

iLLUminate Blog Transcript: Chad Meyerhoefer – Do Elections Make You Sick?

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Transcription results:

- ANNOUNCER: 00:02 This podcast is brought to you by iLLUminate, the Lehigh business blog. To learn more, please visit us at business.lehigh.edu/news.
- JACK CROFT: 00:14 Welcome. I'm Jack Croft, host of the iLLUminate podcast for Lehigh University's College of Business. Today is September 24th, 2020. And as the campaigns for president, congress, and state and local offices in the United States head into the final stretch, we're talking with Chad Meyerhoefer about a study he co-authored titled, "Do Elections Make You Sick?" Dr. Meyerhoefer holds the Arthur F. Searing Professorship in economics in Lehigh's College of Business. His research focuses broadly on the economics of health and nutrition. Much of his work involves the use of microeconomic methods to evaluate and inform public policy. Dr. Meyerhoefer is also a research associate at the National Bureau of Economic Research, which published the election study online. Welcome, Dr. Meyerhoefer. Let's start with a spoiler alert. What were the main takeaways from your study on the effects that elections in Taiwan had on the physical health of voters there? Do elections make you sick?
- CHAD MEYERHOEFER: 01:20 Hi Jack, it's great to talk to you. Yes, elections do indeed make you sick. And in fact, we found that health care costs increased during the campaign periods associated with elections. That increase was relatively large. So health care expenditures in Taiwan increased 19% during those legally mandated campaign periods. And if you extrapolate that result to the entire population and look at how large that number is as a fraction of total health care costs, it was 2% during the election period. The other thing we found was that the amount of money spent on treating illnesses from the election was actually higher than the amount of money that was spent by presidential candidates on their campaigns.
- CROFT: 02:09 All right. And what were the main health issues that were being treated as a result of the elections?
- MEYERHOEFER: 02:14 So we found that election campaigns increased the incidence of acute respiratory infections, gastrointestinal diseases, and injuries. Interestingly, we didn't find any effects on mental health conditions despite the fact that previous studies suggest that depressive symptoms and anxiety increased during the elections.
- CROFT: 02:38 And I'm wondering your study is the first to look at the health care costs of elections and most of us grew up believing that free and fair elections are one of the cornerstones of our system of government in the United States. So what led you to ask the question whether elections make us sick in the first place?
- MEYERHOEFER: 02:56 Well, we were interested in how the health care consequences of elections may be different now compared to in the past. And one of the things that's really changed over time is how acrimonious political debate has become. So in the past, even though there was a two-party system in Taiwan and a two-party system in the United States, there was less negative campaigning. There was less bifurcation of views on as

many issues. And there wasn't the intensity of campaigning that we see today. So we wondered whether this higher intensity of campaigning, what seemed to be higher stakes elections where social policies could shift more abruptly depending on who is elected, whether that would have any effect on health care utilization. Because there's been some anecdotal studies that found that in more recent periods stress levels of voters have become much higher.

CROFT: 04:12

Now, why look at Taiwan as opposed to say the United States?

MEYERHOEFER: 04:17

So my co-author on this study is Hung-Hao Chang. And we've worked together for a number of years looking at issues in Taiwan. So there's a couple reasons why Taiwan is a good case study to look at this issue. The first is that they have a two-party system just like the United States. And the parties are fairly entrenched in their policy positions, again, like the United States. And the intensity of campaigning there is very high. So the island has been termed the "Island of Elections" because when the elections happen, it's almost like a soap opera that you can watch on television. And in fact, there's some people that follow elections in Taiwan very closely because they're so dramatic and interesting. The other reason why we chose Taiwan is that we have, through my co-author, access to administrative health care claims data covering the entire population, which is something that doesn't exist in the United States because of the private insurance system. And so that's a very big asset from a methodological standpoint because it means that we don't have to worry about people having different access to health care like they would in the United States, where people who had better access to health care, maybe they had lower incidence of illness or something like that. In Taiwan, there's a national health insurance system. Everybody has access to care and we know exactly how much is spent to treat everybody's conditions.

CROFT: 05:59

Now you used what's known as a regression discontinuity design to conduct the study. Can you briefly break that down for us and tell us what it means, how it works?

MEYERHOEFER: 06:10

Sure. So the difficulty with any study is trying to identify whether the effect you're interested in is causal or it's just a correlation. So you need some sort of natural experiment in order to identify a causal relationship between elections and health. So we use this regression discontinuity design and what it is, it exploits the fact that as people get older their health care expenditures increase with age. So you can think about there being this nice smooth increasing trend in health care costs as individuals age. So if you isolate the period just around the election and you look at individuals who are eligible to vote as opposed to those who are not eligible to vote, the election can cause a sharp increase in expenditures among those who are voter eligible. And that's because campaign events are targeted towards those voters. So what we did is we looked – so the legal voting age in Taiwan is 20 years old. So we essentially looked at the trend in health care expenditures for individuals less than 20 – just less than 20 – and those that had just turned 20 and looked at how much health care expenditures jumped up during the election for those eligible voters. And the reason why we can do it this way is that there are no other events in-- there are no other phenomena in Taiwan that occur at age 20. So for example, the legal age for smoking and drinking is younger. Students enter either university or military service at a different age. And so there's nothing to sort of confound that relationship between medical expenditures and age.

