

Issue-bundling: An Experimental Approach

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Introduction

While an economic dimension of partisan conflict over taxation and redistribution has been at the heart of democratic politics at least since the rise of mass suffrage in most industrial democracies, other issue dimensions have survived from the pre-industrial era, and new ones have arisen. In particular, this paper focuses on policy disagreements related to religion and moral values that have continued to provide structure to political conflict in many societies around the world. Among advanced industrial democracies, a cleavage related to religion is the only moral division that has consistently rivaled social class over the last century politics (Caramani 2004; Dalton 2008). In the United States, a large literature tracks the recent revival of this dimension and its replacement of race as the clear second dimension in U.S. politics (Ansolabehere, Rodden, and Snyder 2006; Baldassarri and Gelman 2008; Layman 1997, 2001).

One of the most basic claims in comparative political science is that multi-dimensional politics plays out very differently in countries with multiple political parties than in countries with only two parties. In a multi-party system, parties can more fully occupy a two-dimensional issue space, providing alternatives for cross-pressured voters—those with right-of-center preferences on one issue but left-of-center preferences on the other—to find parties with proximate views on both dimensions. For example, working-class advocates of the welfare state with morally conservative views can cast a vote for Christian Democrats, while economic conservatives with morally progressive views can vote for a Liberal party. By contrast, a strict two-party system in which economic and moral issues are bundled together by the parties offers no such alternatives. For instance, a secular, high-income American supporter of gay rights who also favors lower taxes must choose between her preferences over gay rights and those over taxation.

A basic question has been left unanswered in comparative politics: what are the implications of the policy-bundling that forces such choices upon cross-pressured voters in two-party systems? There are a number of claims in the literature, but most are extremely difficult to substantiate with traditional survey data within or across countries. This paper uses a survey experiment to address what are perhaps the two most central claims in this literature.

The first claim is that with a strict two-party system and two salient issue dimensions, cross-pressured voters will be forced to choose the more salient of the two dimensions. The presumption in the literature is that for the majority of voters, this tension is resolved in favor of the economic dimension (Ansolabehere, Rodden, and Snyder 2006; Bartels 2006).

We present results of a U.S. survey experiment in which candidate platforms are held fixed and only the number of candidates is altered across treatment conditions. We contrast conditions with and without issue bundling, and discover that in a hypothetical four-party system, the correlation between policy preferences and vote choice increases for both the economic and moral dimensions, but far more for the latter. We interpret this as evidence that policy bundling asymmetrically suppresses the moral values dimension of conflict.

The second claim has received far more attention in recent literature, especially in the United States. Even if the economic dimension is more salient on average, pundits have argued that there is a persistent asymmetry such that one group of cross-pressured voters—those with economically progressive but morally conservative preferences—is more likely to favor the social over the economic dimension (Frank 2004). This argument is rooted in a long-standing Marxist claim that religion distracts the poor from their economic interests in a way that ultimately benefits the wealthy. Although the literature does not often explicitly mention electoral rules or party systems, the claim is that if a fuller

range of options were available to voters, parties of the economic left would receive more votes (Huber and Stanig 2009).

The standard approach in the literature is to regress a binary indicator of left voting on some combination of survey-based measures of income, religiosity, and issue preferences (Ansolabehere, Rodden, and Snyder 2006; Bartels 2006; Gelman, Park, and Shor 2009; Huber and Stanig 2009; De La O and Rodden 2008; Stegmueller 2013). First, Bartels (2006) and Ansolabehere et al. (2006) find that in spite of the common media portrayals of a “culture war” that has come to dominate American politics, economic preferences are far better predictors of American voting behavior than are moral preferences, and this is true for rich and poor as well as secular and religious individuals. De la O and Rodden (2008) show that preferences on the moral values dimension is a better predictor of voting behavior in countries with multi-party systems. Huber and Stanig (2009) show that low-income voters are less likely to choose economically conservative parties in countries with multi-party systems where there is an economically progressive but morally conservative party.

These studies provide interesting stylized facts that help motivate our analysis, but they cannot answer our basic questions about policy-bundling. Cross-country differences in the relative role of economic versus moral issues could have any number of alternative explanations beyond the party system, which may itself be endogenous. Moreover, comparisons of “economic” versus “moral” polarization in voting behavior among U.S. population subgroups cannot answer the classic underlying question: how might U.S. politics be different if issues could be “unbundled,” as they are in European multi-party democracies like Denmark or the Netherlands?

Our survey experiment allows for a direct comparison of the limited menu of choices available in a two party system with the fuller menu of candidates that is typical of a system of proportional representation. This approach reveals a rather striking asymmetry that is consistent with the classic

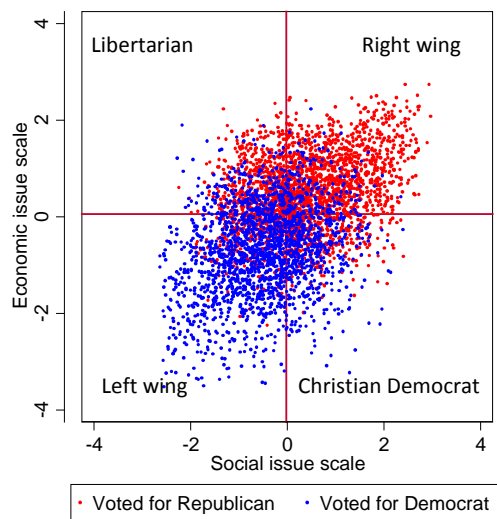
Marxist story: policy-bundling favors the candidates of the economic right, in large part because religious voters are less willing to suppress their moral values preferences than are secular voters.

1. Policy-bundling and party systems

A classic question in comparative politics concerns the relationship between the cleavage structure of societies, the electoral system, and the number of parties (Cox 1997; Duverger 1954; Lijphart 1999; Lipset and Rokkan 1967; Neto and Cox 1997; Ordeshook and Shvetsova 1994; Riker 1982; Sartori 1976; Taagepera and Shugart 1989, 1989). The literature seems to have reached a consensus around the synthesis of Cox (1997): when electoral systems create low barriers to entry for parties, pre-existing social cleavages will be expressed in the party system. For example, if two hypothetically identical countries have the same two-dimensional cleavage structure but one country uses proportional representation with a low electoral threshold and the other uses winner-take-all majoritarian districts, we can expect the country with more permissive electoral rules to have a larger effective number of parties.

This claim relies on a simple logic about partisan entry. Let us consider a society like the United States, with two issue dimensions—a primary dimension rooted in conflicts over the government’s role in regulating the economy and redistributing income, and a secondary dimension related to moral issues like women’s rights, homosexuality, and abortion—where preferences on these two issue dimensions are correlated in the mass public, but only weakly so.

Figure 1: Vote choice and issue positions



This scenario is captured by Figure 1, which is based on issue scales created from the U.S. National Election Studies from 1992 to 2004 by Ansolabehere, Rodden, and Snyder (2006). On the horizontal axis are respondents' preferences on social issues, and on the vertical axis are their preferences on economic issues. The two scales are correlated at .39. Around 60 percent of the respondents have preferences that place them in either the top right or lower left quadrant, such that they are on the same side of the sample median on both dimensions. Around 40 percent of the respondents are divided evenly between the two off-diagonal quadrants. In the lower right quadrant are respondents with social preferences to the right of the sample median, and economic preferences to the left of the median. In the upper left quadrant are those with economically conservative but socially liberal preferences. Throughout the paper, we will refer to the first group as Christian Democrats, and the second as Libertarians.

By all accounts, the Democrats offer a platform that is to the left of the Republicans on both dimensions: The Democratic platform is somewhere in the lower left quadrant, and the Republican

platform is somewhere in the upper right. Thus many voters have preferences that place them closer to the Democrats on one dimension, and closer to the Republicans on the other.

