(IN)CONGRUENCE:
A STUDY OF OPINION-POLICY DISTANCE IN 33 DEMOCRACIES

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Abstract

This article seeks to answer two questions. First, is government policy in contemporary democracies congruent with public opinion? Second, what are the factors that determine opinion-policy congruence? The opinion-policy incongruence is conceptualized as the distance between actual government policy and the policy preferred by the median citizen. This article uses international survey data that assessed citizens' preferences regarding government spending in 33 countries. The results suggest that opinion-policy congruence is more often absent than present in contemporary democracies with significant variation between countries. This variation is explored using fuzzy-set Qualitative Comparative Analysis (fsQCA). I identify two causal paths leading to the opinion-policy congruence: richness and relatively equal distribution of income or richness, decentralization, and usage of non-proportional electoral system.

Keywords: median citizen, opinion-policy congruence, public preferences, QCA.

1. Introduction[1]

For almost 200 years, the trend in Western democracies was enfranchisement of the masses. Power shifted from unelected monarchs to popular representatives, while political rights, initially the province of a privileged few, were gradually expanded to most of the population. In the last decades of the twentieth century, however, this trend of increased mass involvement in politics seems to have reversed. The large, community-embedded mass parties gave way to smaller and more professionalized cartel parties.[2] Trade unions lost membership and influence. Governments began to delegate decision-making authority to independent regulatory agencies. Last but not least, after a period of so-called "eurosclerosis", the process of European integration gained momentum again in the late 1980s; important powers were ceded to European institutions whose popular legitimacy is often questioned. In this context, complaints about "democratic deficits" abound.[3]

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1   This article is based on my MA thesis (Central European University 2012). I wish to thank Carsten Q. Schneider and Levente Littvay for their valuable comments and advice.
2   Richard S. Katz, and Peter Mair, "Changing Models of Party Organization and Party Democracy. The Emergence of the Cartel Party," *Party Politics* 1(1995): 5-28.
3   David Beetham, Unelected Oligarchy: Corporate and Financial Dominance in Britain's Democracy (Liverpool: Democratic Audit, 2011).

An empirical analysis of the relationship between citizens' political preferences and government policy is thus badly needed. This is what I attempt in this article. Using survey data from 33 countries, I explore whether government policy is congruent with public preferences. I examine whether there are differences in opinion-policy congruence across different countries and try to identify which factors, institutional or otherwise, can explain these patterns. My research questions are thus twofold. First: Is government policy in contemporary democracies congruent with public opinion? Second: What are the factors that determine opinion-policy congruence?

2. Gaps in the literature

The study of how politicians respond to public opinion has a long tradition, starting with the work of Miller and Stokes[4], who found a link between U.S. Congressmen's votes and public opinion in their respective constituencies. Following in Miller and Stokes' footsteps, subsequent studies on the effect of public opinion on politics have generally relied on Parliament roll call votes[5] or on various measures of party ideology (manifestos, expert surveys, voter assessments)[6] as their dependent variable. In effect, such studies examine whether the preferences of politicians are influenced by the preferences of the voters. However, there is a rich literature in public choice theory and in political economy that suggests that the preferences of politicians are not the only determinant of public policy. The details of policy implementation, for example, are usually left to unelected bureaucracies who enjoy a substantial degree of independence from interference by elected politicians.[7] Furthermore, important functions of government, such as monetary and regulatory policy, are frequently delegated to agencies with a high degree of autonomy and whose democratic accountability is often doubtful.[8] Thus, a true audit of the complex of institutions that is modern democracy requires that we examine the relationship between public opinion and actual policy instead of the one between

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4   Warren E. Miller, and Donald E. Stokes, "Constituency Influence in Congress," *American Political Science Review* 57 (1963): 45-56.

5   Christopher H. Achen, "Measuring Representation," *American Journal of Political Science* 22 (1978): 475-510; Larry M. Bartels, "Opinion and Congressional Policy Making: The Reagan Defense Build Up," *American Political Science Review* 85(1991): 457-474; Sören Holmberg, "Dynamic Opinion Representation, "*Scandinavian Political Studies* 20(1997): 265-283.

6   James A. Stimson, "Party Government and Responsiveness," in *Democracy, Accountability, and Representation*, ed. Adam Przeworski, Susan C. Stokes, and Bernard Manin (Cambridge: Cambridge University Press, 1999); André Blais, and Marc André Bodet, "Does Proportional Representation Foster Closer Congruence Between Citizens and Policy Makers?" *Comparative Political Studies* 39 (2006): 1243-1262.

7   William A. Niskanen, *Bureaucracy and Representative Government* (Chicago: Aldine, Atherton, 1971).

8   Giandomenico Majone, "Two Logics of Delegation. Agency and Fiduciary Relations in EU Governance." *European Union Politics* 2(2001): 103-122.

public opinion and politicians' preferences, be they measured by roll call votes or party ideology.

Unfortunately, fewer authors have investigated the link between public preferences and actual government policy. Of those few that do investigate the influence of public opinion on policy, almost all focus on a single country, usually the United States.[9] Unfortunately, such single-country longitudinal studies usually limit themselves to examining if policy moves in tandem with opinion and almost never investigate the factors that determine whether policy is congruent or incongruent with public opinion. This happens because the factors we would most expect to influence opinion-policy congruence, like institutions and political culture, are generally stable over relatively long periods.

Some single-country longitudinal studies have tried to explain opinion-policy congruence using variables that do vary in the medium run, like the party in power or the size of the majority in parliament. Stimson, Mackuen, and Erikson[10], for example, find that public opinion and policy in the United States were closer during Democratic presidencies and farther away during Republican ones. Nevertheless, most variables of interest, like electoral systems and political regime, do not change even in the medium run, so a different research design is needed to determine their effects on opinion-policy congruence.

This article thus fills two gaps in the literature. First, it studies actual policy instead of votes in Parliament or party ideology. Second, it provides an extensive comparison of opinion-policy congruence in 33 nations rather than focusing on a single case. By examining 33 different countries, with diverse political cultures and institutional arrangements, I shed new light on the determinants of opinion-policy congruence. My analysis includes variables whose effect on opinion-policy congruence has never been investigated (the level of income inequality), but also involves hypotheses that have previously been suggested but have never been tested in a rigorous manner (decentralization[11], electoral systems[12]).

9   Patrick Flavin, "Income Inequality and Unequal Political Representation in the American States", APSA 2009 Toronto Meeting Paper; Jeffrey R. Lax, and Justin H. Phillips, "The Democratic Deficit in the States." *American Journal of Political Science* 56(2012): 148-166.

10   James A. Stimson, Michael B. Mackuen, and Robert S. Erikson, "Dynamic Representation, " *American Political Science Review* 89 (1995): 543-565.

11   Stuart N. Soroka, and Christopher Wlezien, "Opinion Representation and Policy Feedback: Canada in Comparative Perspective," *Canadian Journal of Political Science / Revue canadienne de science politique* 37 (2004): 531-559.

12   Larry M. Bartels, "The Opinion-Policy Disconnect: Cross-National Spending Preferences and Democratic Representation," prepared for the Annual Meeting of the American Political Science Association, 2008.

3. Measuring opinion-policy distance

I conceptualize the incongruence between public policy and public preferences as the intensity with which the median citizen disagrees with current government levels of spending. To better understand how this can be measured in practice, let us imagine that, on a specific issue, citizens' preferences regarding the level of government spending can be represented on a straight line, with higher preferred levels of spending to the left and lower preferred levels to the right. Government's actual policy position can also be represented on the same line. We can then measure a given citizen's satisfaction with public policy as simply the distance between his position on the line and the government's position. Figure 1 shows such a line, with two possible distributions of citizen preferences along it (red and blue).

