Does college make you *progre*? Evidence from Bolivia*

¿Te hace progre *la universidad? La evidencia en Bolivia*

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Abstract

I examine the association between college education and left-leaning views in Bolivia using novel survey data. My findings suggest that college education is associated with left-leaning social preferences (college-educated individuals favor social equality and a tax system in which not everybody must pay taxes) but right-leaning individual preferences (they favor individual liberty and respect for private property). My results fit the connotation given to terms like progre or socialista caviar commonly used in Latin America to refer to educated individuals who consider themselves progressive, or even socialist, but admit and enjoy the benefits of individual liberty and markets.

Key words: *Bolivia, education, college, public opinion, ideology.*

JEL Classification: *I23, A13, P16.*

Resumen

En este artículo examino la asociación entre educación universitaria y pensamiento de izquierda en Bolivia usando datos nuevos de una reciente encuesta. Mis resultados sugieren que la educación universitaria está asociada a preferencias de izquierda en términos sociales (los individuos con experiencia universitaria favorecen la igualdad social y un sistema impositivo en el que no todos paguen impuestos), pero está asociada a preferencias de derecha en términos individuales (los individuos con experiencia universitaria favorecen la libertad individual y el respeto por la propiedad privada). Estos resultados son consistentes con la connotación que se le da a términos como progre o

* This paper has greatly benefited from the comments of three anonymous referees and those of Editor Rómulo Chumacero. I remain thankful to all of them for their help and support.

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Received: July, 2021. Accepted: June, 2022.

socialista caviar comúnmente usados en América Latina para referirse a individuos educados que se consideran progresistas, o incluso socialistas, pero admiten y disfrutan de los beneficios de la libertad individual y los mercados.

Palabras clave: *Bolivia, educación, universidad, opinión pública, ideología.*

Clasificación JEL: *I23, A13, P16.*

1. Introduction

There is ample evidence suggesting that college students and graduates in the U.S. tend to be more liberal (left leaning in the ideological spectrum) than the general population. The 2019 College Pulse survey, for example, finds that almost 40% of college students have a favorable opinion of socialism while, according to the 2020 NPR/PBS News Hour/Marist survey, only 28% of the U.S. population do. Similarly, the 2018 General Social Survey reports that 50% of college students identify themselves as liberal, while only 28% of the U.S. population do.[1]

The association of college education and left-leaning views seems to have strengthen over time. According to a 2016 Pew Research Center report, the percentage of those with a college degree that were considered "consistently liberal" (based on their answers to a set of policy questions) grew from 5% in 1994 to 24% in 2015. For those with only some college experience, these numbers were 4 and 12%, respectively.[2] The number of socialist or liberal organizations spurring across campuses in the U.S. provides another metric for this trend. The organization Young Democratic Socialists of America, for example, grew from 12 chapters in 2016 to 150 in 2021 (Young Democratic Socialists of America, 2021).

Is the same true in other parts of the world? Using novel survey data, I assess whether a similar phenomenon is present in Bolivia.

The importance of assessing the effect of college on ideological leanings in developing countries reside on the strong relative importance of college graduates on public opinion. It has been largely documented that college education is strongly associated with "successful citizenship" (see, for example, Astin, 1997) and various forms of political engagement (see Nie, *et al.*, 1996, Burns, *et al*., 2001 and Hillygus, 2005). College educated individuals have an important influence, therefore, on politics and policy making decisions. Moreover, their

[1] See College Pulse (2019), NPR/PBS News Hour/Marist (2020) and Smith, *et al*. (2018).
[2] See Pew Research Center (2016).

relative influence on these arenas is likely to be higher in countries with lower rates of literacy and college attendance ratios like Bolivia.[3]

While the mechanisms behind the association of college education and left-leaning views in the U.S. may also be at work in Bolivia, there are important idiosyncratic factors that could make a difference.

First, from 2006 to 2019, Bolivia was governed by a political party (the Movement Towards Socialism or MAS) aligned with the 21st Century Socialism paradigm. Although the government did not directly suppress the functioning of the market economy, it did nationalize "strategic" companies, embraced aggressive income redistribution policies, exercised political influence over the judicial system and established public schools and universities with strong indoctrinating components. Thus, the social, economic and political environments in which students attended college in Bolivia during those years, were very different from the ones American students faced. This could have had an important effect on ideological leanings, particularly for students that attended public universities.

Second, Latin America in general, and Bolivia in particular, have a rich history of left-leaning student movements developed within public universities. Arocena and Sutz (2005) report that during the 1970s and 1980s, the student movement in Latin America "favored, on the one hand, special relations of public universities with some collective actors –trade unions and left-wing parties among others– and, on the other hand, lasting enmities with right wing political powers, as well as very weak relations with entrepreneurs". In Bolivia, the Bolivian University Federation (the main national organization of college students) was established in 1928 with a strong socialist orientation. In its 1949 Declaration of Principles, the Bolivian University Federation determined that the "social character and aspirations of the current university generations cannot be other than a socialist education in a socialist state" (see Federación Universitaria Boliviana, 1949). The 1970 University Revolution inspired by the guerrilla movements of that decade, intensified this ideological inclination.

Third, Bolivia and the U.S. are clearly different in terms of economic conditions and development levels. These differences have an impact on the quality of instruction that students receive and on the choice of social, economic and political paradigms emphasized in classrooms. Thus, universities in Bolivia may be inclined to put a stronger emphasis on issues of poverty and income inequality than their U.S. counterparts.

I assess the association of college education and left-leaning views in Bolivia using data from the 2020 CERES survey, which covered all nine Bolivian regions or departments (Laserna, 2020). The survey included 73 questions designed to elicit opinions on different social, economic and political topics, as well as demographic characteristics including years of education.

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[3] College educated individuals have been historically very important and highly visible in Latin American politics. Petersen (1970) mentions the cases of the overthrow of the regimes in Cuba (1933 and 1959), Guatemala (1944), Venezuela (1958) and Bolivia (1964).

To capture ideological views, I use four questions addressing fundamental economic, social and political paradigms. The first question asks if the respondent believes that private property must be respected, the second question asks if individual liberty is important, the third question asks if social equality is important, and the fourth question asks if everybody must pay taxes.

I use these questions as dependent variables and run ordered logit regressions where the explanatory variable is a dummy that takes the value of 1 if the respondent attended at least one year of college. I address potential endogeneity concerns using Propensity Score Marching (PSM) and the Rosenbaum's bounding approach (Rosenbaum, 2002).

