Does Citizenship Abate Class? Evidence and Reflections from Bangalore, India

Ebony Bertorelli, Patrick Heller, Siddharth Swaminathan,
Ashutosh Varshney

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Ebony Bertorelli (Janaagraha Center for Citizenship and Democracy)
Patrick Heller (Brown University)
Siddharth Swaminathan (Azim Premji University)
Ashutosh Varshney (Brown University)

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ABSTRACT

Drawing on data from a large household survey in Bangalore, this paper explores the quality of urban citizenship. Addressing theories that have tied the depth of democracy to the quality and effectiveness of citizenship, we develop an index of citizenship that includes various measures and then explore the extent to which citizenship determines the quality of services and infrastructure that households enjoy.   Our findings show that citizenship and access to services in Bangalore are highly differentiated, that much of what drives these differences has to do with class, but we also find clear evidence that the urban poor are somewhat better in terms of the services they receive that they would be without citizenship. Citizenship, in other words, abates the effects of class.

INTRODUCTION

In 1951, India was a mere 17.3 per cent urban, and only five Indian cities had populations greater than 1 million. By 2011, three cities – Mumbai, Delhi, and Kolkata – had more than ten million people each, and 53 cities had populations of more than one million. By 2031, six cities are projected to cross the population threshold of 10 million. Depending on what measures are used, India's population, 32 percent urban in 2011, could well be over 40 percent urban over the next 15-20 years, if not higher.[1]   The latest Census shows that for the first time, the absolute increase in urban population during 2001-2011 exceeded the increase in rural population in any ten-year period since independence.

Burgeoning urbanization poses critical questions about how growing and expanding cities can ensure the quality of life for all.   A spate of recent research and government reports has underscored the problem of governance and, in particular, has pointed to weaknesses in urban citizenship.[2] Though cities, as compared to villages, are often conceptualized as bastions of freedom and opportunity, the prevalence of slums, low levels of civic participation and the inequitable provision of

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[1] This is the estimate of the United Nations (2012). It heavily depends on India's definition of "urban", as well as on the assumed rate of economic growth..

[2] See, for example ,the report of the Ahluwalia committee (2011)

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infrastructure point to poor quality of effective citizenship for many. A truncation of citizenship affects the quality of democracy. Normally, a more active citizenry makes democracy deeper.

As India continues to urbanize, a few critical questions have to be addressed: what is the quality of citizenship in urban India? Are the rising cities witnessing the emergence of citizen consciousness and a rights-based politics, heralding a greater citizen-focused deepening of the polity? Or, do vertical patron-client ties between the political elite and citizens and other forms of dependency remain obdurately strong? Is the exercise of citizenship a function of class, caste or community as much of the literature maintains? Can citizenship lead to substantive improvements in people's lives? Specifically, can it help improve the extent and quality of public service delivery?

Primarily because of the predominantly rural nature of Indian polity and society, the literature on urban India has remained sparse. Moreover, most of the literature has to date been largely qualitative and there have been few quantitatively informed analyses of the extent and effectiveness of urban citizenship. We need both newer conceptualizations and careful measurement. The Janaagraha-Brown Citizenship Index (JB-CI) project, of which this study is a part, seeks to address this empirical and conceptual gap. [3]

We seek to answer two questions: how citizenship is distributed over various social and economic categories, and to what extent citizenship, relative to other factors, determines the extent and quality of public service delivery. We go beyond the strictly legal concept of citizenship, which defines citizenship as a bundle of rights (for example, freedom to vote, equal treatment in law, freedom of association, freedom to protest and petition, etc). We concentrate on what might be called effective citizenship, conceptualized as the capacity of citizens to use their basic rights (Heller 2000). This is a relational, not legal, conceptualization of citizenship,

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[3] The long-term project will eventually cover several cities in depth as well as a national sample..

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and we define it as consisting of two critical dimensions: knowledge (what citizens know about their rights) and participation (whether and how much they participate in political and civic life, and what forms such participation takes).

Bangalore is the first city we have studied. Based on a large survey, we present four key findings. First, Bangalore citizens vote in high numbers but do not participate much in politics beyond voting, or in civic life. In part this no doubt reflects the fact that at the local level formal institutions for engaging in politics (ward councils) are absent or weak.

