

The Political Economy of Social Choices

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The Political Economy of Social Choices workshop brought together political economists and social choice theorists and empiricists to Oaxaca to share their current research. The group included prominent senior scholars as well as junior scholars doing their PhD at Washington University in St. Louis.

1 Overview of the field as it relates to the Workshop

The topics covered in workshop are at the intersection of two broad fields: political economy and social choice. These two fields combine economic and political science to examine how groups of people and societies make collective decisions on how to allocate scarce resources among competing social needs.

Political economy examines how economic theory and methods influence political ideology and the decisions made by governments and how politics shapes and determines the economic environment in which individuals and firms operate. The questions addressed in political economy combine economics, law, political science and sociology while taking into account how political institutions, the political environment and the economic system (capitalist, socialist or mixed) interact to determine the choices of governments or groups of agents and how these institutions evolve under different political, social and economic systems. These decisions depend on the political institutions under which agents operate.

Social choice complements political economy as its framework specifies how the opinions, preferences, interests, or welfare of individuals within a group or in a society are aggregated to reach a collective decision or some level of social welfare in a sense specified by the questions or issues being studied recognizing that the interests of all members of the group may not be perfectly aligned and some may have opposing preferences. Social choice specifies the properties that models must have in order for the model to generate an internally consistent aggregation of the well-being of a group of individuals, e.g., the elites under autocracy or citizens under democracy. It also identifies the properties that these preference aggregation rules must have to obtain certain desired outcomes.

Political economy and social choice study a wide range of questions in different areas using many different mathematical, game theory and statistical methodologies. In this framework, political agents—voters, politicians or parties and interest groups—maximize their payoff or utility functions taking into account that their decisions are made in an interdependent world.

In this workshop, researchers focus on developing or testing models where economic policy and political institutions are the outcome of interactions between different agents with perhaps opposing preferences operating under different economic and political institutions. The analytical frameworks of economics and political science are used because of the belief that if economic recommendations are made to governments or political agents without taking into account the political institutions under which they operate, governments or politicians may either not find it in their interest to implement these recommendations or the recommendations may not be politically implementable as powerful groups within society may block their implemen-

tation.¹ Moreover, if political leaders make political decisions without taking into account how these interact with the economy and the incentives these decisions give different groups of agents—be it voters or firms—then these political decisions may lead to catastrophic economic circumstances in the future.² To address and incorporate these two sides of the problem into the models, political economists integrate the economic and political characteristics of agents decisions into their models.

Given that agents may have opposing preferences, political economy models use social choice aggregation rules to determine decisions at aggregate societal or group level. Moreover, using mathematical, statistical and game theory tools, political economy models the strategic interaction of political agents—voters and political leaders or parties and interest groups—under various political and economic institutions and show how agents may use these institutions to their advantage. Using these models, it is possible to examine what happens as the institutions under which these decisions are made vary and to study how agents make decisions taking the decisions of other agents into account. It is also possible to model new institutions or variation of existing ones using mechanism design to explore the properties that social aggregation rules must have in order to minimize the negative incentives effects that these institutions might give certain agents.

Furthermore, in order to understand how the large number of moving pieces of these models—the decisions of many agents with perhaps opposing preferences—interact in these highly complex multi-agent multi-dimensional policy models, theoretical and empirical models make extensive use of mathematical and game theory tools.

Unforeseen random events may affect the decisions of some or all agents and thus the aggregate social choice (for example, a recession in China affects US consumers and thus the outcome of the Presidential election in the US) or agents may not have complete information on how their decisions affect other agents (candidates do not know with certainty how voters will vote). Under incomplete and/or imperfect information, researchers model events as being stochastic assuming that players have an implicit understanding of the distribution of stochastic events affecting players' decisions. This approach has been used, for example, to model the decisions of undecided voters. In these models, it is assumed that voters' utility function are affected by random shocks known only to the voter with parties or candidates and other voters knowing only the distribution of the shock affecting each voter's preferences.

The objective of deterministic or stochastic models is to find the policy equilibria or solutions of these complex social problems as they pertain to the problem being studied. Using these models and the equilibria they generate, it is then possible to examine what happens as the assumptions or the parameters of these models change. These comparative statics not only increase our understanding of how these models work but also generate testable predictions.

