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SanAndrés

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Maestría en Economía

***Relative satisfaction and policy preference: can we
rationalize polarization?***

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10 de enero, 2022

Tesis de Maestría en Economía de

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“Satisfacción relativa y preferencias sobre política: ¿podemos racionalizar la polarización?”

Resumen

Este trabajo explora cómo la identidad influye en la percepción de shocks económicos y en el apoyo a políticas públicas. Para hacerlo, estudia cómo varía la reacción de las personas ante shocks negativos al descubrir alguna característica del individuo que recibe el shock. Luego, examina si estas reacciones se pueden asociar con el apoyo a políticas públicas. Los empleados del sector privado y tercer sector tienden a sentirse mejor acerca de una persona que pierde el empleo cuando descubren que esta trabajaba en el sector público, y que este sector ha perdido menos empleos que los otros en el último tiempo. Las mujeres tienden a sentirse mejor respecto a un individuo que verá una reducción en su salario si descubren que este individuo es un hombre, y que existe una brecha salarial de género en el mercado laboral que favorece a los hombres. También se encuentra que estos sentimientos están asociados con el apoyo a políticas públicas. Los encuestados que se sienten mejor respecto a los shocks negativos tienden a mostrar relativamente más apoyo a políticas que reducen el empleo público o regulan el salario de los hombres. De esta manera, decisiones racionales basadas en identidad grupal parecen ser un complemento a sesgos bien documentados como razonamiento motivado y sesgo de confirmación para explicar polarización en preferencias de política.

Palabras clave: Identidad; Polarización; Shocks; Satisfacción.

“Relative satisfaction and policy preference: can we rationalize polarization?”

Abstract

This paper explores how identity shapes feelings about economic shocks and support to public policies. To do so, we study how people’s feelings about negative shocks vary when they discover some characteristic of the individual that receives the shock. Then, we examine how these feelings are associated with support to public policies. Private and third sector employees tend to feel better about someone being laid-off if they find out that this person worked in the public sector and that public sector employment has been performing relatively better than the others. Women tend to feel better about an individual suffering a wage-cut if they find out that the individual is a man and that there is a wage gap in the labour market that favours men. We also find that people’s feelings can be associated with support to public policies. Respondents feeling better about the negative shocks are more likely to support policies reducing public employment and cutting men wages. In this way, rational choices based on group identity seem to complement well documented biases such as motivated reasoning and confirmation bias to explain polarization in policy preferences.

Keywords: Identity Economics; Polarization; Shocks; Satisfaction.

Códigos JEL: C90; D01; D91.

1. Introduction¹

Polarization in political ideology has profound implications for social behaviour. It can amplify cultural distance, make investors change their risk appetite, and make individuals postpone consumption decisions (Bertrand and Kamenica, 2020; Thaler, 2021; Meeuwis et al., 2019; Gerber and Huber, 2009). One factor that contributes to polarization is that people can form different beliefs from the same factual statements. For example, opposite political groups may assimilate facts that inform public policy in a way that reinforces their group instance, which can lead to widening the gap between these groups' preferences (Alesina, Stantcheva and Teso, 2018). As a result, to explain why polarization persists, scholars placed strong emphasis on how people respond to new information. Disagreements between two people on the same facts may arise from (i) different preconceived notions; (ii) different perceptions of news validity and informational capacity of a source; or (iii) an inference process that is motivated to be in accordance with previous beliefs (Thaler, 2021). The last channel implies that people's reasoning may be biased (motivated reasoning). The first two channels can also be encouraged by biases, such as confirmation bias (Taber and Lodge, 2006; Nyhan, Reifler, and Ubel, 2013). It would be difficult, however, to argue that biases can fully account for all polarization we see among political groups and across several public policy topics. For example, Haaland and Roth (2019) shows that an information treatment regarding actual black discrimination in the labour market substantially narrows differences in beliefs between Republican and Democrat groups, but fails to narrow differences in political behaviour. On account of which, they conclude that "the results demonstrate that correcting biases in beliefs about the extent of racial discrimination is not sufficient to reduce political polarization in support for pro-black policies" (p. 35).

In this paper, we propose group identity, which allows for the presence of others' utility levels in our own utility function, as an additional mechanism for polarization in preferences over public-policies. To fix ideas, consider two mutually exclusive groups A and B. Suppose that utility levels are cooperative between two people in the same group, but competitive between one individual in group A and other in group B.²

¹ I thank Guillermo Cruces, Wendy Brau, Agustín Tau, Gonzalo Ballesteros, and Martín Nistal for their valuable comments and suggestions.

² We say that utility levels are cooperative (competitive) between individuals i and j if the utility of individual i is increasing (decreasing) in the utility of individual j and vice versa.

If someone in group B receives a negative shock to her utility, and we ask individuals how they feel about the shock, those in group A should feel relatively better than those in group B. Therefore, we would expect group A to be more likely than group B to support a policy that can cause these shocks. In this way, the rational behaviour of utility-maximizing agents can be seen as a complement to well documented biases such as motivated reasoning and confirmation bias to explain part of the story of policy-polarization.

To examine whether polarization in preferred policies can arise from interdependence in utility levels, we proceed in two steps.

In the first step, respondents read a prompt stating that a hypothetical individual suffered a negative economic shock and report how they feel about the shock using a satisfaction scale from 1 (less satisfied) to 7 (more satisfied). We use satisfaction as a measure of utility. The treatment arm receives additional information regarding certain characteristic of the individual (e.g. works in the public sector). If the characteristic is shared by the respondent (i.e. she is also a public employee), we say that they belong to the same group and expect their relationship to be empathetic (de Waal, 2008). Respondents' satisfaction results are consistent with the idea that empathy mediates how they feel about the hypothetical individual, in line with seminal studies in Psychology (e.g. Cantor and Zillmann, 1977; Lanzetta and Englis, 1989; Singer et. al., 2006). First, those who work in the private or third sector report higher satisfaction than those in the public sector when they discover that a public employee lost her job (and that the public sector has been doing better than the others). Second, women report higher satisfaction than men when they discover that a man will suffer a wage reduction (and that there is a wage-gap in the labour market that favours men). We do not find treatment effects among private nor public school attendants when they discover that a family in a private school is suffering from higher costs on education. This might be driven by the fact that in Argentina "public school" and "private school" do not clearly define groups since it is very common for students to transition from one type to the other.

