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STATEMENT OF PURPOSE

The Journal of Politics & International Affairs at New York University is a student-run publication that provides a forum for outstanding student work on relevant, thought-provoking topics in the domestic and international landscape, including research in political science, economics, history, and regional studies.

We believe that the student theses published biannually in the Journal—chosen and edited rigorously by our editorial staff—are legitimate and valuable examples of the intellectual growth of politically-minded students and writers at New York University.

NOTES

Articles published in the Journal of Politics & International Affairs do not represent an agreement of beliefs or methodology, and readers are not expected to concur with all the opinions and research expressed in these pages. Instead, we hope that these pieces are able to inform and inspire dialogue in the NYU community by addressing a wide variety of topics and opinions.

Archival volumes of the journal may be found online at

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A Note From The Editors

Each year, the submissions we receive from writers across the University speak to the current events and pressing global issues on the minds of New York University students. We do not request that all submissions be of topical concern, but without fail, they almost always are. In the autumn of 2016, American politics has been a world focal point. The Journal prides itself in being the medium for students to engage in discourse, political or otherwise. Facing an unprecedented period in both the American political realm and beyond, we encourage our writers and readers to voice their opinions and push discourse forward. Now—more than ever—the bright minds of students must be heard.

Being able to highlight and honor exceptional student work engaging these topics is exactly what the Journal of Politics & International Affairs at NYU was created to do. We have to support the effervescent dialogue put forth by the future of America. JPIA does that by featuring sharp op-eds that provoke conversation on our website, by sponsoring more debate and panel forums along with other politically-minded clubs at NYU, and by magnifying the thoughts and concerns of students of all fields of study and political stances primarily in Greenwich Village to the globe.

To get involved with JPIA and stay informed of the thoughts of students, we sincerely hope you will follow us on Twitter, like us Facebook, and send us your brilliant research, papers, projects, and opinions. We will be waiting to see what you write next.

Trudy Wurm, Editor-in-Chief
Patrick Lin, Managing Print Editor

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Our editorial staff accepts submissions for consideration throughout the year. To submit your work, or to inquire about being published on our website, email jpia.club@nyu.edu.

Pitch the print Journal with your original essay or thesis:

Works that are published by the print Journal tend to be longer than 5,000 words or 20 pages, double-spaced. Submissions are vetted based on their originality, academic strength, and syntax. Works that are chosen are then polished by several staff editors. The Journal is published every December and May. Submissions from NYU students of any school are welcome.

Pitch JPIA's online editorial forum:

Our website publishes short blogs that are often around 500 words and feature unique, and creative insights into political issues, current events, and international affairs. We also welcome long-form, reported pieces. These are typically 1,000-2,000 words, allowing writers to explore more complex topics with a heavier research component than the blogs. When pitching please keep your idea to a general abstract, and offer us an example of your written work.

NOTES ON CONTRIBUTORS

AASHNA RAO

Aashna Rao graduated from NYU in May 2016 with a B.A. in Politics & Human Rights from Global Liberal Studies, and a B.A. in Spanish Language & Culture from the College of Arts and Science. While at NYU, she worked at an immigration law firm in the D.C. area, an advocacy organization for informal sector workers in New Delhi, India, and the Guatemalan Embassy in Madrid, Spain. These experiences in immigration and migration policy work inspired her senior thesis research on urban migrant laborers' rights. Aashna hopes to pursue international human rights law, and currently works as a paralegal at the U.S. Attorney's Office in Manhattan.

CHRISTINA GAY

Christina Gay is a first year student at John's Hopkins School of Advanced International Studies in Washington D.C., pursuing a Master of Arts in Conflict Management and International Economics. She graduated from NYU College of Arts and Sciences in 2016 with an Honors degree in International Affairs and a minor in Middle Eastern Studies. Her academic interests include U.S. foreign policy, conflict management, and women's rights and advocacy. She hopes to pursue a career working for the Department of State as a U.S. Foreign Service Officer.

ARNAV MODY

Arnav Mody currently works in the Strategy & Operations practice at Deloitte Consulting in New York. He graduated from NYU in 2016 with a double major in Economics and International Relations and a joint minor in Mathematics and Computer Science. Arnav has a keen interest in global politics and economics with a special focus on India. Growing up in Mumbai, he has always been surrounded by Indian politics and continues to broaden his understanding and insights through research on Indian socio-economic policies. In addition, he enjoys the study of game theory and its application to international relations and international political economy. Arnav hopes to continue to expand his knowledge and hone his skills in various fields through his work at Deloitte Consulting. Going forward, his professional ambitions include studying law, entrepreneurial pursuits, and a greater involvement with international relations and economic policy.

DANIEL FAHRENTHOLD

Daniel graduated summa cum laude from New York University in 2016 with a B.A. in International Relations. His area of focus was global democratic development and international law with regards to U.S. and European Union foreign relations. He is now pursuing a career in international law and plans to attend law school in 2017.

AZIZJON AZIMI

Azizjon Azimi studied International Relations and Economics in the College of Arts and Science and graduated cum laude with high honors in both fields in May 2016 as the youngest degree candidate of his class. His academic interests revolve around the intersection of democratic capacity building and socioeconomic development. Born and raised in the Central Asian country of Tajikistan, he hopes to engage in social entrepreneurship after the completion of his graduate studies. He is currently employed at Simon-Kucher & Partners and is also working on a short-term project at the United Nations. In addition, he serves as Chairman of the Board of Directors of TajRupt, a start-up NGO operating in the spheres of education reform, renewable energy and anticorruption in Tajikistan.

Internal Freedom of Movement & the Fundamental Rights of Urban Migrants in China

Aashna Rao

Since the vocalization of the Asian values debate by Singaporean Prime Minister Lee Kuan Yew in the early 1990s, international human rights discourse has sought on several occasions address the legitimacy of economic focus as a standard of societal well-being instead of political democratization. China is an example of an Asian nation that relies heavily upon economic productivity for advancement. Considering this context, this paper aims to examine the nature of rights of one of the most prevalent and vulnerable groups in the country: rural-urban migrant laborers. After analyzing migrant laborer conditions in Shanghai specifically, this essay will employ Amartya Sen and Martha Nussbaum's language of capabilities to introduce the notion of subsidiary rights. Finally, this essay will argue that the right to migration in both nations is not, in fact, a fundamental one, and instead ought to be conceived of as a subsidiary right.

Introduction

Asian Values as a Normative Conceptual Foundation

In the early 1990s, Prime Minister Lee Kuan Yew of Singapore, aided by Prime Minister Mahathir Mohammed of Malaysia, championed the controversial platform of "Asian values" as a divergence from the western school of thought that draws a connection between economic development and political democratization.[1] Instead of an emphasis on democratic ideals, Lee attributed Singapore's economic success to qualities originating from ideals of Confucianism. He claimed several of these are observed with frequency in Asian cultures, including filial piety, sacrifice of the individual's success in exchange for devotion to the collective (whether it be family or nation), thrift, and a strong work ethic.[2] Western commentators have found fault with the self-serving nature of Lee's manifesto and its potential to be abused as justification for political actions violative of international human rights standards. Additionally, in recent years, an increasing infiltration of human rights rhetoric in the political discourse of Asian nations has informed the criticism Lee's ideals have faced.

1 Elgin, Molly. "Asian Values." Stanford Journal of East Asian Affairs 10.2 (2010): 135-45. Web.

2 BBC World Service. "Article 30: Repression in the Name of Rights Is Unacceptable." BBC.com. BBC World Service, n.d. Web.

Critiques of the East-West Dichotomy

In 1997, scholar Amartya Sen penned a humanistic critique of the careless generalization of Asia's immense diversity and the impact of a more globalized conceptualization of human rights dialogue. Sen stated,

> "The size of Asia, where about 60 percent of the total world population lives, is itself a problem. What can we take to be the values of so vast a region, with such diversity? There are no quintessential values that apply to this immensely large and heterogeneous population, that differentiate Asians as a group from people in the rest of the world. The temptation to see Asia as one unit reveals, in fact, a distinctly Eurocentric perspective."[3]

Simply striking a value system dichotomy between the West and Asia neglects the diversity of values found in both regions. Even when limited to the southeastern region of Asia, the variance between nations in nearly all aspects of society—language, history, tradition, and religion—is immense.

Inoue Tatsuo concurs with Sen, and furthers the diversity argument by dissecting the clichéd contrast between the "individualistic West versus communitarian Asia." Inoue clarifies "that the individualistic-communitarian tension run not between the West and Asia but within each of them. No society is free of these tensions."[4] For Inoue, individualism and communitarianism are not mutually exclusive; supporters of communitarianism, both in the West and in Asia, rely on individual rights to boost their "communitarian aspirations."[5] To distance the discussion from the West versus Asia dichotomist presentation is necessary in order to appropriately account for subtleties of culture found in both regions of the world. Sen and Tatsuo's extensive commentary on the insufficiency of certain western conceptualizations of Asian values, heavy-handed in their tendency to refer to authoritarianism as a direct indicator of Asian leaders' human rights oppression agenda, calls for a more nuanced discussion surrounding the debate.

In reality, the politics of Asian nations are not oblivious or outwardly opposed to human rights rhetoric. Sen questions the assumption that Lee's values of collectivism and individual sacrifice exclude any potential for the maintenance of human rights amongst countries of the entire region. For instance, ancient Indian Emperor Ashoka's "championing of egalitarian and universal tolerance may appear un-Asian to some commentators, but his views are firmly rooted in lines of analysis already in vogue in intellectual circles in India in the three preceding centuries."[6] The official contemporary, historic, and political documents of almost every Asian nation include notions of equality, societal cohesion, economic success, and political stability—all components that undoubtedly serve to improve quality of life within a country. To assume all Asian values rhetoric is a guise for authoritarian regimes eager to conceal politically

3 Sen, Amartya. "Human Rights and Asian Values." Sixteenth Morgenthau Memorial Lecture on Ethics & Foreign Policy (1997): n. pag. The Carnegie Council on Ethics and International Affairs. Web.

4 Tatsuo, Inoue. "Liberal Democracy and Asian Orientalism." The East Asian Challenge for Human Rights. By Daniel A. Bell and Joanne R. Bauer. N.p.: Cambridge UP, 1999. 27-59. Print.

5 Inoue 58.

6 Sen. "Human Rights and Asian Values." 20.

oppressive practices would be injudicious. The focus of international discussion should be to achieve rhetorical accuracy in regard to the Asian values debate in order to help discern the true implications of specific divergences in political approach.

Employing the Asian Values Debate as a Productive Tool

The Asian values debate must be used as a means to understand precisely why certain nations produce policy that respects human rights, while others emphasize policy partial to the maintenance of greater governmental control over specific rights. For instance, the question of whether policies that diverge from western norms do indeed exist in Asian nations must be raised. If the answer is yes, do they stem from a different cultural conceptualization of human rights, as Lee's platform might suggest? Additionally, are these purportedly "Asian" policies simply the government's most effective and practical solution to pressing issues—such as highly-concentrated populations—not present in the west? Or, is the enforcement of policies based in Asian values a political maneuver directed at concealing various human rights abuses in favor of economic progress?

This essay will address these questions in relation to the human right to movement, specifically in regards to rural-urban migration within China. By asking these questions and investigating their intricate responses, I aim to determine whether it is more constructive to conceive of the right to movement as a fundamental human right, or as a political right afforded in varying degrees as seen fit by a government in order to maximize the well-being of its people. This essay will examine these questions by analyzing the conditions of internal, domestic migrant workers in Shanghai, China, a densely populated Asian megacity with a significant rural-urban migrant laborer community.

On the global scale, Joseph Carens argues maintaining closed borders enforces feudal hierarchies that limit opportunity for those who desire to move, and favor the unearned privilege of those lucky enough to be born in economically stable countries or communities. Even when a state exercises its right to control international movement, "there are still significant moral constraints on how that control may be exercised."[7] Thus, there are certain groups—including refugees and asylum-seekers, immediate family members of citizens or permanent residents—the state ought to grant entry to on the basis of morality. In *The Ethics of Immigration*, Carens focuses on internal migration within the state and establishes that in accordance with Article 13.1[8] of the Universal Declaration of Human Rights of 1948, the right to internal movement is officially and politically endorsed as necessary, at least by western nations.[9] However, he discusses the potential scope for fundamentality of the right by explaining,

> "Some critics argue that internal freedom of movement is not a very important freedom because we restrict movement within countries for many different reasons: respect for private property, imprisonment and parole for criminal offenses, medical quarantines,

7 Carens, Joseph. "Who Should Get In? The Ethics of Immigration Admissions." Ethics & International Affairs 17.1 (2003): 95-110. Carnegie Council on Ethics and International Affairs. Web.

8 Article 13.1 of the UN Declaration states, "Everyone has the right to freedom of movement and residence within the borders of each state."

9 Carens, Joseph. The Ethics of Immigration. New York: Oxford UP, 2013. Print.

> prohibitions on settling on indigenous lands, traffic regulations, and so on. Some of these reasons, like traffic regulations, they say, do not involve any fundamental values. They are merely matters of efficiency or public convenience."[10]

These "matters of efficiency or public convenience" are hugely significant in consideration of the limits of government intervention, despite how petty a restriction due to traffic regulations might seem. For instance, a "respect for private property" can translate to property ownership and spatial occupancy issues. "Medical quarantines" can be extrapolated to discuss contamination risks present in poor working conditions or close quarters. The dangers of mass rural-urban migration in regards to provision of sufficient space and satisfactory medical conditions must be examined. The government's duty ultimately is to provide for the well-being of its people. In the face of pressing health and safety risks that jeopardize quality of life, a human rights discourse that provides for freedom of movement can seem like a frivolous consideration. Further, if a total freedom of movement also directly and negatively targets quality of life by threatening health and safety, should a society be willing to allow a curbing of this freedom?

Justifications for Curtailing Freedoms

Daniel Bell presents a sophisticated expression of the Asian values perspective in relation to Lee's policies.[11] Bell explains that Lee Kuan Yew's aim is not to undermine the notion of freedom, but rather that freedoms should be "curtailed as a short-term measure" to eradicate poverty and encourage economic growth.[12] For Singapore's government, assumption of these far-reaching political powers allows for more efficient and effective action on a daily basis, but especially so in times of emergency.

In fact, short-term curbing of rights is even internationally permitted by the United Nations International Covenant on Civil and Political Rights in case of national emergency.[13] Western implementations of this Covenant are often intended to assuage risks of social disorder, while "governments in East Asia frequently appeal to the imperatives of economic development."[14] It is important to note that perhaps western nations, generally considered developed nations, have the luxury to call upon this kind of action primarily to promote public order or prevent deterioration thereof. On the other hand, perhaps Asian governments require more frequent use of this action to better meet the basic economic needs of its people.

The question arises: is it truly more just to restrict a right in the name of preservation of public order than it is to restrict a right to advance an economic purpose? Or do the ends justify the means of the interim in both cases, given the distinct societal and developmental needs of western societies in

10 Carens, The Ethics of Immigration. 247.

11 This perspective is articulated dialogically in Bell's book, East Meets West, by a fictitious character named Jospeh Lo.

12 Bell, Daniel A. East Meets West: Human Rights and Democracy in East Asia. Princeton: Princeton UP, 2000. Print.

13 United Nations Office of the High Commissioner. International Covenant on Civil and Political Rights. International Treaty. New York: United Nations, 1966. Print.

14 Bell, East Meets West. 39.

comparison to Asian societies? Given Sen's interpretation of the Asian values debate that considers the diversity of Asia and the inclusion of principles of human rights discourse, perhaps western legislative bodies should be more forgiving to these "appeal[s] to the imperatives of economic development."

Fundamentality and Well-Being

Whether the human right to movement can be compromised by political regimes for the common economic good must be decided. Crucial to the formulation of this decision is the question of whether the right to internal freedom of movement is a human right, or one whose existence depends on the state's policy objectives. In other words, the nature of a "fundamental" human right must be defined, and the relation between the right to internal movement and the fundamentality of rights in the Chinese context understood.

In Carens' reference to traffic control as a means of restriction, for instance, he acknowledges, "If we can restrict free movement within countries for trivial reasons like traffic control, the critics ask, how could it be an important freedom, much less a basic human right?" Even if traffic control is considered a restriction of movement, all rights are subject to such caveats. For example, the right to freedom of speech—arguably a more commonly accepted "fundamental" right, particularly in democratic nations—is only exercisable insofar as one does not cause harm or threaten to cause harm through its practice.[15] Therefore, the fundamentality of a right cannot be contingent upon the presence of stipulations or restrictions that modify it.

Instead, for Carens, the nature of a fundamental right is one that directly contributes to a sense of freedom and one accompanied by modifications preventing its exercise from inflicting harm to others or damage to a society. Essentially, if the exercise of a right allows a human to feel or, through practice, be more free (without harming others), Carens advances it should be considered fundamental. For Carens, the right to movement within a nation speaks to the value of "having your will matter" and expresses a "vital interest in being free," since having the ability "to move where you want is an important aspect of being free."[16] The capacity to move freely, then, is the fulfillment of a desire to improve one's well-being or to maintain an adequate sense of well-being.

Conceptualizations of "well-being" however can also differ greatly across countries and cultures. "Having your will matter," for example, seems to pertain more strongly to a western notion of individuality. Perhaps the achievement of a satisfactory standard of societal well-being is not an individualistic pursuit, as this can be an inefficient or impossible task without access to state resources, but one the government is better fit to provide for all of its citizens collectively. From a political perspective, perhaps the right to migration may have a more unanimous definition. One could argue every government's obligation should be to allow for movement insofar as it promotes the well-being of its people, while simultaneously monitoring and minimizing consequential harms incurred by the exercise of the right. Satvinder Juss makes the case for the importance of the right to movement both internally and internationally by stating,

> "The world order depends on freedom of movement. Whether one is looking at the encouragement of peace by the easing of demographic pressures, or the enrichment of

15 Carens, The Ethics of Immigration. 247.

16 Carens, The Ethics of Immigration. 247.

> national cultures, or the redistribution of economic resources, or the pursuit of humanitarian objectives, freedom of movement has a central role to play in the modern global order."[17]

On one hand, this sentiment speaks to a sense of universality and fundamentality of the right—it establishes international order, increases freedoms, and minimizes chaos, so it should be fundamental. On the other hand, the maintenance of this modern global order, then, is contingent upon the efficacy of governments to address these goals Juss mentions to ultimately maximize the well-being of its population.

Just as this discussion requires a working conceptualization of "fundamentality," it requires a conceptualization of "societal well-being." By attacking the very foundation of Lee's claim–economic development can be favored over political liberalization–Gerd Langguth calls attention to the scope of economic development and the factors that ought to be included when gauging the well-being of a people. Langguth argues that the 1997 Asian financial crisis "destroyed the notion that 'Asian values' had been the main cause and guarantor of Asia's exorbitant growth rates."[18] Nations that had seen annual economic growth rates of six to nine percent (Malaysia, Singapore, Indonesia, Thailand, South Korea) experienced severe currency depreciation, stock market implosions, and consequential widespread regional financial contagion.[19] Langguth's argument indicates the financial crisis proved that, while those Confucian ideals upon which Lee's platform was based might be theoretically commendable, non-democratic states were ultimately just as susceptible, if not more so, to economic downturn as democratic states. In other words, beyond a certain point, a nation's economic stability or instability is not necessarily an indicator of the strength of governmental policy that ensures societal well-being.

Instead, a more holistic conceptualization should be applied to notions of well-being, even as it relates specifically to economic development or advancement. Modern understanding of economic development insists upon including more than just the traditional, quantitative, aspect; relying solely on GDP or income per capita to determine whether a country is progressing economically, for example, is insufficient. According to economists and theorists alike, it is necessary to conceive of development "as a multidimensional process involving major changes in social structures, popular attitudes, and national institutions, as well as the acceleration of economic growth, the reduction of inequality, and the eradication of poverty."[20] Ultimately, these factors collectively contribute to a sense of societal well-being.

The Language of Capabilities

Sen's capabilities approach aims to advance development by "expanding substantive freedoms."[21] This approach emphasizes human potential—the choice one has to use various means, like GNP or

17 Juss, Satvinder S. "Free Movement and the World Order." International Journal of Refugee Law 6.3 (2004): 289-335. Web.

18 Langguth, Gerd. "Asian Values Revisited." Asia Europe Journal 1.1 (2003): 25-42. Web.

19 Hill, Charles W.L. The Asian Financial Crisis. Working paper. Dayton: Wright State U, 2005. Print.

20 Smith, Stephen C. Economic Development. By Michael P. Todaro. 11th ed. Boston: Addison-Wesley, 2012. 14-18. Print.

21 Sen, Amartya. Development as Freedom. New York: Anchor, 1999. Print.

individual incomes, to establish the life and standard of well-being he or she desires. What matters are not only the utilities or resources an individual possesses, but ultimately the ability of the individual to employ these tools to ensure freedom is a primary end of development. These resources and utilities are significant once the individual can convert them to a valuable functioning as determined by general standards of the community.

Contrary to Lee's separation of economic advancement from political liberalization, Sen argues that different kinds of freedoms are linked directly and empirically. For example, "political freedoms (in the form of free speech and elections) help to promote economic security…[and] social opportunities (in the form of education and health facilities) facilitate economic participation."[22] Increased economic productivity or a greater circulation of wealth into and out of a country at large does not determine quality of life for all citizens, particularly not for impoverished citizens. Economic models that assume Asian values lead to economic success, which then leads to societal well-being, ought to be careful in defining standards of well-being, given that Sen's standpoint is reflective of an internationally acknowledged modern conceptualization of the term.

Martha Nussbaum amends Sen's position, agreeing generally that the capabilities approach is beneficial in its inclusion of the advancement of human rights as an objective, but finding fault in Sen's ambiguity. Nussbaum argues Sen fails to specify "which capabilities a society ought most centrally to pursue" and "what a minimum level of capacity for a just society might be." Nussbaum proposes,

> "To get a vision of social justice that will have the requisite critical force and definiteness to direct social policy, we need to have an account, for political purposes of what the central human capabilities are, even if we know that this account will always be tested and remade."[23]

For Nussbaum, specificity is crucial to practical implementation. Nussbaum provides clarity on two issues particularly vital to understanding how capabilities can be used to expound the topic of this paper. First, Nussbaum offers distinction between rights and capabilities, and second, she "endorses a list" of capabilities she understands to be most central to human development.

Rights, Nussbaum argues, are clearly constructive to progress, but can be significantly supplemented by the language of capabilities, which offers greater consistency and fortification. Rights can be problematic because they are "by no means a crystal clear idea." Nussbaum contends there is too much disagreement about what the basis of rights claims are, whether they are presupposed or reactionary tools, whether both individuals and groups can claim them equally, and from where (of what "cultural and historical tradition") our modern conceptions of rights come. Capabilities bolster the language of rights by leveling these disagreements and instead advancing the notion that there are certain rights all humans and all individuals ought to be capable of accessing and fulfilling regardless of where the right comes from or who the individual is.

22 Sen, Development as Freedom. 11.

23 Nussbaum, Martha C. "Capabilities as Fundamental Entitlements: Sen and Social Justice." Feminist Economics 9.2-3 (2003): 33-59. Routledge Taylor & Francis Group. Web.

The existence of a right, on paper for instance, is simply a right, but the fulfillment of that written right through available resources and mechanisms is the acquisition of a capability. Nussbaum asserts that citizens of a nation do not possess "a right in a sense that matters for judging that the society is a just one simply because this language exists on paper: they really have been given a right only if there are effective measures to make people truly capable of [its] exercise."[24] However, there are certain capabilities that are inviolable, regardless of the political nature of a society. All individual humans ought to be in a position to fulfill certain rights without interference from other individuals, groups, or the state. Nussbaum moves to elucidate Sen's ambiguity by providing a list of these inviolable capabilities. She maintains there are ten capabilities that are "central requirements of a life with dignity." While societies do have some agency in determining the specifics of these capabilities, a society ought not to have the liberty to deem any one of these capabilities unnecessary. In other words, the institutions of every society ought to guarantee at least these ten capabilities to all its citizens. Essentially, Sen defines capabilities as the instruments that transform a right on paper into a reality for an individual or group. Nussbaum accepts this definition and adds a second component: the term "capability" can also be used to refer to a right that is fundamental, or one that each individual in each occasion ought to be able to realize without interference.

In regards to the internal freedom of movement for migrant population in Shanghai, the three capabilities that are most pertinent are the first, third, and tenth—life,[25] bodily integrity,[26] and material control over one's environment,[27] respectively. The first capability is relatively self-explanatory, as the encroachment of one's right to life is perhaps the most atrocious abuse one human can execute upon another. Nussbaum's capability of life also takes care to mention that one's life should be "worth living," which implies the notion of life should inherently include notions of dignity and decency. I will employ the inclusion of this capability as an indication that the right to life is the most fundamental capability of any individual, including migrant laborers. This classification as a highly fundamental capability will be foundational in explaining to which related rights migrants ought to have the most express access.

The third capability relates to the idea of migration, though Nussbaum seems to indicate this is especially relevant in situations in which one is in physical or sexual danger or to acquire physical or sexual freedoms. In its most conservative interpretation, this capability declares that if one is in physical danger, one should be able to relocate. In a more liberal interpretation, this capability could signify one's ability to relocate in pursuit of an improved physical condition. For many migrants, the move to the city is a quest for greater physical stability for themselves and their families. Finally, the tenth capability, particularly the section regarding material control, is relevant to migrant rights as it serves to address the

24 Nussbaum 38.

25 "Being able to live to the end of a human life of normal length; not dying prematurely, or before one's life is so reduced as to be not worth living."

26 "Being able to move freely from place to place; to be secure against violent assault, including sexual assault and domestic violence; having opportunities for sexual satisfaction and for choice in matters of reproduction."

27 The tenth capability is divided into two parts A and B; part B is particularly relevant to migrant laborers:
"Being able to hold property (both land and movable goods), and having property rights on an equal basis with others; having the right to seek employment on an equal basis with others…"

issue of social inequality in the urban sphere. Labor market segregation, lower comparative wages, and insufficient housing are all issues new migrants face in greater proportion to permanent urban counterparts. Nussbaum's tenth capability cements the notion that systematic inequality in housing, health, and work are an encroachment of human rights for migrants.

Nussbaum takes an important step in endorsing this list—in highlighting these ten capabilities, she is effectively prioritizing them over others. In other words, even in times of emergency or scarce resources, these are the ten that ought to be attended to first and without fail. Though other rights are significant, there are perhaps circumstances in which not all members of a population have or are given the means to fulfill them. In the case of Shanghai, this distinction will identify whether national legislative framework affords migrants with unfulfilled rights as capabilities, or whether political powers realize rights outlined in policy by treating them as fundamental capabilities. Further, we will be able to better determine in what circumstances certain rights can remain temporarily unfulfilled if it means addressing one of these capabilities. Finally, after investigating migrants' quality of life in the city in detail, the language of capabilities may be used to form a feasible and efficient approach to establishing helpful policy.

The "Good Governance" Doctrine

For proponents of Lee's platform, the weakness in Nussbaum's arguments might be her classification of political and civil liberties as "first-generation rights," and economic and social liberties as "second-generation rights."[28] In Singapore and China, the case for an adoption of the reverse classification of rights is cemented in Lee's "good governance" doctrine and the Chinese government's human rights rhetoric, outlined in Beijing Weekly in 1991. Both discourses propose that "means of subsistence by economic and social development" are the most crucial focus of developing nations. Civil and political rights and the implementation of democracy are luxuries that countries with developing economies cannot afford and should not emphasize. Furthermore, in order to ensure these "means of subsistence," the government has the right to "exercise strong leadership and efficient management at the cost of peoples' civil and political rights."[29]

As previously asked in the discussion regarding the curbing of certain rights during times of national emergency, how much discretion is the international community willing to afford governments that aim to advance the common good, i.e. economic development, through methods each government deems fit? Who is to ensure Singaporean and Chinese citizens have access to the same kinds of individual rights as, for instance, U.S. citizens, especially when the economies and quality of life in each nation are so vastly different?

Still, Inoue rejects Lee's "good governance" theory and accuses Asian values discourses of exploiting socioeconomic rights to limit political ones. He argues in the human history of Europe that civil and political rights emerged before socioeconomic rights because it takes time for a society to acquire sufficient "social surplus." He proposes this is a paradigm developing nations ought to follow, not because Asian nations should aspire to reproduce the European example, but rather because "socioeconomic rights rather than civil and political rights are luxuries that only the developed countries can afford to implement

28 Nussbaum 36.

29 Inoue 34.

adequately."[30]

The drive to account for various kinds of freedoms within the concept of well-being is not just a western notion. Rather, it is a discourse of which Asian governments are conscious and have addressed in the "good governance" doctrine but one that political leaders supportive of Asian values choose to interpret differently from western commentators. In 1992, Lee stated,

> "The ultimate test of the value of a political system is whether it helps that society to establish conditions which improve the standard of living for the majority of its people plus enabling the maximum of personal freedoms compatible with the freedoms of others in society."[31]

On its surface, Lee's perspective works to establish that Sen and Nussbaum's philosophies are theoretically some upon which all governments can agree. His "ultimate test" even aligns not only with Satvinder Juss's objectives that address well-being in the global order, but also with Carens' notions of vital interests in freedom.

Meritocracy in China and Singapore

The major criticism of Lee's Asian values, of course, emerges from the discrepancy between theory, or speech, and action. If Asian values claim to serve Asian populations more relevantly and appropriately than western democratic ideals, it is necessary to examine how well various Asian governments approach the well-being of their people. For instance, both China and Lee's Singapore embrace meritocracy in their political infrastructure because they claim leaders selected through this system are best equipped to serve the nation. In China, the notion of "elevating the worthy" has a long history, with roots in Confucian ideals of "worthiness" from the Spring and Autumn period.[32] In Singapore, intellectual ability based on academic performance is most highly valued. Singaporean leaders are also expected to participate in "clean government" free of corruption.[33]

In 1990, Lee expressed, "We have no traditional ruling class. Our right to govern is based on merit, and we have to show that we are manifestly qualified to govern because of our abilities, our training, our character, our ability to deliver the goods—that we exercise power for the common good."[34] Lee's supporters might argue meritocratic political selection is precisely what allowed the Singaporean economy to progress from its low point of the 1950s and 60s to its peak under Lee's control.

Opponents of meritocracy argue that the system is based not upon ability of any sort, but upon

30 Inoue 35.

31 Yew, Lee Kuan. "On Democracy." The Wit & Wisdom of Lee Kuan Yew. Singapore: Editions Didier Millet, 2013. 46-47. Print.

32 770-453 BCE

33 Bell, Daniel. The China Model: Political Meritocracy and the Limits of Democracy. Princeton: Princeton UP, 2015. Print.

34 Yew, Lee Kuan. "Speech at the Dinner for the Establishment of the Westin Hotel." Westin Hotel Establishment. Seattle. 29 Aug. 1990. Speech.

luck—those who are luckiest in genetic endowment, family encouragement, and access to opportunity are the ones that rise politically.[35] Critics are also quick to point out that this kind of selection under an authoritarian regime minimizes obligations of political accountability. The elite ruling class are "unchecked by democratic controls [and] have an incentive to interfere politically in the market economy to advance their own private interest. This…undermines public trust in the fairness of the system, and lowers productivity and morale."[36] The generational passing down of power from the nation's wealthiest and most intelligent leaders to a new batch of similarly educated, qualified leaders creates an almost cult-like political mentality, which can be seen in Lee's thirty-year-long term as Prime Minister. Opportunities for dynamic political participation, particularly from the general public, are limited at best.

It is important to note that western nations also employ meritocratic practices, albeit in more democratic and constrained versions than that of Lee. For instance, the U.S. President's appointment of Supreme Court Justices can be viewed as a subtler form of meritocracy. Despite countless checks of power (necessary approval from the Senate, hearings before its Judiciary Committee, and strict political and public scrutiny) and the fact that the President himself is democratically elected, essentially the Justice merits the position based on qualifications and connections. In addition to pre-appointment checks, in this form of democratic meritocracy there is also a sense of post-appointment political accountability. If the Justice does not fulfill his or her role dutifully and in accordance with the law, he or she can be removed from the position and the President would face severe repercussions. The "democratic" element of a democratic meritocracy assuages some of the political abuses critics accuse certain authoritarian meritocratic leaders of employing. That is to say, meritocracy in and of itself is not necessarily detrimental to the advancement of societal well- being, but some versions of authoritarian meritocracy can be.

However, there is a strong case to be made in favor of meritocracy, specifically in Singapore and China. Logically, it appears sound: any nation, and particularly an under- resourced or developing nation, would undoubtedly desire the most intelligent, educated, trained, and qualified individuals in decision-making positions. Further, both Singapore and China implement some forms of checks of power in their political meritocracies. For instance, the Singaporean government has amended its approach in recent years as its population expressed less political trust and respect. In *The China Model*, Daniel Bell mentions the government has "loosened its controls on political speech and no longer relies on harsh retaliation against political opponents."[37] The government has also attempted to provide more benefits for members of the middle and lower classes, who have experienced rising income inequality, a commonly-cited by-product of meritocracy's social elitism. Perhaps these are indicators that Singapore's meritocracy is not absolutely unyielding and the implementation of this particular system is simply what is most functional for the country.

Bell entertains this line of argumentation in the case of China. He highlights three main disadvantages to the meritocratic model in China—corruption, ossification of political hierarchies, and legitimacy—and offers specific solutions, like the inclusion of public integrity commissions, independent inquiries, think-tanks, and media scrutiny. With the inclusion of some democratically-minded reforms,

35 Bell, The China Model. 5.

36 Inoue 36.

37 Bell, The China Model. 65.

Bell indicates meritocracy should have a more future in China as a successful and beneficial governmental structure. Chinese meritocratic leaders do have the potential to "enact sound policies" that would increase the standard of well-being of the people. Bell argues,

> "Chinese-style meritocracy is plagued with imperfections, but few would deny that the system has performed relatively well compared to democratic regimes of comparable size and level of economic development, not to mention family-run dictatorships in the Middle East and elsewhere."

Finally, Bell concludes that it is not irrational to anticipate Chinese-style meritocracy "as an alternative model—and a challenge to Western-style democracy."[38] The size, population, and level of economic production of China are unfamiliar to many western countries. Since the government should not be expected to superimpose western political infrastructure upon the Chinese, perhaps the China model—authoritarian meritocracy coupled with an emphasis on rapid economic development—is what is most directly beneficial to the Chinese people.

Given Bell's reasoning, it is possible the general standard of well-being in China is higher because the government closely monitors—and at times restricts—the right to internal migration, though some might assume every Chinese citizen would desire to exercise the right as though it were fundamental. After all, it can be argued that the implementation of the hukou system[39] aims to maintain order using the very outline Satvinder Juss mentions. The Chinese government is adamant that the hukou acts as a population surveyor and helps ease demographic pressures, creates a greater sense of local community, and allows for an accurate distribution of resources. These are the precise components Juss cites when highlighting the importance of the right to human movement. Perhaps in order to maintain the value of this right, the Chinese government must impose restrictions like the hukou, and the right must be seen as a politically monitored one instead of one exercised entirely individually.

Objectives of the Paper

In the proceeding sections of this essay, I aim to come to a conclusion regarding the scope and nature of classification of this right to internal movement. As I continue through the rest of my analysis, I intend to approach the subject with the same acute and meticulous awareness of the complexities of the Asian values debate I have introduced thus far. A crucial tool in this endeavor is a sustained mindfulness of the epistemological roots of this debate. Sen rejects "Orientalist dualism" that positions the entirety of Asia against the entirety of the western world, ignoring sensitivity to diversity in both regions. It is important to remember, however, that on the other side of this discussion, supporters of Asian values are

38 Bell, The China Model. 4.

39 The hukou is a system of population registration that assigns citizens residency and citizenship status in certain parts of the country. Social resources and access to various programs, healthcare, and education opportunities are also dictated by one's designated hukou. The registration is assigned at birth and does not necessarily change if a citizen relocates to a different part of the country, for example, in the case of rural-urban migration.

also in danger of adopting dualism that presents the West as an imperial, hegemonic Orientalist.

For example, in deeming civil and political liberties "culturally inadequate to the Asian context, [Asian values advocates also] ascribe the same homogenous cultural essence to Asia that Orientalists utilize to contrast Asian society with the Western self-portrait of 'Civil Society.'"[40] The key players are on each side of the argument and also what precisely they represent, endorse, or interpret within the debate must be assessed in detail. Similarly, when referring to international bodies like the United Nations, an organization headquartered in the U.S., whether these institutions are built upon ideals with origin primarily in the western world, or whether they are accurate representations of diverse global opinion must be considered. "International" documents cannot be assumed as reflective of general, international sentiment, and a dichotomist dualism between the West and Asia cannot be relied upon as fact. Ultimately, the deliberation of the right to human migration within China will be most discerning if grounded in the nuanced, conceptual framework provided in this chapter.

China: The Case for Migration as a Subsidiary Right

In modern China, political restriction and supervision of internal migration occurred almost synchronously with the defeat of nationalist party Kuomintang and the consequent establishment of the communist People's Republic under Mao Zedong in 1949. In the decades since, national economic objectives have directly informed the nature of migration policy: changing regulations on rural-urban movement can be linked to major economic events like the Great Leap Forward—Mao's failed campaign for rapid industrialization—the resulting Great Chinese Famine, and the series of 1978 Chinese economic reforms under statesman Deng Xiaoping. Thus, for the Chinese government, managing migration paradigms has always proved an invaluable tool for spurring economic gains, i.e. by encouraging urbanization in an attempt to decrease dependency on agrarian lifestyles and allow China to emerge as a modern global competitor, or for alleviating economic distress, i.e. by prohibiting migration to cities in which unemployment rates are already high. As a result, individual rights discourse related to migration seem to have emerged as afterthought.

The Hukou and its History

During the first decade after the founding of the People's Republic, Mao's Great Leap Forward campaign recruited rural laborers to major cities to work in construction and industrial sectors. Mao's plan also included a fervent drive towards agricultural collectivization, a move with further distanced millions more farmers from their rural livelihoods. These sudden, drastic economic changes coupled with poor weather conditions led to the Great Chinese Famine and the consequent creation of the *hukou* household registration system in 1958 to help curb the rapid influx of laborers in cities.[41] At first, the *hukou* served the

40 Inoue 39.

41 Huang Ping. "China Migration Country Study." (n.d.): n. pag. Rpt. in Regional Conference on Migration, Development and Pro-Poor Policy Choices in Asia. Dhaka: Chinese Academy of Social Sciences, Beijing & U of Oxford, UK, 2003. 1-43. Print.

same census-like purposes as its predecessor, the *baojia* system, which dates as far back as 1070.[42] Both the *baojia* and the initial prototypes of the *hukou* were meant to allow for population registration, surveillance and the monitoring of vast, mobile communities.[43] However, the solidification of the system through stringent written regulations in 1958 permanently altered the political dynamic between countryside and urban populations. Since then, the *hukou* has effectively linked the regional or zonal location of one's residence to one's economic and social entitlements (ability to buy or sell land, access to school districts, employment opportunities, marriage eligibility, etc.).[44]

From the '70s to the mid-2000s, the system served "to exploit China's massive rural labor surplus to support rapid economic expansion. To this end, restrictions on movement and work were lifted but other rules, such as those stopping rural *hukou* holders accessing urban services, were kept in place. The result was the creation of a large, mobile and crucially low-cost workforce that became the backbone of China's manufacturing and export orientated economy."[45] It is this workforce that has driven Chinese modernization since the '70s and has led the country to its position as an economic power player in the global market. The consequences of this kind of modernization meant that already by the 1970s "freedom of residence and movement had long since disappeared from the list of state-guaranteed rights."[46] However, as the foundational *baojia* demonstrates, there are various components to the *hukou* that are morally and politically sound—implementing a system to monitor and, at times, limit mass movement is not inherently wrong. The problematic element of the *hukou* is this perversion and manipulation of the system to exploit a vast, low-cost population through various rights violations.