Figure 1: Two possible distributions of spending preferences among citizens
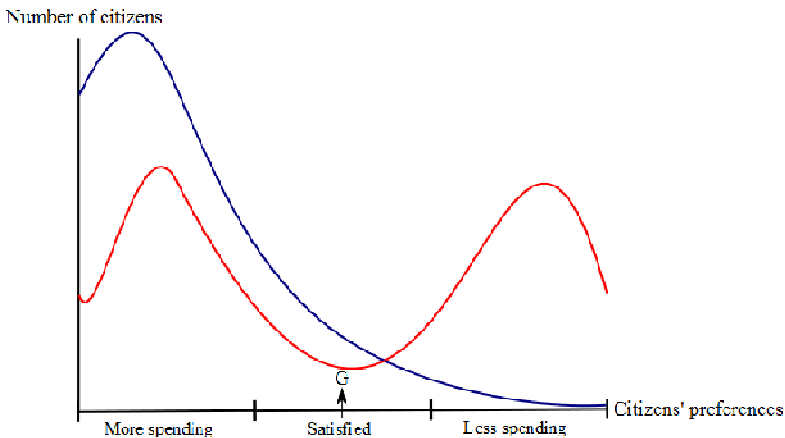
In the figure above, citizens are classified into three categories according to their relative position regarding government's actual level of spending. We can compute the relative position of the median citizen vis-à-vis government spending simply by subtracting the percentage of people who want less spending from the percentage of people who want more:

$$M = (\% \text{ who want more spending}) - (\% \text{ who want less spending}).$$

M will represent the distance from the median citizen to the government's actual policy.[13] In other words, the indicator tells us how satisfied the median citizen is with current government policy. If M=0, this means that those who agree with government levels of spending and those who disagree exactly balance each other out and that the median citizen is in total agreement with government levels of spending.[14] On the other hand, if absolutely all citizens wants more spending (and none want less), then M will be 100. In other words, the median citizen will want considerably more spending. Similarly, if all citizens want less spending (and none want more), the M will be -100, which indicates that the median citizen wants considerably less spending. M can take any value between these two extremes (-100 and 100); negative values suggest that the government is spending more than people would prefer, while positive values indicate a bias towards too little spending. Its absolute value can be considered a measure of the median's citizen disagreement with the actual level of policy.

The median citizen has important normative relevance. It can be shown that, if people's satisfaction with government policy is proportional to how close it is to their ideal points, then the policy that maximizes general welfare will be the one which reflects the preferences of the median citizen.[15] A high level of agreement between the median citizen and government actual policy can thus be seen as a normative standard for evaluating a political regime.

Of course, condensing a frequency distribution to a single number will lead to information loss. Two distributions that are substantively different might receive the same numerical score. Nevertheless, I have argued that, from both a normative and an empirical point of view, the median citizen score is appropriate for summarizing a distribution of public preferences. As describing public preferences using a single indicator makes data presentation and analysis more manageable, I consider the loss of detail to be well worth the trade-off.

4. Is there opinion-policy congruence in contemporary democracies?

Table 1 shows the results of applying the median citizen indicator to survey data that measure public preferences regarding government spending in thirty-three

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13   Obviously, continuous measures of a person's relative position to government policy would allow us to compute the median voter indicator in a more accurate manner. Opinion polls, however, generally use a small number of categories when asking people to describe their positions. The fact that my indicator uses discrete rather than continuous measures of distance reflects this.

14   This assumes a symmetric distribution within the "Satisfied" category.

15   Otto A. Davis, Melvin J. Hinich, and Peter C. Ordeshook, "An Expository Development of a Mathematical Model of the Electoral Process." *American Political Science Review* 64 (1970): 426-448.

countries. The data comes from the Role of Government module of the 2006 International Social Survey Program (ISSP). For eight different policy areas (unemployment, environment, health, law enforcement, education, defense, retirement, culture), people were asked whether the government should spend much more, more, about the same, less, or much less. Adapting it to the question format, our median citizen indicator becomes:

M = (% who answered "much more" + % who answered "more") – (% who answered "less" + % who answered "much less").

Table 1 offers us a wealth of information regarding the link between public preferences and government policy in contemporary democracies. First of all, we can see that government policy is often incongruent with median citizen preferences. Of the 262 country-issue couplets presented in table 1, 125 (or 48%) show levels of disagreement below 50 and only 68 (or 26%) show levels of disagreement below 33. We can thus see that, for most countries and for most policy areas, the median citizen substantially disagrees with government policy.

Another interesting result is that governments generally spend less than the median citizen would want. Of the 262 country-issue pairs, for only 39 (or 15%) of them is the median citizen indicator negative. It thus seems that a median citizen which actually wants less spending is a rare occurrence. If we divide the -100-100 scale of our indicator into three discrete categories (-100 - -33 = wants less spending, -33 – 33 = satisfied, 33 - 100 = wants more spending), we can see that 181 (69%) of our country-issue couplets have median citizens that want substantially more spending, 68 (26%) have median citizens that are satisfied with levels of government spending, and only 13 (5%) have median citizens that want substantially less government spending.

Another insight we gain by looking at Table 1 is that median citizen satisfaction has significant variability between policy areas and, more importantly, between nations. For the purpose of creating a measure of overall congruence I employ factor analysis, a statistical technique that can be used to reduce a number of variables to their underlying dimensions.[16] In our case, this procedure will assume that the eight issue-specific congruence variables are indicators of an unobserved "overall" opinion-policy congruence and will estimate the correlation coefficients between each variable and this latent dimension. Table 2 shows the factor loadings and the unique variances for the congruence variables for each of the eight policy areas.

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16   Jae-On Kim, and Charles W. Mueller, *Factor Analysis. Statistical Methods and Practical Issues* (Thousand Oaks, CA: Sage, 1978), 19.

Table 1: Median citizen disagreement with government policy in 33 countries

Country	Unemployment	Environment	Health	Law enforcement	Education	Defense	Retirement	Culture	AVERAGE[17]
Australia	-27.34	54.08	89.91	65.07	79.12	3.9	50.75	-29.86	50
Canada	8.65	42.13	74.23	48.83	63.79	24.8	49.15	-15.55	40.89
Chile	76.44	28.36	95.05	48.51	94.65	-20.82	91.35	19.4	59.32
Taiwan	44.95	60.2	45.8	53.65	60.84	15.05	46.64	34.3	45.18
Croatia	62.66	66.64	87.52	21.4	88.37	-7.07	89.69	47.87	58.9
Czech Republic	-20.65	39.94	68.32	18.01	59.69	-33.96	56.49	-3.41	37.56
Denmark	0.15	50.75	79.73	61.09	60.81	-50.35	49.09	-38.67	48.83
Dominican Republic	NA	57.92	97.29	46.37	95.44	36.11	71.4	55.43	65.71
Finland	21.54	37.41	79.1	49.44	39.29	-18.09	70.3	-33.43	43.56
France	-26.44	44.51	51.9	19.97	50.64	-40.59	38.85	-20.45	36.67
Germany	14.77	26.91	59.78	36.45	80.3	-43.8	45.35	-18.03	40.67
Hungary	19.61	63.01	92.91	39.05	71.68	-3.71	74.87	41.11	50.74
Ireland	42.52	64.81	92.08	78.83	87.34	-2.37	89.89	15.71	59.19
Israel	13.42	54.03	88.83	54.04	90.69	38.11	80.34	31.46	56.37
Japan	8.63	51.25	55.32	5.27	46.21	-16.6	49.64	-4.64	29.7
South Korea	38.79	68.27	79.18	59.82	63.83	16.73	73.07	27.71	53.43
Latvia	26.17	53.15	86.73	34.92	77.45	-2.08	85.66	33.96	50

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17   Computed using the absolute values of the indicator.

Netherlands	-22.94	24.12	68.33	47.66	70.94	-57.01	36.85	-42.51	46.3
New Zealand	-51.46	28.12	82.74	63.01	68.97	2.86	50.78	-30.57	47.31
Norway	-2.48	34.06	84.78	69.21	60.85	-26.2	57.2	-36.12	46.36
Philippines	NA	54.67	85.23	31.06	86.28	37.34	80.96	44.75	60.04
Poland	37.82	60.38	91.29	60.83	78.28	36.35	91.16	43.18	62.41
Portugal	52.58	64.89	92.91	56.65	84.19	4.02	91.2	37.07	60.44
Russia	48.58	66.9	87.97	27.82	83.52	64.86	90.06	54.88	65.57
Slovenia	19.3	64.23	78.97	23.49	78.33	-39.37	56.8	24.9	48.17
South Africa	61.7	27.25	86.98	56.89	82.53	13.91	75.05	17.42	52.72
Spain	52.1	67.05	86.24	76.76	85.91	-24.13	81.31	36.73	63.78
Sweden	2.16	35.11	78.36	65.65	49.3	-36.21	57.73	-24.61	43.64
Switzerland	17.21	52.4	38.73	21.62	68.75	-56.7	52.67	0.73	38.60
Great Britain	-22.88	53.57	80.67	59.75	71.69	7.1	72.8	-36.19	50.58
United States	22.97	40.95	74.22	47.8	78.62	9.02	57.26	-5.52	42.05
Uruguay	57.08	40.51	89.67	82.28	91.58	-32.05	87.39	31.14	63.96
Venezuela	74.79	46.14	85.68	65.69	86.95	23.43	90.49	63.94	67.14
AVERAGE	32.22	49.2	79.29	48.39061	73.84	25.6	67.95	30.34	

I chose to retain a single factor for both empirical and theoretical reasons. Theoretically, the eight issue-specific congruences can all be considered to be components of a single, more general concept of opinion-policy congruence. Empirically, attempts at retaining more than one factor created factors that were significantly correlated with only one of the eight variables and thus did not reduce the data to a simpler structure.