In the second step, we examine whether feelings about the negative shocks are associated with support to public policies. To do so, we classify each answer in the previous step in two mutually exclusive groups: low satisfaction (1-3 reported satisfaction) and high satisfaction (4-7 reported satisfaction) and compare the average support for certain policies between these groups. We find that high satisfaction

respondents in the treated arm are at least 25 p.p. more likely to support public policies that include reducing public employment and cutting men wages. Robustness checks in the appendix show that results hold when the middle value in the scale (4) is included in the low satisfaction group. Overall, these results seem to suggest that group identity may help explain part of the polarization we see in the public debate around issues that define groups with divergent views or stakes at play.

This paper is closely related to a literature that considers how identity, understood as a person's sense of self, affects economic and psychological outcomes (Akerlof and Kranton, 2000, 2005; Berg and Cable, 2014). These studies deal with a particular economic entity (e.g. an employee), and examine how the inclusion of identity in the utility function can affect standard economic incentives. Wichardt (2008) extends this concept to consider individual identity based on social affiliations, and stresses that a stronger identification with a given group should increase cooperation within this group relative to others. Our work is built on these theoretical insights, though we focus on how identity mediates preferences, instead of outcomes, since we examine respondents' satisfaction.

Our paper also ties in with a political science literature concerned with the emergence of political and affective polarization. Iyengar et al. (2019) points out that people in opposing parties (Democrats and Republicans) increasingly distrust and dislike each other, which shows an animosity between groups that escapes the classic view on polarization as an issue-specific phenomena. They propose social identity, fuelled by the power of partisanship, as a mechanism for affective polarization. In our paper, we try to experimentally link this mechanism with individual preferences. Lelkes (2019) supports the social identity theory based on an experimental survey that shows that respondents react strongly (and negatively) to ideology, especially to the ideology of other party's members. Rogowski and Sutherland (2015) also find that ideological differences play an important role in affective polarization, and that these differences are especially large among respondents with stronger ideological commitments and higher levels of political interest. Finally, external influences such as the media have also been studied. For example, Prior (2013) examines whether the emergence of partisan media has contributed to political polarization and led Americans to support more partisan policies and candidates, but does not find evidence that media coverage is making citizens increasingly partisan.

The rest of the paper is organized as follows. Section 2 provides the survey overview and main results regarding respondents' satisfaction in the information presented. Section 3 associates satisfaction with policy support. Section 4 concludes.

2. Reported satisfaction on information about hypothetical subject

2.1 Survey overview and subject pool

We conducted an online survey disseminated publicly through social networks. The first set of questions collected background information. These are related to employment, education, and gender, and each is used to classify respondents according to two mutually exclusive groups. Employment groups are (1) public sector employees and (2) other (private/third) sector employees.³ Education groups are (1) public school students and (2) private school students. Gender groups are simply (1) men and (2) women.

The second set of questions present a hypothetical situation in which an individual (or a family) receives a negative shock, and then it asks the respondent to state how much satisfied she is with the situation that the hypothetical individual went through. For example, the employment question states that "an individual losses her job". Control subjects do not receive any other information. This means that the shock does not affect a particular group within the topic: respondents cannot tell if the situation involves an individual of group 1 or 2 (e.g. they don't know if the hypothetical individual works in the public or private sector). Treatment subjects receive two additional pieces of information. The first piece states that the individual affected by the shock belongs to group 1. For example, it mentions that the employee worked in the public sector. The second piece underlines a certain difference between groups 1 and 2. For example, it mentions that the total number of jobs in the public sector was unaffected during the last three years, but the total number of private jobs suffered a 300,000 reduction during the same period. This implies that treated respondents know (i) whether the shock affects people in the other group or people in the same group that theirs; and (ii) that people in the other group are different in some relevant dimension regarding the topic of the question. Respondents are assigned to

³ Respondents that never worked are classified as other sector employees since their relevant characteristic for the present analysis is that they do not belong to the public sector identity group.

the treatment group separately for each question. This implies, for example, that a given respondent could have received the extra pieces of information in question 1 but not in question 2 or 3. The information provided is generalist in the sense that treated respondents do not learn anything about the hypothetical individual's specific context or merits. Table 9 in the appendix presents a balancing test. Overall, baseline and treatment arms have similar shares of public employees, private school students, and men. However, the treatment arm in question 1 ended up with a higher share of private school students (59%) than the baseline (45%).

In each of the three questions, respondents have to state how much satisfied they are with the hypothetical individual's situation in a scale from 1 (less satisfied) to 7 (more satisfied). Then, they advance to three final questions to state whether they would support a certain policy regarding each topic. This policy would benefit people in group 2 but hurt those in group 1. In this way, we hypothesize that subjects expected to feel relatively better about the economic shock (because they are less empathetic with individuals in the other group) can also be expected to show relatively higher support for policies that would bring about these shocks.

The following sections present the questions and results for each topic.

2.2 Measuring the effect of unemployment shocks on satisfaction

The first question states that an individual lost her job after many years of working for the same organization. Treated respondents also learn that she worked in the public sector and that the public sector has been doing well relative to the private sector, as summarized in Table 1.

Table 1.

Question 1's treatment assignment.

Treatment group	Message	Probability
No-info	-	1/2
Individual was a public employee	“That person worked in the public sector. The public sector added 94,000 jobs from December, 2019 to June, 2021. However, the private sector lost around 300,000 jobs during the same period of time.”	1/2

Notes: The beginning of question 1 always reads: “A person is now unemployed after working for several years at the same organization”. The treatment groups refer to the information displayed immediately after that baseline description.