The Definition of a Right

Given these parameters, the modern Chinese citizen—particularly one from a rural zone—has likely never possessed the right to fully exercise certain economic and social freedoms because of restrictions placed upon his or her ability to relocate. If we are to employ the language of capabilities, many rural Chinese citizens might possess the right to movement in theory, but not the capabilities to fulfill this right. We must consider, then, what we take to be a right: if this right only exists in theory but has no legitimate backing in writing or in practice, and if the government itself legally introduces a system that interferes with a citizen's ability to relocate with ease, is migration even a right in China, or should it be conceived of as more of a governmental policy platform as it exists in its present form?

A right can be invoked before some sort of a court or judicial process, either by the right's holder or by a party acting on behalf of the right's holder, to ensure some third party is accountable, particularly in cases of the right's violation. This court would be obligated to take action on the matter *because* citizens of the country possess the right. In other words, a right is legitimized through citizens' ability to appeal to rule of law. However, this ability of individuals to freely take action in an appeal to the government

42 Fu, Zhengyuan. Autocratic Tradition and Chinese Politics. Cambridge: Cambridge UP, 1993. Print.

43 Cheng, Tiejun, and Mark Selden. "The Origins and Social Consequences of China's Hukou System." The China Quarterly 139 (1994): 644-68. JSTOR. Web.

44 Huang 3.

45 Marshall, John. "China: Urbanization and Hukou Reform." The Diplomat. The Diplomat, 11 Oct. 2013. Web.

46 Cheng 662.

or against the government might appear to be a rather democratic procedure, especially in the face of Chinese authoritarianism.

In regards to internal freedom of movement, Chinese migrant laborers do not yet possess the ability to appeal to the government or to rule of law because of various political impediments to fair legal trials. Though the government values rule of law with stringency, this adherence is aimed at "creating government efficiencies" rather than augmenting political accountability.[47] As a result, there is very little autonomy and transparency in Chinese legal spheres because legal procedures are so closely linked to the political objectives of the Chinese Communist Party (CCP) and other influential institutions. For instance, most cases in China are tried by panel of judges under the supervision of the CCP's Political-Legal Committees, leaving individual judges with little or no judicial independence. The process of appeals is weak, if present at all, because lower court judges often seek advice from the higher courts before deciding a case. Additionally, because local governments control local judges' salaries and court finances, these entities have the ability to exert great influence in case decisions. Often, these governments advance their own "local protectionism" agendas "in order to protect local industries or litigants, or, in the case of administrative lawsuits, to shield themselves from liability."[48]

Weiquan Lawyering

The aforementioned issues are the challenges lawyers and defendants face if the case even makes it to trial at all. However, the history of human rights case trials in China is rather short and sparse in general. In the early 2000s, a movement called *weiquan* lawyering gained traction in China. *Weiquan* lawyers, also known as "rights protection" lawyers, are

> "A small but influential [group] of lawyers, law experts, and activists who try to assert the constitutional and civil rights of the citizenry through litigation and legal activism. *Weiquan* lawyers represent cases implicating many of the most serious human rights issues that beset China today: farmers whose land has been seized by local officials, urban residents who have been forcibly evicted…workers trying to recoup unpaid wages and rural migrants who are denied access to education and healthcare."[49]

Essentially, the *weiquan* movement emerged because legal professionals and activists observed great weaknesses in Chinese court systems, especially in regards to human rights cases. The movement incorporated a grassroots community mentality in an effort to elevate rights issues to the court level and hold relevant governments accountable. A main objective of the movement was the attempt to raise awareness of the kinds of legal channels available to uneducated or low-income communities and the

47 Lynch, Elizabeth M. "Don Clarke & Li Tiantian: Two Takes on the Jasmine Revolution in China." China Law & Policy. N.p., 30 May 2011. Web.

48 Smith, Christopher, and Marco Rubio. Judicial Independence in the PRC. Rep. N.p.: Congressional-Executive Commission on China, n.d. Print.

49 "Walking on Thin Ice:" Control, Intimidation and Harassment of Lawyers in China. Rep. Human Rights Watch, 28 Apr. 2008. Web.

kinds of injustices these vulnerable communities frequently face.

The Chinese government's reaction to the emergence of *weiquan* lawyers was not favorable, especially after the 2010 Arab Spring, in which several Middle Eastern countries experienced government-related uprisings. As a safeguard against the kind of uprisings initiated in the Middle East, the Chinese government began a massive, severe crackdown on human rights advocates, and particularly those involved in the *weiquan* movement. Hundreds of rights lawyers were forcibly abducted and tortured while in government custody.[50] Fu Hualing notes the difference in tone of *weiquan* lawyers after these government attacks. Hualing argues,

> "*Weiquan*—rights defense—lawyering had two defining characteristics prior to the 2010-2011 crackdown on lawyers and civil society activists. First, *weiquan* lawyers were high-profile in their style of lawyering and did not shy away from political issues… They intentionally chose cases for their sensitivity to attract attention and create impact… Second, their agenda was overly political, and law served as an entry point to a larger, yet ill-defined, battle against the system."[51]

The fervor and effectiveness of *weiquan* lawyers diminished after the violent suppression tactics of 2010. Though rights lawyers and activists are still an emerging group, they have since carried a lower profile. Their agendas are not nearly as blatant and instead, focus has shifted to working within the parameters of the government in the search for legal reform. Another factor in this shift was the government mandate in 2012 requiring each new lawyer to pledge allegiance to the CCP and, effectively, to practice law in a manner that would act on behalf of the Party.[52]

Ultimately, these factors—lack of judicial independence and legal transparency, strong local protectionism initiatives, and a human rights law culture that is either heavily subdued or aligned with CCP political schemes—leave little room for the development of accountability regarding migrant laborer rights. Due to the aforementioned challenges, migration cases are rarely tried in court and the few that are often concern issues of birth quotas more than migration rights. In 2015, for example, a Beijing resident and *hukou*-holder sued the district government when it refused to issue his son a Beijing *hukou* on the grounds that the son's birth violated local birth allowances.[53] Few similar cases have also been publicized, such as financially stable urban parents attempting to register children that exceed quotas, but legal precedence for poor, rural-urban migrants struggling to appeal to the government for increased rights to free movement is relatively non-existent. Thus, for migrant laborer groups, migration does not exist as a

50 Lynch, Elizabeth. "Don Clarke & Li Tiantian."

51 Hualing, Fu. "Can Lawyers Build a Legal Complex for the Rule of Law in China?" Human Rights in China. Human Rights in China, 25 July 2014. Web.

52 Lynch, Elizabeth M. "I Pledge Allegiance to the CCP…China's Lawyers' New Oath Requirements." China Law & Policy. N.p., 22 March 2012. Web.

53 Fan, Bai. "Beijing Father Sues Officials Over Son's 'Hukou' Registration." Trans. Luisetta Mudie. Radio Free Asia. N.p., 9 July 2015. Web.

right because there is no method through which a migrant might realistically arbitrate the matter in court or in any sort of public forum. Instead, the Chinese government treats issues of migration simply as a policy platform that it chooses to endorse when helpful or beneficial to its own objectives.

The Burden of the State

Supporters of the Chinese system might contend political accountability is not a priority when it comes to citizens' civil and political rights. As mentioned in the previous chapter, the Chinese government has demonstrated support for Lee Kuan Yew's "good governance" doctrine that emphasizes economic and social development even "at the cost of peoples' civil and political rights."[54] Thus, the Chinese government might only recognize the duty on the part of the state to be to ensure its people's economic well-being through any means necessary, as the government might understand this sense of well-being to be most directly contributive to national security and stability. In the process of achieving economic well-being, the government might contend it is meeting its burden and its duty to its people because other rights are presumably trumped whenever they jeopardize pursuit of the state's security goals.

However, to argue that this burden has been met, it is imperative that the government legitimately acknowledges that the burden exists in the first place. In order for this burden or obligation to be an effective force, it must involve issues that can be validated through arbitration in a public forum, regardless of the political infrastructure of Chinese authoritarianism. Otherwise, there is no mechanism of accountability because there is no method for citizens to ensure the government claims responsibility for this burden, such as process of appeals. In other words, political obligation is meaningless without a forum in which to try it, which returns to the notion introduced at the beginning of this chapter that any government, in securing any dimension of well-being for its people, ought to involve some realistic processes of judicial appeals in circumstances in which the government does not seem to meet its burden.

Rawls's Lexical Priorities

We can, however, demonstrate sensitivity to the Chinese context by employing the language of John Rawls's lexical priorities. Dick Arneson explains,

> "Rawls favors what he calls 'lexical priority rankings.' If one value has lexical priority over another, the first one trumps the second, we should do everything we can to achieve the top-ranked value to the greatest degree possible and devote resources to achieving the lower-ranked value only when doing so does not lessen even in the slightest degree the extent to which we achieve the top-ranked value."[55]

The Chinese government might employ this sort of lexical ranking to justify advancing economic development in place of civil or political rights at times. In the case where the state feels that economic development is a value that can be prioritized over other rights and is one that has yet to achieve its full potential, then pursuing lower-ranked rights would be an inefficient use of resources that lessens the extent

54 Inoue 34.

55 Arneson, Dick. John Rawls's Theory of Justice. USCD Philosophy. University of California, San Diego, Spring 2008. Web.

to which economic development could be pursued.

What is problematic with this employment of lexical priorities is that it does not account for all the fundamental capabilities that Sen and Nussbaum highlight—by prioritizing economic development as the highest-ranked value, the Chinese government often fails to provide certain groups of citizens, including migrant laborers, with the instruments to fulfill their basic capabilities. This reality, however, allows for the formation of an important normative argument regarding the "right" to migration in China.

In the context of China's migrant laborers, instead of regarding economic development as the highest-ranked value and approaching freedom of movement as a policy platform, the government ought to regard all those rights related to migration, such as guaranteed and fair wages, health care, housing, and social investment security, with utmost value because they translate directly to fundamental capabilities of life, bodily integrity, and material control that are inviolable. Then, freedom of movement ought to be recognized as a right—though it is not presently—provided its exercise does not interfere with these more important or fundamental capabilities. In this case, the right ought to function by placing the burden of proof on the government to justify instances in which the right can be abridged or trumped through arbitration in courts. Thus, out of reasonable sensitivity of China's political structure, history, and existing institutions like the *hukou*, freedom of movement would be considered a subsidiary right, meaning that it comes second to fundamental capabilities and has the potential not to be invoked if the government can make the case through independent judicial proceedings that fundamental capabilities would be violated if these subsidiary rights are addressed.

Emergence of Migration Rights Discourse

Despite poor means of legitimately and legally debating the issue in court, Chinese migration rights rhetoric does exist in theory. Underscored by a series of accumulating events in the early 2000s, migrant laborer rights were emphasized by both international and domestic discourses that attended explicitly and specifically to migrants, as opposed to farmers or low-income laborers in general, as had previously been the case. In 2002, public sentiment regarding migrant rights was drastically impacted by the death of Sun Zhigang, an educated migrant in Guangzhou who was detained and fatally beaten while in police custody. Sun's death led to the abolition of the custody and repatriation program, which had formerly allowed for arbitrary detention and repatriation of migrants by the police.[56] Lay Lee Tang notes, "the unprecedented public outcry over police brutality signaled a change in public perception of rural migrant workers, underscored extreme dissatisfaction with arbitrary police powers, the power of the media [and] an awakening to their humanity and identity as rural migrant workers."[57]

Government response to the public outcry surrounding this event, as well as the general mounting tension in relation to migrant laborer rights, included a flurry of rapidly produced policies addressing the issues. This wave of legislation was jumpstarted by the State Council's release of Document No. 2 in 2002 and Document No. 1 in 2003. As stipulated in these documents, migrants gained recognition as members of the working class instead of maintaining classification as peasants. Urban employers were also required

56 Wong, Linda. "Chinese Migrant Workers: Rights Attainment Deficits, Rights Consciousness and Personal Strategies." The China Quarterly 208 (2011): 870-92. Cambridge University Press. Web.

57 Tang, Lay Lee. CHINA: Review of Rights Discourse. Rep. no. 3-2011. Oslo: U of Oslo, 2011. Print. RIPOCA.

to sign labor contracts when hiring migrant workers and were prohibited from extorting unreasonable fees from laborers seeking work. Two more pieces of legislation in 2002–the Work Safety Law and the Law on the Prevention and Cure of Occupational Diseases–also contained detailed provisions on the standards of safety of work environments.[58]

Over the course of the following year, over thirty-four million migrant laborers were recruited into unions by the All-China Federation of Trade Unions (ACFTU), education initiatives for migrant children improved, and reproductive health services for non-permanent residents were augmented. In 2006, when State Council Premier Wen Jiabao publicly reinforced the Government Work Report and Circular No. 36, it seemed this string of migrant rights policy had reached a successful climax. Both pieces of legislation primarily served to directly address wage issues for migrant laborers. The Premier postulated that minimum wages be guaranteed and that payment delays, cuts, and defaults be minimized as much as possible through the use of a wage deposit monitoring system. Employers who disobey the new regulations were to be fined. Additionally, the laws aimed to provide greater social security services and job training programs, as well as eliminate job-related discrimination based on residency status or lack thereof.[59]

To a certain degree, these policies laid pertinent and significant foundation for the development of formalized, lasting rights claims. However, determining how tangible the effects of these initiatives has been is difficult. For example, on one hand, a poll by the Ministry of Labor and Social Security indicated that eighty percent of migrant laborers were paid in full in the 2005 work year.[60] On the other hand, a 2006 ACFTU survey noted that sixty five percent of migrants in Beijing were still working in a "Three-D" occupation, or one that is "dirty, dangerous, and demeaning."[61] The incredible number of rights issues that Chinese migrant laborers face and the slow nature of change on this front make it difficult to gauge overall national progress. Improvements in the provision of one right to a group of workers in one city or region does not necessarily correlate to the provision of that same right, or even any other right, to a different group of workers in another region.

Increased discussion and awareness of these rights matters has led to increased action—for example, there has been a markedly greater number of arbitrated labor dispute cases and collective protests in the last decade throughout the country.[62] However, this trend could be indicative of amplified consciousness regarding migrants' rights—individuals and groups might feel more confident now to organize and voice their complaints to governing bodies—or it could be demonstrative of how ineffective the policy initiatives of the early 2000s have been in the long term. What is indisputable is the existence of a migrant laborer rights framework in China and its increasing persistence over the last two decades, regardless of whether critics believe it fulfills international or western standards or not.

What is contestable, however, is the nature of this rhetoric—while international NGOs and

58 Tuñón, Max. Internal Labour Migration in China: Features and Responses. Working paper. Beijing: International Labor Office, 2006. Print.

59 Tuñón 19-20.

60 Ye, Wang. "Migrant Workers See Higher Wages." China Daily [Beijing] 14 Feb. 2006: 2. Print.

61 Nielsen, Ingrid, and Russell Smyth. "Rural Migrants and Public Security." Economic Growth, Transition, and Globalization in China. Ed. Yanrui Wu. Cheltenham: Edward Elgar, 2006. 121-52. Print.

62 Wong, Linda.

workers themselves have fought to promote this issue and develop a thorough, lasting rights-based approach to their economic circumstance, the government's efforts to address migrants' issues often seem largely utilitarian and as a means to maintain a sustainable working force. It is important to highlight this delicate distinction—while the federal government has undoubtedly addressed and sought to improve migrant laborers' working conditions, this does not necessarily demonstrate an intent to augment migrants' fundamental capabilities as individuals, even though improving work conditions can lead to increased freedoms.

For instance, when laborers protest low wages, the government identifies a weakness in infrastructure: wages are insufficient to maintain the sustainability of the workforce, and if nothing is done to improve the situation, the weakness will propagate and threaten to jeopardize economic progress. So, the government addresses the weakness by introducing new policy or amending existing ones. In doing so, the federal government conveys a message to workers through the monetary remuneration, telling them that they and their work are significant and worthy of remuneration. This is seemingly both a productive and appropriate message—it indicates the government's compassion for the workers' poor living conditions and its obligation to improve the quality of life of its people. However, for the Chinese government, this obligation stems not necessarily from any political desire to demonstrate burden of proof, but rather the threat to future development--the highest-ranked value. Thus, this is not a humanistic message, nor is it one that is designed to protect any specific human capability. The sentiment is not extended to communicate respect for the individual's right to a decent, dignified life, which can only be fulfilled through a modicum of financial stability. In some cases, this sentiment might be interpreted in the production of policy that improves wage conditions, but it is not necessarily one the federal government intends to advance.

Fundamental Rights in the Constitution

The government's perspective is most evident in the language of the Chinese Constitution. Chapter II of the Constitution, entitled "The Fundamental Rights and Duties of Citizens," outlines the rights framework all citizens theoretically have access to but simultaneously stresses the duties and obligations of the citizen to serve the government. Article 53 of Chapter II clearly states, "Citizens of the People's Republic of China, in exercising their freedoms and rights, may not infringe upon the interests of the State, of society or of the collective, or upon the lawful freedoms and rights of other citizens."[63] In including this language, the Chinese government effectively indicates that the purpose of the Constitution is, to a certain degree, to safeguard the state against individuals. It further cements the notion that collective society is a significant entity against which, in certain circumstances, the individual has no rights.

Thus, Chinese rights discourse is both intricate and significant. In theory, federal legislation does not necessarily ignore or arbitrarily encroach upon migrant laborers' rights in theory. While in reality, when required, the government has produced policy that intends to efficiently and specifically improve certain flaws. However, the presentation of this policy does not manifest in greater national political sensitivity to the individual's determination or right. This is because implementation of policy is lacking—neither does the legislation legitimately provide migrants with more opportunities to fulfill their human capabilities, nor does it offer legal spheres in which migration as a right in general can be debated and arbitrated. In other

63 Constitution of the People's Republic of China, § II (1982). Print.

words, the production of legislation is insufficient in conveying any sense of the government's burden of proof without citizens' ability to legally contest this legislation in court. Instead, the Chinese government seems to be primarily concerned with meeting a practical, pressing need, and does not necessarily take the opportunity to consciously enhance domestic capabilities rhetoric in general.

Challenges to Policy Implementation

Since the establishment of this legislation in the early 2000s, the primary challenge for the Chinese government has been narrowing the discrepancy between the theoretical framework and its implementation. A report from Beijing's International Labor Organization (ILO) Office cites three major roadblocks to implementation. First, methods of labor inspection are severely lacking—the report notes that on average, the State Administration for Work and Safety (SAWS) assigns only one inspecting official to every 35,000 workers. Thus, "without a well-trained inspectorate to enforce the law, penalize non-compliance, and promote the importance of safe working environments, employers will continue to violate the law."[64] Essentially, Chinese enterprises have little or no incentive to offer better working conditions, including higher wages and benefits like social security programs, to their workers—in fact, thousands of businesses rely on cheap migrant labor for high productivity and high profit. The cost of paying employees more or offering additional bonuses is not only unfavorable for an employer bent upon making as great a profit as possible, but also unnecessary, as the migrant population in any Chinese megacity is so concentrated that laborers are willing, if not desperate, to work even if conditions are undignified or indecent. Therefore, the lack of any official entity to enforce the law, the financial incentive to actively disobey existing laws, and the plethora of laborers in search of jobs commonly cause business owners to adopt practices that directly violate their workers' rights.

The second obstacle to implementation is the contention between national objectives and local realities in regards to government support for upholding migrant rights. Though systems like the *hukou* are technically nation-wide initiatives, it is ultimately the local governments that must deal with the immediate consequences, both positive and negative, of migration. Linda Wong notes that though the federal government undoubtedly benefits economically from migrant labor, it has other overarching obligations to fulfill. Thus, there is a difference, and at times a conflict of interest, insofar as migration policy is concerned on the provincial versus the federal level. Wong argues public reactions like protests are symptomatic of "the contradiction between local state obsession with accumulation (economic development) and central state concern for maintaining legitimacy (protecting labor, extending social protection, raising living standards)."[65] As explained previously and affirmed by Wong, though the federal government might not aim to enhance individual's capabilities discourse in its production of policy, this does not mean the government has no vested interest in the general improvement of society, which in many cases is derived from the improvement of working migrant communities.

However, local governments' preoccupations about the negative ramifications of migration are also neither unwarranted nor illogical. One could argue supporters of restrictive rural-urban migration measures have reason to fear or be hesitant of unimpeded movement. Zhengzhou serves as one such example of the potentially disastrous effects of rapid and mass migration in a densely populated nation--

64 Tuñón 21.

65 Wong, Linda.

the Beijing ILO Office reports, "When qualifications for permanent residence were relaxed in Zhengzhou, the capital of Henan Province, the migrant population mushroomed ten-fold to 150,000 in just three months. The rapid deterioration of social order forced the authorities to reverse to decision."[66]
Thus, there is certainly an argument to be made that governing bodies, particularly those local to the destination of mass migration, should have the ability to maintain a sort of selective sensitivity when addressing migration policy. In other words, local governments should be permitted to make adjustments on migration policy based on the of their province specifically. Though determining how far this selective sensitivity extend should is clearly difficult, the situation of Zhengzhou provides a starting point: local governments ought to be able to withhold the right to migration in situations where conditions of migrants and other urban residents are so poor that the government cannot support both the subsidiary right to movement and the fundamental capability of life at the same time. This would be an example of a case in which the government could declare that it has fulfilled its obligation by attempting to protect the highest-ranked value--the capability of decent life. Further, the government would be justified in not invoking the subsidiary right to migration to Zhengzhou, as it could be argued that fundamental capabilities would be violated if the subsidiary right to migration were wholly supported.

The third major obstacle to the implementation of the framework provided by legislation of the early 2000s is perhaps a surprising one— "not all migrants are in favor of changing the current system. Although only a share of rural laborers actually returns to their native communities, many are reluctant to give up the land rights guaranteed to them by the rural *hukou*…this land serves as a source of income and the ultimate safety net. Also, some migrants might not be willing to pay part of their salaries into a social insurance scheme."[67] This mentality does not necessarily translate to a disregard of policy on the laborers' part but rather, is indicative of the cyclic effects of a distrust or lack of confidence in the policy and the entities that enforce it.

Because migrant workers are unsure if they will be able to find adequate work after moving to the city, and oftentimes do not earn enough money upon arrival to allow for the migration of relatives, like parents and children, they prefer to keep their rural land as a backup. Similarly, because wages are already low and there is often no emphasis on development or social and economic progress in the workplace culture, social insurance plans can seem like a frivolous expense instead of a worthy investment. If laborers were guaranteed steady, decently-paying jobs and offered training regarding long-term financial practices, they might be more likely to contribute to a more stringent implementation of legislation.

A revision of the *hukou*, for instance, could make room for a greatly amended system that might provide a better resource distribution and allocation plan. The existence of such a system and the realistic implementation of legislative framework do not have to be mutually exclusive--it is the notion that internal freedom of movement is absolute that would be sacrificed in this decision. Instead, political energy could be applied to carrying out influential steps that directly rectify the violation of related fundamental rights. For instance, inspection and training programs could be bolstered and executed to ensure enterprises and local officials abide by present regulations; federal and local governments could operate more cohesively to alleviate desperately competitive working conditions in megacities. Limiting the number of citizens that

66 Tuñón 23.

67 Tuñón 23.

are permitted to move to the city then might not be nearly as abusive if post-migration urban registration processes are made significantly easier and resources are allocated to assist migrants in finding adequate positions for their skill and education level.

These actions could certainly have a broader societal affect: migrants might feel more confident by moving to the city where they can achieve a decent standard of living not only for themselves, but also for their families. They could be better trained, more likely to invest in local social programs, such as financial security plans, pension plans, schooling, etc., and generally more eager to embark upon a stable working life in the city. The status gap between urban workers and migrant laborers might lessen over time as migrant integration within the city solidifies. Ultimately, this might also free up rural resources and allow for governing bodies to reassess and readdress the rural-urban dynamic as a whole, and provide decent, dignified livelihoods to rural and urban residents alike. Thus, it is crucial to recognize rights related to migration as fundamental, even if the right to free movement within China is to be conceived of as subsidiary.

The "Floating Population" of Shanghai

In the case of Shanghai, this recognition would have immense effects for the city's large migrant population. A 2013 survey conducted by the Shanghai Statistics Bureau shows that about forty percent (9.6 million) of Shanghai's population of 23.9 million is comprised of long-term rural-urban migrants.[68] While fifteen years ago, the same Bureau indicated a migrant population of less than 4 million,[69] meaning the community has more than tripled in size since. A 2014 survey conducted by financial magazine Value Line offers a plausible explanation, "Shanghai has become the country's most popular city for the floating population… The city recorded a net inflow population of about 9.54 million while Beijing ranked second with about 7.72 million."[70] Though not the capital of the nation, Shanghai offers appealing employment and lifestyle opportunities: it is the largest city proper in the world and is both international and modern. The recent establishment of the Shanghai Free Trade Zone, an economic maneuver intended to attract even greater quantities of foreign direct investment, makes the megacity particularly inviting for migrant laborers in a nation largely dependent on cheap, mass productivity to secure its place as one of the world's largest economies and exporters.

This "floating population" (*liudong renkou*) that Value Line mentions is the term used generally to describe the long-term, temporary, and seasonal migrants in Chinese megacities who are unregistered under the urban *hukou*. By not undertaking the registration change process—which is no simple task, and is oftentimes entirely impossible for uneducated or poor laborers—these migrants exist in the city with limited or no access to regional economic resources. They are generally employed rather informally, even if their occupation is technically registered or recognized within the formal sector.[71] John Friedman

68 "Shanghai Population." World Population Review. N.p., 13 Sept. 2015. Web.

69 Roulleau-Berger, Laurence, and Shi Lu. "Migrant Workers in Shanghai: Inequality, Economic Enclaves, and the Various Routes to Employment." China Perspectives 58 (2005): n. pag. Revues.org. Web.

70 Hongyi, Wang. "Shanghai 'most Popular City' for Migrants." China Daily [Beijing] 19 May 2014: n. pag. Print.

71 Goodkind, Daniel, and Loraine A. West. "China's Floating Population: Definitions, Data and Recent Findings." Urban Studies 39.12 (2002): 2237-250. SAGE Journals. Web.

outlines the typical profile of a "floating population" laborer by elaborating,

> "[These workers] usually find jobs in small or medium-sized private enterprises, work as cleaning staff or housekeepers, temporary work on construction sites, or simply set up their own small businesses on the streets. Their typically poor educational background and low social rank in urban society often leaves them with painfully low wages and…an average workload of more than 54 hours per week, which significantly exceeds the maximum of 40 hours set by national labour laws."[72]

Hence, in Shanghai, many of that 40 percent of the population lives under these conditions, despite the fact that the city is one of the wealthiest in the nation. One could argue that these problems arise from the failure to operate the *hukou* system in an equitable and humane manner. All the vulnerable qualities of the floating population that Friedman lists could be improved if the local government were to fervently and immediately recognize specific basic rights that relate to Nussbaum's first, third, and tenth central capabilities, like reasonable work hours, guaranteed wages, occupational training, and safe workplaces. Allocating resources to address these specific rights could, in fact, be easier and less taxing than attempting to upend the *hukou* system altogether or alter the nature of national migration freedoms discourse. Thus, despite the subsidiary nature of the right to migration itself, these related rights ought to be consistently and indisputably categorized as fundamental.

Another complication of the creation of the floating population in Shanghai is that it is directly linked to the nature of formal and informal work within the city. Unlike other developing nations, where ineffective political practices and corruption are often to blame for the development of informal economies, the emergence of the informal sector in Shanghai can be attributed to the government's late 1990s program to manually introduce informal labor organizations in an effort to reduce unemployment amongst the floating population. Despite the term "informal labor organizations," these entities exist in the grey area between the two sectors.

For instance, even though these organizations were implemented directly by the Shanghai Municipal Government and "policies and measures are introduced to promote, [as well as] record and regulate, informal labor organizations, placing these more towards the formal end of the formality/informality continuum," they do not abide by the "regulatory framework of the Industrial and Commercial Bureau. Thus…they are not recorded and regulated by the government department which has the authority to grant them formal status."[73] The very existence of and the consequently poor monitoring of these organizations provide abundant opportunities for employers to take advantage of migrant laborers in the floating population. Given Shanghai's position as a leader in the national drive towards industrial

72 Schulz, Sebastian. "Here to Stay: The Daily Challenges Facing Shanghai's 'Floating Population'" Global Urbanist 23 Oct. 2012: n. pag. Urban Livelihoods & WIEGO. Web.

73 Howell, Jude. Good Practice Study in Shanghai on Employment Services for the Informal Economy. Working paper no. 6. Geneva: International Labor Organization, 2002. Print.

and financial advancement, a deep divide emerges between the kinds of jobs the city's elite occupy and those relegated to the floating population. In Shanghai's economy, the most formal sectors, that is the robust financial corporations and productively profitable export manufacturers, serve as a stark contrast to the most informal ones, such as selling goods independently on the street or at small stalls, much like those Friedman profiled.

Mandated vs. Realistic Wages

According to Shanghai's government, as of April 1, 2015, the legally mandated minimum wage is ¥2,020 (Yuan), or approximately $325 dollars, per month, which was an increase from the previous ¥1,820; the hourly minimum wage also saw a raise in 2015 from ¥17 to ¥18, which is approximately $2.74. Despite the potentially positive trend, these minor improvements cannot necessarily or directly be attributed to a greater political desire to provide economic stability, nor are they necessarily aimed at the development of the Chinese human rights rhetoric for migrant workers. In fact, some suggest "rapid increases in Chinese wages reflect a shift in the world's second-largest economy toward more reliance on consumption, while simultaneously weighing on the slowing manufacturing sector."[74] While changes in wage are occurring for laborers in Shanghai, it is possible these amendments are more tailored to Linda Wong's notion of "local state obsession with accumulation" and a desire to improve domestic economy rather than a political sensitivity towards rights discourse.

In practice, migrant laborers' wages are far from compliant with regional regulations. As a 2005 Monash University report notes, "in urban areas the floating population and local urban residents participate in segmented labor markets. A survey of the floating population in Shanghai found a clear division between the floating population and local residents in terms of occupational composition, living conditions and income and benefits."[75] Understandably, restrictions imposed by the *hukou* system, or by attempts to evade the system, result in wage gaps between legally registered urban residents and migrants in the city.

Data from a comprehensive series of 2008 surveys[76] indicated non-migrant urban workers' monthly wages amounted to approximately ¥3,075.21, certainly above Shanghai's minimum wage standards at the very least. By comparison, their migrant laborer counterparts on average earned ¥1,648.38 a month—a number not only below Shanghai's minimum wage, but also barely constitutes half the wage of other urban workers. Similarly, while other urban laborers made about ¥18.40 per hour, according to the same surveys, migrant laborers made ¥7.09 per hour. The debilitating effect of these large wage discrepancies for migrants is only exacerbated by the fact that the average hours per week worked by this group is significantly greater than those of other urban employees, with migrants working

74 "Shanghai Raises Monthly Minimum Wage 11 Percent -Xinhua." Economy. Reuters, 30 Mar. 2015. Web.

75 Nielsen, Ingrid, Russell Smyth, and Mingqiong Zhang. Unemployment Within China's Floating Population: Empirical Evidence from Jiangsu Survey Data. Working paper no. 6. Melbourne: Monash U, 2005. Print.

76 Data is derived from three major national surveys conducted from March to May 2008, encompassing 15 major Chinese cities (including Shanghai) and approximately 14,700 individuals.

approximately 61.53 hours and 43.45 for others, with the latter falling far closer to the generally-accepted 40- hour workweek standard.[77]

Migrant Workers at Han City

Even within the migrant community, occupational and wage levels vary greatly. In Shanghai's Han City Shopping Mall, for example, it is possible to earn an income that surpasses the city's minimum wage regulations. This mall located on Nanjing West Road, a popular tourist destination for designer goods and high-end restaurants, is infamous for housing dozens of stalls that exclusively sell fake and counterfeit products. The salespeople make no effort to present the clothes, accessories, and trinkets in their stalls as genuine— because the mall is well-known and frequently reviewed on travel sites such as TripAdvisor--the understanding is that those who choose to purchase the products, who are almost entirely foreigners and tourists, are well aware that the goods are counterfeit. Customers knowingly choose to shop to experience a uniquely "Shanghainese" phenomenon.

Annie,[78] a migrant saleswoman in her mid-30s, operates a stand that sells high-end teas. She left her hometown in the western Sichuan province nine years ago, when she first moved to Beijing. After a few years, she relocated her family--a husband and two daughters, aged nine and two respectively--to Shanghai in hopes of even better economic opportunity. She says she learned English "some from school, some from business" in the mall, where she interacts with tourists on a daily basis. Neither Annie nor any member of her family has an urban *hukou* in Shanghai. This season has been low in sales for her and she has been losing money, but she notes on her best day, she can make up to ¥1,000. Supposing Annie were to have a solid month of high-sale days, she could earn up to ¥30,000 in that time. Each month, however, she is required to pay ¥15,000 to the "big boss," the man who owns the building and allows these migrant workers to set up shop there. Then, an additional ¥3,000 per month goes towards rent for the apartment in which she lives with her family. Ultimately, Annie is left with ¥12,000 for her four-person household.

Annie's income is further diminished by other factors. First, she must spend a significant amount to restock her tea products. Second, because Annie usually spends ten or eleven hours manning her Han City stall, her husband is required to stay home with their younger daughter, meaning the ¥12,000 or less she earns is their sole source of income. And as their family is not on any sort of health or social insurance plan, if Annie were unable to attend to her work for a period of time, their income would simply cease altogether. Third, Annie explains that the cost of living in Shanghai is particularly high--she notes, "every day we spend a lot, everything [is] a lot in Shanghai. Beijing [is] much cheaper." Finally, earning even that much is imperatively contingent upon working thirty straight days and selling the maximum number of goods per day as she can, which is neither feasible nor realistic. So, while determining the exact sum Annie and her family rely on per month is difficult, it is safe to assume the family of four lives on far less than ¥12,000. Further, Annie mentions though she was able to bring her nuclear family along with her from

77 Quheng, Deng, and Li Shi. "Wage Structures and Inequality among Local and Migrant Workers in Urban China." The Great Migration. By Edward Elgar. N.p.: n.p., 2010. 74-92. Print.

78 Subjects interviewed in January 2016; did not want to provide their Chinese names or their family names/ surnames.

Sichuan, her parents and siblings continue to reside in her hometown.

Still, Annie's income is likely much higher than Shanghai's minimum wage rate. There are also other advantages to her job—though the hours are long, the work is not physically arduous. She is able to stay indoors, in a relatively clean environment, where she can chat with neighboring salespeople, many of whom are her friends and live in apartment complexes close to hers. Apart from that, her elder daughter is still young enough to receive free, compulsory education from the state, despite not having an urban *hukou*.[79] When her younger daughter is older, she too will see this benefit. While Annie herself has learned English through her occupation, a skill not many migrant workers possess and one that could potentially give her a professional advantage in the future. Finally, Annie is the boss of her own business, which is a rare occurrence for migrants in Shanghai. She herself orders and purchases all the goods she sells, so she has some flexibility in terms of when and how she chooses to allocate her finances.

However, this is not the case for other Han City salespeople. Candy, Jimmy, Grace, and Julia, who range in age from eighteen to about forty years old, are all from the Anhui province and operate their stalls on behalf of bosses. Candy's boss is her cousin-sister, who urged Candy to move to Shanghai immediately after high school at the age of seventeen to work for her business, while Julia's boss is a Mongolian man who imports the sweaters she sells from his home country. Regardless of the kinds of goods they sell, the source of these products, or who their bosses are, one feature is common—when asked how much money each individual makes from sales, all four replied only with, "Secret." There seemed to be a collective awareness that incomes were not to be revealed, particularly when asked about explicitly. Instead, each one noted that their boss checked in once a month to deliver their share of the profits, but the workers refused to disclose the precise amount received. Grace added only that it is "not so much money."

"Three-D" Jobs

Despite the constraints, operating small businesses or stalls is certainly preferred to labor-intensive work in Shanghai, for instance construction work, which is commonly regarded as one of the most grueling and least fruitful sectors for migrant laborers. A 2013 report by the SOAS University of London revealed that "even taking all family income sources into account," which includes any sort of subsistence or income originating from rural familial land plots where the worker's official *hukou* would be registered, "about one tenth of construction workers [in Shanghai] still belong to families with total yearly household income less than 20,000 Yuan (or less than about US$3,200)." This amounts to approximately ¥1,600 per month for the entire family, far below Shanghai's mandated minimum. For laborers that are not self-employed and who work at businesses or sites with masses of other workers, held pay and wage arrears are extremely common and it is not unusual for employers to end the fiscal year with millions of Yuan worth of wages unpaid to their employees. Additionally, adequate payment for overtime hours is also often severely lacking in such occupations. The SOAS report continues:

> "The survey has also explicitly asked construction workers about what they regard

79 Because the Ministry of Education requires all Chinese children to complete at least nine years of schooling, even children born outside urban zones are permitted into schools, though oftentimes they struggle to catch up or keep up.