Second, effective citizenship in Bangalore is highly differentiated. While all Bangaloreans know and cherish their formal rights, their capacity to use those rights is very unevenly distributed. The biggest predictors of high effective citizenship are education and class. On the whole, the higher the class, the greater the effective citizenship. There is one exception though: the highest class exhibits lower effective citizenship.   The caste and religious differences are worth noting as well. Scheduled Castes (SCs) and Muslims generally have lower levels of effective citizenship than non-SCs, Hindus and Christians.   This general pattern of differentiated citizenship, however, comes with an important caveat. Inequalities in effective citizenship are largely driven by differences in knowledge of civic and political affairs. In contrast, participation, especially as it relates to voting, is a substantial leveler: lower classes, SCs and Muslims participate more than higher classes, higher castes and Hindus/Christians.

Third, it is on the translation of rights into outcomes – namely, providing public services (water, power, roads, sanitation) --- that urban governance has failed most conspicuously.[4] Access to basic services and infrastructure in Bangalore is unevenly distributed and is highly correlated with class and caste, though not with religion. Muslims do not fare worse than the Hindus overall.

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[4] These outcomes are sometimes called "social citizenship". We don't' use that term here. But if were to use it, this study would be about the impact of *political* and *civic* citizenship on *social* citizenship.

Fourth, in this overall pattern of unequal effective citizenship, there is however one promising finding. Though the poor have lower effective citizenship, it matters more for them. Specifically, we find that the poor get more in terms of access to basic services and infrastructure from the citizenship they do have than their class position would otherwise predict. To put it simply, if they did not participate in political and civic life, they would receive less from the state. Citizenship, in this sense, is an ally of the poor.

In what follows, we begin with a discussion of theories and concepts deployed in this study. We next describe our research design. We then show how we constructed the two indices -- one for citizenship and another for public service provision. The next two sections describe how citizenship and public services are distributed over the various standard socio-economic categories: class, caste, religion, education, gender, location and migrant status. Finally, we deploy statistical models and engage in an explanatory exercise, asking to what extent citizenship matters relative to other factors, in the provision of public services.

THEORY AND CONCEPTS

A basic idea runs through the existing literature on citizenship. The literature is marked by "the malodorousness of subjecthood and the fragrance of citizenship" (Jayal, 2013: 3). But what does citizenship entail? To answer this question, we turn to T. H. Marshall, widely regarded as the field's theoretical pioneer. We address three questions: (a) How did Marshall conceptualize citizen rights? (b) What might be his deficiencies, both generally and especially with respect to India? (c) In what ways do we address these deficiencies and go beyond Marshall in this study?

Marshall's Formulations

Published originally in 1950 and reprinted many times, Marshall's *Citizenship and Social Class* was the first, and highly influential, treatment of the subject. Marshall

sought to divide citizenship into three components: civil, political and social. The civil component referred to individual freedoms, such as the freedom of speech, religion and association, and the right to property, contracts and justice. The courts were the main institutions concerned with this aspect of citizenship. The political component of citizenship encompassed franchise as well as the right to run for office. The local governments and parliament were the principal institutional arenas for with these rights. The third, social, element of citizenship, was split by Marshall into two parts: (a) "the right to a modicum of economic welfare and security" and (b) "the right to share to the full in the social heritage and to live the life of a civilized being according to the standards prevailing in the society" (Marshall 1992: 8). The so-called social services, especially, though not only, public provision of health care and education, were the institutions closely associated with the third set of rights. The third aspect of citizenship, also called social citizenship, is inextricably tied up with the rise of a welfare state. Marshall also argued that this conceptual classification was based on the historical evolution of citizenship in Britain. The civil rights were introduced in the 18th century, political rights in the 19th, and the social rights in the 20th.

It is noteworthy that Marshall conceptualized the problem of deprivation *entirely in class terms*. It was the economically poor, who had "the right to a modicum of economic welfare and security" and "the right to share to the full in the social heritage". If the state did not guarantee such rights and make allocations for them through state-financed health, housing and education schemes, markets would not be able to provide them. Indeed, left unchecked, markets would deprive the poor of full citizenship. Markets might be consistent with political and civil citizenship, but they were certainly in conflict with social citizenship.