The comparative politics literature argues that a sudden exogenous shift to a permissive form of proportional representation in this setting would likely lead to partisan entry, as political entrepreneurs form parties that attempt to peel off disaffected voters in the off-diagonals. The clearest recent example is provided by New Zealand, which prior to electoral reform in the 1990s, had the purest two-party system among the industrial democracies outside the United States. After adopting proportional representation, the two major parties have lost a considerable share of the vote to parties like ACT New Zealand, New Zealand First, and United Future that occupy positions in the off-diagonals.

More generally, in the European countries that are substantially more secular than the United States, permissive electoral rules have allowed for the long-term maintenance of multi-party systems in which parties have staked out a fuller range of positions in a two-dimensional space including economic and moral issues.

Figure 2: Party positions in Denmark, Norway, Netherlands, and Germany

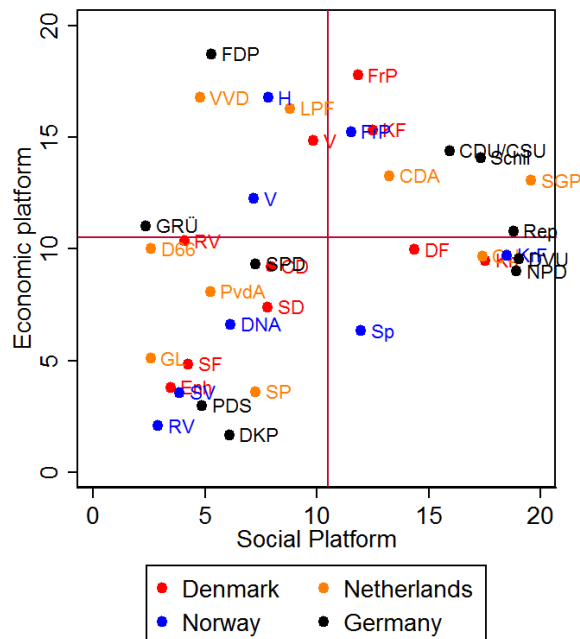


Figure 2 displays the results for several European countries of an expert survey conducted by Benoit and Laver (2006) that attempts to characterize the platforms of parties on various issue dimensions. Unlike the United States, most countries of continental Europe have parties with platforms in the off-diagonals, including various flavors of Christian Democracy as well as Agrarian and Nationalist parties in the lower right quadrant, and Liberal, Radical, or *Venstre* parties in the upper left quadrant.

1.1: Issue bundling and the dominance of economics

While religion and moral values have maintained relevance in many industrialized countries and “class voting” has declined over time, it is not controversial to claim that economic issues related to taxation and redistribution have constituted the primary dimension of electoral politics in much of the industrialized world since the early part of the 20th century.

In the United States, however, this claim has come under recent scrutiny, since a social-cultural dimension of conflict related to religion, abortion, and homosexuality appears to have gained importance since the 1980s. Bartels (2006) and Ansolabehere et al (2006) have regressed vote choice on multi-item issue scales capturing preferences on economic and moral issues. In both studies, the coefficients on the economic issue scale were consistently much larger than the coefficients on the moral scale, though the impact of the moral values dimension does seem to have increased over time. The apparent dominance of the economic dimension can be visualized in Figure 1 above, where Democratic presidential votes are represented with blue dots, and Republican votes with red dots. The red and blue dots are clearly more differentiated on the vertical axis than the horizontal axis. Extending a similar analysis to other countries, de la O and Rodden (2008) find that the coefficients for social issues also appear to be especially small relative to those for economic issues in other countries with majoritarian electoral institutions and a small number of parties.

A tempting explanation for these results is that without a full menu of political parties in the two-dimensional issue space, cross-pressured voters in countries like the United States and Britain are forced to choose between their economic and social policy preferences, and economic issues are simply more salient for more voters. By contrast, multi-party systems facilitate the “unbundling” of issues and a higher correlation between non-economic issue preferences and voting.

Unfortunately, such a conclusion cannot be drawn from these analyses. First of all, it is impossible to ascertain whether the smaller moral values coefficients are driven by differential salience among cross-pressured voters, or the possibility that parties’ platforms are further apart on the economic dimension. Second, it is possible that such models are sensitive to differences in measurement error across the two issue dimensions. More broadly, it is quite difficult to use observational data to isolate the impact of individuals’ economic and moral issue positions on vote

choice under differ contextual situations because vote choice is also driven by multiple non-issue considerations (including partisanship, valence considerations, or candidate's attractiveness) that affect issue positions and each other, and are themselves driven by observed and unobserved individual characteristics such as socio-economic status or personality. Because of this, the standard regression approach is quite sensitive to potential misspecification.

The cross-national analyses must be approached with special caution because electoral rules and the ensuing restrictions in the menu of choices might be endogenous to the strength of political cleavages in society. Restrictive electoral rules conducive to a two-party system may be more likely to emerge and stabilize in contexts that have only one main dimension of electoral conflict. Thus the lack of electoral relevance of a second dimension may be a cause rather than a consequence of the existing menu of political choices. Unfortunately, reality offers few natural experiments that researchers can exploit. While electoral and party systems change over time, drastic, truly exogenous changes are rare. Moreover, cross-national survey research on this topic is plagued with problems of measurement. Cross-national surveys rarely contain high-quality measures of economic and moral issue positions. More important, there is a problem of measurement equivalence, since the exact content of the non-economic dimension(s) of electoral competition varies substantially across countries and within countries over time. Issues that are controversial in some contexts, like same-sex marriage, stem cell research, or euthanasia, might be completely irrelevant in others due to widespread social consensus.

Our approach is to assuage these problems of causal inference with a survey experiment. We hold constant the precise issue dimensions and the platforms of candidates, altering only the menu of choices made available to the respondents. We explore one of the basic counterfactuals of comparative politics: what would happen if the United States adopted a European-style system of proportional

representation? This allows us to examine whether cross-pressured voters are more likely to suppress the social or economic dimension.

1.2 Asymmetries among cross-pressured voters

Issue-bundling has attracted attention in the comparative political economy literature because of the possibility that different types of cross-pressured voters resolve their ambivalence in different ways, with important implications for policy. Borrowing an evocative analogy from Marquis de Sade, Marxists since the mid 19th century have argued that religion is the “opiate” of the masses. As articulated by Vladimir Lenin, “Marxism has always regarded all modern religions and churches, and each and every religious organisation, as instruments of bourgeois reaction that serve to defend exploitation and to befuddle the working class.”¹ In a Democratic setting, Marxists posit that the form of this befuddlement is votes by the religious working class for parties of the right.

For dialectical materialists, political conflict will ultimately be economic in nature. While they firmly believed that religion was a pre-industrial relic that would eventually fade away, 19th century socialist thinkers were concerned that by attacking religion, they would invigorate a religious dimension of conflict, and religious workers would be forced to choose between their loyalty to the church and their loyalty to the working class. They may have also pointed out that some segment of the anti-clerical bourgeoisie might side with the left against the church in this instance, but they clearly believed the danger associated with the former outweighed any potential benefit of the latter for the left. Multi-dimensional preferences with policy-bundling, they feared, would favor the parties of the right and promote the policy agenda of the rich.

¹“The Attitude of the Workers’ Party to Religion,” *Proletary*, No. 45, May 13 (26), 1909, translated in *Lenin Collected Works*, Progress Publishers (1973: Moscow), Volume 15, pp. 402-413.