> as their main problems…. In response, 41% point to the lack of a labour contract. Another 41% of workers identify deficiencies in social insurance. Insurance related to occupational safety and health is a particular concern. For example, about 60% of workers have had to buy their own safety equipment. And over 18% of workers have experienced work-related injuries or occupational diseases."[80]

These findings highlight an important migrant right—right to occupational health and safety— especially relevant to those laborers who work at construction or sanitation sites, in crowded factories, or amongst generally unsafe and unsanitary conditions. Many laborers in the construction and manufacturing sectors live with their spouses and children at the work sites, either in the unfinished building structures or in makeshift apartments amongst dangerous machinery.[81]

Therefore, in addition to low wages and the lack of labor contracts, unions, and adequate housing, migrant workers in these jobs are subjected to conditions that jeopardize their capability of life, both dignified and otherwise, on a daily basis. The kinds of jobs that jeopardize this capability are the previously mentioned Three-D jobs that are dirty, dangerous, and demeaning.[82] They require long hours of continuous, rigorous physical labor, often offered at low wages and in cramped, dirty quarters or outdoors in highly unfavorable weather conditions. Thus, these migrants are "more at risk of contracting malaria, hepatitis, typhoid fever, respiratory infections and measles infections, [which are] all more prevalent in overcrowded, poorer and less hygienic conditions."[83]

Even beyond acting as irreparably debilitating forces against migrants' livelihood in every sense of the word, Three-D jobs are problematic because they contribute to the cycle of urban labor segmentation and stigmatization. Ingrid Nielsen and Russell Smyth explain,

> "It is common for the floating population to be forced to do jobs that the urban populace do not want…In some cases occupational stratification has been institutionalized…At one level this manifests itself in subtle forms of discrimination. For example, in Shanghai employers using migrant labor are required to contribute 50 renminbi [Yuan] for each migrant laborer they employ. The proceeds from this fund are used exclusively to assist unemployed permanent urban workers."[84]

Though this ¥50 contribution process is outdated, it fed social stigmas that persecuted migrant laborers in

80 Centre for Development Policy and Research. Survey Results Document Exploitative Labour Conditions in China's Construction Sector. Rep. Vol. 78. London: U of London: SOAS, 2014. Print.

81 Roulleau-Berger and Lu 3.

82 Nielsen, Ingrid, and Russell Smyth. "Rural Migrants and Public Security" 126.

83 Mou, Jin, Sian M. Griffiths, Hildy Fong, and Martin G. Dawes. "Health of China's Rural–urban Migrants and Their Families: A Review of Literature from 2000 to 2012." British Medical Bulletin 116.1 (2013): 19-43. Oxford University Press. Web.

84 Nielsen, Ingrid, and Russell Smyth. "Rural Migrants and Public Security" 126.

Shanghai. On one hand, a certain air of condescension has built over the past decades regarding categories of urban work in the city. Residents and permanent workers view jobs in sectors like construction to be too menial and too lowly for their faculties; while the overabundance of willing laborers, desperate to acquire any sort of income, means permanent urban workers need not concern themselves with certain positions if they so choose. On the other hand, the rapid and vast influx of migrant laborers has led to certain economic instability, like temporary waves of unemployment in some sectors, in Shanghai.

Thus, permanent urban laborers rely upon cheap migrant labor—much in the same way the rest of the nation does—despite scoffing in disgust at the notion of the floating population and Three-D jobs. Urban workers look down upon migrant laborers and exclude them from post- migration integration into certain sectors, which forces migrants to predominantly occupy lower job sectors. The establishment of this paradigm then continues to feed into the conceptualization of migrants as dirty, cheap, and poor, and so the cycle repeats.

Addressing the Fundamental Capability to Life

The overwhelming presence of migrant laborers in Three-D jobs, the below-minimum wages they earn, and the pervasiveness of labor segregation are aspects of migrant life in Shanghai that are undoubtedly and egregiously devastating for the floating population.

However, a positive conclusion can also be drawn from their plight—these three factors, low wages, demeaning jobs, and inaccessibility to certain labor sectors, provide three very clear-cut targets on which to focus rights claims and legislation for migrant communities. Applying energy to ensure the general right of freedom of internal movement within China for all citizens equally is, in fact, a misuse of resources and is insensitive to Chinese political and historic culture. Instead, both local and federal governments ought to begin by at least addressing these three factors, because they directly and explicitly affect the migrant workers' highly fundamental human capabilities as stated by Martha Nussbaum—the fulfillment of a decent life, bodily integrity, and "having the right to seek employment on an equal basis with others." Because the language of capabilities encompasses these rights—meaning all individuals ought to have the means to fulfill the framework of the right with legitimate capability—these are not rights in which the Chinese government should have the authority to interfere.

This notion of decency is arguably contestable when solely referencing the right to movement, as previously noted. Joseph Carens, for instance, insists freedom of movement is a fundamental right because it can be extrapolated to "having your will matter" and expressing a "vital interest in being free." For Carens, these are the qualities that translate to decent human life and what ground freedom of movement as something fundamental. In other words, using Nussbaum's terminology, Carens might very well classify freedom of movement as an eleventh central capability. However, Carens is shortsighted in his outlook regarding movement rights because by emphasizing the process or choice by which one is able to move, he neglects the significance of first establishing the kind of receptive framework that could allow for a sustained, decent life post-migration. In the case of Shanghai, this must be the political priority. So, we must acknowledge that possessing the free will to move whenever one chooses is not contributive to a decent life in the same way assuring successful post-migration economic integration in the city is. For this reason, I have established the difference between fundamental capabilities, like life, and subsidiary rights, like migration.

Decency, then, is inextricably linked to the capability of life. Migrants cannot be left to scrape

by on meager wages and jobs that threaten their physical safety every day, because these circumstances jeopardize their fundamental right to a decent life and therefore, their fundamental right to life. Local governing bodies ought to work within the framework of the *hukou* by advocating for reforms that augment these rights to life.

Overpopulation, overcrowding, and occasional unemployment are very real issues in Shanghai, the solution, then, cannot simply be to eradicate the *hukou* and adopt Carens' conceptualization of free movement. This kind of mentality would wreak havoc on an already-precarious situation. Instead, wage reforms must be introduced and enforced, employers and employees alike must be trained on maintaining safe and acceptable workplace conditions, and social programs must be boosted to allow a mixing of occupational opportunity and sentiment between migrant and permanent urban laborers. These tasks seem daunting, but they are both far more effective and less strenuous than overturning a decades-old system that, as research has indicated, would result in an inundation of migrants in megacities.

Moreover, there is an existing rights discourse within the nation that could be applied to improve these problematic practices in a piecemeal method, as opposed to confronting a deeply traditional nation with an entirely new barrage of policy. Chinese legislators might be more willing to adopt localized and specified processes, such as wage arrear monitoring programs, skill-training programs, and health and safety inspections, as opposed to eradicating or replacing institutions altogether. Perhaps the critics that argue China's history is too divergent from that of the western world for the Chinese to adopt western sentiments of politics and economics are right; perhaps then what is necessary is to explore and exchange information in specific, relevant segments to address issues of reality, as opposed to amending a cultural philosophy.

Conclusions

After analyzing the realities of migrants' circumstances in Shanghai, I maintain internal freedom of movement within China ought not to be considered a fundamental capability and instead ought to be viewed as a subsidiary right. The nature of this subsidiary right ought to be that it is extrapolated from other, inviolable rights, and that it is invoked if it does not jeopardize the provision of fundamental capabilities in any circumstance. However, if fundamental capabilities have been fulfilled and the government still chooses not to afford a citizen the subsidiary right to migration, the government ought to carry the burden of justifying why it chooses not to through public legal proceedings, in which the citizen can also present a case. The mere introduction and establishment of these proceedings might not, of course, guarantee an imminent end to rights abuses. At the very least, however, these public measures might allow for increased commentary by both local and international entities within a specifically Chinese context. Instead of attempting to upend or reform the entire judicial process, this focus might allow activists to tailor their approach and concentrate on safeguarding the transparency, accessibility, and frequency of trials for migrants wishing to bring cases to court. In other words, these courts might provide an appropriate space for discussion that is more sensitive to the realities of the Chinese system and less susceptible to dichotomous debates eager to condemn authoritarian "otherness."

Further, the conceptualization of freedom of movement as a subsidiary right does not mean components that contribute to the existence of the right should not also be amended—for instance, the *hukou*, as discussed, requires much improvement; while the continued implementation of the *hukou* means

the freedom of movement might never be conceived of as a fundamental capability in China. Again, though this notion might not be ideal, or might even be foreign and unacceptable to some critics, this is a conclusion appropriately justified by the unique combination of factors that constitute modern China. Part of this justification stems from the economic realities of the situation, since the country clearly does not possess enough resources to support such rapid influxes stably.

Another portion of this justification originates in China's political structure, especially the Chinese Constitution. Political sensibility and national rights rhetoric do not deliver the right to internal movement as one determined by individuals or one that is fundamental. Altering this approach to subsidiary rights would be attempting to re-write Chinese history, entirely restructuring Chinese political infrastructure, and eroding notions of collectivism that characterize the Chinese identity. In short, the task is impossible and unnecessary. Instead, the obligations of the state and of western and international communities extend only as far as to ensure that in possessing the choice of when to afford subsidiary rights to its people, the Chinese government never violates related, fundamental capabilities, continues to work towards improving living conditions through policy creation and implementation, attempts to afford subsidiary rights whenever possible, and incorporates a legitimate legal procedure for defending its decisions regarding the provision of subsidiary rights.

Urban migrant labor is the very core of Chinese economic productivity and is thus the foundation of a large portion of global economic paradigms. Without this group, the countenance of our global economy would be unrecognizable. What is often forfeited in the great modern rush to productivity, however, is the conceptualization of these migrant laborers as individuals and as humans. Through the research and analysis presented in this essay, I aim to rediscover migrant laborers' humanity on the global scale by presenting their greatest challenges and providing an argument that acknowledges their right to dignified life. In such a densely populated and economically driven nation, migration is a right that cannot be taken lightly, even if it is not fundamental. Allowing the government to invoke migration rhetoric only when it is economically beneficial or when it poses a threat to a status quo does not appropriately expound the vast influence of migration and migrant labor within the country. Further, this kind of utilization of migration is indicative of the potential negative qualities of authoritarian agendas as it reduces, or entirely eliminates, political accountability on the matter. Hence, migration must be elevated to a right so that individuals and groups of migrants can have access to legal mechanisms that reflect the societal value of their lives and labor contributions and that seek to revive and sustain the basic obligations of any political entity.

To this end, the strength of the Asian values debate lies not in the emphasis of diversity between the East and the West, but rather, as Sen indicates, in the emphasis on diversity within Asia and in the utilization of the debate as an instrument of education for non-Asian commenters. India, for instance, is an Asian nation in which certain western processes have potential for implementation primarily due to the country's pre-existing democratic infrastructure. So, conceptualizing migration rights as subsidiary ones in China is not suggested because China is a non-western nation. Rather, it is suggested because even amongst its neighboring Asian counterparts, China's positioning as a global production superpower and its distinct political and economic features create a unique circumstance for migrant laborers that requires a singular solution. The most productive application of Asian values in the context of Chinese internal migration is the one that allows for the careful consideration of each political, economic, cultural and historic factor that defines the Chinese context and carries weight in determining how freedom of movement within

a nation is conceptualized. Thus, in China, though Asian values never ought to be employed to justify inhumane abuses, they can be used to defend practices western commenters might consider undemocratic, so long as the language of fundamental capabilities and the provision of prioritized rights never falter.

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IMF Conditionality & State Capacity

CHRISTINA GAY

Countries applying for loans from the International Monetary Fund (IMF) agree to terms of conditionality. Conditionality in its broad sense covers the design of IMF-supported programs, macroeconomic and structural policies, and the specific tools used to monitor progress toward the goals outlined by the country in cooperation with the IMF. While the IMF claims these conditionality programs are meant to ensure repayment and promote economic growth, these conditions often reflect the interests of major stakeholders in the fund rather than the interests of the host country. I argue that the strict austerity measures and fiscal reforms often included in these programs increase reliance on indirect taxation and nontax revenue, as already weak states agree to tax reforms they do not have the administrative capacity to implement. I provide evidence that IMF conditionality programs have a deleterious effect on overall state capacity, and that this effect has an even stronger impact on non-democratic countries.

Introduction

Greece recently won a conditional agreement from Eurozone leaders to receive up to $95 billion over the next three years in its third bailout. However, the country has had to make substantial concessions in return, including taxation reform, labor market liberalization, and privatization. As in many countries facing IMF conditionality plans, the proposal of these reforms was met with public unrest and distrust in these reforms' ability to improve government revenue and catalyze economic growth. Because conditionality programs emphasize trade liberalization, onerous tax reform, and privatization while providing loans and financial aid, governments are required to find new means to collect revenue, but often lack the administrative capability to collect direct taxes. Analyzing data from the World Bank on IMF programs and respective countries' direct taxes, indirect taxes, and non-tax revenue while under conditionality programs, I argue that IMF conditionality harms state capacity. States that heavily rely on indirect taxes or non-tax revenue tend to do so because they have a weaker administration, less legitimacy, and less political will in different sectors of society to follow reform programs. While I initially hypothesize that conditionality programs forcing liberalization would reduce indirect taxation while providing non-tax revenues that don't incentivize administrative capacity, evidence suggests that IMF programs in fact

increase reliance on indirect taxes and non-tax revenue. Using a variety of statistical tests to account for endogeneity between entrance into an IMF program and non-tax revenue, empirical data supports the conclusion that IMF conditionality has an even stronger negative effect on state capacity than initially expected.

Literature Review

IMF loans to countries facing balance of payment deficits and bankruptcy are either tied to the nation's conditionality or require economic and political provisions. Such policies often include fiscal policy reforms, such as austerity measures and tax reform, as well as neoliberal policies of trade liberalization and privatization of key public services (IMF).

Governments often join IMF programs when suffering from an imbalance of payments and need access to cheap credit to avoid deficit (Goldstein and Montriel 1986). However, contrary to the Washington Consensus, which suggests uniformity of IMF conditionality, researchers report large variations in policies and requirements of IMF conditionality (Casper 2008). Important factors in approving and designing IMF programs are influenced by the interests of IMF Executive Board members and their governments, IMF's major quota holders—especially the U.S.—and private financial institutions who supplement IMF loans, rather than the needs of the target country (Casper 2008). If IMF conditionality requirements are more tailored to these actors rather than the target state, I question the capability of such policies to create significant lasting development and economic growth.

Previous empirical work has shown that IMF conditions not only depend on the severity of the economic crisis, but also on the relative bargaining power of state actors, interest groups, G7 governments, foreign banks, and relative power groups within the fund (Gould 2003, Dreher 2004). There is a broad spectrum of literature showing that the effects of these policies are often harmful to the target country. Loans with higher reforms associated with conditionality have a deleterious effect on democratic practices (Brown 2008) and human rights (Abouhard and Cingranelli, 2007). Additionally, IMF conditionality provides increased information to elites competing for power, and consequently increases risk for a political coup (Casper 2008). The anti-IMF demonstrations have been so fervent in recent years that scholars have renewed the popular claim that IMF programs' requirement for countries to undertake economic reforms encourages social unrest and government crises (Dreher and Gassebner, 2012). While countries enact these reforms in an effort to stabilize their balance of payments and foster economic growth, Przeworski and Vreeland (2000) find that IMF programs lower annual economic growth by 1.5% for each year the country participates.

The literature discusses both the reactions to initial reforms imposed by the IMF as well as the challenges of successfully implementing lasting tax reform. Taxes may be considered the most theoretically and empirically justified measure of state capacity (Hendrix 2010). The actual implementation and success of the tax reform depends on a variety of conditions. Talercio argues that political will within different sectors of society is needed to modernize tax reform (2003). Beyond political will, the success of tax reform also requires positive public perception of administration (Bird and Zolt 2008). Finally, Smith discusses three main administrative obstacles to developing a simplified, efficient tax structure and broader tax base: an underdeveloped private sector, non-credible public bureaucracies, and low administrative capacity of local government systems (2014). Regimes applying for IMF loans are usually doing so because they are

facing bankruptcy or an extreme balance of payments deficit, often as a result of the obstacles described above by Smith. Therefore, tax reform policies included in IMF conditionality may be ill-suited to the regimes they are often targeted towards, leading to little positive impact or increase in revenues.

Vehorn (2008) empirically analyzed the creation of a Large Taxpayer Unit (LTU) to ensure either stable or enhanced revenue flows by comparing changes in the average annual tax share before and after implementation, and revealed that 43% of countries experienced a decline in their tax share. This suggests an inconsistency between programs such as LTUs and Structural Adjustment Programs (SAP), and the ability of the target country to collect this revenue. In their work on military interventions and state capacity, Pickering and Kisangani discuss the importance of looking beyond tax ratio when assessing state capacity to include direct taxes, indirect taxes, and non-tax revenues (2008). Direct taxes, income taxes, taxes on wealth and property, and corporate taxes indicate the highest level of government penetration in society. Direct taxes consist of the revenue the government is able to collect from the most powerful groups, such as labor and capital, as well as from ordinary citizens; additionally, they require the highest amounts of administrative capacity to collect. Indirect taxes—duties on goods, services, and international trade are easier to administer, and are often used by states that lack coercive authority and legitimacy. They tend to be more volatile than direct taxes, and do not create the same bonds of legitimacy between the government and the people. Consequently, reforms to post-colonial tax systems have emphasized increased direct taxation (Fjeldstaad and Moore 2008).

IMF conditionality generally requires major macro-economic conditions: liberalization of exchange rates, liberalization of trade, privatization of state-owned enterprises, discipline of government expenditures, and reform of revenue mobilization and tax reform. Regarding aforementioned concerns about IMF conditionality to these more specific definitions of state capacity and tax and non-tax revenue could possibly explain the gap in the literature between the rhetoric of these conditionality programs to increase state stability, and the seemingly contradictory decrease in tax share, growth, and distribution of labor. Looking at the works describing the difficulties associated with successful implementation of a simplified direct tax policy, in addition to the restrictions IMF trade liberalization and privatization place on indirect tax revenue, it is apparent that there is potential for a negative overall effect on tax ratio.

Lastly, Pickering and Kisangani analyze non-tax revenue—foreign aid, administrative fees, profits from state owned enterprises, and resource rents. Non-tax revenue similarly does not require an extensive administrative apparatus to collect, and offer state-builders some degree of state autonomy. However, while governments that derive a small to moderate proportion of their income from non-tax revenue are able to build a buffer from the international economy and powerful societal groups, excessive reliance on tax revenues can have a corrosive effect on state-building (Snider 1988). With reduced incentive for leaders to penetrate and build bonds with society, the result is more likely to be decreased state extractive capacity and declining tax revenue (Remmer 2004). Renter states provide extreme examples of this result, such as when oil resource rents provide enough of a buffer to fund the government without requiring it to build up a strong administrative apparatus.

The literature provides evidence of the obstacles of administration, legitimacy, and public trust required to implement successful direct tax reform as recommended by the IMF. Macroeconomic conditions, in their attempts to incentivize both direct investment and trade liberalization, limit struggling countries' ability to collect indirect tax revenue. Governments are left with only non-tax revenue as a

means of stabilizing their balance of payments, which is facilitated by the loans and foreign aid given by the IMF. Analyzing the effects of IMF programs on these three sources of government revenue could provide a more complete picture of how IMF programs effect state capacity as a whole.

Finally, I address the difference between the effect of these programs on democratic and non-democratic countries. Non-democratic leaders rely on the approval of a smaller winning coalition for survival in office, and will be less likely to have the same level of administrative outreach needed for a strong tax program. Smaller coalition governments have less incentive to provide public goods, which are required for collecting tax revenue. "Free resources" such as foreign aid, grants, and resource rents allow small coalition governments to pay off their winning coalitions without providing public goods or enacting policies that encourage economic activity (Bueno de Mesquita 2003). Additionally, the works of Bird and Willet discuss the use of IMF programs as a signaling effect to both foreign direct investment and a country's home population (2004). Conditionality may allow reformers to justify tax reforms and policies that would otherwise lead to unrest. The IMF becomes an excuse to justify policies the borrowing government wanted to implement but could not for fear of popular backlash (Bird and Willet 2004). An application of the selectorate theory suggests this should not be the case for less democratic leaders, who would be less concerned with popular reaction to tax policy since they only need to appease a smaller winning coalition (Bueno de Mesquita 2003). Therefore, policies required by IMF conditionality may be outside the ruling government's interests, particularly in less democratic regimes, because they neither benefit the winning coalition nor do they provide a justification for policies the government have fear to implement.

Hypotheses

Hypthothesis 1: IMF conditionality will fail to encourage an increase in direct taxes.

Direct taxes are often met with political unrest and demonstrations, so they will be more costly for leaders to implement. Additionally, direct taxes require the public to view the governments and its actions as legitimate, as well as political will of the bureaucracy to implement them. Developing countries in need of IMF bailouts are not likely to have well-administered, reliable governmental systems, making direct taxes difficult to successfully implement. While IMF programs encourage austerity programs and increased direct taxation, I hypothesize countries will be unable to successfully carry out these programs.

Hypothesis 2: IMF conditionality will decrease indirect taxes.

IMF conditionality stresses economic liberalization, often through elimination of trade barriers and making the country more attractive to foreign investment. These policies will reduce duties from goods, services, and international trade normally collected as indirect taxes.

Hypothesis 3: IMF conditionality will increase dependence on nontax revenue.

I predict both the decrease in indirect taxes from conditionality and the administrative difficulty of collecting direct taxes will decrease the total tax ratio, forcing leaders to depend on nontax revenue, including foreign aid, resource rents, and administrative fees.

Hypothesis 4: The following effects will be stronger on non-democracies

Hypothesis 4 stems from the logic that authoritarian governments will have less incentive to foster stronger bonds of legitimacy between them and the general population. We would expect policies required

through conditionality by the IMF on less democratic regimes to be outside the ruling government's interests, because they neither benefit the winning coalition nor do they provide a scapegoat for policies the governments have fear to implement.

Data and Specifications

The independent variable is the presence of an IMF program. I use a dichotomous variable IMF Program, denoting whether an IMF arrangement has been in effect within a country at least five months during a particular year (Casper 2008). I use data from both Casper (2008) and Dreher (2004), which includes 159 countries spanning from 1970- 2002. For the dependent variables, I use Pickering and Kisangani's measure of state capacity through direct taxes, indirect taxes, and non-tax revenue. Three variables, direct taxes, indirect taxes, and non-tax revenue, are created to comprise of indicators provided by the World Bank and the IMF. Direct taxes consist of income taxes, taxes on wealth, and "other taxes," which includes employer payroll or labor taxes, taxes on property, and taxes not allocable to other categories, such as penalties for late payment or nonpayment of taxes as a percentage of total revenue. Indirect taxes combine the taxes on goods and services, and taxes on international trade, also as a percentage of total revenue. Finally, non-tax revenue consists of grants and other revenue; social contributions; and interest payments, all as a percentage of total revenue. Grants and other revenue include grants from other foreign governments, international organizations, and other government units; interest, dividend, rent, requited, non-repayable receipts for public purposes (such as fines, administrative fees, and entrepreneurial income from government owner-ship of property), and voluntary, unrequited, no repayable receipts other than grants[1]. Social contributions include social security contributions by employees, employers, and self-employed individuals, and other contributions whose source cannot be determined. They also include actual or imputed contributions to social insurance schemes operated by governments. Interest payments include interest payments on government debt, including long-term bonds, long-term loans, and other debt instruments to domestic and foreign residents. As noted above, all measures are a percentage of the total revenue collected each year in a given country, therefore, these measures are representative of how much each country relies on a particular source of revenue rather than the actual amount of revenue a country is receiving.

I use a series of economic and political controls that could potentially influence both participation into an IMF program and a country's ability to collect revenue. Economic factors that could influence both the independent and dependent variables of interest include GDP per Capita, inflation, rate of economic growth, the level of a country's external debt, and the level of international reserves. I also control for political and institutional factors such as regime type, the size of the winning coalition, and if the country is undergoing political reform. My final group of controls consists of possible conflicts that could influence both IMF participation and tax policy. Such factors include whether or not a country is embroiled in a civil war, an international conflict, or experiencing anti-government demonstrations. Previous empirical works analyzing the effects of IMF programs have shown that population, military size, and GDP per capita

1 Due to restrictions in the Data, my measure of non-tax revenue only includes selected rents as a percentage of total revenue. It should be noted that as a result there may be additional non-tax revenue not accounted for in the model. Also, as a result of this, direct taxes, Indirect taxes and non-tax revenue do not add up to equal 100% of total revenue.

are likely to influence the number of IMF staff a country may have (Casper 2008). Additionally, military capacity, bureaucratic capability, and GDP per capita have all been shown to be highly correlated with administrative capacity; as a result, I control for military capacity, population size, and GDP per capita in my analysis (Fearon, Laitin 2003). Table 1 presents the summary statistics of my main variables of interest[1].

Table 1: Summary Statistics of Key Variables

	Variable	Units	N	Mean	Sd	Min	Max	Source
Independent Variable:	IMF	0 or 1	4330	.2829	.4504	0	1	World Bank
Dependent Variables:	Direct tax	% total rev	742	25.909	12.814	.4841	68.7727	World Bank
	Indirect tax	% total rev	730	41.419	15.864	2.0153	81.296	World Bank
	Non-Tax Revenue	% total rev	484	49.684	17.61899	10.865	165.901[3]	World Bank
Controls:	FDI Inflows	$ USD	4002	1.77e+09	1.06e+10	-4.55e+09	3.21e+11	World Bank
	Anti-Govt Demonstrations	Total #protests	4311	.60078	1.717	0	26	Casper
	Winning Coalition	Size scale 0-1	4359	.5565497	.3173633	0	1	Casper
	Log Population	Log Population	4403	15.90084	1.57388	11.573	20.97064	Casper
	Log GDP	Log of GDP	3882	7.367	1.5617	4.0567	11.0247	Casper
	Growth	Rate GDP growth	3820	1.429	6.44167	-50.2923	92.9855	Casper
	Military Capacity	CINC	4376	.00666	.02047	8.80e-06	.17763	COW
	Log Debt	Log of total debt	2659	1.5723	.71854	0	4.6864	Casper
	Log Total Reserves	Log int'l Reserves	2761	2.6267	1.54511	-4.6629	8.78219	Casper
	Inflation	Log of Inflation	3396	3.4237	.6893	-4.6485	10.0770	Casper
	Regime Type	0,1, or 2	4248	.18408	.4813	0	2	Casper
	Civil War	0 or 1	4407	.16632	.37241	0	1	Casper
	Conflict	0 or 1	4407	.046063	.20964	0	1	Casper
IV Instrument:	IMF_Staff	#people on IMF	3479	.75811	2.0158	0	24.8	Casper

1 For a full description of each of the variables included in my analysis, please refer to the Appendix.

3 This maximum of 165.90% of revenue is due to an inflationary period in Brazil in 1990, where inflation rates were over 2,000 (World Bank).

Issue of Selection

Unfortunately, selection into the IMF is not random, countries participating in IMF programs differ systematically from countries that do not (Przeworski and Vreeland 2000). In order to distinguish between the inherent effects of IMF programs and the differences in country conditions, there must be an instrument to correct for potential selection bias. In order to assess the economic effects of IMF loan programs, one must first distinguish the economic effects of the loans from the economic conditions that determined the size and scope of the loan programs. In order to do this, I use an institutional variable that has predictive value for IMF loan participation, but is exogenous to my dependent variable, the tax ratio.

IMF loans are more likely to exist and be larger in size for when countries have more nationals on the IMF staff (Barro and Lee 2005). Barro and Lee find two advantages of having a higher percentage of nationals working at the IMF when negotiating a loan. They argue that countries with more nationals employed by the IMF have access to insider information that could influence their ability to negotiate favorable conditions with the IMF; Secondly, Barro and Lee argue that while a country's own nationals cannot work directly as desk economists or mission team members for their home countries, they are often sought out for comments on country programs (2005). As a result, loans and conditionality may be more sensitive to country issues when a large number of that nation's nationals are employed as IMF staff. Additionally, Conway found empirical support that conditionality is not set independently of the decision to approve a program, but is in fact the endogenous outcome of a bargaining process between IMF staff and the government of the potential participant country (Conway 2003).

I use the variable *IMF_staff* created by Casper, which divides the number of a country's nationals who work for the IMF by the total number of individuals who are employed by the Fund in a given year (Casper 2008). The variable was designed as a proxy for each country's special connection with the IMF (Casper 2008).

Methodology

$$Directtax_{i,t} = \beta IMF_{i,t} + \mathrm{X'}_{i,t}\gamma + \alpha_r + \epsilon_{i,t}$$

$$Indirecttax_{i,t} = \beta IMF_{i,t} + \mathrm{X'}_{i,t} + \alpha_r + \epsilon_{i,t}$$

$$nontaxrevenue_{i,t} = \beta IMF_{i,t} + \mathrm{X'}_{i,t} + \alpha_r + \epsilon_{i,t}$$

I first run an Ordinary Least Squares regression (OLS) to show preliminary results of the relationship between IMF programs and revenue. The main relationship of interest is between the dependent revenue variable (direct taxes, indirect taxes, nontax revenue) and the presence of an IMF program. X' denotes the group of control variables listed above. I also account for region fixed-effects ($\alpha_{i,t}$) to account for regional characteristics that effect both entry into IMF programs and revenue. Finally, I cluster robust standard errors at the country level ($\varepsilon_{i,t}$).

$$IMF_{i,t} = \lambda IMF\_Staff_{i,t} + \mathrm{X'}_{i,t}\nu + \alpha_r + \eta_{i,t}$$

$$Directtax_{i,t} = \beta\widehat{IMF}_{i,t} + \mathrm{X'}_{i,t}\gamma + \alpha_r + \epsilon_{i,t}$$

$$Indirecttax_{i,t} = \beta\widehat{IMF}_{i,t} + \mathrm{X'}_{i,t}\gamma + \alpha_r + \epsilon_{i,t}$$

$$nontaxrevenue_{i,t} = \beta\widehat{IMF}_{i,t} + \mathrm{X'}_{i,t}\gamma + \alpha_r + \epsilon_{i,t}$$

I then use a two-stage instrumental variable least squares regression (2SLS) to account for endogeneity and problems of selection into IMF programs. The 2SLS estimator is the result of two consecutive OLS regressions: the first is a regression of the instrument, *IMF Staff*, on the independent variable, *IMF Staff*. In the second stage, the model-estimated values from the first stage are used in place of the actual values of the problematic predictors to compute an OLS model that accounts for selection. As in the OLS regressions, I account for the use of a variety of control variables, region fixed effects, and a country-clustered robust standard error.

Results

I first perform OLS regressions on the effect of IMF participation on direct taxes, indirect taxes, and non-tax revenue. Using data from polity IV as a measure of democracy, I show the effect on tax revenue first on the entire sample, then on a sample excluding only countries that are very democratic, and finally on a sample excluding all democracies. The results, shown in Table 2, reveal a decrease in direct taxes under IMF conditionality, and an increase in both non-tax revenue and Indirect taxes. Indirect taxes, despite conditions of privatization and economic liberalization often stipulated by the IMF, increase as a percentage of tax revenue while direct taxes decrease. The tests support hypothesis 4: that IMF conditionality programs lead to a larger shift in tax share in less democratic countries.

Table 2: OLS Regressions of IMF on Direct Taxes, Indirect Taxes, and Non-tax Revenue (Without IMF_Staff instrument)

VARIABLES	Direct Tax			Indirect Tax			Non-tax Revenue		
	Full Sample	Polity<19	Polity<17	Full Sample	Polity<19	Polity<17	Full Sample	Polity<19	Polity<17
IMF	**-4.450*** **	**-4.576*** **	**-5.283*** **	**2.653**	**4.220***	**5.377****	**8.082****	**8.586****	**7.738*** **
	(1.312)	**(1.376)**	**(1.621)**	**(2.367)**	**(2.228)**	**(2.638)**	**(3.254)**	**(3.502)**	**(2.472)**
Winning Coalition	2.215	0.684	3.333	13.06	21.86*	19.57**	-10.09	-14.14	-23.52
	(3.909)	(5.499)	(8.507)	(12.32)	(12.52)	(9.518)	(16.12)	(19.71)	(16.79)
Log Population	5.315***	5.483***	5.531***	0.842	-0.423	1.352	-4.003	-3.527	-3.588
	(0.903)	(1.067)	(1.788)	(2.326)	(2.790)	(3.572)	(3.283)	(3.617)	(4.226)
Log GDP	5.423***	6.681***	6.216***	-6.354***	-6.582***	-0.941	4.174	5.593	3.133
	(1.700)	(1.328)	(1.827)	(2.035)	(2.229)	(3.194)	(3.392)	(4.518)	(5.612)
Growth	-0.230**	-0.230**	-0.199	0.106	0.0736	0.155	0.264	0.256	0.0406
	(0.113)	(0.111)	(0.134)	(0.178)	(0.195)	(0.172)	(0.395)	(0.417)	(0.283)
Military Capacity	-323.5***	-368.4***	-240.7	-126.8	-196.3	-1,152	867.5***	815.6**	1,210*
	(97.90)	(102.5)	(454.6)	(203.3)	(327.0)	(751.0)	(315.4)	(378.5)	(691.7)
Log Debt	3.212*	3.003	3.376	-1.514	-1.914	-1.667	3.219	3.587	-3.429
	(1.826)	(1.865)	(2.262)	(2.009)	(2.055)	(2.563)	(3.737)	(4.405)	(4.128)
Log Total Reserves	-0.00137	-0.0726	0.227	-0.0904	-0.772	-0.518	-4.237**	-3.343*	-2.860
	(1.060)	(1.204)	(1.442)	(1.439)	(1.484)	(1.479)	(1.810)	(1.737)	(1.941)
Civil War	-1.731	-0.272	-1.527	5.489	3.969	2.053	-1.189	-1.852	3.829
	(2.262)	(1.820)	(2.502)	(3.466)	(3.191)	(4.109)	(4.401)	(5.192)	(3.778)
Inflation	-0.0231	-0.0109	-0.000964	-0.167	-0.133	0.138	0.812**	0.879**	0.207
	(0.0828)	(0.0714)	(0.0920)	(0.132)	(0.137)	(0.104)	(0.374)	(0.372)	(0.168)
Regime Type	6.285**	6.611**	6.695*	4.557	8.543	12.88***	15.69	14.95	-3.157
	(3.000)	(3.250)	(3.480)	(5.505)	(5.495)	(4.622)	(11.20)	(13.60)	(12.86)
Conflict	-2.408	-2.958	-1.064	-4.973	-5.345	-13.08***	-9.213	-10.80	3.050
	(3.975)	(3.681)	(3.199)	(5.545)	(5.202)	(3.721)	(9.302)	(10.61)	(9.484)
Constant	-82.34***	-91.74***	-92.99***	60.53	75.18	7.864	69.05	51.58	100.2
	(16.59)	(16.74)	(29.88)	(44.77)	(53.17)	(67.86)	(62.95)	(75.45)	(83.14)
Observations	424	371	264	444	395	285	259	209	146
R-squared	0.518	0.597	0.588	0.224	0.284	0.372	0.383	0.423	0.328
Region Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

(Country Clustered Robust Standard error in Parenthesis)

*** p<0.01, ** p<0.05, * p<0.1

Table 3: IV Regression First Stage Statistics: Strength of IMF_Staff as a predictor of participation in IMF

VARIABLES	Full Sample	Polity<19	Polity<17
IMF Staff	**0.113***	**0.144****	**0.266*****
	(0.0630)	**(0.0678)**	**(0.0599)**
FDI Inflow	0	-0	-0*
	(0)	(0)	(0)
Anti Govt Demonstrations	0.0124*	0.00856	0.0131
	(0.00645)	(0.00696)	(0.00845)
Winning Coalition	-0.0113	-0.0419	0.0108
	(0.100)	(0.110)	(0.121)
Log Population	-0.0181	-0.00363	-0.0199
	(0.0254)	(0.0280)	(0.0279)
Log GDP	-0.125***	-0.107***	-0.143***
	(0.0318)	(0.0335)	(0.0358)
Growth	0.000699	0.000553	0.000167
	(0.00294)	(0.00304)	(0.00323)
Military Capacity	-3.692	-3.411	0.584
	(2.335)	(2.268)	(2.153)
Log Debt	0.192***	0.194***	0.183***
	(0.0335)	(0.0354)	(0.0349)
Log Total Reserves	-0.0299*	-0.0227	-0.0187
	(0.0165)	(0.0166)	(0.0172)
Inflation	-0.00569*	-0.00722**	-0.0111***
	(0.00301)	(0.00318)	(0.00309)
Regime Type	-0.0518	-0.0589	-0.0760
	(0.0573)	(0.0583)	(0.0554)
Conflict	-0.160	-0.136	-0.136
	(0.109)	(0.112)	(0.104)
Civil War	0.0133	0.0358	0.0717
	(0.0619)	(0.0600)	(0.0615)
Constant	1.531***	1.174**	1.066**
	(0.512)	(0.567)	(0.529)
Observations	1,734	1,522	1,221
R-squared	0.183	0.192	0.215
Region Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes

(Country Clustered Robust Standard error in Parenthesis)

*** p<0.01, ** p<0.05, * p<0.1

As stated above, we must take the issue of selection into IMF programs into account when analyzing their effect on tax ratios and state capacity. Before analyzing the 2nd stage results of the 2SLS Instrumental Variables regressions on tax ratios, I empirically test our ability to use *IMF Staff* as an instrument for a country's participation into an IMF program. Having controlled for the additional variables that could plausibly correlate with both the number of nationals working at the IMF and tax policy, the first stage summary statistics show *IMF Staff* has a statistically significant correlation with a country's participation in the IMF (Table 3). I run the first stage regressions for all three samples: the full sample, the sample excluding very democratic countries, and the sample excluding all democratic countries[4]. Also, the Cragg-Donald F-statistics (Table 4) show that the variable is not weakly identified since all values are greater than 10 (Staiger, Stock 1997). Since we have no other reason to expect that a country's tax policy is related to its number of nationals employed at the IMF, I argue that I*MF Staff* fulfills the exclusion restriction, and can be used to satisfy the issue of selection.

Table 4: Cragg-Donaldson weak identification tests for IMF Staff variable

Cragg-Donald f-statistic								
Direct Taxes			Indirect taxes			Non Tax Revenue		
Full Sample	Polity <19	Polity<17	Full Sample	Polity <19	Polity<17	Full Sample	Polity <19	Polity<17
38.85	63.19	77.73	41.94	67.44	85.24	16.10	27.44	36.76

Note: For the case of a single-regressor, Staiger and Stock (1997) suggested declaring instruments to be weak if the first-stage F -statistic is less than 10. All f-statistics are greater than 10 for models of direct taxes, indirect taxes, and non-tax revenue, and for all three samples.

4 Very democratic countries are those with a polity score of 9 or 10, which on for my analysis are coded as 19 or 20 on a scale of 0-20. Additionally, I count democracies as countries with a polity score higher than 17.