Table 2: Factor loadings and unique variances for issue specific congruence

Variable	Factor1	Uniqueness
unemployment	0.7768	0.3965
environment	0.4786	0.7710
health	0.6760	0.5430
lawenforce~t	0.2901	0.9159
education	0.6947	0.5174
defense	0.5562	0.6907
retirement	0.9268	0.1410
culture	0.8556	0.2679

I then compute a country's overall opinion-policy congruence score as a weighted average of its eight issue-specific congruence scores, with the scores for each area being multiplied by that area's factor loading in the factor analysis described above. I thus assume that overall congruence is a linear combination of issue specific congruences and that the factor loadings for each issue are the coefficients of this linear combination.

5. Wealth and opinion-policy congruence: a statistical analysis

Table 3 presents this overall opinion-policy distance score for each of the 33 countries and also shows their level of GDP per capita in 2006 (the year in which the surveys used to measure opinion-policy distance were taken). From an inspection of the table, it can be seen that the countries with the smallest distance between the preferences of the median citizen and actual government policy tend to have a high GDP per capita, while the countries with the largest distance between the median citizen and government policy tend to have a low GDP per capita. This suggests that a country's level of wealth might play an important role in determining whether it will achieve opinion-policy congruence.

Table 3: Opinion-policy distance and GDP per capita

Country	Opinion-policy distance	GDP per capita (2006) – U.S. dollars
Japan	29.695	31837.8
France	36.6688	30322.2
Czech Republic	37.5588	19478.2
Switzerland	38.6012	33793.5
Germany	40.6738	31571.6
Canada	40.8913	35747.9
United States	42.045	43202.9
Finland	43.575	32822.4
Sweden	43.6413	31235.1
Taiwan	45.1787	29086.7
Netherlands	46.295	32061.9
Norway	46.3625	44341.9
New Zealand	47.3138	25625.7
Slovenia	48.1738	23250.3
Denmark	48.83	36079.5
Australia	50.0037	32127.5
Latvia	50.015	13784.3
Great	50.5812	31627.6
Hungary	50.7438	18491.5
South Africa	52.7163	12786.9
South Korea	53.425	21876.6
Israel	56.365	24297
Croatia	58.9025	12885.1
Ireland	59.1937	42858.9
Chile	59.3225	12737.1
Philippines	60.0414	5159.91
Portugal	60.4388	19948.5
Poland	62.4113	13797.2
Spain	63.7788	27542.5
Uruguay	63.9625	10580.1
Russia	65.5738	11904.3
Dominican Republic	65.7086	7550.51
Venezuela	67.1387	6467.17

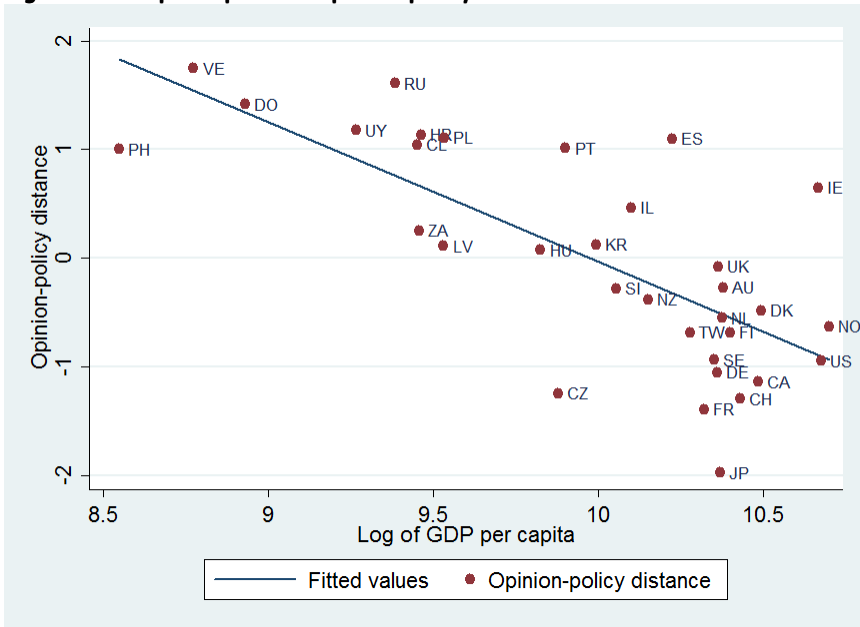**Figure 2: GDP per capita and opinion-policy distance**

Figure 2 shows the relationship between GDP per capita and the distance between public opinion and public policy for the 33 countries included in my dataset. Table 4 presents the corresponding univariate regression equation.

Table 4: Overall opinion-policy distance regressed on logged GDP per capita.

Dependent variable: Overall opinion-policy distance.	
Intercept	12.82 *** (2.16)
Log GDP Per Capita	-1.29*** (0.22)
R-squared	0.53

* p<0.05, ** p<0.01, *** p<0.001

Both the scatter plot and the regression table indicate a positive relationship between GDP per capita and policy-opinion congruence. In general, public opinion and public policy more will be more closely aligned in richer countries than in poorer countries. Variation in per capita GDP explains about 53 percent of the cross-national variation in opinion-policy congruence.

Why does GDP per capita have a positive effect on opinion-policy congruence? One plausible explanation is that poorer states have less capacity to implement the policies desired by their citizens.[18] We should therefore expect decision makers in poorer countries to have a more restricted set of policies from which they can choose.[19] Politicians in poor countries, even if they are benevolent, will thus be less likely to be able to implement the specific policies desired by the public.

A second reason why public opinion and government policy might be more closely aligned in richer countries is that politicians there are more likely to be held accountable by the public. On the one hand, wealthy countries are more likely to have a developed mass media system than can monitor politicians' actions and transmit this information to the public.[20] On the other hand, wealthier people tend to be more informed about politics, and thus are more likely to identify whether government policy matches their preferences or not.[21] In conjunction, these two facts suggest that, compared to policymakers in poorer countries, those in wealthy countries will be more likely to be punished if policy strays too far from what the public prefers; politicians in rich countries will thus have higher incentives of moving policy in the direction of the public opinion.

Despite the reasonably strong positive relationship between GDP per capita and opinion-policy congruence, several outlier cases can be seen in figure 2. Most notably, Japan and the Czech Republic have much higher levels of congruence than we would expect given their GDP per capita, while the level of opinion-policy congruence in Spain and Ireland is much lower than what their GDP per capita would predict.

Also of note in figure 2 is that richer countries are more likely to be outliers than poorer ones. The data-points in figure 2 form a funnel-like patter around the regression line, with poorer countries sticking close to the regression line and richer ones being much more dispersed. In other words, GDP per capita serves as a good predictor of opinion-policy congruence for poor countries but not for rich ones. The fact that the regression residuals are correlated with the independent variable indicated heteroskedasticity and thus missing factors.[22] The pattern in figure 2 can also be interpreted in terms of sufficiency. Being poor seems to be sufficient for a country to have low levels of opinion-policy congruence (all countries with GDP per

18   Timothy Besley, and Torsten Persson, "The Origins of State Capacity: Property Rights, Taxation, and Politics." NBER Working Paper Series, National Bureau of Economic Research (2007).
19   Ibid.
20   Ibid.
21   Ibid.
22   John Fox. *Regression Diagnostics*. (London: Sage Publications, 1991).

capita lower than 19 000 dollars have low levels of congruence). Being rich, however, is clearly not sufficient for having a high level of congruence.

Another way of interpreting the scatter plot in figure 2 is that, for about a third of the countries in our sample, we have found a good explanation for the observed levels of opinion-policy congruence. Chile, Croatia, the Dominican Republic, Hungary, Latvia, the Philippines, Poland, Russia, South Africa, Uruguay, and Venezuela all have the relatively low levels of opinion-policy congruence we would expect given their GDP per capita. Given that all poorer countries tend to have low levels of congruence, regardless of their institutions or other characteristics, we can safely conclude that wealth is the main factor that explains the low level of congruence in poorer nations.