My findings are mixed. On one hand, I find that attending college is robustly associated with believing that individual liberty is important. As I argue below, this result would suggest that attending college is associated with right-leaning rather than left-leaning views. On the other hand, however, I find that attending college is robustly associated with believing that social equality is important and not associated with thinking that everybody must pay taxes. As I also argue below, these last results suggest that attending college is associated with left-leaning views.

The relationship between college education and believing that private property must be respected is less robust. While the ordered logit regressions show a positive and significant relationship between these two variables (which would suggest that college education is associated with right-leaning views), the PSM results cast some doubts on this finding.

The overall pattern that emerges is one in which college-educated individuals display left-leaning social preferences (they favor social equality and a tax system in which not everybody must pay taxes), but right-leaning individual preferences (they favor individual liberty and, to some extent, respect for private property, which are variables that are likely to affect them more directly).

This interpretation of the results fits the connotation given to terms like *progre* or *socialista caviar*, commonly used in Latin America to refer to educated individuals who consider themselves progressive, or even socialist, but admit and enjoy the benefits of individual liberty and markets (see Álvarez, 2017). These terms remind us of the expression *radical chic* coined by journalist Tom Wolfe in his famous essay *Radical Chic: That Party at Lenny's*, where he described the adoption of radical political views by celebrities, socialites and affluent individuals (see Wolfe, 1970).[4]

[4] Ideological categories are certainly difficult to define. "Left" and "right" can be characterized in multiple dimensions and do respond to historical and social context. The Pew Research Center (2021), for example, uses nine different classifications in its 2021 survey of US adults that range from "Progressive Left" to "Faith and Flag Conservatives". Another common classification is that of Nolan (1971), which uses a chart with four quadrants to define liberal, libertarian, conservative and authoritarian individuals along personal and economic dimensions. According to the chart, liberals (left-wing) can be defined as those supporting low economic freedom and high personal freedom. Libertarians support high

The next section presents a brief review of the literature on the effect of college on ideological attitudes. Section 3 presents an overview of recent trends in college education in Bolivia. Section 4 presents the data. Section 5 discusses the methodology. Section 6 presents the results, and section 7 concludes.

2. Related Literature

Different mechanisms explaining the effect of college education on ideological leanings have been advanced in the literature. Bowman (2013), Strother, *et al*. (2020), and Dey (1997), for example, argue that attending college allows students to interact and socialize with individuals from diverse social and economic backgrounds, which produces peer-effects and a natural interest to further understand political and social dynamics. Campbell and Horowitz (2016) argue that colleges provide a "free space" that permits and encourages the development of political ideologies. Klatch (1999) and Polleta (2004) argue that this feature of college education has been instrumental in moving political views to the left. For their part, Astin (1997), Hanson, *et al*. (2012), and Horowitz (2007) argue that college provides an environment in which professors are very influential and can easily transmit their own ideological leanings to their students.

Not much is known about the effect of college on ideological views in Latin America. An important exception is that of Saravia and Marroquín (2021) who use the 2017 wave of the Latinobarómetro and find that attending college in Latin America is positive and significantly associated with left-leaning economic views "in general/abstract terms and as they pertain to domestic economic issues," but not when it comes to international trade issues.

Graham and Sukhtankar (2004) and Wiesehomeier and Doyle (2012) assess the effect of the number of years of education on ideological views in Latin America. Using the 2000-2002 waves of the Latinobarómetro, Graham and Sukhtankar (2004) find that the number of years of education is negatively associated with satisfaction with the market economy and support for market policies in the region, but positively associated with support for regional economic integration,

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economic and personal freedom. Conservatives support high economic freedom and low personal freedom, and authoritarians (supporters of statism) support low economic and personal freedom. In the Nolan chart, the Latin American *progre* or *socialista caviar* would be probably classified in the liberal quadrant. Notice, however, that the chart assumes that personal and economic freedom can be independent of one another. That is how liberals can be defined as supporting the former but not the latter. In reality, however, the two freedoms are intimately related. Low economic freedom, for example, imposes restrictions on individuals (e.g. attacks to private property rights), which would inevitably result in low personal freedom. This is where the interpretation of the Latin American *progre* or *socialista caviar* proposed above deviates from the chart's classification. In this paper, these terms refer to somebody that favors and enjoys the control of his property rights and individual liberty (personal freedom that includes personal economic freedom), but also voices support for low economic freedom for the rest of society.

a proxy for free international trade. Using the 2006 wave of the Latinobarómetro, Wiesehomeier and Doyle (2012) find that "education has a weak negative, but highly significant effect on left-right placement, indicating that individuals with higher education tend to identify with the left".

I contribute to this literature by assessing the effect of college education on ideological views in Bolivia using data not previously exploited.

3. Recent Trends in College Education in Bolivia

Gross enrollment in Bolivian colleges increased from 655,000 students in 2012 to 700,000 in 2016, and 771,000 in 2019. In relative terms, these numbers represented enrollment ratios of 48%, 48% and 51%, respectively (Instituto Nacional de Estadística, 2021). For comparison, the enrollment ratios for Latin America were 45%, 51% and 53%, respectively (World Bank, 2021).[5]

Importantly, the modest increase in enrollment numbers seems to have concentrated in public institutions. Indeed, the share of students enrolled in private colleges in Bolivia decreased from 34% in 2012 to 31% in 2016, and 25% in 2019 (see Instituto Nacional de Estadística, 2021). This is important because, as mentioned in the introduction, public universities in Bolivia are likely to be more influenced by the politics of the government party than private universities, and because they have a strong tradition of left-leaning student movements.[6]

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[5] The enrollment ratio in colleges is defined as gross enrollment as a percentage of the total population of the five-year age group following on secondary school leaving (World Bank, 2021).