In order to see if these political economy and social choice theories and predictions reflect the social phenomena being modelled these theories must be tested. One way of testing these theories is to see if the predictions generated by these theories are observed in the real world. Different empirical models have been developed to test different models and hypotheses. If the predictions of a theoretical model does not accord with what is observed, then the model needs to be modified. There are different ways of modifying these models with the most common being that of relaxing some of the simplifying assumptions made in the base model. The workshop included several empirical models where a theoretical framework is applied to different countries with different political institutions. Others compared predictions of theoretical models under different political regimes to examine if political leaders value policies differently under different political institutions and political regimes.

An alternative approach to using empirical data to test theoretical models is to use laboratory experiments. In these experiments, researchers vary the assumptions in their models to examine the behavioral responses of individuals. This allows researchers to examine if the actual behavioral response of individuals correspond to the behavioral assumptions made in the theoretical model. Others experiment with the response of individuals as institutions change.

Rather than testing theories using empirical data and sophisticated econometric techniques, some prefer

¹This is the case in Greece where the recommendations or “demands” made by the European Commission, the European Central Bank and the IMF (the Troika) on the economic and policy reforms Greece must implement in order to receive their bailout package have led to early elections and to the resignation of the last Prime minister after massive popular demonstrations in the streets of Athens.

²For example, the oversized Greek public sector with a large number of employees who may retire at age 55 has been identified as one of culprits of the recent Greek financial crisis. This crisis has threatened the stability of the Euro and put at risk the European Monetary Union.

to test their theories by using simulations using estimated values for the parameters in their models. By varying these parameters they get a deeper understanding of how their theory works and the predictions emanating from their theoretical framework to then relate their results to what others have observed or estimated. Simulations also allow them to examine what happens as the parameters or institutions change. These counterfactuals allow researchers to evaluate for example whether changes to institutions produce an outcome deemed desirable.

The workshop included theoretical papers in the political economy and social choice traditions. There are theoretical and empirical papers, with some papers using laboratory experiments and others using simulations. Some study specific issues others study broader social issues. We now give a general overview of the topics covered in the workshop.

2 Topics and Problems addressed in the Workshop

As mentioned earlier political economy and social choice cover a great variety of social issues as such the workshop could only hope to address a small subset of them. Topics covered in the workshop can be divided into two major groups: theoretical and applied. The theoretical papers can be subdivided into social choice and political economy. The empirical ones take institutions as given as so are mostly in political economy.

We begin by giving a general description of the papers presented at the workshop. We first classify the papers according to whether they belong mostly in the social choice or political economy camps; then link the papers along different dimensions so as to give a more general view of what was covered in the workshop.

2.1 Social Choice

In this section we give a brief outline of the papers that dealt more directly with social choice issues. We go from the more general papers to those dealing with more specific social choice problems faced when individuals make decisions under specific institutional settings.

The paper by Michael Morreua (University of Norway) and John A. Weymark (Vanderbilt University) entitled “Scale-Dependent Welfarist Social Choice” is the one most clearly embedded in the social choice. The authors make a general point on the social aggregation of individual preferences. Within the “welfarist” approach to measuring social welfare, the authors develop a novel way of measuring social welfare that takes into account the scales used to measure the welfare of the individuals and provide an axiomatic characterization of a scale-dependent form of social welfare. This is important as in the “welfarist” approach to measuring the welfare of a community or society is measured by aggregating or averaging the welfare of individuals and this will depend on the scales used to measure the welfare of individuals.

Within the “utilitarian” approach to measuring social welfare, Marcus Pivato (Université de Cergy-Pontoise) shows that if social welfare is calculated as the average utility of individuals in a society with large number of individuals whose utility function satisfy certain statistical properties then it is possible to get an accurate estimate of a utilitarian social welfare function. This is true even when the utility functions of individuals are noisy, meaning are hit by a random shock draw from a known distribution. Under these circumstances, there is an alternative or policy that maximizes social welfare function in pairwise comparisons, i.e., there is a Condorcet winner maximizes social welfare.

Alexander Elbittar (Instituto Tecnológico Autónomo de México), Andrei Gombert (Instituto Tecnológico Autónomo de México), César Martinelli (Instituto Tecnológico Autónomo de México), and Thomas Palfrey (California Institute of Technology) in their paper “Ignorance and Bias in Collective Decisions” study decision making in committees that have common interests but where committee members have incomplete information about which of two alternatives is best. They are interested in studying the committee’s decision making process when each member can acquire a private costly signal before casting their vote when decisions are made by either majority or unanimity rule.