Figure 3: Income per capita and opinion-policy distance (only countries with GDP per capita > $19,000 included).
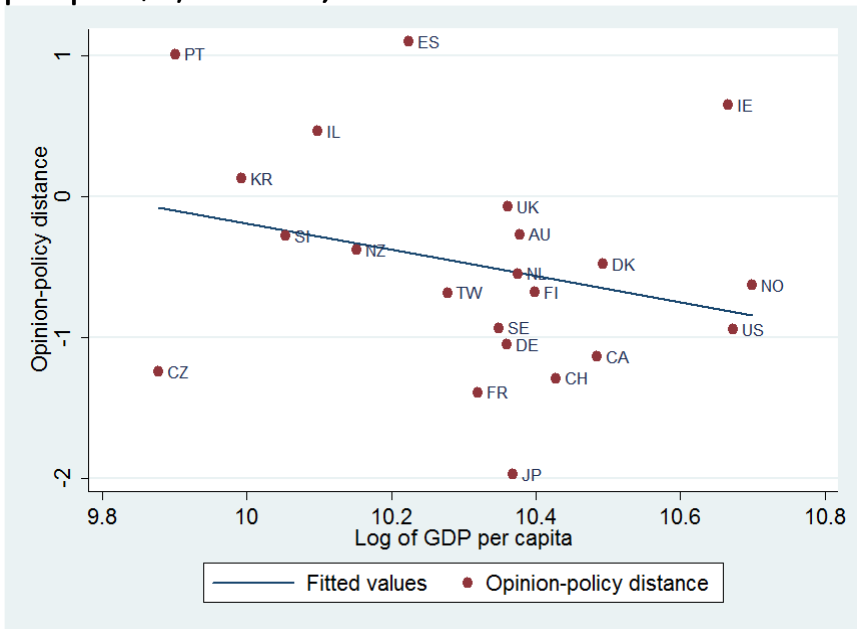
What we cannot explain yet, however, are the congruence levels seen in richer countries. Spain and France, for example, have very a similar GDP per capita but Spain has one of the lowest opinion-policy congruence levels in the sample while France has one of the highest. Likewise, Ireland and Japan have similar levels of GDP per capita, but Japan has the highest congruence score in the sample while Ireland has one of the lowest. It is thus clear that, for richer countries, there are some factors besides GDP per capita that influence their opinion-policy congruence

levels. This conclusion is reinforced by figure 3, which shows the relationship between GDP per capita and opinion-policy distance only for countries with a GDP per capita higher than 19,000 $. We can clearly see that the relationship between GDP per capita and opinion-policy congruence is much weaker for this subset of countries than it is for the entire sample. In fact, GDP per capita only explains about 7 percent of the variance in congruence among this subset of countries. What this means is that we need to look at other variables to explain why public policy matches public opinion in some rich countries but not in others.

6. Wealth and opinion-policy congruence: a set-theoretical analysis

The pattern of data points in figure 2 suggests that having a high GDP per capita is a necessary but not sufficient condition for having high opinion-policy congruence. In what follows, I will offer a more rigorous test of this hypothesis. For this purpose, I will use the method of fuzzy set Qualitative Comparative Analysis (fsQCA), which is well suited for investigating relationships of necessity and sufficiency. Fuzzy set QCA is different form crisp set QCA (csQCA) in that it allows for different degrees of membership in a set. This means that fsQCA can capture not only qualitative differences between cases, but also quantitative differences between them.[23]

The index of opinion-policy distance that I developed ranges from 0 (perfect congruence) to 100 (total incongruence). A score of 50 marks a qualitative difference on our index: in countries that score more than 50, those that wish for a change of government policy in a particular direction outnumber those that prefer a change in the other direction by more than 50 percentage points. A score of 50 will thus serve as a qualitative anchor in transforming the values of my incongruence index into set membership scores. A score of 50 on a particular policy area will thus correspond with a set membership of 0.5 in the set of countries in which opinion and policy in that area are congruent. I will also use two other qualitative anchors for set calibration. A opinion-policy distance score of 33 will correspond to a membership score of 0.95 in the set of countries in which policy and opinion are congruent, while a opinion-policy distance score of 66 will correspond to a membership score of 0.05 in the set of countries in which policy and opinion are congruent. In short, my calibration function can be represented as follows:

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23   Carsten Q. Schneider, and Claudius Wagemann. *Set-Theoretic Methods for the Social Sciences: A Guide to Qualitative Comparative Analysis* (Cambridge: Cambridge University Press, 2012).

$$\text{Membership score (Opinion and policy are congruent)} \begin{cases} >0.95 \text{ if Opinion-policy distance} < 33 \\ >0.5 \text{ if Opinion-policy distance} < 50 \\ <0.05 \text{ if Opinion-policy distance} > 66 \end{cases}$$

Opinion-policy distance values are then transformed into set membership scores using a logistic function, according to Charles Ragin's direct method of calibration.[24]

I also use a GDP per capita of 19 000 dollars as a qualitative anchor; I chose this value of GDP per capita to serve as a qualitative because it is typical of middle-income countries (Hungary, the Czech Republic). Thus, a country which has a GDP per capita of 19 000 dollars will have a membership score of 0.5 in the set of rich countries. I also use two other qualitative anchors in my calibration: a GDP per capita value of $4 000 corresponds to a membership score of 0.05 in the set or rich countries, while a GDP per capita of $38 000 corresponds to a membership score of 0.95 in the same set. I chose these scores as qualitative anchors because they characterize they characterize the typical poor (the Philippines) and the typical rich (Ireland, Denmark, Switzerland) countries in my sample. My use of qualitative anchors can be summarized as follows:

$$\text{Membership score (Rich country)} \begin{cases} >0.95 \text{ if GDP per capita} > \$38\,000 \\ >0.5 \text{ if GDP per capita} > \$19\,000 \\ <0.05 \text{ if GDP per capita} < \$4\,000 \end{cases}$$

Any countries with GDP per capita higher than $38 000 will have a membership near 1. (In other words, a country with a GDP per capita of $40 000 and one with a GDP per capita of $80 000 will have almost the same membership score in the set of rich countries, even though the latter's GDP per capita is twice as much as the former's. Such countries might have different membership scores in a set of very rich countries.)

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24   Charles C. Ragin, "Measurement versus Calibration. A Set-theoretic Approach," in *The Oxford Handbook of Political Methodology*, ed. Janet M. Box-Steffensmeier and David Collier (Oxford: Oxford University Press, 2008), 186-190.

Table 5 shows the countries included in my analysis and their membership scores in the set of countries in which public opinion and policy are congruent and in the set of rich countries.

Table 5: Membership scores in the set of countries in which opinion and policy are congruent

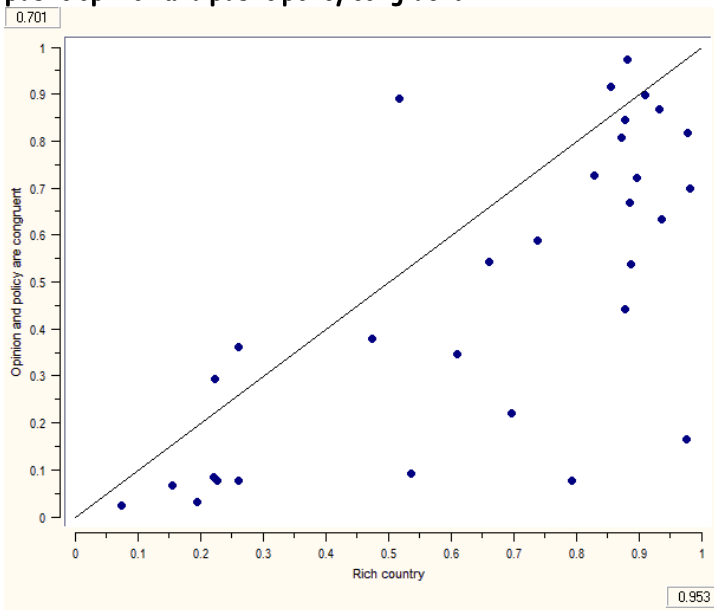| Country name	Public opinion and policy are congruent	Rich country
Venezuela	0.02	0.08
Russia	0.03	0.19
Uruguay	0.07	0.16
Croatia	0.08	0.23
Poland	0.08	0.26
Spain	0.08	0.79
Chile	0.09	0.22
Portugal	0.09	0.54
Ireland	0.16	0.98
Israel	0.22	0.70
South Africa	0.29	0.22
South Korea	0.35	0.61
Latvia	0.36	0.26
Hungary	0.38	0.47
United Kingdom	0.44	0.88
Australia	0.54	0.89
Slovenia	0.54	0.66
New Zealand	0.59	0.74
Denmark	0.63	0.94
Netherlands	0.67	0.89
Norway	0.70	0.98
Finland	0.72	0.90
Taiwan	0.73	0.83
Sweden	0.81	0.87
United States	0.82	0.98
Germany	0.85	0.88
Canada	0.87	0.93
Czech Republic	0.89	0.52
Switzerland	0.90	0.91
France	0.92	0.86
Japan	0.97	0.88

Using the data from the table above, I check whether being a rich country is a necessary condition for having opinion-policy congruence. The software I use for this test of necessity is fsQCA. Table 6 presents the results of this test.