Fast forward 100 years to the contemporary *Kulturkampf* of the United States. Although the majority of voters are gradually becoming more secular and tolerant on social issues, many religious Americans have maintained a set of traditional social values, creating a disjuncture that increasingly maps onto conflicts between the parties. This has led to a revival of the Marxist story about issue-bundling, popularized by the journalist Thomas Frank (2004). Frank's arguments are somewhat difficult to pin down (Bartels 2006), but the basic logic is identical to that of classical Marxists: there is an asymmetry between the two groups of cross-pressured voters. Voters in the lower right quadrant of Figure 1—those with leftist economic preferences and right-wing social preferences whom we have termed “Christian Democrats”—are more likely to favor their social preferences when casting votes than are the economically conservative but socially progressive voters we have called “Libertarians.” Echoing the disdain of 19th century socialists, Frank explains this asymmetry as a function of low education and religious fervor. Moreover, like the early socialists he discounts the possibility that Libertarians create an offsetting advantage for the left.

The key claim is that *relative to a hypothetical scenario without policy bundling*, the strict American two-party system favors the party of the economic right because of an asymmetry in the way cross-pressured voters make choices. To our knowledge this argument has not been tested. The survey-based approaches of Ansolabehere et al (2006) and Bartels (2006) cannot address the possibility of asymmetric issue suppression because they cannot address the crucial counterfactual of “unbundled” policies. The same is true of a related study by Baldassari and Goldberg (2012) that uses a classification technique to show that as social issues have gained prominence, both types of cross-pressured voters have become more likely over time to vote for Republicans.

While these single-country studies do not explicitly contrast two-party policy bundling with a relevant counterfactual, the approaches of De la O and Rodden (2008) and Huber and Stanig (2009)

attempt to contrast “bundled” and “unbundled” conditions by using cross-country comparisons that suffer from all of the weaknesses described above. Our study achieves this comparison with a survey experiment that allows us to examine the possibility that different groups resolve their conflicting preferences in different ways.

2. Experimental design and procedures

We designed an experiment to assess the extent of issue voting in contexts with different political choices and embedded it in an online survey about religiosity and politics fielded by SSI, a polling company, in June 2013. The study, conducted in the US, contained quotas by age, education, and place of residence. Respondents could choose to take the survey in English or Spanish. We base our analysis on the 1611 respondents for whom we have complete information about the main variables.

The survey experiment, which was placed at the beginning of the questionnaire, described candidates running in an election and asked respondents to vote for one. We did not offer the option of not voting. The four treatment conditions modified the number of candidates and whether they had issue positions on the economic dimension, the moral dimension, or both. Specifically, all participants were told: “We would like to know your opinion about two [four] candidates. They have similar platforms on all major political issues except for the positions we describe below. The description is general, and is not about candidates from a specific party. Which candidate do you prefer?” We emphasized that the candidates were hypothetical and did not belong to a party in order to reduce the influence of non-issue considerations such as partisanship (e.g. Tomz and Van Houweling 2008, 2009). A description of the candidates followed.

The first two treatment conditions presented candidate that differed only on one issue dimension and were designed to elicit the baseline support for each positions in a one-dimensional conflict space. In treatment (1), which we call the “Economics Only” condition, the two candidates only had positions on economic issues. According to the description, “Candidate A wants more spending on social programs and higher taxes for wealthy citizens” and “Candidate B wants less spending on social programs and lower taxes for wealthy citizens.” Treatment (2), the “Morals Only” condition, described two candidates with positions on moral issues. The text claimed that “Candidate A wants more restrictions on abortion and a ban on same-sex marriage” and “Candidate B wants fewer restrictions on abortion and legal same-sex marriage.” We chose the issues of social spending, taxes, abortion and same-sex marriage because they are central indicators of economic and moral attitudes in the US (Treier and Hillygus 2009).

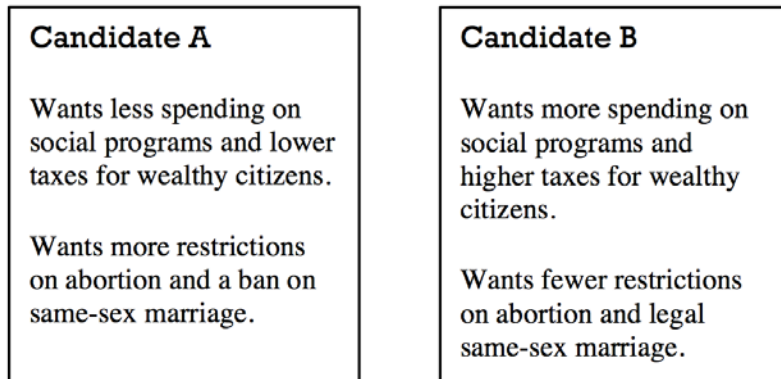
In treatments (3) and (4) candidates competed in a two-dimensional issue space. Treatment (3), the “Policy Bundling” condition, described two candidates with economic and moral positions: Candidate A was liberal on both dimensions and Candidate B was conservative. This is the only treatment that forced cross-pressured respondents to suppress their preferences on one dimension. Treatment (4), the “Unbundled” condition, described four candidates: the first candidate had left-wing positions on both dimensions; the second candidate had right-wing positions; the third candidate had left-wing economic views but right-wing moral views; and the fourth candidate had the opposite views. Hence, the four candidates occupied the four quadrants of the two-dimensional issue space and this situation freed respondents of forced choice. Table 1 summarizes the set-up:

Table 1: The treatment conditions

Condition	No. of candidates	Structure of conflict	Differences between candidates
Economics Only	2	One-dimensional	Economic issues
Morals Only	2	One-dimensional	Moral issues
Policy Bundling	2	Two-dimensional	Economic and moral
Unbundled	4	Two-dimensional	Economic and moral

In addition to randomly assigning respondents to the four treatment conditions, we also randomized the order in which the candidates appeared with the aim of avoiding order effects. Figure 3 illustrates how respondents encountered information about the candidates using condition (3) as an example.

Figure 3: Information about the candidates in the “policy bundling” treatment



The study contained extensive information about respondents’ background and political views. Here, we are interested in the impact of economic and moral issue positions on vote choice across treatment conditions. Our measure of economic positions is the factor score of six questions that tapped into attitudes towards redistribution and social insurance. Three questions asked if federal spending on unemployment benefits, Social Security, and aid for the poor should be increased, decreased or kept the same. The fourth item asked if the government should reduce income differences between the rich and the poor. The fifth item asked if health care should be provided through a government insurance plan or

through private insurance. The sixth item was about support for lowering federal income taxes for families with high incomes. The factor score has a mean of zero and a standard deviation of 1 and higher values imply more economically conservative positions.

Our measure of moral issue positions is the factor score of four questions about core moral issues: abortion, homosexual marriage, adoption by homosexual couples, and medical-assisted suicide. The factor score of moral attitudes has a mean of zero and a standard deviation of 1. Higher values stand for morally conservative views.

Central to our research question is the existence of cross-pressured voters. To assess respondents' issue orientation, we divided respondents into four groups: "Left-wing" respondents (33 percent of the sample) reported positions to the left of the mean on economic and moral issues; "Right-wing" respondents (24 percent) had right-of-center positions on both; "Christian-Democrats" (19 percent) had left-of-center positions on economic issues and right-of-center positions on moral issues; and "Libertarians" (23 percent) reported the opposite issue orientation.² According to this classification, a substantial share of the population (42 percent) experiences cross-pressures. This figure is not far off the estimates of previous research. For instance, in the National Election Study data presented above, around 40 percent of U.S. citizens are cross-pressured. The estimate of Treier and Hillygus (2009) is between 35 and 40 percent, Feldman and Johnston (2013) put the figure between 23 and 60 percent, and Baldassarri and Goldberg (2012) found that 41 percent are cross-pressured.

