes.com/2021/02/18/world/middleeast/israel-covid-vaccine-reopen.html> [<https://perma.cc/PE9F-JT8J>] (reporting on Israel’s “Green Badge” policy, which allows participation in certain activities only to vaccinated individuals).
 13. See Isabel Kershner, *My Life in Israel’s Brave New Post-Pandemic Future*, N.Y. TIMES (May 17, 2021), <https://www.nytimes.com/2021/04/05/world/middleeast/israel-vaccinations.html> [<https://perma.cc/VKH3-3HM6>] (“Green Pass holders may dine indoors in restaurants, stay in hotels and attend indoor and outdoor cultural, sports and religious gatherings in the thousands. We can go to gyms, swimming pools and the theater. We can get married in wedding halls.”).
 14. See Stefano Rizzuti, *Arriva Il Green Pass, a Cosa Serve, Tutto Quello Che Si Potrà Fare con la Certificazione Verde*, FANPAGE (May 6, 2021, 9:25 AM), <https://www.fanpage.it/politica/arriva-il-green-pass-a-cosa-serve-tutto-quello-che-si-potra-fare-con-la-certificazione-verde>

committed to doing so in the near future.¹⁵ In the United States, New York was the first state to implement a domestic COVID pass when it introduced the “Excelsior Pass.”¹⁶ Some private companies are also requiring proof of vaccination against COVID-19 from their employees, customers, or both.¹⁷

COVID passes have been extremely polarizing in the United States.¹⁸ Pass proponents argue that they provide the key for a safer and quicker return to normalcy by allowing increasingly larger sectors of the economy to reopen, thus accelerating social and economic recovery.¹⁹ Additionally, limiting access to goods and services to those who can prove that they are vaccinated could reduce vaccine

[<https://perma.cc/2ABK-7EEQ>] (describing the characteristics and benefits of the COVID “green pass” launched in Italy in May 2021); Adrienne Murray, *Coronapas: The Passport Helping Denmark Open up After Covid*, BBC (Apr. 21, 2021), <https://www.bbc.com/news/world-europe-56812293> [<https://perma.cc/4B2F-VXVU>] (describing Denmark’s “coronapas,” which “already applies to hairdressers and tattoo parlours, but not shops, and will be required for cinemas, theatres and gyms”); Ministerio de Salud, *Preguntas Frecuentes Pase de Movilidad*, GOBIERNO DE CHILE (Aug. 31, 2021), <https://saludresponde.minsal.cl/pase-de-movilidad> [<https://perma.cc/HQG4-SWFW>] (describing Chile’s “mobility pass,” which allows vaccinated individuals to circulate during lockdown); Tarmo Virki, *Estonia Starts Testing Digital Immunity Passport for Workplaces*, REUTERS (May 23, 2020, 2:12 AM), <https://www.reuters.com/article/health-coronavirus-estonia-digital-idUSKBN22WoGE> [<https://perma.cc/2PYS-GTFV>] (“Estonia has started to test one of the world’s first digital immunity passports . . .”).

15. See Mark A. Hall & David M. Studdert, “Vaccine Passport” Certification – Policy and Ethical Considerations, 385 NEW ENG. J. MED. e32 (2021) (listing Australia, Denmark, and Sweden as countries that have committed to implementing a COVID pass).
16. See Geoffrey A. Fowler, *We Tested the First State “Vaccine Passport.” Here’s What Worked – and Didn’t*, WASH. POST (Apr. 9, 2021, 1:09 PM EDT), <https://www.washingtonpost.com/technology/2021/04/08/vaccine-passport-new-york-excelsior-pass> [<https://perma.cc/ZF2Y-URJL>] (“New York just became the first state to offer a digital ‘vaccine passport.’”).
17. See, e.g., *Do I Need a COVID-19 Vaccine to Cruise? How Far in Advance Do I Need to Get My Vaccine?*, ROYAL CARIBBEAN, <https://www.royalcaribbean.com/faq/questions/do-i-need-a-covid-vaccine-to-cruise-what-counts-as-proof> [<https://perma.cc/4GD8-5963>] (“All Royal Caribbean guests age 12 and older [departing from the United States] must present proof of COVID-19 vaccination, with the final dose of their vaccine administered at least 14 days before sailing.”); see also Peter Rudegeair, *Morgan Stanley Requires Employees to Get Vaccinated Before Going to the Office*, WALL ST. J. (June 23, 2021, 8:19 PM), <https://www.wsj.com/articles/morgan-stanley-requires-employees-to-get-vaccinated-before-going-to-the-office-11624462581> [<https://perma.cc/RJ72-XE63>] (“Morgan Stanley has told its employees they must get Covid-19 vaccines before returning to its New York offices.”).
18. See *infra* Section II.B.
19. See Aaron Schwid & Tom Frieden, Opinion, *How to Reopen the Economy Safely? Immunity Passports.*, WASH. POST (Dec. 21, 2020, 9:53 AM), <https://www.washingtonpost.com/opinions/2020/12/21/tom-frieden-covid-immunity-passports> [<https://perma.cc/84JM-4XGG>] (“[P]roviding the option of an immunity passport to those who choose to receive one can increase freedom of movement for passport holders and accelerate broader social and economic recovery.”).

hesitancy among populations who are eager to resume prepandemic activities – and thereby accelerate vaccine uptake.²⁰

However, criticism of COVID passes has abounded from both the political left and the political right. Given existing inequities in access to vaccination and trust in health systems, many on the left are concerned that immunity passports could crystallize and enhance existing inequities along class and racial lines.²¹ Meanwhile, many conservative opinion leaders have warned that COVID passes would imperil civil liberties.²² Concerns over a loss of privacy have been expressed across the political spectrum.²³

Against this background, U.S. policy makers have adopted conflicting positions. After initially flirting with the prospect of adopting a nationwide COVID pass,²⁴ the Biden Administration rejected the idea and decided to rely on solutions developed and implemented by private actors instead.²⁵ At the same time, some governors have adopted executive orders banning private businesses from requiring any proof of vaccination in order to enter their premises. However, as legal scholar Lawrence Gostin has noted, these orders lie on “shaky legal ground,”²⁶ and the Equal Employment Opportunity Commission has already

20. See Spencer Bokart-Lindell, Opinion, *Should You Be Worried About ‘Vaccine Passports’?*, N.Y. TIMES (Apr. 6, 2021), <https://www.nytimes.com/2021/04/06/opinion/vaccine-passports-covid.html> [<https://perma.cc/338T-ZBWB>] (“In greasing the wheels for reopening, proponents argue, vaccine passes could incentivize people to get inoculated.”); see also Wilf-Miron, Myers & Saban, *supra* note 12 (discussing Israel’s “Green Pass” as a policy intended to incentivize vaccine uptake).

21. See *infra* notes 40–44 and accompanying text.

22. See *infra* note 45 and accompanying text.

23. See *infra* notes 45–49 and accompanying text.

24. See Max Fisher, *Vaccine Passports, Covid’s Next Political Flash Point*, N.Y. TIMES (May 8, 2021), <https://www.nytimes.com/2021/03/02/world/europe/passports-covid-vaccine.html> [<https://perma.cc/ELG6-HDYC>] (“President Biden has asked federal agencies to explore options [related to immunity passports].”).

25. See Sheryl Gay Stolberg & Adam Liptak, *Likely Legal, ‘Vaccine Passports’ Emerge as the Next Coronavirus Divide*, N.Y. TIMES (Apr. 26, 2021), <https://www.nytimes.com/2021/04/06/us/politics/vaccine-passports-coronavirus.html> [<https://perma.cc/85NN-DRXA>] (citing White House press secretary Jen Psaki stating that “[t]he government is not now nor will we be supporting a system that requires Americans to carry a credential” and that “[t]here will be no federal vaccinations database and no federal mandate requiring everyone to obtain a single vaccination credential”).

26. Ceylan Yeginsu, *What Are the Roadblocks to a ‘Vaccine Passport’?*, N.Y. TIMES (June 15, 2021), <https://www.nytimes.com/2021/04/14/travel/covid-vaccine-passport-excelior-pass.html> [<https://perma.cc/2P2K-4XB8>] (citing health-law specialist Lawrence Gostin).

announced that requiring COVID-19 vaccinations from employees does not constitute job discrimination.²⁷

In this Essay, we conduct an experiment to shed light on this heated debate. We investigate how beliefs and behavior surrounding COVID passes are impacted by “status quo bias” – that is, bias arising from knowledge that public and private entities have already required proof of vaccination from other diseases in the past.²⁸ In particular, we analyze whether status quo bias could (1) increase support for COVID passes, (2) induce more people to state that they are willing to get vaccinated once the pass is implemented, and (3) depolarize the debate around COVID passes. We find that status quo bias is an effective tool to achieve all these three goals, and therefore suggest that policy makers explicitly link COVID passes to vaccine requirements of the past.

The Essay proceeds as follows. In Part I, we discuss the main objections that COVID passes have encountered in the United States and beyond. We explore the ethical objections raised against COVID passes, the charge that COVID passes increase political polarization, and the concern that they might decrease vaccine uptake. In Part II, we review the literature on status quo bias, which suggests that framing new policies as extensions of old or existing ones increases support for them, and link it to the COVID context. In Part III, we describe our experiment, before presenting our results in Part IV. Finally, in Part V, we discuss the implications of our findings for policy implementation and communication more generally.

I. THREE ISSUES CONCERNING COVID PASSES: ETHICAL CONCERNS, POLARIZATION, AND VACCINE HESITANCY

COVID passes have been heavily criticized from a wide array of perspectives. In this Part, we briefly explore the three main strains of critiques: (1) ethical considerations surrounding the infringement of fundamental liberties and fairness, (2) COVID passes’ potential effect on political polarization, and (3) the possibility that COVID passes cause backlash that reduces vaccine uptake.

27. See Stolberg & Liptak, *supra* note 25 (“The Equal Employment Opportunity Commission has told employers that they can mandate coronavirus vaccination because public health comes first.”); see also *What You Should Know About COVID-19 and the ADA, the Rehabilitation Act, and Other EEO Laws*, U.S. EQUAL EMP. OPPORTUNITY COMM’N (May 28, 2021), <https://www.eeoc.gov/wysk/what-you-should-know-about-covid-19-and-ada-rehabilitation-act-and-other-eo-laws> [<https://perma.cc/KCU3-K4PN>] (responding to frequently asked questions about the possibility for employers to ask proof of COVID-19 vaccination from their employees).