Which communities of India, defined in non-class terms, experience truncated citizenship? Given what we know from existing studies, Dalits (Scheduled Castes, or SCs), Adivasis (Scheduled Tribes, or STs), Muslims and women are some of the obvious candidates for investigation. Also relevant here is an Ambedkar idea. He

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used to call the village a cesspool for Dalits, and viewed the city a site of potential liberation. Is that true?   To what extent does caste discrimination exist in urban India, compromising citizenship?[5] By definition, this question acquires significance in the study of citizenship in urban India.

Rights-as-Status, Rights-as Practice

The relative neglect of non-class forms of exclusion comes with some other limitations of the Marshallian model. Most notably, in painting his broad canvas of the history of citizenship in the UK, Marshall had a tendency to privilege rights, and he specifically conflated rights-as-status with rights-as-practice. All citizens are presumed to have the basic rights and the capacity to exercise free will, associate as they choose and vote for who and what they prefer. Following in the relational tradition of analysis, Somers (1993) has argued that the conventional treatment wrongly equates the status of citizenship (a bundle of rights) with the practice of citizenship (a set of relationships). Formal rights matter, but formal rights must also be actionable. Somers goes on to argue that given the highly uneven rates of political participation and influence across social categories that persist in advanced democracies (and especially the United States), the notion of citizenship should always be viewed as contested. But in the context of developing democracies, where inequalities can be very high and access to rights is often circumscribed by social position or compromised by the weaknesses of state institutions, the very notion of citizenship comes into question (Fox 1994: Mahajan, 1999).

Beyond Marshall: Conceptualizing Citizenship

We thus seek to go beyond Marshall and much of the contemporary literature on citizenship in two ways. First, Marshall's concentration is on class deprivation; we

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[5] For discrimination against urban Dalit businessmen, see Jodhka, 2010.

include non-class forms of deprivation – caste, religion, tribe, gender – as well, since in the Indian context these are important sources of social exclusion in their own right. Second, Marshall's focus is on the legal availability of rights, not on how the legally enshrined rights are experienced on the ground. Our focus is less on the laws or rights in theory, more on the practices on the ground.

Following Somers, we argue that the formal nature of citizenship – the legal codification of basic rights of citizenship – should be analytically distinguished from its efficacy, that is, the degree to which a citizen can effectively use their rights independently of their social position and without compromising their associational autonomy.[6] There is no dispute as to the formal character of citizenship in India, at least with respect to basic civic and political rights. These are enshrined in the constitution, have been upheld by the courts and are the bread-and-butter of Indian democratic life[7]. Social rights in the Marshallian sense – right to food and education, if not health -- have only just really come into play as formal rights of citizenship, but the principle of being able to deploy civic and political rights to demand social rights is well established.

The effective dimension of citizenship is in contrast much less clear, and in fact presents the central conceptual and empirical challenge of this study. How effectively Indians make use of their rights to associate, vote, participate and engage remains an open-ended question. There is certainly widespread recognition that citizenship in India is highly differentiated. Chatterjee's claim that the realm of civil society – the realm in which citizen's use their rights - is largely the privileged domain of the middle classes and that the poor have only their electoral clout to work with has even become a dominant trope of the literature (Chatterjee 2006). Is Chatterjee right? Do the poor exercise only political, not civil, rights?

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[6] This later point is especially key to understanding why clientelism can be so corrosive to citizenship. See Heller (2013) and Baiocchi, Heller and Silva (2011) for an elaboration. For forms of clientelistic politics in Bangalore, see Breeding (2011)

[7] Of course even these classic liberal rights have often been contested in India. For the performance of India's democracy on two different dimension of democracy – electoral and liberal – see Varshney 2013, Ch. 1; and 2015).

We argue that *practicing citizenship* means essentially two things. First, it requires having sufficient knowledge and understanding to fully engage in public life. This means having, in effect, the basic knowledge of politics and how the state functions. These are necessary for making informed decisions about one's preferences and about how to make claims on the state, be it by voting or directly interacting with state actors. Second, one must enjoy the freedom to participate in public life. This cannot simply be confined to voting, but means enjoying freedom to engage in activities of public relevance across social boundaries, including gender, religion, caste and class. There is a large literature on the latter. For instance, Rueschemeyer et al. (1992) have systematically linked the participatory dimension of citizenship to substantive outcomes.

Following this reasoning, we take knowledge and participation as the building blocks of the idea of effective citizenship. And we view substantive social outcomes (water, electricity, sanitation and roads), in part, as a function of the exercise of civic and political rights, i.e. effective citizenship.