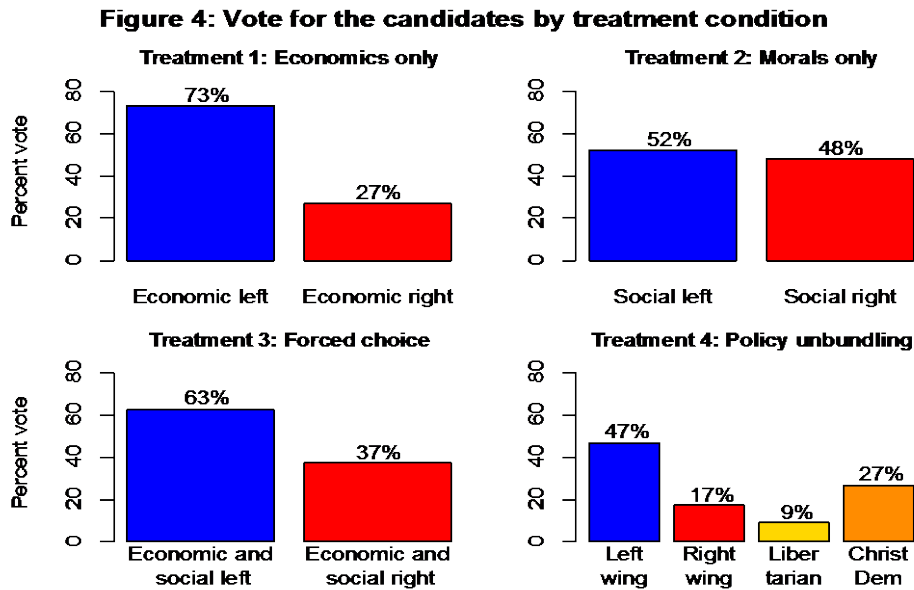
3. Results

² For a graphical display of the positions of respondents in the economic and the moral issue dimensions see Figure A.1 in the appendix.

Before testing the two main propositions, we briefly review in Figure 4 the elections results of the survey experiment. In the Economics Only condition (N=410) 73 percent of respondents chose the candidate who championed more social spending and higher taxes. Support for the left-wing candidate was lower in the Morals Only condition (N=405) at 52 percent. These figures provide the baseline level of support for each position in a context of one-dimensional political conflict. The baseline support for the economic left is quite high, which may be due to our description of the hypothetical platforms or to a left-leaning sample.³ In the Policy Bundling condition (N=392) 63 percent of respondents chose the candidate with left-wing views on economic and moral issues. Finally, in the Unbundled condition (N=404) 47 percent voted for the candidate with left-wing platforms on both dimensions. The second most preferred candidate was the Christian-Democrat, who had left-wing economic views but conservative moral views, with 27 percent of the vote. The candidate with right-wing views on both dimensions received 17 percent of the vote, and the Libertarian candidate, who opposed spending and taxes but supported abortion and same-sex marriage, got 9 percent of the vote.

³ The sample is indeed left leaning. Among self-reported voters in the 2012 presidential election, 56 percent reported that they voted for Barack Obama, 38 percent for Mitt Romney, and 5 percent for other candidates. The official figures are 51 percent, 47 percent, and 2 percent respectively. However, the distribution of key political variables such as partisan identification, ideology, or attitudes towards abortion is similar to the results of the 2012 American National Election Study (see Table A.1. in the appendix). Our sample is slightly more liberal and less religious than comparable samples, but the difference is not large.

Figure 4: Vote for the candidates by treatment condition



Note: The entries are the percentage of respondents who voted for each of the candidates, described as having different issue positions, in the four treatment conditions.

The results suggest that policy bundling can be politically consequential. Relative to the respective baseline conditions, the share of the vote for the economically conservative candidate and the morally liberal candidate was significantly higher when we introduced policy bundling. In addition, in a counter-factual four-party system, the candidates of the economic left and the moral right would do jointly better than in a two-party system with two dimensions of conflict. However, the results need to be interpreted with caution because they may be shaped by ceiling effects. A large share of respondents chose the party of the economic left in the baseline condition (about 73 percent). Hence, the introduction of a second dimension of political conflict had more room to reduce the vote for the left-wing candidate. A more detailed sub-group analysis of the choices of cross-pressured voters under different conditions is in order.

In the rest of this section we further analyze the results of the experiment addressing two main questions: Does policy bundling reduce the extent of economic and moral issue voting? Are the effects of policy bundling asymmetric across different types of voters?

3.1. The effects of policy bundling on issue voting

We begin by evaluating the extent of economic and moral issue voting across treatment conditions. Table 2 addresses the following question that is inspired by the classic comparative politics literature: compared with a situation of issue-bundling, are individual economic (moral) views a stronger determinant of voting for the economic (moral) left when voters are not forced to choose between the two dimensions? We look at economic and moral issue voting separately and include only the relevant treatment conditions in each analysis.

In Models (1) to (3) we estimate various versions of a probit regression predicting vote for the economically conservative candidate. Because the Morals Only treatment had no such candidate, we excluded cases from this condition. Model (1) includes our measure of individual economic issue position, where higher values indicate anti-redistributive views, the treatment conditions, which are added as dummy variables with Policy Bundling as the baseline condition, and the interaction of economic issue positions and the treatments. The interaction coefficient tests if policy bundling reduced economic issue voting, defined as the extent to which individual economic views affected vote choice. Economic and moral issue orientations are moderately correlated ($r=0.2$) and moral orientations can be expected to affect vote choice, especially in the Policy Bundling condition. To address this, we included individual-level moral issue position as a control variable in models (2) and (3). Model (3) also added the interaction between moral issue positions and treatment condition. Models (4) to (6) present equivalent analyses with voting for the morally conservative candidate as the dependent variable and excluding the cases from the Economics Only condition.

Table 2: Economic and moral issue voting across treatment conditions

	Vote for the economically right-wing candidate			Vote for the morally right-wing candidate		
	(1)	(2)	(3)	(4)	(5)	(6)
Economics Only condition	-0.46***	-0.45***	-0.38**			
Ref. Policy Bundling	(0.11)	(0.11)	(0.11)			
Morals Only condition				0.30**	0.34**	0.37***
				(0.11)	(0.11)	(0.11)
Unbundled condition	-0.50***	-0.50***	-0.42***	0.19+	0.22*	0.25*
	(0.11)	(0.11)	(0.12)	(0.10)	(0.11)	(0.11)
Economic issues (conservative)	0.54***	0.52***	0.55***		0.28***	0.55***
	(0.07)	(0.08)	(0.09)		(0.05)	(0.09)
Economics Only x Econ. issues	0.40***	0.40***	0.36**			
	(0.12)	(0.12)	(0.13)			
Morals Only x Economic issues						-0.42***
						(0.12)
Unbundled x Economic issues	0.48***	0.45***	0.43**			-0.36**
	(0.13)	(0.13)	(0.13)			(0.12)
Moral issues (conservative)		0.42***	0.79***	0.77***	0.76***	0.79***
		(0.05)	(0.09)	(0.08)	(0.08)	(0.09)
Economics Only x Moral issues			-0.53***			
			(0.12)			
Morals Only x Moral issues				0.47***	0.43***	0.43**
				(0.13)	(0.13)	(0.13)
Unbundled x Moral issues			-0.56***	0.26*	0.26*	0.23+
			(0.12)	(0.12)	(0.12)	(0.12)
Constant	-0.37***	-0.40***	-0.45***	-0.39***	-0.42***	-0.45***
	(0.07)	(0.07)	(0.08)	(0.07)	(0.07)	(0.08)
Pseudo R-Squared	0.24	0.30	0.32	0.33	0.36	0.37
Obs.	1206	1206	1206	1201	1201	1201

+ p<0.1, * p<0.05, ** p<0.01, *** p<0.001. Entries are probit regression coefficients (standard errors). The dependent variable in models (1) to (3) is voting for the economically conservative candidate. These models exclude cases of the Morals Only condition, which had no such candidate. The dependent variable in models (4) to (6) is voting for the morally conservative candidate. The analyses exclude the Economics Only condition.