28. See generally *infra* notes 82-87 and accompanying text (explaining status quo bias).

To begin, we survey the ethical concerns that specialists, pundits, and politicians have voiced surrounding COVID passes. Their concerns are important because, just as with other counterpandemic measures,²⁹ the success of any policy implementing COVID passes will substantially depend on how they are perceived by the public.³⁰ If these critiques gain traction, and people perceive COVID passes as unfair or as a fundamental threat to their liberties, the passes are more likely to exacerbate polarization, increase vaccine hesitancy, or be rendered ineffective by widespread boycotts.³¹ Contact-tracing apps provide a sobering lesson: once presented as an essential tool to flatten the curve of

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29. See Gilad Abiri & Sebastián Guidi, *The Pandemic Constitution*, 60 COLUM. J. TRANSNAT'L L. (forthcoming 2021) (manuscript at 45 n.232), <https://ssrn.com/abstract=3797023> [<https://perma.cc/EJF5-H5QK>] (“The effects of legitimacy in inducing counter-pandemic behavior [have] been noted before and during COVID-19, both by public health scholars and political legitimacy scholars.”).
 30. According to a recent survey, less than half of Americans support “immunity privileges,” and support is even lower when referring to “general work” restrictions. See Mark A. Hall & David M. Studdert, Perspective, “Vaccine Passport” Certification – Policy and Ethical Considerations, 385 NEW ENG. J. MED. e32(1) (2021).
 31. See Aubrey Allegretti, *Some Tory MPs to Boycott Conference If Vaccine Passports Required for Entry*, GUARDIAN (July 22, 2021, 12:05 PM EDT), <https://www.theguardian.com/world/2021/jul/22/some-tory-mps-to-boycott-conference-if-vaccine-passports-required-for-entry> [<https://perma.cc/6CPB-WJYD>] (describing the intention of British Conservative MPs to boycott a party conference because of the fears they would have to be vaccinated in order to attend); see also Antonio Palma, *No Green Pass al Porto di Trieste, Ancora Scontri, Protesta Prosegue: “Sabato Incontro Col Governo,”* FANPAGE (Oct. 18, 2021, 10:54 PM), <https://www.fanpage.it/attualita/no-green-pass-al-porto-di-trieste-ancora-scontri-protesta-prosegue-sabato-incontro-col-governo> [<https://perma.cc/3GXV-ZSDC>] (describing how a group of people protesting against the green pass disrupted activities at the largest Italian commercial port); Eva Plevier, *Dutch Protest Against COVID-19 Vaccine Pass to Enter Bars, Restaurants*, REUTERS (Sept. 25, 2021, 9:56 AM EDT), <https://www.reuters.com/world/europe/dutch-marchers-protest-new-covid-19-pass-enter-bars-restaurants-2021-09-25> [<https://perma.cc/H5ZN-UQW5>] (“More than 40% of bar and restaurant owners [in the Netherlands] do not plan to ask customers for a [COVID pass].”).

infections,³² they ultimately failed because governments and technology companies could not garner the necessary public trust.³³

Next, we consider the impact of policies on polarization in today's political landscape. Policies that become polarized are more likely to generate backlash and, therefore, less likely to be implemented successfully.³⁴ Further, polarizing policies can contribute to the overall polarization of American society.³⁵ As Americans increasingly report that they are less comfortable maintaining social relationships with supporters of the opposing party,³⁶ any further increase in polarization might be one scratch too many in the American social fabric.³⁷

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32. Traditional human contact tracing became challenging during the COVID-19 pandemic due to the speed at which the virus spreads and the fact that asymptomatic patients can be contagious. Under these circumstances, it becomes very hard for people to remember who they were in contact with, especially as this group is likely to include perfect strangers. Contact-tracing apps were widely considered the solution to these problems, as they allowed users to be notified almost instantaneously when they had been in contact with someone infected. However, they ultimately failed to be adopted by the required number of people due to citizens' lack of trust of the contact-tracing apps. See Alessandro Blasimme & Effy Vayena, *What's Next for COVID-19 Apps? Governance and Oversight Adaptive Governance Can Help Earn Social License*, 370 SCIENCE 760, 761 (2020) (linking lack of widespread adoption of contact-tracing apps with a lack of trust in the apps); see also Ian Ayres, Alessandro Romano & Chiara Sotis, *How to Make COVID-19 Contact Tracing Apps Work: Insights from Behavioral Economics* (2021) (unpublished manuscript) (manuscript at 5-9), <https://ssrn.com/abstract=3689805> [<https://perma.cc/U6AU-HRLL>] (reviewing the literature on contract-tracing apps).
 33. See, e.g., Jessica Rich, *How Our Outdated Privacy Laws Doomed Contact-Tracing Apps*, BROOKINGS INST. (Jan. 28, 2021), <https://www.brookings.edu/blog/techtank/2021/01/28/how-our-outdated-privacy-laws-doomed-contact-tracing-apps> [<https://perma.cc/D4BC-MJEG>] ("A key reason for this failure [of contact-tracing apps] is that people don't trust the tech companies or the government to collect, use, and store their personal data, especially when that data involves their health and precise whereabouts.").
 34. See, e.g., Eric M. Patashnik, *Limiting Policy Backlash: Strategies for Taming Counter-Coalitions in an Era of Polarization*, 685 ANNALS AM. ACAD. POL. & SOC. SCI. 47, 48 (2019) ("Policy backlash occurs when people or organizations mobilize *against* a policy during or after its enactment, diminishing the power of its supporters and reducing the likelihood of the policy's subsequent entrenchment and expansion.").
 35. See *infra* note 66 and accompanying text.
 36. See, e.g., Shanto Iyengar, Yphtach Lelkes, Matthew Levendusky, Neil Malhotra & Sean J. Westwood, *The Origins and Consequences of Affective Polarization in The United States*, 22 ANN. REV. POL. SCI. 129, 136-39 (2019) (surveying empirical studies showing the far-reaching consequences of increasing polarization on everyday interactions and life choices).
 37. For instance, research shows that roughly one-third of Democrats and Republicans consider the other party as a "threat to the nation's well-being." *Political Polarization in the American Public: How Increasing Ideological Uniformity and Partisan Antipathy Affect Politics, Compromise and Everyday Life*, PEW RSCH. CTR. 7 (June 12, 2014), <https://www.pewresearch.org/politics/2014/06/12/political-polarization-in-the-american-public> [<https://perma.cc/6DF8-3V9N>].

COVID passes are already a very polarizing issue.³⁸ For this reason, exploring the ways in which they could become less polarizing is critical.

Finally, we emphasize that vaccines represent an important weapon against COVID-19. Accordingly, the idea that COVID passes might fuel vaccine hesitancy must be taken seriously.³⁹ It would be sadly paradoxical for a tool devised to incentivize vaccine uptake to ultimately have the exact opposite effect.

A. Ethical Concerns

One prominent set of critiques points to the danger COVID passes could pose to values such as liberty, privacy, and fairness. A first set of concerns, often voiced by those on the left, characterizes immunity passports as being fundamentally unfair: as long as vaccination is distributed unevenly among the population (because of divergent attitudes and trust towards the health system, if not straightforward differential access to vaccines),⁴⁰ assigning advantages to those who already benefit from existing arrangements could entrench and enhance existing racial and social hierarchies⁴¹—both within societies⁴² and between rich

38. See *infra* Section II.B.

39. See *infra* Section II.C.

40. See Kristen Underhill & Olatunde C.A. Johnson, *Vaccination Equity by Design*, 131 YALE L.J.F. 53, 57-64 (2021) (discussing the predictable “inverse equity effect” of COVID-19 vaccines).

41. See, e.g., Nicole Hassoun & Anders Herlitz, *How to Make ‘Immunity Passports’ More Ethical*, SCI. AM. (Feb. 24, 2021), <https://www.scientificamerican.com/article/how-to-make-immunity-passports-more-ethical> [<https://perma.cc/5ZDE-KFSF>] (advocating for caveats and exceptions to immunity passports, since such passports “may be inevitable”). The main ethical concerns on the left about immunity passports arise from the fact that immunity will likely be unevenly distributed across the population along class, race, and age lines (since they disparately impact the chances of getting vaccinated or surviving the disease). Therefore, granting additional advantages to immunized people might reinforce existing inequalities. See *id.*; see also Fisher, *supra* note 24 (“Vaccines go overwhelmingly to rich countries and privileged racial groups within them. Granting special rights for the vaccinated, while tightening restrictions on the unvaccinated, risks widening already-dangerous social gaps. . . . Special privileges for the vaccinated would, by definition, favor demographics that are inoculated at higher rates. In Western countries, those communities tend to be white and well-off.”).

42. See Y. Tony Yang & Vasiliki Rahimzadeh, *A Digital COVID-19 Vaccine Passport System Is Still Premature*, REGUL. REV. (Apr. 5, 2021), <https://www.theregreview.org/2021/04/05/yang-rahimzadeh-digital-covid-19-vaccine-passport-system-still-premature> [<https://perma.cc/VW57-GRS5>] (“Critics say the creation of a vaccine passport system could lead to a ‘two-tiered society,’ exacerbating inequalities between vaccinated and unvaccinated populations. Right now vaccines are not equally accessible to all.”). The argument has also been made with respect to the already existing Israeli Green Pass. See Cat Ferguson & Joshua Mitnick, *Israel’s ‘Green Pass’ Is an Early Vision of How We Leave Lockdown*, MIT TECH. REV. (Mar. 1, 2021), <https://www.technologyreview.com/2021/03/01/1020154/israels-green-pass-is-an-early->

and poor countries.⁴³ Critics have even compared COVID passes to the infamous “literacy tests” used for voter suppression.⁴⁴

On the other hand, and usually from the other side of the political spectrum, some Americans are concerned that COVID passes could violate fundamental freedoms, including and especially the right to privacy. For Republicans and libertarians, creating and maintaining a centralized database of vaccinated people would constitute a “nightmare” for civil liberties.⁴⁵ Their concerns prompted Republican governors to announce that they would not allow immunity passports in their states⁴⁶ and to sign executive orders banning both state and private

vision-of-how-we-leave-lockdown [https://perma.cc/7ST4-M5W4] (“Some ethicists argue that such programs may further entrench existing inequalities, and this is already happening with Israel’s pass, since few Palestinians in the occupied territories of Gaza and the West Bank have access to vaccines.”).