Table 5: IV Second Stage Regression Results of IMF on Direct Taxes, Indirect Taxes, and Non-tax Revenue

(Using IMF Staff instrument as predictor of participation into IMF programs)

VARIABLES	Direct Tax			Indirect Tax			Non-Tax Revenue		
	Full Sample	Polity<19	Polity<17	Full Sample	Polity<19	Polity<17	Full Sample	Polity<19	Polity<17
IMF	**-23.38***	**-25.06****	**-28.87*****	**49.64**	**45.96***	**14.21***	**-9.865**	**1.543**	**13.78*****
	(13.85)	**(12.29)**	**(9.997)**	**(36.08)**	**(27.07)**	**(8.097)**	**(29.94)**	**(17.28)**	**(4.159)**
FDI Inflow	-2.85e-10	-2.37e-10	-1.61e-09*	2.11e-10	2.28e-10	1.47e-09***	-5.34e-10*	-4.86e-10*	-1.32e-09**
	(2.42e-10)	(1.99e-10)	(8.41e-10)	(6.71e-10)	(5.49e-10)	(4.92e-10)	(3.09e-10)	(2.62e-10)	(6.01e-10)
Antigovt Demonstrations	0.785*	0.719*	1.167***	-0.962	-0.855	-0.538*	-1.279	-1.152	-0.203
	(0.439)	(0.412)	(0.393)	(0.665)	(0.594)	(0.326)	(1.061)	(0.986)	(0.630)
Winning Coalition	6.634	2.963	1.024	-16.71	-1.437	7.555	10.97	2.958	-17.81*
	(5.505)	(6.382)	(9.777)	(18.94)	(14.25)	(6.788)	(26.86)	(20.72)	(9.466)
Log Population	5.613***	7.075***	7.023***	-1.736	-6.689**	-6.131***	2.386	2.927	3.517
	(1.251)	(1.444)	(2.542)	(3.468)	(3.338)	(2.339)	(4.332)	(4.604)	(2.653)
Log GDP	3.399	5.266**	5.635**	-0.688	-3.861	-3.670	4.475	9.403**	9.257**
	(2.737)	(2.301)	(2.540)	(7.128)	(4.832)	(2.823)	(5.570)	(4.795)	(3.979)
Growth	-0.137	-0.148	0.253	0.285	0.180	0.0318	0.0803	0.275	0.282
	(0.194)	(0.211)	(0.255)	(0.364)	(0.366)	(0.181)	(0.321)	(0.265)	(0.213)
Military Capacity	-406.5***	-452.0***	-136.0	262.3	246.7	-167.0	338.7	324.1	482.8
	(119.0)	(117.7)	(674.8)	(354.1)	(328.4)	(460.2)	(451.2)	(374.0)	(365.7)
Log Debt	7.273**	7.226**	6.715**	-10.15	-9.502	-4.350*	4.400	1.398	-4.870
	(3.060)	(2.990)	(2.897)	(7.019)	(6.062)	(2.295)	(4.770)	(3.853)	(3.988)
Log Total Reserves	0.203	0.417	1.341	-0.487	-1.713	-0.0834	-5.348***	-3.898**	-3.091*
	(0.976)	(1.036)	(1.173)	(2.517)	(2.247)	(1.278)	(1.997)	(1.720)	(1.872)
Inflation	-0.179	-0.207	-0.248*	0.0931	0.189	0.166	0.707*	0.875***	0.457***
	(0.137)	(0.132)	(0.141)	(0.369)	(0.303)	(0.130)	(0.362)	(0.261)	(0.150)
Regime Type	7.707***	7.091**	6.011	-9.293	-2.172	4.209	36.28***	34.97***	18.67
	(2.681)	(3.348)	(4.788)	(8.500)	(7.065)	(3.011)	(14.08)	(12.46)	(12.42)
Conflict	-4.557	-4.552	-4.998	-2.363	-4.354	-10.76***	-6.647	-5.458	9.440
	(2.849)	(3.030)	(4.284)	(8.001)	(8.145)	(3.180)	(10.20)	(9.900)	(9.181)
Civil War	-3.059	-0.0174	-2.915	5.083	0.190	-0.543	-8.669	-6.876	0.982
	(2.832)	(2.597)	(3.010)	(4.936)	(4.176)	(3.352)	(7.380)	(5.078)	(2.392)
Constant	-78.47***	-109.4***	-111.2**	83.85	170.3***	148.7***	-36.11	-76.09	-56.29
	(24.94)	(24.12)	(44.41)	(64.27)	(53.34)	(43.85)	(65.37)	(87.27)	(47.35)
Observations	378	325	230	393	344	246	228	178	127
R-squared	0.003	-0.044	-0.079	-2.422	-1.582	0.392	0.374	0.561	0.398
Region Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

(Country Clustered Robust Standard error in parenthesis)

*** p<0.01, ** p<0.05, * p<0.1

Hypothesis 1

I now present the estimates produced by the 2SLS model on the effect of IMF participation on direct taxes as a percentage of revenue (Table 5). While the initial hypothesis was that IMF participation would fail to increase direct tax collection, we actually see a significant decrease in direct tax ratio. In all of the models, the coefficient for IMF Program is negative and statistically significant. As with the previously performed OLS regression without the IMF staff instrument, the relationship is stronger when very democratic countries are excluded.

The results provide evidence that other than failing to increase direct taxes by requiring additional austerity measures, IMF programs are correlated with a decrease in direct taxes, suggesting that countries are failing to comply with conditions stipulated by IMF programs. My initial hypotheses were based on the assumption that countries would completely comply with the conditions in exchange for a loan, but the data clearly suggests that we must also factor in the possibility of non-compliance to certain fiscal policies required by the IMF. There is a wide variety of literature on IMF programs and compliance. Dreher (2004) argues that conditionality with IMF programs is unnecessary, due to lack of credible punishment if conditions are not met. Mercer-Blackman and Unigovskaya (2004) analyzed 33 countries transitioning to market economies using MONA data, and found that only 17 implemented more than 50% of the structural benchmarks included under their program during the period of 1993–97. The IMF itself reports compliance with structural benchmarks in 57% of all programs from 1987–99 (IMF 2001). With this, we can see that certain aspects of conditionality are followed, while others are not. Regardless, there is still evidence that IMF programs have a strong effect on tax policy, and so I move forward with my analysis, now keeping in mind that countries may not comply with all aspects of the conditions required.

I propose two explanations for the results found above. The first is that IMF conditionality in other fiscal and political sectors provides a further strain on the borrowing countries government, further weakening its capacity to collect direct taxes. As discussed before, IMF programs are often met with civil unrest, which may reduce public trust in government, both of which have been empirically associated with a state's ability to collect taxes. The second explanation for the reduction in direct taxes follows the logic presented by Pickering and Kisangani: weak governments will be more inclined to rely on easily obtained revenue, such as a loan from the IMF, than use more resources and administration to collect direct taxes. Thus, countries may not follow certain aspects of fiscal conditionality if presented with easier revenue.

Hypothesis 2

I use the same instrument of measurement, *IMF Staff*, to analyze the effect of IMF programs on indirect taxes; the results are presented in table 5. The relationship between IMF program and indirect taxes is statistically significant when excluding very democratic countries and when excluding all democracies. The empirical results show an increase in indirect taxation when an IMF program is in place, which—while counter to my original hypothesis fits in with the logic behind the decrease in direct taxes presented above.

The previous literature finds a strong association among IMF programs, increased social unrest, and government crisis, which illuminates why countries ultimately increase the use of indirect taxation rather than following the conditions required by the fund. Faced with protest and internal government crises that come with the acceptance of conditionality, governments may find it even more difficult to

successfully implement tax reform. So despite calling for increased austerity and tax reform, the IMF may, in reality, exacerbate previous deficiencies in state capacity and cause governments to rely even more on indirect taxes.

Hypothesis 3

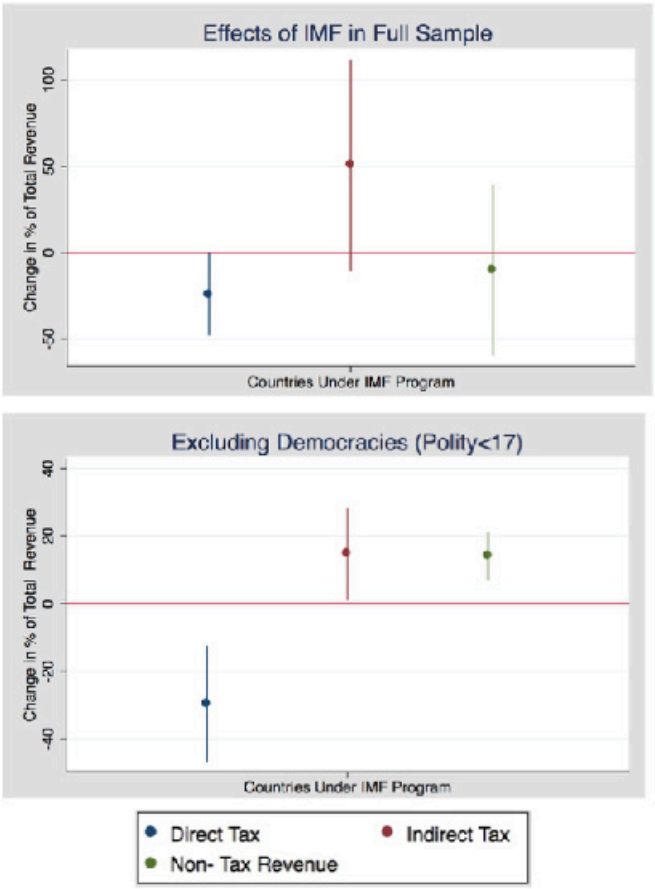
Finally, I analyze the effect of IMF programs on nontax revenue. The empirical results of the instrumental variables 2SLS regression presented in table 5 reveal an increase in nontax revenue, but results are only statistically significant when the sample is restricted to non- democratic countries. The results from nontax revenue holistically suggest there is a positive relationship between IMF programs and non-tax revenue, especially in non-democratic countries.

Hypothesis 4:

All three models showed a more significant and stronger relationship between IMF programs and changes in direct taxes, indirect taxes, and nontax revenue (Graphs 1, 2). When running the IV regression on the full sample, only direct taxes had a significant relationship a country's participation in an IMF program. When very democratic countries were eliminated from the sample, both indirect taxes and direct taxes have a significant relationship, and the IMF program's effect on direct taxes is slightly stronger. Finally, when all democracies were excluded, the sample of authoritarian countries showed a statistically significant effect on all three dependent variables. In terms of direct taxes, restricting the sample produces an even stronger, more statistically significant result. However, when reducing the sample for indirect taxes, IMF seems to have less of an effect. This could be explained by the increase in non-tax revenue for the same sample. In accordance with the theory that countries under conditionality will turn to easier forms of revenue, authoritarian governments may be more likely to transition to nontax revenue than the sample including democracies and non-democracies.

To put these results in a real-world framework, based on the coefficients produced by the IV regression, one can apply the results of this model to the recent IMF conditions program in Greece, which has been met with popular uprisings and social unrest. As a democracy, we would expect direct taxes to make up 23.38% less of its total revenue than if the country were not under an IMF program. However, in Sierra Leone, a non-democracy currently under an IMF credit facility arrangement, we would expect direct taxes to make up 28.87% less of total revenue. Additionally, we would expect indirect taxes in Sierra Leone to make up 14.21% more of total revenue, and nontax revenue to increase by 13.78%. All of these are indicators of a reduction in state capacity under the IMF program.

Graphs 1 & 2: IV Regressions Coefficient Plots using IMF_Staff instrument:



Conclusion

Evidence supports that IMF programs reduce use of direct taxes for revenue collection, while increasing countries' use of indirect taxes and nontax revenue. As predicted, these effects were all stronger and more significant when excluding very democratic and all democratic countries.

My original hypotheses did not account for the possibility of non-compliance by states under IMF programs. Despite conditionality emphasizing increased direct taxation, austerity, and trade liberalization, the data presents evidence that IMF programs have an even more deleterious effect on state capacity than I originally predicted. There is strong empirical evidence for a negative relationship between IMF programs and direct taxes, which are the strongest indicators of state-capacity and government penetration into society. In addition, despite conditionality, the presence of an IMF program created an increase in indirect

taxation, which is used by governments who are unable to directly tax their populations and instead rely on export taxes and customs tariffs to fund their regimes. Further work could be done regarding the specific relationship between compliance with conditionality programs and tax policy, especially regarding what policies countries tend to follow over others. Finally, the data shows an increase in nontax revenue when countries are under IMF programs, which has a corrosive effect on state building when the programs are relied upon as a primary source of revenue. As a whole, countries under IMF programs are put under increased pressure and strain that forces them to rely more on indirect taxes and nontax revenue to fund their regimes. Although conditionality often stipulates increasing direct taxation, the data suggests non-compliance with certain policies required by the IMF. Based on the results of both the OLS and 2SLS regressions, there is sufficient evidence to support the claim that IMF programs reduce overall state capacity. to 2013. It includes direct household (out-of-pocket) spending, private insurance, charitable donations, and direct service payments by private corporations. Private health expenditure should be considered because of the persistence of many international organizations such as the IMF and WTO pushing for privatization in social health policy. This is due to their interest in reducing each country's great public debt and shifting resources so that the international organizations can implement better budgeting in Latin American countries (Homedes and Ulgade, 2005; Iriart, Merhy and Waitzkin, 2001).

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Appendix

Description of Key Variables

Direct Taxes: This is variable is a measure of a percentage of total revenue that comes from direct taxes in a given year. My data for this variable comes from the World Bank Development Indicators. Direct taxes include taxes on income as well as other taxes collected by the government, as a percentage of revenue. Taxes on income, profits, and capital gains are levied on the actual or presumptive net income of individuals, on the profits of corporations and enterprises, and on capital gains, whether realized or not, on land, securities, and other assets. Intragovernmental payments are eliminated in consolidation (IMF). Other taxes include employer payroll or labor taxes, taxes on property, and taxes not allocable to other categories, such as penalties for late payment or nonpayment of taxes (IMF).

Indirect Taxes: Indirect taxes include taxes on goods and services, and taxes on international trade. Taxes on goods and services include general sales and turnover or value added taxes, selective excises on goods, selective taxes on services, taxes on the use of goods or property, taxes on extraction and production of minerals, and profits of fiscal monopolies (IMF). Taxes on international trade include import duties, export duties, profits of export or import monopolies, exchange profits, and exchange taxes (IMF). My data for this variable comes from the World Bank Development Indicators Databank.

Non-Tax revenue: Nontax revenue consists of grants, social contributions, and interest payments made to the government. Grants and other revenue include grants from other foreign governments, international organizations, and other government units; interest; dividends; rent; requited, nonrepayable receipts for public purposes (such as fines, administrative fees, and entrepreneurial income from government ownership of property); and voluntary, unrequited, nonrepayable receipts other than grants (IMF). Social contributions include social security contributions by employees, employers, and self-employed individuals, and other contributions whose source cannot be determined. They also include actual or imputed contributions to social insurance schemes operated by governments (IMF). Interest payments include interest payments on government debt--including long-term bonds, long-term loans, and other debt instruments--to domestic and foreign residents (IMF). My data for this variable comes from the World Bank World Development Indicators Databank.

Winning Coalition Size: This variable measures the size of the winning coalition ((Bueno de Mesquita, Smith, Silverson and Morrow, 2003). It is included because countries with smaller winning coalitions spend less on public goods, leading to less tax revenue.

Log (GDP Per Capita): This variable is a natural logarithm of GDP per capita in each country. My data for this variable comes from Penn World Tables, and the dataset provided by Casper (2008). It is included because countries with high GDPs are less likely to need an IMF loan and are likely to have higher levels of revenue.

Log(population): This variable is a natural logarithm of each country's population in a given year. My data for this variable is from Penn World Tables, and the dataset provided by Casper (2008). It is included

because countries with higher populations are less likely to join IMF programs.

Inflation: This variable takes the natural logarithm of inflation is a country is any given year. I use the data provided by Casper, where he adds 17.65 (the lowest deflation rate in the data) to each value of the inflation variable in order to ensure that deflationary values are included into the analysis (Casper 2008). It is included in my analysis because countries with high levels of inflation are more likely to join IMF programs, and it is negatively correlated with state capacity and revenue.

Growth: This variable is a measure of growth in a country's GDP. My data for this variable is constructed by Casper (2008). It is included because country's experiencing high levels of economic growth are less likely to join IMF programs, and are more likely to experience a rise in revenues.
Military Capabilities: This variable is a measure of military strength from the Correlates of war National Material Capabilities set (Casper 2008). It is included because countries with large militaries are less likely to join IMF programs and are more likely to have strong administrative capacity.

Log (total External Debt): This variable measures total external debt as a percentage of gross national income. My data for this variable comes from the World Bank Development indicators, and the dataset provided by Casper (2008). It is included because countries with higher debt are more likely to join IMF programs and are less likely to have capacity to collect revenue.

Log (Total International Reserves): This variable is a measure of total international reserves as a percentage of total external debt. My data for this variable comes from the World Bank Development Indicators, and the dataset provided by Casper (2008).

Civil War: This variable measures whether or not the country is currently experiencing a civil war. My data for this variable comes from the dataset provided by Casper (2008). This variable is included because countries experiencing civil war are more likely to terminate IMF programs and are less likely to be able to collect tax revenue.

Conflict: This variable measures whether a country is involved in an international conflict. My data for this variable comes from the dataset provided by Casper (2008). It is included in my analysis because countries involved in international conflict are more likely to join into an IMF program and may negatively influence non-tax revenue and indirect taxes.

Anti Government Demonstrations: This variable is a measure of the number of anti-government demonstrations the occurred within a given year in each country. My data for this variable comes from the Banks Cross-National-Times-Series Data Archive (Casper 2008). It is included because protests are positively correlated with IMF programs and have a negative effect of the collection of Direct Taxes.

Regime Type: This variable is a three-point measure of a country's regime type. A 0 denotes a civilian regime, a 1 denotes a civilian-military regime, and a 2 denotes a military regime. My data on regime type

is provided by the Banks Cross-National-Time-Series Data Archive (Casper 2008). It is included in my analysis because military regimes are less likely to join IMF programs and more likely to have stronger state capacities.

IMF_Staff: This variable is a measure of a country's nationals employed at the IMF as a percentage of the total number of individuals employed by the IMF in a given year. My data for this variable comes from the dataset provided by Casper (2008). It is used as an instrument as a predictor of a county's participation into an IMF program.

The Politics of Food Distribution in India

Arnav Mody

In policies concerning the redistribution of resources to subnational states within a federal system, governments have a tendency to make decisions that increase their political support on different levels. The change of inter-party alliances, political business cycle, and importance attributed to individual states impact the distribution of centrally-administered food grains. This paper explores the issue of distributive politics within the government-sponsored Public Distribution System (PDS) in India, which provides subsidized food grains to a large section of the population. Research findings show the incumbent central government favors states that are governed by the same party as or a party that is allied with the central incumbent when distributing subsidized wheat and rice. These results hold true for states that are deemed 'important' for electoral strategy through proxies such as swing states or states with a larger representation in the lower house of parliament.

Introduction

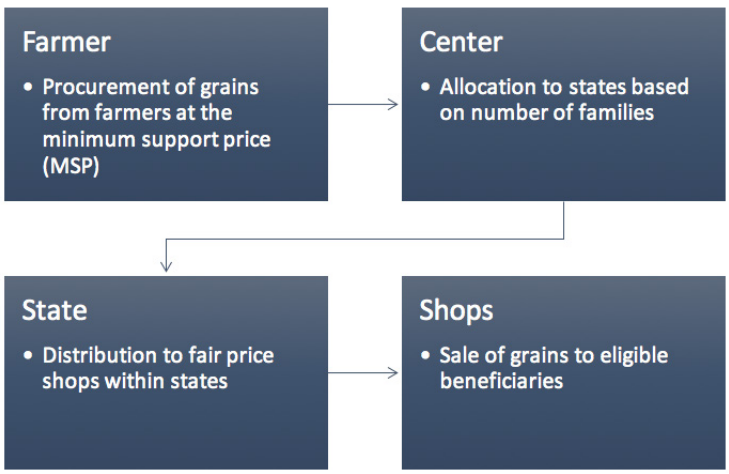
Governments around the world use public policy to distribute necessary goods to their citizens. One of the most basic yet grossly underprovided goods is food: 795 million people suffer from chronic undernourishment globally (Food and Agriculture Organization of the United Nations 2015). Food distribution systems are commonly used as a policy tool to redistribute food and alleviate hunger among sections of the population. As with many government-sponsored distribution systems, some discretionary power over the operation of such public programs is given to politicians and bureaucrats of the incumbent political party in the functioning of such public programs. Consequently, it is important to analyze the political considerations involved in decision-making by those in power.

India's Public Distribution System (PDS) is the largest food distribution program in the world and is responsible for distributing over 19 million tons of rice and wheat to over 27 million citizens across 29 states. On average, the monetary equivalent of the food grains distributed is $13.6 billion a year[1]. Thus, it is important to study the existence of distributive politics in this essential sector. This research will investigate the political motivations behind the distribution of food to Indian states through the Public Distribution System.

The Indian government procures essential food grains that are stored as a buffer stock or

1 "Public Distribution, NFSA & Computerisation." Department of Food & Public Distribution. <http://dfpd.nic.in/public-distribution.htm>.

distributed to eligible consumers at subsidized or 'fair' prices through a national network of over 500,000 Ration Shops. Such distribution is carried out in a coordinated effort with India's 29 states as outlined in Figure 1. The Central Government allocates a certain amount of grains to each state based on a formula that takes into consideration the number of families under each of three income categories: Above Poverty Line (APL), Below Poverty Line (BPL) and Antyodaya Anna Yojana (AAY)[2]. The Central government is also responsible for storing of grains while the state government is responsible for purchasing grains from the Center at a central issue price (CIP) and transporting them to Fair Price Shops within the state. It must be noted that not all the allotted food grains necessarily reach a state in a given month ('offtake'). While the state has the ability to request up to 100 percent of their allotted amount, the central government controls the storage of grains, release from storage facilities, and distribution to the state. The process, of grains reaching the state after the state makes a request, goes through many stages wherein the central government is able to use its discretionary powers to impact the actual offtake of grains. Selective efficiency, increased bureaucracy, and administrative delays are possible reasons the state may not receive 100 percent of its allotted amount. Additionally, the central government also has the discretion to allocate additional grains above the initial allotment to states on an ad-hoc basis. The decision to provide this additional allocation is completely dependent upon the central government through the Ministry of Consumer Affairs, Food and Public Distribution. Reasons cited for the provision of additional allocations include festivals, flood relief, and general additional requirements as deemed necessary by the Ministry. Given the discretionary power that lies with the incumbent central government, there is scope for the system to be exploited as a political tool.



With a focus on credit claiming, it is possible that the central government varies the actual food grains states receive by the political business cycle, as the government tries to provide the electorate with greater utility in the months nearing an important election. It is also possible that the central government puts more focus on politically relevant states and those with political parties that are aligned with the central government at a given time. The research paper will investigate these important considerations

2 AAY is a scheme launched in December 2000 for the poorest among BPL families.

using PDS and electoral data from government databases.

Although there has been research in the corruption and wastage that has riddled the system, there have been no findings on the direct use of this system as a political tool by the central and local governments. A distribution system such as PDS is not unique to food grains or to certain countries. Research on India's PDS will contribute to broader literature on political business cycles and distributive politics, important topics in political science. Specific distributive policies can include cash grants to states, transfers of goods, and even contracts like those of the defense industry or for new factories. It is important to understand why certain groups receive such benefits from the central government at certain times. This thesis will make use of a unique and comprehensive database to investigate a very important issue within distributive politics that has not been researched until now.

The paper is organized as follows. Section 2 delves into existing literature on important questions in distributional politics. Section 3 connects the literature review to the theoretical framework used in this particular paper before declaring three hypotheses. Section 4 discusses the data used to test the hypotheses and process through which variables have been created if they were not directly derived from existing data. Section 5 presents the results of various regressions covering a range of models and specifications. Section 6 concludes the paper by providing considerations for future research in this field.

Literature Review

Distributive politics is a widely researched topic, albeit not within India's PDS. As Gordon and Kang (2015) note in their paper Distributive Politics: Federal Outlays, a number of studies present evidence that voters represented by members of a majority party receive more benefits than those represented by members of a minority party (Levitt and Snyder 1995; Balla, Lawrence and Maltzman 2002; Martin 2003; Ansolabehere and Snyder 2006; Boyle and Matheson 2009; Lazarus and Steigerwalt 2009; Engstrom and Vanberg 2010). It is also very important to understand whether discretion with respect to government policies lies with the central or state government. With regard to US distributive programs, Gordon (2015, p. 3-4) points out that, "for certain programs, Congress specifies the amounts and recipients in statutory formulae" while "for others, Congress grants a much greater degree of discretion to the agency administering the program," citing examples of price supports for agricultural commodities and grants from the National Institutes of Health respectively.

Political institutions of most countries—with regular, competitive, democratic elections—have the incentive to manipulate public policies in their control and thus increase their chances of re-election. Since elections generally occur with gaps of four or five years, governments are not equally incentivized to use policy tools at all points in time between two elections. Past research has made a case for the existence of a political business cycle, where government policies are influenced by the election cycle; governments provide more public goods that give constituents a positive utility in months closer to important elections as compared to months further away from the time of pre-election. Political budget cycles are patterns that focus almost exclusively on government spending. The existence of these cycles in developing countries has been shown through a number of studies which also conclude that these cycles have a significant and large magnitude (Remmer 1993;
Schuknecht 1996; Shi and Svensson 2006; Brender and Drazen 2005). On a macroeconomic level relating to unemployment and inflation, Nordhaus (1975) concludes that a "perfect democracy with retrospective evaluation of parties will make decisions biased against future generations" and "within an incumbent's term in office there is a predictable pattern of policy, starting with relative austerity in early years and ending with potlatch right before elections". The political business cycle also exists with more targeted spending which takes the form of capital expenditure and commonly infrastructure projects such as roads,

schools, and factories. Targeted spending on states or even more localized projects is referred to as 'pork barrel spending' and has been a subject of much research with results that suggest increasing importance of such spending compared to non-targeted spending (Ferejohn 1974; Bates 1981; Tanzi and Davoodi 2001; Keefer and Knack 2002; Eslava 2005).

There has been research into political cycles in India recently and specifically in Indian states, which is the focus of this thesis. Khemani (2004) tests a number of policy tools such as tax rates, capital account spending, spending on public services, and percentage growth in state roads across 14 major states of India. The research concludes that politicians manipulate fiscal policies before elections to provide targeted favors to special interest groups in exchange for campaign support. The research also deduces there is no evidence of large-scale fiscal profligacy around election times nor net effect on the overall fiscal deficit due to the targeted nature of policy manipulations. Sen and Vaidya (1996) find strong evidence of pre-electoral increase in both budget deficit and its monetization in the years leading to an election.

An important factor to consider when investigating the incentives of central governments using political tools to influence state elections is possible alignment or non-alignment of the incumbent central political party with the incumbent state party. One of the biggest challenges is to understand which political party expects to receive credit for the successful execution of a policy–the party in power in the center or incumbent in the state. Arulampalam et al. (2008, p. 3) term this as generation of 'goodwill': "We assume that central grants are used to finance public projects in the states and that they generate goodwill amongst voters for the ruling party at the center. However, since these grants improve the welfare of the state population, the incumbent in the state also reaps some of the benefits." To investigate this further, their paper on Electoral Goals and Center-State Transfers: A Theoretical Model and Empirical Evidence from India isolates the 'Aligned Swing effect'. Given the objective of maximizing expected vote share across states, "the central incumbent (and, hence, central grants) will be especially biased in favor of states that are simultaneously aligned and relatively more swing" (Arulampalam et al. 2008, p. 2). They stress the importance of such effects as "the swing factor may work very differently amongst those states which are ruled by the opposition party; such swing states may actually be discriminated against since some of the goodwill leaks to the party in power at the state and this leakage is costlier if the vote share of the state incumbent rises sharply as a consequence" (Arulampalam et al. 2008, p. 1-2). Hudak (2010, p. 11) shows that presidents direct more discretionary grants to swing states, especially in advance of presidential elections. However, there is a strong argument for the contrary as "empirical support for the swing voter model is weak in studies on the distribution of federal resources" (Gordon 2015). Larcinese, Rizzo and Testa (2008) and Berry, Burdent and Howell (2010) find that swing states do not receive more federal outlays. On the other hand, these studies find a positive and significant association between levels of support for the president and the allocation of federal resources at the state level.

Another indication of the 'importance' of a state is its representation in the parliament at the central level. Just like U.S. states are proportionately represented in the House of Representatives, the lower house of India's Bicameral-Parliament, the Lok Sabha, apportions seats to states based on their populations. Each state is divided into constituencies, each representing one seat in the Lok Sabha. The largest state, Uttar Pradesh, is divided into 80 constituencies and thus represented by 80 members of parliament (MPs). The general elections (national level) take place every five years and were most recently held in 2014. Based on their representation in parliament, larger states can be regarded as more important and thus receive greater outlays. Gordon (2015) notes: "Recently, Shor (2006) demonstrates that presidents disproportionately privilege states with more Electoral College or battleground states". Further clarification on this aspect of distributive politics theory is presented by Golden and Min (2013) who claim single-member districts (SMDs) focus on "pork" and patronage as compared to legislators elected under

proportional representation (PR) that engage in programmatic politics. Given the theory on leakages of goodwill to state incumbents, the central incumbent can focus a disproportionately greater amount of discretionary resources on the states that have a larger representation in parliament if they are allied, since any leakages are attributed to the same party or alliance.

Arulampalam et al. (2008) build on the model of electoral competition constructed by Dixit and Londregan (1995) to illustrate the promotion of electoral prospects of a party by spreading goodwill using center-state transfers. After assigning variables to the set of states where each political party is an incumbent, SL and SR, where L and R are the two political parties, they formulate a model to calculate goodwill. My paper will take inspiration from their findings in order to determine the 'political importance' of the state–the independent variable.

Scholarly papers have not reached a consensus on the impact of a successfully executed policy on the effective goodwill received by a political party. While this paper will not reach a conclusion on center-state transfers in general, it hopes to further understand the interplay between the Alignment Effect and Swing Effect in distribution of food from central stockpiles to states. There is an abundance of research on distributive politics and the political business cycle in the United States with allocation of federal grants and provision of public goods and services. There has also been some research on central allocation in the Indian context investigating political motives as well as provision based on gender and caste. This paper sheds light upon the immensely important Public Distribution System in India.

Although economists, political scientists, and news agencies have carried out investigative research into the inefficiencies inherent in this system, there is a lack of research on whether general findings on distributive politics apply to the case of PDS. Any findings will be important in recognizing which states and electorates are the greatest victims of the impact of politics on an essential food distribution system in a country where 194.6 million people go to sleep on an empty stomach every day[3].

Theory

The availability of food has improved significantly over the last few decades but a large proportion of the population, especially in rural areas, still depends on Ration Shops for basic food needs. The quantity and quality of available food grains in Ration Shops across a state is a reflection of the efficiency of the system and by association that of the state government. States that receive more food grains in a given month inevitably have better stocked Ration Shops and thus consumers are likely to receive higher quality grains. A shortage of grains in Ration Shops reflect negatively on the state government and its ability to provide subsidized food grains as promised. Thus, Ration Shops are very important in meeting the daily food needs for a large proportion of the population and availability of sufficient food grains at these shops is a direct reflection of the performance of the state government.

Legislative elections for state governments take place every five years at different times for different states. Voters elect local leaders from each constituency to a seat in the state legislative assembly based on the perception of the leader as well as of the political party they represent. At the state and national level, India is a single member constituency first past the post majoritarian system. The party/alliance with the majority of seats in a given state election then elects the chief minister who appoints a state cabinet. To increase their power and influence in the country, national political parties seek to get their parties elected into state legislatures. It is likely that states put a greater focus on pleasing their voter bases as an election year nears. Months directly after an election may not be as important in providing voters with public goods since they do not have a say in the formation of the government until the next

3 Hunger in India." Hunger in India. N.p., n.d. Web. 17 Oct. 2015. <http://www.indiafoodbanking.org/hunger>.

election. Therefore, months closer to an election are more important in swaying voter preference in the direction of a particular party.

It is important to note to note interactions between state and central governments and the significance of state elections to the party in the center. In PDS, the central government—through the Food Corporation of India (FCI)—assumes responsibility for procurement, storage, transportation, and bulk allocation of food grains to state governments. The central government has the incentive to, through its discretionary powers, favor states that are ruled by the same party or a party they are allied with. Among these aligned states, the central government also has an incentive to put further emphasis on states that can be swing states in the next election. The discretionary power exists in the stage of the food distribution process between the central government procuring grains from farmers and distributing grains to states. Grains are stored and transported to states by a central government controlled agency that has the ability to artificially delay the supply of food grains to certain states, resulting in a state receiving less than 100 percent of its allotted food grains in a given month. A more explicit way for states to be favored is through the provision of ad-hoc grains above the initially allotted level resulting in a percentage offtake of over 100 percent.

The interaction of such effects within the political business cycle can be termed as the Aligned Swing Effect, as coined by Arulampalam et al. (2008). Their research concludes that a state that is both swing and aligned with the central government receives 16 percent higher grants than a state that is unaligned and non-swing. The political business cycle and Aligned Swing Effect are mutually exclusive, and therefore a research hypothesis must address both factors.

In addition to the swing state theory, a state's importance can also be measured by the number of members of parliament a state sends to the national legislature. Larger states generally have a larger number of seats (i.e. representation) in the lower house of parliament or the Lok Sabha. These states can be considered more important with regards to central allocation and credit security, for central policies do not leak to the state if the state incumbent is a member of a rival political party.

The aforementioned considerations prompt research into three primary hypotheses:

Hypothesis 1: Aligned Swing Effect

Swing states that are aligned with the central government will receive a higher offtake of rice and wheat as a percentage of the initial monthly allotment. Additionally, these states will be more likely to receive an additional ad-hoc provision of food grains resulting in an offtake percentage greater than 100 percent for the given month. The null hypothesis can be rejected if states that are both aligned and swing are not found to receive higher percentage offtakes of wheat and rice.

Hypothesis 2: Political Business Cycle

The offtake of rice and wheat as a percentage of the initial monthly allotment will be larger in months that precede a state election. The alternate hypothesis postulates that there is no relation between food grain distribution through PDS and the election cycle. As a secondary hypothesis to the question of the political business cycle, this thesis will also test whether the cycle exists exclusively in states that are aligned and swing.

Hypothesis 3: Importance of States

States represented by a larger number of seats in the Lok Sabha and allied with the central government will receive a higher percentage offtake of wheat and rice. These states will also be more likely

to receive an additional ad-hoc provision of wheat and rice over and above their initial allotted amount. The alternate hypothesis claims that an allied state's size in terms of number of seats has no relation with the percentage offtake of wheat and rice grains.

The above hypotheses are tested using two different dependent variables in a range of models. One dependent variable used in testing each of the three hypotheses is the percentage offtake of rice and wheat in a given state in a given month. The percentage offtake is calculated by dividing the actual amount or 'offtake' of grains received by a state with the initial, formula-based, monthly allotment. Hypothesis 1 and 3 are also tested using a binary dependent variable which indicates whether a state receives an additional 'ad-hoc' provision of wheat and rice in a given month. This variable takes the value of 1 if the state receives an ad-hoc provision and 0 otherwise.

The hypothesis of the aligned swing effect will be tested with two interacting dummy independent variables representing the alignment and swing factors. Each dummy variable–aligned and swing–will be coded with a value of 1 if the state is a swing state or aligned with the central government respectively and 0 otherwise. The interaction of the two dummies will denote the aligned swing effect.

With regards to the political business cycle, the independent variable will measure the proximity of the next state election. The variable will measure the number of months to the next state election with the smallest number of months, zero, being the month of the election.

The variable that measures importance of a state is determined from the number of Lok Sabha constituencies in that state. Larger states will have a greater number of constituencies and thus a greater number of seats in the 545-member parliament.

The dependent variable and independent variables are likely to be associated with each other if the Public Distribution System is indeed used as a political tool. Given the importance of the provision of subsidized food grains to sectors of the population that live below or close to the poverty line and cannot easily afford food grains at market prices, improved provision of these subsidized essential goods signals a favorable government policy which helps the government gain support during an election.

Data

The dependent variable $offtake_{st}$ is the 'percentage offtake' which is a measure of the percentage of initially allotted food that is actually transferred to the state. This data is available on the Department of Food & Public Distribution's official website and has been compiled per state per month from June 2006 to August 2015 by IndiaStat, a statistics information portal. Data for some months between 2006 and 2011 is not available; available months and years can be found in Appendix A. Using the same dataset, the binary variable $adhoc_{st}$, is created to determine whether or not a state received an ad-hoc allocation resulting in their percentage offtake to take a value greater than 100%. The variable $adhoc_{st}$ takes the value 1 if the central government has given the state an additional allocation of wheat and rice for that month and the value 0 otherwise. Although India has seven union territories that also receive subsidized food through PDS, they are not considered for the purpose of this research due to the lack of a governmental presence at the state/union territory level. Since these union territories do not elect subnational governments, public policy is less likely to be affected by national and state politics.

Table 1: Summary Statistics

Name (units)	Mean	Std Dev	Min	Max	Source	# Obs
$offtake_{st}$ (%)	91.43%	25.91	0%	298.60%	IndiaStat	1,667
$adhoc_{st}$	0.32	0.47	0	1	IndiaStat	1,667
$allied_{st}$	0.47	0.50	0	1	ECI	1,667
$months_{st}$	30.94	18.5	0	74	ECI	1,667
$netswing_{st}$	0.38	0.49	0	1	-	1,632
$stateswing_{st}$	0.47	0.50	0	1	-	1,632
$centralswing_{st}$	0.28	0.45	0	1	-	1,632
$close\_3_{st}$	0.07	0.25	0	1	-	1,667
$close\_6_{st}$	0.12	0.319	0	1	-	1,667
$close\_12_{st}$	0.22	0.41	0	1	-	1,667
$seats_{st}$	18.9	18.88	1	80	ECI	1652
$excess\_rainfall_{st}$	0.17	0.37	0	1	IMD	1,667
$income_{st}$ (INR)	75,290.30	39,698	11,051	224,138	RBI	1,652

The variable $allied_{st}$ utilizes constituency-wise electoral data from the Election Commission of India and is expanded to include a party's political alliance for a particular election in the state or center, if applicable. A state is allied with the central government if the single-party or coalition governments at the state and center share one political party in common. The two major alliances seen at the state and central level are the United Progressive Alliance (UPA) led by the Indian National Congress (INC) and the National Democratic Alliance (NDA) led by the Bhartiya Janta Party (BJP). The alignment dummy for each state remains the same until the next state or national election when it may change.

The independent variable $months_{st}$ indicates the number of months to the next state election. The maximum number of months in a given election cycle would be the month after an election while the minimum number of months would be zero, the month of the election. The months to the next election are also categorized in dummy categories of 3, 6, and 12 months to elections, represented by $close\_3_{st}$, $close\_6_{st}$ and $close\_12_{st}$ respectively. The dummy $close\_12_{st}$ takes the value of one if $months_{st}$ is less than or equal to 12 and so on.