Table 2 presents average reported satisfaction in control and treated respondents according to their employment group status (i.e. whether they work in the public sector or not). In *Panel A*, *p*-values compare the difference in satisfaction *within*⁴ groups. Both public (column 1) and other sector (column 2) treated employees report higher satisfaction than control respondents in the same employment group, but the effect is stronger for other sector employees, as expected. This implies that the additional information can affect respondents' satisfaction even when they do not know the individual and no information is given regarding the individuals' specific context or merits. The fact that public employees seem to report a somewhat higher satisfaction can be rationalized by the piece of information that stated that the public sector has been doing relatively better than the private sector. Given that there were only 60 public employees in the survey, it is unclear whether the effect in this group is insignificant at conventional levels or we miss statistical power. In *Panel B*, *p*-values compare the difference in satisfaction *between* groups. In column 4, results show that other sector respondents report higher satisfaction than public sector ones. This is the main result for this question. In line with psychological studies, this result supports the idea that public sector respondents are relatively more empathetic with the individual that lost her job, and that interdependence in utility levels can emerge just from sharing characteristics. Column 3 shows that being in either group does not play a role in absence of additional information, as expected. In this case, group identity cannot

⁴Differences *within* group refer to differences between baseline and treatment arms in the same identity group, while differences *between* groups refer to differences between two identity groups in the same arm (either baseline or treatment).

shape respondents' satisfaction because neither group can relate with the individual that suffered the negative shock.

Table 2.

Average satisfaction in the shock across treatment arms and employment groups.

<i>Panel A – within group</i>	1. Public sector employees	2. Other sector employees
No-info	2.50 (0.22)	2.49 (0.10)
Individual was a public employee	2.82 (0.26)	3.55 (0.15)
Difference p-values	0.348	< 0.01
Observations	60	247
<i>Panel B – between groups</i>	3. No-info	4. Individual was public empl.
Public sector employees	2.50 (0.22)	2.82 (0.26)
Other sector employees	2.49 (0.10)	3.55 (0.15)
Difference p-values	0.959	0.032
Observations	161	146

Notes: Data from question 1. Respondents were put in the hypothetical situation that an individual loses her job and asked how satisfied they were with this news. We randomized information stating that the individual worked at the public sector. No-info corresponds to baseline information (i.e. respondents did not know where the individual worked). We present the mean of reported satisfaction that subjects reported for the shock (standard errors in parenthesis). We present the p -value for the standard two-sample, two-tailed t-test for equality of the reported satisfaction means across treatment arms given an identity group and across identity groups given a treatment arm. *Panel A* compares the treatment effect within identity groups. *Panel B* compares the treatment effect between identity groups. The sample is grouped according to respondent's employment group status (whether they work in the public or private sector).

2.3 Measuring the effect of higher education costs shocks on satisfaction

The second question states that a family is facing higher costs on his son's education due to a policy that aims to increase teachers' salaries. Treated respondents also learn that the policy benefits public school teachers though it is paid by private school families, as summarized in Table 3.

Table 3.
Question 2's treatment assignment.

Treatment group	Message	Probability
No-info	-	1/2
Family is at private school	“The increase in education cost falls on private education families, while the increase in salaries corresponds to public teachers. While each teacher has 24 students on average in the private sector, in the public sector they have only 16 students, on average.”	1/2

Notes: The beginning of question 2 always reads: “Because of a new policy that aims to increase teachers’ salaries, a family now has to pay an additional cost for their son’s education. Last year, the cost represented 10% of this family’s budget. This year, it represents 35% of the budget”. The treatment groups refer to the information displayed immediately after that baseline description.

Table 4 presents average reported satisfaction in control and treated respondents according to their education group status (i.e. whether they study in a public or private school). Results point out that it was not relevant for respondents to know that the higher cost on education was paid by private schools and benefited public ones. Average satisfaction is nearly identical in both groups and across treatment arms. This might be explained by two facts. First, students in Argentina usually attend both types at different stages of their education, particularly when transitioning from high school to college. Second, the question used to classify respondents according to public or private education only asked about current or last level attained, which may well not coincide with the type of education in which they spent most of their time or feel more identified with.

Table 4.

Average satisfaction in the shock across treatment arms and education groups.

<i>Panel A – within group</i>	1. Private school students	2. Public school students
No-info	3.14 (0.17)	3.23 (0.17)
Family is at private sch.	3.14 (0.18)	3.09 (0.18)
Difference p-values	0.983	0.590
Observations	158	149
<i>Panel B – between groups</i>	3. No-info	4. Family is at private sch.
Private school students	3.14 (0.17)	3.14 (0.18)
Public school students	3.23 (0.17)	3.09 (0.18)
Difference p-values	0.726	0.864
Observations	149	158

Notes: Data from question 2. Respondents were put in the hypothetical situation that a family faces increasing costs in education and then were asked how satisfied they were with this news. We randomized information stating that the family attended a private school and that private school teachers had more students, on average, than public school teachers. No-info corresponds to baseline information. We present the mean of reported satisfaction that subjects reported for the shock (standard errors in parenthesis). We present the p -value for the standard two-sample, two-tailed t-test for equality of the reported satisfaction means across treatment arms given an identity group and across identity groups given a treatment arm. *Panel A* compares the treatment effect within identity groups. *Panel B* compares the treatment effect between identity groups. The sample is grouped according to respondent's school group status (whether they attend a private or public school).

2.4 Measuring the effect of wage shocks on satisfaction.

The third question states that an individual, who is earning a higher wage than a colleague, will suffer a wage reduction due to a new firm policy that establishes that all employees must earn the same wage. Treated respondents also learn that the individual is a man, and that there is a gender gap in average wages (i.e. men tend to earn more than women), as summarized in Table 5.

Table 5.

Question 3's treatment assignment.

Treatment group	Message	Probability
No-info	-	1/2
Employee is male	“The person with higher salary is a man (\$81,000 per month), and his colleague is a woman (\$65,000 per month). In the Argentinean labour market, on average, men earn a wage 25% higher than women.”	1/2

Notes: The beginning of question 3 always reads: “In a certain firm, a person earns 25% more than its colleague. Because of a new firm policy that states that all employees must earn the same, this person will suffer a wage reduction”. The treatment groups refer to the information displayed immediately after that baseline description.

Table 6 reports average satisfaction in control and treated respondents according to their gender. *Panel A* shows that both men and women reported higher satisfaction when they discover that the employee subject to a wage reduction is a man and read that there is a wage-gap favouring men. The fact that men seem to report a somewhat higher satisfaction can be rationalized by the piece of information that stated that there is a wage gap in the labour market that favours them. Specifically, it may be the case that being in an advantaged group mitigates the effect of cooperation within the group. However, while the effect is not significant at the 10% level for men, it is significant at the 1% level for women. Moreover, the magnitude of the effect for women is strong: they report almost a 4 in a 1-7 scale of satisfaction regarding the negative shock the man is facing. This is the highest average value reported among the three questions for any group and treatment arm. It anticipates the result in *Panel B*, column 4, which presents an almost 1.5 difference in satisfaction between women and men in the treated respondents group. Finally, column 3 indicates that women with only baseline information also reported higher satisfaction on the wage-reduction relative to men respondents, though the effect is weaker in magnitude and statistical significance in comparison with the treated arm.