43. See Saskia Popescu & Alexandra Phelan, Opinion, *Vaccine Passports Won’t Get Us out of the Pandemic*, N.Y. TIMES (Mar. 22, 2021), <https://www.nytimes.com/2021/03/22/opinion/covid-vaccine-passport-problem.html> [https://perma.cc/YZ5U-4NQE] (“Without international consensus, we risk entrenching geopolitical divides with inconsistent requirements that could prolong the pandemic. Vaccine passports that enable citizens of some nations to travel internationally while millions of others wait for vaccinations will serve only to deepen global inequities.”); see also Oliver Holmes & Quique Kierszenbaum, *Green Pass: How Are Covid Vaccine Passports Working for Israel?*, GUARDIAN (Feb. 28, 2021, 11:17 AM EST), <https://www.theguardian.com/world/2021/feb/28/green-pass-how-are-vaccine-passports-working-in-israel> [https://perma.cc/HSP5-N849] (“With an already highly unequal international vaccination push, green passes, especially if they relate to travel, would allow citizens of richer, more powerful nations to be first to enjoy the privileges.”).
44. See Mia Sato, *Vaccine Passports Could Further Erode Trust*, MIT TECH. REV. (Dec. 22, 2020), <https://www.technologyreview.com/2020/12/22/1015451/vaccine-passports-nita-farahany-trust> [https://perma.cc/J95J-N2K3] (citing Professor Nita Farahany comparing vaccine passports to literacy tests in its potential exclusionary effects).
45. Stolberg & Liptak, *supra* note 25 (quoting “libertarian” former Republican congressman Justin Amash, who had tweeted that “[a] vaccine passport—a unified, centralized system for providing or denying access to everyday activities like shopping and dining—would be a nightmare for civil liberties and privacy”); see also Associated Press, *Vaccine Passport Efforts Draw Opposition from GOP Lawmakers*, ABC10 (Apr. 3, 2021, 10:38 AM PDT), <https://www.abc10.com/article/news/health/coronavirus/vaccine-passport-draw-opposition-gop-lawmakers/507-9d19a1cb-e760-4942-9f81-0978f979d041> [https://perma.cc/J4YE-N7YJ] (surveying Republican public officials “portray[ing] [COVID passes] as a heavy-handed intrusion into personal freedom and private health choices”).
46. See Devan Cole, *Mississippi GOP Governor Pushes back on Vaccine Passports: ‘I Don’t Think It’s a Good Thing to Do in America,’* CNN (Apr. 4, 2021, 12:18 PM), <https://edition.cnn.com/2021/04/04/politics/tate-reeves-vaccine-passports-cnntv/index.html> [https://perma.cc/6RNY-KZGR] (quoting Mississippi Republican Governor Tate Reeves stating, “I don’t support vaccine passports. I don’t think it’s necessary and I don’t think it’s a good thing to do in America”); see also Bokot-Lindell, *supra* note 20 (quoting South Dakota Republican Governor Kristi Noem calling COVID passes “un American” and a form of “oppression”).

entities from requiring proof of vaccination from customers or employees.⁴⁷ But these concerns are not limited to the political right. Indeed, the American Civil Liberties Union⁴⁸ and progressive privacy scholars⁴⁹ have raised similar objections to COVID passes.

Ethics are important, but the concerns that COVID passes raise are not purely ethical in nature. Successfully implementing the passes requires a critical mass of support. Even if they are adopted, people who believe that they are fundamentally unfair or immoral might be reluctant to download them. Even worse, those who are unwilling to download the passes might forge them.⁵⁰ Just as some people believe privacy concerns were responsible for the failure of contact-tracing apps,⁵¹ liberty concerns could doom COVID passes.

B. Polarization

COVID passes are extremely polarizing, and not only in the United States. For example, in the United Kingdom, Members of Parliament from both parties warned that an immunity passport would be “divisive and discriminatory.”⁵² And in France, President Macron’s government introduced a bill that would have made access to transportation and certain places and activities conditional on

47. See Elliott Davis, *States Are Banning COVID-19 Vaccine Requirements*, U.S. NEWS & WORLD REP. (Apr. 30, 2021, 4:54 PM), <https://www.usnews.com/news/best-states/articles/2021-04-30/these-states-are-banning-covid-19-vaccine-requirements> [https://perma.cc/VUB2-TSMW] (quoting James Nash, press secretary for the National Governors Association, for the proposition that Governors in six states—Arizona, Florida, Idaho, Montana, Texas and South Dakota—“have issued executive orders prohibiting vaccine passports/requirements in some regard”).

48. See Jay Stanley, *There’s a Lot that Can Go Wrong with ‘Vaccine Passports,’* ACLU (Mar. 31, 2021), <https://www.aclu.org/news/privacy-technology/theres-a-lot-that-can-go-wrong-with-vaccine-passports> [https://perma.cc/Z9X2-E23Z] (“As privacy advocates and civil libertarians, there are several factors to consider on vaccine passports.”).

49. See, e.g., Ignacio Cofone, *Immunity Passports and Contact Tracing Surveillance*, 24 STAN. TECH. L. REV. 176, 214-25 (2021) (elaborating on how the privacy risks posed by a COVID pass are unevenly and regressively distributed among the population).

50. See Govind Persad & Ezekiel J. Emanuel, *The Ethics of COVID-19 Immunity-Based Licenses (“Immunity Passports”)*, 323 J. AM. MED. ASS’N 2241, 2242 (2020) (“[T]he benefits of immunity licenses could encourage forgery, illegal markets, or fraud by unethical physicians or testing facilities.”).

51. See *supra* note 32-33 and accompanying text.

52. Jasmine Cameron-Chileshe, George Parker & Anna Gross, *Boris Johnson Faces Rebellion over Domestic Covid Passports*, FIN. TIMES (Apr. 1, 2021), <https://www.ft.com/content/1df6369a-3836-430d-8afd-1f3ff8ff5ee8> [https://perma.cc/FM6A-PCWZ].

vaccine uptake or on proof of test results or medical treatment.⁵³ The bill was met with an immediate outcry, forcing the government to withdraw it the day after it was introduced.⁵⁴ Right-wing leader Marine Le Pen argued that the proposal was “deeply harmful and oppressive” and would have created “second-class citizens.”⁵⁵

In the United States, COVID passes have joined the growing list of items at the center of America’s culture war.⁵⁶ American critics have compared COVID passes to Holocaust symbols⁵⁷ and dubbed them “vaccine fascism.”⁵⁸ The South Dakota Governor Kristi Noem described them as “one of the most un-American ideas in our nation’s history.”⁵⁹ Supporters of COVID passes, on the other hand, condemn this criticism as irrational, partisan opposition.⁶⁰

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53. Arthur Berdah, *Vaccins: Comment Macron a Débranché la Loi*, FIGARO (Dec. 24, 2020) (transcribing the relevant passages of the bill).
 54. *Id.* (“Aware that the nascent scandal threatened to become a violent whirlwind, Emmanuel Macron felt obligated to intervene himself . . . [and ordered the general secretary to] ‘pull’ the bill as soon as possible.”).
 55. *Id.*
 56. See Jon Allsop, *How the Culture War Is Impeding Necessary Scrutiny of ‘Vaccine Passports,’* COLUM. JOURNALISM REV. (Apr. 6, 2021), https://www.cjr.org/the_media_today/vaccine_passports_culture_war.php [<https://perma.cc/S8AC-4TPY>] (“Much coverage of these arguments [against COVID passes] has cast vaccine passports as the hot new trend in the wider COVID ‘culture war.’”); see also Molly Roberts, *Vaccine Passports Are Already Turning into a Culture War*, WASH. POST (Mar. 30, 2021, 4:56 PM EDT), https://www.washingtonpost.com/opinions/the-next-front-in-the-pandemic-culture-wars-vaccine-passports/2021/03/30/1b5ea520-918d-11eb-a74e-1f4cf89fd948_story.html [<https://perma.cc/8Y94-68FF>] (“Vaccine passports don’t even exist yet, but that won’t stop our riven country from turning them into exactly what we’re always looking for: a reason to get mad at the other guy.”).
 57. See Peter Suci, *Vaccine Passport Comparison to Holocaust Symbols Stirs Debate*, FORBES (Mar. 30, 2021, 4:22 PM EDT), <https://www.forbes.com/sites/petersuci/2021/03/30/vaccine-passport-comparison-to-holocaust-symbols-stirs-debate> [<https://perma.cc/HMX4-AVPW>] (critically describing comparisons between COVID requirements and the Holocaust on social media); see also Houston Keene, *GOP Lawmakers Warn Against Vaccine Passports*, FOX BUS. (Mar. 29, 2021), <https://www.foxbusiness.com/politics/coronavirus-vaccine-passports-republicans-warn> [<https://perma.cc/JS9W-YMN3>] (citing Republican Congressman Madison Cawthorn linking vaccine passports proposals to “Nazi Germany” and dubbing them a “type of totalitarianism”).
 58. Rand Paul, *We Must Resist the Latest COVID-Era Power Grab: The ‘Vaccine Passport,’* HILL (Apr. 5, 2021, 8:00 AM EDT), <https://thehill.com/blogs/congress-blog/healthcare/546412-we-must-resist-the-latest-covid-era-power-grab-the-vaccine> [<https://perma.cc/4WJB-9N3T>].
 59. Bokor-Lindell, *supra* note 20.
 60. See, e.g., Michael Hiltzik, Column, *Stop Grousing About Vaccine ‘Passports’—They’re the Key to Reopening Society*, L.A. TIMES (Apr. 5, 2021, 12:11 PM PT), <https://www.latimes.com/business/story/2021-04-05/vaccine-passports-key-to-reopening-society> [<https://perma.cc/EW4X-RFSG>] (“Make no mistake: In the United States, the debate is being driven almost

COVID passes intercept two aspects of polarization: policy polarization and affective polarization.⁶¹ Policy polarization, sometimes termed “issue polarization,” focuses on the “difference between the policy positions of Democrats and Republicans.”⁶² Consider the case of mask mandates in schools. If the vast majority of Democrats and Republicans were mildly in support of this policy, then issue polarization would be low. Instead, since the vast majority of Democrats support mask mandates in school, whereas only a minority of Republicans are in favor, the issue is highly polarized.⁶³ Affective polarization, on the other hand, relates to “the tendency of people identifying as Republicans or Democrats to view opposing partisans negatively and copartisans positively.”⁶⁴ For instance, there is affective polarization when a significant number of people associates negative feelings with the idea of their children marrying across party lines.⁶⁵

In our experiment, we focus on the effects of policy polarization. However, it is clear that these two aspects of polarization are interdependent. In a country like the United States with high rates of affective polarization, it will be harder to find common grounds on which to develop bipartisan policies, thereby exacerbating policy polarization.⁶⁶ Similarly, when the party in power imposes polarizing policies, it is likely that affective polarization will grow accordingly.⁶⁷

entirely by ideology and partisan politics. Conservatives and Republicans have embraced opposition to vaccination requirements as the newest flashpoint in their culture war.”).

61. Clearly, there are many ways to define and measure polarization. An in-depth survey of this decades-old debate lies beyond the scope of the Essay, and we refer the interested reader to see generally Morris P. Fiorina & Samuel J. Abrams, *Political Polarization in the American Public*, 11 ANN. REV. POL. SCI. 563, 566–77 (2008). Instead, we merely borrow the dichotomy between polarization on policy issues and affective polarization from Iyengar et al., *supra* note 36.
62. Iyengar et al., *supra* note 36, at 131.
63. Dominick Mastrangelo, *Wide Partisan Split Seen on School Mask Mandates: Poll*, HILL (Sept. 7, 2021, 7:45 AM EDT), <https://thehill.com/homenews/571025-wide-partisan-split-seen-on-school-mask-mandates-poll> [<https://perma.cc/63F3-PUL8>] (reporting that “[a] total of 85 percent of Democrats, 66 percent of independents, and just 32 percent of Republicans surveyed support mask mandates for all students and staff at their child’s school”).
64. Shanto Iyengar & Sean J. Westwood, *Fear and Loathing Across Party Lines: New Evidence on Group Polarization*, 59 AM. J. POL. SCI. 690, 691 (2015) (citation omitted).
65. Shanto Iyengar, Gaurav Sood & Yphtach Lelkes, *Affect, Not Ideology: A Social Identity Perspective on Polarization*, 76 PUB. OP. Q. 405, 418 (2012) (reporting that “significant numbers of Democrats and Republicans, but especially the latter, express displeasure at the prospect of a family member marrying into the out-party”).
66. See Frances E. Lee, *How Party Polarization Affects Governance*, 18 ANN. REV. POL. SCI. 261, 274 (2015) (reporting that “[v]arious empirical studies show that policy stalemate has trended upward along with party polarization” both in divided and unified governments).
67. On the mutual causal ties between policy polarization and affective polarization, see JAMES E. CAMPBELL, *POLARIZED: MAKING SENSE OF A DIVIDED AMERICA* 91–115 (2018), which notes that “[i]ssues that divide the nation in the same way . . . tend to deepen the divisiveness of those issues.”

