

Research Statement

Thomas Fujiwara

Assistant Professor of Economics, Princeton University

April 2019

My research is in political economy, with a substantive focus on developing countries. I investigate how political and social institutions shape individual behavior, with a focus on incentives, information, and norms (mutual conventions, beliefs, and expectations). In particular, my work aims to understand how these factors influence *representation*, both in elections and in the workplace (e.g., under-representation of women and socially excluded groups). Whether elected officials properly represent the will of voters has important implications for policy outcomes. Similarly, representation of excluded groups in positions of power in the workplace can affect their labor market performance.

Economic theory often provides clear predictions to guide empirical work, and my work seeks to draw out, and test, these predictions. My research makes use of both observational data and field experiments. The papers based on observational data usually involve quasi-experimental empirical strategies, clarifying their link to theoretical predictions, and applying them to data from several contexts. The field experiments usually occur in the natural context of the participants' existing activities. Finding the right setting and partners (e.g., politicians and career placement directors) and creatively designing the treatments and data collection allow me to determine mechanisms and test theories. By spanning multiple methodologies, I aim at building a body of research evidence that balances external validity and the ability to test specific theoretical predictions, addressing the role of alternative mechanisms and confounding factors.

Representation in politics. I have studied the effects of representation (how improving the political participation of less educated voters can advance policies that benefit them), how social norms affect electoral representation, and voter behavior more generally (why citizens vote in the first place, and how they make their voting decisions).

Several political economy papers study the effects of interventions on electoral outcomes (e.g., turnout or vote shares). Their motivation partly relies on the premise that, by affecting electoral outcomes, such interventions also affect policymaking and welfare. While theory (e.g., the median voter and citizen candidate models) predicts this is the case, the evidence has been less clear. ***Voting Technology, Political Responsiveness, and Infant Health: Evidence from Brazil*** (*Econometrica* 2015) provides evidence that improving the political participation of poorer voters does advance policies that affect them. While filling

a ballot is trivial for educated citizens, this is not true for illiterate voters in the developing world. In Brazil, paper ballots required reading and writing and a substantial share of votes were deemed invalid (blank or error-ridden) and discarded from tallying. The introduction of electronic voting technology in the late 1990s allowed visual aids and facilitated voting for the less educated. Exploiting a regression discontinuity design embedded in its phase-in through time, I estimate that electronic voting reduced invalid votes, generating the *de facto* enfranchisement of more than 10% of the Brazilian electorate. I then find that, as predicted by political economy models, this enfranchisement of the less educated: i) increased the share of state legislators from left-wing parties, ii) shifted government spending towards public health care, a policy that is particularly beneficial to the poor, leading to iii) improved health services utilization (pre-natal visits) by less educated mothers and iv) reduced occurrence of low-weight births in this group.

This paper addressed the effects of enfranchisement and also highlighted how implementation issues can create “frictions” in the democratic process, making it perform differently than “frictionless” theories would predict. A set of papers continued to study these implementation issues, such as Callen and Long (2015), Neggers (2018), and León (2017).

The paper above studies how voters affect public good provision. I explore voters’ reactions to information on public good provision in two other papers using *field experiments*. While most of the related literature studies information provided by NGOs or news outlets, I focus on campaign messages provided by the candidates themselves. The experiments are done in partnership with political parties, so that the messages studied are embedded in their usual campaigning efforts. ***Can Informed Public Deliberation Overcome Clientelism? Experimental Evidence from Benin*** (with Wantchekon, *American Economic Journal: Applied Economics* 2013) studies a key question in the political economy of developing countries: why candidates pursue “clientelistic” political strategies (vote-buying or promises of targeted transfers) at the expense of “programmatic” strategies based on policy proposals of broader appeal (e.g., public-good provision). We cooperated with Presidential candidates in Benin, who agreed to change their usual campaign messages in randomly selected villages. Treated villages had town-hall meetings where policy proposals of broad appeal, written by experts, were presented and attendees (potential voters) had a chance to respond and react. The control group was exposed to the usual campaign strategy of festive rallies with gift distribution. The treatment reduced the prevalence of clientelistic practices and increased the candidates’ vote shares, but only in areas that were not the stronghold of the participating candidate. This paper suggests the first steps in understanding the conditions under which programmatic politics may overcome a clientelistic equilibrium.