Table 6.

Average satisfaction in the shock across treatment arms and gender groups.

<i>Panel A – within group</i>	1. Men	2. Women
No-info	2.09 (0.12)	2.42 (0.21)
Employee is male	2.41 (0.16)	4.00 (0.24)
Difference p-values	0.11	< 0.01
Observations	200	108
<i>Panel B – between groups</i>	3. No-info	4. Employee is male
Men	2.09 (0.12)	2.41 (0.16)
Women	2.42 (0.21)	4.00 (0.24)
Difference p-values	0.14	< 0.01
Observations	160	148

Notes: Data from question 3. Respondents were put in the hypothetical situation that an individual will suffer a salary reduction and then were asked how satisfied they were with this news. We randomized information stating that the individual was a man and that men tend to earn more in the labour market. No-info corresponds to baseline information (i.e. respondents did not know whether the employee was a woman or a man). We present the mean of reported satisfaction that subjects reported for the shock (standard errors in parenthesis). We present the *p*-value for the standard two-sample, two-tailed t-test for equality of the reported satisfaction means across treatment arms given an identity group and across identity groups given a treatment arm. *Panel A* compares the treatment effect within identity groups. *Panel B* compares the treatment effect between identity groups. The sample is grouped according to respondent's gender.

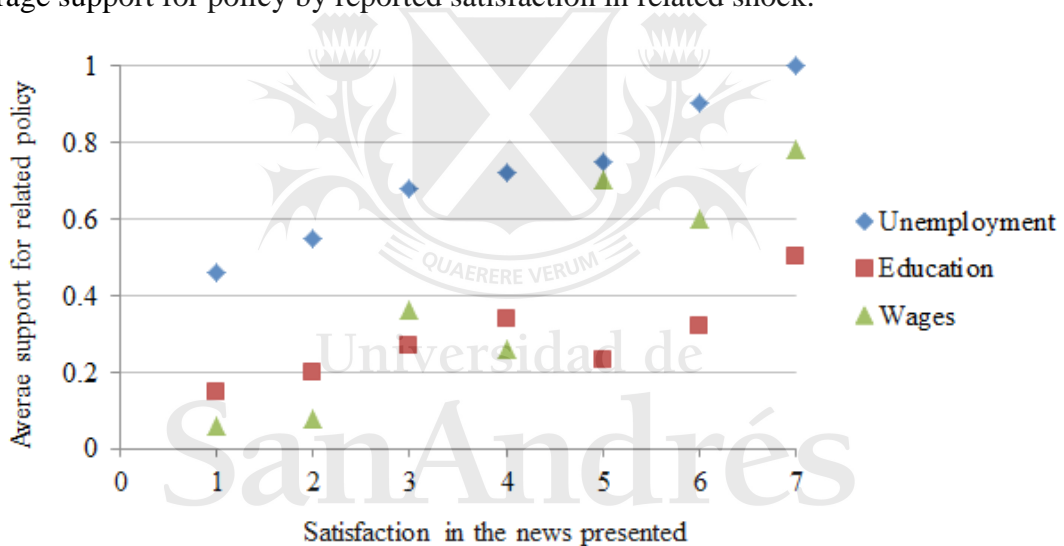
3. Reported satisfaction and support to policies

Results in the previous section stress that we might feel relatively better about negative economic shocks when they affect people that are different to us in some relevant dimension. In this section, we examine whether satisfaction can be associated with higher support to policies that make the previous shocks happen. This analysis is exploratory in the sense that we cannot relate satisfaction with policy support in a causal way within the framework of our experiment. For question 1 (unemployment), respondents are asked if they would support a policy that reduces public employment in exchange of saving taxes on their income. For question 2 (education), respondents are asked if they would support a policy that increases taxes on private schools in exchange of paying better wages to public teachers. For question 3 (wages), respondents are asked if they would support a policy that regulates and reduces men wages to close the wage gap between men and women in the labour market.

Figure 1 anticipates our results. We present the mean of policy support (dummy indicator that takes the value 1 if the respondent supports the policy).⁵ It suggests that the average support for policies is increasing in the level of satisfaction for all topics. For example, for people that reported 1 in the satisfaction scale when asked about the individual that lost her job, 40% of them would support a policy that reduces public employment. However, almost 80% of those who reported 5 would support the policy. In the appendix, we present the graph for each topic separately, with their corresponding confidence intervals at 95%. These graphs suggest that results may not hold for every topic or treatment arm. For example, Figure 3 shows that there is no significant relationship between satisfaction and support in the education topic considering respondents in both treatment arms.

Figure 1

Average support for policy by reported satisfaction in related shock.



In Table 7 we report average support for policies. We cluster respondents by two groups of satisfaction levels based on the scale from 1 to 7. One is low satisfaction (responses range from 1 to 3). The other is high satisfaction (responses range from 4 to 7). In Panel A, results point out that respondents showing “high” satisfaction in a public employee losing her job are 25p.p. more likely to support the policy (Column 2). This is also true for respondents that did not know the employee losing her job worked in the public sector, but the effect is weaker (a difference of 15p.p. and significant only at the 9% level). Results imply that satisfaction can be associated with policy support and that it seems that people in the treatment arm made a link between

⁵ Support takes the value 0 if respondents stated that they would not support the policy or that they were “not sure” whether they would support it not.

the unemployment shock (and the information regarding how well the public sector was performing) with the policy question. Column 2 in *Panel B* shows that respondents with “high” satisfaction in a private school family facing increasing costs on education are 3 times more likely than “low” satisfaction respondents to support a policy that includes higher taxes on private schools. Column 1 shows that this is not true among respondents with baseline information (i.e. those who did not know that the increasing costs on education only fell on private school families). In this case, it is clear that information relevant for group identity can have different effects for people with varying degrees of utility on negative shocks when it comes to support for public policies. This suggests that, for some topics, highlighting differences between groups can be considered a catalyst for polarization in policy preferences. What’s more, this catalyst is consistent with rational behaviour since individuals support relatively more policies that bring about events associated with relatively higher satisfaction. Finally, 47% of the respondents showing “high” satisfaction in a man suffering a wage cut would support a policy that includes wage-cuts with the goal of narrowing the wage gap between men and women, while, in the “low” satisfaction group, support is only 8% (Column 2, *Panel C*). This difference holds for respondents that did not know the individual suffering a wage cut was a man, but support levels are closer together between “high” and “low” satisfaction groups (44% and 15%, respectively, Column 1, *Panel C*).