Table 6: Analysis of necessary conditions for the outcome "Policy and opinion are congruent"

Condition tested	Consistency	Coverage
Rich country	0.951	0.697
Not rich country	0.311	0.495

We can see being a rich country is indeed a necessary condition for having opinion-policy congruence. The consistency value is larger than 0.9, which is the conventional threshold for accepting a condition as necessary. The coverage, however, is only 0.722. This suggests that, while all countries that have opinion-policy congruence are rich, not all rich countries have opinion-policy congruence.

Figure 4: Fuzzy-set XY Plot: Being a rich country is a necessary condition for having public opinion and public policy congruent.

7. The causes of congruence

We have previously seen that being rich is a necessary condition for a country to have congruence between public opinion and public policy. Nevertheless, we have also seen that being a rich country is not sufficient for the occurrence of opinion-policy congruence: public opinion and public policy are closely matched in some rich countries, but not in others. In this section, I examine the combinations of factors that are sufficient for the occurrence of opinion-policy congruence. A survey of the comparative politics and political economy literatures suggests three other factors, besides economic wealth, that have a major effect on whether public policy in a country is congruent with citizens' preferences. These three factors are the income distribution in the society, the electoral system, and the level of state decentralization. I proceed by examining the mechanisms through which each of these factors could plausibly affect opinion-policy congruence in a country. I then describe how I operationalize and measure a country's income distribution, its electoral system, and its level of decentralization. Finally, employing fuzzy-set Qualitative Comparative Analysis (fsQCA), I present an empirical account of how the three factors previously mentioned, together with a country's level of wealth, interact with each other and contribute to the presence of opinion-policy congruence.

7.1 The distribution of income in society

One reason why public policy might stray from what the median citizen prefers is political inequality. If, during the policy-making process, politicians give more weight to preferences of a certain subset of society, the policy adopted will not be the one desired by the median citizen.

Politicians who wish to be elected need the triple resources of volunteers, money, and votes.[25] They will thus tend to be more responsive to those that can provide them with these resources. This alone, however, does not guarantee that policy will deviate from what the median citizen wants. If people who volunteer, donate money, and vote have, on average, the same policy preferences as those who do not, then public policy will still be congruent with the preferences of the general public. Nevertheless, if the groups who are most politically active have policy preferences that are significantly different from those of the general public, government policy will no longer reflect what the median citizen wants. Thus, the degree of opinion-policy congruence in a country will be negatively affected by the presence of groups who have both higher levels of political participation and

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25   Henry E. Brady, Sidney Verba, and Kay Lehman Schlozman, "Beyond the SES: A Resource Model of Political Participation," *American Political Science Review* 89 (1995), 271-294.

different policy preferences than the general public. There is strong evidence that, in modern democracies, the wealthy form exactly such a group, being more likely to be politically active[26] and having policy preferences that are significantly different from those of the median citizen.[27]

As policy makers will tend to be more responsive to people who are politically active, we should expect policy to deviate from what the median citizen prefers and to be biased towards the preferences of the rich. Of course, modern democracies differ with respect to their income distributions. Some, like the United States, are highly unequal, while others, like Sweden, have a relatively more equal distribution of income. While public policy is likely biased in favor of the rich in most countries, this effect will be much stronger in countries with a very unequal distribution of income than in relatively equal countries. Thus, countries with high income inequality should exhibit low levels of opinion-policy congruence, as the rich will be quite different from the majority in both policy preferences and political influence. In contrast, countries with low levels of income inequality should have high levels of opinion-policy congruence, as relative economic equality will make people more similar in both preferences and political influence.
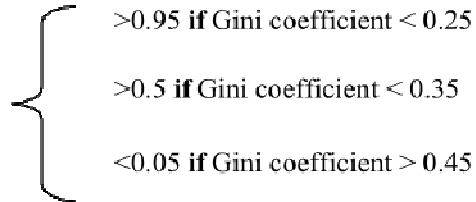
The most widely used measure of the inequality of an income distribution is the Gini index. In theory, the Gini index can take any value from 0 (maximum equality) to 1 (maximum inequality). In practice, however, the Gini index for countries varies from 0.2 to 0.7. The values of the Gini index for the countries included in my study come from the World Bank database.[28] The data is from 2006 (the year the survey data used to compute opinion-policy congruence comes from) or the closest year available. Using Ragin's direct method of calibration, I transform the Gini index values into set membership scores, which are the appropriate data for fuzzy-set Qualitative Comparative Analysis. The calibration function is summarized bellow:

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26   Marian Currinder, *Money in the House. Campaign Funds and Congressional Party Politics* (Boulder, CO: Westview Press, 2009), 21; Arend Lijphart, "Unequal Participation. Democracy's Unresolved Dilemma," *American Political Science Review* 91 (1997), 1-14.
27   Giacomo Corneo, and Hans Peter Grüner. "Individual Preferences for Political Redistribution." Discussion Paper No. 2694, Centre for Economic Policy Research, London (2001); Daniel Doherty, Alan S. Gerber, and Donald P. Green, "Personal Income and Attitudes toward Redistribution: A Study of Lottery Winners," *Political Psychology* 27 (2006), 441-458.
28   http://data.worldbank.org/indicator/SI.POV.GINI.

Membership score (Countries with equal distributions of income)

$$>0.95 \text{ if Gini coefficient} < 0.25$$

$$>0.5 \text{ if Gini coefficient} < 0.35$$

$$<0.05 \text{ if Gini coefficient} > 0.45$$

Gini index values of 0.25, 0.35, and 0.45 are used as qualitative anchors. I chose 0.25 and 0.45 as qualitative anchors because they are the Gini scores for what I consider to be archetypically equal (Sweden and Denmark) and unequal countries (U.S.). The third qualitative anchor, 0.35, is the approximate value of the Gini index in moderately unequal countries (France, Poland).

7.2 The level of decentralization

One of the main arguments in favor of decentralization and federalism offered by the public finance literature is that it increases the congruence between citizens' preferences and government policy. There are several theoretical reasons why we should expect policy to be more congruent with public opinion in a federal and decentralized state rather than in a unitary and centralized one. First of all, decentralization leads to smaller policy jurisdictions; thus, instead of complying with a one-size-fits-all national policy, subnational units have the possibility to adapt their policy to local preferences. Therefore, if preferences vary among regions, federalism and decentralization will tend to promote more opinion-policy congruence.[29]

Furthermore, collective action is easier to organize in a smaller jurisdiction, so citizens in a federal state will be more likely to influence policy through these means. In addition, we should realize that moving government policy towards the public's preferences is not the only way to increase congruence between the two; congruence also increases if people move from regions' whose policies they dislike to ones in which policy is more akin to their preferences. Charles Tiebout argues that, given fully mobile citizens, fiscal federalism leads to an optimal supply of public goods.[30] To use Albert Hirschman's terminology[31], we could say that federalism and decentralization make both "voice" and "exit" more effective.

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29   Wallace E. Oates, "An Essay on Fiscal Federalism," *Journal of Economic Literature* 37(1999), 1122.
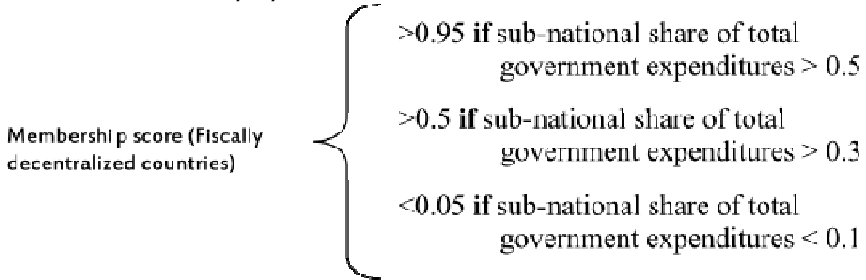30   Charles M. Tiebout, "A Pure Theory of Local Expenditures," *Journal of Political Economy* 64 (1956), 416-424.
31   Albert O. Hirschman, Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States (Cambridge, MA: Harvard University Press, 1970).