[6] The institutional arrangement that governs public universities in Bolivia is highly conducive to political influence. First, university presidents and other executive positions are not selected through competitive recruitment processes but through elections in which professors and students have the right to vote. Thus, if a professor wants to become president, he or she needs to build a political organization and form coalitions that can guarantee him or her more votes. This is often done promising higher salaries and less rigorous evaluations to professors, and less rigorous grading criteria to students. It is also important, of course, to receive support from national political parties especially if they are in power. Political ideology and campaign promises become, therefore, more important than results-oriented programs. Second, students share the university governance with the president and professors' committees. This is the result of co-governance or *co-gobierno*, which, to my knowledge, is a feature present only in Bolivian public universities. *Co-gobierno* gives students strong political power and becoming a representative of the student body is a highly sought-after position. Episodes of corruption and unethical political maneuvers have been common since the establishment of *co-gobierno* in 1930. Students engage in political rivalry, which often leads to chaos and violence. In March of 2021, for example, at least five students died during a protest leading to a student congress in the public university of El Alto. More recently, in May of 2022, four students died in a stampede provoked by tear gas released during a student assembly in Potosí. This episode led to the discovery of corrupt organizations led by student representatives who had been playing that role for over 30 years receiving salaries and using administrative loopholes (and protection from

Moreover, contrary to the tendency in the region, there was an overall decrease in the number of colleges operating in the country. This number went from 62 in 2016 to 56 in 2019. The number of public colleges went down from 14 to 12 (a 14% decrease) and the number of private colleges went down from 48 to 44 (an 8% decrease) (Ministerio de Educación, 2016; and Webometrics, 2021).[7]

The slow increase in enrollment ratios has an effect on the demographics observed in our data. The average age of those with college experience is 36.38, whereas the average age of those without college experience is not too far ahead at 38.79. Note that that age difference is much larger for the region. Using the 2017 Latinobarómetro, Saravia and Marroquín (2021) find that the average age of those with college experience was 36.81 whereas the average age of those without college experience was 42.28.

In terms of access to higher education, despite starting at a higher level than the region, the participation of the poorest 50% of the population in Bolivia seems to have stagnated. According to Ferreyra, *et al*. (2017), approximately 28% of the students enrolled in colleges in 2000 came from the bottom half of the income distribution. This number increased to 30% by 2012 (representing only a 7% increase). For comparison, these numbers were 16% and 24% for the entire region (a 50% increase).

Unfortunately, the 2020 CERES survey does not allow us to identify whether somebody with college experience attended a public or private college, nor what major or field of study they pursued. This is certainly a limitation of the study as these factors could make a difference. Data for the U.S. suggests, for example, that fields in the humanities tend to have a stronger effect moving ideological views to the left than fields in the sciences.[8]

Finally, there may be regional effects as colleges not established in the capital or the most populated cities, where the political debate is more intense, may give less importance to the study and discussion of ideological issues. I use department dummies to capture any idiosyncratic regional effects.

executives and administrators who benefited from the alliances) to update their student registrations year after year.

7 This trend reversed a rapid increase in private colleges observed from 1995 to 2005. During this period the number of private colleges grew approximately by 53%. This positive development came to a halt after 2005, however, and the number of private colleges has remained more or less constant ever since (see Autoridad de Fiscalización y Control Social de Empresas, 2014).

8 According to the 2019 College Pulse survey, students majoring in the humanities were favorable to socialism 51% of the time. Students majoring in the sciences, on the other hand, were favorable to socialism only 38% of the time (College Pulse, 2019).

4. Data

The data is derived from the 2020 CERES survey (Laserna, 2020), which includes 2,213 interviews with individuals 18 years of age or older conducted in all nine Bolivian departments (Chuquisaca, La Paz, Cochabamba, Oruro, Potosí, Tarija, Santa Cruz, Beni and Pando).[9] The survey took place between November 27 and December 7, 2020. Approximately half of the respondents were met in person while the other half were contacted by phone. The sample represents approximately 90% of the country's population with a 3% sample error.[10]

Table 1 lists the variables considered in the study and compares means and standard deviations for those with at least one year of college experience (whether they graduated or not) and those without any college experience.

In terms of dependent variables, disagreeing with the statement "private property must be respected" or thinking that individual liberty is not important, can be considered left leaning. These opinions would suggest a preference for a collective approach to the distribution of resources rather than a laissez-faire approach in which such distribution is determined by individual and voluntary actions in the marketplace.

Thinking that social equality is important can also be considered left leaning. The most common interpretation of the term social equality in Latin America (*igualdad social*) is that of economic equality, which requires the state sponsored provision of certain "social rights" such as health services, education, housing, etc. The term suggests the need for an "equitable" distribution of income, a concept closely associated with that of "social justice" (see CEPAL, 2016 and 2018). Clearly, the term social equality goes beyond the mere idea of equality before the law.

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9 CERES is a non-profit research institute domiciled in Cochabamba, Bolivia (https://ceresbolivia.org).

10 Notice that the survey was conducted in the midst of the ongoing Covid-19 pandemic. While the specific weeks in which the survey was conducted were not characterized by a strong wave of contagion in Bolivia, the social circumstances determined by the disease and the public policies designed to combat it, may have had an influence on the responses. Some respondents may have felt more inclined to emphasize the importance of individual liberty, for example, if they were growing tired of lock-downs or mask mandates. Some others may have felt more inclined to consider social equality as important if they resented the differences in the quality of health services in public hospitals vis-à-vis private hospitals. Indeed, survey responses are always influenced by context and circumstances. Given, however, that the survey sampling followed standard protocols to make sure that the respondents were randomly chosen, there are no reasons to believe that the pandemic produced systematic individual bias. Unfortunately, the questionnaire did not include questions that could allow us to identify respondents highly affected by the pandemic (those who were sick or had close relatives that were sick or died).

TABLE 1
VARIABLES

Variable	Value	College		No College		Mean diff.
		Mean	SD	Mean	SD	
Dependent Variables						
Do you agree with the statement "private property must be respected"?						
PrivProp	1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree	3.38	0.61	3.19	0.59	***
How important is individual liberty for you?						
IndLib	1=not important at all, 2=a little bit important, 3=somewhat important, 4=very important	3.76	0.58	3.44	0.84	***
How important is social equality for you?						
SocEqual	1=not important at all, 2=a little bit important, 3=somewhat important, 4=very important	3.74	0.65	3.47	0.85	***
Do you agree with the statement "everybody must pay taxes"?						
Taxes	1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree	2.91	0.76	2.71	0.73	***
Control Variables: Demographics						
Age	18 through 75	36.38	12.48	38.79	15.33	***
Indigenous	2=indigenous, 1=any other race or ethnicity	1.57	0.49	1.67	0.46	***
Female	1=male, 2=female	1.48	0.5	1.49	0.5	
Catholic	1=Catholic, 0=any other religion or no religion	0.68	0.46	0.68	0.46	
MarStat	1=married, 0=not married	0.32	0.46	0.31	0.46	
Control Variables: Income						
In which income bracket would you place the total monthly income of your household including remittances?						
Income	0 or 16 possible income brackets ranging from greater than 0 to greater than Bs. 7,500 ($1,071)	9.11	4.66	5.37	4.17	***
Are you currently employed?						
Employed	0=not employed, 1=employed	0.59	0.49	0.54	0.49	**
Control Variables: Satisfaction, Trust and Technology						
Do you think that the economic situation in the country is better, worse or equal to the economic situation twelve months ago?						
EconPerc	1=worse, 2=equal, 3=better	1.61	0.71	1.81	0.81	***
Would you say that the people in your neighborhood or community is:						
Trust	1=not trustworthy at all, 2=a little bit trustworthy, 3=somewhat trustworthy, 4=very trustworthy	2.73	0.85	2.54	0.92	***
Do you have a WhatsApp account?						
WA	0=no, 1=yes	0.92	0.27	0.66	0.47	***
Independent Variable						
College	1=complete or incomplete college (at least 13 years of education), 0=no college experience (less than 13 years of education)	Mean	0.41↑	SD	0.49↑	

Two-tails t-test statistical significance: *<0.1, **<0.05, ***<0.01.
↑ Values for the entire sample.
N between 1,099 and 2,205.