The state and central swing dummies are calculated using a method developed by Arulampalam et al. (2008). Note the difference between state constituencies that determine representation at the state legislature (Vidhan Sabha) and national constituencies that determine representation in the Lok Sabha at the national level. For each state, *s*, the last Vidhan Sabha and Lok Sabha elections occurring in *s* is identified. For each election a variable $winmarg_{it}$ is defined which, for election constituency *i*, is the difference in the percentage vote shares of the two political parties that secure the highest number of votes in constituency *i*. The electoral constituency is then determined as a 'swing' constituency if its $winmarg_{it}$ value is less than the cutoff value (varying cutoff values of two percent, five percent and 10 percent will be used). This value represents the closeness with which each state constituency was won. Variables $stswing02_{st}$ and $cswing02_{st}$ are generated to denote the proportion of constituencies in the state and national elections respectively that are identified as 'swing' using the two percent cutoff value. Similarly, $stswing05_{st}$, $stswing10_{st}$, $cswing05_{st}$, and $cswing10_{st}$ are created using the other cutoff values. The above variables are then transformed as follows to create the swing dummy variable used in this paper. In each calendar year, the

median $stswing02_{st}$ variable is calculated and states with a $stswing02_{st}$ value higher than the median (more swing constituencies than the median at the one percent cutoff) are coded with the value 1 for the swing dummy $stateswingdum02_{st}$ for that year. A similar process is carried out for the various cutoff values at the state and central level leading to the creation of six swing dummies.

In order to consolidate the effects from the state and central swing variables, a 'net' swing dummy variable is also created. This variable identifies the latest election faced by the state, be it a national election or a state election, and uses the swing value for that variable until the next election takes place. This process creates three more swing variables: $netswingdum02_{st}$, $netswingdum05_{st}$, and $netswingdum10_{st}$. Because such a variable takes into account both elections, it is more comprehensive than the state and central swing dummies tested independently. For convenience sake, the dummy variables created will be referred to as $stateswing_{st}$, $centralswing_{st}$, and $netswing_{st}$.

The variable seatsst represents the number of Lok Sabha constituencies in each state. In other words, this is the number of members of parliament (MPs) each state sends to the lower house of parliament (Lok Sabha). The variable incomest is included in testing the hypothesis in order to control for state-specific factors such as infrastructure, Ration Shop networks, efficiency, and possibly corruption. Such a hypothesis represents the state-wise per capita net state domestic product at factor cost, calculated at constant prices in Indian rupees (INR) and collected from the Reserve Bank of India (RBI) database. The variables $seats_{st}$ and $income_{st}$ are also used in their logarithmic form, $\log(seats_{st})$ and $\log(income_{st})$ where log represents the natural logarithm.

The additional ad-hoc allocation resulting in an offtake of over 100 percent is approved by the central government for a number of reasons cited in monthly reports from the Ministry of Food and Public Distribution. Most commonly, these reasons are: festivals, flood relief, and 'additional requirement.' In order to control for the cases when additional food is allocated for flood relief, which is less likely to be due to political alliances or strategies, the variable $excess\_rainfall_{st}$ is used. The India Meteorological Department (IMD) releases daily rainfall data for each of 36 subdivisions that cover the entire country. The data is compared with a Long Period Average (LPA), which is calculated as the average rainfall received in a particular subdivision in the past 50 years. The department then calculates the 'Percentage Departure of Rainfall' from the LPA and categorizes a state receiving 'excess' rainfall if this value is greater than 20 percent. The $excess\_rainfall_{st}$ dummy variable takes a value of 1 if a state received excess rainfall in a given month and a value of 0 otherwise. It must be noted that the IMD's subdivisions are not always divided as per state lines. In some cases, larger states have multiple subdivisions within them while in other cases, some subdivisions cover multiple smaller states. In the case where a state has multiple subdivisions, the total percentage departure of rainfall is calculated across the subdivisions. For smaller states, the percentage departure value from the entire sub-division is used as it is the smallest level at which rainfall data is released. The data used is taken at the seasonal level in accordance with the seasonal breakdown provided by the IMD: Pre-monsoon Period (March 1 to May 30), South-West Monsoon Period (June 1 to September 30), Post Monsoon Period (October 1 to December 31, Winter Monsoon Period (January 1 to February 28).

The three hypotheses are tested in the following sections using Ordinary Least Squares (OLS) with percentage offtake of wheat and rice ($offtake_{st}$) as the dependent variable.

Hypothesis 1: Aligned Swing Effect

The models to test this hypothesis use versions of the net swing, state swing and central swing. Specifications A, B, and C as shown below are run using OLS with $\log(income_{st})$ as a control variable, clustered standard errors at the state level, year fixed effects and state fixed effects. Specification D uses an

OLS regression with adhocst as the dependent variable and an additional $excess\_rainfall_{st}$ control variable.

A. $$offtake_{st} = \beta_0 + \beta_1 allied_{st} + \beta_2 netswing_{st} + \beta_3(allied_{st} \times netswing_{st}) + \beta_4 income_{st} + FE(year_{st}) + FE(state_{st}) + \varepsilon_{st}$$

B. $$offtake_{st} = \beta_0 + \beta_1 allied_{st} + \beta_2 stateswing_{st} + \beta_3(allied_{st} \times stateswing_{st}) + \beta_4 income_{st} + FE(year_{st}) + FE(state_{st}) + \varepsilon_{st}$$

C. $$offtake_{st} = \beta_0 + \beta_1 allied_{st} + \beta_2 centralswing_{st} + \beta_3(allied_{st} \times centralswing_{st}) + \beta_4 income_{st} + FE(year_{st}) + FE(state_{st}) + \varepsilon_{st}$$

D. $$adhoc_{st} = \beta_0 + \beta_1 allied_{st} + \beta_2 netswing_{st} + \beta_3(allied_{st} \times netswing_{st}) + \beta_4 income_{st} + \beta_5 excess\_rainfall_{st} + FE(year_{st}) + FE(state_{st}) + \varepsilon_{st}$$

To test the hypothesis with adhocst, a probit model is used since adhocst is a binary variable taking the value of 0 or 1. Specifications E, F and G shown below run the probit models with $\log(income_{st})$ and $excess\_rainfall_{st}$ as a control variable, clustered standard errors at the state level, year fixed effects and state fixed effects.

For the following holds true for the dependent variables in Specifications E, F and G:

$$adhoc_{st} = \begin{cases} 1 \text{ if } adhoc_{st}^{*} > 0 \\ 0 \text{ otherwise} \end{cases}$$

E. $$adhoc_{st}^{*} = \beta_0 + \beta_1 allied_{st} + \beta_2 netswing_{st} + \beta_3(allied_{st} \times netswing_{st}) + \beta_4 income_{st} + \beta_5 excess\_rainfall_{st} + FE(year_{st}) + FE(state_{st}) + \varepsilon_{st}$$

F. $$adhoc_{st}^{*} = \beta_0 + \beta_1 allied_{st} + \beta_2 stateswing_{st} + \beta_3(allied_{st} \times stateswing_{st}) + \beta_5 income_{st} + \beta_6 excess\_rainfall_{st} + FE(year_{st}) + FE(state_{st}) + \varepsilon_{st}$$

G. $$adhoc_{st}^{*} = \beta_0 + \beta_1 allied_{st} + \beta_2 centralswing_{st} + \beta_3(allied_{st} \times centralswing_{st}) + \beta_4 income_{st} + \beta_5 excess\_rainfall_{st} + FE(year_{st}) + FE(state_{st}) + \varepsilon_{st}$$

As mentioned above, each swing dummy variable can be calculated by using three possible thresholds (i.e. 2 percent, 5 percent and 10 percent). The choice of threshold is dependent on how close a victory at the constituency level must be for it to be considered a 'swing' victory. The constituencies at the national election level are much larger, given that there are only 543 for the entire country. Therefore, it can be assumed that the threshold for swing is at the 10 percent level , which implies a 10 percent difference in total votes between the winning candidate and the runner-up of a particular constituency. Along the same lines of reasoning, since the state constituencies are smaller on average–India has 4,126

state constituencies–the threshold for state elections can be assumed to be less than that of the national elections. It can thus be assumed that the five percent threshold is optimum for the state swing variable. The *netswing* variable was created in order to increase the robustness of the swing variable. It incorporates the most recent election and swing dummies for states change more frequently. Thus, the netswing variable would be most effective if this dummy incorporated the elections which were the closest, making the two percent dummy ideal in this model. Table 2 outlines the empirical specifications that were tested in relation to Hypothesis 1.

Regression results with the percentage threshold values of the swing variables that are not displayed in Table 2 can be found in Appendix C.

Table 2: Aligned Swing Effect

	OLS (1) $offtake_{st}$	OLS (2) $offtake_{st}$	OLS (3) $offtake_{st}$	OLS (4) $adhoc_{st}$	Probit (5) $adhoc_{st}$	Probit (6) $adhoc_{st}$	Probit (7) $adhoc_{st}$
$allied_{st}$	-1.18	-4.00	-2.02	-0.03	-0.08	-0.13	-0.10
	(2.46)	(2.41)	(2.48)	(0.05)	(0.14)	(0.17)	(0.13)
$netswing_{st}$[4]	-2.49			-0.05	-0.18		
	(3.83)			(0.05)	(0.16)		
$allied_{st}$ x $netswing_{st}$	6.92**			0.13**	0.39**		
	(3.38)			(0.05)	(0.17)		
stateswing[5]		-12.22**				-0.05	
		(0.040)				(0.27)	
$allied_{st}$ x stateswing		16.17***					
		(5.74)					
centralswing[6]			-11.48**				-0.55**
			(5.62)				(0.27)
$allied_{st}$ x centralswing			8.59*				0.39*
			(4.44)				(0.21)
log($income_{st}$)	15.34	14.33	17.02	0.49**	1.5**	1.41	1.58**
	(11.09)	(12.38)	(10.33)	(0.18)	(0.65)	(0.82)	(0.64)
$excess\_rainfall_{st}$				0.03	0.09	0.05	0.11
				(0.04)	(0.14)	(0.15)	(0.13)
year FE	✓	✓	✓	✓	✓	✓	✓
state FE	✓	✓	✓	✓	✓	✓	✓
cluster(state)	✓	✓	✓	✓	✓	✓	✓
# Obs	1,652	1,620	1,601	1,652	1,593	1,561	1,542
R^2	0.17	0.18	0.18	0.16	0.12	0.13	0.12

Robust standard errors in parenthesis *

p ≤ 0.10 ** p ≤ 0.05 *** p ≤ 0.001

Note: Regressions are run with percentage offtake and ad-hoc as the dependent variables using OLS and probit models with state-month as the unit of measurement, income per capita and excess rainfall as controls, clustering standard errors at the state level and state and year fixed effects.

When the results in Table 2 are analyzed to test the Aligned Swing Effect hypothesis, the most important coefficient to observe is the interaction between the allied dummy and a swing dummy. A positive interaction variable in the models with percentage offtake as the dependent variables signifies that if a state is allied with the central government and is a swing state, it receives a greater percentage offtake of food. In the probit models above, a positive interaction variable indicates a greater probability of the state receiving an additional 'ad-hoc' allocation of food. The swing dummy can also be observed as it is a representation of states that are swing but not allied with the central government. A negative swing dummy would suggest that states which are not allied but are swing receive a lower percentage offtake or are less likely to receive an ad-hoc allocation of rice and wheat than other states do.

Models 1 to 3 test the hypothesis with percentage offtake as the dependent variable at the 'net', state, and central level using income per capita as a control, year fixed effects, state fixed effects, and clustered standard errors at the state level. Model 1 suggests, at a five percent significance level, that a state which is allied and net-swing in a particular month receives a 6.92 percent greater offtake of food. At the stateswing level, the positive interaction coefficient is significant at the one percent significance level. The negative stateswing variable is significant at the five percent level, which indicates that states that are swing but not aligned with the central incumbent have an offtake that is lower by 12.22 percent. Model 3 shows a similar result at the central level where states that are aligned and swing receive an 8.59 percent greater offtake and where states that are not aligned and swing have an 11.48 percent lower offtake, significant at the 10 percent and five percent level respectively.

Model 4 tests the hypothesis with an OLS regression using adhocst as the dependent variable. Since adhocst is a binary variable, it is more appropriate to use a probit model, as done in Model 5, 6 and 7. The results from these models generally show that states allied with the central government and swing states in the given month are more likely to receive an additional allocation of food grains from the central government, resulting in their percentage offtake to be greater than 100 percent. A state's eligibility to receive this additional allocation is dependent upon the discretion of the central government and thus these results are consistent with the theory and hypothesis. Model 7 shows that a state which is allied and swing at the central level, has a 39 percent greater probability of receiving an additional ad-hoc allocation of food grains from the central government. The results also show that a state which is swing at the central level and not allied, has a 55 percent lower probability of receiving the additional ad-hoc allocation which is consistent with results from the previous models using offtakest as the dependent variable.

Figures 2 to 7 are coefficient plots (coefplots) of the three different swing dummies – stateswing, centralswing and netswing – at the 95 percent and 90 percent confidence intervals with offtakest as the dependent variable. An analysis of the confidence intervals of the three different effects labeled on the vertical axis shows that the allied swing effect is the most prominent effect. It is significant at the 90 percent level in each of the three cases and significant at the 95 percent level for the stateswing and netswing variables. This can be identified by the vertical line at $x = 0$ and by whether a particular coefficient's confidence interval crosses the line.

Figure 3 and 5 also show that the Non-Allied Swing effect is significant at the 10 percent level, which is represented by the coefficient of the swing variable in the interaction regression and it incorporates instances when the allied dummy equals 0 and the swing dummy equals 1.

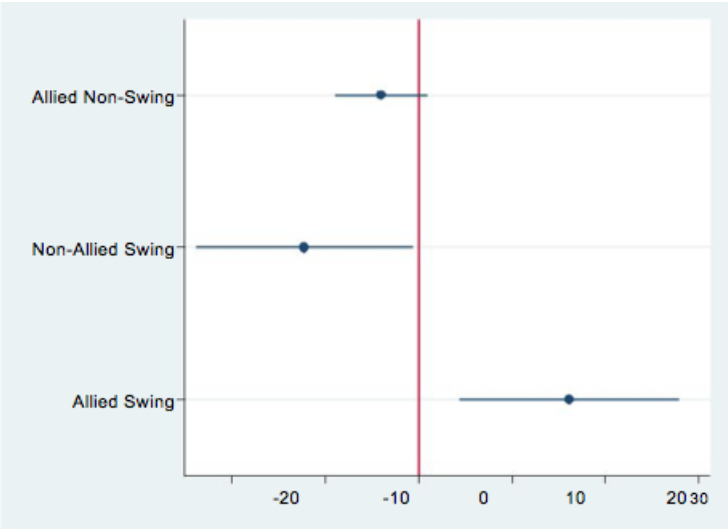


Figure 2: State swing variable at a 95% significance level

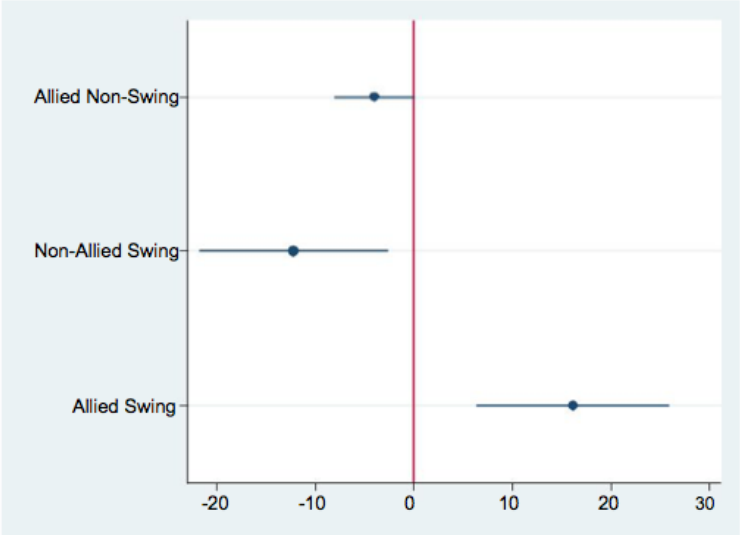


Figure 3: State swing variable at a 90% significance level

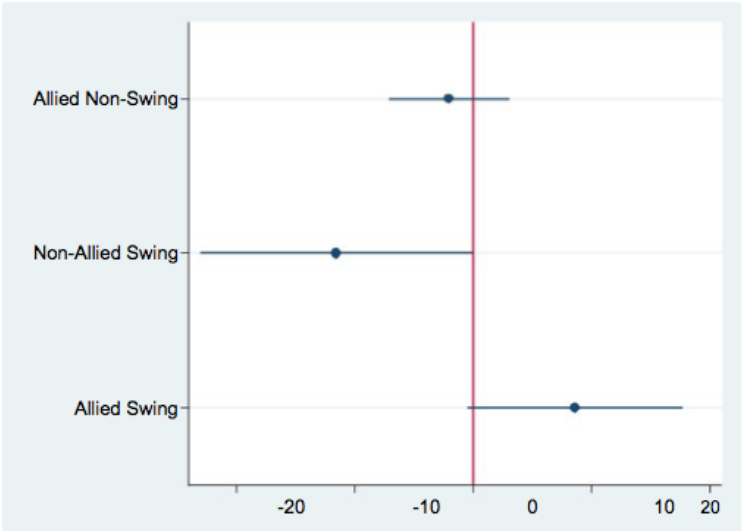


Figure 4: Central Swing variable at a 95% significance level

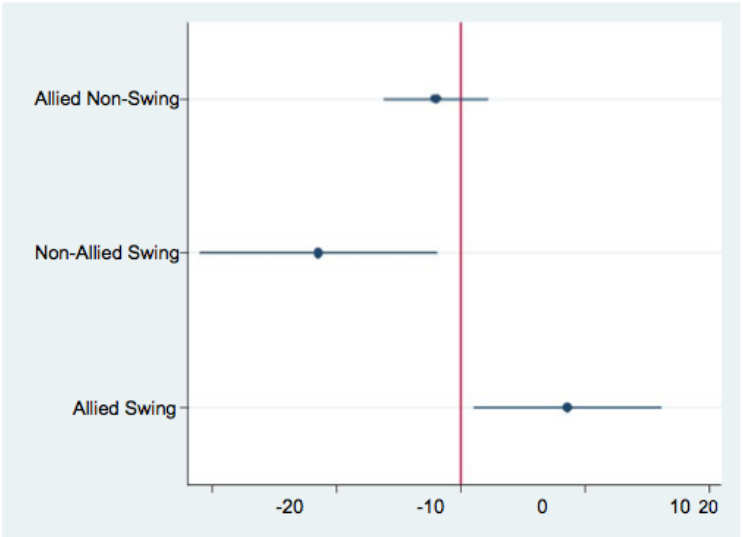


Figure 5: Central Swing variable at a 90% significance level

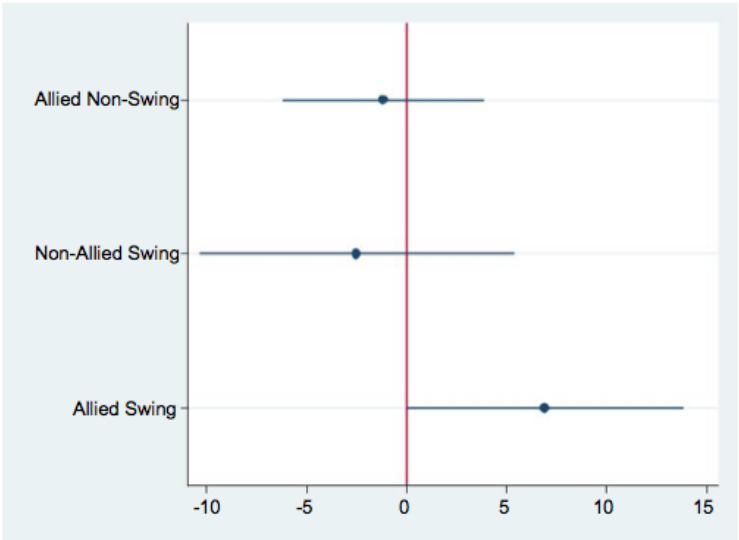


Figure 6: Net Swing variable at a 95% significance level

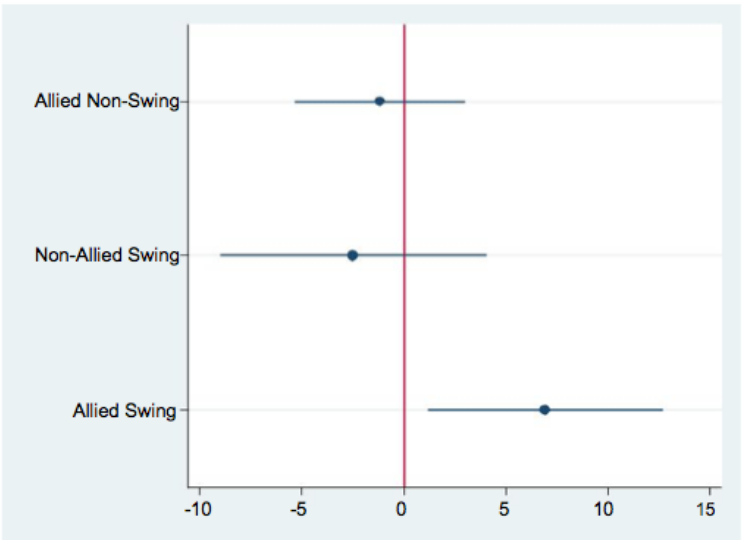


Figure 7: Net Swing variable at a 90% significance level

Hypothesis 2: Political Business Cycle

The models to test this hypothesis use a combination of months to election and the closeness dummy. Specifications H, I, and J as shown below are run using OLS with variations of $months_{st}$ and $months2_{st}$ as the independent variable, $income_{st}$ and $log(income_{st})$ as control variables, clustered standard errors at the state level and state fixed effects.

H. $$offtake_{st} = \beta_0 + \beta_1 months_{st} + \beta_2 income_{st} + FE(state_{st}) + \varepsilon_{st}$$

I. $$offtake_{st} = \beta_0 + \beta_1 months_{st} + \beta_2 allied_{st} + \beta_3 (months_{st} \times allied_{st}) + \beta_4 income_{st} + FE(state_{st}) + \varepsilon_{st}$$

J. $$offtake_{st} = \beta_0 + \beta_1 allied_{st} + \beta_2 close\_3_{st} + \beta_3 close\_6_{st} + \beta_4 close\_12_{st} + \beta_5 (allied_{st} \times close\_3_{st}) + \beta_6 (allied_{st} \times close\_6_{st}) + \beta_7 (allied_{st} \times close\_12_{st}) + FE(state_{st}) + \varepsilon_{st}$$

The validity of a political business cycle in the discretionary distribution of food grains is tested by two different methods. One method tests whether there is a correlation between the actual number of months until the next state election for states that are allied and the percentage offtake of food grains as specified in Equation I. A version of this model, as shown in Model 10, also tests the squared months to election since the marginal effect of each additional month as $months_{st}$ gets larger is likely to be diminished. In other words, when elections are far away, one month closer to elections has less of an impact on policy as compared to the impact when elections are closer. Stemming from the same reasoning, the second method does not take $months_{st}$ into account but instead assumes different categories of 'closeness' to elections. This approach is more appropriate if government policy is only substantially impacted when elections are 12 months away and is increasingly impacted when the elections are 6 and 3 months away. The closeness dummies interact with the allied dummy to test the effect of central policy on states that have governments which are allied to the center. A positive coefficient of the interaction would imply that states that are allied receive more food as they get closer to elections.

Table 3: Political Business Cycle

	OLS (8) $offtake_{st}$	OLS (9) $offtake_{st}$	OLS (10) $offtake_{st}$	OLS (11) $offtake_{st}$	OLS (12) $offtake_{st}$	OLS (13) $offtake_{st}$	OLS (14) $offtake_{st}$
$months_{st}$	0.06* (0.073)	0.01 (0.04)	-0.05 (0.30)				
$months^2_{st}$			0.002 (0.006)	1.13 (2.74)	1.00 (2.55)	1.38 (2.44)	1.19 (2.75)
$allied_{st}$		-2.20 (3.14)	-0.71 (3.91)				
$months_{st}$ x $allied_{st}$		0.10 (0.08)	-0.03 (0.39)				
$months^2_{st}$ x $allied_{st}$			0.002 (0.006)				
$close\_3_{st}$				-2.39 (4.38)	-2.39 (4.38)	-3.09 (3.21)	
$close\_6_{st}$				-3.23 (3.98)	-0.79 (2.93)		-4.60 (2.41)
$close\_12_{st}$				2.82 (2.84)			2.84 (2.84)
$close\_3_{st}$ x $allied_{st}$				-11.71* (5.83)	-11.69* (5.85)	-5.90 (5.72)	
$close\_6_{st}$ x $allied_{st}$				6.09 (6.07)	6.18 (4.78)		-2.31 (5.08)
$close\_12_{st}$ x $allied_{st}$				0.02 (4.12)			-0.04 (4.13)
$log(income_{st})$	1.64 (4.01)	1.94 (4.23)	1.79 (4.46)	2.13 (4.07)	1.99 (4.11)	2.01 (4.11)	2.01 (4.12)
state FE	✓	✓	✓	✓	✓	✓	✓
cluster(state)	✓	✓	✓	✓	✓	✓	✓
# Obs	1,667	1,667	1,667	1,652	1,652	1,652	1,652
R^2	0.16	0.17	0.17	0.17	0.17	0.17	0.16

Robust standard errors in parenthesis * p ≤ 0.10 ** p ≤ 0.05 *** p ≤ 0.001

Note: Regressions were run with percentage offtake as the dependent variable using OLS with state-time as the unit of measurement, income per capita as the control, clustering standard errors at the state level and state fixed effects.

The models in Table 3 test a number of variations of the equation specifications for Hypothesis 2. In Model 8, the positive coefficient for monthsst, significant at the 10 percent level, implies that percentage offtake of food to states is lower as elections get closer, regardless of alliance. When the model is tested taking the interaction between $months_{st}$ and $allied_{st}$ into account, there are no significant results and thus the earlier finding can be assumed to be a chance result. The reason is that the mean value of $months_{st}$, 30.94, is far from what is believed to actual impact government policy or action since, at election time, voters are likely to forget any benefits they enjoyed 30 months prior to that election. To partially counter the issue of an asymmetric marginal effect of $months_{st}$, the dummy variable method is used. Model 11 and 12 show a negative coefficient for the ($close\_3_{st}$ x $allied_{st}$) variable at the 10 percent level, indicating that an allied state which is three months away from a state election receives less food offtake compared to non-allied states closer to elections or allied states further away for elections. This result does not have a theoretical support and is not replicated by the other closeness variables, $close\_6_{st}$ and $close\_12_{st}$. Given these reasons, it is likely that the findings in Model 11 and 12 are also chance findings. No other variables are found to be significant in the testing of this hypothesis and therefore the results do not substantiate the claim of the existence of

a political business cycle.

Hypothesis 3: Importance of States

The models to test this hypothesis use the number of national parliament seats apportioned to each state as a proxy for the importance of the state. Specifications K and L shown below are run using OLS with offtakest as the dependent variable, variations of $seats_{st}$ and $\log(seats_{st})$ as the independent variable, incomest or $\log(income_{st})$ as a control variable, clustered standard errors at the state level, year fixed effects and state fixed effects. Specification M is an OLS regression using adhocst as the dependent variable with $\log(income_{st})$ and $excess\_rainfall_{st}$ as control variables, and state and year fixed effects as in Specification L.

K. $$offtake_{st} = \beta_0 + \beta_1 allied_{st} + \beta_2 seats_{st} + \beta_3 (allied_{st} \times seats_{st}) + \beta_4 income_{st} + FE(year_{st}) + FE(state_{st}) + \varepsilon_{st}$$

L. $$offtake_{st} = \beta_0 + \beta_1 allied_{st} + \beta_2 \log(seats_{st}) + \beta_3 (allied_{st} \times \log(seats_{st})) + \beta_4 income_{st} + FE(year_{st}) + FE(state_{st}) + \varepsilon_{st}$$

M. $$adhoc_{st} = \beta_0 + \beta_1 allied_{st} + \beta_2 \log(seats_{st}) + \beta_3 (allied_{st} \times \log(seats_{st})) + \beta_4 income_{st} + \beta_5 excess\_rainfall_{st} + FE(year_{st}) + FE(state_{st}) + \varepsilon_{st}$$

To test the hypothesis with $adhoc_{st}$, a probit model was used since adhocst is a binary variable taking the value of 0 or 1. Specification N runs the probit models with $\log(income_{st})$ and $excess\_rainfall_{st}$ as control variables; clustered standard errors at the state level; and year fixed effects as well as state fixed effects.

For the following holds true for the dependent variable in Specification N:

$$adhoc_{st} = \begin{Bmatrix} 1 \; if \; adhoc_{st}^{*} > 0 \\ 0 \; otherwise \end{Bmatrix}$$

N. $$adhoc_{st}^{*} = \beta_0 + \beta_1 allied_{st} + \beta_2 \log(seats_{st}) + \beta_3 (allied_{st} \times \log(seats_{st})) + \beta_4 income_{st} + \beta_5 excess\_rainfall_{st} + FE(year_{st}) + FE(state_{st}) + \varepsilon_{st}$$

Table 4: Importance of States

	OLS (15) $offtake_{st}$	OLS (16) $offtake_{st}$	OLS (17) $offtake_{st}$	OLS (18) $adhoc_{st}$	Probit (19) $adhoc_{st}$
$allied_{st}$	-1.41	-5.56**	-3.65	-1.15**	-0.44**
	(3.54)	(2.07)	(4.72)	(0.07)	(0.19)
$seats_{st}$	-0.61***				
	(0.16)				
$allied_{st}$ x $seats_{st}$	0.18				
	(0.17)				
$log(seats_{st})$		-4.83***	-10.07***	-0.19***	-0.63***
		(0. 57)	(2.16)	(0.03)	(0.10)
$allied_{st}$ x $log(seats_{st})$		2.74***	2.37	0.078***	0.24***
		(0.486)	(1.94)	(0.02)	(0.07)
$log(income_{st})$	13.83	-2.80	13.21	0.43**	1.32**
	(10.80)	(1.64)	(10.95)	(0.18)	(0.64)
$excess\_rainfall_{st}$				0.03	0.09
				(0.04)	(0.13)
year FE	✓	✓	✓	✓	✓
state FE	✓		✓	✓	✓
cluster(state)	✓		✓	✓	✓
cluster(year)		✓			
# Obs	1,652	1,652	1,652	1,652	1,593
R^2	0.17	0.04	0.17	0.16	0.12

Robust standard errors in parenthesis * $p \leq 0.10$ ** $p \leq 0.05$ *** $p \leq 0.001$

Note: Regressions were run with percentage offtake and ad-hoc as the dependent variables using OLS and probit models with state-time as the unit of measurement, income per capita and excess rainfall as controls, clustering standard errors at the state level and state and year fixed effects.

Model 15 in table 4 indicates a negative coefficient for the variable seatsst with a p-value less than 0.001. A negative coefficient assigned to $seats_{st}$ or $\log(seats_{st})$ implies that for non-allied states with the central governments, a larger number seatsst yields a lower percentage offtake of food. A logarithmic form of the variable seatsst has been used for Model 16, 17, 18, and 19 in order to make the positive skewed distribution of $seats_{st}$ more normal, as illustrated in Appendix B. Model 16 shows that, at the one percent significance level, states that are allied and have a greater number of seats in the central legislature receive a 2.74 percent greater offtake of wheat and rice. However, this model does not take state fixed effects into account.

Models 18 and 19 test the hypothesis that allied states with a greater number of seats are more likely to receive an additional ad-hoc allocation of wheat and rice, resulting in a percentage offtake greater than 100 percent. A positive coefficient value for the interaction term supports this hypothesis and indicates the increased likelihood of a state receiving an ad-hoc allocation. The probit regression in Model 19 shows

4 Calculated at the 2% threshold

5 Calculated at the 5% threshold

6 Calculated at the 10% threshold

that states which are allied and have a greater number of seats are 24 percent more likely to receive an ad-hoc allocation for every one unit increase in the logarithm of the seats they have in the Lok Sabha.

The marginal effects in Figure 8 draws the relationship of log($seats_{st}$) with the variable $allied_{st}$ from the OLS regression in Model 18 that uses adhocst as the dependent variable. At the 95 percent confidence level, the marginal effects curve does not cross x axis when the value of log($seats_{st}$) is 3 or higher. Such results translate to a value of 20 Lok Sabha seats, implying that the relationship is significant for states of 20 or greater seats in parliament. The result is consistent with the hypothesis which postulates that for states with a larger number of seats, the existence of an alliance with the central government increases the probability for the states to receive an ad-hoc allocation of food. The positive slope of the curve shows that when the value of log($seats_{st}$), consequently same as the number of seats for an allied state is higher, there is a greater probability of the state receiving an ad-hoc allocation of food. The marginal effects of the probit model shown in Figure 9 portray a similar relationship and reinforce the findings. For higher values of log($seats_{st}$), an allied effect is seen wherein states are more likely to receive a discretionary additional allocation of food from the central government if they are allied with the coalition that has a majority in the Lok Sabha.

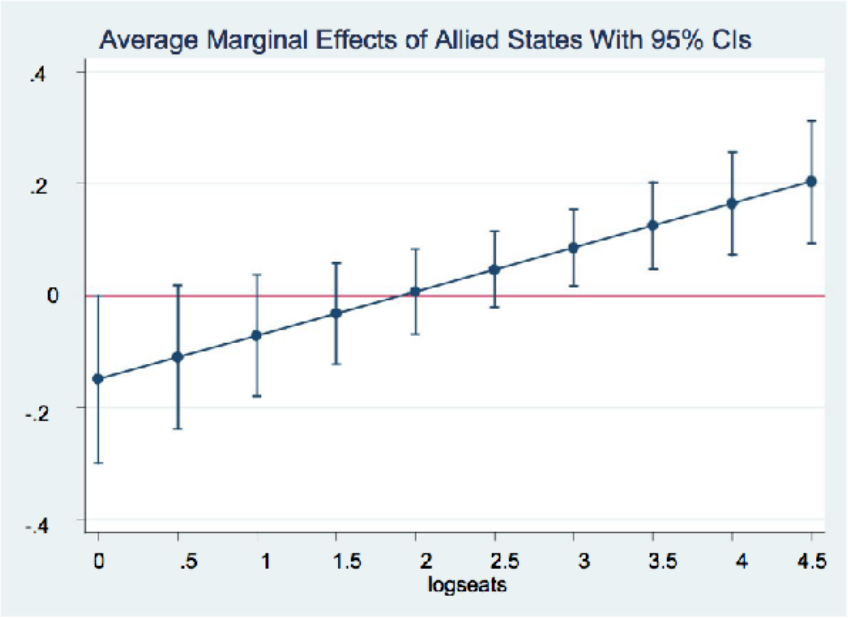


Figure 8: Average marginal effects of allied states at different levels of log(seatsst) from OLS Model 18.

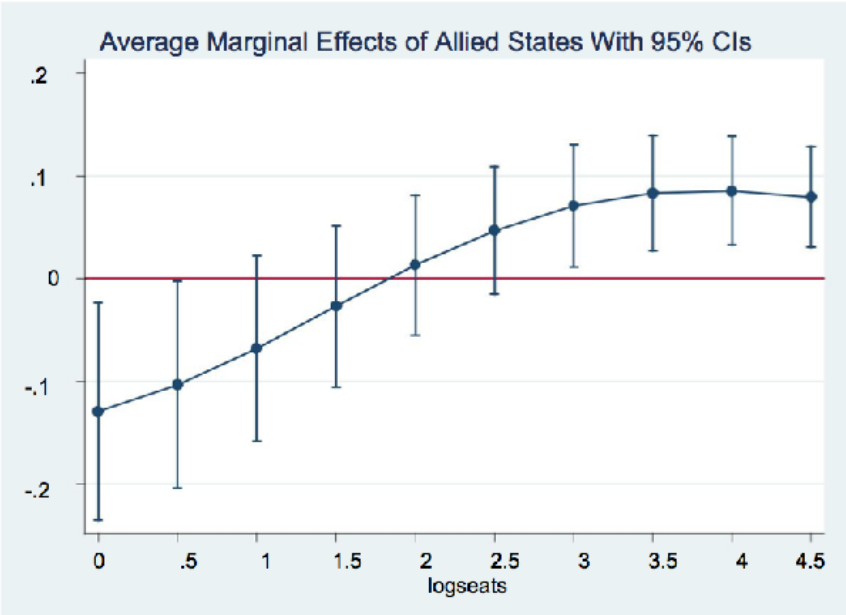


Figure 9: Average marginal effects of allied states at different levels of log(seatsst) from Probit Model 19.

Conclusion

Policy tools are often used in electoral strategies to sway voters' opinions in favor of individual leaders or political parties. In the context of this paper, the incumbent central government has discretionary influence over the distribution of allotted food grains to Indian states and has the approval of ad-hoc provisions over and above the initially allotted quantity of wheat and rice. The findings in this paper are based on two main theoretical notions: the view that some states are more important than the others at different time periods and that leaders can identify goodwill generation by policies and the parties to which voters will attribute this generated goodwill.

The element of 'swing' in a state's electoral body is a representation of how closely an election was won and how it can be used as a proxy for the state's importance in a political party's larger electoral strategy. Given the leakage of goodwill from central government policies to state governments, it was hypothesized that states which are allied with the central government and are considered swing states from their most recent elections would receive a greater percentage offtake of wheat and rice from the government-sponsored Public Distribution System (PDS). States that are allied and swing were also expected to be more likely to receive an additional ad-hoc allocation of food grains from the central government. These claims are substantiated by data from both state and central level elections. Results from the models tested in Hypothesis 1 also indicate that swing states which are not allied with the central government receive a lower percentage offtake of food and are less likely to be given an ad-hoc allocation. Therefore, according to the analysis of the results from testing Hypothesis 1, the null hypothesis is not rejected.

Voters tend to attribute recent policies with greater importance than policies implemented

further in the past leading to the idea of a political business cycle that incumbent governments tend to manage policy to reward their voters more as elections get closer. With this theoretical basis, it was hypothesized that states which are allied with the central government will receive a higher percentage offtake of food grains closer to state elections. After thorough analysis, no substantial evidence was found to support the claim of the existence of a political business cycle in the distribution of food and therefore Hypothesis 2 is rejected.

One possible proxy for the importance of a state is its representation in parliament, which is determined by the population of the state with respect to the country. The number of seats each state has in the Lok Sabha or lower house of parliament is a measure of state importance with regard to targeting of government policies. Given the theory behind leakages of goodwill to the state incumbent, it was hypothesized that states which are not allied with the central government and have a larger representation in the Lok Sabha receive a lower percentage offtake of food. These states were also expected less likely to receive an additional ad-hoc allocation of food from the central government. The results derived from testing Hypothesis 2 illustrate a strong negative correlation between non-allied states of a large representation of seats and the percentage offtake of food they receive each month. Additionally, for a larger number of Lok Sabha seats, allied states were found more likely to receive an ad-hoc allocation of food and non-allied states less likely to receive an allocation above their initially allotted amount. Therefore, the results derived do not reject Hypothesis 3 and states that have a larger representation in parliament and are allied with the central government can expect to receive a greater offtake of food grains.