Finally, federalism will foster competition between subnational units and will thus promote better government.[32] As far as opinion-policy congruence is an element of the quality of government, we should expect it to increase in a federal system.

Measuring federalism and decentralization raises conceptual difficulties. Rodden observes that a country's level of decentralization has three different dimensions (fiscal, policy and political) and that about a dozen variables have been used to measure them.[33] What is worrisome to him is that most of these variables are not strongly correlated with each other. This means that the same country can be quite decentralized according to one indicator and centralized according to another. Because of this, argues Rodden, the measure of decentralization that we use must be in accordance with our hypothesis. In my case, I am interested in the effect on decentralization on the congruence between citizens' spending preferences and government spending policy. It is thus natural that my measure of federalism should capture how decentralized government expenditure actually is. For this purpose, I will measure a country's level of fiscal decentralization by looking at what share of government expenditures is spent by sub-national governments.

My data for comes from the Quality of Government Institute[34] and is from the year 2006. Using Ragin's method of direct calibration, I transform the share of government spending done by sub-national units into set-memberships scores. The calibration function employed is summarized below:

$$
\text{Membership score (Fiscally decentralized countries)} = \begin{cases} >0.95 \text{ if sub-national share of total government expenditures} > 0.5 \\ >0.5 \text{ if sub-national share of total government expenditures} > 0.3 \\ <0.05 \text{ if sub-national share of total government expenditures} < 0.1 \end{cases}
$$

I have used 0.1, 0.3, and 0.5 as qualitative anchors. In archetypically highly decentralized countries (U.S., Canada), sub-national governments account for around 50 percent of total government expenditures. This value will thus serve as a qualitative anchor; a country in which spending by sub-national governments is 50 percent of total government expenditure will thus have a membership score of 0.95

32   James M. Buchanan, "Federalism as an Ideal Political Order and an Objective for Constitutional Reform," *Publius* 25 (1995), 19-27.
33   Jonathan Rodden "Comparative Federalism and Decentralization: On Meaning and Measurement," *Comparative Politics* 36 (2004), 481-500.
34   http://www.qog.pol.gu.se/data/qogstandarddataset/.

in the set of fiscally decentralized countries. In moderately decentralized countries (Spain, Sweden), sub-national governments account for around 30 percent of total government expenditures. This value serves as my second qualitative anchor; a country in which spending by sub-national units is 30 percent of total government expenditures will have a set membership score of 0.5 in the same set. Finally, in very centralized countries (New Zealand, Portugal), sub-national government only account for around 10 percent of total government expenditures. This value will serve as my third qualitative anchor; a country in which local governments account for 10 percent of total government expenditure will have a set membership score of 0.05 in the set of fiscally decentralized countries.

7.3 The electoral system

An electoral system can be seen as a function that turns votes into seats in the legislature.[35] There is a great diversity of electoral systems; for our purpose, however, we will only focus on the two most widespread electoral systems: proportional representation systems and plurality systems. There are several reasons why we should expect plurality electoral systems to foster more opinion-policy congruence than proportional representation ones.

First of all, plurality systems tend to generate single-party cabinets.[36] When the cabinet is formed by a single political party, voters will easily be able to discern who is responsible for unpopular policies. Parties in plurality systems will thus avoid adopting policies that deviate too much from the median voter's preference. In contrast with plurality systems, proportional representation systems tend to generate coalition cabinets. As responsibility for unpopular policies will be more dispersed, parties in proportional representation systems will face lower costs for supporting policies that go against the median citizen's preferences.

Rogowski and Kayser[37] offer a second reason why plurality systems promote more opinion-policy congruence. They observe that seat-vote elasticities are much greater for plurality systems than for proportional ones. In other words, a similar increase in vote share for a party will tend to generate a larger number of seats in plurality systems than in proportional representation ones. Small increases in a party's vote share will, in plurality systems, often lead to large increases in seat share. Because of this, argue Rogowski and Kayser, politicians will be more

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35   Gary W. Cox, Making Votes Count. Strategic Coordinates in the World's Electoral Systems (Cambridge: Cambridge University Press, 1997), 95.
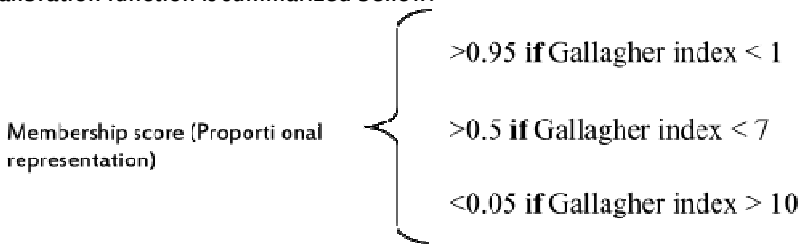36   Arend Lijphart, Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries (New Haven, CT: Yale University Press, 1999), 167.
37   Ronald Rogowski, and Mark Andreas Kayser, "Majoritarian Electoral Systems and Consumer Power: Price-Level Evidence from the OECD Countries." *American Journal of Political Science* 46 (2002), 526-539.

responsive to voter's preferences in plurality systems than in proportional representation systems. Rogowski and Kayser support their hypothesis by showing that price levels are lower in countries with plurality systems; they interpret this pattern as proof that, in plurality electoral systems, voters have more political clout relative to producer interest groups.

Duverger's law and the median voter theorem suggest another reason why public policy in countries with plurality electoral systems will not stray too far from what the median citizen prefers. According to Duverger[38], plurality electoral systems should bring about two-party systems. But we know from Downs that, in a two-party system, the platforms of the two political parties will converge on the median voter's position.[39] In contrast, proportional representation tends to generate multiparty systems, where the median voter's position is not necessarily an equilibrium on which parties will converge.[40]

To measure how proportional an electoral system is, I use the Gallagher index. This index, developed by Michael Gallagher[41] measures the disproportionality between the distributions of votes and seats in an election. The index can take any value from 0 (most proportional) to 100 (most disproportional). Professor Gallagher's website provides values of his index for recent elections in all the countries included in my study.[42] For each country, I averaged the values of the Gallagher index for the three elections prior to 2006, so as to avoid any perturbations due to random events in a given election year. I then transformed this average Gallagher index into set-membership scores using Ragin's (2008) direct method of calibration. The calibration function is summarized bellow:

Membership score (Proportional representation)

$$> 0.95 \text{ if Gallagher index} < 1$$

$$> 0.5 \text{ if Gallagher index} < 7$$

$$< 0.05 \text{ if Gallagher index} > 10$$

38   Maurice Duverger, Political Parties: Their Organization and Activity in the Modern State (London: Methuen, 1959), 224.
39   Anthony Downs. *An Economic Theory of Democracy*.
40   Norman Schofield, Itai Sened, and David Nixon, "Nash Equilibrium in Multiparty Competition with Stochastic Voters," *Annals of Operations Research* 84(1998), 3-27.
41   Michael Gallagher, "Proportionality, disproportionality and electoral systems," *Electoral Studies* 10 (1991), 33-51.
42   http://www.tcd.ie/Political_Science/staff/michael_gallagher/ElSystems/Docts /ElectionIndices.pdf.

Gallagher index values of 1, 7, and 10 serve as qualitative anchors. I choose 1 as qualitative anchor because that is the value of the Gallagher index for countries with almost perfectly proportional electoral systems (Denmark, Netherlands). A country with a Gallagher index value of 1 will have a set-membership score of 0.95 in the set of countries with proportional representation. Typical plurality systems (U.K., Canada) have Gallagher index values of around 10. A country with a Gallagher index value of 10 will thus have a membership score of 0.05 in the set of countries with proportional representation. I chose a Gallagher index value of 7 to serve as a qualitative anchor because it is typical of the most disproportional PR electoral systems (Croatia's Gallagher index value of 6.77 is the highest of any country included in my study that uses a proportional representation system). A country with a Gallagher index value of 7 will have a membership score of 0.5 in the set of countries with proportional representation.