Thus, while our results and implications refer to policy polarization, we refer to both literatures in the remainder of this Essay.

C. Vaccine Hesitancy

Although polarization can be considered a harm in and of itself, negative reactions to COVID passes can also produce an even more concrete harm to public health: vaccine hesitancy. Public-health experts,⁶⁸ public officials,⁶⁹ and employers⁷⁰ have all been wary of mandating vaccination due to fear of backlash. Paradoxically, mandatory vaccination can increase vaccine hesitancy due to a psychological mechanism known as “reactance”: people place a higher value on freedoms that have been restricted.⁷¹ This mechanism has already been found to be at play in other health policy contexts.⁷² Just as telling a teenager not to drink

68. See Lawrence O. Gostin, Daniel A. Salmon & Heidi J. Larson, *Mandating COVID-19 Vaccines*, 325 J. AM. MED. ASS’N 532, 533 (2021) (“[Vaccine] mandates can undermine public support, creating a backlash and even reducing vaccine uptake. Mandates may be useful in the future, but their implementation among any population that does not widely support vaccination could be counterproductive.”).

69. See, e.g., Roxana Tiron, *Pentagon Wary of Forcing U.S. Troops to Get Coronavirus Shots*, BLOOMBERG GOV’T (Mar. 2, 2021), <https://about.bgov.com/news/pentagon-wary-of-forcing-u-s-troops-to-get-coronavirus-shots> [<https://perma.cc/633X-JMFY>] (reporting concerns that mandating vaccinations within the U.S. military could “backfire with the public”).

70. See Kaiser Health News, *Corporations Encourage Employee Vaccination, But Stop Short of Mandates*, U.S. NEWS & WORLD REP. (May 24, 2021, 12:56 PM), <https://www.usnews.com/news/health-news/articles/2021-05-24/corporations-encourage-employee-vaccination-but-stop-short-of-mandates> [<https://perma.cc/Y8SN-3NYF>] (surveying the incentives companies are giving to employees for vaccination and suggesting that corporate resistance to imposing mandates is driven by fear of backlash).

71. See Kristin Laurin, Aaron C. Kay, Devon Proudfoot & Gavan J. Fitzsimons, *Response to Restrictive Policies: Reconciling System Justification and Psychological Reactance*, 122 ORG. BEHAV. & HUM. DECISION PROCESSES 152, 153 (2013) (“[A]n elimination or threat of elimination of the freedom to engage in a given behavior creates ‘psychological reactance’ in the individual, that is, a motivational state directed toward restoration of the eliminated or threatened freedom.” (quoting Jack W. Brehm, Lloyd K. Stires, John Sensenig & Janet Shaban, *The Attractiveness of an Eliminated Choice Alternative*, 2 J. EXPERIMENTAL SOC. PSYCH. 301, 301-13 (1966))).

72. For a literature review on the application of reactance theory to health communication, see Tobias Reynolds-Tylus, *Psychological Reactance and Persuasive Health Communication: A Review of the Literature*, 4 FRONTIERS COMM’N 1, 1 (2019).

might make her more likely to do so,⁷³ mandating COVID-19 vaccination might increase people's vaccine hesitancy.⁷⁴

A similar phenomenon has been identified in relation to other COVID-19 protective measures, such as the use of face masks,⁷⁵ social distancing,⁷⁶ lockdowns,⁷⁷ and even handwashing.⁷⁸ Introducing COVID passes might similarly be perceived as coercive enough to trigger reactance and therefore lead to lower vaccine uptake.⁷⁹ Others believe that implementing a COVID pass might even

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73. James Price Dillard & Lijiang Shen, *On the Nature of Reactance and Its Role in Persuasive Health Communication*, 72 COMM'C'N MONOGRAPHS 144, 164 (2005); Lillian Southwick Bensley & Rui Wu, *The Role of Psychological Reactance in Drinking Following Alcohol Prevention Messages*, 21 J. APPLIED SOC. PSYCH. 1111, 1121-23 (1991).
 74. See Pierre Verger & Eve Dubé, *Restoring Confidence in Vaccines in the COVID-19 Era*, 19 EXPERT REV. VACCINES 991, 992 (2020) ("Mandatory vaccination does not deal with the causes of vaccine hesitancy, but may instead favor it by triggering reactance: if people's freedom to choose is reduced, they may respond with anger and seek to reassert it."); see also Cornelia Betsch & Robert Böhm, *Detrimental Effects of Introducing Partial Compulsory Vaccination: Experimental Evidence*, 26 EUR. J. PUB. HEALTH 378, 379 (2016) ("[M]aking selected vaccinations compulsory is likely to increase the uptake of this particular vaccine. However, the overall effect on vaccine uptake in a society – or a smaller setting such as a hospital – can be negative."). But see Dolores Albarracín, Haesung Jung, Wen Song, Andy Tan & Jessica Fishman, *Rather than Inducing Psychological Reactance, Requiring Vaccination Strengthens Intentions to Vaccinate in US Populations*, 11 NATURE: SCI. REPS. [1], [1] (2021) (presenting the results of survey experiments to suggest that "fears of a backlash against vaccine mandates may be unfounded.").
 75. See Steven Taylor & Gordon J.G. Asmundson, *Negative Attitudes About Facemasks During the COVID-19 Pandemic: The Dual Importance of Perceived Ineffectiveness and Psychological Reactance*, PLOS ONE 1, 1, 3 (2021) ("[A]necdotal news reports suggest that [anti-mask] rallies are motivated, at least in part, by a phenomenon known as psychological reactance (PR).").
 76. Rodrigo Díaz & Florian Cova, *Reactance, Morality, and Disgust: The Relationship Between Affective Dispositions and Compliance with Official Health Recommendations During the COVID-19 Pandemic*, 13 COGNITION & EMOTION 1, 13 (2021) ("[P]sychological reactance significantly predicted to which extent French participants went to the restaurant [when advised not to do so]").
 77. Bodo Lang, Opinion, *How to Reduce Lockdown Resistance*, U. AUCKLAND (Sept. 10, 2021), <https://www.auckland.ac.nz/en/news/2021/09/10/reduce-lockdown-resistance.html> [<https://perma.cc/YSP7-3FQ9>] (explaining the concept of reactance in the context of New Zealand's lockdown measures and suggesting ways to overcome it).
 78. Hannah Ball & Tayah Renea Wozniak, *Why Do Some Americans Resist COVID-19 Prevention Behavior? An Analysis of Issue Importance, Message Fatigue, and Reactance Regarding COVID-19 Messaging*, HEALTH COMM'C'N 1, 5 (2021) (finding through a survey study that reactance was related negatively to adherence to hygiene-related behavior, such as using hand sanitizer and avoiding touching eyes, nose, and mouth with unwashed hands).
 79. See Allan Smith, *Politicization of 'Vaccine Passports' Could Aggravate GOP Hesitancy, Experts Warn*, NBC NEWS (Apr. 6, 2021, 4:31 AM), <https://www.nbcnews.com/politics/politics-news/politicization-vaccine-passports-could-aggravate-gop-hesitancy-experts-warn-n1263048> [<https://perma.cc/XG8V-2LWN>] (reporting that experts believe that COVID passes – and

lower trust in the health system more generally⁸⁰ and confirm conspiracy theory fears.⁸¹

II. THE USES OF THE STATUS QUO

As we discussed in Part I, if COVID passes are to be implemented, addressing the main critiques against them will be critical. In this Essay, we explore one way to decrease the perceived disruptiveness of COVID passes: status quo bias.

A. Status Quo Bias and Policy Acceptance

Behavioral scientists have shown that people tend to prefer the existing state of affairs over change, for both rational and irrational reasons.⁸² On the one hand, information cost and cognitive limitations can make sticking with the status quo a rational strategy.⁸³ On the other hand, status quo bias is tightly connected with loss aversion⁸⁴ and decision avoidance.⁸⁵ Because the status quo is used as the benchmark against which losses and gains are assessed, and because people attach more weight to losses than to gains of equal value,⁸⁶ the status quo seems preferable. Additionally, studies have documented that people attach value

the debate around them – might further complicate the “most urgent goal,” which is getting everyone vaccinated).

80. See Sato, *supra* note 44 (arguing that the loss of trust might be especially severe among minorities).

81. See Bonnie Kristian, *America Deserves a Better Endgame than Vaccine Passports*, WEEK (Mar. 31, 2021), <https://theweek.com/articles/974741/america-deserves-better-endgame-than-vaccine-passports> [<https://perma.cc/HK3G-PMX5>] (“[A] passport system might well exacerbate [vaccination opponents’] hesitancy by ‘confirming’ conspiracy theory fears.”).

82. For the seminal paper, see William Samuelson & Richard Zeckhauser, *Status Quo Bias in Decision Making*, 1 J. RISK & UNCERTAINTY 7, 7 (1988), which shows through experiments that when making decisions “individuals disproportionately stick with the status quo.” See also Russell Korobkin, *Status Quo Bias and Contract Default Rules*, 83 CORNELL L. REV. 608, 625–30 (1998) (reviewing studies supporting the existence of status quo bias).

83. See Scott Eidelman & Christian S. Crandall, *Bias in Favor of the Status Quo*, 6 SOC. & PERSONALITY PSYCH. COMPASS 270, 271 (2012) (discussing literature supporting this conclusion).

84. See Daniel Kahneman, Jack L. Knetsch & Richard H. Thaler, *Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias*, 5 J. ECON. PERSPS. 193, 197 (1991) (noting that “[o]ne implication of loss aversion is that individuals have a strong tendency to remain at the status quo”).

85. See Christopher J. Anderson, *The Psychology of Doing Nothing: Forms of Decision Avoidance Result from Reason and Emotion*, 129 PSYCH. BULL. 139, 140 (2003) (discussing the concept of decision avoidance in relation to the status quo).