The fourth dependent variable asks for the respondent's opinion on the statement "everybody must pay taxes". The interpretation of this question depends on what we think the respondent had in mind as the plausible alternative. If the respondent thought that the alternative was "nobody must pay taxes," then disagreeing with the proposed statement can be considered right leaning (i.e. disagreement with a collective administration of resources). If, however, the respondent thought that the alternative was "not everybody, but some, must pay taxes," then disagreeing with the original statement can be considered left leaning. This alternative would be most likely associated with thinking that only those capable of paying taxes (those earning a higher income) must do. This is consistent with a progressive tax system designed to redistribute wealth.

The last interpretation seems the most appropriate. Government, and government provided public goods, have played a primary role in Bolivia since at least the 1952 National Revolution. A paradigm with no taxes (and, therefore, no actionable government) is not something that Bolivians are likely to consider as a realistic alternative.[11]

In average, college-educated individuals are significantly more likely to think that private property must be respected and that individual liberty is important. For these two variables, therefore, in average, attending college seems to be associated with right-leaning views. When it comes to social equality and taxes, however, I get the opposite result. College-educated individuals are significantly more likely to think that social equality is important and that not everybody must pay taxes.

I use a rich set of demographic, income, satisfaction and technology control variables. The difference in means, between those that are college educated and those that are not, is statistically significant for most of them. In terms of demographics, college-educated individuals are younger and less indigenous than their non-college educated counterparts. Both groups are, however, indistinguishable when it comes to the proportion of males vs. females, Catholics vs. non-Catholics, and married vs. non-married.

In terms of income, as expected, college-educated individuals are significantly more likely to place in higher income brackets and be employed. Also,

[11] As pointed out by an anonymous referee, the opinion on the statement "everybody must pay taxes" could have also depended on the type of taxes that the respondent had in mind when answering the question, which is something that the survey did not specify. The type of tax considered could have determined whether the statement "everybody must pay taxes" implied that everybody must pay the same amount or rate, or not. For example, a low-income person may have agreed with the statement if he thought that the question referred to a progressive income tax. Of course, a high-income person may have disagreed with the statement for the same reason. The responses could flip, however, if the tax considered was a tax on sales. While this is a valid concern at the margin, it is more likely that the respondents thought of the statement as referring to the general idea of taxes, rather than to a specific type. Most people understand taxes as a general concept but only a small number of respondents would have been able to consider specific types and effects when considering the question.

college-educated individuals are significantly more pessimistic about the economic situation in the country, significantly more likely to think that people in their neighborhood or community are trustworthy, and significantly more likely to have a WhatsApp account (a proxy for access to the internet and technology).

Finally, notice that, according to the survey, 41% of the respondents had at least one year of college education. This ratio is twice the corresponding value in 2010. According to the Barro-Lee database, the percentage of the population 15 years old or older with tertiary education in Bolivia in 2010 (whether they completed it or not) was 21%. That was the second highest percentage among Latin American countries (Panama was first with 22%). That year, the average for Latin America was 11% and the percentage for the U.S. was 54% (see Barro and Lee, 2013).

5. Methodology

I first run ordered logit regressions and assess the association of college education with each of the four dependent variables using odds-ratios.

The obvious empirical challenge is endogeneity. Underlying factors could prompt a person to attend college and also develop certain attitudes toward private property, individual liberty, social equality and taxes. Given that the data don't provide a natural experiment that can be used to address the identification problem, I partially address this challenge using PSM. This procedure allows us to compare responses to the four dependent variables by respondents who are similar across observable characteristics except for whether they attended college or not. Essentially, therefore, the treatment *attending college* becomes equivalent to a random event at the individual level considering observable characteristics.[12]

PSM controls for potential endogenous effects produced by observable characteristics but not for those of unobservable ones. Thus, the results could still be affected by hidden bias. I use a sensitivity analysis known as Rosenbaum's bounding approach (Rosenbaum, 2002) to estimate how big a potential hidden bias should be in order to cast doubts on the robustness of the PSM results.

The data derived from the survey provides only one observation point per respondent. Unfortunately, therefore, I am not able to follow respondents over time and observe their ideological inclinations (as well as other personal characteristics) before and after attending college. It would be useful, for example, to compare what a respondent thought right before entering college and then immediately after their college experience. An imperfect substitute to that analysis consists on limiting the aforementioned regressions to include only respondents between the ages of 18 (the youngest in the survey) and 25. While the bias produced

[12] For more details on PSM see, for example, Caliendo and Kopeining (2005), and Heinrich *et al*. (2010).

by unobservable factors would not disappear, such bias is likely to be smaller. First, the effect of college education on ideological inclinations is likely to be stronger on young respondents given how recent the college experience was. Second, young respondents are less likely to have been exposed to other life cycle factors that may confound the effect of college experience. For example, they would have little work experience and most of them would still be single (in fact, only 9 respondents below the age of 25 indicated that they were married). I present the results of this analysis in the Appendix.

Another common method to deal with endogenous effects is the use of instrumental variables. In this case, the goal would be to find a variable (the instrument) highly correlated with attending college, but not correlated with ideological views as captured by the dependent variables. This method is meant to remove endogenous effects as whatever determines the instrumental variable does not simultaneously determine ideological views.