Model (1) shows that conservative economic views were a strong predictor of voting for the economically right-wing candidate in the Policy Bundling condition. The interaction term enters with the expected positive sign, confirming our expectation that economic issue voting was even more intense in the two conditions that absolved respondents from forced choice. The economic views coefficient is

reduced very slightly in models (2) and (3) which include controls for respondents' moral views and their interaction with the treatment conditions. As expected, moral issue positions were a powerful predictor of vote for the conservative candidate in the policy bundling situation, but the negative interaction terms in model (3) suggest that this effect was much reduced in the other treatment conditions.

Model (4) finds that moral issues positions were a very strong predictor of voting for the morally conservative candidate. The positive interaction coefficient between moral opinions and treatment conditions confirms our expectation that moral issue voting was considerably larger in the absence of policy bundling. Furthermore, models (5) and (6) suggest that the position on economic issues predicted vote for the morally conservative candidate in the Policy Bundling condition, but this impact appeared to be less important in the other two conditions.

Because interactions in probit models cannot be interpreted directly, we estimated the marginal effects of individual economic and moral issue positions on vote choice. Figure 5 shows the average change in the probability of voting for the economically conservative candidate associated with a one standard deviation increase in conservative economic attitudes (left panel), and the changes in the probability of voting for the morally conservative candidate associated with a one standard deviation increase in conservative moral views (right panel). The models are based on the estimates from models (3) and (6), but the results look similar when using models (1) and (4), which include no controls, instead.

Figure 5: Issue voting across treatment conditions

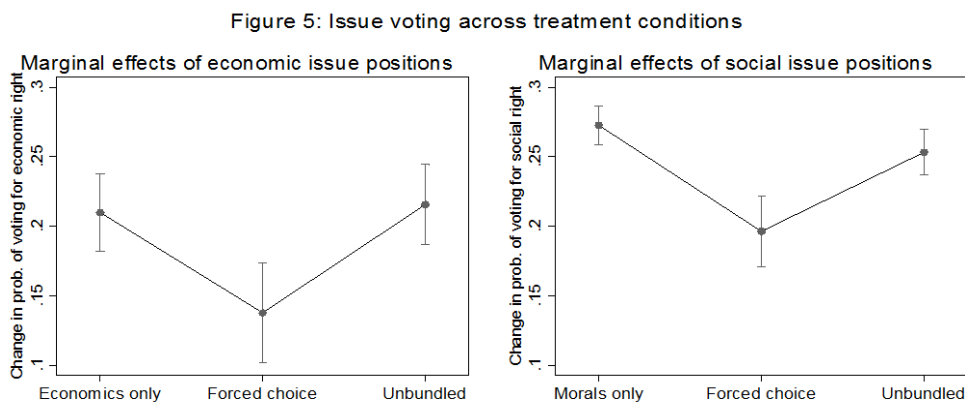


Figure 5 confirms that the Policy Bundling condition reduced the extent of both economic and moral issue voting. While the results seem to suggest that moral issue positions are a somewhat stronger determinant of vote choice than economic issue positions, the size of the estimates cannot be directly compared because they depend on the characterization of candidates' positions (e.g. describing the candidates as being more polarized might have resulted in more sorting and larger effect sizes), the distribution of the particular issue position (our economic scale is unimodal but the moral issues scale is bimodal and not normally distributed),⁴ the range of the variables (which is larger for the economic issues variable), and the scales may be plagued by differential measurement error. Hence, we do not focus on a direct comparison of the marginal effects, but assess the relative reductions in the size of the coefficients separately.⁵

A one standard deviation increase in conservative economic views is associated with a 0.14 increase in the probability of voting for the economically right-wing candidate in the Policy Bundling condition. This change in probabilities is 0.21 in the Economics Only condition (and 0.22 in the Unbundled condition). Hence, in this experiment the introduction of policy bundling reduced economic

⁴ This polarized distribution is consistent with previous findings in the literature (e.g. Ansolabehere et al 2006).

⁵ When we regress a seven-point scale for party identification on the issue scales, we get a result that is more in keeping with Bartels (2006) and Ansolabehere et al. (2006): The economic coefficient is far larger than the moral coefficient.

issue voting by 33 percent. The relative reduction in moral issue voting is similar in size. In the Morals Only condition, the marginal effect of a one standard deviation increase in conservative moral views is very large at 0.27 (0.25 in the Unbundled condition), but this coefficient is reduced to 0.20 in the Policy Bundling condition. This amounts to a 26 percent decrease (20 percent for the Unbundled condition).

The results do not confirm the hypothesis that, on average, economic views have pre-eminence over moral views. The introduction of policy bundling suppressed the impact of both economic and moral views on vote choice to a similar extent.

3.2. Asymmetries in responses to policy bundling

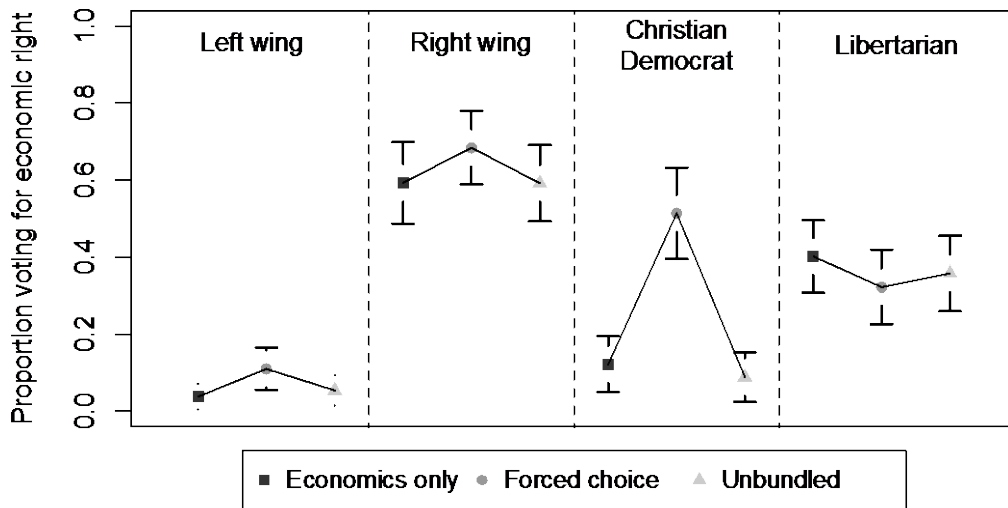
Next, we asked if policy bundling had a stronger effect on the vote choices of some types of voters. To examine this, we analyzed the results separately for four types of voters depending on their issue orientation. We are interested in two treatment effects. The first quantity of interest is the difference in the vote share for a candidate in the baseline conditions and the Policy Bundling condition. This is the treatment effect of the introduction of a second dimension of electoral competition in two-candidate systems. We also compare vote choices in the Policy Bundling and the Unbundled conditions. This comparison addresses the counterfactual question: would election results change if voters had the richer menu of political choices typical of multi-party systems?

We expected Left-wing and Right-wing respondents, who are respectively to the left and to the right of the mean position on both dimensions, to be largely unaffected by the treatment because both groups should be highly likely to choose the candidate that was close to them on both dimensions. The real focus of interest is in the reactions of cross-pressured citizens –Christian-Democrats and

Libertarians. In particular, we expected the Policy Bundling Condition to have a larger effect on the choices of Christian Democrats.

We first examine voting for the economically right-wing candidate and then switch focus to the moral positions of the candidates. Figure 6 displays the proportion of respondents that voted for the economically right-wing candidate in the three relevant treatment conditions, sub-setting by respondent’s issue orientation.