86. See Kahneman et al., *supra* note 84, at 194 (describing the idea of loss aversion).

to the mere existence of something, which likewise results in a preference for the status quo.⁸⁷

These dynamics also affect policy preferences. In fact, an effective and well-documented technique to increase the acceptance of a policy is to present it as a continuation of past policies. As one study put it, “[t]o the extent that an advertiser, political actor, or any other persuader wishes to make a practice or product acceptable, framing their preferred alternative as the status quo is likely to enhance its position and increase its support.”⁸⁸ Instances of this effect abound. Wording a ballot for a referendum proposition as a continuation of the status quo, for instance, has been found to increase the number of people who vote for it by up to 8%.⁸⁹ Similarly, a recent study found that people tend to favor carbon-mitigation policies more strongly when they believe that they are already in place.⁹⁰ As a more dramatic example, presenting torture as a longstanding practice within the U.S. military significantly increased support for it across party lines during the global War on Terror.⁹¹

Building on these studies, we hypothesize and demonstrate that policy makers can leverage status quo bias to increase support for COVID passes. After all, requiring proof of vaccination in order to engage in certain activities is not a new phenomenon: government agencies, schools, and universities in all fifty states have required proof of vaccination for decades.⁹² Our contribution to this literature is showing that status quo bias can be used in a highly salient and controversial domain.

87. See Eidelman & Crandall, *supra* note 83, at 272 (“People simply assume, with little reason or deliberation, the goodness of existing states.” (citing Scott Eidelman, Christian S. Crandall & Jennifer Pattershall, *The Existence Bias*, 97 J. PERSONALITY & SOC. PSYCH. 765 (2009))).

88. Christian S. Crandall, Scott Eidelman, Linda J. Skitka & G. Scott Morgan, *Status Quo Framing Increases Support for Torture*, 4 SOC. INFLUENCE 1, 9–10 (2009).

89. See Michael Barber, David Gordon, Ryan Hill & Joseph Price, *Status Quo Bias in Ballot Wording*, 4 J. EXPERIMENTAL POL. SCI. 151, 151 (2017). For a literature review about how referendum voters are by default inclined to favor the status quo, see Joshua J. Dyck & Shanna Pearson-Merkowitz, *Ballot Initiatives and Status Quo Bias*, 19 ST. POL. & POL’Y Q. 180, 182–85 (2019).

90. See Corey Lang, Michael Weir & Shanna Pearson-Merkowitz, *Status Quo Bias and Public Policy: Evidence in the Context of Carbon Mitigation*, 16 ENV’T RSCH. LETTERS (2021).

91. Crandall et al., *supra* note 88, at 1.

92. See Stolberg & Liptak, *supra* note 25 (“Government entities like school boards and the Army can require vaccinations for entry, service and travel . . .”); see also Erwin Chemerinsky & Michele Goodwin, *Compulsory Vaccination Laws are Constitutional*, 110 NW. U. L. REV. 589, 596–99 (2015) (describing the proliferation of compulsory-vaccination laws); James G. Hodge, Jr. & Lawrence O. Gostin, *School Vaccination Requirements: Historical, Social, and Legal Perspectives*, 90 KY. L.J. 831, 850–52, 867–75 (2002) (tracing the evolution of school vaccination requirements).

B. Status Quo Bias in Public Discourse Around COVID Passes

Journalists and pundits who support the introduction of COVID passes have indeed highlighted how they are the continuation of longstanding policies. The *New York Times* described immunity passports as “a modern version of the World Health Organization’s ‘yellow card’ that provides international proof of yellow fever vaccination.”⁹³ Historians have gone further back in time, recalling the history of smallpox-immunity passports required for entry into the United States at the end of the nineteenth century,⁹⁴ which critics also denounced as tyrannical at the time.⁹⁵ Even popular comedian Trevor Noah devoted a full video to explaining how the passes are “just proof of vaccination, which may sound like a novel idea, but [is] really nothing new.”⁹⁶

However, quite surprisingly, policy makers have failed to recognize this remarkable psychological feature when advocating for COVID passes. Those responsible for implementing and promoting COVID passes have not highlighted how they extend a common practice, and how this practice has been embraced by conservatives and liberals alike.⁹⁷ Rather, policy communication around different versions of immunity passports seems to be geared towards emphasizing how technology can make it safe to return to normal. Take, for example, New York State’s video introducing the Excelsior Pass, which emphasizes “life-saving vaccines, revolutionary technology, and your voluntary participation.”⁹⁸ Not

93. See Stolberg & Liptak, *supra* note 25.

94. See Jordan E. Taylor, Opinion, *The U.S. Has Had ‘Vaccine Passports’ Before—and They Worked*, TIME (Apr. 5, 2021, 11:52 AM EDT), <https://time.com/5952532/vaccine-passport-history> [<https://perma.cc/55YB-3E2V>] (“But [a COVID vaccine pass] would not be American history’s first example of a vaccine passport—and in fact, Americans’ long campaign against smallpox shows that the benefits of such a system can extend far beyond the venues into which such a passport would grant admission.”).

95. See, e.g., Taylor, *supra* note 94 (“One Illinois writer dramatically claimed in 1923 that ‘A scar from forced vaccination is a brand, a mark of medical tyranny and despotism.’”).

96. The Daily Show with Trevor Noah, *Vaccine Passports: What Are They, and Why Does Fox News Hate Them?* / *The Daily Social Distancing Show*, YOUTUBE, at 01:44 (Apr. 6, 2021), <https://www.youtube.com/watch?v=AB4bHCs3ao4> [<https://perma.cc/9MMJ-MTJ4>].

97. This failure is not exclusive to the United States. The official documents explaining both the European Union (EU) and Italian versions of COVID passes, for instance, do not refer in any way to the fact that vaccination requirements are already widespread. See *Certificazione Verde COVID-19*, GOVERNO D’ITALIA, <https://www.dgc.gov.it/web> [<https://perma.cc/U3E3-MB8N>]; *Coronavirus: Commission Proposes a Digital Green Certificate*, EUR. COMM’N (Mar. 17, 2021), https://ec.europa.eu/commission/presscorner/detail/en/IP_21_1181 [<https://perma.cc/4UAY-L63U>].

98. Governor Andrew M. Cuomo, *Excelsior Pass – Overview*, YOUTUBE, at 00:18 (May 27, 2021), https://www.youtube.com/watch?v=UQFEjLOdi9s&ab_channel=GovernorAndrewM.Cuomo [<https://perma.cc/BZ6E-48JX>].

only is there no reference to the status quo, but the expression “revolutionary technology” evokes a clear break from the past.

Former New York City Mayor Bill de Blasio also chose to emphasize the future. When asked about the Excelsior Pass, he replied by imagining a future with vaccine passports, speculating “*what you’re going to see* is private institutions, businesses, or maybe cultural institutions, theaters” demanding proof of vaccination.⁹⁹ In a press conference, de Blasio said that it was “too soon to see” how proof of vaccination would work in practice, but that it was “a step in the right direction.”¹⁰⁰ The mayor’s senior advisor echoed him, stating “*we’re going to have to get to a world where there’s proof of vaccination required for certain activities or events.*”¹⁰¹ Instead of speculating on a future world with vaccination requirements, de Blasio and his advisors could have been more persuasive if they acknowledged that we are *already* in that world.

Policy makers’ obliviousness towards status quo bias is all the more intriguing once we notice that their opponents have readily recognized its power. For example, COVID-pass opponents have argued that mandating vaccination would be different this time around because COVID vaccines have only received emergency-use authorization, rather than full Food and Drug Administration (FDA) approval.¹⁰² Others have argued that COVID passes are not on par with yellow-fever cards because the yellow-fever vaccine was more reliable and effective than current COVID vaccines.¹⁰³ And former Republican (later Libertarian) Representative Justin Amash has stated: “Let’s get the terms clear: A ‘vaccine passport’ is not ‘what we already do.’ It’s not proof of vaccination for international travel or schooling. It’s proof of vaccination for everyday living—

99. Off. of the Mayor, *Transcript: Mayor de Blasio Appears Live on the Brian Lehrer Show*, CITY N.Y. (Apr. 30, 2021), <https://www1.nyc.gov/office-of-the-mayor/news/329-21/transcript-mayor-de-blasio-appears-live-the-brian-lehrer-show> [<https://perma.cc/A3EX-4LKX>] (emphasis added).

100. *Transcript: Mayor de Blasio Holds Media Availability*, CITY N.Y. (Mar. 29, 2021), <https://www1.nyc.gov/office-of-the-mayor/news/226-21/transcript-mayor-de-blasio-holds-media-availability> [<https://perma.cc/TA3S-M3FW>].

101. *Id.* (emphasis added).

102. See Sato, *supra* note 44 (distinguishing between emergency-use authorization from full regulatory approval for the purposes of mandatory vaccination).

103. *The Reality of Vaccine Passports*, N.Y. TIMES (Apr. 7, 2021), <https://www.nytimes.com/2021/04/07/opinion/the-argument-vaccine-passports.html?searchResultPosition=1&showTranscript=1> [<https://perma.cc/48QN-UZDB>] (featuring Natalie Kofler, a Harvard molecular biologist, explaining that the yellow-fever vaccine has been around for almost 100 years and is believed to give lifelong immunity to the yellow fever, whereas a lot of uncertainty surrounds COVID-19 vaccines).

groceries, restaurants, movies. It's disingenuous to conflate the former with the latter."¹⁰⁴

C. Depolarizing Techniques: A New Use for Status Quo Bias?

A nascent body of literature has attempted to devise strategies to reduce affective polarization.¹⁰⁵ For instance, Douglas Ahler and Gaurav Sood show that misperceptions about other party supporters are common and can result in polarization.¹⁰⁶ Moreover, reducing such misperceptions can trigger warmer feelings towards supporters of the other party.¹⁰⁷ Matthew Levendusky finds that emphasizing American identity over partisan identity also can reduce polarization.¹⁰⁸

Turning to polarization on policy issues, a recent study from Barbara Mellers and her coauthors produced promising results.¹⁰⁹ In particular, they show that participants in “forecasting tournaments” who were asked to predict salient U.S. political events moved towards more moderate political views.¹¹⁰ The basic idea is that this kind of tournament increases epistemic humility by pushing people to acknowledge their limited ability to understand cause-and-effect relationships related to complex issues.¹¹¹ The participants moderate their positions on

¹⁰⁴. Justin Amash (@justinamash), TWITTER (Mar. 29, 2021, 11:50 PM), <https://twitter.com/justinamash/status/1376743500323168265> [<https://perma.cc/84LR-6CFJ>].

¹⁰⁵. See Iyengar et al., *supra* note 36, at 139–41 (surveying studies on this issue).

¹⁰⁶. Douglas J. Ahler & Gaurav Sood, *The Parties in Our Heads: Misperceptions About Party Composition and Their Consequences*, 80 J. POL. 964, 965 (2018) (“People make large, systematic errors when judging party composition, considerably overestimating the extent to which partisans belong to party-stereotypical groups. For instance, Americans believe that 32% of Democrats are gay, lesbian, or bisexual (only 6.3% are in reality), and that 38% of Republicans earn over \$250,000 per year (just 2.2% do in reality).”).