- CROFT: 08:09 Okay. Now you looked at two national presidential elections in 2008 and 2012 and two local township mayoral elections in 2005 and 2009. And I'm wondering why look at both national and local elections? And did the results that you saw differ between the two kinds of campaigns?
- MEYERHOEFER: 08:35 There are three reasons why we looked at both presidential and local mayoral elections. The first reason was that we expected there to be a bigger effect on health care use during presidential elections. And that's because there's a lot more at stake. The federal government, the national government, turns over when there's a new president elected. And those campaigns tended to be-- they tend to involve more people, whereas mayoral elections they don't always occur at the same time. They're focused on certain areas. So one way of testing whether our model was working properly and we were actually capturing the effect of the elections was to see whether there was a bigger effect on health care use as a result of presidential elections. And in fact, there was. So health care costs increased about three times as much during presidential campaign periods than local campaign periods.
- MEYERHOEFER: 09:43 The second reason that we looked at both types of elections was there is a difference in the length of the campaign period. So one of the really interesting things we found in our study was that there was no increase in health care use just before the campaign periods were allowed to start and there was no increase in health care use immediately after the election. And that's actually contrary to some previous studies which found that effects on stress and anxiety were high after the election as well as before. So Taiwan is different than the United States in the sense that they actually have legal limits on the length of their campaign period. And their campaign periods are relatively short, which is one of the reasons why they're so intense. So a presidential campaign period is four weeks long and a local mayoral campaign is only one week long. And so that allowed us to test whether we found effects on health outside these different-length campaign periods. And in fact, we didn't. We only found health care effects during the weeks of those legally mandated campaigns.
- MEYERHOEFER: 10:56 Now, the last reason why we looked at both types of elections was that we were able to obtain data on campaign spending for local elections. For presidential elections, it's hard to use that data because with the presidential candidates, they only report campaign expenditures for the entire country so you don't know where the spending was higher, in what regions of the country. Whereas in the mayoral elections you do know that. So we were able to look at that information and identify that health care costs were higher in campaigns where spending was greater. And also verify that when there were no mayoral elections in certain areas, that there was essentially no effect on health care utilization even though there were elections during the same period in other parts of the country. So to look whether there's any sort of spillover effects that occur across different regions.
- CROFT: 12:04 Okay. A couple of follow-up questions then. And you can talk a little bit about how we translate the findings from Taiwan to United States campaigns, but as we're all painfully aware, the presidential campaigns in the U.S. are basically never-ending now. As soon as somebody is elected, the next cycle starts. I'm wondering would there be benefits to a shorter campaign season in the United States healthwise?
- MEYERHOEFER: 12:39 That's a really interesting question. And it's not fully clear whether having a shorter campaign would be better or worse, but we do know that-- what I think we did learn

is the characteristics of the campaigns are very important. So the fact that the campaigns are so short in Taiwan could possibly increase the intensity of campaigning, which might increase the probability of getting sick. If you lengthened out campaigns, then it might decrease that intensity and therefore reduce health care costs. However, at the same time, we also learned that exposure to illness was really important. So the fact that we find that acute respiratory infections and gastrointestinal diseases where the types of health care expenditures that increased suggests that a lot of the negative effects of campaigning are through these rallies where people are packed in in very close quarters, they're very impassioned, and they're screaming loudly. They're spreading a lot of germs around them because they're excited. They're talking loudly. They're speaking loudly. They're cheering. And they're in close contact with other people. Also, these campaign events tend to be very long in duration, people are not eating. They're away from home, they're not eating the same type of food that they eat at home.

MEYERHOEFER: 14:29

There can be a lot of stress that's associated with what happens in the campaign rallies if it makes people worried about what's going to happen in the future if that candidate's not elected, which could also lead to gastrointestinal illness. And so these things –to say if you have a longer campaign period and you have more of these events, that could be bad. That could increase health care expenditures more over a longer period than having a shorter period. But at the same time, during a longer period if you're increasing –if you're decreasing the intensity of those events, then that could be good. So I think it's really more correlated with how many of these events are happening, how much is spent on campaigns. So the fact that we find that health care costs are higher when there's more spending is important for the U.S. because in the United States, we spend a lot of money on campaigns. There's huge millions and millions of dollars spent on presidential and congressional campaigns. So it's more about that, I think, than it is the length per se. Yeah.