The most common instrumental variable used in studies that try to assess the effect of college on behavioral variables is college proximity (see, for example, Card, 1995). The idea is that college proximity reduces the cost of attending college and, therefore, induces attendance, independently of personal inclinations to attend college, which could be determined by the same factors that determine the dependent variable.[13]

The survey has data on the geographic coordinates of the location where the interview took place, but only for 48% of the respondents. Even if I was willing to limit the analysis to a much smaller sample, however, I could still not use this information to build a reliable instrument. First, as mentioned before, I only know if the respondent attended college, but not what college or university they attended. Thus, I cannot know whether their college was proximate for them or not. Second, many of those who responded that they attended college, may have moved to a different location after graduation. Thus, current location is not a reliable measure of where they were living when deciding whether to attend college or not. A potential way around this problem is to consider only those respondents under the age of 26, who are more likely to be currently attending college and for whom college proximity may be relevant. Considering only those in this group age, however, reduces the sample to only 180 respondents and, of course, does not solve the problem of not knowing what college they attended. Other instruments used in the literature include randomly assigned scholarships and mandatory enrollments. This information could potentially allow us to build a natural experiment but is not something provided by the survey.

[13] The implicit assumption is, of course, that individuals do not choose their location in relation to their college in response to personal inclinations associated with attending college.

6. Results

6.1. Ordered Logit Regressions

Table 2 presents the results of ordered logit regressions for each dependent variable. While eight department dummies are included in the regressions as control variables (Pando is excluded as the reference category), I do not report the coefficients as that would produce an excessively long table. I also control for Age^2 to capture a potential non-linear effect of the age of the respondents.

TABLE 2
ODDS-RATIOS FOR ORDERED LOGIT MODELS

	PrivProp	IndLib	SocEqual	Taxes
College	1.432**	2.519***	1.809***	1.223
Demographics				
Age	1.009	0.998	1.014	0.997
Age^2	1.000	1.000	0.999	1.000
Indigenous	0.733**	0.841	1.452**	0.709**
Female	0.928	1.239	1.261	0.697***
Catholic	0.973	0.979	0.869	1.114
MarStat	1.218	1.001	0.959	0.985
Income				
Income	1.048***	1.067***	1.047**	1.069***
Employed	0.940	0.809	0.899	0.809
Satisfaction, Trust and Technology				
EconPerc	0.968	1.138	1.194*	1.088
Trust	1.117	1.331***	1.214**	1.141*
WA	2.134***	2.467***	2.551***	1.684***
Department dummies	yes	yes	yes	yes
N	968	965	963	961
Pseudo R^2	0.047	0.081	0.073	0.054
Lipsitz p-value	0.51	0.95	0.66	0.92

Calculated using robust standard errors.
Statistical significance: *<0.1, **<0.05, ***<0.01
If the Lipsitz p-value is above 0.1, the model satisfies the proportional odds assumption (see Lipsitz, *et al*., 1996).

Notice that the odds-ratio for the independent variable, College, is greater than one and statistically significant for the PrivProp, IndLib and SocEqual regressions. These results suggest that attending college is associated with support for private property and individual liberty but also with support for social equality. As College takes the value of 1, the odds of observing PrivProp, IndLib and SocEqual take the maximum value of 4 (strongly agree or very important) is 1.432, 2.519 and 1.809 times higher than the odds of observing any of the other three, less favorable, categories, respectively. The coefficients are not only significant but also sizable. On the contrary, the coefficient of College is not statistically significant when the dependent variable is Taxes. This last result suggests that attending college is not significantly associated with thinking that everybody must pay taxes.

The aforementioned results can be interpreted as suggesting that college-educated individuals have a preference for left-leaning social features (they favor social equality and a tax system in which not everybody must pay taxes), but that that preference reverses when it comes to private property and individual liberty. In other words, college-educated individuals seem to display left-leaning social preferences but right-leaning individual preferences (preferences over variables that affect them more personally). This interpretation of the results fits the definition of *progre* or *socialista caviar* that I provided in the introduction.

In terms of control variables, the only consistent effects are those of Income, WA and Trust. As expected, higher income levels are associated with support for private property and individual liberty, but, perhaps surprisingly, they are also associated with a preference for social equality and a tax system in which not everybody must pay taxes. The same is true for those who have a WhatsApp account and trust their neighbors.

The Appendix presents the results when limiting the sample to individuals between the ages of 18 and 25. As mentioned in the previous section, this exercise is likely to reduce hidden bias as the effect of college education is more proximate and respondents are less likely to have been exposed to other life cycle factors. I find similar results. The only difference is that the coefficient of College is not significant when the dependent variable is PrivProp. Thus, if anything, the effect of college education on younger people is slightly stronger moving respondents to the left.

6.2. Propensity Score Matching

The first step is to estimate propensity scores of observing the treatment (College = 1). To do this I use a logit model with College as the dependent variable. Table 3 shows the results in terms of odds-ratios. Older people (at a decreasing rate), non-indigenous, those earning a higher income, those less optimistic about the economy and those having a WhatsApp account, are more likely to have college experience. The propensity score mean is 0.378.

TABLE 3
ODDS-RATIOS FOR LOGIT MODEL OF THE PROPENSITY TO HAVE COLLEGE EDUCATION

Dependent variable: College	Coefficient
Age	1.088**
Age^2	0.999**
Indigenous	0.576***
Female	1.067
Catholic	1.036
MarStat	0.876
Income	1.185***
Employed	0.791
EconPerc	0.825*
Trust	0.912
WA	3.493***
Constant	0.081***
Common support	[0.013, 0.926]
Propensity score mean	0.378
Propensity score st. dev.	0.249
N	970
Pseudo R^2	0.217

Calculated using robust standard errors.

The next step is to compute the average treatment effects on the treated (ATT). To compute ATT I use the following common matching algorithms: nearest neighbor, no replacement, 50 nearest neighbors and kernel. Table 4 shows the results.[14]

[14] Different matching techniques have been developed for the purpose of constructing pair-matched samples. They all have advantages and disadvantages depending on the nature and extension of the dataset (see Greifer, 2022, for a list of matching methods supported by the R programming language). Following Rosenbaum and Rubin (1983), PSM has become the standard technique in the literature. I have additionally tried genetic and cardinality matching. The results, available upon request, are qualitatively similar. Indeed, after comparing large-scale applications of cardinality matching and PSM, Fortin *et al*. (2021) conclude that "both matching techniques achieved comparable candidate covariate balance and expected systematic error". Similarly, in a simulation exercise, Donzé and Lai (2011) compare genetic matching and PSM and find that their "results are very contrasted and don't show the superiority of genetic matching, particularly without propensity scores".