The treatment-campaign strategy in the previous experiment differs from the control in two dimensions: the content (programmatic versus clientelistic) and the format (town halls versus rallies). To disentangle these two mechanisms, *Policy Deliberation and Voter Persuasion: Evidence from an Election in the Philippines* (with Lero, Lopez-Moctezuma, Rubenson, and Wantchekon, *American Journal of Political Science*) focuses on the role of format by implementing a field experiment in partnership with two programmatic parties in the Philippines. The parties participate in the “party-list election” that aims to generate representation to disadvantaged groups in the Filipino congress and have clear policy-based platforms (based on the rights of women and the urban poor). Our experiment involved the parties changing their campaign strategy in randomly chosen neighborhoods. The treatment strategy was to hold town hall meetings, while the control was to follow the usual strategy (leaflets and cars with speakers). While the format of the message is different, their content is the same. Our results suggest that town-hall meetings are more effective in increasing the parties’ vote share, shedding light on the role of allowing deliberation with voters as a method of conveying programmatic and policy-based campaign messages.

The papers above address how information affects how citizens choose which candidates to vote for. Another relevant question is why they turn out to vote in the first place. Recent research has focused on behavioral explanations, which we explore in *Habit Formation in Voting: Evidence from Rainy Elections* (with Meng and Vogl, *American Economic Journal: Applied Economics* 2016) examines the long-standing hypothesis that voting is habit-forming (turnout today *causes* turnout in the next election). Establishing this causal nexus, however, has been elusive as it has a confound: the general persistence in the determinants of turnout. The paper first clarifies that estimating habit formation requires an unexpected, temporary, shock to voting costs. It then uses Election Day precipitation as a shock to identify habit formation in American elections. Specifically, we document that rain on Election Day reduces turnout not only contemporaneously, but also in the next election (four years later). We also explore the role of social spillovers in amplifying the effect of past rainfall.

Two of my papers address the empirical relevance of strategic voting. Whether citizens vote sincerely (for their preferred candidate) or strategically (a best response to others’ votes) is key to understanding how voters’ preferences translate to who are the elected officials. It also has important implications for the formulation of political economy models and for the evaluation of institutions such as electoral rules. *The Runner-up Effect* (with Anagol, *Journal of Political Economy* 2016) uses data from Brazilian, Canadian, Indian, American, and British first-past-the-post elections to document a novel fact: second-placed candidates are substantially more likely than third-placed candidates to run in, and win, subsequent elections. This is true even when comparing second- and third-placed candidate that are *just a few votes apart*. Both types of candidates lose the election, have similar electoral performance, and (given the

rationale of close-election regression discontinuities) are on average similar on observable and unobservable characteristics. This finding thus identifies the effect of simply being labeled the runner-up (instead of third-place).

While this result is at first pass puzzling, we develop a model where strategic voters coordinate under aggregate uncertainty (a global game) that can rationalize the results: although being a close runner-up is uninformative of candidate quality, in equilibrium voters strategically coordinate on the higher ranked candidate. The model yields other predictions we take to data: the effect is stronger when supporters of second- and third-placed candidates form a “divided majority” that failed to coordinate against the election winner and that voters who supported the third-placed candidate switch to voting for the runner-up in the next election. This paper also has implications for the interpretation of incumbency advantage: several papers compare close first- and second-placed candidates to estimate the effects of holding office. The “runner-up effect” suggests that simply being labeled first-place may play a role by itself.

A Regression Discontinuity Test of Strategic Voting and Duverger’s Law (*Quarterly Journal of Political Science* 2011) follows an alternative strategy to study strategic voting. It exploits a regression discontinuity design in the assignment of plurality rule (first-past-the-post) and runoff (dual ballot) electoral systems in Brazilian mayoral races. I find that plurality rule causes voters to desert third-placed candidates and vote for the two most popular ones. While the *correlation* between use of plurality rule and the concentration of votes in two candidates is an established result (named Duverger’s Law), this paper provides novel evidence on the *causal* effect of electoral rules. Additional tests indicate that candidates’ characteristics and entry cannot account for the effect of electoral rules on the concentration of votes in two candidates, suggesting that strategic voting drives this finding.

The themes of the two above papers (the use of candidate rankings by voters and design of electoral rules) are also addressed by *Norms in Bargaining: Evidence from Government Formation* (with Sanz, accepted at the *Review of Economic Studies*). This paper studies how social norms (mutual conventions, beliefs, and expectations) affect political representation in parliamentary systems. It documents results that are difficult to reconcile with existing theories of multilateral bargaining, but consistent with a norm prescribing that the party with most votes should form government, even if it does not have a majority of seats. The norm can affect representation by turning formal institutions designed to generate governments representing majorities into informal rules where the party with a plurality of votes holds power. We provide evidence from both European national parliaments and Spanish local governments, leveraging regression discontinuity designs in which the two parties with the most votes are a few votes apart and *tied in their number of seats*. While theory suggests that both parties should have equal bargaining power,

our results indicate that the party with slightly more votes is substantially more likely to form a government.¹ While this result is *prima facie* puzzling (similarly to the “Runner-up Effect”), it can be rationalized in a model of information aggregation and incumbent disciplining in elections, where different equilibria can be interpreted as different norms. The model generates additional predictions supported by the data, such as voters enforcing the norm by punishing second-placed parties that form governments and that municipalities. Moreover, the model predicts that municipalities that adopt the norm have improved governance outcomes, which we confirm using data on instances of corruption in Spain.