THE STUDY DESIGN

The survey was conducted in 2012. To ensure proportionate geographical representation of the central and outer regions of Bangalore, as well as social representation of our selected populations (the Scheduled Castes (SCs)/Scheduled Tribes (STs) and Muslims), we adopted a multi-stage stratified random sample. Our achieved sample size was 4,093 individuals, allowing us robust representation and statistical significance at the city, ward, and neighbourhood level.

We selected 20 wards out of a total of 198, and 10 "polling parts" from each ward. Polling parts, which are the smallest political geographic entities in urban India, were selected because they provide consistency in methods if the survey is to be used in other cities and also because they provide some indication of a

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neighbourhood due to their small size.[8] Thirty households were randomly selected from each polling part.[9]

Appendix One contains a full list of our variables, how we measured them, and how the indices were constructed. In our description below, we break down our descriptive statistics and present cross-tabulations. Later, we will build upon our disaggregated findings in the statistical models we deploy.

The basic demographic characteristics of our sample are presented in Table 1. We also compare these statistics to the Census data for 2011. Our sample over-represents the Muslims and SCs/STs. The sample Muslim population is 18% compared to 14% in the Census. The proportion of SC/ST respondents in the entire sample is approximately 20.4 percent (16.8% SC and 3.6% ST), while the comparable proportion for Bangalore reported in the 2011 Census is approximately 14% of the entire population (12% SC and 2% ST). The gender break-up of our sample is 55.6% female as opposed to 47.8% as per Census data, 44.3% male as opposed to 52.4% from Census data[10]. When we present results later, we will note that readjusting sample proportions according to census data does not alter our conclusions.

In Table 1, we also present the SC/ST numbers as a proportion of the overall Hindu sub-sample. The SCs and STs account for about 29 percent of all Hindus in the sample (24 percent SC and 5 percent STs). Within the Hindu sub-sample, it is also noteworthy that "forward castes" (FCs) represent 54%, a figure that might strike many as too high. From our analysis of individual respondents, it is clear that many Lingayats and Vokkaligas classified themselves as FCs, even though legislatively

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[8] Each polling part has approximately 7-14 streets and 1,500-2,500 individuals above the age of 18.

[9] We excluded respondents who had not lived in the city for at least a year since such residents might be temporary (and as such not very invested in practicing their citizenship).

[10] Individuals were selected from households using randomization of all household members above the age of 18 who had lived in the household for a minimum of one year. The overrepresentation of women is either due to the randomization of participants at the household level, and/or the difficulty that all surveys in India face of finding working males at home.

substantial proportions of them have been classified as the "other backward classes" (OBCs). The legal and the self-reported categories thus diverge. In line with existing empirical research, our decision is to stick to self-reporting in this case. Politically, Lingayats and Vokkaligas have a dominant status in the state of Karnataka. Empirically driven social science research conducted in Karnataka, therefore, tends to recode them as FCs in order for the data to make better sense, given these groups' social standing and access to resources. We take self-classification as a social fact. We would also note that a majority of our respondents who reported having moved to Bangalore in the past year self-identified as FCs.

Table 1 -- Sample Characteristics: Caste and Religion (percentages)

Religion		Caste (Hindus Only)	
Hindu	72.9	SC	17.0
Muslim	18.0	ST	24.0
Christian	8.8	OBC	5.0
Jain	0.1	Forward/Other	54.0
Other	0.2		

THE VARIABLES

Control Variables

Our basic control variables are the standard socio-economic categories, meant to capture the hypothesized sources of social exclusion or unequal endowments. These include caste, religion, education and class. We asked all Hindu respondents their caste as well as where they would place themselves in official categories of Scheduled Castes (SC), Scheduled Tribes (ST), Other Backward Castes (OBC), and Forward Castes (FC). All caste data reported here refer to respondents' self-classification into one of these four categories. Given the relatively small number of STs in our sample, we club STs and SCs together in the analysis. We also only report findings for Muslims, Hindus and Christians, as the total number of other religions

was very small (0.3%). Our education variable was a 5-point classification scheme, running from illiterate to college degree (Appendix 1).