TABLE 4
AVERAGE TREATMENT EFFECT ON THE TREATED

Outcome variable	Matching algorithm	ATT	Rubin's B	Rubin's R	Bias before matching	Bias after matching
PrivProp	Nearest neighbor	0.048	31.4	1.09	20.5	5.3
	No replacement	0.137***	58.7	1.52	20.5	9
	50 nearest neighbors	0.087**	22.2	1.41	20.5	4.2
	Kernel	0.061	15.4	1	20.5	3
IndLib	Nearest neighbor	0.192**	30.7	1.03	20.4	5.9
	No replacement	0.330***	58.8	1.5	20.4	8.7
	50 nearest neighbors	0.258***	21.7	1.39	20.4	4
	Kernel	0.226***	16.5	0.99	20.4	3.4
SocEqual	Nearest neighbor	0.209**	43.9	0.81	20.5	6.8
	No replacement	0.180***	59.9	1.58	20.5	8.4
	50 nearest neighbors	0.161***	22	1.42	20.5	3.8
	Kernel	0.221***	15.6	1	20.5	3
Taxes	Nearest neighbor	0.037	35.8	0.77	20.5	6.6
	No replacement	0.121**	58	1.56	20.5	8.4
	50 nearest neighbors	0.057	21.5	1.4	20.5	3.9
	Kernel	0.027	16.5	1.04	20.5	3.4

Statistical significance: *<0.1, **<0.05, ***<0.01.

Notice that the matching algorithms 'nearest neighbor' and 'no replacement', do not satisfy the balancing property recommended by Rubin (2001) for any of the outcome variables. Rubin (2001) recommends B to be less than 25 and R to be between 0.5 and 2. In the case of these two matching algorithms, B is always greater than 25. This means that treated and untreated respondents with the same propensity scores do not have similar distributions for all baseline variables, i.e. we do not have a balanced control group. This shortcoming is also reflected in the bias after matching, which is always much higher when using these two algorithms than when using '50 nearest neighbors' and 'kernel'. These last algorithms, on the other hand, perform well in terms of the Rubin's (2001) balancing property.[15]

Considering only the '50 nearest neighbors' and 'kernel' algorithms, the results are as follows:

- For PrivProp, the ATT is only significant when using the '50 nearest neighbors' algorithm. In that case, the average value of PrivProp is 8.7% higher among those who are college educated than among those who are not (remember

[15] Table A.2 in the Appendix shows the number of observations under common support.

that higher values of PrivPro indicate agreement with the statement "private property must be respected").

- For IndLib, the ATT is significant when using both algorithms. The effect is sizable. The average value of IndLib is 22.6 to 25.8% higher among those who are college educated than among those who are not (remember that higher values of IndLib indicate that the respondent considers that individual liberty is important).
- For SocEqual, the ATT is significant when using both algorithms and the effect is sizable. The average value of SocEqual is 16.1 to 22.1% higher among those who are college educated than among those who are not (remember that higher values of SoqEqual indicate that the respondent considers social equality important).
- In the case of Taxes, the ATT is not significant for any of the two algorithms. This means that there is no distinction among college educated individuals and non-college educated individuals when it comes to agreeing with the statement "everybody must pay taxes".

In summary, although college-educated individuals continue to be strongly in favor of individual liberty, they do not seem as inclined to support private property as the ordered logit regressions had first suggested (the ATT is significant for only one of the algorithms and it is not sizable). On the other hand, college-educated individuals continue to be strongly in favor of social equality and not significantly different from those who are not college educated when it comes to agreeing with the statement "everybody must pay taxes".

As mentioned before, PSM allows us to control for potential endogenous effects produced by observable characteristics, but cannot rule out hidden bias. I perform a sensitivity analysis that suggests how big a potential hidden bias should be in order to cast doubts on the robustness of the results. Table 5 presents this analysis (Rosenbaum, 2002).[16]

In Table 5, Γ (gamma) represents the odds of receiving treatment (attending college) and is standardized to one for randomized experiments. In observational studies, Γ may be larger than one indicating that the odds of receiving treatment are not the same as the odds of not receiving it. The larger the value of Γ, the more the study departs from the experimental design benchmark. Thus, as Γ increases, so does the range of possible p-values because of the uncertainty generated by the potential hidden bias.

[16] The application of the Rosenbaum's bounding approach in Table 5 is based on the kernel matching algorithm.

TABLE 5
SENSITIVITY TO HIDDEN BIAS: ROSENBAUM BOUNDS

Γ (gamma)	PrivProp		IndLib		SocEqual		Taxes	
	sig+	sig–	sig+	sig-	sig+	sig–	sig+	sig–
1	<0.001	<0.001	0	0	<0.001	<0.001	0.049	0.049
1.05	<0.001	<0.001	0	0	<0.001	0	**0.104**	**0.02**
1.1	<0.001	<0.001	0	0	<0.001	0	0.188	0.007
1.15	0.002	<0.001	<0.001	0	<0.001	0	0.299	0.002
1.2	0.007	<0.001	<0.001	0	<0.001	0	0.427	<0.001
1.25	0.018	<0.001	<0.001	0	<0.001	0	0.557	<0.001
1.3	0.037	<0.001	<0.001	0	<0.001	0	0.676	<0.001
1.35	0.069	<0.001	<0.001	0	<0.001	0	0.777	<0.001
1.4	**0.116**	**<0.001**	<0.001	0	<0.001	0	0.854	<0.001
1.45	0.18	<0.001	<0.001	0	<0.001	0	0.909	<0.001
1.5	0.258	<0.001	<0.001	0	<0.001	0	0.946	<0.001
1.55	0.348	<0.001	<0.001	0	<0.001	0	0.969	<0.001
1.6	0.444	<0.001	<0.001	0	<0.001	0	0.983	<0.001
1.65	0.54	<0.001	<0.001	0	<0.001	0	0.991	<0.001
1.7	0.631	0	<0.001	0	<0.001	0	0.995	<0.001
1.75	0.713	0	<0.001	0	<0.001	0	0.997	<0.001
1.8	0.784	0	<0.001	0	<0.001	0	0.999	<0.001
1.85	0.841	0	<0.001	0	<0.001	0	0.999	<0.001
1.9	0.887	0	<0.001	0	<0.001	0	0.999	<0.001
1.95	0.921	0	<0.001	0	<0.001	0	0.999	<0.001
2	0.947	0	<0.001	0	0.001	0	0.999	<0.001

Γ: Log odds of differential assignment due to hidden factors.
sig+: upper bound significance level.
sig–: lower bound significance level.