8. Results

We have seen that a survey of the literature suggests that four major factors influence a whether a country's public opinion and public policy are congruent: its level of wealth, its distribution of income, its electoral system, and its level of decentralization. In this section, I put the theories previously discussed to the test. Using data from 28 countries[43], I investigate the sufficient conditions for the occurrence of opinion-policy congruence. In addition, I also examine the necessary and sufficient conditions for the non-occurrence of this outcome. The method I use is fuzzy set qualitative comparative analysis (fsQCA) Fuzzy set QCA is different form crisp set QCA (csQCA) in that it allows for different degrees of membership in a set. This means that fsQCA can capture not only qualitative differences between cases, but also quantitative differences between them.[44] There are several reasons for choosing this particular method. First of all, as we have previously seen, the relationship between opinion-policy congruence and the factors that influence it can best be expressed in set-theoretic terms such as necessity and sufficiency. Second, my study includes a relatively small number of cases, which makes multivariate statistical analysis difficult. Fuzzy-set QCA appears to be the best solution for my analysis, striking a balance between quantitative and qualitative methods both in terms of number of cases included and of attention to detail. Furthermore, the literature on the determinants of opinion-policy congruence

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43   Five countries (Dominican Republic, Philippines, Taiwan, Uruguay, and Venezuela) are not included in this part of the analysis because data was unavailable for at least one of the conditions tested.
44   Schneider and Wagemann, *Set-Theoretic Methods for the Social Sciences*.

suggests that complex interactions of factors are involved; QCA would be the best method to deal with this, as it can easily deal with conjunctural causation.[45]

My analysis has four causal conditions: whether a country is rich (R), whether it has an equal distribution of income (E), whether it has proportional representation (P), and whether it is decentralized (D). The outcome is whether opinion and policy in a country are congruent (CON).[46]

We have previously seen that being a rich country is a necessary condition for having opinion-policy congruence. Now we can examine if any of the other conditions, or their negations, also serve as necessary condition for the occurrence of opinion-policy congruence. The results of this analysis of necessary conditions are presented in table 7.

Table 7: Analysis of necessary conditions for the outcome CON.

Conditions tested	Consistency	Coverage
R	0.951	0.697
E	0.806	0.671
P	0.636	0.585
D	0.757	0.748
r	0.311	0.495
e	0.448	0.567
p	0.569	0.628
d	0.549	0.560

It can be seen that, besides R, no other condition or negation of condition has a consistency value larger than 0.9, which is the conventional threshold for accepting a condition as necessary.[47] Thus, being a rich country is the sole necessary condition for the occurrence of opinion-policy congruence. None of the other conditions or negations of conditions are, by themselves, necessary for the occurrence of the outcome.

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45   Charles C. Ragin, *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies* (Berkeley and Los Angeles, CA: University of California Press, 1989), 25
46   I will use capital letters (e.g. R, CON) to indicate the presence of a condition or outcome and small letters (e.g. c, con) to indicate their absence.
47   Schneider and Wagemann, *Set-Theoretic Methods for the Social Sciences*.

Table 8: Set-membership scores for the casual conditions and for the outcome (CON)

Country	R	E	P	D	CON
Russia	0.195	0.124	0.467	0.760	0.031
Croatia	0.227	0.858	0.524	0.133	0.076
Poland	0.261	0.507	0.604	0.299	0.076
Spain	0.793	0.710	0.703	0.544	0.077
Chile	0.222	0.002	0.345	0.112	0.085
Portugal	0.537	0.259	0.690	0.143	0.092
Ireland	0.977	0.710	0.568	0.369	0.164
Israel	0.697	0.253	0.873	0.166	0.220
South Africa	0.224	0.000	0.944	0.704	0.293
South Korea	0.611	0.752	0.029	0.910	0.347
Latvia	0.261	0.425	0.645	0.353	0.361
Hungary	0.475	0.890	0.255	0.337	0.378
UK	0.879	0.574	0.000	0.310	0.442
Australia	0.887	0.794	0.068	0.865	0.537
Slovenia	0.661	0.964	0.819	0.130	0.543
New Zealand	0.739	0.410	0.884	0.129	0.588
Denmark	0.936	0.964	0.914	0.879	0.633
Netherlands	0.886	0.773	0.926	0.340	0.667
Norway	0.981	0.952	0.834	0.614	0.700
Finland	0.897	0.838	0.831	0.682	0.720
Sweden	0.872	0.973	0.897	0.582	0.808
US	0.978	0.047	0.096	0.934	0.816
Germany	0.878	0.916	0.825	0.809	0.846
Canada	0.932	0.704	0.025	0.984	0.866
Czech Republic	0.518	0.937	0.632	0.288	0.889
Switzerland	0.910	0.596	0.857	0.932	0.897
France	0.855	0.665	0.000	0.222	0.916
Japan	0.882	0.282	0.007	0.666	0.972

Table 8 is a data matrix showing the 28 countries included in my analysis and their membership scores for the four causal conditions and for the outcome. Table 9 shows the data matrix transformed into a truth table. In contrast to data matrices, truth table rows do not indicate cases, but logically possible combinations of conditions.[48] As the model has four conditions, there are $2^4 = 16$ possible

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48   Ibid.

combinations of conditions. As 28 cases are included in the analysis, it would have been theoretically possible for each truth table row to have at least one case allocated to it.[49] However, we can see that 4 of the 16 truth table rows do not have any cases. The fact that not all possible combinations of conditions occur in reality raises the problem of limited diversity. I will come back to this issue later in my analysis.

Table 9: Truth table for the outcome CON (opinion-policy congruence)

R	E	P	D	number	CON	Raw consist.	PRI consist.	Product	Cases
1	0	0	1	2	1	0.839	0.640	0.537	JP, US
1	1	1	1	7	1	0.826	0.675	0.559	CH, DE, DK, ES, FI, NO, SE,
1	1	0	1	3	1	0.795	0.491	0.390	AU, CA, KR
1	1	0	0	2	1	0.773	0.460	0.356	FR, UK
1	1	1	0	4	1	0.768	0.442	0.340	CZ, IE, NL, SI
0	0	0	1	1	0	0.723	0.133	0.097	RU
0	1	0	0	1	0	0.710	0.246	0.175	HU
0	1	1	0	2	0	0.692	0.214	0.148	HR, PL
0	0	1	1	1	0	0.626	0	0	ZA
1	0	1	0	3	0	0.619	0.089	0.055	IL, NZ, PT
0	0	0	0	1	0	0.610	0.091	0.056	CL
0	0	1	0	1	0	0.579	0	0	LV
0	1	0	1	0	-	0.845	0.357	0.301	-
0	1	1	1	0	-	0.819	0.244	0.199	-
1	0	0	0	0	-	0.747	0.335	0.251	-
1	0	1	1	0	-	0.774	0.269	0.209	-

The analysis of sufficient conditions for the outcome CON is complicated by the problem of limited diversity; as already mentioned, out of the 16 truth table rows, 4 are logical remainders. There are three different strategies for solving the problem of limited diversity.[50] First, the researcher could adopt a conservative strategy,

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49   A case is allocated to a truth table row if its membership score in the condition combination that describes that row is more than 0.5. A case can only be a member of one truth table row.

50   The rest of this paragraph draws on Schneider and Wagemann, 2012.

which doesn't make any assumptions about counterfactuals and uses only the data in the truth table. Second, one could incorporate in the analysis only those counterfactuals that correspond to theoretical expectations (easy counterfactuals). Third, one could aim at reaching the most parsimonious solution of the truth table, using both easy and difficult counterfactuals in the process. Using only those counterfactuals for which theoretical expectations exist should produce an intermediate solution, which is a super-set of the complex/conservative solution and a sub-set of the most parsimonious solution.

Employing the fsQCA software, I generate all three solutions (conservative, intermediate, most parsimonious). For the intermediate solution, I use the following directional expectations, based on the theories discussed in the previous sections: being rich (R), being equal (E), being decentralized (D), and not having proportional representation (p) should contribute to the occurrence of opinion-policy congruence (CON). I use a frequency threshold of 1 and a consistency threshold of 0.75.

Table 10: Analysis of sufficient conditions for the outcome CON (conservative / intermediate solution)

Solution:	R*E	+	R*D*p	→	CON
Path consistency	0.753		0.800		Cases not covered
Raw coverage	0.772		0.479		by any path but members of CON:
Cases covered[51]	Australia Canada Czech Republic Denmark Germany Finland France Netherlands Norway Sweden Slovenia Switzerland		Australia Canada Japan United States		New Zealand
Unique coverage	0.406		0.103		
Solution consistency	0.761				
Solution Coverage	0.876				

51   Cases whose membership value in that path is higher than 0.5.

The first notable thing about the results is that conservative and the intermediate solutions are the same. The reason for this is that no easy counterfactuals can be made; assuming that any of the missing condition combinations leads to the outcome CON would violate our directional assumptions. A solution that only incorporates easy counterfactuals is, in this case, a solution that incorporates no counterfactuals.