Political motivations and electoral incentives can be used to shape public policy in most fields where a particular leader or party possesses discretionary power to influence the way in which a certain policy is carried out. Government transparency with regard to the mechanisms and internal workings of the Public Distribution System (PDS), a massive exercise in food policy to alleviate the dire crisis of hunger and poverty, would be helpful in targeting this research to more specific questions within discretionary policies. Improved accessibility and availability of data on food offtake as well as the specific unexpected incidents that warrant an additional allocation of food would further enhanced the results in this paper. Finally, there are extensive claims of corruption at different levels within PDS and policies to combat this corruption would make the research into public policy less affected by external, immeasurable factors. The research can potentially be extended to include considerations of corruption and systemic inefficiencies that impact the distribution of food from central stockpiles to ration shops in states.

The electoral data collected from Indian elections between 2006 and 2015 at the state and central level to test the policy of food distribution can be applied to many other areas within India to understand where political influence and distributive politics are more widespread. There are a number of centralized policies and programs in India that rely on state support to reach to the poorer and marginalized sections of society in an effort to bridge the socio-economic inequality in a country with an HDI rank of 130 and Gini coefficient of 33.6[7]. These programs involve a large amount of public expenditure and have the potential to benefit millions of people. Research into the effectiveness and political bias in the management of these programs can prove to be invaluable in evaluating and changing them and in optimally increasing the per capita benefit derived from the millions of rupees spent on uplifting socio-economically backward populations in India.

7 Human Development Report 2015. Rep. UNDP.

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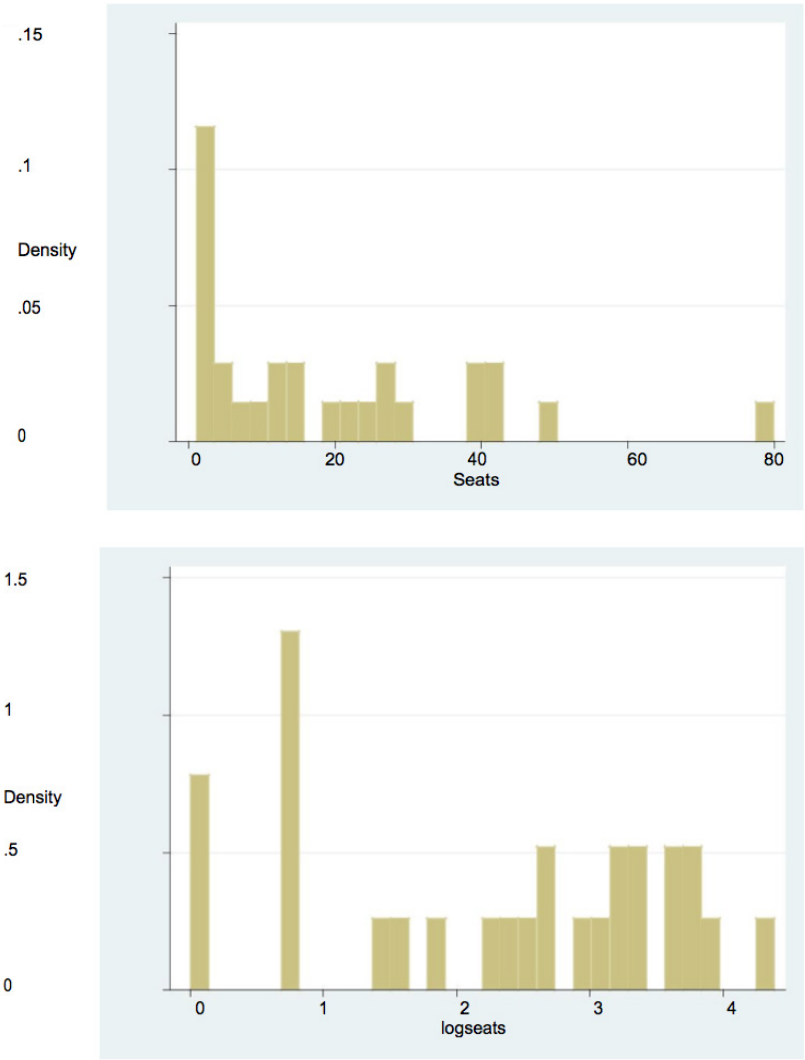
Appendix

Appendix A: Table of available percentage offtake data

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015	✓	✓	✓	NA	✓	✓	✓	✓				
2014	✓	✓	✓	✓	✓	✓	✓	✓	NA	✓	✓	✓
2013	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2012	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2011	✓	NA	✓	NA	✓	NA	✓	✓	✓	✓	✓	✓
2010	NA	✓	NA	NA	✓	NA	NA	NA	✓	✓	✓	NA
2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2008	NA	NA	✓	✓	NA	NA	NA	NA	✓	NA	NA	NA
2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2006	NA	NA	NA	NA	NA	✓	NA	NA	NA	NA	NA	NA
2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Note: The table above shows the years and months for which food data relating to quantities of wheat and rice and percentage offtake values is available. The above months and years are the ones that have been used to test all models in this paper.

Appendix B: Histograms of $seats_{st}$ and $log(seats_{st})$



Note: The histograms above depict the differences between the distribution of the seatsst and log(seatsst) variables. It can be seen that the seatsst variable is positively skewed which is corrected when the natural logarithm of seats is taken.

Appendix C: Additional Aligned Swing Effect Results

	$offtake_{st}$	$offtake_{st}$	$offtake_{st}$	$offtake_{st}$	$offtake_{st}$	$offtake_{st}$
$allied_{st}$	0.16	0.72	-0.81	0.21	-0.05	-0.85
	(2.74)	(2.77)	(4.25)	4.02	(2.62)	(2.66)
$netswing\_05_{st}$	-1.91					
	(3.62)					
$allied_{st}$ x $netswing\_05_{st}$	4.01					
	(4.15)					
$netswing\_10_{st}$		-3.63				
		(3.57)				
$allied_{st}$ x $netswing\_10_{st}$		2.40				
		(3.99)				
$stateswing\_02_{st}$			6.13			
			(5.38)			
$allied_{st}$ x $stateswing\_02_{st}$			15.69			
			(13.76)			
$stateswing\_10_{st}$				-12.24**		
				(5.78)		
$allied_{st}$ x $stateswing\_10_{st}$				6.70		
				(5.75)		
$centralswing\_02_{st}$					-4.94	
					(4.01)	
$allied_{st}$ x $centralswing\_02_{st}$					3.33	
					(4.01)	
$centralswing\_05_{st}$						-7.90
						(5.72)
$allied_{st}$ x $centralswing\_05_{st}$						4.83
						(5.28)
$log(income_{st})$	13.92	14.87	15.69	13.04	15.93	17.43
	(10.69)	(10.59)	(13.76)	(12.27)	(10.88)	(10.39)
Year FE	✓	✓	✓	✓	✓	✓
State FE	✓	✓	✓	✓	✓	✓
cluster(state)	✓	✓	✓	✓	✓	✓
# Obs	1,649	1,652	1,620	1,620	1,652	1,601

Robust standard errors in parenthesis *

$p \leq 0.10$ ** $p \leq 0.05$ *** $p \leq 0.001$

Note: Regressions were run with percentage offtake as the dependent variable using OLS with state- month as the unit of measurement, income per capita as the control, clustering standard errors at the state level and state and year fixed effects

Dangerous Neighbors: Cross-Border Effects of Invasion on Democracy

Daniel Fahrenthold

This paper presents an analysis of the spatial effects of an invasion with regards to the development of democracy in the invaded country's neighbors. The hypotheses tested here predict that neighbors of an invaded country are negatively impacted by the presence of a nearby invasion in the years following the invasion, as measured by changes in the country's ranking on the Polity scale. Results indicate that the expected loss is roughly one half point on the Polity scale and that these effects continue for around three years after the invasion. It was found that this relationship between democracy and nearby invasion does not extend to those countries with particularly strong institutions, democratic or otherwise.

Introduction

Being invaded is a terrible ordeal for a country to endure. The destruction of infrastructure, disruption of central control, and uncontrolled violence takes a toll on any invaded nation. An invasion is terrible for an invaded country's neighbors as well. The physical destruction can easily cross borders, as it did in Laos during the Vietnam War. As government control is eroded in countries that are invaded, neighbors are forced to contend with the non-state actors that thrive in the subsequent chaos, as Mali was forced to do with the Tuareg uprising following the 2011 NATO intervention in Libya. On the other hand, if an invading army is able to more firmly control its target than the previous local government, neighbors can be faced with these groups moving operations into their territories, as with the the case with the Taliban and Al-Qaeda after the 2001 invasion of Afghanistan.

In political science this is often termed spillover effects. Though largely ignored until reccently, spillover effect is increasingly an object of study in politics and economics. Spillover effects are studied with regards to such things as the contagiousness of civil conflict or the economic benefits of military alliances. This paper seeks to determine to what degree spillover effects influence a country's democratic robustness following the invasion of a nearby country. Several cases from the past few years could provide the impetus for this research in their own right, but taken collectively they underline the urgency of the issue. Examples include Turkey's worrying descent into autocracy following the invasion of Iraq by the United States, the rise of the Islamic State; the deterioration of democratic processes in Pakistan following the invasion of

Afghanistan in 2001, or the 2011 coup d'état in Mali after the international intervention..

I would argue that this spatial aspect of invasion and its consequences on democracy has been ignored in political science literature. Bruce Bueno de Mesquita and George W. Downs (2006) show that being the subject of invasion negatively impacts the development of democracy in a country, conditional on the invading country (Bueno de Mesquita & Downs, 2006). They argue that leaders of large democracies invade other countries in order to secure policy concessions that will facilitate their reelection, and that these policy concessions are more easily extracted from autocratic governments. The result is that democratic invaders are likely to institute governments in their targets that are less democratic than the counterfactual assumption. This is to say the installed regime will often be more autocratic than one would expect them to be, given standard assumptions of how their democracy would develop over time. The effects of invasion on subsequent democracy within a country are so great that they can be clearly seen from a cursory study of political history,. The spillover effects, however, are often much more pernicious. One such example of the insidious spatial externalities of international policies is given in John Doces' 2014 paper "Saving Sudan, Starving Uganda: Aid, Growth, and Externalities in Africa" (Doces, 2014) . In an analysis of foreign aid given to Sudan, Doces finds that the resultant inflation inadvertently caused by this aid was responsible for a reduction in neighboring countries' annual economic growth by as much as 1.25 percent (Doces, 2014). Many of the effects of invasions are similarly capable of traversing national borders, yet researchers have largely ignored this simple fact in favor of an analysis that assumes the inviolability of national borders and the prime importance of the nation-state unit such as it exists in developed countries. Furthermore, the effects caused by a nearby invasion can not be constrained merely to easily-surmised economic costs such as disruptions in regional trade. The effects of the invasion on the quality of democracy in the nearby countries must also be quantified.

This paper shows that in the years following an invasion, neighboring countries experience a decline in the quality of their democracies in comparison with what would be expected of an untreated country with the same characteristics. The larger question is to what degree an international war can affect apparently neutral and uninvolved neighboring countries in profound ways, regardless of the size of the conflict. It is logical, for example, that neutral Sweden was greatly impacted by World War II despite its neutrality; what is less clear, is that Saudi Arabia would be similarly effected by the First Gulf War.

Literature Review

The development of a country's political systems has fixated political scientists for decades now, as they have attempted to account for each and every factor that influences a country's movement from autocracy to democracy and vice versa. As much as political scientists have wished for a "magic bullet" explanation, neither historicist political science nor its more statistically rigorous modern iteration has been able to explain how democracy is formed and maintained in the long term. Some authors such as Drury, Krieckhaus, and Lisztig (2006), have suggested that corruption levels are key to democracy in a country, while others have proposed that robust economic growth is required to nurture young democratic institutions (Drury et al., 2006; Helliwell, 1994). Levels of wealth of the citizenry or of sophistication of the national economy have been proffered as explanations, as well as income equality or ethnic homogeneity (Lijphart, 2012; Muller, 1988; Reynold, 2007). Still others suggest that history and geography are integral to understanding the development of democracy, or that only certain critical historical events

can kick-start democratic development (Collier & Collier, 1991; Engerman & Sokoloff, 1997). Each possible explanation has been reviewed and convincingly argued, but the truth is that they all have some explanatory ability when discussing the development and subsistence of democracy. The work of Bueno de Mesquita and Downs (2006) shows that foreign invasion does have a negative effect on the development of democracy in the targets of those invasions. Kristian Skrede Gleditsch's body of work complements Bueno de Mesquita and Downs' by exploring the spatial impact of war and civil conflict – that is, how a war can affect otherwise uninvolved neighbors. It is the conclusions that these two papers establish which will be connected, despite important works such as those from Paelinck and Klaassen as far back as 1979, spatial econometrics remain largely neglected in most works of modern social sciences (Paelinck & Klaassen, 1979). As Neumayer and Plümper (2010) note, "not controlling for existing spatial effects causes omitted variable bias just as it is caused by the exclusion of any other variable that is correlated with at least one regressor and the dependent variable" (Franzese & Hays, 2010; Neumayer & Plümper, 2010). Therefore, this sort of spatial analysis should not be ignored any more than temporal analysis is, though it is much harder to study. Numerous studies suggest the cardinal importance of spatial analysis, however, and given the complexity and importance of both the effects of war and the development of democracy, this relationship between them warrants further study.

Relying much on the work of Kristian Skrede Gleditsch, in particular on his 2008 paper with Halvard Buhaug "Contagion or Confusion? Why Conflicts Cluster in Space" (2008), this thesis tests the spatial effects of invasion on the democratic robustness of the neighbors of targeted countries (Gleditsch & Buhaug, 2008). In their paper, Gleditsch and Buhaug (2008) argue that empirical studies of civil war "tend to adopt a 'closed polity' approach, which… disregards the potential influence of regional factors and the international context" (Gleditsch & Buhaug, 2008). The authors contrast this with their own approach, which seeks to capture the spatial effect on the development of civil war in a given country. In their 2010 paper "Making spatial analysis operational," Eric Neumayer and Thomas Plümper (2010) create a series of analytical methods to make spatial regression more feasible (Neumayer & Plümper, 2010). This paper relies greatly on those listed above.

Applying the method of thinking and the mathematical concepts developed in Gleditsch's works to those in Bueno de Mesquita and Downs (2006) gave way to the theory tested in this paper (Bueno de Mesquita & Downs, 2006). While Bueno de Mesquita and Downs (2006) studied the impact of intervention on long-term democratic development in targeted countries, they neglected the international aspect of this relationship. This study, which observed countries over a ten-year period after the invasion, compared observations to a counterfactual proposition of how democracy would develop in that country were it not invaded. No consideration is given to nearby countries which could have some effect on the development of democracy in the invaded country, nor to the invaded country's influence on its neighbors (Bueno de Mesquita & Downs, 2006). Michael D. Ward and Kristian Skrede Gledistch (2008) note the importance of long-run spatiotemporal feedback effects that countries can have on each other with regards to certain characteristics or relationships, such as that between GDP per capita and democratic robustness (Ward & Gleditsch, 2008, p. 39). Gleditsch (2007) restates this with regards to civil war, finding that "changes on the regional democracy variable yield a large decrease in the risk of [internal] conflict, with an estimated effect more than twice the size of that of country-specified democracy," suggesting that countries with many robustly democratic neighbors are potentially part of a regional normative fabric that helps to

ensure peaceful conflict resolution (Gleditsch, 2007). This is yet another example of the prime importance of spatial consideration in the social sciences.

Although the scope of this paper does not include empirically testing possible mechanisms for the relationship between democracy and nearby foreign invasion, potential explanations grounded in outside works can be suggested. One is found in Cederman, Girardin, and Gleditsch's "Ethnonationalist Triads: Assessing the Influence of Kin Groups on Civil Wars" (2009) and in the Selectorate Theory produced by Bueno de Mesquita, et al. (2003) (Cederman et al., 2009; Bueno de Mesquita et al., 2003). In the event of war in a country, the growth of armed non-state actors can be increased in neighboring countries either from direct economic or physical processes or from what Gleditsch (2007) calls "actor-specific" relationships (Gleditsch, 2007). Nearby conflict can increase the general proliferation of weapons across borders and make it easier for groups opposed to the government to arm themselves (Collier & Hoeffler, 2004). These and other war-time factors can influence the development of rebel groups in a country after an intervention, such as marginalized ethnic groups that straddle the border between countries. This transnational ethnic relationship is precisely what Cederman, Girardin, and Gleditsch (2009) study within the context of civil war, arguing that where it exists, it helps to facilitate the movement of conflict from one country to the other. Under certain conditions, the likelihood that ethnonationalist civil war will occur is increased by the presence of ethnic kin groups in neighboring countries (Cederman, et al., 2009). This shows that trans-border ethnic kin groups can have strong effects on stability and political processes in neighboring countries, conditional on the relative demographic weight of the rebelling group in the primary dyad. It is plausible that the effects on the decay of democracy in neighboring countries could take place via this ethno-political corridor. This would also be consistent with findings by Buhaug, Cederman, and Rød (2008), upon which Cederman, Girardin, & Gleditsch (2009) is partly based (Buhaug et al., 2008). This newly armed or newly formed rebel group then influences the country it is based in, presenting new challenges to the incumbent leader. As predicted by the Selectorate Theory, the leader will respond with a restriction of democracy relative to what is expected, shoring up domestic support within the winning coalition in response to a new threat (Bueno de Mesquita et al., 2003).

Alternatively, the rebel group can be a new pillar of support for the incumbent leader, often times resulting in an authoritarian zone developing in what could otherwise be a democratic state (Gibson, 2005).

Therefore, the type of analysis conducted here exists already in two halves. Half of this research has been done to examine the impact of international conflict on democratic development. The other half, pertaining to how one country is influenced by realities in otherwise-uninvolved nearby countries, has also been done, though with considerably more difficulty in terms of data management. The two areas of research are conducted largely independently of each other, but research has been done before that combines these sorts of variables. In that sense, this study occupies a progressive position, reconciling the two halves, widening the scope of countries studied in the intervention-democracy relationship, and by searching for new relationships to examine in a transnational context.

Theory

A country being invaded will result in neighboring countries becoming more autocratic. This is based on the findings by Gledistch (2007) indicating that internal violence in one country increases

the likeliness of similar violence in neighboring countries, and on those from Bueno de Mesquita & Downs (2006) indicating that military intervention has a negative effect on the long term development of democracy in a target country (Gleditsch, 2007; Bueno de Mesquita & Downs, 2006). I adapt the scope of the work by Bueno de Mesquita & Downs by applying a spatial framework such as the one Cederman, Girardin, & Gleditsch used in "Ethnonationalist Triads: Assessing the Influence of Kin Groups on Civil Wars" (2009) to determine the effects of foreign military intervention on the robustness of democracy in nearby countries (Cederman, et al., 2009).

Through any number of potential metrics not exhaustively listed in this paper, the effects of an invasion on a nearby country will include a tangible decrease in the quality of democracy in those nearby countries.

> *Null hypothesis:* If a country is invaded, this will have no discernible effect on the robustness of democracy in other nearby countries.

> *Hypothesis 1:* If a country is invaded, this will have a discernible and negative effect on the robustness of democracy in other nearby countries.

Since a country that is highly democratic or autocratic requires strong political and societal institutions to remain so, I expect that the anti-democratic effects of any nearby invasions will be more solidly withstood by these countries.

> *Hypothesis 2:* The negative effect of nearby invasion on the robustness of democracy will be weakened if the neighboring country is highly democratic or highly autocratic.

Research Design

As in Bueno de Mesquita & Downs (2006), I survey the development of democracy in these neighboring countries over the course of five years, using a monadic spatial-x regression analysis outlined in Neumayer & Plümper (2010) and, partially, in Ward & Gleditsch (2008). This is modeled as:

$$y_{it} = \alpha + \rho \sum_{k} w_{ikt} x_{kt} + \beta X_{it} + \epsilon_{it}$$

where subscript *it* represents the country *i* in year *t*, which together comprise our unit of analysis; ρ represents the spatial effect variable; with the subscript k denoting the dyad relationships of all other countries *k* with the country *i*, limited to only those within at most 950 kilometers; w_{ikt} indicates the weighting matrix; x_{kt} is the value of the *x* variable in country *k* to be lagged, in this case the presence of a foreign invasion in year *t*; ε_{it} is the independent and identically distributed error term; and βX_{it} represents other explanatory control variables combined as a vector (Neumayer & Plümper, 2010). To analyze these variables and their interactions, I conducted an Ordinary Least Squares regression on the change in democracy of a country in a given year as explained by the invasion spatial effect variable, the country's past Polity score, and its current level of economic development. I also controlled for year fixed effects and country clustering.

This study is inherently beholden to geographical "facts on the ground" that it does not account for. I am

unable to control for the topography of countries as a way to measure how well an invasion in one country would translate into threat to the democracy of another. The United States and Canada, for example, have an extremely porous and easily-traversed border. The border between Georgia and Russia, on the other hand, is both highly mountainous and heavily policed. A problem therefore arises when studying country pairs using only their minimum distance, because in some cases distance between two borders does not correlate with their porousness relative to each other. I have therefore created a binomial variable that treats all country pairs less than 200 kilometers apart as equally close, to approach this geographical problem from another angle. The combination of the contiguous variable and the 200km mock contiguity variable should give a more accurate account of the effect of invasion on very close neighbors than either would alone.

The nearness of countries will be defined as any country dyad relationship where the minimum distance between the two is less than 950 kilometers, with special focus on those countries that are closer together. To constrain the study of only those countries which are contiguous would deny self-evident facts on the ground in terms of the mobility of people across borders. It would, for example, purport that no connection should be discussed between Armenia and Russia, or Singapore and Indonesia, when these countries clearly have strong political and historical ties to one another, for better or worse. Some countries are not physically touching but are close enough to be essentially contiguous in terms of movement of people, and for this reason I have included the binomial 200km variable that analyzes those countries that are very close, including contiguous ones, as if they were all contiguous. In my other two regression analyses, I use the continuous variable of the minimum distance between two countries that are less than 950 kilometers apart. The spatial effect variable that is generated is weighted according to this variable, and therefore automatically puts more weight on those countries that are closest. I also included a squared distance term, the squared value of the minimum distance between countries less than 950 kilometers apart, to account for a non-linear effect of distance between countries.

Table 1 - Summary Statistics: Minimum Distances

Variable	Definition	Obsv.	Mean	Std. Dev.	Min	Max
Minimum Distance	Minimum distance between two countries that are at most 950km from each other.	116,706	344	330	0	2679*
Contiguousness	Dummy variable denoting contiguousness in a dyad.	36,928	0.316	0.465	0	1
Within 200km	Dummy variable denoting dyads with less than 200km between them.	50,894	0.436	0.496	0	1
Minimum Distance Squared	The minimum distance between two countries that are at most 950km from each other squared.	116,709	227414	353200.8	0	7,177,041

*A few island countries in the South Pacific are coded into the dataset so that they can have at least one neighbor. This includes Australia, New Zealand, Papua New Guinea, and Fiji. Otherwise, the maximum distance is 949km.

**A percentage of all observations that meet this criterion.

The data that I use for the distance dyads between countries comes from Gleditsch and Ward's "Measuring Space: A Minimum Distance Database" (Gleditsch & Ward, 2001). I also created a few binomial variables to simplify analysis of this dataset. One measures whether two countries are contiguous (i.e. have a minimum distance of 0km). The other two are thresholds that measure the minimum distance between countries in the dyads as less than 200km and less than 500km. It should be noted that this dyadic dataset is symmetrical and measures distances between countries from 1875 to 2002. I have also used the *kountry* Stata command module published by Raciborski (2008) to standardize country names according to the Correlates of War Project, facilitating the merging of my data (Raciborski, 2008).

I created four spatial effect variables using methods set down in Neumayer and Plümper (2010). These spatial effect variables are the weighted values of the dependent, independent, and error term variables in nearby units of observation, in this case country-years. They facilitate regression analysis of monadic contagion by providing a variable which can be plugged into a simple Ordinary Least Squares analysis. My first two spatial effect variables were weighted according to the binomial *Contiguousness* and *Within200km* variables that I created from the original minimum distance dataset. The other two spatial effect variables are weighted according to the continuous *mindist* variable and its squared value, respectively, and therefore they include all country pairs whose distance is less than 950 kilometers from each other, besides a few unique cases noted above.

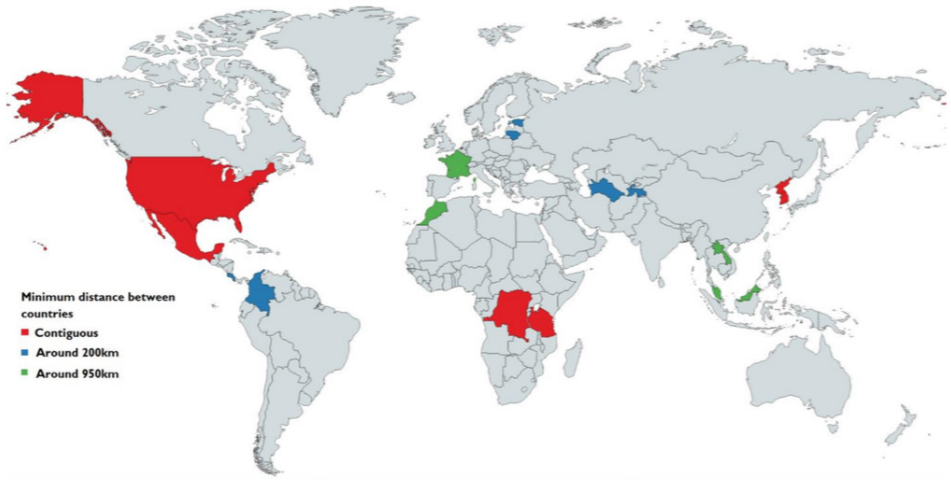


Figure 1: Examples of Country Distance Pairs

Note: A map giving examples of country pairs at different distances relevant to my study. Country pairs highlighted in red (the United States and Mexico, the Democratic Republic of the Congo and Tanzania, North and South Korea) are contiguous and would be the only countries included in the first (contiguous) model of each analysis. Country pairs highlighted in blue (Nicaragua and Colombia, Estonia and Lithuania, Turkmenistan and Tajikistan) are about 200 kilometers apart. These would be included in the second model with any country pairs that are closer than that. All

distance pairs would be treated as the same in the 200km analysis, meaning the weighting system of the matrix used to create the spatial effect variable of invasion does not put more weight on closer country pairs in the 200 kilometer analysis. Country pairs highlighted in green (France and Morocco, Laos and Malaysia) are about 950 kilometers apart, and represent some of the most distant country pairs that I have included in my analyses. I would not expect an invasion in one of these countries to have much effect on the other, and indeed these pairs are given much less weight in the Continuous and Squared 950 kilometer analyses than the closer pairs.

Wars are determined and coded according to the Correlates of War Index, as any war between two countries that results in over 1000 battlefield deaths. Whether a war constitutes an invasion comes from the UCDP/PRIO Armed Conflict Dataset, which includes coding for international conflicts that are centered on territorial disputes from 1946 to 2014 (Gleditsch et al., 2002; Pettersson & Wallensteen, 2015). The data on war that I use therefore originates from the Correlates of War Project but is modified by Gleditsch (2001) to match with the country names that he uses in his Minimum Distance Data set and subsequently by me to provide a measure of invasion (Gleditsch, 2004). Only wars between at least two countries are included; that is to say, conflict within a state, and that between a state and a non- state actor, are excluded from this dataset.

Table 2 - Summary Statistics: War

Variable	Definition	Obsv.	Mean	Std. Dev.	Min	Max
Deaths	Total number of deaths in a war, by country.	916	174,280	685,381	0	75m
Invaded	Dummy variable denoting whether a country's participation in a war constituted being invaded.	293	0.195	0.396	0	1
Length	Length of the war, in years.	944	3.82	2.52	1	11

I measure the movement along the democracy-autocracy continuum using the Polity index, which produces judgments regarding the contestability of elections in a given country for a given year between 1800 and 2014. This data was last updated in 2014 and is currently in its fourth edition. Within this dataset, the variable *polity* measures not only position on the continuum of political freedom from -10 to 10 but also includes other values for events such as an interregnum. The *polity2* variable is more standardized than the *polity* variable and carries only values between -10 and 10. Therefore I have chosen to use *polity2* as my primary dependent variable so that changes in democratic development can be more easily studied. I did not make us of most other variables in the Polity dataset for the analysis conducted in this paper.

Table 3 - Summary Statistics: Polity

Variable	Definition	Obsv.	Mean	Std. Dev.	Min	Max
Polity2*	Polity score measuring contestability of elections, excluding additional values	16,661	-.636	7.07	-10	10
Dpolity2	Change in the *polity2* variable from the year before.	16,408	0.05	1.45	-19	16
Pastavgpolity5	The average polity score for a country over the past five years	16,596	-0.77	6.91	-10	10
Pastavgpolity10	The average polity score for a country over the past 10 years.	16,658	-0.89	6.77	-10	10

* The mean and standard deviation of the polity and change variables are skewed by the presence in the dataset of values such as -88 and -77 which code for various abnormal events in a country. Therefore polity2 and my own measure of change in that variable, dpolity2, should be considered more accurate with regards to means and standard deviations in the dataset. See the Polity codebook for more information.

The Polity effectively measures changes in democratic robustness and is commonly used in political science literature for this purpose. I theorize that the changes in democracy given a nearby invasion will manifest as a negative movement in the country's Polity score. For the purpose of testing Hypothesis 2, I define strongly democratic states as those with a Polity rating of 7 or higher, and strongly autocratic states as those with ratings of -7 or lower. This would correspond, respectively, to a country having institutions that are robust enough to allow for peaceful contestability of elections or to a country having institutions strong enough to repress the population politically. Those states that are in between would be considered neither strongly democratic nor strongly autocratic, but can still lean to one side or another.

In my analysis, I controlled for the effect that a country's GDP and GDP per capita levels would have on democratic development and robustness, as is commonly suggested in political science literature.34 For historical GDP and GDP per capita data, I rely on Bolt and van Zanden's The Maddison Project: collaborative research on historical national accounts (2014).35 This gives estimates of country's national accounts from 1800 until 2010, in standardized 1990 US dollars. So that it can better serve as a comparison variable between countries and years, I regressed this GDP data using their natural log values rather than their nominal ones.

Table 4 - Summary Statistics: GDP

Variable	Definition	Obsv.	Mean	Std. Dev.	Min	Max
Year	Time, in years	14634	1948.51	49.332	1800	2010
GDP	Gross domestic product, measured in millions of 1990 US dollars.	12219	119.6	504.71	0.046	10746.65
GDP per capita	Gross domestic product per capita, measured in 1990 international dollars.	12606	4093.80	5058.02	289.15	42916.24
LogGDP	The natural log of the GDP variable.	12219	2.83	1.95	-3.08	9.28
LogGDPpc	The natural log of the GDP per capita variable.	12606	7.78	0.99	5.67	10.67

Results

Based on my results, I was able to reject my first null hypothesis with at least 95% certainty that a nearby invasion would have no effect on democratic development, under certain conditions. This effect appeared starting about one year after the invasion, and strengthened in terms of both statistical robustness and variable coefficient at the three-year mark. By five years, however, the effect was greatly diminished, to the point where I was generally not able to find statistically significant difference from the null hypothesis in that model.

In measuring the effect of invasion on nearby countries' democratic development, I examined changes to their Polity score in the same year as the nearby invasion, but also lagged changes in the Polity score by one, three, and five years. This would therefore estimate the effects of the invasion on democratic robustness in the few years following the invasion, as was done in Bueno de Mesquita and Downs (2006). As the effects of an invasion within a country can be reasonably expected to be stronger within that country itself, they examined the changes over a scale of ten years rather than up to five. Special focus is warranted on countries that are contiguous, as we would expect them to bear the brunt of the spillover damage from a nearby invasion. For this reason, they are modeled separately from other country distance pairs in each time analysis. As explained above, I also included a binomial variable that codes any country distance pair below 200km as contiguous. A country falls into the "within 200 kilometer" category if the distance between them is from 0 to 199 kilometers, and this binomial ("dummy") variable was the source of the weighting matrix for the second model. This would give us another look at countries that are close together besides the contiguousness model. The model also evens out any geographical or topographical features of the distance between these country pairs by weighting every pair the same regardless of their distance. Any country pair beyond 200 kilometers is not included in this model. These results are shown in the 200km Model columns in the following tables. For the third model in each year analysis, I used a simple continuous variable to weight the spatial effect for all dyads in the dataset. This means that all countries are included as pairs with any neighbors less than 950 kilometers away, and the spatial effect matrix is weighted by this distance. Countries that are 900 kilometers apart, for example, would thus have much less impact than countries that are only 50 kilometers apart in the third model. The final model is the same as the third, except that the minimum distance variable has been squared.

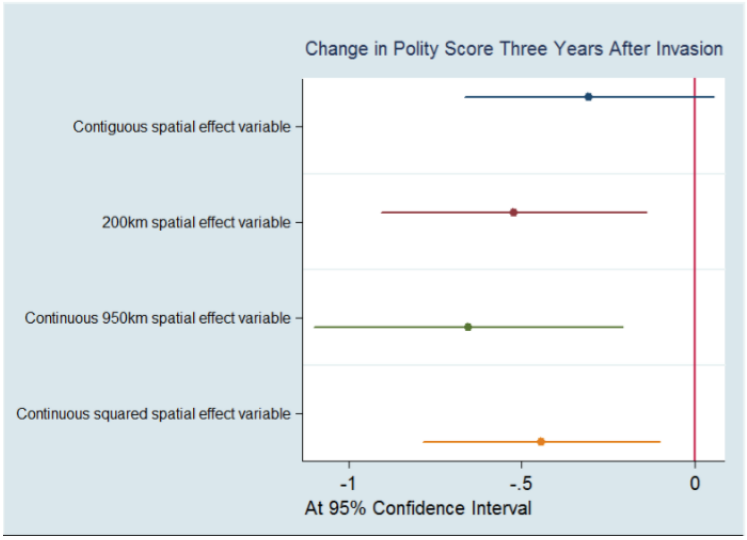


Figure 2: Change in Polity Score Three Years After Invasion

Note: This coefficient plot shows the coefficients of the spatial effect variables in each model three years after the invasion. See Table 8 for more information.

In each results table, the coefficients are given of the associated variable with regards to country *i*'s Polity score in a given year. Table 6 shows the effect of each variable on the Polity score of a country in the same year that a neighboring country was invaded. Table 7 shows the same results but with the Polity score lagged by one year; that is to say, it shows the effect of a nearby invasion, economic indicators, etc. on that country's Polity score the following year. Tables 8 and 9 show the same results as Table 7 but with temporal lags on the Polity score of 3 and 5 years, respectively.

Figure 3: Change in Polity Score Five Years after Invasion

Note: This coefficient plot shows the coefficients of the spatial effect variables in each model five years after the invasion. No statistically significant coefficients were found. See Table 9 for more information.

I was able to find evidence to support my first and main hypothesis, which is that an invasion in a neighboring country resulted in a slight drop in a country's Polity score following the invasion. Table 6 shows that I found little evidence of a change in democratic robustness during the same year that a country's neighbor experienced invasion, regardless of which distance tranche was studied. In Tables 7 and 8, however, I was able to find my most significant results. In both cases I found that a neighboring invasion could be expected to produce a change of roughly -0.5 points on the Polity scale (depending on the distance model examined) in a country's Polity value along the 21-point scale. Table 9 shows that by the time five years had passed after the nearby invasion, that invasion could no longer be considered to have any effect on further changes in a country's Polity score. It should be noted that in all of my analyses, a t- test revealed that the results of the binomial contiguous model and the full 950 kilometer continuous distance model were not statistically different.

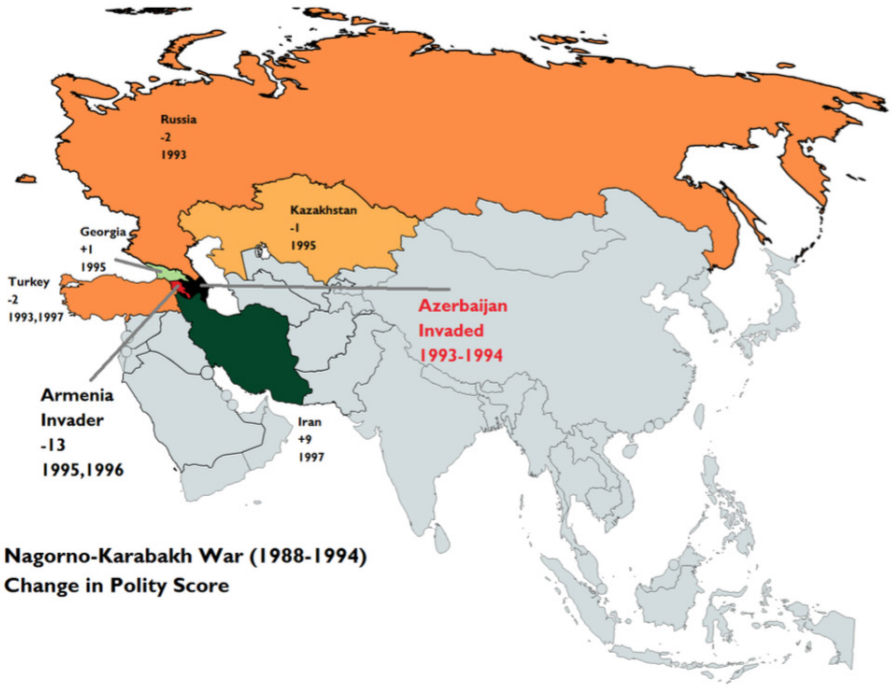


Figure 4: Change in Polity Score following the Nagorno-Karabakh War

Note: A map showing changes in the Polity sores of nearby countries in the years after the Nagorno-Karabakh War, which took place from 1988 to 1994, and the years in which these changes occurred. In my dataset, an invasion is not recorded until 1993-1994, when the intensity of the war increased sharply. This map thus records changes from 1993-1997, i.e. those years of the invasion and up to three years after it ended. Of particular note is Armenia, with strong ethnic, linguistic, and cultural ties to Azerbaijan, where a huge drop of 13 points on the Polity scale was experienced. It is also important to note that Armenia was in fact the invading country.

Iran experienced a 9-point increase in its Polity score in 1997 with the election of the reformer Mohammed Khatami, with 70% of the popular vote, supposedly against the wishes of the ruling conservative elite. This appears to be unrelated to the war in Azerbaijan.