Higher satisfaction responses are consistently correlated with higher support to policies. In addition, the difference in support tends to be greater for the treatment arm, which discovered new information about the individuals potentially affected by the policy (though we did not test this idea directly, it is clear that the effect can vary depending the policy topic which suggests further research on the subject). Robustness checks in the appendix show that results overall hold when the middle value in the scale (4) is included in the low satisfaction group. There is one case in which the low satisfaction group shows greater support. This corresponds to the baseline information arm in the policy that includes taxes on private schools to fund an improvement in teachers’ salaries. It is worth bearing in mind that respondents in this arm did not discover that the family facing higher costs on education attended a private school when they reported satisfaction levels. In the treatment arm, however, the high satisfaction group is again the one showing greater support to the policy.

Table 7.

Average support for policies across high and low satisfaction by treatment status.

Satisfaction	1. Baseline information	2. Treatment arm
<i>Panel A</i>		
<i>Question 1: employment</i>		
Low (1-3)	0.57 (0.05)	0.52 (0.06)
High (4-7)	0.72 (0.07)	0.77 (0.05)
Difference p-values	< 0.09	< 0.01
Observations	162	146
<i>Panel B</i>		
<i>Question 2: education</i>		
Low (1-3)	0.30 (0.05)	0.13 (0.03)
High (4-7)	0.24 (0.05)	0.41 (0.06)
Difference p-values	0.41	< 0.01
Observations	150	158
<i>Panel C</i>		
<i>Question 3: wages</i>		
Low (1-3)	0.15 (0.03)	0.08 (0.03)
High (4-7)	0.44 (0.09)	0.47 (0.07)
Difference p-values	< 0.01	< 0.01
Observations	160	148

Notes: Data from all questions. Respondents were asked if they would support a certain policy. In Panel A, the policy comprises reducing public employment to decrease taxes on income. In Panel B, the policy comprises increasing public teachers' wages by imposing taxes on private schools. In Panel C, the policy comprises reducing men wages to close the wage gap between men and women in the labour market. We present the mean of policy support (dummy indicator that takes the value 1 if the respondent supports the policy). Standard errors shown in parenthesis. We present the p -value for the standard two-sample, two-tailed t-test for equality of the reported satisfaction means for high or low satisfaction groups. We show the breakdown of responses by treatment status (if respondent received additional information when asked about how much satisfied she was in the hypothetical individual receiving a negative shock) and satisfaction levels (low satisfaction group includes responses from 1 to 3 and high satisfaction group include responses from 4 to 7).

4. Final remarks and discussion

In this paper, we argued that rational choices based on group identity can help explain part of the polarization in policy preferences we see across several public policy topics, particularly around issues that define groups with divergent views or stakes at play. Our argument has two parts. First, we tend to feel relatively better about negative economic shocks when they affect individuals that are different from us. We used reported satisfaction as a measure of these feelings. Second, how we feel

about the shocks is associated with support to policies. For example, people more satisfied about a public employee losing her job are more likely to support a policy that includes a cut down on public employment. In this context, rational-behaviour is consistent with the emergence of polarization.

Our experimental strategy involved exogenous variation in the information that respondents received regarding the hypothetical individual affected by the shock. However, to measure how satisfaction varies with the degree of empathy in a relationship in a more direct way, future research could attempt to generate exogenous variation in respondents' characteristics, for example by assigning them to different groups in a lab experiment. Other limitations of our study include the fact that we did not examine how results can vary for people that transition from one group to another (e.g. once a private sector employee now working in the public sector). Relatedly, are there pieces of information that could make private sector employees feel more empathetic with public sector ones? Analyses of this kind can help our understanding of the factors that neutralize (instead of polarize) beliefs.

Our main results show that employees working in the private and third sector are more satisfied (1 point higher in a 1-7 satisfaction scale) than public sector employees when they are told that a public employee lost her job (and they also discover that employment in public sector has been doing relatively better than in the others). In addition, women are more satisfied (2 points higher in the 1-7 scale) than men when they are told that a man will suffer a wage reduction (and that there is a wage-gap in the market favouring men). Finally, reported satisfaction translates into support for policies. High-satisfaction respondents in the treated arm are at least 25 p.p. more likely to support a public policy that includes a reduction in public employment or reducing and regulating men wages. To put it bluntly, part of the polarization we witness in public-policy preferences may be driven by the fact that we like relatively more negative consequences when they fall on a group of individuals with which we do not feel identified. A better understanding of how this behaviour varies with socio-demographic characteristics, the dynamics of group identification, and what information could be given to make people empathise with different individuals are important topics for further research.

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5. Appendix A: Robustness check

Table 8.

Average support for policies across high and low satisfaction by treatment status.

Satisfaction	1. Baseline information	2. Treatment arm
<i>Panel A</i>		
<i>Question 1: employment</i>		
Low (1-4)	0.61 (0.04)	0.61 (0.04)
High (5-7)	0.80 (0.20)	0.84 (0.07)
Difference p-values	0.38	0.017
Observations	162	146
<i>Panel B</i>		
<i>Question 2: education</i>		
Low (1-4)	0.32 (0.04)	0.18 (0.03)
High (5-7)	0.07 (0.05)	0.54 (0.10)
Difference p-values	0.01	< 0.01
Observations	150	158
<i>Panel C</i>		
<i>Question 3: wages</i>		
Low (1-4)	0.18 (0.03)	0.09 (0.03)
High (5-7)	0.55 (0.15)	0.74 (0.08)
Difference p-values	< 0.01	< 0.01
Observations	160	148

Notes: Data from all questions. Respondents were asked if they would support a certain policy. In Panel A, the policy comprises reducing public employment to decrease taxes on income. In Panel B, the policy comprises increasing public teachers' wages by imposing taxes on private schools. In Panel C, the policy comprises reducing men wages to close the wage gap between men and women in the labour market. We present the mean of policy support (dummy indicator that takes the value 1 if the respondent supports the policy). Standard errors shown in parenthesis. We present the p -value for the standard two-sample, two-tailed t-test for equality of the reported satisfaction means for high or low satisfaction groups. We show the breakdown of responses by treatment status (if respondent received additional information when asked about how much satisfied she was in the hypothetical individual receiving bad news) and satisfaction levels (low satisfaction group includes responses from 1 to 4 and high satisfaction group include responses from 5 to 7).