In a larger decision making body, a legislature, Robert S. Erikson (Columbia University) and Yair Ghitza (Catalist) in their paper “Electing the Agenda-Setter” examine what happens to the legislative choice of multi-dimensional policies when the legislative agenda setter is elected by a vote in the legislature. They model the selection of the agenda setter as a tournament and show that when legislators are paired against each other, the Condorcet winner is more likely than not.

Comparing the electoral outcome under different voting systems, Steven J. Brams (New York University) and Richard F. Potthoff (Duke University) examine how candidates are either ranked or graded in their paper “The Paradox of Grading Systems.” They classify voting systems according to whether candidates can be ranked or graded. They show that while systems with two grades rule out a discrepancy between the average-grade winner, who receives the highest average grade, and the superior-grade winner, who receives more superior grades in pairwise comparisons (akin to Condorcet winners), in voting systems with more than two grades these two winners differ, thus leading to the paradox.

In their paper “Evaluating the likelihood of the referendum paradox for mixed voting systems” Michel Le Breton (Toulouse School of Economics), Dominique Le Pelley (Universit de la Runion) and Vincent Merlin (Universit de Caen Basse-Normandie) study the paradox that arises when in a two party competition, a party gets a majority of parliamentary seats without obtaining a majority of votes nationwide as the voting rules fails to select the Condorcet winner.

This section presented theoretical papers that mostly address social choice issues, the next section presents papers that are mostly classified in the political economy camp but that also address question pertaining to social choices.

2.2 Political Economy

Some of the papers included in Section 2.1 also have elements political economy, we chose however to highlight the social choice aspect of these models. This section includes papers that contain theoretical and applied political economy models.

2.2.1 Elections and Voting: Theory and Applications

The themes of the papers outlined in this section are presented from the more general or aggregate to the more specific. The first four papers present theories that apply at the national level, the others theories that take into account the jurisdictions within a country.

Arnaud Dellis (Universit du Quebec a Montreal) and Christopher Cotton (Queen’s University) in their paper “Informational lobbying and agenda distortion” challenge the view that pure informational lobbying (in the absence of political contributions and evidence distortion) leads to better informed policymaking. In their model policymakers have financial and time constraints and thus cannot address all issues. Moreover, policymakers are incompletely informed on these issues. Under these limitations the policymaker must choose an agenda (the order in which issues are dealt with) and must decide whether to spend effort on becoming informed in a particular issue or take the information provided by lobby groups. These groups are only interested in providing information that benefits them. Lobbyists shift the policymaker attention towards issues of lower public importance when the policymaker prefers the information of the lobbyists to doing their own search.

In his paper “Probabilistic Voting over Income Taxes with International Migration,” Craig Brett (Mount Allison University) studies the income tax policy choice of vote-maximizing politicians when voters can either choose to vote and stay at in the country or not vote and move to another country.

In their paper “Modelling the effect of campaign advertising on US Presidential Elections when differences across states matter,” Maria Gallego (Wilfrid Laurier University) and Norman Schofield (Washington University in St. Louis) extend Schofield’s (2007) stochastic voting model by allowing for voters’ policy and advertising preferences to differ across states. Their model gives a theoretical rationale for the well-known fact that candidates spend more resources in swing than in non-pivotal states during US Presidential elections. They are the first to jointly model the policy and advertising decisions of candidates in a stochastic voting model when candidates directly communicate with voters as happens in current campaigns. Today’s campaigns combine social media, smart phones and large data sets containing detailed voter information to send targeted messages to voters.

Steven J. Brams (New York University) and D. Marc Kilgour (Wilfrid Laurier University) examine the effect that voters in non-competitive, i.e., non-pivotal, states have on US Presidential elections in their paper entitled “Paths to Victory in Presidential Elections: The Setup Power of Noncompetitive States.” In their model, non-competitive states structure the contest in competitive states. They identify three measures of

set-up power-winningness, vulnerability, and fragility—and show how they pinpoint the advantages of the candidate ahead in electoral votes in the noncompetitive states.

The outline of the political economy theory papers presented in this section give an indication of different types of issues that arise under different institutional setting and at different levels of the policy decision making process. The next section outlines the empirical papers presented at the workshop.

2.2.2 Applied Political Economy

The empirical papers in this section examine electoral outcomes within a given country. The first two papers study the effects that changes in the institutional setting have on electoral outcomes in Mexico and Canada. The other papers take Schofield's (2007) theoretical model to the data in two different countries: the US and Ireland. These papers examine the empirical predictions derived from a theoretical model in countries with different political regimes. In another paper, evidence from laboratory experiments measure how polarization affect reforms in Egypt. Another paper tests how public policy, healthcare, varies by political regimes.