Take the first model (PrivProp) as an illustration. In this case, the upper bound p-value crosses the critical threshold of 10% at Γ = 1.4. This means that if 1) we fail to account for an unobservable characteristic associated with at least a 40% increase in the odds of being treated and, 2) that characteristic has a strong relationship with the dependent variable; then the significance level of the College coefficient may go above 10%. Thus, the PSM result for this model is moderately sensitive to hidden bias.

Similarly, the PSM result for the Taxes model is highly sensitive to hidden bias as the upper bound p-value crosses the critical threshold of 10% at Γ = 1.05.

On the other hand, the PSM results for the IndLib and SocEqual models are very robust to hidden biases. The upper bound p-value doesn't cross the critical threshold of 10% at any of the Γ values in any of the two models.

In general, the PSM results confirm those of the ordered logit regressions but cast some doubts on the positive relationship between college education

and believing that property rights must be respected. The positive effect verifies with the application of only one of the four matching algorithms, the ATT is not sizable and the result is somewhat sensitive to hidden bias.

7. Conclusion

I have examined the association between college education and left-leaning views in Bolivia using the 2020 CERES survey.

My ordered logit regression results suggest that attending college is significantly associated with agreeing that private property must be respected and that individual liberty is important. These results alone would suggest that attending college is associated with right-leaning views. I also find, however, that attending college is significantly associated with believing that social equality is important and is not significantly associated with thinking that everybody must pay taxes. These results alone would suggest that attending college is associated with left-leaning views.

The obvious empirical challenge is endogeneity as underlying factors could prompt a person to attend college and also determine his ideological leanings. I partially address this challenge using PSM, which builds a counterfactual to treatment (attending college) to control for potential endogenous effects produced by observable characteristics. While PSM and ordered logit regressions are different methodologies, the results are consistent in terms of individual liberty, social equality and taxes. The PSM results suggest that those with college experience are 22.6 to 25.8% more likely to consider that individual liberty is important, and 16.1 to 22.1% more likely to consider that social equality is important. These results are very robust to hidden bias. Moreover, the ATT is not significant when the dependent variable is Taxes.

Contrary to the ordered logit results, however, the PSM results suggest that attending college is not robustly associated with believing that private property must be respected. The ATT is significant when applying only one of the two valid algorithms and is not sizable at only 8.7%. Moreover, this result is somewhat sensitive to hidden bias.

The overall pattern that emerges out of this exercise is one in which college-educated individuals display left-leaning social preferences (they favor social equality and a tax system in which not everybody must pay taxes), but right-leaning individual preferences (they favor individual liberty and, to a lesser extent, private property, which are variables that affect them more directly). This interpretation of the results fits the connotation given to terms like *progre* or *socialista caviar* commonly used in Latin America to refer to educated individuals who consider themselves progressive, or even socialist, despite admitting and enjoying the benefits of individual economic freedom.

References

Álvarez, G. (2017). Como Hablar con Un Progre. Bogotá, Colombia: Ariel.

Arocena, R. and Sutz, J. (2005). "Latin American Universities: From an Original Revolution to an Uncertain Transition". *Higher Education*, 50, 573-592.

Astin, A. (1997). What Matters in College? Four Critical Years Revisited. San Francisco, CA: Jossey-Bass.

Autoridad de Fiscalización y Control Social de Empresas (AEMP). (2014). Estudio de Educación Superior Universitaria en Bolivia. La Paz, Bolivia: AEMP.

Barro, R. and Lee, J. (2013). "A New Data Set of Educational Attainment in the World, 1950-2010". *Journal of Development Economics*, 104, 184-198.

Bowman, N. (2013). "How Much Diversity is Enough? The Curvilinear Relationship Between College Diversity Interactions and First-Year Student Outcomes". *Research in Higher Education*, 54 (8): 874-894.

Burns, N., Schlozman, K. and Verba, S. (2001). The Private Roots of Public Action: Gender, Equality, and Political Participation. Cambridge, MA: Harvard University Press.

Caliendo, M. and Kopeinig, S. (2005). "Some Practical Guidance for the Implementation of Propensity Score Matching". IZA Discussion Paper Series, No. 1588. Bonn, Germany: Institute for the Study of Labor.

Campbell, C. and Horowitz, J. (2016). "Does College Influence Sociopolitical Attitudes?". *Sociology of Education*, 89 (1): 40-58.

Card, D. (1995). "Using Geographic Variation in College Proximity to Estimate the Returns to Schooling" in Christofides, L. *et al*. eds. Aspects of Labour Market Behaviour: Essays in Honor of John Vanderkamp. Toronto: University of Toronto Press.

Comisión Económica para América Latina de las Naciones Unidas (CEPAL). (2016). La Matriz de la Desigualdad Social en América Latina. Santiago: CEPAL (https://www.cepal.org/es/publicaciones/40668-la-matriz-la-desigualdad-social-america-latina).

Comisión Económica para América Latina de las Naciones Unidas (CEPAL). (2018). La Ineficiencia de La Desigualdad. Santiago: CEPAL (https://repositorio.cepal.org/handle/11362/43442).

College Pulse (2019). July 2019 Survey of 10,590 Undergraduate Students. San Francisco, CA: College Pulse (https://collegepulse.com/blog/8-in-10-philosophy-majors-favor-socialism).

Dey, E. (1997). "Undergraduate Political Attitudes: Peer Influence in Changing Social Contexts". *Research in Higher Education*, 68(4): 398-413.

Donzé, L. and Lai, P. (2011). "Propensity Score Matching and Genetic Matching: Monte Carlo Results". International Statistical Institute: Proceedings of the 58th World Statistical Congress, Dublin.

Federación Universitaria Boliviana (1949). Programa de Principios de la F.U.B. In Cornejo, A. (Ed.) Programas Políticos. Cochabamba: Imprenta Universitaria.

Ferreyra, M., Avitabile, C., Botero, J., Haimovich, F. and Urzúa, S. (2017). At a Crossroads: Higher Education in Latin America and the Caribbean. Directions in Development. Washington, DC: World Bank.

Fortin, S., Johnston, S. and Schuemie, M. (2021) "Applied Comparison of Large-Scale Propensity Score Matching and Cardinality Matching for Causal Inference in Observational Research". *BMC Medical Research Methodology*, 21 (109).

Graham, C. and Sukhtankar, S. (2004). "Does Economic Crisis Reduce Support for Markets and Democracy in Latin America? Some Evidence from Surveys of Public Opinion and Well Being". *Journal of Latin American Studies*, 36: 349-377.