The three papers described above further our understanding of voter coordination. They indicate that voters do strategically coordinate on candidates in ways that affect who is elected. Moreover, coordination can occur imperfectly and is guided by norms based on candidates’ rankings in previous elections. They helped to rekindle a literature testing the extent and consequences of strategic voting (e.g., Pons and Tricaud 2018a; Spenkuch 2018; Bordignon, Naniccini and Tabellini 2016) and start a literature on the effects of candidate rankings in previous elections (Folke, Persson, and Rickne 2016, Meriläinen and Tukiainen 2016; Pons and Tricaud 2018b).

Representation in the workplace. My research described above studies how information and social norms affect electoral representation. Much like political contexts, the workplace is also characterized by power dynamics that are affected by information and norms.

How social norms and perceived power dynamics regarding gender roles can create the underrepresentation of women in business environments is addressed in *‘Acting Wife’: Marriage Market Incentives and Labor Market Investments* (with Bursztyn and Pallais, *American Economic Review* 2017). We show that norm perceptions create tradeoffs between career and family for women even before marriage. Previous research shows that men typically prefer romantic partners who are less professionally ambitious than they are. Thus, actions that help single women’s careers may harm their marriage-market prospects. We provide evidence that single women respond to this tradeoff with two field experiments in an elite U.S. MBA program.

¹ This is perhaps best explained with an example. Consider an election for a council with 11 seats where three parties (A, B, and C) obtained, respectively, 42.0%, 41.9%, and 16.1% of the votes. Parties A and B receive five seats each, and party C, one seat. Forming a government requires a majority of six. Theories of bargaining and coalition formation predict that A and B should have similar bargaining power and are equally likely to form a government. Our findings, however, indicate that party A is much more likely to appoint the mayor.

In the first experiment, randomly-selected students were primed to believe that their responses to a real-stakes placement questionnaire would be viewed only by a career counselor, while all other students were primed to believe that their classmates would also see their responses. When students expect that only a career counselor will see their answers, single women, non-single women, and men all report similar preferences. However, when they believe their classmates may see their answers, single women report lower desired compensation, willingness to travel, and willingness to work long hours, as well as lower self-ratings of ambition. Men and non-single women do not respond differently when they expect classmates to see their responses.

In the second experiment, students made choices over hypothetical jobs, knowing that a career counselor and a randomly-selected small group of classmates could see their answers. Single women made substantially less career-focused choices in front of single, male peers than in front of female or married male peers. Using observational data on grades, we find a similar pattern in the classroom. Unmarried women perform similarly to married women in class when their performance is kept private from their classmates (on exams and problem sets); yet, they have significantly lower participation grades. This paper received substantial media attention and has informed how multiple business schools revised their career placement procedures.

While the previous work studies the consequences of social norms, “*The Origins of Human Pro-Sociality: Cultural Group Selection in the Workplace and the Laboratory*” (with Francois and van Ypersele, *Science Advances* 2019) studies the origins of norms regarding trust and cooperation. A set of theories based on cultural group selection predicts that inter-group competition increases trust. When applied to the context of workers and firms, these theories predict that competition among firms should increase workers’ trust in their co-workers and the general population. The latter can be measured by answers to the “canonical generalized trust question” that is studied by a large literature. We find three pieces of evidence supporting this prediction: i) American workers in more competitive industries are more likely to report higher trust, ii) state-level banking regulation reforms that enhances competition increase trust, iii) German workers who switch to more competitive industries report increases in their trust. We also design a laboratory experiment in which pairs of participants play a pure public-goods game or a variation where pairs compete with another pair. In the competitive variation, a pair receives their share of the public goods only if their joint contribution equals or exceeds that of another (randomly selected) competitor pair. Introducing competition increases within-pair cooperation (public-good provision) in the laboratory and makes participants more likely to report higher generalized trust.

Ongoing research and future work. I am currently pursuing several projects that continue in the directions of studying the causes and consequences of political representation and under-representation of women and socially excluded groups in the workplace.