The effects of Mexico's automated redistricting on electoral outcomes are examined by Eric Magar (Instituto Tecnológico Autónomo de México), Micah Altman (Massachusetts Institute of Technology), Michael McDonald (University of Florida), and Alejandro Trelles (University of Pittsburgh) in their paper "The effects of malapportionment, turnout, and gerrymandering in multi-party systems." They use the redistricting map to examine if there is evidence of party bias in how votes translate into seats in Mexico's lower Chamber of Congress. They show that the redistricting effect is basically the sum of three separate effects: *malapportionment*, the inequitable or unsuitable apportioning of representatives to a legislative body, *gerrymandering*, the manipulation of electoral boundaries in favor of one party, and the *turnout* of voters in the election. The theoretical structure for decomposing redistricting into the three effects applies broadly to other countries.

J. Stephen Ferris (Carleton University), Stanley L. Winer (Carleton University) and Bernard Grofman (University of California Irvine) examine the competitiveness of the Canadian system since confederation in their paper "Measuring Electoral Competitiveness: The Parliamentary System of Canada, 1867 - 2011." After compiling riding level electoral data, they build different competitiveness indices for each legislative assembly and compare their competitiveness measure with that provided by Laakso and Taagepera's (1979) index on the effective number of parties in a legislature. They also compare it with "first versus second place vote margins" at both the constituency and national party level. Their paper shows the evolution of party competitiveness in Canada over the last century and half. This particularly important, as during certain periods there have been a large number of parties competing in the elections in different regions of the country. As a by-product, their study also shows the evolution of Canada's Federal parties and how competitiveness has influenced such evolution.

In "Modeling Elections and Referenda in Ireland" Norman Schofield (Washington University in St. Louis) and William Simoneau (PhD student at Washington University in St. Louis) examine the 2007 Irish election and the Lisbon Treaty referenda of 2008 and 2009. Using survey data they determine voters' policy positions to study each party's positions during the general election and in the referenda. Analyzing these two referenda is important because they occurred just before and just after the the 2008 global financial crisis. By examining differences in voters' response to the referenda before and after the crisis they are able to examine the effect that the financial crisis had on how citizens votes in the referenda. They found that leaders' valences—voters' non-policy evaluation of the ability of leaders to govern—played a significant role in the outcome of the election and in the referenda. They also find evidence that higher media campaign expenses on the yes side increased the number of yes votes in the second referendum.

In their paper "Measuring Campaign Spending Effects in Post-Citizens United Congressional Elections" Norman Schofield (Washington University in St. Louis) and Brandon Barutt (PhD student at Washington University in St. Louis) examine the impact that campaign spending has on the ability of incumbents and challengers to be elected in the 2014 US mid-term Congressional election. Studying the effect of campaign expenditures on Congressional electoral outcomes became important after the controversial 2010 Supreme Court rulings in *Citizens United v. Federal Election Commission* (2010) and in the 2010 *Speech Now v. Federal Election Commission* that struck down the limits on campaign contributions. This project examines the nature of independent, no candidate related, campaign expenditures in U.S. congressional elections and how the impact of these independent expenditures compares to traditional campaign expenditures. They adapt the theoretical framework developed in Schofield (2007) to study Congressional candidates' policy

positions in the election and how the campaign expenditures by independents affects these positions. Their results suggest that the effect of campaign expenditure by independents are subject to different dynamics than that of congressional candidates' campaign spending with few election outcomes substantially altered by the presence of spending, including controversial independent expenditures.

Norman Schofield (Washington University in St. Louis) and Jeong Hyun Kim (Washington University in St. Louis) study the role of activist in "Spatial Model of U.S. Presidential Election in 2012." The importance of this election is due to the Supreme Court's Citizens United ruling eliminating the limit on campaign contributions. They find that the exogenous increase in campaign contributions led to voters' ideological difference with candidates becoming more important in their choice of candidate, but that candidates' valence, the non-policy evaluation of candidates, did not play a significant role.

Polarization during elections in Egypt as an obstacle to reforms is studied by Mazen Hassan (Cairo University), Sarah Mansour (Cairo University) and Rebecca B. Morton (New York University) in their paper "Political Polarization and Support for Reform: Experimental Evidence from Egypt." The authors use an innovative experimental approach to study polarization by creating ideological societies in the laboratory. Subjects/Citizens choose between implementing a reform that benefits all members of society (but with a differential benefit for supporters of one of the societies) versus not enacting the reform which lead to lower payoffs for everyone. They find that when voters are given information that support for the reform varies across ideological societies, they are significantly more likely to report that their vote choices are influenced by their society membership than when such information is not provided. They also find some evidence that the information influences voters' choices in the election but that there are no information effects when societies are ideologically neutral.