6. Appendix B: survey questions

6.1 Background information (employment).

Original

¿Dónde trabajás actualmente? (si no te encontrás trabajando, respondé considerando tu último trabajo)

1. Sector público (por ejemplo cualquier entidad pública de gobierno nacional, provincial, o municipal; entidades reguladoras como AFIP, ANSES; o entidades comerciales de orden público como el Banco de la Nación Argentina)
2. Sector privado o tercer sector
3. Nunca trabajé

Translation

Where do you work at present? (If you are not currently working, consider your last post)

1. Public sector (for example any public entity of the federal, state, or municipal government; regulatory entities, or commercial entities owned by the state)
2. Private or third sector
3. I've never worked

6.2 *Background information (education).*

Original

¿Dónde estudias actualmente? (si no te encontrás estudiando, respondé considerando tu último nivel de educación completado)

1. En una institución educativa pública
2. En una institución educativa de orden privado (incluye escuelas de gestión privada con subvención pública)

Translation

Where do you study at present? (If you are not currently studying, consider your last educational level attained)

1. In a public institution
2. In a private institution (including private management schools with public support)



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6.3 Background information (gender).

Original

Por favor, indicá tu género (como figura en tu D.N.I)

1. Mujer
2. Hombre

Translation

Please, state your gender (as stated in your national ID)

1. Woman
2. Man



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6.4 Question 1 (employment). Control arm.

Original

Considerá la siguiente situación:

Una persona se quedó desempleada luego de trabajar varios años en la misma organización.

Por favor, para la siguiente afirmación, elegí el número que crees que te describe de forma más apropiada.

La situación que vivió esta persona me deja:

(Seleccioná uno de los números a continuación)

1 (menos satisfecho) – 2 – 3 – 4 – 5 – 6 – 7 (más satisfecho)

Translation

Consider the following situation:

A person was laid off after working for several years in the same organization.

Please, for the following statement, choose the number which describes you in the most appropriate way.

The situation this person went through makes me:

(Select one of the following numbers)

1 (less satisfied) – 2 – 3 – 4 – 5 – 6 – 7 (more satisfied)

6.5 Question 1 (employment). Treatment arm.

Original

Considerá la siguiente situación:

Una persona se quedó desempleada luego de trabajar varios años en la misma organización.

Esta persona trabajaba en el sector público. El sector público sumó alrededor de 94.000 asalariados entre Diciembre de 2019 y Junio de 2021. Sin embargo, en el sector privado se perdieron alrededor de 300.000 empleos durante el mismo periodo.

Fuente: Observatorio de Empleo y Dinámica Empresarial y AFIP.

Por favor, para la siguiente afirmación, elegí el número que crees que te describe de forma más apropiada.

La situación que vivió la persona que se quedó sin su trabajo en el sector público me deja:

(Seleccioná uno de los números a continuación)

1 (menos satisfecho) – 2 – 3 – 4 – 5 – 6 – 7 (más satisfecho)

Translation

Consider the following situation:

A person was laid off after working for several years in the same organization.

This person worked in the public sector. The public sector added around 94,000 jobs between December 2019 and June 2021. However, in the private sector 300,000 jobs were lost during the same period.

Please, for the following statement, choose the number which describes you in the most appropriate way.

The situation this person went through makes me:

(Select one of the following numbers)

1 (less satisfied) – 2 – 3 – 4 – 5 – 6 – 7 (more satisfied)

6.6 Question 2 (education). Control arm.

Original

Considerá la siguiente situación:

Debido a una nueva política nacional que intenta mejorar el salario docente, una familia debe pagar este año un costo extra por la educación de su hijo. El año pasado, el costo educativo era del 10% del presupuesto de esta familia. Este año, el costo educativo es del 35% del presupuesto familiar.

Por favor, para la siguiente afirmación, elegí el número que crees que te describe de forma más apropiada.

El incremento en el costo educativo que enfrenta esta familia me deja:

(Seleccioná uno de los números a continuación)

1 (menos satisfecho) – 2 – 3 – 4 – 5 – 6 – 7 (más satisfecho)

Translation

Consider the following situation:

Due to a new national policy that aims to increase teachers' salaries, a family has to pay this year an extra cost for their children's education. Last year, educational costs were 10% of the family's budget. This year, the cost is 35% of the family's budget.

Please, for the following statement, choose the number which describes you in the most appropriate way.

The increase in educational costs that this family faces makes me:

(Select one of the following numbers)

1 (less satisfied) – 2 – 3 – 4 – 5 – 6 – 7 (more satisfied)

6.7 Question 2 (education). Treatment arm.

Original

Considerá la siguiente situación:

Debido a una nueva política nacional que intenta mejorar el salario docente, una familia debe pagar este año un costo extra por la educación de su hijo. El año pasado, el costo educativo era del 10% del presupuesto de esta familia. Este año, el costo educativo es del 35% del presupuesto familiar.

El incremento en el costo educativo recae sobre escuelas privadas, pero la mejora salarial es para docentes de escuela pública. Mientras que en el sector privado cada docente tiene 24 alumnos, en promedio, en el sector público cada docente tiene sólo 16 alumnos, en promedio.

Fuente: Promedio de alumnos por cada cargo docente elaborado en base a información del Ministerio de Educación para escuelas secundarias a nivel nacional.

Por favor, para la siguiente afirmación, elegí el número que crees que te describe de forma más apropiada.