Figure 6: Vote for the economically right-wing candidate by treatment and issue orientation



Note: The y-axis shows the proportion of respondents who voted for the economically conservative candidate depending on respondents’ issue orientation across treatment conditions.

As expected, non-cross-pressured respondents exhibit small or non-existent treatment effects. Respondents classified as Left-wing voted for the economically leftist candidate in very high numbers in all conditions. While there is a statistically significant difference in the proportion of votes for the left-wing candidate in the Economics Only condition (96 percent) and the Policy Bundling Condition (89

percent), this difference is small in substantive terms. Right-wing respondents voted for the economically conservative candidate in similar numbers across treatment conditions.⁶

The treatment effects were largest for Christian-Democrats. While 12 percent voted for the economically conservative candidate in the Economics Only condition, as much as 53 percent did so in the Policy Bundling condition. The difference is highly statistically significant. In the Unbundled condition only 9 percent of Christian-Democrats voted for a candidate with economically conservative views. The difference between the Policy Bundling and the Unbundled Conditions is also highly significant. The results suggest that almost half of Christian-Democrats suppress their economic preferences and base their vote on proximity in the moral dimension when there is policy bundling compared to a situation in which the context does not force them to choose between their economic and moral views. This group of cross-pressured voters is hence highly responsive to policy bundling –the introduction of the moral dimension of political conflict often leads to different choices.

Finally, the vote choices of Libertarians do not change much across treatment conditions. True, members of this group are somewhat more likely to vote for the economically left-wing candidate in the Policy Bundling condition (70 percent) than in the Economics Only condition (62 percent) or the Unbundled condition (65 percent), suggesting that some Libertarian respondents suppress their economic preferences and prioritize their moral preferences when forced to choose. But the difference is substantively small.

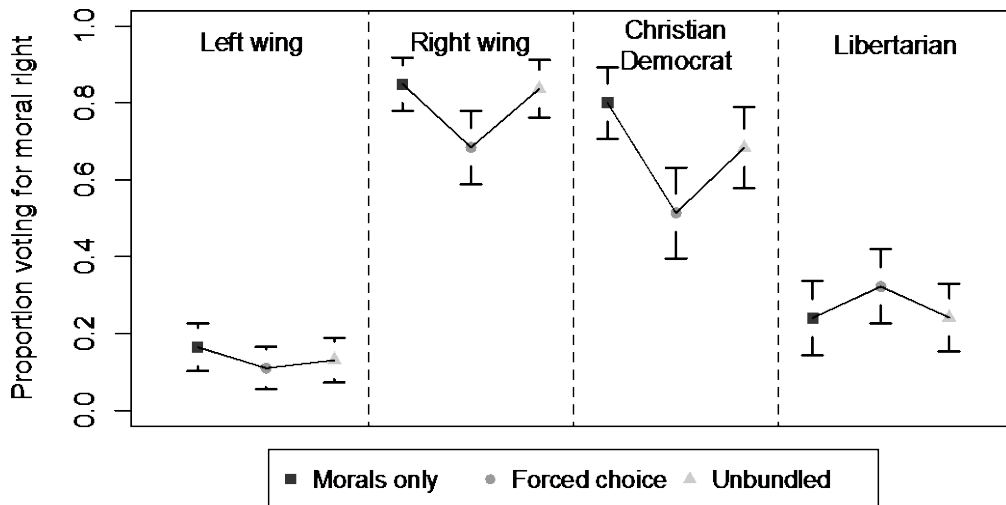
In summary, the subgroup analysis supports the claim that there is an asymmetry in voters' responsiveness to the introduction of the moral dimension of electoral competition. Voters who supported redistribution but had morally conservative views were particularly sensitive to information

⁶ Again, the fact that 40 percent of this group of right-of center respondents chose the economically left-wing candidate may suggest that the economic views of the right-wing candidate were perceived as very conservative or that the sample is relatively liberal such that some fraction of the respondents we classified as Right-wing have in fact liberal economic positions.

about the candidates' moral stances. The changes in voting behavior observed in this group were substantial and were not matched by similar shifts among the second group of cross-pressured voters, Libertarians. As a consequence of this asymmetric response, policy bundling benefited the party of the economic right.

Figure 7 looks at the results from a different perspective and examines voting for the moral right. We grouped respondents by their issue orientation and excluded responses to the Economics Only condition.

Figure 7: Vote for the morally right-wing candidate by treatment and issue orientation



Note: The y-axis shows the proportion of respondents who voted for the morally conservative candidate depending on respondents' issue orientation across treatment conditions.

Left-wing respondents were extremely unlikely to vote for the morally conservative candidate in all treatment conditions. The number of Libertarians who chose that candidate was also relatively small, ranging from 23 percent in the Morals Only condition to 31 percent in the Policy Bundling condition and the differences are not statistically significant. The largest changes happened among respondents with right-of-center moral views. About 85 percent of Right-wing respondents chose the morally conservative candidate in the Morals Only and the Unbundled conditions, but this figure dropped to 69 percent in the

Policy Bundling condition. The large and significant 16 percent points change contradicts our expectations that the treatments would not affect right-wing respondents with congruent preferences. Again, this finding may be due to the fact that many respondents who are right-of-center in this particular sample have in fact liberal preferences. Finally, Policy Bundling affected the vote choices of Christian Democrats the most. While 79 percent chose the morally conservative candidate when they did not learn about the candidates' economic positions, only 50 percent chose that candidate in the Policy Bundling condition.

The findings introduce a twist in regards to the consequences of asymmetric reactions to policy bundling. The socially conservative candidate did overall best in the conditions that absolved voters of forced choice. Hence, the introduction of policy bundling may benefit the party of the moral left.

To assess the robustness of the results we conducted two additional analyses. Firstly, we excluded moderate voters defined as respondents with economic or moral issue positions within a half standard deviation from the mean. As has been discussed, because of the composition of the sample and the description of the candidates, many respondents we classified as conservative because they had right-of-center positions in this sample may in fact prefer the liberal candidate. Excluding moderates allows us to examine if the segments of the electorate with political positions more clearly anchored in the extremes also present asymmetric reactions to policy bundling. Secondly, we replicated the analyses excluding non-voters. It is well known that in the US voters have a higher socio-economic status than non-voters and that SES is associated with political preference. Christian-Democrats may be less likely to vote in elections both because they are cross-pressured and because they have a lower SES.⁷ The

⁷ In our sample Christian Democrats reported the lowest turnout rates. While 56 percent reported that they voted in the 2012 presidential election, this figure was 70, 71, and 74 percent for Libertarian, Left-wing, and Right-wing respondents respectively. The fact that Christian Democrats are the least participatory group might suggest that the reaction of this group to changes in the menu of choices is less politically consequential than the response of other groups. However, this conclusion is premature. Christian Democrats may be less likely to vote precisely because they are cross-pressured and they may become more likely to vote in a system with no policy bundling.

analyses allow us to rule out that the results on asymmetric responses are driven by a distinct group of politically disengaged cross-pressured voters.

Table 3 reports the effect of policy bundling, defined as the difference in support for the conservative candidate in the Economics Only and the Policy Bundling, separately for all respondents (column 1), excluding economic moderates (column 2), and excluding non-voters (column 3). Positive values denote that the introduction of policy bundling increased the vote for the conservative candidate. Table 4 replicates the analyses comparing vote for the morally conservative candidate in the Morals Only and the Policy Bundling conditions. Economically (morally) moderate voters are defined as respondents with economic (moral) issue positions within one half of a standard deviation from the mean. While we focus here on the comparison of the baseline conditions and the Policy Bundling condition, table A.2 in the appendix replicates the analyses comparing the Unbundled and the Policy Bundling conditions.