Dina Balalaeva (National Research University—Higher School of Economics) and Olga Shvetsova (Binghamton University, SUNY) examine the health policies of autocracies and democracies in their paper "The Political Economy of which Diseases to Treat First." This empirical paper starts from the premise that healthcare policies differ in autocracies and democracies. The authors argue that autocrats value healthcare because it complements their economic policies as they help maintain the health of those working in the firms of the elite that supports the dictator in office. Using disaggregated data on mortality from specific diseases, they show that, other things being equal, while autocracies deal more efficiently with diseases that "damage" the workforce, at the expense of other areas of health related problems. Democracies do not have such bias, with their healthcare policy priorities being less clear as in democracies healthcare policies depend on the preferences of their coalitions supporting the government in office.

The papers included in this section highlight that there is much to learn from taking "theoretical models to the data." Some empirical models increase our understanding of different factors that influence the outcome of elections in different countries highlighting the factors that have up to now been held either constant or are implicitly assumed, in a sense in the background, of the theoretical models. Understanding the working of real elections will help us extend existing models or develop new ones. One paper shows how political reforms and the supply of public goods is influenced by the degree of political polarization; another showed that public policy, healthcare, is influenced by the political regime prevailing in the country.

3 Other links between papers

The papers presented in the workshop were broadly classified into social choice and political economy recognizing that the distinction between these two categories may not be very sharp. From the descriptions given in Sections 2.1 and 2.2 it is clear however that some of these papers have much in common.

3.1 Axiomatic approach

The axiomatic approach to modeling social welfare is followed by Morreua and Weymark in their paper "Scale-Dependent Welfarist Social Choice." They characterise the axioms for that the social welfare functional that they propose must satisfy in order to have a scale-dependent form of welfarism.

3.2 Incomplete information

There are two different types of incomplete information models presented in this workshop. There are papers where players have incomplete information on the issues over which they are making decisions, in other papers some agents have incomplete information over the payoffs or utility functions of other players.

We first summarize those where incomplete information is over issues.

- Dellis and Cotton in their paper “Informational lobbying and agenda distortion” show that an uninformed policymaker can exert effort or expand resources to learn about an issue on his own, and therefore does not need lobbying to become informed. They show that some interest groups concerned with issues that affect them rather than all citizens have greater incentives to collect information and lobby than other groups. These lobbying efforts can shift the policymaker’s attention away from the issues that affects the well-being of the general population and towards the issues of concern to specialized active lobby groups.
- Elbittar, Gomberg, Martinelli and Palfrey in their paper “Ignorance and Bias in Collective Decisions” where committee members have incomplete information over two alternatives from among which they must choose.

Many believe that in today’s highly complex world there is much uncertainty. Models can be developed where decisions are made under uncertainty using, for example, the theories developed by Hurwicz (1951), the 2007 Nobel Prize in Economics. Many prefer modelling situations in which agents have incomplete and imperfect information about the utilities or payoffs of other agents but where agents know the distribution from which different types of agents are drawn rather than being uncertain about the actions of others. That is, their modelling approach is to assume that decisions lead to risky rather uncertain outcomes. Papers assuming that agents have incomplete information on the payoff of others drawn from a known distribution of types include both theoretical and empirical models.

The theoretical papers assuming the payoffs of some agents are subject to a random shock drawn from a known distribution are:

- Pivato in his paper “Statistical Utilitarianism” in deriving the optimal social policy, the Condorcet winner, when agents utilities are subject to unobservable random shocks.
- Brett’s paper “Probabilistic Voting over Income Taxes with International Migration” identifies the conditions under which political considerations can attenuate (or exacerbate) the downward pressure on income tax rates typically associated with international mobility.
- Gallego and Schofield in their paper “Modelling the effect of campaign advertising on US Presidential Elections when differences across states matter” as they assume that voters’ utility functions are affected by a random shocks identifying different types along several dimensions with each voters observing the shocks affecting their utility function after candidates have chosen their policy positions and their advertising campaigns.