El incremento en el costo educativo que enfrenta esta familia me deja:

(Seleccioná uno de los números a continuación)

1 (menos satisfecho) – 2 – 3 – 4 – 5 – 6 – 7 (más satisfecho)

Translation

Consider the following situation:

Due to a new national policy that aims to increase teachers' salaries, a family has to pay this year an extra cost for their children's education. Last year, educational costs were 10% of the family's budget. This year, the cost is 35% of the family's budget.

The increase in educational costs fall on private schools, but the improvement in salaries goes to public teachers. While there are 24 students, on average, per teacher in the private sector, that figure is only 16 in the public sector, on average.

Please, for the following statement, choose the number which describes you in the most appropriate way.

The increase in educational costs that this family faces makes me:

(Select one of the following numbers)

1 (less satisfied) – 2 – 3 – 4 – 5 – 6 – 7 (more satisfied)

6.8 Question 3 (wages). Control arm.

Original

Considerá la siguiente situación:

En cierta empresa, una persona gana un 25% más que su colega. Por una nueva política de la empresa, que dispone que todos en el establecimiento deben cobrar lo mismo, esa persona sufrirá una reducción en su salario.

Por favor, para la siguiente afirmación, elegí el número que crees que te describe de forma más apropiada.

La situación que vive la persona que verá una reducción en su salario me deja:

(Seleccioná uno de los números a continuación)

1 (menos satisfecho) – 2 – 3 – 4 – 5 – 6 – 7 (más satisfecho)

Translation

Consider the following situation:

In a given firm, a person earned 25% more than a colleague. Due to a new firm policy, establishing that all employees must earn the same wage, that person will suffer a wage cut.

Please, for the following statement, choose the number which describes you in the most appropriate way.

The situation of the person that will suffer a wage reduction makes me:

(Select one of the following numbers)

1 (less satisfied) – 2 – 3 – 4 – 5 – 6 – 7 (more satisfied)

6.9 Question 3 (wages). Treatment arm.

Original

Considerá la siguiente situación:

En cierta empresa, una persona gana un 25% más que su colega. Por una nueva política de la empresa, que dispone que todos en el establecimiento deben cobrar lo mismo, esa persona sufrirá una reducción en su salario.

La persona que cobra más es un hombre (\$81.000 por mes), y su colega es una mujer (\$65.000 por mes). En el mercado laboral argentino, en promedio, los hombres ganan un salario 25% más alto que las mujeres.

Fuente: Dirección General de Estudios y Estadísticas Laborales.

Por favor, para la siguiente afirmación, elegí el número que crees que te describe de forma más apropiada.

La situación del hombre que verá una reducción en su salario me deja:

Translation

Consider the following situation:

In a given firm, a person earned 25% more than a colleague. Due to a new firm policy, establishing that all employees must earn the same wage, that person will suffer a wage cut.

The person that earned more was a man (\$81,000 per month), and the colleague was a woman (\$65,000 per month). In the Argentinean labor market, on average, men earn 25% more than women.

Please, for the following statement, choose the number which describes you in the most appropriate way.

The situation of the man that will suffer a wage reduction makes me:

(Select one of the following numbers)

1 (less satisfied) – 2 – 3 – 4 – 5 – 6 – 7 (more satisfied)

6.10 *Support to policy 1 (employment).*

Original

¿Apoyarías una política que reduzca el empleo público para pagar menos impuestos sobre tu salario laboral?

1. Sí
2. No
3. No estoy seguro

Translation

Would you support a policy that reduces public employment in order for you to pay fewer taxes on your salary?

1. Yes
2. No
3. I am not sure



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6.11 *Support to policy 2 (education).*

Original

¿Apoyarías una política que incremente los impuestos a los colegios privados para financiar a los colegios públicos, aunque esto encarezca el costo educativo en familias que asisten a escuela privada?

1. Sí
2. No
3. No estoy seguro

Translation

Would you support a policy that increases taxes on private schools in order to fund public schools, even though this makes education more costly for families attending private schools?

1. Yes
2. No
3. I am not sure



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6.12 Support to policy 3 (wages).

Original

¿Apoyarías una política que intente regular y reducir el salario de los hombres para cerrar la brecha de género salarial en el mercado laboral?

1. Sí
2. No
3. No estoy seguro

Translation

Would you support a policy that tries to regulate and reduce men wages to narrow the gender wage gap in the labor market?

1. Yes
2. No
3. I am not sure

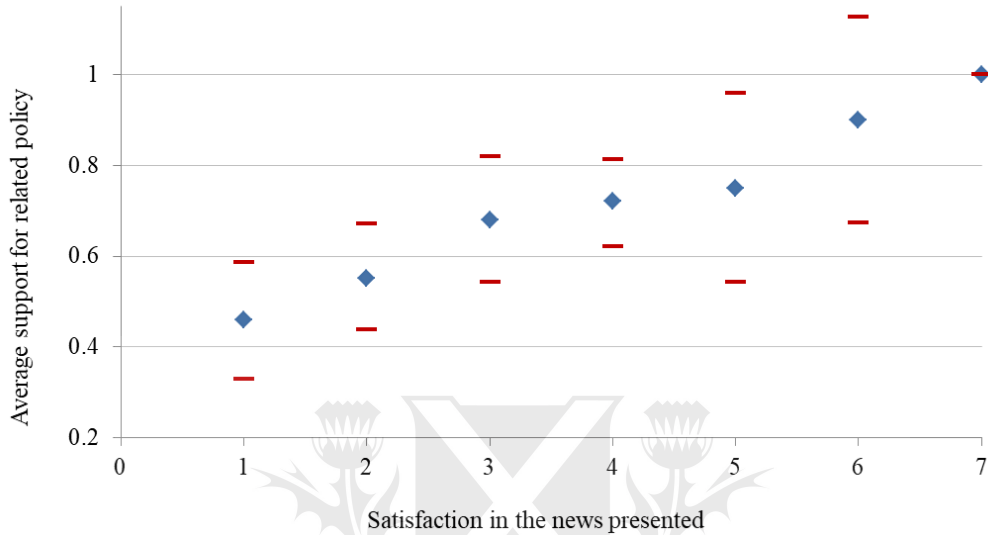


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7. Appendix C: Satisfaction and policy support