Table 3: The treatment effects of policy bundling on vote for the economic right

	All respondents (1)	Excluding moderates (2)	Excluding non-voters (3)
Left-wing	7.1*	2.8	0.9
Right-wing	9.0	11.2	3.9
Christian-Democrats	38.8***	39.8***	56.1***
Libertarians	-8.6	-6.7	-3.3

+ p<0.1, * p<0.05, ** p<0.01, *** p<0.001, two-tailed. The entries of column (1) are the treatment effect of policy bundling, defined as the difference in the percentage of respondents who voted for the economically conservative candidate in Economics Only and the Policy Bundling condition. Column (2) excludes respondents with economic issue positions within one half of a standard deviation from the mean. Column (3) excludes non-voters in the 2012 presidential election.

Table 4: The treatment effects of policy bundling on vote for the moral right

	All respondents (1)	Excluding moderates (2)	Excluding non-voters (3)
Left-wing	-5.4	-10.4*	-8.3+
Right-wing	-16.4**	-3.9	-14.0*
Christian-Democrats	-29.3***	-23.4**	-16.8***
Libertarians	8.1	16.3+	6.9

+ p<0.1, * p<0.05, ** p<0.01, *** p<0.001, two-tailed. The entries of column (1) are the treatment effect of policy bundling, defined as the difference in the percentage of respondents who voted for the morally conservative candidate in Morals Only and the Policy Bundling condition. Column (2) excludes respondents with moral issue positions within one half of a standard deviation from the mean. Column (3) excludes non-voters in the 2012 presidential election.

The results with regards to voting for the economically conservative candidate are largely robust to the exclusion of some segments of the electorate. Policy bundling consistently produced very large increases in the percentage of Christian Democrats that voted for candidates with conservative economic views. The differences are highly statistically significant. Among the other groups there are no noteworthy changes when we exclude economic moderates or non-voters, suggesting that citizens with consistent economic and moral preferences as well as Libertarians are unlikely to change their vote when they learn about the candidates' moral positions. Turning to the analysis of support for the morally conservative candidate, Table 4 suggests that the results are mostly robust to the exclusion of respondents with morally moderate views and non-voters. The introduction of policy bundling did not modify the choices of right-wing citizens when we exclude moderates, which is consistent with the initial expectation that the treatments should not have an effect on people with congruent political beliefs. The introduction of the economic dimension of conflict reduced support for the morally conservative candidate by 16 percentage points among non-moderate Libertarians, suggesting that Libertarians care intensely about economic issues.

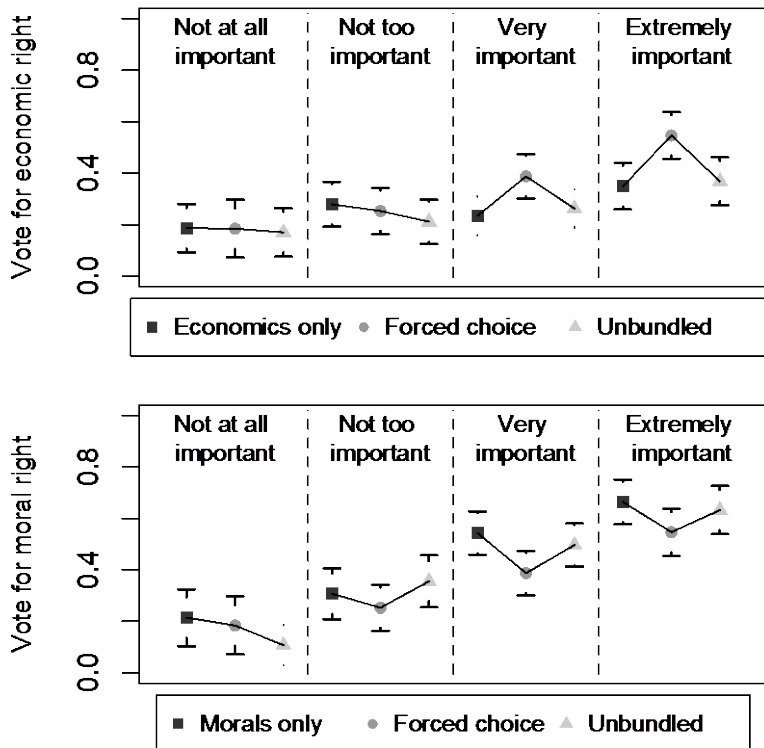
Issue voting and religiosity

The analysis so far has examined if the effects of policy bundling were conditional on respondents' issue positions. In this section we examine if religiosity moderated responses to policy bundling. We expected religious respondents to care more intensely about moral issues. Finding heterogeneous effects would provide additional evidence that the introduction of a second dimension of electoral competition has asymmetric consequences for different types of voters and, in particular, that religious citizens are more responsive to policy bundling than other citizens.

Figure 8 presents the proportion of respondents who chose the economically and the morally conservative candidate in the upper and lower panel respectively, depending on the reported importance of religion in life.⁸

⁸ The results are robust when using different measures of religiosity such as beliefs about the bible (analyses available upon request).

Figure 8: Vote choice by treatment condition and importance of religion in life



Note: The y-axis shows the proportion of respondents who voted for the economically (upper panel) or morally (lower panel) conservative candidate in the relevant treatment conditions, sub-setting by reported importance of religiosity in life.

The effect of policy bundling on voting for the economically conservative candidate was small and statistically insignificant for respondents who consider religion not important or not too important in their life. By contrast, offering information about the candidate’s moral issue positions in a forced choice situation had a large effect on the voting choices of religious voters. While 35 of respondents who consider religion extremely important voted for the economically conservative candidate in the Economics Only condition, as many as 55 voted for the conservative candidate in the Policy Bundling condition. For people who consider religion very important in their life the treatment effect of policy bundling relative to the baseline condition was 15 percentage points and statistically significant. Hence, the effect of policy bundling increased in the level of religiosity, confirming that religious respondents were more likely to change their vote choices based on information about the candidates’ moral issue

positions in a forced choice situation. When focusing on the effects of policy bundling on voting for the morally left-wing candidate we find a similar if less pronounced pattern. Respondents who did not consider religion important in their life were extremely likely to vote for the morally liberal candidate in all treatment scenarios while religious respondents were more likely to change their votes.

Finally, it can be reasoned that the asymmetric responses of religious voters may be driven by composition effects if such voters are more likely to be poor and, as predicted by distraction theories, poor voters have a larger tendency to suppress their economic preferences. However, the data clearly disconfirmed this view. The correlation between religiosity and income was very small at -0.04. We replicated the analyses (see Table A.2 in the appendix) sub-setting by three similarly sized income groups and we found that the treatment effects were visible for both poor and rich respondents.

Conclusions and discussion

The analyses provided extensive support for the hypothesis that a particular group of voters, cross-pressured religious voters with economically liberal but morally conservative preferences, are disproportionately likely to change their vote in response to policy bundling. When they are absolved of free choice, either because political conflict plays along only one dimension or because they are faced with a European-style multi-party system, some voters become more likely to support candidates that are more liberal economically and more conservative morally than when they are forced to choose in a US-style, two-candidate and two-dimensional system. These findings are consistent with the counterfactual claim that if a fuller range of options were available to voters, parties of the economic left would receive more votes. And so would parties of the moral right.