3.3 Simulations

Two papers use simulation techniques in order to understand the equilibria in their models. These models are part of what is known as computational social choice. These are:

- Erikson and Ghitza in their paper “Electing the Agenda-Setter” simulate tournaments in which the legislative agenda setter is elected by the legislature. They find that when all possible agenda setters are paired against each other, a Condorcet winner is more likely than not. The probability of a Condorcet winner (who defeats all comers in a leadership battle) actually increases with the complexity of the structure of legislative preferences.
- Le Breton, LePelley and Merlin in their paper “Evaluating the likelihood of the referendum paradox for mixed voting systems” simulate mixed electoral systems with D representatives elected in districts and L members elected at large to a legislature. They estimate the probability of the referendum paradox

as a function of the ratio L/D under the three scenarios. From an electoral design perspective, they find values for L/D are sufficiently large for the referendum paradox to become negligible and which mixed system is more able to drastically reduce the likelihood of the paradox.

- Magar, Altman, McDonald and Trelles in their paper “The effects of malapportionment, turnout, and gerrymandering in multi-party systems” taking the new and old redistricting maps and the electoral outcomes as given develop different simulations to estimate the vote-seat bias of parties in Mexico’s lower Chamber of Congress to decompose the electoral effect of redistricting on three potential sources of party bias in a multiparty setting separately: malapportionment, gerrymandering, and turnout.

3.4 Experiments

The two papers using laboratory experiments to address the issues they were concerned with are

- Elbittar, Gomberg, Martinelli and Palfrey show in their paper “Ignorance and Bias in Collective Decisions” design experiments where subject, that are members of a committee, must choose whether to acquire costly information before casting a vote. Their experiments show that voters are more likely to acquire information under majority rule, and attempt to counter the bias in favor of one alternative under unanimity rule
- Hassan, Mansour and Morton in their paper “Political Polarization and Support for Reform: Experimental Evidence from Egypt” find that when their subjects/voters are provided with information that support for the reform varies across ideological societies, they are significantly more likely to report that their vote choices are influenced by their society membership than when such information is not provided.

3.5 Empirical techniques

Different types of empirical techniques were used to study different empirical problems.

Three models used similar estimation techniques to estimate the positions of parties in elections in different countries. These models included different explanatory variables in their analysis. Since these models apply Schofield’s (2007) probabilistic voting model, their empirical technique uses Multinomial Logit regression techniques. These models assume that voters’ preferences are subject to a random shock drawn from an Extreme Value Distribution. each voter observes his or her own shock after parties choose their policy positions but before casting their ballot.

- Schofield and Simoneau in their paper “Modeling Elections and Referenda in Ireland” studied the 2007 Irish general election, and the the 2008 and 2009 Lisbon Treaty referenda.
- Schofield and Barutt in their paper “Measuring Campaign Spending Effects in Post-Citizens United Congressional Elections” examined the effect of campaign spending by candidates and independents on the 2014 US House of Representatives elections.
- Schofield and Kim in their paper “Spatial Model of U.S. Presidential Election in 2012” studied candidates policy positions in the 2012 US Presidential election.

3.6 Indices of electoral competition

Ferris, Winer and Grofman in their paper “Measuring Electoral Competitiveness: The Parliamentary System of Canada, 1867 - 2011” develop a variety of indices to measure the competitiveness of the Canadian parliamentary system using riding level data on elections since 1967.

Brams and Kilgour in their paper “Paths to Victory in Presidential Elections: The Setup Power of Non-competitive States” estimate three measures of setup power—winningness, vulnerability, and fragility—to illustrate how these measures highlight the advantage of the candidate ahead in electoral votes in noncompetitive states using the electoral results of the 2000, 2004, 2008 and 2012 US Presidential elections.

3.7 Healthcare

Balalaeva and Shvetsova in their paper “The Political Economy of which Diseases to Treat First” use disaggregated data on mortality from specific diseases from worldwide sample to show how healthcare expenditures on these diseases differs between autocratic and democratic countries.

4 Outcome of the Meeting

The papers presented at the workshop examined great variety of issues dealing with different aspects of social decision making in single and multi-dimensional policy spaces under different decision rules, different political institutions and different voting systems. Some studied elections when there are two or more parties competing in the election; others decisions in committee settings, decisions by voters through elections or through referenda in different countries.

Simulation techniques were used to examine the sensitivity of theoretical models to variations in the assumptions (including redistricting) and parameter values. Using laboratory experiments some examined the behavioral assumptions of theoretical models. Others defined criteria that voting systems may have then estimated how these measures behave in reality.

In essence the workshop was very productive. A wide variety of questions were examined using different frameworks and analytical tools.

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