CROFT: 15:46

And let me ask. And we should note that the study that you did was conducted before the global COVID-19 pandemic created this whole new set of significant health risks linked to elections: just going to polling places, and on the health of poll watchers, the difficulty in getting people to volunteer as poll watchers now. But you talked about the large intensely impassioned rallies in Taiwan. And clearly, we've seen that phenomenon in the U.S. as well, as one of the cornerstones of President Trump's first campaign and continuing now during the pandemic. Should the results of your study give us concern about those rallies?

MEYERHOEFER: 16:36

I mean, I think that our results do suggest that there could be some negative consequences to rallies like that. And there's two reasons for that. One is, of course, during the COVID-19 era here we're obviously very concerned about the spread of the illness through respiratory droplets. And if people are at a rally where they're standing very close to other people and they're cheering and they're shouting, they're going to be – they're going to be putting out a higher number of those respiratory droplets and increasing the risk of transmission of any virus, including COVID. So that is a concern. The fact that people are not wearing masks at some of these rallies increases the likelihood that there will be a transmission. So really this is the first study – even though I should say caveat this, in that our data are not specific to individual rallies so we weren't able to measure health care costs due to specific rallies. We just measure health care costs over this four-week campaign period. But we know in Taiwan that one of the main features of campaigning are these rallies.

And the fact that we find these respiratory infections really suggests that that's where transmission is occurring. So this is really the first study to prove that those types of rallies do cause higher transmission of respiratory infections. So that should give people who attend them pause that, yes, the likelihood of getting a virus like COVID-19 is a lot higher at a rally like that than it would be otherwise. So that's one important concern.

MEYERHOEFER: 18:37

And I think the other factor that we find is, interestingly, if you look at many of the previous studies on this topic, they're really focused on stress and mental health. And they show that people report psychological distress because of the election, that they report depression, depressive symptoms. And they even measure people's biomarkers, so their cortisol levels or testosterone levels. They find elevated levels of cortisol and decreases in testosterone and these can be associated with depressive symptoms and psychological distress. And so they're really focused on mental health aspects. So it's interesting that we don't find any increases in mental health conditions in our data. But that doesn't mean that this stress that people are feeling doesn't contribute to their physical illness because stress can – we can essentially increase fatigue and it can weaken immunity and that makes you more susceptible to respiratory infections like COVID-19. So if these campaign rallies are increasing people's stress levels, then that could also be bad. So we don't know much about this, but obviously, we've all had this feeling that when we go to our favorite media outlet and we read about the campaign nowadays, it does get us worked up. And that's a stress response. And then our heart rate increases, we have physical symptoms from that. And so if it's the case that that stress level and those physical symptoms are higher at rallies, then that could certainly be bad for the health of attendees.

CROFT: 20:41

Now one of the other things you mentioned was a link between high levels of campaign spending and greater health care costs, which is interesting. And I'm wondering if you could talk a little more about that. And one of the things I'm wondering is this, we're in that season where it's just nonstop political commercials, every channel all day, all night. And is there any indication that the constant barrage of campaign advertising, for example, plays a role in making us sick?

MEYERHOEFER: 21:14

Yes. So in this study, we weren't able to differentiate types of campaign expenditures, whether they're media ads or whether they're expenditures on events. However, the evidence we're getting from this study does suggest that that constant barrage could be bad for our health. Especially as the media ads that we see nowadays tend to be more negative in nature. And there's been, of course, a lot of discussion in the press about the transition towards negative campaigning and how it's actually more effective, which is one of the reasons why we see it more often. And the question is, how does that make us feel? What kind of response does that invoke in a person's mind? And are there any physical symptoms from that? And so I think that my own view of it is that those negative media campaign ads, they're a constant reminder – they're sort of meant to play on our fears and they're a constant reminder that the election is a high stakes event where, if our preferred candidate is not elected, that it could have negative consequences for us personally. And that increases anxiety and stress and that can make you, again, more susceptible to physical illness.

MEYERHOEFER: 22:47

So I do think that our study sort of uncovers a tangible cost of that type of campaigning. Previously, we think, "Oh, that's unpleasant," but it wasn't clear whether that unpleasantness translated into any real cost. And now we know that it

does. And this also links to the literature on the effectiveness of advertising and political spending in campaigns. And so some previous studies have shown that a lot of campaign spending is socially wasteful because it doesn't actually have a big impact on the outcome of the election. And that's particularly true of incumbents' candidates spending on to re-elect them. And it's almost like an arms race. So if both candidates have the same level of spending, it's sort of potentially the effects cancel each other out is one way of thinking about it. So if that's the case, if there's no real benefit to this type of spending yet there are costs both in terms of just the cost of paying for those ads where that money could have been spent on other things – and also this health care cost – then it suggests that we may want to think about whether limiting spending is a good thing to do.