Representative of my planned future work is an ongoing project (with Bursztyn) on how political representation affects policy outcomes in developing contexts. We study how Brazilian municipal governments affect the market structure of *illegal* deforestation of the Amazon rainforest. We exploit a 2004 Supreme Court decision affecting the number of elected officials in a subset of municipalities to document that larger council sizes lower deforestation. We then study how this can be explained by theories of whistleblowing (where just one representative of the “good type” can substantially affect outcomes) and a Shleifer-Vishny model where multiple corrupt officials set bribes in a decentralized manner (and thus raise the cost of bribing officials to carry out illegal deforestation).

Last, an ongoing research project (with Hilbig and Raffler) studies the under-representation of women in elected offices. It focuses on whether female candidates receive fewer votes because their parties nominate them to run in districts where their party is unpopular. Doing so requires measuring party popularity separately from the nominated candidate’s popularity. We do this by exploiting unique data from German Bundestag elections, where citizens cast two separate votes *for the same office* (one for a specific candidate and one for a party list). This allows us to show that women are systematically nominated to run in districts where their party is, *ex-ante*, less popular. Moreover, it allows us to calculate what counterfactual female candidates’ vote shares would be if their parties treated them similarly to men (i.e., nominated men and women to safe and competitive districts at equal rates).

In **conclusion**, I investigate how political and social institutions shape individual behavior, focusing on how incentives, information, and norms shape individual behavior and influence *representation*, both in elections and in the workplace. Understanding these issues is an important part in designing institutions that deliver what citizens prefer and organizations that provide opportunities to a diverse group of people.

References

- Callen, M., & Long, J. D. (2015). Institutional corruption and election fraud: Evidence from a field experiment in Afghanistan. *American Economic Review*, 105(1), 354-81.
- Folke, O., Persson, T., & Rickne, J. (2016). The primary effect: Preference votes and political promotions. *American Political Science Review*, 110(3), 559-578.
- León, G. (2017). Turnout, political preferences and information: Experimental evidence from Peru. *Journal of Development Economics*, 127, 56-71.

Meriläinen, J., & Tukiainen, J. (2016). Primary Effect in Open-List Elections. *VATT Institute for Economic Research Working Papers No. 79*.

Neggers, Y. (2018). Enfranchising Your Own? Experimental Evidence on Bureaucrat Diversity and Election Bias in India. *American Economic Review*, 108(6), 1288-1321.

Pons, V., & Tricaud, C. (2018a). Expressive Voting and Its Cost: Evidence from Runoffs with Two or Three Candidates. *Econometrica*, forthcoming.

Pons, V., & Tricaud, C. (2018b). Rankings Matter Even when They Should Not: Bandwagon Effects in Two-Round Elections. *Working paper*.

Spenkuch, J. (2018). Expressive vs. Strategic Voters: An Empirical Assessment. *Journal of Public Economics*, forthcoming.

Own papers (in chronological order)

Policy Deliberation and Voter Persuasion: Experimental Evidence from an Election in the Philippines. (with Leonard Wantchekon, Gabriel Lopez-Moctezuma, Cecilia Pe Lero, and Daniel Rubenson). Forthcoming, *American Journal of Political Science*.

Norms in Bargaining: Evidence from Government Formation. (with Carlos Sanz). Forthcoming, *Review of Economic Studies*.

The Origins of Human Pro-Sociality: Cultural Group Selection in the Workplace and the Laboratory (with Patrick Francois and Tanguy van Ypersele). *Science Advances*, 4(9): 19 September 2018.

‘Acting Wife’: Marriage Market Incentives and Labor Market Investments (with Leonardo Bursztyn and Amanda Pallais). *American Economic Review*, 2017, 107(11): 3288-3319.

Habit Formation in Voting: Evidence from Rainy Elections. (with Kyle Meng and Tom Vogl). *American Economic Journal: Applied Economics*, 2016, 8(4): 160-188.

The Runner-Up Effect. (with Santosh Anagol). *Journal of Political Economy*, 2016, 124(4): 927-991.

Voting Technology, Political Responsiveness, and Infant Health: Evidence from Brazil. *Econometrica*, 2015, 83(2): 423-464 (*lead article*).

Can Public Deliberation Overcome Clientelism? Experimental Evidence from Benin (with Leonard Wantchekon). *American Economic Journal: Applied Economics*, 2013, 5(4): 241-255.

A Regression Discontinuity Test of Strategic Voting and Duverger’s Law. *Quarterly Journal of Political Science*, 2011, 6(3-4): 197–233 (*lead article*).