Examining the conservative solution, we see that there are two paths for reaching the outcome CON. A country can achieve opinion-policy congruence either by being rich and equal or by being rich, being decentralized, and having a non-proportional system. The first path covers several Western European nations, plus Australia and Canada. The second path covers Australia, Canada, the U.S., and Japan. Being rich (R) is part of both paths to congruence, which confirms its status as a necessary condition.

The second causal path to congruence (R*D*p) nicely illustrates the concept of conjunctural causation. For rich countries, it is not enough to be decentralized or to have a non-proportional electoral system in order to achieve opinion-policy congruence; opinion-policy congruence only occurs if the two factors are present simultaneously. Decentralization will not produce opinion-policy congruence if the country has a proportional electoral system. Similarly, a non-proportional electoral system will not lead to opinion-policy congruence if the country is centralized. This finding fits nicely with Elinor Ostrom's theory[52] that institutions operate configurationally and that their effects cannot be separable.

Table 11: Sufficient conditions for the outcome CON (most parsimonious solution)

Solution:	R*E	+	R*p	→	CON
Path consistency	0.753		0.746		Cases not covered
Raw coverage	0.772		0.552		by any path but members of CON:
Cases covered	Australia		Australia		New Zealand
	Canada		Canada		
	Czech Republic		France		
	Denmark		Japan		
	Germany		United States		
	Finland				
	France				
	Netherlands				

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52   Elinor Ostrom, "An Agenda for the Study of Institutions," *Public Choice* 48 (1986): 3-25.

	Norway Sweden Slovenia Switzerland	
Unique coverage	0.353	0.132
Solution consistency	0.745	
Solution Coverage	0.905	

Table 11 shows the most parsimonious solution for the occurrence of the outcome CON. According to this solution, there are two paths to opinion-policy congruence: a country can be rich and equal, or it can be rich and have a non-proportional electoral system. We can see that this solution has a higher coverage value than the conservative solution, though at the cost of less consistency; this is to be expected, as the most parsimonious solution is a super-set of the conservative solution. The problem with the most parsimonious solution is that it does not discriminate between easy and difficult counterfactuals. To examine the counterfactuals that are used in this case to produce the most parsimonious solution, I intersect the Boolean expression for limited diversity with the solution itself, producing the following result:

$$(r*E*D + R*e*p*d + R*e*P*D) * (R*E + R*p) \Leftrightarrow$$
$$\Leftrightarrow R*e*p*d$$

The most parsimonious solution thus rests on the following counterfactual:

$$R*e*p*d \rightarrow CON$$

We should be careful in interpreting the most parsimonious solution because, as we have seen, none of the counterfactuals incorporated in it are easy ones. The most parsimonious solution rests on the counterfactual assumption that a country that is rich, unequal, centralized and uses a non-proportional electoral system will have opinion-policy congruence. How plausible is this assumption? From the complex solution, which rests on no assumptions, we do know that countries that are rich and unequal but combine two congruence-fostering institutions (fiscal decentralization and a non-proportional electoral system) will have opinion-policy congruence. We also know that countries that are rich and unequal but lack both congruence fostering institutions do not show opinion-policy congruence. The most parsimonious solution rests on the assumption that countries that are rich and unequal but have only one opinion-policy congruence institution (a non-proportional electoral system) will also show congruence. While this counterfactual

can be supported by some theoretical arguments[53], the fact that all countries that were unequal but still showed opinion-policy congruence had more than one congruence-fostering institution points against it. For this reason, our interpretation should, in this case, focus on the complex solution rather than the most parsimonious one.

9. Discussion

What information has our fuzzy-set Qualitative Comparative Analysis brought us? First of all, we now know that being rich is a necessary condition for having opinion-policy congruence. All countries that showed opinion-policy congruence were rich countries, and none of the non-rich countries showed opinion-policy congruence. Being rich, however, is not sufficient for the occurrence of opinion-policy congruence. Several rich countries (Ireland, Israel, Portugal, South Korea, Spain, and the United Kingdom) did not show opinion-policy congruence. An analysis of sufficient conditions suggests that there are two paths to opinion-policy congruence. On the one hand, being rich and being equal are jointly sufficient for the occurrence of opinion-policy congruence. In other words, countries that are rich and equal will have opinion-policy congruence regardless of their level of decentralization or their electoral system. Most of the countries in my study that do have opinion-policy congruence have followed this path, being both rich and equal. Of note is that almost all the countries that are uniquely covered by this path are located in Northern Europe (Denmark, Finland, Norway, Sweden) or Western Europe (France, Germany, the Netherlands, Switzerland). The only post-communist countries in which opinion-policy congruence occurs, Slovenia and the Czech Republic, are also uniquely covered by this rich and equal path. The other path to congruence is being rich, being decentralized, and having a non-proportional electoral system. This path includes much fewer countries; the only two countries uniquely covered by it are Japan and the United States. Australia and Canada are covered by both paths.

The results suggest that the easiest way for a rich country to achieve opinion-policy congruence is to have a relatively equal distribution of income. In relatively equal societies, the rich have fewer resources and politicians will thus have fewer incentives to deviate from what the median citizen prefers in order to appease the rich. In addition, the rich themselves will have fewer incentives to try to steer policy their own way, as the more equal distribution of income will make them more similar to the non-rich in both preferences and level of information.

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53   Rogowski and Kayser, "Majoritarian Electoral Systems and Consumer Power: Price-Level Evidence from the OECD Countries".

The second path to opinion-policy congruence requires a combination of two congruence-fostering institutions: fiscal decentralization and a non-proportional electoral system. Decentralization favors opinion-policy congruence by making collective action easier and by allowing policies that are tailored to local preferences. In addition, decentralization will also encourage competition between sub-national units, which will also favor congruence. Non-proportional electoral systems, on the other hand, will give more power to voters as compared to interest groups; furthermore, due to Duverger's law and to the median voter theorem, the platforms of political parties in countries with non-proportional electoral systems are likely to converge on the median voter. When combined in a rich country, fiscal decentralization and a non-proportional electoral system are enough to guarantee that public policy will match public opinion. Nevertheless, relatively few countries have followed this path towards opinion-policy congruence. Japan and the United States are the only countries in my study that have achieved opinion-policy congruence through a combination fiscal decentralization and non-proportional electoral system while having an unequal distribution of income.

What can we say about the robustness of opinion-policy congruence? Countries that have achieved congruence solely through a relatively equal distribution of income are vulnerable to increases in income inequality. If a country lacks the institutional combination of fiscal decentralization and non-proportional electoral system, increases in income inequality are likely to lead public policy away from what the median citizen prefers. On the other hand, countries that have achieved opinion-policy congruence through fiscal decentralization and a non-proportional electoral system will not be vulnerable to increases in income inequality; Japan and the United States are already quite unequal countries and they still show opinion-policy congruence. Such countries, however, are vulnerable to changes in their institutions. If a country has reached opinion-policy congruence solely through its institutional combination, then any change in its level of decentralization or electoral system can damage its opinion-policy congruence. If, for example, Japan or the United States would adopt more proportional electoral systems, it is likely that public policy in these countries would move away from the preferences of the median citizen.

In the end, opinion-policy congruence is most robust in those countries that are covered by both causal paths. Australia and Canada have both relatively equal distributions of income and a combination of fiscal decentralization and non-proportional electoral system. In these countries, opinion-policy congruence is likely to survive an increase in income inequality due to their combination of institutions. Similarly, moves towards more proportional electoral systems or higher fiscal centralization should not damage opinion-policy congruence in Australia and Canada, as long as the two countries remain relatively equal.

10. Conclusions

This article has sought to answer two questions. First, is government policy in contemporary democracies congruent with public opinion? Second, what are the factors that determine opinion-policy congruence? The results suggest that opinion-policy congruence is more often absent than present in contemporary democracies. Nevertheless, there is significant variation between countries. I identified two causal paths that lead to opinion-policy congruence: to achieve opinion-policy congruence, a country must either be rich and have a relatively equal distribution of income or it must be rich, decentralized, and use a non-proportional electoral system.

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