¹⁰⁷. *Id.*

¹⁰⁸. Matthew S. Levendusky, *Americans, Not Partisans: Can Priming American National Identity Reduce Affective Polarization?*, 80 J. POL. 59, 59 (2018) (finding in both original and natural experiment data that “increasing American identity decreases affective polarization in the mass public”); see also Ryan E. Carlin & Gregory J. Love, *Political Competition, Partisanship and Interpersonal Trust in Electoral Democracies*, 48 BRIT. J. POL. SCI. 115 (2016) (showing a similar effect in connection to the killing of Osama Bin Laden).

¹⁰⁹. See Barbara Mellers, Philip Tetlock & Hal R. Arkes, *Forecasting Tournaments, Epistemic Humility and Attitude Depolarization*, 188 COGNITION 19 (2019).

¹¹⁰. *Id.* at 24 (“In a two-year forecasting tournament, participants who actively engaged in predicting US domestic events were less polarized in their policy preferences than were non-forecasters.”).

¹¹¹. *Id.* at 20 (“[A]sking people to explain complex policies, such as transitioning to a single-payer health care system, makes people appreciate the depth of their ignorance . . .”).

those issues as a result.¹¹² Other cognitive interventions, such as forcing respondents to realize that they ignore how controversial policies work,¹¹³ or exposing them to statements of scientific consensus about climate change,¹¹⁴ have also resulted in a reduction in issue polarization. Despite these successes, however, reducing partisanship is generally difficult, and some attempts have failed to produce results.¹¹⁵

In this Essay, we test the depolarizing potential of status quo bias in the COVID context. Reminding respondents that the policy that happens to be very divisive now has actually been in place for a long time might not only reduce their opposition to it, but also bring their opinions closer to those of the other party. In so doing, we attempt to add an arrow in the quiver of policy makers by showing that the status quo can be an additional tool to depolarize policy debates surrounding COVID passes.

III. OUR EXPERIMENT

We devised a double-blind experiment approved by the Yale University Institutional Review Board. Participants were paid \$1 for taking part in our survey. We recruited a sample of approximately 3,200 U.S. residents on *Prolific.co*. *Prolific* is a survey platform extensively used by researchers in many different fields.¹¹⁶ The experiment took place on April 14, 2021, and all the observations were collected in less than twenty-four hours. Participants had to be at least eighteen years of age and reside in the United States. They took an average of ten minutes to answer the survey.

Participants were randomly assigned to one of four different groups:

^{112.} *Id.*

^{113.} Philip M. Fernbach, Todd Rogers, Craig R. Fox & Steven A. Sloman, *Political Extremism Is Supported by an Illusion of Understanding*, 24 PSYCH. SCI. 939, 942 (2013) (“[A]sking people to explain how policies work decreased their reported understanding of those policies and led them to report more moderate attitudes toward those policies.”).

^{114.} Sander van der Linden, Anthony Leiserowitz & Edward Maibach, *Scientific Agreement Can Neutralize Politicization of Facts*, 2 NATURE HUM. BEHAV. 2, 2 (2018) (“[C]orrecting people’s perception of the scientific norm can help depolarize ideological worldviews and neutralize motivated cognition.”); see also Michael Andrew Ranney & Dav Clark, *Climate Change Conceptual Change: Scientific Information Can Transform Attitudes*, 8 TOPICS COGNITIVE SCI. 49, 66 (2016) (presenting experimental results suggesting that scientific information can increase concern and awareness about climate change without furthering polarization).

^{115.} See, e.g., Matthew S. Levendusky, *When Efforts to Depolarize the Electorate Fail*, 82 PUB. OP. Q. 583, 590 (2018) (reporting failed attempts to reduce affective polarization in the electorate).

^{116.} Stefan Palan & Christian Schitter, *Prolific.ac – A Subject Pool for Online Experiments*, 17 J. BEHAV. & EXPERIMENTAL FIN. 22, 23–25 (2018) (describing the wide adoption and characteristics of the platform).

- (1) Domestic Pass Control,
- (2) Domestic Pass and Status Quo,
- (3) International Pass Control, and
- (4) International Pass and Status Quo.

Our large sample size allows us to have significant statistical power.

To begin, we asked respondents whether they were already vaccinated against COVID-19. We offered answers that allowed us to distinguish between respondents who completed their vaccination schedule and those who are still waiting for their first or second dose. For respondents who are not fully vaccinated, we asked whether they planned to obtain their next shot, were still indecisive, or had decided not to complete or start their vaccination process. After answering these questions, respondents were randomly assigned to one of the four groups. Each group saw a different set of slides, as shown in Figures A1 to A5 in the online Appendix.

After receiving the treatment, respondents were asked to state their level of agreement on a scale from zero to ten with six statements intended to capture their support for COVID passes.

1	A COVID PASS is important to fight COVID-19
2	A COVID PASS can help preventing new variants of COVID-19 that might render current COVID-19 vaccines ineffective
3	A COVID PASS is key to return to normal quickly and safely
4	A COVID PASS is an extreme limitation to the individual liberties of Americans
5	A COVID PASS is unfair towards minorities who are receiving vaccines at a lower rate than the rest of the population
6	A COVID PASS poses severe dangers to Americans' data privacy

Table 1: Six statements capturing the support for the COVID pass

The first three statements aimed to measure their perception of COVID passes on three positive dimensions, namely whether (1) COVID passes are important in the fight against COVID-19, (2) COVID passes can help prevent new variants of COVID-19 that might render the existing vaccines ineffective, and (3) COVID passes are crucial for returning to normalcy.

The second half of statements aimed to measure the perception of COVID passes on three negative dimensions, namely whether (1) COVID passes are an extreme limitation of the individual liberties of Americans, (2) COVID passes are unfair towards minorities and vulnerable groups that are getting vaccinated at a lower rate, and (3) COVID passes severely threaten Americans' data privacy.

In line with the literature,¹¹⁷ we operationalized “polarization” as the distance between the position of the respondents who identify as Republicans and that of the respondents who identify as Democrats – thus accounting for issue polarization. In particular, we focused on the level of agreement with the survey’s six statements on COVID passes. If answers provided by Democrats and Republicans were markedly different, we determined that there was a high level of polarization surrounding COVID passes. If the answers provided by members of both parties were similar, we determined that the level of polarization was low.

Additionally, we asked respondents whether they intended to get vaccinated if a COVID pass was introduced. We framed the question in three different ways, depending on the current vaccination status of the respondent. Respondents who had already completed at least one cycle of vaccination were asked: “If a COVID PASS is introduced, how likely is it that you will vaccinate against COVID-19 again next year if it is considered necessary?” Respondents who had received only one shot of a two-shot vaccine were asked: “If a COVID PASS is introduced, how likely is it that you will complete your vaccination against COVID-19?” And respondents who had not vaccinated against COVID-19 were asked: “If a COVID PASS is introduced, how likely is it that you will get vaccinated against COVID-19?” Respondents answered on a five-point Likert scale ranging from “Very unlikely” to “Very likely.”

Finally, we measured respondents’ vaccine hesitancy,¹¹⁸ and concluded the survey by compiling demographics, such as age and political affiliation.

IV. RESULTS

We hypothesized that status quo bias would have three consequences. First, it would increase support for COVID passes. Second, it would increase vaccine intention following the introduction of a COVID pass. Third, it would reduce the level of polarization surrounding COVID passes. Therefore, by leveraging status quo bias, we aimed to increase overall support for COVID passes, thereby increasing vaccine uptake and reducing the gap in support between Democrats and Republicans.

117. For a discussion of the literature, see, for example, Iban Lauka, Jennifer McCoy & Rengin B. First, *Mass Partisan Polarization: Measuring A Relational Concept*, 62 AM. BEHAV. SCI. 107, 108 (2018), which observes that starting from the seminal works of Professor Giovanni Sartori, “[d]efinitions of political polarization usually involve distances in policy stances or attitudes between groups of people, parties, or specific representatives.”

118. The questions are taken from Cornelia Betsch, Philipp Schmid, Dorothee Heinemeier, Lars Korn, Cindy Holtmann & Robert Böhm, *Beyond Confidence: Development of a Measure Assessing the 5C Psychological Antecedents of Vaccination*, 13 PLOS ONE 1, 16 (2018).

We found unequivocal support for our hypothesis that status quo bias can increase support for COVID passes and reduce polarization. However, we found that the effect of status quo bias on intent to get vaccinated – our second hypothesis – is more nuanced. In particular, our results seem to suggest that status quo bias can increase intended vaccine uptake only if framed in terms that explicitly refer to the past use of similar solutions by both liberal and conservative decision makers. Otherwise, status quo bias might actually *reduce* vaccine uptake.

A. Summary Statistics

The demographics of our sample are similar to U.S. demographics in many key aspects.¹¹⁹ As for descriptive statistics, Democrats agreed more with the three statements emphasizing good features of the pass and agreed less with the three statements describing the risks posed by the pass. Moreover, Democrats stated that they are more likely to get vaccinated than the Republicans if a COVID pass was introduced. For the demographic composition of our sample and the summary statistics for the dependent variables in our sample, we refer the readers to Tables A1 and A2 in the Appendix.

B. Support for COVID Passes and Vaccine Intention

We started by investigating whether status quo bias (1) increases support for COVID passes and (2) leads more people to state that they intend to get vaccinated if a COVID pass is introduced. To that end, we compared levels of agreement with the six statements among respondents in the status quo groups, as well as the other respondents. We employed an ordered logit model to study the determinants of agreement with the statements capturing support for the pass. To estimate the accuracy of ordered logistic regressions in our context, we performed a Brant test to check that the proportional odds assumption cannot be rejected. We note that the relevant test is that for the status quo treatment variable, for which the tests are insignificant for the majority of our regressions. For the three regressions where the Brant test is significant (in the international status quo the regressions for the pass limiting liberty, the pass preventing the

119. For instance, about 50% of our respondents are female, which is roughly the same percentage of females in the total U.S. population. *Population, Female (% of Total Population) – United States*, WORLD BANK, <https://data.worldbank.org/indicator/SP.POP.TOTL.FE.ZS?locations=US> [<https://perma.cc/LMG9-C6S7>]. Similarly, white respondents account for 72% of the participants, roughly equivalent to the 71% of the U.S. population reported as white by the U.S. Census Bureau. *QuickFacts*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/US/PST045219> [<https://perma.cc/GYH2-8S5L>]. Moreover, we do not observe significant differences in the demographics of the treatment groups.

spread of the virus, and the pass creating privacy concerns) we implement further tests to select the most accurate model to use. To decide whether an ordered logistic regression or a generalized ordered logistic regression (which would not assume proportional odds) would be preferable given our data, we compare the Akaike information criterion (AIC) and Bayesian information criterion (BIC) for the ordered logit (using the `ologit` command in Stata) and generalized ordered logit (using the `gologit2` command in Stata) of the most complete regressions. We find that the AIC is similar for the two models and the BIC is much lower for the ordered logistic regressions, making this more parsimonious model preferable. Hence, we report the coefficients and odds ratios of the regressions we run in text and present the marginal effects (not assuming proportional odds) in the Appendix.