Figure 2

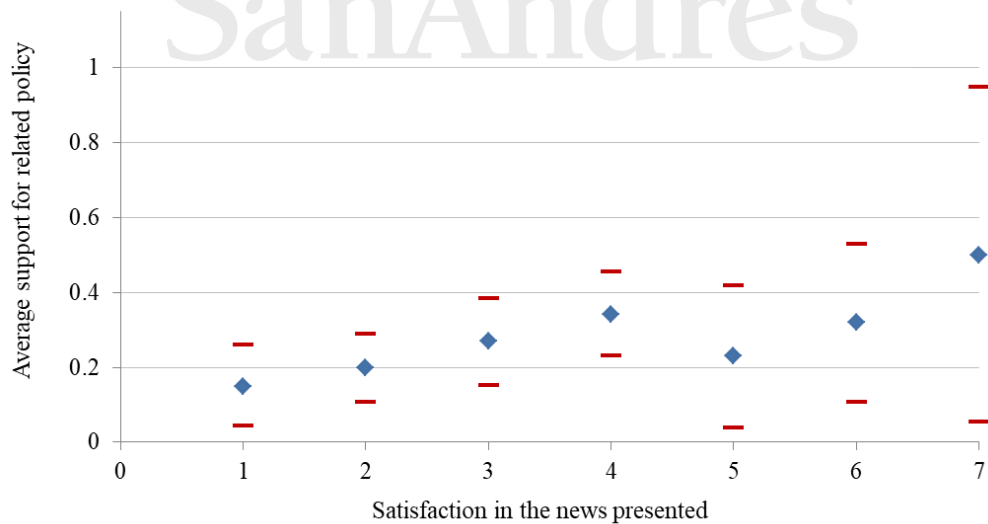
Average support for public employment policy by reported satisfaction in related shock.



Notes: The figure graphs average policy support among respondents for a given scale of satisfaction in a negative shock related to the policy. The red lines establish confidence intervals at 95%.

Figure 3

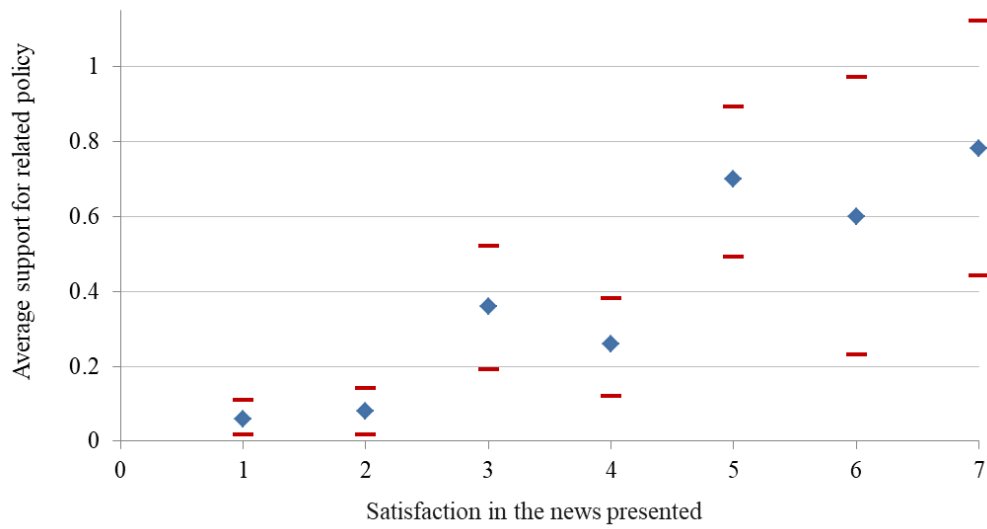
Average support for education policy by reported satisfaction in related shock.



Notes: The figure graphs average policy support among respondents for a given scale of satisfaction in a negative shock related to the policy. The red lines establish confidence intervals at 95%.

Figure 4

Average support for wage regulation policy by reported satisfaction in related shock.



Notes: The figure graphs average policy support among respondents for a given scale of satisfaction in a negative shock related to the policy. The red lines establish confidence intervals at 95%.

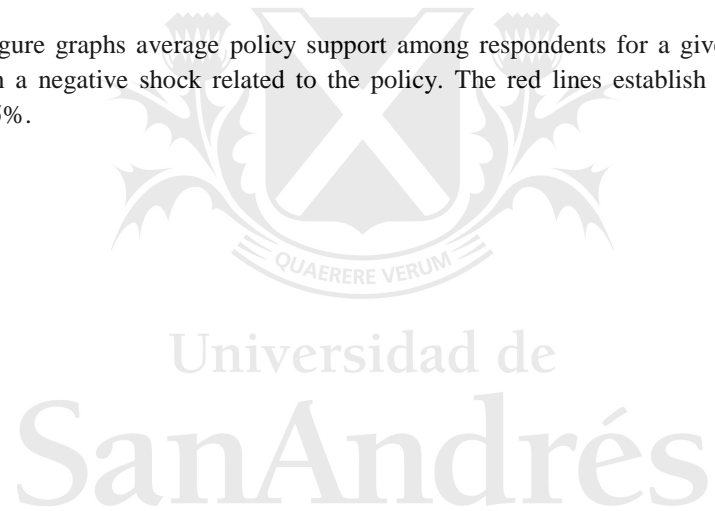


Table 9.
Balancing test.

	Baseline	Treatment	Difference p - value
<i>Question 1: employment</i>			
Public employees	0.19 (0.03)	0.19 (0.03)	0.89
Private school attendants	0.45 (0.04)	0.59 (0.04)	0.01
Men	0.67 (0.04)	0.62 (0.04)	0.36
<i>Question 2: education</i>			
Public employees	0.16 (0.03)	0.23 (0.03)	0.13
Private school attendants	0.55 (0.04)	0.49 (0.04)	0.30
Men	0.65 (0.04)	0.65 (0.04)	0.92
<i>Question 3: wages</i>			
Public employees	0.20 (0.03)	0.19 (0.03)	0.81
Private school attendants	0.54 (0.04)	0.49 (0.04)	0.32
Men	0.64 (0.04)	0.65 (0.04)	0.83

Notes: We present the p -value for the standard two-sample, two-tailed t-test for equality of the variables in the first column between baseline and treatment arms. The total number of observations is 308 for all tests. Standard errors shown in parenthesis.