All control variables, except class, are easy to define and compute.   Measuring class is notoriously difficult. We developed and collected an asset based measure as well as occupational data. Here, however, we report only a third measure of class, based on Housing Type (HT). Both occupational and asset data have serious measurement problems[11] and are also conceptually problematic. Neither captures the full array of conditions that capture the class situation. HT on the other hand is a good measure in part because the home itself is the largest asset, but also because homes capture the spatial dynamics of having access to neighborhood assets including locational advantages and social capital. This then comes much closer to the relational views of class increasingly favored in the literature (Portes and Hoffman 2003; Tilly 1998 Massey 2007).

Another significant advantage of our HT variable is that it was not self-reported. Instead, field surveyors, after receiving extensive field training, were asked to classify each household they surveyed into one of five HTs:

HT 1: Informal settlement
HT 2: Designated/Notified slum
HT 3: Lower middle class housing
HT 4: Middle class housing
HT 5: Upper Class housing

Figure 1 summarizes the distribution of our sample over housing types, and Appendix 2 presents a visual picture of these housing types. Only 73 citizens (1.8%) in our sample live in informal slum settlements (HT1) and 462 (11.3%) in one-room notified/designated slum housing (HT2).   Taking these two categories together

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[11] Many sociologists have argued for the superiority of occupational data, which corresponds much more closely to actual class practices than income data (Wright 1985). But occupational data in India where much of the labor for still works in the informal sector is unreliable. Asset measures are more reliable than income measures, but nonetheless suffer from the fact that a same asset can cover a wide range of qualities.

(HT1 and HT2), we find that 13.1% live in slums.[12] This is higher than the census figure of 8.5%. The census figure has, however, been widely criticized for undercounting slums.[13] 52.7% of our sample lived in HT 3, that is, lower middle class housing.[14] HT 4, which we call middle class, is also quite large, accounting for 29.8% of our sample. If housing type, relative to assets and occupation, is a better indicator of class, it becomes very clear that Bangalore has a very sizeable middle class.

Figure 1: Class Distribution (Using Housing Type)

THE INDICES: CITIZENSHIP AND PUBLIC SERVICES

We constructed two indices. The first is the Citizenship Index (CI), which serves as the independent variable in our analysis. The second is the Basic Service Delivery and Infrastructure Index (BSDII), which is our dependent variable.

As discussed in the theory section, the effective exercise of citizenship requires having the necessary knowledge and being able to participate in public life. Our citizenship index, thus, has two components: knowledge and participation. To capture each of these we asked a series of questions and developed specific measures.[15]

Knowledge of civil and political affairs was relatively easy to capture: for political/electoral knowledge we asked if the respondent knew which parties and individuals held which positions (i.e. which party or coalition rules at the national and state levels) and for civic knowledge we asked if they knew about different opportunities for participation (e.g. awareness of ward meetings), and if they knew which agencies delivered which services (water, electricity, sewerage etc).

Participation refers to specific forms or instances of direct involvement in political and civic life. The participation index is composed of three dimensions of participation: voting activity, non-voting political participation (political participation henceforth), and civic participation. Voting focuses on whether a respondent voted in the three recent elections (the 2009 parliamentary elections, 2013 state assembly elections, and the 2010 local elections). Political participation refers to a respondent's political activities outside of voting, i.e. participation in elections and rallies and contributions to political parties. Civic participation measures a respondent's civic involvement, i.e. participation in neighbourhood redressal of common problems, participation in a variety of associations and participation and frequency of participation in local ward meetings. The overall

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[15] Appendix 1 has details on the measures used in this study including summary statistics.

citizenship index is an aggregation of the average scores for the two components of knowledge and participation.

The BSDII covers water, sanitation, electricity and roads. Each of these carries the same weight in the index. Water provision service, for instance, is based on five dimensions: source, usability, convenience, gaps in supply, and consistency. The indicators for electricity provision include whether a household has an electricity connection and the number of gaps in power supply experienced by the household. The indicators for sanitation capture whether a household has own toilet, or shared/community toilet, or whether the toilet is an open or shared pit, or open defecation is practiced. Similarly, the measure for infrastructure, i.e. roads, is based on three dimensions: whether the road is unpaved (*kuccha)* or paved (*pucca*); in good or poor condition; and if water gets logged during monsoon. The BSDII is, thus, a simple aggregation of these 12 questions.