We split the analysis for the international and domestic pass and focused on the impact of being in the status quo group with respect to the Domestic Pass Control and International Pass Control. We considered different sets of controls and deemed the effect of a treatment “robust” if the magnitude and statistical significance of the coefficient were similar across the specifications considered. The sets of control variables included: (1) the vaccination status of the respondent, (2) the respondent’s demographics (e.g., age, gender, and education), (3) the respondent’s level of concern about the pandemic (i.e., worry about themselves or family and friends contracting COVID-19, worry about SARS-CoV-2 variants, and worry about the poverty resulting from the pandemic), (4) the respondent’s trust level (in the state and federal governments, the FDA, the respondent’s doctor, pharmaceutical companies, insurance companies, and, the Centers for Disease Control (CDC)), and (5) a set of statements capturing the respondent’s attitude to vaccinations. We ran seven specifications for all the dependent variables, considering different combinations of these sets of control variables. Further, we ran the same regressions employing a generalized ordered logit model as a robustness check for our results.

We refer the reader to the online Appendix for the full regression tables and marginal predictions for the increase in agreement at each point of the scale. Tables 2, 3, 4, and 5 present the coefficients of the regressions ran with the full set of control variables, the corresponding proportional odds ratio, and their p-values. The coefficients for the ordered logit regression show the direction of the effect on the support for the statement or intention to vaccinate. The coefficient of the treatment variable shows the ordered log-odd estimate comparing participants in the control group and in the Status Quo group, *ceteris paribus*. The odds ratios ease the interpretation of the results, as they represent the increased likelihood of participants in the “Status Quo group” to agree more with the statements we propose. Intuitively, an odd ratio of 2 for the treatment variable means that respondents in the treatment group *ceteris paribus* have twice as many

chances of agreeing with the statement considered. Similarly, an odds ratio of 0.5 for the treatment variable means that respondents in the treatment group *ceteris paribus* have 50% more chances of agreeing with the statement considered.¹²⁰ Finally, in the last two columns of Tables 2, 3, 4, and 5, we report the marginal prediction for the average participant in the control group and the treatment group (i.e., we fix the level of all the covariates at their means and look at the impact of the treatment on the agreement with each of the statements).

1. Domestic COVID Pass

We begin our analysis by comparing the level of support for COVID passes among respondents in the Domestic Pass control condition with that of respondents in the Domestic Pass and Status Quo condition.

We find that the respondents in the Domestic Pass and Status Quo condition agree by about 6% more with all three statements containing positive aspects of COVID passes than the respondents in the Domestic Pass Control. This difference between the groups is sizeable (with odds ratios of 1.72, 1.62, and 1.62 respectively), significant at 1% ($p < 0.001$), and robust to different sets of control variables for all three statements. This suggests that simply presenting the information about the COVID pass through a status-quo framing increases the probability of agreeing more with positive statements about the domestic pass by about 6%, irrespective of the person's demographics or vaccination attitudes.

We then turn to the negative aspects of COVID passes. Participants in the Status Quo group are less likely than participants in the control group to agree with these statements. This difference between the Domestic Pass and Status Quo group and Domestic Pass Control group is also sizable (with odds ratios of 0.68, 0.793, and 0.748, respectively) and statistically significant ($p < 0.001$, $p = 0.013$, and $p < 0.01$ respectively). The marginal effects suggest that the status-quo framing reduces the perception of negative aspects of the pass by about 4.6%. We note that this is only an average impact and refer the reader to the Appendix for tables reporting marginal predictions, or how the treatment affects the probability of increasing the participants' agreement at each point of the scale.

120. However, some caution is needed when interpreting these results due to the proportional-odds assumption and the fact that the dependent variable (the level of agreement with the statement) is not binary. This assumption implies that the impact of the treatment is that same at each point of the scale. That is, a person in the treatment group is always $1 - OR * 100\%$ more likely to agree with a statement than one in the control group, regardless of the level of agreement of the person in the control group. For an annotated example, see *Ordered Logistic Regression | Stata Data Analysis Examples*, UCLA INST. FOR DIGIT. RSCH. & EDUC., <https://stats.idre.ucla.edu/stata/dac/ordered-logistic-regression> [<https://perma.cc/B6C4-JEZH>].

To summarize, we observe that when compared with the respondents in the Domestic Pass Control group, respondents in the Domestic Pass and Status Quo group agree more with statements emphasizing positive aspects of COVID passes and agree less with statements emphasizing negative features of COVID passes. Consequently, we conclude that leveraging status quo bias can increase support for a domestic COVID pass.

STATEMENT	COEF. OR- DERED LOGIT	ODDS RATIO	P-VALUE	MARGIN (CONTROL)	MARGIN (SQ)
PASS IM- PORTANCE	0.542 ***	1.72***	<0.001	5.46	6.1
PASS HELPS PREVENT- ING SPREAD	0.48 ***	1.62***	<0.001	4.72	5.43
PASS HELPS RETURN TO NORMALCY	0.485 ***	1.62***	<0.001	5.28	5.89
PASS LIMITS LIBERTIES	-0.386 ***	0.68***	<0.001	4.08	3.51
PASS IS UN- FAIR	-0.231**	0.793**	0.013	5.13	4.73
PASS CAUSES PRIVACY CONCERNS	-0.291***	0.748***	0.003	3.94	3.54

Table 2: Column 1 reports the effect of the treatment (Domestic Pass and Status Quo) on each statement. Columns 2 and 3 report the coefficients and odds ratios obtained from an ordered logit regression considering the statement as the dependent variable and controlling for demographics, vaccination status, trust levels, vaccination attitudes, and worry levels of the participants. Column 4 reports the p-value from these regressions. Finally, Columns 5 and 6 report the marginal prediction for the control group and treatment group, showing the average level of support with the statement in the control and treatment group on a scale ranging from 1 to 10. We obtain these estimates by fixing the level of all the control variables at the mean and derive the average impact of the treatment. The asterisks reflect the significance of the result, with * = $p < 0.10$, ** = $p < 0.05$, *** = $p < 0.01$.

2. *Domestic COVID Pass and Vaccine Intention*

We also investigated whether introducing status quo bias can induce more people to state that they are willing to get vaccinated after the introduction of a COVID pass. This is a key question, as one of the main reasons to adopt a COVID pass is to increase vaccination uptake,¹²¹ but it is feared that such a polarizing solution could backfire and lower the percentage of people who are willing to get vaccinated.¹²² We divided participants into three groups depending on their current vaccination status and asked their intention to (1) receive the first dose after the introduction of the pass (for participants who had not yet received the vaccine), (2) receive the second dose after the introduction of the pass (for participants who had already received the first dose), or (3) start a new vaccination cycle if required next year (for participants who have already received both doses). We then aggregated the responses in a general measure of vaccination uptake.

We find that respondents included in the Domestic Pass and Status Quo group were more likely to state that they intend to get vaccinated if a COVID pass is introduced than the respondents included in the Domestic Pass Control group. This difference is sizeable (with an odds ratio of 1.4), significant at 5% ($p=0.011$), and robust to a battery of controls. This difference is driven by the participants who have already received both doses of the vaccine and would be willing to start a new vaccination cycle if deemed necessary (for this group with an odds ratio of 7.24 and $p<0.001$). We therefore conclude that leveraging status quo bias when implementing a COVID pass could lead to higher rates of vaccine uptake, especially among those who have already been vaccinated against COVID-19, in case new rounds of vaccination are needed.

121. See Wilf-Miron et al., *supra* note 20.

122. See *supra* notes 68-81 and accompanying text.

GROUP	COEF. ORDERED LOGIT	ODDS RATIO	P-VALUE	MARGIN (CONTROL)	MARGIN (SQ)
UNVACCINATED PEOPLE (LIKELIHOOD OF GETTING THE FIRST DOSE OF THE VACCINE)	0.226	1.25	0.194	3.44	3.5
VACCINATED PEOPLE WHO HAVE RECEIVED THE FIRST DOSE ONLY (LIKELIHOOD OF COMPLETING THE VACCINATION SCHEDULE)	-0.269	0.764	0.467	4.67	4.73
VACCINATED PEOPLE WHO COMPLETED THE CYCLE (LIKELIHOOD OF GETTING VACCINATED AGAIN THE FOLLOWING YEAR, IF NEEDED)	1.98***	7.24***	<0.001	4.61	4.83
OVERALL MEASURE OF UPTAKE	.336**	1.4**	0.011	4.1	4.2

Table 3: Impact of the treatment (Domestic Pass and Status Quo) on respondents' intention to get vaccinated depending on their vaccination status. Columns 2 and 3 report the coefficients and odds ratios obtained from an ordered logit regression considering the statement as the dependent variable and controlling for demographics, vaccination status, trust levels, vaccination attitudes, and worry levels of the participants. Column 4 reports the p-value from these regressions. Finally, Columns 5 and 6 report the marginal prediction for the control group and treatment group, showing the average level of support with the statement in the control and treatment group on a scale ranging from 1 to 5. We obtain these estimates by fixing the level of all the control variables at the mean and derive the average impact of the treatment. The asterisks reflect the significance of

the result, with $\ast = p < 0.10$, $\ast\ast = p < 0.05$, $\ast\ast\ast = p < 0.01$. We note that the margins for rows 2 and 3 (Vaccinated people who have received the first dose only (likelihood of completing the vaccination schedule) and Vaccinated people who completed the cycle (likelihood of getting vaccinated again next year)) are estimated without controlling for the vaccination status (whether the person is indecisive about the next dose or does not want it) due to the very low number of people in our sample who have received only one dose and state that they are either indecisive or against receiving the second.

3. International COVID Pass

Next, we compare the answers provided by the respondents in the International Pass Control condition with the answers provided by the respondents in the International Pass and Status Quo condition.

For the three statements capturing positive aspects of COVID passes, the results are in line with the ones obtained for the domestic COVID pass. The respondents in the International Pass and Status Quo group agree more with all three positive statements. The difference in their levels of agreement is sizeable (with odds ratios of 1.49, 1.51 and 1.39, respectively), significant at 1% ($p \leq 0.001$), and robust to a battery of controls. This means that the Status Quo framing on average increases agreement with these sentences by about 4.6%.

The results differ with respect to the negative statements. While status quo bias reduces agreement with the statement “A COVID PASS poses severe dangers to Americans’ data privacy,” (with an odds ratio of 0.794 and significant at 5%, $p = 0.017$), the treatment does not have a similar effect on the other two negative statements.

Therefore, we conclude that the status quo can have a positive impact on the support for an international COVID pass. However, the impact is more limited than the status quo’s effect on support for a domestic COVID pass.

