Doctoral RESEARCH

PhD in Political Economy & Government (PEG)
PhD in Public Policy (PPOL)

2016
The PhD in Political Economy & Government (PEG) and PhD in Public Policy (PPOL) programs provide rigorous academic training to students who are committed to making the world a better place through research that inspires new ideas.

The PEG Program equips doctoral students for careers either in academia or policymaking that demand advanced knowledge of economics and political science. The PPOL Program trains doctoral students to shape new directions in public policy research and prepares them for careers in academia, government, and research organizations. PPOL students develop skills to teach the next generation of educators, researchers, and practitioners in public policy and the social sciences.

Students in both programs share an intellectual interest in the impact of politics on economic processes and outcomes, the reciprocal influence of economic conditions on political life, and developing scholarly research that empowers public policy practitioners to make informed decisions.

This document provides some of the students’ publications and presentations over the past year.

**POLITICAL ECONOMY AND GOVERNMENT**


**ABSTRACT**


> For decades, scholars have studied the relative power of parties and committees in the U.S. Congress. An influential theory, Conditional Party Government (cpg), hypothesizes that as intra-party preferences converge and inter-party preferences diverge, rank-and-file members and committees transfer power to party leaders. Most previous tests of cpg and other theories of party power rely on roll call votes to measure both the distribution of preferences within the chamber and the relative power of party leaders. We propose an alternative that assesses shifts of power within Congress by using PAC contributions and newspaper coverage. Since PACs are sophisticated donors who target their contributions to gain access and influence in Congress, following the money allows us to construct a measure of relative power. During the period 1978–2014, we find that party leaders receive an increasing share of the donations over time at the expense of committee leaders and rank-and-file. The share of PAC donations to party leaders closely tracks standard measures of cpg.

Another measure of power, based on newspaper coverage, produces similar patterns for an even longer period, from 1890–2014. Overall, our results provide strong support for the cpg theory.


Inmatrilineal kinship systems lineage and inheritance are traced through female members. I test the predictions of the “matrilineal puzzle,” the hypothesis that matrilineal systems decrease spousal cooperation by creating split allegiances within the household. I use a geographic regression discontinuity design along the matrilineal belt, which describes the distribution of matrilineal societies across Central Africa, to compare the cooperation of couples from matrilineal and patrilineal ethnic groups. Consistent with anthropologist’s accounts of split allegiances within matrilineal couples, I find that individuals from matrilineal ethnic groups cooperate significantly less with their spouses in an experimental setting, leading to monetary losses. This result is driven by opportunities to conceal income from spouses. I present evidence that the decrease in cooperation is due to lower levels of altruism between spouses and increased women’s bargaining power. I examine the implications of these findings for investment in children. Finally, I explore external validity using Demographic and Health Survey data.


Contributions pledged at the Paris Climate Alliance Equilibrium model using individual Climate Club proposal. We then test the change by first examining the Nordhaus bargaining. We apply our theory to climate change policy, establishing the Alliance/Nash Equilibrium as the Nash equilibrium. Players start by negotiating from their own standpoint, making stalemate likely. Second, the focal-point solution where contributions are proportional to benefits clashes with the disproportionate incentives little players have to ride cheaply. We identify a solution, the CheapRiding Efficient Equilibrium, which defines the relative contributions of players of differing size (or preference intensity) to reflect cheap riding incentives, yet still achieves Pareto optimality. Players start by establishing the Alliance/Nash Equilibrium as a base point. From that point they apply either the principles of the Lindahl Equilibrium or the Nash Bargaining Solution to proceed to the Pareto frontier. The former benefits from its focal-point properties; the latter is a standard analytic tool addressing bargaining. We apply our theory to climate change by first examining the Nordhaus Climate Club proposal. We then test the Alliance Equilibrium model using individual nations’ Intended Nationally Determined Contributions pledged at the Paris Climate Change Conference. As hypothesized, larger nations made much larger pledges in proportion to their Gross National Incomes.


Energy-efficient technologies offer considerable promise for reducing the financial costs and environmental damages associated with energy use, but these technologies appear not to be adopted by consumers and businesses to the degree that would apparently be justified, even on a purely financial basis. We present two complementary frameworks for understanding this so-called “energy paradox” or “energy-efficiency gap.” First, we build on the previous literature by dividing potential explanations for the energy-efficiency gap into three categories: market failures, behavioral anomalies, and model and measurement errors. Second, we posit that it is useful to think in terms of the fundamental elements of cost-minimizing energy-efficiency decisions. This provides a decomposition that organizes thinking around four questions. First, are product offerings and pricing economically efficient? Second, are energy operating costs inefficiently priced and/or understood? Third, are product choices cost-minimizing in present value terms? Fourth, do other costs inhibit more energy-efficient decisions? We review empirical evidence on these questions, with an emphasis on recent advances, and offer suggestions for future research.


ABSTRACT


Massively open online courses (MOOCs) have received a great deal of attention but little research exists on how they might fit into the existing system of higher education. We study the impacts on learning outcomes of hybrid courses redesigned using online materials from MOOCs created on the Coursera platform and digital materials created by the Open Learning Initiative, relative to existing versions of the same courses. We find that student performance is about the same in both sections, as measured by pass rates and scores on common assessments. This finding held across a variety of disciplines and subgroups of students. We find no evidence supporting the worry that disadvantaged or academically underprepared students were harmed by taking hybrid courses with reduced class time. Despite the similar student outcomes produced by the two course formats, students in the hybrid sections reported considerably lower satisfaction with their experience.


ABSTRACT


In many developing countries, environmental quality remains low and policies to improve it have been inconsistently effective. We conduct a case study of environmental policy, focusing on an unprecedented ruling by the Supreme Court of India, which targeted industrial pollution in the Ganga River. Difference-in-difference estimations indicate that the ruling led to reductions in river pollution and one-month infant mortality. To look at the mechanisms of impact, we test whether the identified health impact is fully explained by changes in pollution induced by the policy, and fail to reject that it indeed is. In so doing, we also quantify the adverse impact of water pollution on infant health and document the persistence of such impacts in downstream communities.

ABSTRACT


A central authority possessing tax and expenditure responsibilities can readily provide an efficient level of a public good. Absent a central authority, the case with climate change mitigation, voluntary arrangements must replace coercive arrangements; significant under-provision must be expected. Potential contributors have strong incentives to free ride, or to ride cheaply. International public goods are particularly challenging. The players - the nations of the world - are many and they start in quite different circumstances. Voluntary arrangements that might emerge from negotiations fall short for two reasons: First, players frame negotiations from their own standpoint, making stalemate likely. Second, the focal-point solution where contributions are proportional to benefits clashes with the disproportionate incentives little players have to ride cheaply. We identify a solution, the CheapRiding Efficient Equilibrium, which defines the relative contributions of players of differing size (or preference intensity) to reflect cheap riding incentives, yet still achieves Pareto optimality. Players start by establishing the Alliance/Nash Equilibrium as a base point. From that point they apply either the principles of the Lindahl Equilibrium or the Nash Bargaining Solution to proceed to the Pareto frontier. The former benefits from its focal-point properties; the latter is a standard analytic tool addressing bargaining. We apply our theory to climate change by first examining the Nordhaus Climate Club proposal. We then test the Alliance Equilibrium model using individual nations’ Intended Nationally Determined Contributions pledged at the Paris Climate Change Conference. As hypothesized, larger nations made much larger pledges in proportion to their Gross National Incomes.


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