Citizenship

Before turning to the Citizenship Index and its component parts, we want to make a few descriptive observations. At all levels of elections, Bangaloreans vote in high percentages: 77.5% at state level, 71.4% at the municipal level and 70.2% at national level, with the highest rates of voting occurring among the poorest segments of the sample. They also have quite good political knowledge. 83.4% respondents answered the question "ruling party at state-level' correctly and 84.6% answered "ruling party at national-level" correctly. But only 35.2% respondents knew the name of their municipal corporator. The level at which citizens are most likely be able to use their rights - the local or municipal level - is precisely the level at which they have the least political knowledge. Almost certainly, this reflects how weak local government has historically been at the local level.

But when it comes to participation in politics *beyond* the voting booth, Bangaloreans are once again not very active. Less than 10% contribute time to political

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campaigns in municipal elections and less than 10% participate in politics outside elections. Especially in local politics, the space in which classical democratic theorists from Locke to Gandhi have argued the skills and virtues of citizenship are forged, there clearly continues to be a massive deficit. Thus, 93% of our respondents reported that they did not know if there was a ward committee in their community, and only 2.6% reported to having attended a ward meeting, again no doubt reflecting the anemic nature of local institutions of representation.

In sum, Bangaloreans vote a lot, know something, but don't do all that much beyond electoral participation.[16]

Citizenship Index

We can now turn to the Citizenship Index (CI). The CI consists of both the knowledge and participation measures weighted equally. Table 3 provides the summary statistics on CI. The index can take on values in a 0-1 range. The mean is 0.32, indicating the citizenship of a typical respondent in Bangalore.

To get a substantive sense of what this means, recall that this index is based on 12 questions that focus on knowledge about national, state, and local political actors, institutions and state service provision agencies, and 9 questions on voting, political and civic participation, with each set of questions being equally weighted, as is each component. As such, a perfect score would require answering all questions positively. Our mean score (0.34) means that a respondent with mean citizenship tends to vote in two (and sometimes three) elections, participates in one political or civic activity, and has some knowledge about political actors (typically national and state political actors) and state agencies (about 2-3 key ones such as water, electricity, and transportation). Participation, in the form of attending meetings and

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[16] See, however, Kamath and Vijaybhaskar (2014). They document the more recent forms of civic activity in Bangalore, both in the slums and middle class neighborhoods, but they concede that in the end, the electoral triumphs over the civic.

rallies organized by political parties during or between elections, is typically low. While civic participation in specific caste, religious, or voluntary associations is also low, respondents occasionally participate in neighbourhood meetings that address service problems.

We turn next to the CI's distribution across each of our control variables: education, caste, religion, and household type. These are reported in Tables 4-7 below. We then take a more disaggregated look, examining the components of the CI – knowledge and participation. In order to tease out the relationships between the citizenship index and the control variables, we recode the CI into a discrete binary variable. Respondents who score above the mean CI value are coded as having 'high' citizenship and those with CI values equal to or less than the mean are coded as having 'low' citizenship. [17] This recoding enables us to isolate patterns across the control variables (which are discrete and nominal) clearly and intuitively.[18]

Table 4 reveals, as one might expect, that there is a very clear and linear relationship between citizenship and education. The lower one's educational level the lower the level of effective citizenship (citizenship hereafter). Those with no schooling are most likely to have low citizenship. Those with secondary schooling and college are much more likely to fall into the high categories of citizenship.

Caste appears to have some effect on citizenship, with the SCs having lower citizenship than the FCs (Table 5). The same is true for religion (Table 5). Muslims are slightly more likely to have lower effective citizenship, and Christians are

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[17] Based on this classification, we find that about 47 percent of the respondents fall below the mean CI level and 53% above.

[18] All cross-tabs we report are statistically significant. We have looked at the Pearson chi-square test statistic (Pearson χ^2) and statistical significance for the cross tabulations of CI and the control variables. Statistical significance suggests that the differences in CI observed across levels or categories of the control variables are meaningful and not due to chance. However, we also note that these tests are bivariate tests and statistical significance may disappear in a multivariate statistical environment. In later sections we present the results from a statistical estimation using OLS regression models.

slightly likely to have higher citizenship, but the differences across the three religious groups are not pronounced.