Table 6 - Change in Polity Score in Year of Invasion

Same Year as Invasion Change in Polity IV	0km Model	200km Model	Continuous Model	Squared Model
Contiguous spatial effect variable (binomial)	-0.264 (0.248)			
200km spatial effect variable (binomial)		-0.572* (0.312)		
950km spatial effect variable (continuous)			-0.307 (0.307)	
Squared spatial effect variable (continuous)				-0.205 (0.236)
Control variables				
Average Polity Score of past 5 years	-0.0591* (0.0356)	-0.0583* (0.0349)	-0.0581* (0.0350)	-0.0581* (0.0349)
Average Polity Score of past 10 years	0.0389 (0.0365)	0.0377 (0.0357)	0.0379 (0.0358)	0.0379 (0.0358)
Log of Nominal GDP	-0.00613 (0.0202)	-0.00514 (0.0190)	-0.00515 (0.0190)	-0.00520 (0.0190)
Log of GDP per capita	0.0204 (0.0425)	0.0240 (0.0416)	0.0234 (0.0415)	0.0236 (0.0415)
Constant	0.120 (0.385)	0.0864 (0.379)	0.0236 (0.400)	0.0218 (0.400)
Observations	13,650	14,143	14,178	14,178
R-squared	0.043	0.042	0.042	0.042
Year Fixed Effects	✓	✓	✓	✓
Country Clustering	✓	✓	✓	✓
Countries	139	139	139	139
Years	58	58	58	58

Standard errors are shown in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Note: The effects of the nearby invasion and controls on changes in the Polity score during the same year as the invasion. As would be expected, the effects were muted so close to the time of the invasion, with only the model that exclusively examined countries under 200 kilometers of distance showing any statistical significance.

Table 7 - Change in Polity Score One Year after Invasion

One Year after Invasion Change in Polity IV	0km Model	200km Model	Continuous Model	Squared Model
Contiguous spatial effect variable (binomial)	-0.348*			
	(0.195)			
200km spatial effect variable (binomial)		-0.473**		
		(0.235)		
950km spatial effect variable (continuous)			-0.312	
			(0.267)	
Squared spatial effect variable (continuous)				-0.144
				(0.209)
Control variables				
Average Polity Score of past 5 years	-0.126***	-0.123***	-0.123***	-0.123***
	(0.0351)	(0.0342)	(0.0342)	(0.0342)
Average Polity Score of past 10 years	0.106***	0.103***	0.103***	0.103***
	(0.0338)	(0.0330)	(0.0330)	(0.0330)
Log of Nominal GDP	0.0159	0.0148	0.0149	0.0147
	(0.0194)	(0.0183)	(0.0183)	(0.0184)
Log of GDP per capita	0.0471	0.0539	0.0529	0.0536
	(0.0433)	(0.0431)	(0.0426)	(0.0427)
Constant	-0.834	-0.889	-0.207	-0.212
	(0.755)	(0.755)	(0.355)	(0.356)
Observations	13,649	14,142	14,177	14,177
R-squared	0.051	0.050	0.050	0.050
Year Fixed Effects	✓	✓	✓	✓
Country Clustering	✓	✓	✓	✓
Countries	139	139	139	139
Years	58	58	58	58

Standard errors are shown in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Note: The effects of the nearby invasion and any control variables on changes in the Polity score one year after the invasion began. In this test we begin to see more statistically significant effects, with both the contiguous and the 200km models revealing significant negative coefficients.

Table 8 - Change in Polity Score Three Years after Invasion

Three Years after Invasion Change in Polity IV	0km Model	200km Model	Continuous Model	Squared Model
Contiguous spatial effect variable (binomial)	-0.305*			
	(0.182)			
200km spatial effect variable (binomial)		-0.523***		
		(0.195)		
950km spatial effect variable (continuous)			-0.654***	
			(0.226)	
Squared spatial effect variable (continuous)				-0.445**
				(0.174)
Control variables				
Average Polity Score of past 5 years	-0.0341	-0.0339	-0.0340	-0.0338
	(0.0208)	(0.0207)	(0.0207)	(0.0206)
Average Polity Score of past 10 years	0.0229	0.0218	0.0216	0.0216
	(0.0235)	(0.0232)	(0.0232)	(0.0232)
Log of Nominal GDP	0.0369*	0.0350*	0.0364*	0.0363*
	(0.0212)	(0.0203)	(0.0211)	(0.0212)
Log of GDP per capita	0.0112	0.0143	0.0134	0.0138
	(0.0378)	(0.0371)	(0.0379)	(0.0380)
Constant	0.0641	-0.140	-0.138	-0.141
	(0.325)	(0.288)	(0.295)	(0.296)
Observations	13,572	14,065	14,100	14,100
R-squared	0.035	0.035	0.035	0.035
Year Fixed Effects	✓	✓	✓	✓
Country Clustering	✓	✓	✓	✓
Countries	139	139	139	139
Years	58	58	58	58

Standard errors are shown in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Note: The results of analyses of the spatial effect variable and control variables on changes in a country's Polity score three years after the invasion. In this test we saw statistical significance of all the spatial effect variables, including in the Continuous and Squared models.

Table 9 - Change in Polity Score Five Years after Invasion

Five Years after Invasion Change in Polity IV	0km Model	200km Model	Continuous Model	Squared Model
Contiguous spatial effect variable (binomial)	-0.146 (0.168)			
200km spatial effect variable (binomial)		-0.291 (0.208)		
950km spatial effect variable (continuous)			-0.293 (0.249)	
Squared spatial effect variable (continuous)				-0.185 (0.179)
Control variables				
Average Polity Score of past 5 years	-0.0905*** (0.0328)	-0.0903*** (0.0327)	-0.0902*** (0.0327)	-0.0901*** (0.0326)
Average Polity Score of past 10 years	0.0925*** (0.0334)	0.0922*** (0.0333)	0.0923*** (0.0332)	0.0923*** (0.0332)
Log of Nominal GDP	-0.00542 (0.0210)	-0.00699 (0.0200)	-0.00700 (0.0200)	-0.00707 (0.0200)
Log of GDP per capita	-0.0477* (0.0279)	-0.0467* (0.0278)	-0.0482* (0.0277)	-0.0479* (0.0278)
Constant	0.612** (0.249)	0.493** (0.235)	0.620** (0.247)	0.618** (0.247)
Observations	13,480	13,973	14,008	14,008
R-squared	0.049	0.047	0.047	0.047
Year Fixed Effects	✓	✓	✓	✓
Country Clustering	✓	✓	✓	✓
Countries	139	139	139	139
Years	58	58	58	58

Standard errors are shown in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Note: the effect of nearby invasion and control variables on any changes in the Polity score of a country five years after the beginning of the invasion. At this point I found that the nearby invasion had lost its explanatory power with regards to changes in the Polity score, as I found no statistically significant effects from the spatial variables. I was thus not able to reject the null hypothesis.

In Hypothesis 2, I predicted that the effects of a nearby invasion on democratic robustness would be severely limited in countries whose institutions were already robust and well established. As shown in Table 3, the average Polity score among all countries is around 0, skewing slightly to the negative. Countries with very high or very low Polity scores can therefore be said to be solidly within one camp or the other with regards to the democracy-autocracy continuum. These countries have strong institutions, which allow political leaders to either safely hold freely contestable elections or to withstand the public pressure engendered by suppressing them. Of all countries in the Polity dataset, about 34% are classified as being strongly democratic, meaning they have scores of 7 or above. A further 31% is classified as the opposite, with a score of -7 or below, indicating authoritarianism. The "in-between" states have values lower than 7 and higher than -7 and are not considered robustly authoritarian or democratic.

Table 10 shows the results of my regression analysis of changes in democracy three years after a nearby invasion in only those states with highly contestable elections – that is, only in robust democracies. As predicted, these countries were able to withstand the democracy- decaying effects of nearby invasion as compared to states with lower Polity rankings. In this case I was able to reject the null hypothesis that restricting my study to only democracies would have no effect, and find instead that strong democracies do not seem to be affected by nearby invasion. Table 11 shows the same test conducted on strongly autocratic states. In Hypothesis 2, I predicted that highly autocratic states would withstand the effects of nearby invasion and would have no resulting change in their Polity score just as their highly democratic counterparts did. The results of this analysis also confirmed that expectation.

Table 12 shows the analyses conducted on countries that have neither strongly authoritarian nor strongly democratic institutions. I found that both of the continuous models, which included all countries pairs less than 950 kilometers apart and weight the matrix such that closer country pairs are given more weight, showed coefficients of the spatial effect variables that were both statistically robust and greater than in the other analyses. This would suggest that countries with weaker institutions are particularly susceptible to the deleterious effects of a nearby invasion. This is consistent with what I predicted in Hypothesis 2.

Table 10 - Change in Polity Score Three Years after Invasion in Democratic States

Three Years after Invasion **Strongly Democratic States**	0km Model	200km Model	Continuous Model	Squared Model
Contiguous spatial effect variable (binomial)	0.0179			
	(0.204)			
200km spatial effect variable (binomial)		0.115		
		(0.325)		
950km spatial effect variable (continuous)			-0.840	
			(0.634)	
Squared spatial effect variable (continuous)				-0.695
				(0.524)
Control variables				
Average Polity Score of past 5 years	-0.0150	-0.0141	-0.0160	-0.0157
	(0.0130)	(0.0132)	(0.0134)	(0.0134)
Average Polity Score of past 10 years	-0.00543	-0.00542	-0.00669	-0.00693
	(0.0123)	(0.0125)	(0.0126)	(0.0127)
Log of Nominal GDP	0.0227	0.0181	0.0267	0.0269
	(0.0246)	(0.0217)	(0.0301)	(0.0301)
Log of GDP per capita	0.0824	0.0779	0.0897	0.0905
	(0.0797)	(0.0759)	(0.0812)	(0.0811)
Constant	-0.678	-0.626	-0.742	-0.757
	(0.751)	(0.711)	(0.773)	(0.779)
Observations	4,418	4,574	4,587	4,587
R-squared	0.127	0.115	0.113	0.114
Year Fixed Effects	✓	✓	✓	✓
Country Clustering	✓	✓	✓	✓
Countries	139	139	139	139
Years	58	58	58	58

Standard errors are shown in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Note: This mirrors the results in Table 8 in showing changes in a country's Polity score three years after the invasion, but it is restricted to surveying only those countries that are fully democratic, and therefore have Polity scores of 7 or higher at the time of the invasion. As expected, I found that these countries did not show a statistically significant change in their Polity score after invasion.

Table 11 - Change in Polity Score Three Years after Invasion in Autocratic States

Three Years after Invasion **Strongly Autocratic States**	0km Model	200km Model	Continuous Model	Squared Model
Contiguous spatial effect variable (binomial)	0.0136			
	(0.144)			
200km spatial effect variable (binomial)		-0.356		
		(0.233)		
950km spatial effect variable (continuous)			0.0659	
			(0.204)	
Squared spatial effect variable (continuous)				0.139
				(0.159)
Control variables				
Average Polity Score of past 5 years	0.00187	-0.00156	-0.000983	-0.000427
	(0.0329)	(0.0333)	(0.0335)	(0.0331)
Average Polity Score of past 10 years	-0.00859	-0.00784	-0.00732	-0.00827
	(0.0285)	(0.0308)	(0.0310)	(0.0303)
Log of Nominal GDP	-0.00445	-0.00355	-0.00339	-0.00394
	(0.0144)	(0.0146)	(0.0145)	(0.0144)
Log of GDP per capita	-0.0659*	-0.0692*	-0.0688*	-0.0682*
	(0.0366)	(0.0374)	(0.0373)	(0.0373)
Constant	0.429	0.432	0.502	0.493
	(0.283)	(0.291)	(0.351)	(0.351)
Observations	2,954	3,040	3,047	3,047
R-squared	0.076	0.081	0.080	0.080
Year Fixed Effects	✓	✓	✓	✓
Country Clustering	✓	✓	✓	✓
Countries	139	139	139	139
Years	58	58	58	58

Standard errors are shown in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Note: This shows changes from a nearby invasion and control variables in a country's Polity score three years after invasion if countries surveyed are restricted to only those that are robustly autocratic, with Polity scores of -7 or lower. As expected, these countries appear able to withstand the effects of a nearby invasion and showed no statistically significant coefficient in the spatial effect variable.

Table 12 - Change in Polity Score Three Years after Invasion in All Other States

Three Years after Invasion **Neither Strongly Democratic nor Strongly Autocratic States**	0km Model	200km Model	Continuous Model	Squared Model
Contiguous spatial effect variable (binomial)	-0.109 (0.461)			
200km spatial effect variable (binomial)		-0.162 (0.583)		
950km spatial effect variable (continuous)			-1.096*** (0.384)	
Squared spatial effect variable (continuous)				-0.769*** (0.279)
Control variables				
Average Polity Score of past 5 years	-0.0563 (0.0994)	-0.0538 (0.0930)	-0.0553 (0.0928)	-0.0553 (0.0928)
Average Polity Score of past 10 years	0.0767 (0.0931)	0.0691 (0.0878)	0.0695 (0.0877)	0.0697 (0.0877)
Log of Nominal GDP	-0.0310 (0.0526)	-0.0328 (0.0527)	-0.0337 (0.0533)	-0.0340 (0.0533)
Log of GDP per capita	0.00892 (0.139)	0.0334 (0.136)	0.0292 (0.137)	0.0288 (0.137)
Constant	1.436 (1.295)	1.276 (1.268)	-0.218 (0.815)	-0.215 (0.815)
Observations	3,248	3,416	3,429	3,429
R-squared	0.140	0.128	0.128	0.128
Year Fixed Effects	✓	✓	✓	✓
Country Clustering	✓	✓	✓	✓
Countries	139	139	139	139
Years	58	58	58	58

Standard errors are shown in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Note: This shows changes in a country's Polity score following nearby invasion when only those countries that are neither highly democratic nor highly autocratic are surveyed. In this case we found that both of the continuous models, which weight the relationship between the invasion and its effects based on the distance and include all country pairs below 950 kilometers, showed pronounced negative coefficients. This indicates that the invasion had particularly strong effects on countries with weak institutions.

Conclusion

We must acknowledge that democracy is now normatively considered the best form of government among nations, despite its drawbacks. There are endless works available to explain the formation of democracy, its downfall, and what factors are required to sustain it, including some that explain the relationship between war in a country and subsequent democratic development. In contrast, work on spatial impact on democracy remains very limited, despite recent advances in statistical computational tools that can make this type of analysis relatively easy. With each new spatial relationship we find, we learn again how crucial it is to include spatial analytics in political science. It may seem to us that the unitary nation-state is a compelling and accurate unit of analysis in political science, but we must remember that ignoring a country's neighbors can be just as harmful as omitted variable bias in finding robust and trustworthy results.

Based on my findings, I was able to reject most of my null hypotheses on the cross- border effects of invasion on democracy. Of prime importance was my finding that we could expect that those states near to a country being invaded would have an associated decrease in their Polity ranking of between one half and one point in the years following this invasion. This effect seemed to dissipate after 5 years had passed since the invasion. I also found that this effect was not visible among the roughly two thirds of all countries that are ranked as strongly democratic or strongly autocratic on the Polity scale but that the effects were acute in the states that fell in between. However, it could be that democracies appear immune to the effects of nearby invasion simply because strong democracies tend to cluster in the same regions and these regions tend to be peaceful (Gibler & Tir, 2012; Gleditsch, 2007).

To understand the tangible effects of a change in a single point on the Polity scale, we can compare two similar countries that are ranked one point apart, such as France and the United Kingdom. Both are developed countries with similar cultural values and standards of living. Both are very strong democracies as well, but while the United Kingdom is ranked as a perfect 10 on the Polity scale, France has a score of 9. The differences of a single point can be illustrated in the respective power of each country's chief executive. While the Prime Minister in the UK is indeed the most powerful person in the country, he or she is not authorized to govern against the wishes of his or her party, and must hold a majority in the Parliament at all times. He or she can be recalled at any time through a vote of no confidence, and the legislative body therefore exercises a great deal of authority over the Prime Minister. In contrast, the President of France not only has broad authority over the appointment of all cabinet ministers and the French Prime Minister, he or she also has sweeping emergency powers which include the complete dissolution of the National Assembly without needing to vacate the office of the President. In this sense, large differences in the structure of government and the power of certain individuals can be portrayed in the difference of a single point on the Polity scale.

This analysis reveals first the unforeseen impacts that invasion can have. Accepting the discourse usually offered by powerful democracies like the United States that they invade foreign countries foremost for the sake of instituting democracies in their targets, we can see that not only does they seem to fail in this primary goal, but that they also contribute to a weakening of fledgling democracies throughout the region and a further strengthening of authoritarian tendencies in nearby non-democratic regimes (Bueno de Mesquita & Downs, 2006). More consideration must be given, therefore, to how the negative impact of an invasion is allowed to spread to a country's neighbors. This should be important not only to the supposedly

well-meaning invader, in those cases where there is one, but also for the neighbors of these countries who will have to endure the spillover effects of invasion.

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Press Freedom & Inflation in a Democracy: Modus Operandi for Protest?

Azizjon Azimi

Which factors lead to mass mobilization and collective action? This question exploring the determinants of protest has been studied extensively in the field of political science. Present hypotheses in the literature assign significance to a variety of conditions, from economic factors to political systems. This research incorporates elements of two overarching hypotheses—transparency and grievances—by introducing an interaction model. It delves into examining determinants of protest by testing press freedom as a proxy for transparency and inflation as a proxy for grievances, along with joining the two in an interaction variable. A cross-national time-series analysis covering 93 democracies from 1995 to 2011, the research employs OLS and Poisson regressions to find strong significance for the interaction, as well as reinforcing stipulations of the relative deprivation theory and the transparency argument.

Introduction

This research investigates the joint effect of press freedom and inflation on protest, which is part of a larger question of collective action and mass mobilization in the field of political science. Historically, there has been plenty of research conducted on determinants of protest: labor unionization and emergence of strikes in the 19th and 20th centuries across the western hemisphere were topics of significant interest for social scientists studying protests. A wider impetus for research emerged after the fall of communist regimes in Eastern Europe amidst public demonstrations of late 1980s, as well as "color revolutions" in post-Soviet republics in early 2000s. Recently, the protest literature has been burgeoning due to the phenomenon of the Arab Spring movement that swept across the Middle East and North Africa in 2011.

Transparency and grievances have been identified as important determinants of protest in numerous studies. As such, emergence of protest has been found to be subject to strategic complementarities, with willingness of a citizen to participate in anti-government demonstration being contingent on willingness of other citizens to also participate. Such willingness has been theorized to improve with the presence of coordination goods that allow for political coordination, such as free press, or with the exacerbation of economic conditions, such as rising inflation. Furthermore, liberalization of the press has been strongly correlated with democracy, where public protest is generally commonplace and legally

unpunished. Thus, one faces the following question: does a concurrent rise in transparency, through press freedom, and decline in economic well-being, through inflation, pave the way for protests in a democracy? I contend that citizens are more likely to mobilize when there is a free press, which is a proxy for transparency, that informs the public of increase in inflation – reflecting a decrease in purchasing power of the population. This eases the collective action problem by stirring social grievances and paves the way for mass mobilization. The research fills in the existing gap in literature by utilizing an interaction model, investigating the simultaneous impact of press freedom and inflation on protest in democracies, while controlling for a number of other variables that have been identified as protest determinants in the literature. I employ two distinct regression methods in order to have the most thorough testing of my hypotheses. Consideration of simultaneous effects of coordination goods and grievances opens up an arena for further work on determinants of protest, which expands on the findings of this research.

Literature Review

It has been established that protest is subject to a collective action problem, and that the willingness of a given citizen to participate in anti-government mobilization is contingent on the willingness of others to similarly participate (Bueno de Mesquita 2010; Kuran, 1991; Lohmann, 1993). Free riding and personal gain have also been identified as default expectations for participants of collective action movements. (Tullock 1971). Hence, a given citizen grows more willing to engage in protest if he/she believes that others are similarly willing to mobilize – making mass unrest subject to strategic complementarities (Rosendorff, Hollyer and Vreeland 2013). A rise in perception of others' willingness to protest increases a given citizen's view of the likelihood of a protest's success, providing incentives for mobilization to further personal gain.

This paper's focus on democratic states stems from an extension of the selectorate theory of Bueno de Mesquita et al (2003). According to this theory, political systems can be classified through identification of two groups – the winning coalition (W) and the selectorate (S). The winning coalition is a group of individuals whose support is imperative for a leader's retention of power, while the selectorate consists of a larger group from which members of the winning coalition can be drawn (Bueno de Mesquita et al. 2003). As such, democracies tend to have larger winning coalitions than autocracies. For instance, the winning coalition in a single-member district two-party system is roughly 25% of the electorate, or half of the votes in half of the contested seats (Bueno de Mesquita and Smith, 2009). In rigged electoral regimes, monarchies, or military juntas, the winning coalitions are substantially smaller – paving the way for leaders of such regimes to make greater use of private goods to satisfy the select few within that coalition. Conversely, leaders in democratic systems tend to focus more on the provision of public goods to meet the demands of their relatively large winning coalitions. Among such public goods are what Bueno de Mesquita (2003) classifies as coordination goods – goods, such as free press, that enhance peoples' coordination and ease barriers toward collective mobilization. Subsequently, because leaders in democracies resort more frequently and consistently to the provision of public goods, this paper focuses solely on democratic states to thoroughly investigate the impact of a specific coordination good –press freedom– on protest.

Similar to autocracies, leaders in democracies face a risk of deposition by political challengers from within their winning coalition and by revolutionary threats stirred through mass mobilization (Bueno de Mesquita et al. 2006). I will be exploring how leaders' decision to curb the latter phenomenon in

democracies impacts the emergence of protest. To reduce revolutionary threats, leaders can alter the provision of coordination goods. This can be done through either (1) suppression of coordination goods to reduce the ability for people to organize politically, or (2) advancement of coordination goods to increase citizen welfare and reduce desire for revolutionary change. Kuran (1989) produced a formal model focused on opposition growth that concluded press freedom is a significant variable in creating the ground for dissent while accounting for the cost of mobilization. As such, the opportunity of protest has been formally defined as anything that increases the likelihood of protest's success, while the threat has been defined as "the costs that a social group will incur from protest, or that it expects to suffer if it does not take action" (Goldstone & Tilly 2001). Although often overlooked, the role of press freedom as a coordination good is crucial in determining the likelihood of protests' success as availability of information shapes popular willingness to mobilize. This research looks into press freedom as an indicator of transparency and an independent variable in determining protest. Specifically, it tests Bueno de Mesquita's (2003) hypothesis that press freedom as a coordination good is not a sufficient condition for collective action, leading to further discussion on other determinants of protest.

The literature has stipulated the presence of socioeconomic grievances as necessary precondition for social mobilization, with theories of mobilization being previously based on Marxism and Durkheimian sociology (Tilly 1978). Marxist scholars understand social movements as demonstrations of class relations determined by the ownership structure of production means. In this view, the proletariat collectively mobilizes to alter the status quo in face of exploitation and impoverishment by the capitalist class. The models of class-based approach have, however, been seriously questioned in the work of Mancur and Olson (1965). Olson's results show that rational individuals trying to maximize their own benefits will not participate in collective action. In other words, rational individuals do not join social movements despite the motivation to satisfy their desire because of high costs of participation (Kitschelt 1991). In this regard, it is crucial to consider the response of state institutions to the emergence of protest movements. According to Olson, initial suppression of such movements by the state decreases a rational individual's willingness to participate in protest. Thus, it can be deduced that mass mobilization is most likely to take place in democracies, where freedom of assembly is nominally guaranteed.

On the other hand, Durkheimian sociological approach focuses on the collective action aspect and includes subcategories such as the collective behavior theory and relative deprivation theory, parts of which will be tested in this research. According to these theories, people feel grievances and challenge the existing system when economic changes in society lead to a decline in social well-being and increase in collective insecurity about pre-existing expectations. As such, the relative deprivation theory specifically argues that decrease in economic well-being is associated with more protest, especially among those in the lower socioeconomic strata with a low purchasing power. Relative deprivation is thus seen as motivating people to engage in protest activities (Lipsky 1968; Gurr 1970). Based on this hypothesis, popular frustration is achieved when there is a divergence between achievements and expectations (Gurr 1968). This frustration, stemming from the expectations-achievements gap, manifests itself through aggression and causes the population to rebel (Gurr 1970). Hence, it can be inferred that citizens will mobilize and publicly demonstrate when their achievements do not match expectations, which can occur through a negative change in either achievements or expectations. In this research, I will be using inflation as a proxy for decline in economic well-being and rise in grievances.

Using data from four waves of the European Social Survey, Solt (2010) examines whether and how the differences in levels of economic data, including inflation and income inequality, contribute to variation in people's tendencies to engage in political protest across countries and over time. Contrary to predictions of the relative deprivation theory, he finds that worse economic conditions are associated with less participation in protests among all individuals, except those in the highest income quintile. Conversely, Rosendorff, Hollyer and Vreeland (2013) find that the availability of public economic information promotes collective action and mobilization, making regimes more vulnerable to revolutionary threats from below. They conclude that transparency in the form of data dissemination promotes mobilization, including demonstrations and strikes, under autocratic regimes whose economic growth is under-performing. Hence, unrest is facilitated in autocracies through mechanisms that influence citizen beliefs such as availability of data on economic performance, as well as coordination goods at-large. On the other hand, they find that a rise in transparency leads to a decrease in protest in democracies. This conforms with the earlier assumption of selectorate theory that states increased provision of coordination goods can reduce the citizens' desire to revolt. To account for the result, they refer to the electoral mechanism and note that under democratic systems people can express their grievances through the ballot box rather than by protest (Rosendorff, Hollyer and Vreeland 2013).

Studies have also shown the varying effect of independent media across regime types (Whitten-Woodring 2009; Whitten-Woodring and James 2012). Press freedom in a democracy has been found to be associated with improvement in human rights through a two-way interaction model. In addition, Whitten-Woodring and James (2012) employed a system of static equations that indicated protest is most likely to occur when democracy is present and media are not independent. This paradox of absence of free media in a democracy has come to the center of attention in the relevant literature. For instance, the Russian Federation was consistently classified as a democracy on polity for the majority of Vladimir Putin's first two terms in power despite having grim press freedom indicators[1] [2]. Whitten-Woodring and James (2012) suggest that although maintaining tight control over the press and the media is more beneficial for those in power, consistent application of this practice is also costly. Therefore, regimes might opt out for partial free press in order to reduce costs. The resulting greater availability of coordination goods makes participation in mass movements easier and promotes collective action, yielding a net effect of mobilization. Additionally, Egorov, Guriev, and Sonin (2009) theorize that leaders permit media freedom in order to stay informed about the performance of low levels of bureaucracy in remote regions. This is illustrated in the policies employed by the World Bank and other multilateral financial institutions to encourage media freedom in developing countries in an effort to promote democratization (Egorov, Guriev, and Sonin 2009).

This leads to discussion of another determinant of protest considered in the literature on collective action – level of democracy. Empirical studies have found that lack of democracy is positively correlated with the emergence of domestic dissent in the form of protest and armed rebellion. (Bueno de Mesquita et al. 2005; Shellman 2006; McCormick and Mitchell 1997; Poe and Tate 1994; Poe, Tate, and Keith 1999: Davenport and Armstrong 2004; Davenport 2007). Rasler (1996) investigates how and why the Shah's policy of repression catalyzed the revolutionary mobilization of the Iranian people from the 1950s to late

1 http://www.systemicpeace.org/polity/rus2.htm

2 https://freedomhouse.org/report/freedom-press/2015/russia

70s. He puts into question several major theories of protest, including the relative deprivation and value expectancy theories, to sort out the empirical relationships between protest behavior, strikes, concessions, and repression prior to the 1979 Revolution. Using data on 26 provinces over 20 years (520 observations), estimates from Poisson regression models demonstrated that repression had a short-term negative effect and a long-term positive effect on overall levels of protest. He concludes by stating that understanding the escalatory dynamics in the Iranian case can increase understanding of similar cases, such as in the Philippines in 1986, and the communist Eastern European governments in 1989. Rasler's finding is very useful for this research, and I will adapt it to the framework of democratic states by using cross-national polity data to account for intra-democratic variation, in addition to employing Poisson regression methods.

Presence of repression in a democracy is a paradox with plenty of practical examples. For instance, countries such as Brazil, India, Israel, Mexico or Russia, which have been consistently classified as democracies on Polity for longer periods of time, have ranked highly in terms of repression on the Political Terror Scale (PTS 2015). Another finding on repression as determinant of protest is Francisco's (1995) hypothesis that extreme repression in the long-term fuels oppositional activity and hence, political mobilization. Rasler (1996) had used this to infer that repression's pattern of effects stems from a combination of deterrent and micromobilization mechanisms. Francisco (1995) notes that concessions expanded the protests by accelerating massive urban strikes that led to greater oppositional activity, in line with Rasler's (1996) findings. This led me to include labor strikes in my definition of protest using data from the Cross National Time Series (CNTS) Archive.

It is important to note that the reduction in provision of political coordination goods under a repressive environment results in reduced ability for people to coordinate economically, yielding a decrease in productivity and overall economic activity. This, however, does not have negative consequences for leaders with access to abundant labor-free resources that can freely suppress coordination goods due to insignificant reliance on taxation of productive sectors of the economy. Bueno de Mesquita and Smith (2010) contend that the exact trajectory of leaders' response can be determined by examining the nature of government finance. Thus, consistent with theoretical predictions, they find that leaders with access to free resources suppress coordination goods as a response to growing revolutionary threat. To account for this finding, I will be controlling for a number of indicators related to government financing such as oil revenues and natural resources as percentage of GDP, volumes of tax revenue, final consumption, military expenditure, and per capita gross domestic product in the regression specifications.

Income inequality is also used as an indicator of grievances in explaining the rise of protest movements, although in ways that are often contradictory or inconsistent. Gurr (1970) suggests that inequality sharpens grievances that motivate more people among the poor to protest. Under high levels of inequality, individuals have larger incentives to fight for democracy because democracies are more redistributive than autocracies. In non-democratic regimes, higher levels of economic inequality increase public frustration and the likelihood of collective action by the poor to organize revolutionary change. Nevertheless, empirical studies have found both positive and negative relationship between income inequality and emergence of protest. By utilizing a cross-sectional time-series dataset covering 196 countries between 1963 and 2008, Berg (2013) finds a positive effect of inequality on protest conditional on triggers of collective action. This research expands on the model by considering the impact of press freedom that is important in conveying information about changes in persisting status quo of socioeconomic inequality

to the general public, stirring public discontent and protest.

Berg (2013) cites an important role in the Egyptian uprising of 2011 played by popular demand for improvement of the distributive status quo sustained through authoritarian rule. This notion was supported by the World Values Surveys, which measures people's perception of inequality, which suggested Egyptians had become more hostile to inequality and increasingly dissatisfied with the patterns of income distribution (The World Bank 2013). Furthermore, unequal income distribution and increased economic woes were identified as particular elements stirring collective action to demand change not just in Egypt, but also throughout the region at-large (Abdel Meguid, El Banna, Korayem and Salah Eldin 2011). Macculoh (1995) found that more people had preference for protest when inequality in their nation was high. The research utilized two surveys of revolutionary preferences across a quarter-million randomly sampled individuals, and found that a 1-standard-deviation increase in the Gini coefficient explained up to 38 percent of the standard deviation in support for protest.

Finally, there are other determinants of protest present in the literature that are beyond the aforementioned general framework. For instance, it has been found that rapid rates of urbanization in the West throughout the 19th and 20th centuries were crucial in widening class-based mobilization through labor unionization (Tilly 1978). Increased participation of the working class in unions produced a sharp rise in strikes, with most notable examples including the 200,000-strong Great Southwest Railroad Strike of 1886 and the 400,000-strong Railroad Shop Workers Strike of 1922, both in the United States (Cassity 1979 & Davis 1997). Concurrently, development of technologies that further enhance popular coordination such as mobile phones and the internet have been subject of many studies in the literature. Thus, I account for urbanization, population density, mobile subscriptions, and internet access as control variables in this research.

Theoretical Framework & Hypotheses

Bridging the gap between Rosendorff, Hollyer and Vreeland's (2013) findings and stipulations of the relative deprivation theory, I argue that a rise in transparency through increased press freedom leads to more protest in democracies if it takes place concurrently with a decline in economic well-being represented by rising inflation. This is achieved through the following mechanism: increase in transparency enables people to learn about the decline in economic well-being, stirring grievances and paving the way for mobilization. Press freedom, which serves as a proxy for transparency, is then vital in disseminating information to the public and easing the collective action problem. As per the relative deprivation theory, I suspect that an increase in inflation exacerbates social grievances by widening the expectations-achievements gap through a decrease in purchasing power of the population, all else being equal. The trigger effect of changes in price levels occurs despite a stabilizing role played by relative levels of societal wealth, which can be explained in the prism of Olson's famous conclusion: "it is not those who are accustomed to poverty, but those whose place in the social order is changing, who resort to revolution" (1963). Thus, the quintessential argument of this research is that an interaction of transparency and grievances jointly leads to protest.

It is also worthy to dissect this claim and investigate separately the impact of each independent variable on protest. Rosendorff, Hollyer and Vreeland's (2013) finding that a rise in transparency per se leads to a decrease in protest in democracies can be tested individually. Increased provision of transparency

allows people to coordinate more freely, reinstating the pre-existing expectations-achievements equilibrium of sociopolitical status quo and decreasing popular desire for revolt. At the same time, freer press is able to increase the availability of public economic information to the people, leading to a change in assessment of incumbent leaders. This substitutes the popular need for mobilization and collective action with electoral activity, preventing the outburst of protests. On the other hand, the relative deprivation theory argues that grievances stir protest irrespective of presence of other mediums due to weakening of social order that comes as a result of structural economic changes. Thus, it predicts that a rise in inflation will per se lead to an increase in protest, irrespective of transparency, level of repression, or any other factor. Because higher levels of transparency and electoral competitiveness in democracies enable collective action in democratic systems, these factors provide a basis for using the relative deprivation theory for analysis. Moreover, this research includes a number of control variables, such as real lending interest rate, per capita GDP and change in GNI, that have been used as proxies for grievances in the literature.

Hypothesis I: Greater press freedom and higher inflation lead to more protest

This interaction model is an extension of Rosendorff, Hollyer and Vreeland's (2013) finding and claims on the relative deprivation theory. It stipulates that a concurrent rise in press freedom, which eases collective action, and inflation, which increases popular grievances through surge in price levels, leads to protest. The alternate hypothesis suggests that press freedom and inflation jointly have no impact on protest.

Hypothesis II: Greater press freedom leads to less protest

This hypothesis directly tests the result of Rosendorff, Hollyer and Vreeland's (2013) paper that increase in transparency in democracies decreases protest. Peoples' ability to assess government performance is enhanced through freer press, which improves political coordination and eases collective action – appeasing the popular fervor to protest. Furthermore, presence of electoral competitiveness discourages people from protesting by providing an institutional alternative – voting against the incumbent in the next elections. Alternate hypothesis postulates that there is no relationship between press freedom and protest.

Hypothesis III: Rise in inflation leads to more protest

An extension of the relative deprivation theory, this hypothesis suggests that a rise in inflation induces negative socioeconomic changes and produces an imbalance in the expectations-achievements gap. Subsequently, this provides the ground for mass mobilization and collective action. Intra-democratic variation in state capacity and repressive institutions are taken into account through inclusion of corresponding control variables discussed later in this research. The alternate hypothesis is that inflation is not correlated with protest.

The unit of analysis is country-year with a sample of 93 democracies from 1995 to 2011. The panel data is a segmented version of an initial dataset that included 194 countries in the same time period. Segmentation of democracies was completed by dropping observations with a polity score of less than 6. As such, based on polity classifications, scores below 6 correspond to anocracies and autocracies, while a score of 6 or above constitutes a democracy. Limited nature of time period covered stems from the absence of

complete numerical scores in the Freedom House's press freedom dataset in the period before 1994. Data in the preceding period included assignments of three categories of ranks: free, partly free, and not free. Historically, democracies overwhelmingly received classifications of "free." Therefore, creating dummy variables for these classifications would not have sufficiently captured the intra-democratic variation in levels of press freedom. Consequently, I have focused on the complete numerical set so as to account for variation in press freedom within democracies.