Greifer, N. (2022). "Matching Methods" (https://cran.r-project.org/web/packages/MatchIt/vignettes/matching-methods.html#cardinality-and-template-matching-method-cardinality).

Hanson, P., Weeden, D., Pascarella, E. and Blaich, C. (2012). "Do Liberal Arts Colleges Make Students More Liberal? Some Initial Evidence". *Higher Education*, 64 (3): 355-369.

Heinrich, C., Maffioli, A., and Vázquez, G. (2010). "A Primer of Applying Propensity Score Matching". Office of Strategic Planning and Development Effectiveness, Impact-Evaluation Guidelines, Technical Notes, No. IDB-TN-161. Washington, DC: Inter-American Development Bank.

Hillygus, S. (2005). "The Missing Link: Exploring the Relationship Between Higher Education and Political Engagement". *Political Behavior*, 27 (1): 25-47.

Horowitz, D. (2007). Indoctrination U: The Left's War Against Academic Freedom. New York, NY: Encounter Books.

Instituto Nacional de Estadística (INE). (2021). Encuesta de Hogares 2012-2020. La Paz, Bolivia: INE (www.ine.gob.bo).

Klatch, R. (1999). A Generation Divided: The New Left, the New Right, and the 1960s. Berkeley, CA: University of California Press.

Laserna, R. (Ed.) (2020). Polarización y Conflicto: Midiendo los Riesgos de la Violencia. Centro de Estudios de la Realidad Económica y Social (CERES). Cochabamba, Bolivia: Serrano Press.

Lipsitz, S., Fitzmaurice, G. and Molenberghs, G. (1996). "Goodness-of-Fit Tests for Ordinal Response Regression Models". *Journal of the Royal Statistical Society*, 45(2): 175-190.

Ministerio de Educación, Estado Plurinacional de Bolivia. (2016). Guía de Universidades del Estado Plurinacional de Bolivia 2016. La Paz, Bolivia: Ministerio de Educación.

Nie, N., Junn, J. and Stehlik-Berry, K. (1996). Education and Democratic Citizenship in America. Chicago: University of Chicago Press.

Nolan, D. (1971). "Classifying and Analyzing Politico-Economic systems". The Individualist Jan 1971.

NPR/PBS News Hour/Marist. (2020). Poll of 1,416 National Adults. Poughkeepsie, NY: Marist Institute for Public Opinion (http://maristpoll.marist.edu/

npr-pbs-newshour-marist-poll-results-election-2020/#sthash.FIIAyvTH.dpbs).

Petersen, J. (1970). "Recent Research on Latin American University Students". *Latin American Research Review*, 5 (1): 37-58.

Pew Research Center. (2016). A Wider Ideological Gap Between More and Less Educated Adults. Washington, DC: Pew Research Center (https://www.pewresearch.org/politics/2016/04/26/a-wider-ideological-gap-between-more-and-less-educated-adults/).

Pew Research Center. (2021). Survey of US Adults July 8-18. Washington, DC: Pew Research Center (https://www.pewresearch.org/politics/2021/11/09/beyond-red-vs-blue-the-political-typology-2/).

Polleta, F. (2004). Freedom is An Endless Meeting: Democracy in American Social Movements. Chicago, IL: University of Chicago Press.

Rosenbaum, P. (2002). Observational Studies. New York, NY: Springer.

Rosenbaum, P. and Rubin, D. (1983). "The Central Role of the Propensity Score in Observational Studies for Causal Effects". *Biometrika*, 70: 41-55.

Rubin, D. (2001). "Using Propensity Scores to Help Design Observational Studies: Application to the Tobacco Litigation". *Health Services and Outcomes Research Methodology*, 2: 169-188.

Saravia, A. and Marroquín, A. (2021). "Is College Education Associated with Left-Leaning Economic Views? Evidence from Latin America". *The Social Science Journal*, 4: 1-16.

Smith, T., Davern, M., Freese, J. and Morgan, S. (2018). General Social Surveys, 1972-2018 [machine-readable data file]. Chicago, IL: NORC at the University of Chicago (gssdataexplorer.norc.org).

Strother, L., Piston, S., Golberstein, E., Gollust, S. and Eisenberg, D. (2020). "College Roommates Have a Modest but Significant Influence on Each Other's Political Ideology". *Proceedings of the National Academy of Sciences* (https://doi.org/10.1073/pnas.2015514117).

Webometrics. (2021). Ranking Web de Universidades. January 2021 (https://www.webometrics.info/es/Latin_America_es/Bolivia). Accessed July 14, 2021.

Weisehomeier, N. and Doyle, D. (2012). "Attitudes, Ideological Associations and the Left-Right Divide in Latin America". *Journal of Politics in Latin America*, 4 (1): 3-33.

Wolfe, T. (1970). Radical Chic: That Party at Lenny's. New York Magazine June 8 (https://nymag.com/news/features/46170/index15.html).

World Bank. (2021). World Development Indicators. Washington, DC: The World Bank (https://databank.worldbank.org/source/world-development-indicators).

Young Democratic Socialists of America (2021). Find a chapter (https://y.dsausa.org/get-involved/chapters/). Accessed July, 14, 2021.

Appendix

TABLE A.1
ODDS-RATIOS FOR ORDERED LOGIT MODELS
RESPONDENTS AGES 18 TO 25

	PrivProp	IndLib	SocEqual	Taxes
College	1.544	2.762**	2.511*	1.022
Demographics				
Age	1.568	28.126**	0.126	3.125
Age^2	0.987	0.925**	1.045	0.972
Indigenous	1.232	1.145	2.773**	0.843
Female	0.511**	1.295	1.352	0.709
Catholic	0.753	0.926	0.665	0.955
MarStat	1.265	0.6	0.753	11.132**
Income				
Income	1.077**	1.111**	1.057	1.081**
Employed	0.754	1.033	1.039	0.584*
Satisfaction, Trust and Technology				
EconPerc	0.913	0.916	0.739	1.116
Trust	0.786	0.971	0.848	1.29
WA	2.426*	1.535	2.569*	2.352*
Department dummies	yes	yes	yes	yes
N	212	211	211	209
Pseudo R^2	0.068	0.101	0.08	0.08

Calculated using robust standard errors.
Statistical significance: *<0.1, **<0.05, ***<0.01.

TABLE A.2
COMMON SUPPORT REGIONS

	Untreated Off	Untreated On	Treated Off	Treated On	Total
PrivProp	0	602	17	349	968
IndLib	0	598	19	348	965
SocEqual	0	598	16	349	963
Taxes	0	594	20	347	961