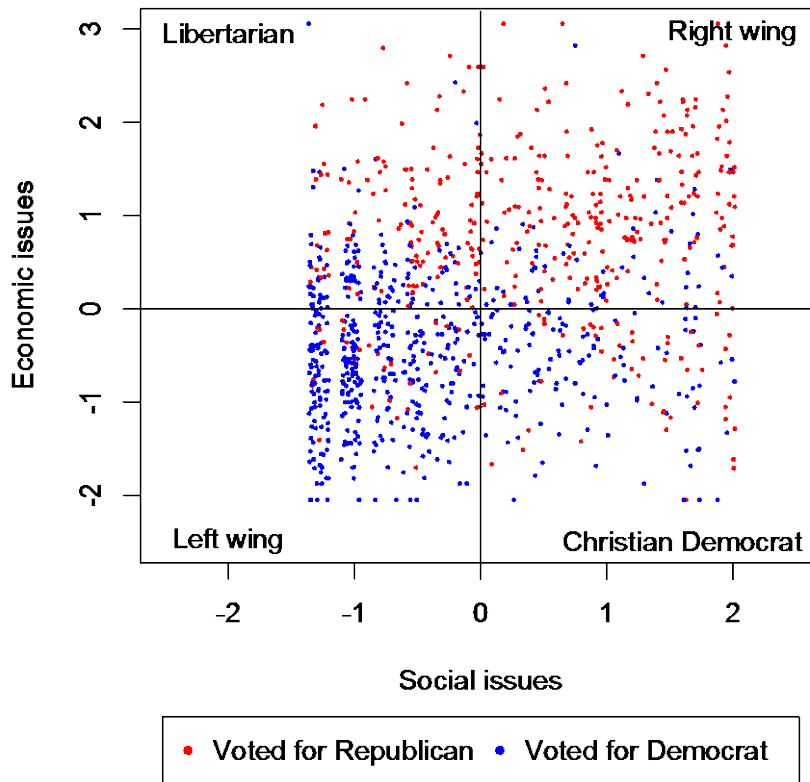
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Appendix

Figure A.1: Vote choice and issue positions in the online survey



Characteristics of the sample

Because the online survey uses a quota sample, the distribution of respondents by age, education, and region within the US is similar to the overall US population according to census estimates. However, the sample may differ from the population in important respects, which may have affected the results. In particular, the results suggest that the sample may be more liberal than the population or than similar samples. Table A.1. compares the distribution of responses to selected variables that had the same question wording in our survey and in the 2012 pre- and post-election surveys.

Table A.1: Comparison of selected questions of the online survey with the 2012 Time Series ANES

	ANES 2012 face-to-face		ANES 2012 web		2013 web
	Not weighted	Weighted	Not weighted	Weighted	Not weighted
Ideology					
Extremely liberal	4.9	3.0	3.2	3.2	7.6
Liberal	14.1	13.1	11.3	10.4	14.3
Slightly liberal	13.1	11.4	11.7	11.8	11.2
Moderate	32.6	30.7	35.2	36.0	35.4
Slightly conservative	15.5	17.1	14.7	15.0	11.5
Conservative	16.1	20.1	20.0	19.1	14.6
Extremely conservative	3.9	4.7	3.9	4.6	5.4
Party identification					
Democrat	46.8	34.6	38.1	36.1	39.8
Republican	17.3	24.9	27.6	29.4	25.2
Independent	33.8	37.2	31.2	31.1	31.8
Other party	2.2	3.3	3.1	3.5	3.2
Bible is the word of God or men					
Is the actual word of God	41.0	33.7	28.38	29.7	27.2
Is the inspired word of God	42.0	46.4	47.6	48.0	44.5
Ancient book of fables	17.0	19.9	24.02	22.3	28.3
Abortion self-placement					
Should never be permitted	12.1	11.8	11.1	12.5	13.5
Rape, incest, or danger	27.9	27.6	27.2	27.7	31.0
For other reasons	15.8	17.5	15.1	14.6	15.6
Matter of personal choice	44.2	43.0	46.6	45.2	39.9
Homosexual adoption					
Yes	63.4	66.2	60.8	61.5	63.7
No	36.6	33.8	39.3	38.6	36.3

Note: The table reports the distribution of responses for questions that had similar question wording in the 2012 American National Election Study and in the online survey conducted in June 2013.

The comparison suggests that the online sample is slightly more ideologically liberal than the ANES samples. Secondly, it is less likely to believe that the bible is the actual word of God than other samples. However, the differences are not large in magnitude. In terms of party identification and moral attitudes the distribution of responses was similar to the ANES responses. Hence, we conclude that the sample was slightly more liberal and less religious than the overall population.

Additional robustness checks

Table A.2: Difference in vote for the economic right in the Unbundled and the Policy Bundling conditions

	All respondents (1)	Excluding moderates (2)	Excluding non- voters (3)
Left-wing	5.6	3.6+	1.0
Right-wing	9.2	7.8	2.9
Christian-Democrats	41.9***	46.4***	59.2***
Libertarians	-4.2	-2.5	-3.6

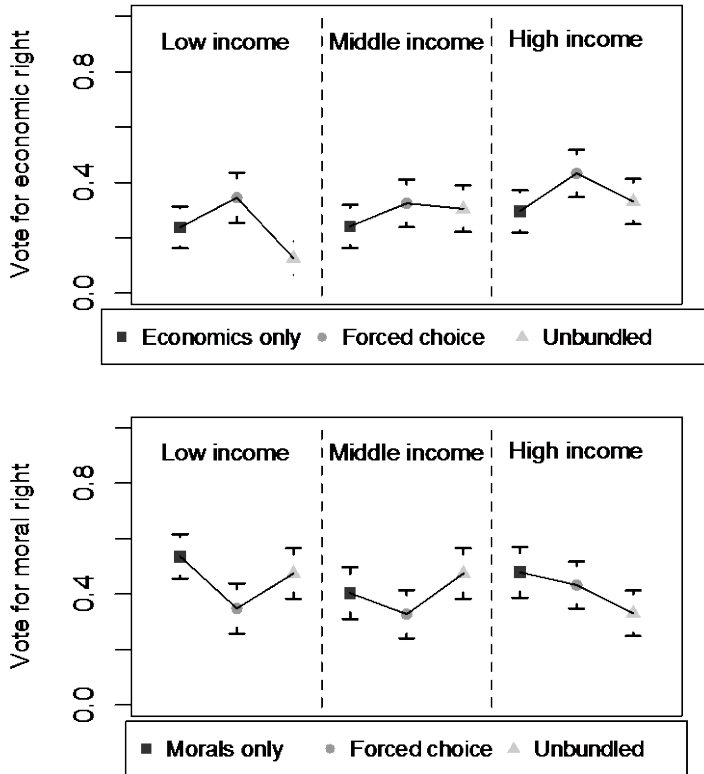
+ p<0.1, * p<0.05, ** p<0.01, *** p<0.001, two-tailed. The entries of column (1) are the differences in the percentage of respondents who voted for the economically conservative candidate in the Unbundled and the Policy Bundling condition. Column (2) excludes respondents with economic issue positions within one half of a standard deviation from the mean. Column (3) excludes non-voters in the 2012 presidential election.

Table A.3: Difference in vote for the moral right in the Unbundled and the Policy Bundling conditions

	All respondents (1)	Excluding moderates (2)	Excluding non- voters (3)
Left-wing	-2.1	-6.4	-5.1
Right-wing	-15.1*	-4.9	-21.7***
Christian-Democrats	-18.1*	-18.4+	3.1
Libertarians	7.4	17.1+	12.3

+ p<0.1, * p<0.05, ** p<0.01, *** p<0.001, two-tailed. The entries of column (1) are the differences in the percentage of respondents who voted for the morally conservative candidate in the Unbundled and the Policy Bundling condition. Column (2) excludes respondents with moral issue positions within one half of a standard deviation from the mean. Column (3) excludes non-voters in the 2012 presidential election.

Figure A.2: Vote choice by treatment condition and income



Note: The y-axis shows the proportion of respondents who voted for the economically (upper panel) or morally (lower panel) conservative candidate in the relevant treatment conditions, sub-setting by income.