Table 1: Summary of Hypotheses

	Protest
Transparency ↑	↓
Grievances ↑	↑
Transparency & Grievances ↑	↑

The research uses two distinct regression methods with robust standard errors – Ordinary Least Squares (OLS) and Poisson regressions. This is done to account for positively skewed distribution of protest data that contains a large number of observations with a value of 0, as evident in Figure 1 below. Protest data is log transformed in OLS specifications in the following way: log(*protest*) = log(*protest + 1*). This is done in order to prevent significant loss of data resulting from undefined values generated by taking the log of zero. Concurrently, because protest data is in form of count data, application of Poisson regression estimates has a number of substantive additions to present in comparison with OLS specifications. Firstly, Poisson regressions presume errors to follow the Poisson distribution – which is already skewed and nonnegative. Secondly, as opposed to modeling the response variable as a linear function of regression coefficients, Poisson regressions model the natural logarithm of the response variable as a function of regression coefficients. The principal Poisson regression model for an observation *i* is as follows:
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$$\Pr(Y_i = y_i \mid \mu_i, t_i) = \frac{e^{-\mu_i t_i} (\mu_i t_i)^{y_i}}{y_i!}$$

where

$$\mu_i = t_i \mu(\mathbf{x}_i'\boldsymbol{\beta})$$
$$= t_i \exp(\beta_1 X_{1i} + \beta_2 X_{2i} + \cdots + \beta_k X_{ki})$$

That is, the outcome will follow a Poisson distribution for a given set of predictor variables. Moreover, the successful use of these estimates in Rasler's (1996) research on protest demonstrates the importance of Poisson regressions in estimating count variables. Thus, the use of Poisson regressions adds a unique aspect to this research that enables it to consider the interaction impact in a more discrete form. The following is a breakdown of the dependent and independent variables:

Dependent Variable: Protest

Protest is defined as frequency of public anti-government demonstrations and/or strikes with a minimum participation of 100 people. Data is taken from the Cross-National Time-Series (CNTS) Archive. The frequency distribution of protest data reinforces the aforementioned observation of values being positively skewed:

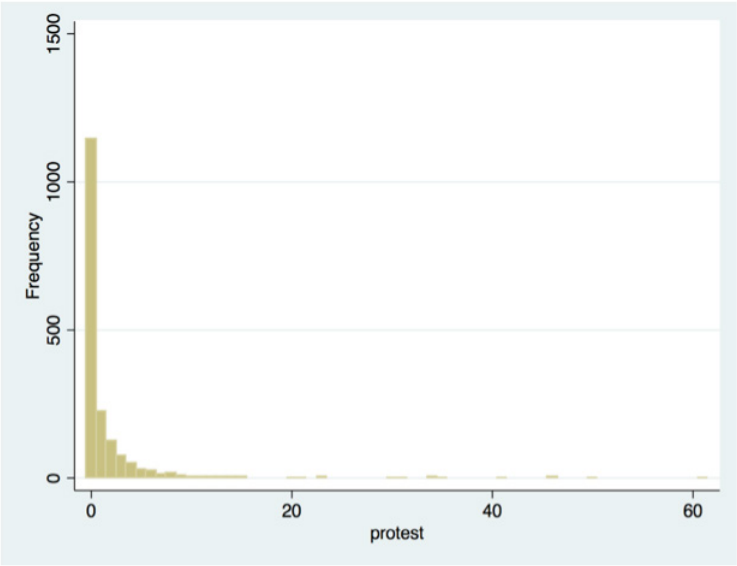

Figure 1: Frequency distribution of protest data

Independent Variables: Press Freedom & Inflation

Press freedom data is taken from Freedom House's Freedom of the Press index. It measures media independence assessing the degree of print, broadcast, Although numerical scores have been assigned

since 1980, full scores on a 0-100 scale for all countries were not compiled until 1994. Crucial distinction to note is that a score closer to 0 denotes more press freedom, while score of near 100 stipulates less press freedom. Thus, in order to prevent confusion, the variable name for press freedom has been changed to "*pressrestriction*" so as to logically correspond to index classification. As expected, most of observations for democracies occur in the lower range of press restriction data, meaning that democracies tend to have high levels of press freedom:

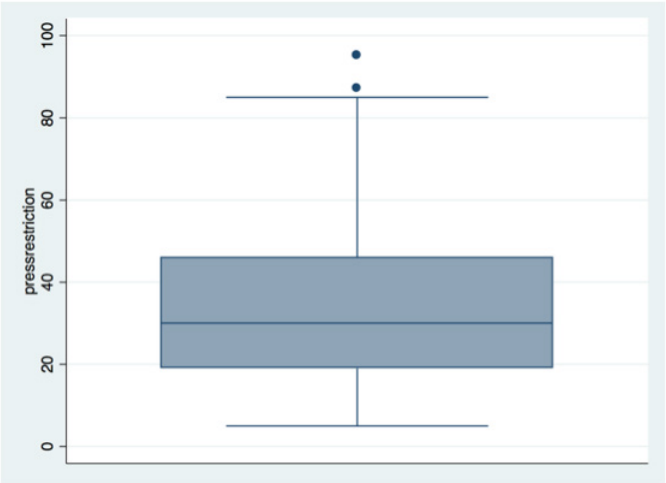

Figure 2: Box-and-whiskers plot of Press Restriction

Inflation, as measured by the annual growth rate of the GDP implicit deflator, shows the rate of price change in the economy as a whole. The GDP implicit deflator is the ratio of GDP in current local currency to GDP in constant local currency. The data is extracted from World Bank's World Development Indicators database and covers 214 countries and territories since 1960. An important distinction to make is the use of GDP deflator method in measuring inflation as opposed to the consumer price index approach. Because the consumer price index calculations are based on a fixed basket of goods, they often do not accurately capture changes in consumption and investment behavior of consumers across time. Thus, this research refers to inflation data calculated with the GDP deflator method where a varied basket of goods is used to determine annual price changes.

Summary statistics and taxonomy for all variables, as well as a list of countries in the data are listed in the appendix. Majority of data were taken from the World Bank's World Development Indicators (WDI)—primary World Bank database compiles information from internationally-recognized sources including United Nations bodies and the International Monetary Fund. The WDI database has been one of the most cited sources of data in social science research, although it has its own setbacks. Questions have been raised with regards to the validity of data provided by sovereign governments and aggregated in various indicators of the World Bank. An example is the case of Greece before the emergence of its sovereign debt crisis, when an ex-post investigation showed country's government officials intentionally

forged data on key indicators such as public finances[3]. It is worthy to note that the World Bank has taken steps to counter such discrepancies, including regular staff reviews of indicators for validity and reliability, as well as initiatives to improve statistical capacity of developing countries[4]. Nonetheless, this paper's focus on democratic states maximally safeguards the data from politicization and misreporting, which is often a trademark of autocratic regimes.

Regression Specifications

Model 1 (OLS):

$$Log\ (Protest)_{it} = \alpha + \beta_1 PressRestriction_{it} + \beta_2 Inflation_{it} + \beta_3 (PressRestriction\ x\ Inflation)_{it} + FE(year_{it}) + \varepsilon_{it}$$

Model 2 (OLS):

$$Log\ (Protest)_{it} = \alpha + \beta_1 PressRestriction_{it} + \beta_2 Inflation_{it} + \beta_3 (PressRestriction\ x\ Inflation)_{it} + \beta_4 Urbanization_{it} + \beta_5 Log(Population)_{it} + \beta_6 Log(Military)_{it} + \beta_7 Internet_{it} + \beta_8 Log(GDP\ per\ capita)_{it} + \beta_9 Log(Consumption)_{it} + FE(year_{it}) + \varepsilon_{it}$$

Model 3 (OLS):

$$Log\ (Protest)_{it} = \alpha + \beta_1 PressRestriction_{it} + \beta_2 Inflation_{it} + \beta_3 (PressRestriction\ x\ Inflation)_{it} + \beta_4 Log(Tax\ Revenue)_{it} + \beta_5 \Delta GNI_{it} + \beta_6 Mobile_{it} + \beta_7 Density_{it} + \beta_8 NaturalResources_{it} + FE(year_{it}) + \varepsilon_{it}$$

Model 4 (OLS):

$$Log\ (Protest)_{it} = \alpha + \beta_1 PressRestriction_{it} + \beta_2 Inflation_{it} + \beta_3 (PressRestriction\ x\ Inflation)_{it} + \beta_4 Log(Military)_{it} + \beta_5 Internet_{it} + \beta_6 Mobile_{it} + \beta_7 Unemployment_{it} + \beta_8 Polity2_{it} + \beta_9 InterestRate_{it} + FE(year_{it}) + FE(country_{it}) + \varepsilon_{it}$$

3 http://www.nytimes.com/2010/05/05/business/global/05iht-greece.html?_r=0

4 http://data.worldbank.org/about/data-programs

Model 5 (OLS):

$$Log\ (Protest)_{it} = \alpha + \beta_1 PressRestriction_{it} + \beta_2 Inflation_{it} + \beta_3 (PressRestriction\ x\ Inflation)_{it} + \beta_4 Urbanization_{it} + \beta_5 Log(Military)_{it} + \beta_6 Log(GDP\ per\ capita)_{it} + \beta_7 Log(Consumption)_{it} + \beta_8 Log(Tax\ Revenue)_{it} + \beta_9 \Delta GNI_{it} + \beta_{10} InterestRate_{it} + FE(year_{it}) + FE(country_{it}) + \varepsilon_{it}$$

Model 6 (Poisson):

$$Protest_{it} = \alpha + \beta_1 PressRestriction_{it} + \beta_2 Inflation_{it} + \beta_3 (PressRestriction\ x\ Inflation)_{it} + \beta_4 Internet_{it} + \beta_5 Density_{it} + \beta_6 Unemployment_{it} + \beta_7 Polity2_{it} + \varepsilon_{it}$$

Model 7 (Poisson):

$$Protest_{it} = \alpha + \beta_1 PressRestriction_{it} + \beta_2 Inflation_{it} + \beta_3 (PressRestriction\ x\ Inflation)_{it} + \beta_4 Urbanization_{it} + \beta_5 Log(Population)_{it} + \beta_6 \Delta GNI_{it} + \beta_7 Unemployment_{it} + \beta_8 InterestRate_{it} + \varepsilon_{it}$$

It is also important to comment on the interpretation of coefficients within this research design. For the log-linear model of OLS regressions, a one-unit increase in predictor variable X multiplies the expected value of response variable Y by the base of natural logarithm to the power of coefficient β. However, if the magnitude of β is small, which is the expectation in this linear-log case, (100 x β) can be used to determine the expected percentage change in response variable Y for a unit increase in predictor variable X. As for interpretation of Poisson coefficients, β corresponds to a change in the difference of logs of expected response counts for a one-unit increase in X conditioned on holding other predictor variables constant.

Results

Hypothesis I

Regression results, presented below, demonstrate that the interaction term is highly significant at a 1% level across all models and regression methods. Such robust significance suggests a strong correlation between protest and the joint effect of press freedom and inflation. However, the interaction term's negative coefficient leads to further questioning of the exact relationship between these variables. To accept the hypothesis, a positive relationship between rise in inflation and press freedom and emergence of protest would need to be detected.

Table 2: Regression Results

	Model 1 OLS	Model 2 OLS	Model 3 OLS	Model 4 OLS	Model 5 OLS	Model 6 Poisson	Model 7 Poisson
Press Restriction	**0.0008 (0.0002)*** **	**0.00067 (0.00025)*** **	**0.0083 (0.0027)*** **	-0.008 (0.006)	-0.007 (0.007)	**0.017 (0.0096)***	**0.026 (0.007)*** **
Inflation	**0.0069 (0.0017)*** **	**0.0062 (0.0024)*** **	**0.00098 (0.00036)*** **	**0.018 (0.007)*** **	**0.025 (0.008)*** **	**0.0017 (0.0005)*** **	**0.002 (0.0005)*** **
Inflation x Press Restriction	**-0.000018 (2.87 x 10^{-6})*** **	**-0.000017 (3.4 x 10^{-6})*** **	**-0.00002 (6.75 x 10^{-6})*** **	**-0.0004 (1.5 x 10^{-4})*** **	**-0.0005 (1.8 x 10^{-4})*** **	**-0.000035 (1.3 x 10^{-5})*** **	**-0.000038 (1.5 x 10^{-5})*** **
Urbanization		**0.0044 (0.002)** **			-0.02 (0.017)		**0.02 (0.008)*** **
Log (Population)		**0.13 (0.025)*** **					
Log (Military)		0.041 (0.067)		0.036 (0.05)	0.11 (0.11)		
Internet		-0.0007 (0.001)		**0.0041 (0.002)** **		0.0047 (0.0061)	0.01 (0.009)
Log (GDP per capita)		-0.0039 (0.032)			-0.12 (0.18)		
Log (Consumption)		-0.065 (0.7)			0.03 (0.21)		
Log (Tax Revenue)			0.02 (0.013)		-0.31 (0.22)		
Δ GNI			**-0.016 (0.009)***		-0.005 (0.008)		
Mobile			0.0004 (0.0012)	-0.00064 (0.0013)			-0.0057 (0.004)
Density			**0.0004 (0.0003)***		-0.0019 (0.003)	0.0006 (0.0006)	**0.0008 (0.0007)***
Unemployment				0.012 (0.012)		0.02 (0.02)	0.03 (0.02)
Polity2				**-0.17 (0.06)*** **	-0.13 (0.09)	0.038 (0.11)	
Interest Rate				0.0024 (0.003)	-0.0008 (0.004)		
Natural Resources			-0.002 (0.003)		0.0006 (0.00		
Robust	✓	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓		
Country FE				✓	✓		
Cluster (country)	✓	✓	✓	✓	✓		
R^2	6.94	17.29	11.00	40.50	45.46	1.82	6.59
Countries	93	88	80	78	69	91	93
Observations	1,351	1,209	843	986	658	1,266	1,285

Robust standard errors in parentheses.

*p ≤ 0.10 **p ≤ 0.05 ***p ≤ 0.001

In order to further delve into this matter, we ought to examine the average marginal effects of one of the predictor variables on the response variable at different levels of the other predictor variable:

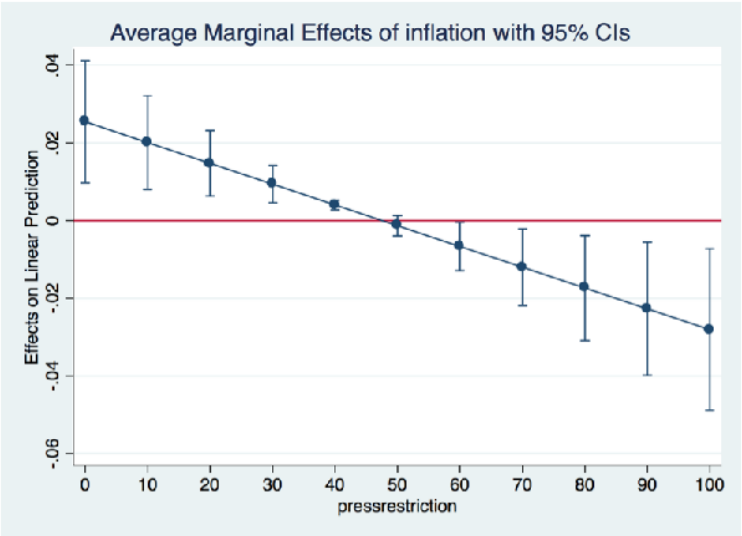

Figure 3: Average marginal effects of inflation on protest at different levels of *pressrestriction* from Model 5 (OLS)

This figure demonstrates that at low levels of press restriction—or high levels of press freedom—inflation has a positive effect on protest. Thus, it can be inferred, a free press disseminating information about negative economic data in the form of rising inflation leads to mobilization and emergence of protest. The precise trend is inflation has a higher positive effect at higher levels of press freedom, while having a more negative effect at lower levels of press freedom—in accordance with Bueno de Mesquita's (2003) finding. To further test the significance of marginal effects, let us examine results from Model 3 (OLS):

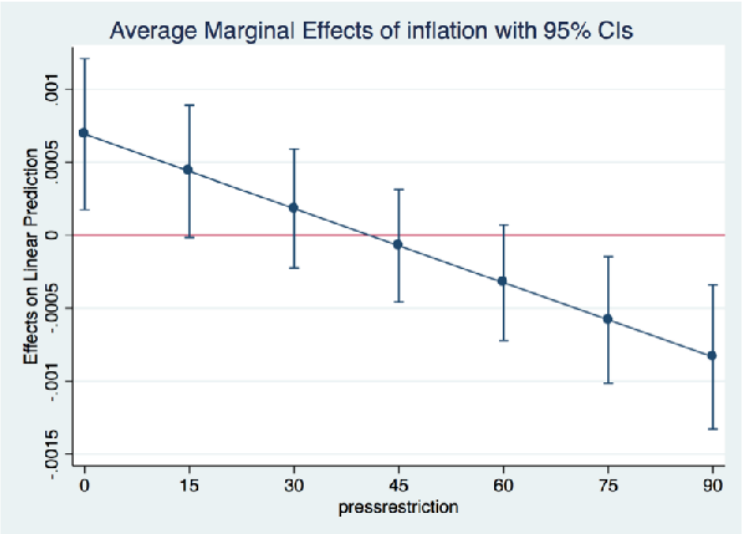

Figure 4: Average marginal effects of inflation on protest at different levels of *pressrestriction* from Model 3 (OLS)

Figure 4 allows us to identify the exact cutoff for significance of these results: inflation has a positive effect on protest when press restriction is below the numerical score of 15. Concurrently, inflation has a negative impact on protest when press restriction is above the score of 75. Both of these marginal effects figures reinforce the central hypothesis of this research, at lower levels of press restriction—or higher levels of press freedom—inflation has a positive effect on protest. Furthermore, the marginal effects from Poisson regressions presented in Appendix F also support this hypothesis by demonstrating a positive impact of inflation on protest at high levels of press freedom. As such, the hypothesis that greater press freedom and higher inflation jointly lead to protest, is accepted. The following table lists all countries that had a press restriction score of 15 or less for at least one year in between 1995 and 2011:

Table 3: List of countries with press restriction score of 15 or below and frequency of their observations (i.e. Australia had a score of 15 or below for 11 years in-between 1995 and 2011)

country	Freq.	Percent	Cum.
Australia	11	5.50	5.50
Austria	6	3.00	8.50
Belgium	18	9.00	17.50
Canada	4	2.00	19.50
Costa Rica	1	0.50	20.00
Denmark	18	9.00	29.00
Finland	11	5.50	34.50
Germany	6	3.00	37.50
Jamaica	6	3.00	40.50
Luxembourg	18	9.00	49.50
Netherlands	14	7.00	56.50
New Zealand	17	8.50	65.00
Norway	18	9.00	74.00
Portugal	4	2.00	76.00
Solomon Islands	3	1.50	77.50
Spain	1	0.50	78.00
Sweden	18	9.00	87.00
Switzerland	18	9.00	96.00
United States	8	4.00	100.00
Total	200	100.00	

Now, to examine substantive effects of the interaction term, we need to take a closer look at the coefficients. As mentioned in the research design section, in OLS regressions the expected percentage change in response variable Y for a unit increase in predictor variable X can be measured by multiplying the coefficient of X by 100. At the same time, Poisson coefficients represent the predicted difference in the logs of expected counts. In measuring the substantive effect of this interaction term, we presume the result is the expected percentage change (for OLS) or expected log difference (for Poisson) in protest for a simultaneous 1% increase in inflation and one-unit increase in press restriction score (i.e. one-unit decrease in press freedom). Hence, due to the fact that the interaction term is rightly negative across these models, we ought to reverse the sign when estimating the expected percentage change or log difference in protest to properly account for press freedom as opposed to press restriction.

Table 4: Substantive effects of the interaction term in OLS models (% in change in protest with 1% rise in inflation one-unit increase in press freedom)

	Model 1	Model 2	Model 3	Model 4	Model 5
Expected Percent Change in Protest	**0.0018%**	**0.0017%**	**0.002%**	**0.04%**	**0.05%**

Table 5: Substantive effects of the interaction term in Poisson models (expected difference in logs of expected counts of protest with 1% rise in inflation and one-unit increase in press freedom)

	Model 6	Model 7
Expected Difference in Logs of Expected Counts	**0.000035**	**0.000038**

The small-scale magnitude of interaction term's substantive effects throughout these models can be explained by a significant discrepancy in measurement of variables. As such, summary statistics in Appendix B demonstrate this discrepancy: while the range of values for protest is 61, it is over 4,000 in inflation values and 90 in press restriction values. Consequently, the simultaneous effect of press freedom and inflation has a highly statistically significant, yet disproportionately small impact on protest occurrence. The most substantive results are produced by OLS models 4 and 5, where country fixed effects are added.

Hypothesis II

Press freedom is found to be significant in 5 of the 7 models. The positive coefficient in models of significance suggests that a rise in press restriction (i.e. decrease in press freedom) leads to more protest. Consequently, it can be inferred, a rise in press freedom leads to less protest, which supports Rosendorff, Hollyer and Vreeland's (2013) claim. Concurrently, the two models where press freedom is found to be meagerly insignificant and has negative coefficients are OLS models with country fixed effects. This points to the fact that intra-country factors omitted in the analysis might have an impact on emergence of protest. Although this paves the way for rejecting the hypothesis and concluding that transparency per se is not correlated with protest, I contend that the strong significance found for press freedom in Poisson regression models provides the ground for accepting the hypothesis. To further investigate this claim, I ran an additional Poisson regression model without controls:

Table 6: Poisson regression model without controls

	Pressrestriction	Inflation	Pressrestriction x Inflation	Countries	R^2	Observations	Cluster (country)	Robust
Model 8	**0.018 (0.007)*** **	**0.0014 (0.0004)*** **	**-0.000032 (1.4 x 10^{-5})*** **	93	2.44	1,342	✓	✓

Robust standard errors in parentheses.

*p ≤ 0.10 **p ≤ 0.05 ***p ≤ 0.001

As such, it is evident that press freedom is strongly correlated with protest. Hence, I argue that a different set of control variables might have produced significance for press freedom in OLS models with country fixed effects, which opens up the room for further research on other controls. In terms of substantive effects, the result is similar to that of the interaction term. The most substantive coefficient occurs in Model 3 (OLS), which suggests that a one-unit increase in press freedom score leads to 0.83% decrease in frequency of protest:

Table 7: Substantive effects of press freedom in OLS models (% in change in protest with one-unit rise in press freedom score)

	Model 1	Model 2	Model 3	Model 4	Model 5
Expected Percent Change in Protest	**-0.08%**	**-0.067%**	**-0.83%**	-	-

Table 8: Substantive effects of inflation in Poisson models (expected difference in logs of expected counts

	Model 6	Model 7
Expected Difference in Logs of Expected Counts	**-0.017**	**-0.026**

Hypothesis III

Inflation is found to be significant at 1% level across all specifications, maintaining a positive coefficient all-throughout. The finding suggests that a rise in inflation increases the frequency of protest, which is in line with predictions of the relative deprivation theory. Moreover, marginal effects of inflation in Poisson regressions presented in Appendix F reinforce this claim. As such, the hypothesis that exacerbation of economic conditions and resulting social grievances lead to more protest—an extension of the relative deprivation theory—is accepted. Models 4 & 5 (OLS) have the highest magnitude of inflation's substantive effect on protest:

Table 9: Substantive effects of inflation in OLS models (% in change in protest with 1% rise in inflation)

	Model 1	Model 2	Model 3	Model 4	Model 5
Expected Percent Change in Protest	**0.69%**	**0.62 %**	**0.098%**	**1.8%**	**2.5%**

Table 10: Substantive effects of inflation in Poisson models (expected difference in logs of expected counts of protest with 1% rise in inflation)

	Model 6	Model 7
Expected Difference in Logs of Expected Counts	**0.0017**	**0.002**

In addition, due to sufficient substantive effect of inflation in Models 4 & 5, it is possible to construct a prediction matrix of expected increase in number of protests given a 1% rise in inflation. If we take 2011, which is the last year of observation in the data, as a baseline and examine countries with the highest number of protests, we can identify the predicted number of additional protests in the following year based on significance of the inflation variable:

Table 11: Number of predicted additional protests after 2011

	USA	Greece	Tunisia
Model 4	1	1	1
Model 5	2	1	1

Controls

There are also a number of significant control variables across various specifications. Urbanization is significant at 5% in Model 2 (OLS) and at 1% in Model 7 (Poisson), with a positive coefficient in both, which falls in line with theoretical predictions found in the literature. The coefficient in Model 2 suggests that a 1% increase in urbanization leads to 0.44 percent increase in protest frequency in a given democracy. Because protests tend to be centered in cities and towns, it is logical to infer that a greater inflow of population into urban areas increases the frequency of protest. Furthermore, population (log *transformed*) is found to be significant at 1% in Model 2 (OLS). The coefficient of log(*population*) can be interpreted as follows: 1% increase in population leads to 0.13% increase in protests. The following figure demonstrates a positive line of fit for a scatter plot of log(*population*) and log(*protest*):

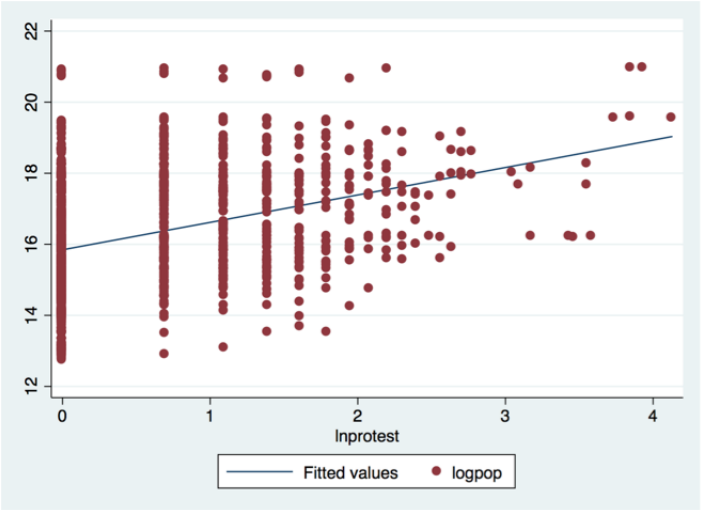

Figure 5: Scatter plot of log(*population*) and log(*protest*) with a line of fit

Another significant control variable is internet access. It is significant at 5% in Model 4 (OLS) with a positive coefficient that can be interpreted as follows: an additional internet user per 100 people in a democracy leads to a 0.41 % increase in protest. The internet has been instrumental in easing the collective action problem by allowing people to coordinate politically at relatively low socioeconomic costs online. The advent of social media platforms such as Facebook and Twitter has been actively cited in literature as driving mass mobilization, especially in democracies where internet freedom is generally higher. This leads to a discussion of another significant control—polity score. It is found to be significant at 1% in Model 4 (OLS) with a negative coefficient that stipulates a one-unit increase in polity score results in 17 % decrease in protests. Such substantive effect can be explained through the prism of electoral argument's substitution mechanism. As a country democratizes and has more competitive elections, the population chooses to express its grievances through the ballot box as opposed to mass mobilization and collective action. According to Model 4's results, this mechanism holds true for intra-democratic variation as well.

Conclusion

This research adds a new dynamic to the discussion of determinants of protest by introducing an interaction variable and simultaneously employing two distinct regression methods for robust testing. The finding of strong significance for a joint effect of press freedom and inflation bridges the gap between transparency and grievance theories of protest. This is demonstrated through a consistent finding that inflation has a more positive effect on protest at higher levels of press freedom, which was supported by both OLS and Poisson regressions. Furthermore, the research reinforces previous findings in the literature in two separate dimensions: it finds evidence supporting the arguments of (1) the relative deprivation theory and (2) Rosendorff, Hollyer and Vreeland's claim on transparency. As such, the significance of

inflation throughout all specifications presents a strong argument for the relative deprivation argument and expectations-achievements interpretation mentioned in the literature review. It also opens up the space for further research on other economic indicators serving as proxies for grievances & economic well-being. With regards to transparency, the research finds support for an increase in transparency leads to a decrease in protest. Although the press freedom coefficient was found to be slightly insignificant in two models, I attribute this to the choice of control variable given the press freedom variable's overwhelming significance in the rest of the models and Poisson regressions.

It is also worthy to point at constraints and limitations that hindered the scope and results of this research. First and foremost, the inconsistency in the volume of data of independent and dependent variables produced room for further improvement in future studies. For instance, the plentitude of data on press freedom scores from Freedom House and inflation from the World Bank within the 1995-2011 period was juxtaposed with frequent lack of protest data in the Cross-National Time-Series set. This severely limited the scope of analysis, which was reflected through lack of robust substantive effects in coefficients of key variables. In addition, the absence of comprehensive numerical scores in the press freedom dataset in the period prior to 1994 constrained the time scope of this research. Inclusion of data prior to 1994 would enable testing the research's findings in crucial historical periods such as worldwide protests of 1968 and demonstrations across Eastern Europe in the late 1980s and early 1990s.

Despite data-related difficulties, this research provides a basis for further studies into determinants of protest. The strong significance of the interaction term allows for consideration of other factors in this analytical framework. For instance, the interaction term can be expanded to include levels of repression within democracies. Conversely, economic and social indicators and metrics other than the ones presented in this paper can be tested as proxies for transparency and grievances. The significance of a number of control variables also necessitates a more detailed consideration of their impact on protest. Most importantly, this research paves the way for examining determinants of protest in autocratic regimes. The application of a joint effect of transparency and grievances on protest can be extended to study mass mobilization in autocracies despite the apparent differences in structure and functioning of state institutions.

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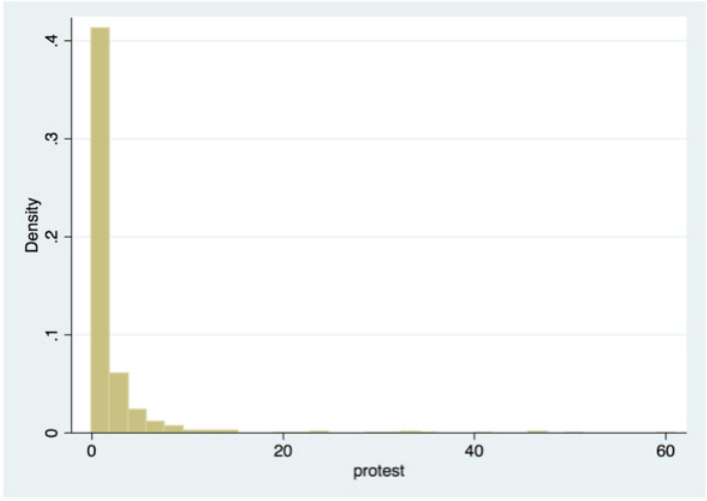
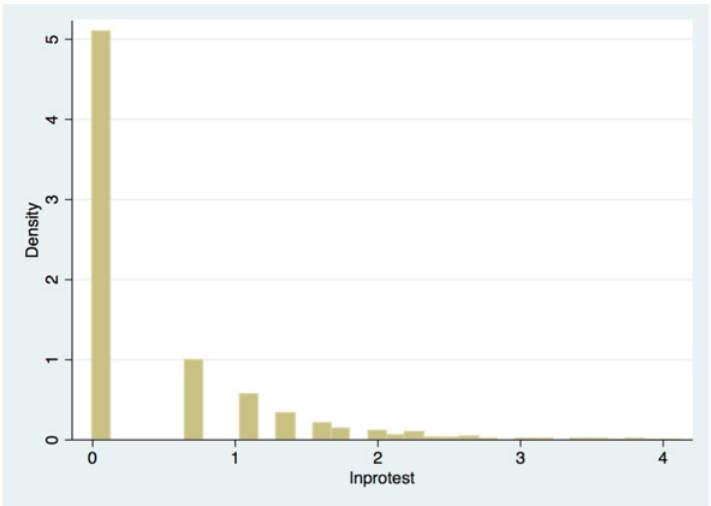
Appendix

Appendix A: Histograms of protest and log(protest)





Note: The histograms above depict the differences between distributions of protest and log(protest). As evident, the protest variable distribution is positively skewed, which is not sufficiently corrected by the log(protest) distribution. This served as basis for the use of Poisson regressions to have additional tests of hypotheses.

Appendix B: Summary Statistics of Variables

Variable	Mean	St. Dev.	Min.	Max.	Obs.	Source
Protest	1.27	3.85	0	61	1,744	UNTS
Log (Protest)	0.43	0.71	0	4.12	1,744	-
Inflation	17.60	144.02	-27.63	4,107.30	1,736	World Bank
Press Restriction	52.76	17.34	5	92	1,375	Freedom House
Consumption	4.34×10^{13}	1.27×10^{14}	2.76×10^{8}	6.36×10^{15}	1,697	World Bank
Log (Consumption)	26.83	2.77	19.44	36.39	1,697	-
Δ GNI	3.57	4.14	-31.52	26.41	1,516	World Bank
Polity2	8.55	1.45	6	10	1,718	Polity IV
Tax Revenue	6.44×10^{12}	4.10×10^{13}	1.40×10^{8}	6.45×10^{14}	1,121	World Bank
Log (Tax Revenue)	25.24	2.74	14.15	34.10	1,121	-
Unemployment	8.53	6.02	0.7	39.3	1,751	World Bank
Military Exp.	8.61×10^{11}	4.74×10^{12}	3.49×10^{8}	8.75×10^{13}	1,641	World Bank
Log (Military Exp.)	22.87	2.97	15.06	32.10	1,641	-
Mobile	52.02	48.08	0	208.94	1,751	World Bank
Internet	24.43	27.46	1.12×10^{-4}	92.02	1,665	World Bank
Interest Rate	7.44	11.67	-87.85	133.73	1,409	World Bank
Urbanization	60.38	21.34	8.67	97.67	1,751	World Bank
Density	124.12	1472.57	1.46	1,112.69	1,742	World Bank
GDP per capita	13,336.71	17,562.63	119.90	113,726.6	1,746	World Bank
Log (GDP per capita)	8.52	1.57	4.79	11.64	1,746	-
Oil Rents	1.41	4.91	0	68.82	1,699	World Bank
Population	4.12×10^{7}	1.27×10^{8}	3.39×10^{5}	1.28×10^{9}	1,756	World Bank
Log Population	16.17	1.55	12.73	20.97	1,756	-
Natural Resources	5.34	8.67	9.9×10^{-6}	69.29	1,713	World Bank

Appendix C: Taxonomy of Variables

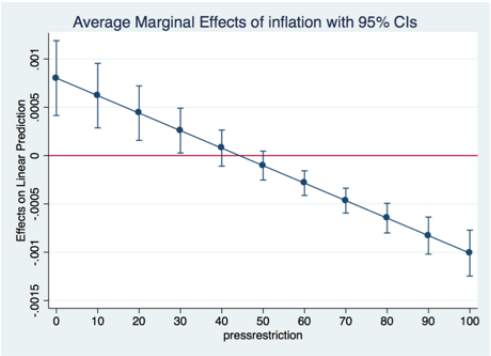
Variable	Measure	Unit
Protest	Frequency of public anti-government demonstrations and/or strikes with a minimum participation of 100 people.	Frequency, log transformed
Inflation	The rate of price change in the economy measured by annual growth rate of GDP implicit deflator.	Percent
Press Restriction	Media independence measure assessing the degree of print, broadcast, and digital media freedom.	Numerical Scores (0-100)
Consumption	Sum of private and general government consumption expenditures.	Current LCU, log transformed
Δ GNI	Change in gross national income.	Percent
Polity2	Evaluation of elections for competitiveness and openness, the nature of political participation, and the extent of checks on executive authority.	Numerical Scores (6-10)
Tax Revenue	Compulsory transfers to the central government for public purposes.	Current LCU, log transformed
Unemployment	Share of the labor force that is without work but available for employment.	Percent (out of 100)
Military Exp.	All current and capital expenditures on defense-related activities.	Current LCU, log transformed
Mobile	Mobile cellular telephone subscriptions with access to the PSTN.	Per 100 people
Internet	Internet users who have used the Internet in the last 12 months.	Per 100 people
Interest Rate	Lending interest rate adjusted for inflation as measured by the GDP deflator.	Percent
Urbanization	Percentage of population living in urban areas.	Percent (out of 100)
Density	Population density measured by midyear population divided by land area in square kilometers.	Ratio
GDP per capita	Gross domestic product divided by midyear population.	Current LCU, log transformed
Population	Total population of all residents living in a country.	Numerical, log transformed
Natural Resources	Total natural resources rents as percentage of GDP.	Percent (out of 100)

Appendix D: List of countries classified as a democracy (polity score > 6) for at least one year in-between 1995 and 2011.

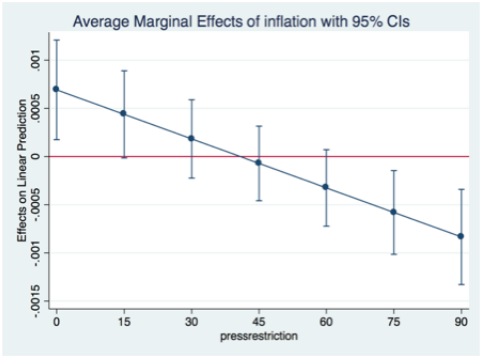
1. Albania
2. Argentina
3. Australia
4. Austria
5. Belgium
6. Benin
7. Bolivia
8. Botswana
9. Brazil
10. Bulgaria
11. Burundi
12. Canada
13. Chile
14. Colombia
15. Comoros
16. Costa Rica
17. Croatia
18. Cyprus
19. Czech Republic
20. Denmark
21. El Salvador
22. Estonia
23. Finland
24. France
25. Georgia
26. Germany
27. Ghana
28. Greece
29. Guatemala
30. Guinea Bissau
31. Guyana
32. Honduras
33. Hungary
34. India
35. Indonesia
36. Ireland
37. Israel
38. Italy
39. Jamaica
40. Japan
41. Kenya
42. Kosovo
43. Kyrgyzstan
44. Latvia
45. Lebanon
46. Lesotho
47. Liberia
48. Lithuania
49. Luxembourg
50. Macedonia
51. Malawi
52. Malaysia
53. Mali
54. Mauritius
55. Mexico
56. Moldova
57. Mongolia
58. Montenegro
59. Namibia
60. Nepal
61. Netherlands
62. New Zealand
63. Nicaragua
64. Niger
65. Norway
66. Pakistan
67. Panama
68. Paraguay
69. Peru
70. Philippines
71. Poland
72. Portugal
73. Romania
74. Senegal
75. Sierra Leone
76. Slovak Republic
77. Slovenia
78. Solomon Islands
79. Somalia
80. South Africa
81. South Korea
82. Spain
83. Sweden
84. Switzerland
85. Thailand
86. Trinidad and Tobago
87. Tunisia
88. Turkey
89. Ukraine
90. United Kingdom
91. United States
92. Uruguay
93. Zambia

Appendix E: Average marginal effects of inflation from OLS regressions

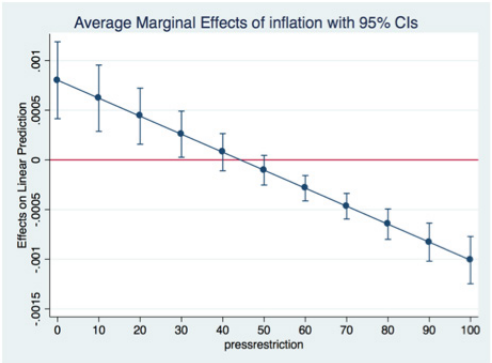
Model 1



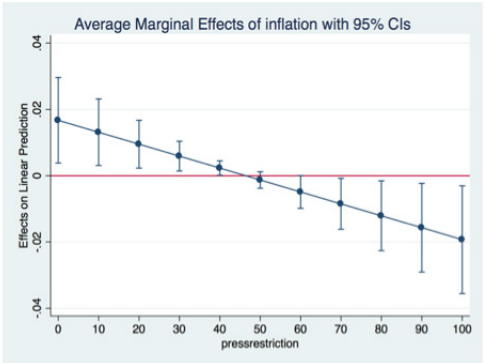
Model 2



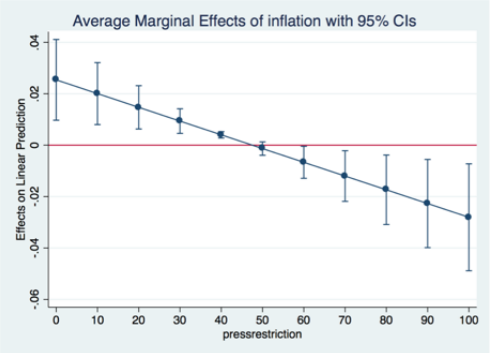
Model 3



Model 4

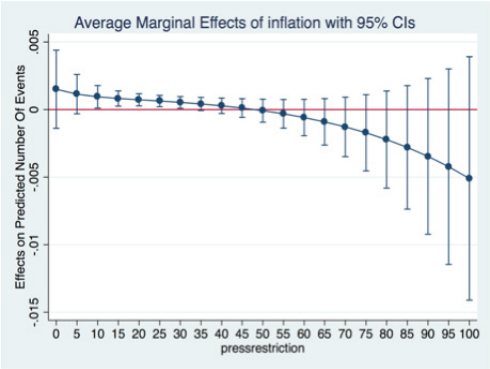


Model 5



Appendix F: Average marginal effects of inflation from Poisson regressions

Model 6



Model 7