CROFT: 24:16

Now I'm wondering as you talk about the health care costs and the costs on stress and anxiety, did you find any implications for public health in the U.S. as a result of the study?

MEYERHOEFER: 24:33

I think we did. So one of the things we found in Taiwan was that health care costs due to the election were higher among the group of individuals that had the most to lose in the campaign. So in the case of Taiwan, there's two dominant political parties. You can think about them as a white-collar party and a blue-collar party. And in the elections that we studied, the white-collar party won the elections. And so the losers of the elections and the group that was sort of vying to overturn the current government was blue-collar. Their supporters tended to be blue-collar individuals. And so we found the health care expenditures were highest among men who were middle to lower-income. And so it suggests that the efforts to sort of propel their candidate to victory and their engagement in the campaign was higher. They also had the most to lose in the campaign if their candidate didn't win. And their candidate wasn't projected to win because the candidate was not the incumbent. So their stress may have been higher, their activity and their engagement in campaigning higher. So what that would suggest in the United States is that the group that is most engaged in campaigning that has the most to lose is probably the group that's going to be most affected from a health standpoint from the campaigns. Which in the U.S., as minorities, low-income individuals who are minorities is what we find. And there's also anecdotal studies after the 2016 election that show that women and women who are minorities in the minority categories experienced the most negative physical and mental health symptoms from that campaign event.

MEYERHOEFER: 26:46

So it does suggest that public health authorities could try to target resources towards those groups that are most at risk. It also suggests that – again, coming back to the campaign spending aspect of things – that one traditional solution in economics to deal with negative externalities from activities is to tax those activities. So in the United States, there's no tax on private contributions to political campaigns. So you could think about imposing a tax on those contributions to reduce the level and sort of limit the arms race that we see. Because there's sort of something interesting about political campaigning which is that all that matters – you can think about it like political spending as being a zero-sum game that the candidate who has the higher spending gets a benefit over the candidate with the lower spending. So if that spending – if those spending levels are really, really high, the candidate with the higher spending gets the benefit. But if those spending levels are really low, the candidate with the higher spending still gets the same benefit. So you could essentially just reduce the level of spending proportionally and nothing would change.

The candidate with the higher spending would still get the same advantage. So that's why this spending is wasteful. And if we could take that money and we could do something more beneficial with it like invest in infrastructure, for example, or invest in the health care system, then that would make everybody better off. And so redistributing funds through this through tax is one way to do that.

CROFT: 28:47

One final question then to wrap up here. And that's given the toll that elections take on our health, are they worth it?

MEYERHOEFER: 28:55

Oh, absolutely. So if you look more broadly, of course, at authoritarian societies and democratic societies, there's no question that the overall health of the population is much better in democratic societies than in authoritarian regimes. So overall, elections are definitely worth it. It's not a matter of there being – so there's sort of this sort of balance that you have to, that you want to achieve with democratic elections. Because candidates are competing, that's going to cause people to engage and it's going to cause a discourse between opposing groups. And so that discourse is good because it allows society to – it allows the information about what's going on in the government and the implications to spread. And we want more people to be informed about policies and things. So that's good. And it allows different opposing views – people to learn about the opposing views of others and that's good too. And so society can kind of hash out its problems through these elections. So we do want those benefits from elections and from campaigning, but at the same time, we don't want the social discourse to rise to a really high level. So, of course, the extreme case is that there is so much conflict that's generated from elections that you get violence. And that, of course, is tremendously damaging. And so as a society, I think we have to look at where we are on that continuum. Have things risen to a level that, in addition to getting the benefits of the discourse, we're also now getting some negative effects because the campaigns are so negative and the debate is so acrimonious that it's actually leading to social strife or to negative feelings and stress? So I think it's not so much about the elections and the democratic process, it's about the campaigning and how the campaigning is done. And our study, I think, suggests that in the United States anyway and in Taiwan, that the intensity of campaigns and the conflict that results from them is getting to the point where there are some negative health consequences and higher health care costs as a result.

CROFT: 31:42

Dr. Meyerhoefer, thank you so much for being with us today. It's been fascinating. And certainly, you have given us a lot to think about as we sit through the barrage of campaign advertising and the upcoming debates and the rest of the campaign.

MEYERHOEFER: 31:58

Thanks, Jack. It's been a pleasure.

CROFT: 32:01

I'd like to once again thank my guest, Chad Meyerhoefer. His study Do Elections Make You Sick is available on the National Bureau of Economic Research website at nber.org/papers/w26697. You'll find a link to the study in the accompanying blog post. This podcast is brought to you by iLLUminate, the Lehigh business blog. To hear more podcasts featuring Lehigh business thought leaders, please visit us at business.lehigh.edu/news. And don't forget to follow us on Twitter, @LehighBusiness. Thanks for listening.