STATEMENT	COEF. ORDERED LOGIT	ODDS RA- TIOS	P-VALUE	MARGIN (CON- TROL)	MARGIN (SQ)
PASS IM- PORTANCE	0.398 ***	1.49	<0.001	6.06	6.48
PASS HELPS PREVENTING SPREAD	0.412 ***	1.51	<0.001	5.78	6.3
PASS HELPS RETURN TO NORMALCY	0.328 ***	1.39	0.001	5.71	6.14
PASS LIMITS LIBERTIES	-0.117	0.89	0.23	3.32	3.25
PASS IS UN- FAIR	-0.058	0.95	0.572	4.35	4.27
PASS CAUSES PRIVACY CONCERNS	-0.231 **	0.794	0.017	3.47	3.29

Table 4: Column 1 reports the effect of the treatment (International Pass and Status Quo) on each statement. Columns 2 and 3 report the coefficients and odds ratios obtained from an ordered logit regression considering the statement as the dependent variable and controlling for demographics, vaccination status, trust levels, vaccination attitudes, and worry levels of the participants. Column 4 reports the p-value from these regressions. Finally, Columns 5 and 6 report the marginal prediction for the control group and treatment group, showing the average level of support with the statement in the control and treatment group on a scale ranging from 1 to 10. We obtain these estimates by fixing the level of all the control variables at the mean and derive the average impact of the treatment. The asterisks reflect the significance of the result, with * = $p < 0.10$, ** = $p < 0.05$, *** = $p < 0.01$.

4. International COVID Pass and Vaccine Intention

For the international COVID pass, the impact of the status quo treatment on vaccine intention is weaker. With most sets of controls, we did not observe a

significant effect. For the combinations of controls for which we found a statistically significant result, the effect is negative ($p < 0.001$ in the ordered logit regression for unvaccinated people). This result is driven by respondents who have not yet received a dose of the vaccine and becomes less robust when this category is aggregated with the others. Therefore, status quo bias surrounding the international COVID pass seems to have either no impact on vaccine intention, or a weak negative one.

GROUP	COEF. ORDERED LOGIT	ODDS RATIOS	P- VALUE	MARGIN (CONTROL)	MAR- GIN (SQ)
UNVACCINATED PEOPLE (LIKELI- HOOD OF GETTING THE FIRST DOSE OF THE VACCINE)	-0.491***	0.61	0.004	3.52	3.33
VACCINATED PEO- PLE WHO HAVE RE- CEIVED THE FIRST DOSE ONLY (LIKELI- HOOD OF COM- PLETING THE VAC- CINATION SCHEDULE)	0.38	1.46	0.244	4.60	4.72
VACCINATED PEO- PLE WHO COM- PLETED THE CYCLE (LIKELIHOOD OF GETTING VAC- CINATED AGAIN THE FOLLOWING YEAR, IF NEEDED)	0.018	1.02	0.952	4.63	4.64
OVERALL MEASURE OF UPTAKE	-0.193	0.825	0.123	4.12	4.05

*Table 5: Impact of the treatment (International Pass and Status Quo) on respondents' intention to get vaccinated depending on their vaccination status. Columns 2 and 3 report the coefficients and odds ratios obtained from an ordered logit regression considering the statement as the dependent variable and controlling for demographics, vaccination status, trust levels, vaccination attitudes, and worry levels of the participants. Column 4 reports the p-value from these regressions. Finally, Columns 5 and 6 report the marginal prediction for the control group and treatment group, showing the average level of support with the statement in the control and treatment group on a scale ranging from 1 to 5. We obtain these estimates by fixing the level of all the control variables at the mean and derive the average impact of the treatment. The asterisks reflect the significance of the result, with * = $p < 0.10$, ** = $p < 0.05$, *** = $p < 0.01$.*

C. Polarization

As is standard in the political science literature,¹²³ we operationalized polarization as the *distance* between Democrats' and Republicans' opinions on COVID passes, thus accounting for issue polarization. More specifically, we built a score for the participants' overall support for the pass by summing the level of agreement with the positive statements (1-3 in Table 1) and subtracting the negative statements (4-6 in Table 1). We then used the absolute value of this score as a dependent variable.¹²⁴ To account for the fact that demographics are strong predictors of support for the pass, we regressed the absolute score on demographics (except for political orientation) and constructed a new variable with the residuals of this regression. This allowed us to measure the part of the score that did not depend on demographics and study whether the distance between Republicans and Democrats decreases when they are in a status quo treatment group. Within this framework, we considered COVID passes "depolarized" if there was less distance between the opinions of the Democrats and the Republicans. As Democrats tend to support COVID passes more than Republicans, this could happen in three ways: (1) an increase in the support for COVID passes among Republicans, while the support among Democrats remains unchanged, (2) a reduction in support among Democrats, while the support among Republicans remains unchanged, or (3) an increase in support among Republicans that is larger than an increase among Democrats, or (4) a reduction in support among Republicans that is smaller than a reduction among Democrats.

We observe that introducing status quo bias reduces polarization surrounding both domestic and international COVID passes. The reduction in polarization is more than seven times larger for the domestic COVID pass than for the international COVID pass. However, for both passes the effect is significant at 1% ($p < 0.01$). As the dependent variable used to measure the decrease in polarization relies on residuals from regressions, it has the advantage of accounting for the proportion of the variance in replies driven by demographics and factors other than the political orientation of the participant. However, it makes the interpretation of the coefficient obtained harder as it changes the scale of the values for the dependent variable. Thus, we can interpret the direction and relative size

123. See, e.g., Gyung-Ho Jeong & Paul J. Quirk, *Division at the Water's Edge: The Polarization of Foreign Policy*, 47 AM. POL. RES. 58, 71 (2019) (using "the distance between the foreign-policy positions of the Democratic and the Republican senator in each split-delegation state [as] an index of split-delegation foreign-policy polarization").

124. A similar procedure is adopted, among others, in James N. Druckman & Matthew S. Levendusky, *What Do We Measure When We Measure Affective Polarization?*, 83 PUB. OP. Q. 114 (2019). The authors create an affective-polarization index by summing the scores on positive and negative personal traits that Democrats attribute to Republicans, and vice versa. *Id.*

of the decrease (i.e., we are able to say that polarization decreases more for the domestic pass than for the international pass). However, we cannot comment on the absolute magnitude of the effect.

V. DISCUSSION

COVID passes are widely considered a powerful tool for increasing vaccine uptake and thereby fighting COVID-19.¹²⁵ But they are also perceived as threatening individual liberties and privacy rights, and as a step towards a more unjust and divided society.¹²⁶ The polarization they generate is therefore unsurprising.

In our experiment, we investigated whether leveraging status quo bias can effectively alter perceptions of COVID passes among a large sample of American respondents. We found that the answer is yes. With respect to both domestic and international passes, respondents in status quo treatment groups more strongly supported COVID passes. This finding is robust and highly statistically significant. This is an important lesson for both policy makers and private entities who want to promote or implement a COVID pass. Emphasizing how a proof of vaccination has already been required in the past to engage in usual activities is an effective way to increase the perceived benefits of COVID passes and to reduce their perceived risks.

One important caveat, however, is that proof of vaccination was generally required when there was widespread access to the requested vaccine, so that anyone who wanted to get vaccinated had the opportunity to do so.¹²⁷ Requiring proof of vaccination to engage in certain activities when most of population does not have access to vaccination would introduce much graver fairness concerns and would be markedly different from historical proof-of-vaccination programs. While many developed countries are already past this point, this issue is still pressing for many countries throughout the world.

A second important caveat is that, by leveraging status quo bias, it is possible to persuade more people to state that they would be willing to get vaccinated if a COVID pass is introduced. However, this effect is only observed for the domestic COVID pass, not for the international one. A possible explanation for this

^{125.} See Bokart-Lindell, *supra* note 20; Wilf-Miron et al., *supra* note 12.

^{126.} See *supra* Part I.

^{127.} See Seema Mohapatra, *Why COVID-19 Immunity Passports May Violate US Law*, CONVERSATION (May 27, 2020), <https://theconversation.com/why-covid-19-immunity-passports-may-violate-us-law-138165> [<https://perma.cc/MXE5-4UPH>] (“The concept of immunity passports is not novel . . . For example, yellow fever vaccination cards are required to travel to certain countries. And university students in Florida and Colorado must have meningococcal vaccinations. But in those cases, there is a readily available vaccine that allows anyone who gets one access to a country or college campus.”).

finding is that a large fraction of the population – and 65% of our respondents – rarely, if ever, travels abroad. Therefore, an international COVID pass might simply have less impact on their daily lives and vaccination decisions.

Last, we observe that introducing status quo bias can depolarize COVID passes. Both the domestic and the international status quo treatments are effective in reducing polarization. Our results suggest that leveraging status quo bias in policy communications can be an effective means of depolarizing controversial and salient issues. In terms of the size of the effect, we find that the decrease in polarization due to status quo bias is greater for the domestic pass than for the international pass. In particular, polarization in the domestic group drops by roughly seven times more than in the international group. This might be because in the domestic setting, we explicitly flagged that both liberal and conservative institutions had required proof of vaccination in the past (Figure 4), whereas in the international setting, we merely stated that proof of vaccination was required without specifying the political ideology of the entity instituting such requirements (Figure 5). Thus, it is possible that emphasizing the bipartisan nature of past policies requiring proof of vaccination helps depolarize COVID passes even more than status quo bias itself.

It is also remarkable that for both the domestic and international passes, depolarization was driven by respondents who self-identified as Republican: although the status quo treatment affected all groups of respondents, its effect was stronger on Republicans, therefore shortening the distance between the two groups. A possible explanation is that conservatives have a higher tendency to find the status quo to be a just state of affairs,¹²⁸ and hence they can be more effectively persuaded by showing how a new policy is actually a continuation of the past.¹²⁹ The corollary would be that policies *prima facie* deemed progressive can be depolarized to some extent when they are framed as being germane to the status quo, and especially so when they are reminded that this status quo was also the product of conservative policy makers.

128. See generally John T. Jost, Brian A. Nosek & Samuel D. Gosling, *Ideology: Its Resurgence in Social, Personality, and Political Psychology*, 3 PERSPS. ON PSYCH. SCI. 126, 129–31 (2008) (“To the extent that political conservatives are motivated, at least in part, by the desire to maintain the societal status quo . . . they should exhibit stronger system-justification tendencies in general.”).

129. See, e.g., Davide Morisi, Céline Colombo & Andrea De Angelis, *Who Is Afraid of a Change? Ideological Differences in Support for the Status Quo in Direct Democracy*, 31 J. ELECTIONS PUB. OP. & PARTIES 309 (2021) (finding empirical evidence showing that “support for a referendum proposal decreases when voters consider that it will change the status quo, but only among right-wing voters”); see also Crandall et al., *supra* note 88, at 6 (reporting a larger effect of the status-quo treatment over Republicans than over Democrats and Independents, although not discussing its implications).

CONCLUSION

The jury is still out on whether COVID passes will in fact be a key tool for restoring normalcy, and policy makers should carefully consider whether their benefits outweigh concerns about fairness, privacy, and individual liberty. However, the success of COVID passes will depend in no small measure on their widespread acceptance by the population writ large.

Policy makers have chosen to focus on how COVID passes can allow for a brighter future. Our experiment suggests that they would be well-advised to also point to the past: the fact that a policy has been accepted in the past enhances its acceptability in the present. In fact, our experiment provides evidence that showing how similar policies were implemented in the past by both Democrats and Republicans can increase support for COVID passes and reduce the polarization that currently surrounds them.

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