Household type (HT), which is our selected proxy for class, has a very strong impact on the distribution of citizenship (Table 6). The majority of those living in HT1 (shacks) have low levels of citizenship and only about 15% score high levels of citizenship. Those living in designated slums also score much lower levels of citizenship than the middle classes (HT3 and HT4) with only 31% having high citizenship. But the overall relationship between class and citizenship is not perfectly linear. Thus, those living in the highest category of housing – the upper class – in fact display lower levels of citizenship than the middle class (HT4) and are really only marginally higher than the lower middle. In sum, *the bottom of the class hierarchy has lower than average citizenship, the middle has high citizenship, and the citizenship of the upper classes tapers off somewhat.*

Tables 7 explore the distribution of citizenship across gender, location and migrant status. Though all three of these categories impact the distribution of citizenship in the direction one might have anticipated, the gap between women and men, and between migrants and non-migrants – roughly 16% in both cases - is especially high.

TABLE 4: Education Level and Effective Citizenship

	Education Level (Respondent)				
Citizenship	No Schooling	Primary School	Middle School	Secondary School	College & Above
Low	71.40	62.41	59.77	43.64	36.69
High	28.60	37.59	40.23	56.36	63.31

TABLE 5: Caste, Religion, and Effective Citizenship

	Caste			Religion		
Citizenship	SC/ST	OBC	Forward	Hindu	Muslim	Christian/Others
Low	52.57	48.24	42.84	46.83	51.43	43.92
High	47.43	51.76	57.16	53.17	48.57	56.08

TABLE 6: Class and Effective Citizenship

	Household Type				
Citizenship	Informal Slum	Notified Slum	Lower Middle	Middle	Upper Class
Low	84.72	68.40	48.26	36.28	45.36
High	15.28	31.60	51.74	63.72	54.64

TABLE 7: Gender, Location, Migrant Status and Effective Citizenship

	Gender		Location		Migrant	
Citizenship	Female	Male	Inner	Outer	Migrant	Non-Migrant
Low	54.46	38.70	46.24	52.09	56.01	40.90
High	45.54	61.30	53.76	47.91	43.99	59.10

The CI is a highly aggregated measure. To make more sense of the general relationships we have found between citizenship and our control variables, we now take a closer look at the components of the CI, knowledge and participation. As with the CI measure, we converted knowledge and participation components into binary discrete measures with the mean value marking low and high levels.[19] What we find is that knowledge and participation are unevenly distributed across social categories, but move in opposite directions.   Higher social groups have more knowledge, but participate less than the lower social groups. [20] P*articipation has an equalizing effect.*

For instance, only 35% of the SC/STs indicate high knowledge in our sample, but 72% exhibit high levels of participation. The numbers are very similar for Muslims as well: only 36% have high knowledge, but participation among them is very high, about 71%.   Finally, while only 18% of designated slum dwellers exhibit high knowledge, 68% participate in political and civic life. Indeed, the greater propensity of the poor and the relatively marginalized social groups to participate in both political and civic life goes a long way in closing the knowledge gap.

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[19] We find that about 56% and 44% of respondents fall into the low-high knowledge category respectively; and 33% and 67% in the low-high participation categories respectively.
[20] For detailed tables, see Janaagraha website.

Public Service Provision:
**The Basic Service Delivery and Infrastructure Index (BSDII)**

We now turn to our dependent variable, the BSDII Index. The BSDII is built on measures of quality of four services: water, sanitation, electricity and roads. In this section we provide the overall distribution of BSDII across our socio-economic factors. BSDII is a continuous measure that ranges from 0 to 1.0.[21] Households that score above the mean BSDII value are coded as having 'good' public services and those with BSDII values equal to or less than the mean are coded as having 'poor' public services. A perfect BSDII score (1.0) would translate to having quality and convenient water with no interruptions, electricity with very infrequent interruptions, excellent roads and drainage, and good sanitation, specifically in-house flush toilets that are connected to sewage systems.[22]

As the distribution in Figure 2 shows, about 44 percent of households receive poor (i.e. below the mean) public services and 56 percent get good services.

Figure 2: Distribution of BSDII

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[21] The mean is 0.648 with a standard deviation of 0.189.

[22] A household with an average BSDII score can expect to have a public source of water that is located inside the premises (a tap or hand-pump) with gaps in provision. Water is typically used for a single purpose (either general use or drinking, mostly the former), and some of these households are likely to have water storage. These households are have a metered power connection and typically face power outages between 4 to 6 hours a week, have flush toilets inside the house (as opposed to a community toilet or pit toilet), and located in areas with roads that tend to be in good (*pucca*) condition, but with likely poor drainage during monsoon.
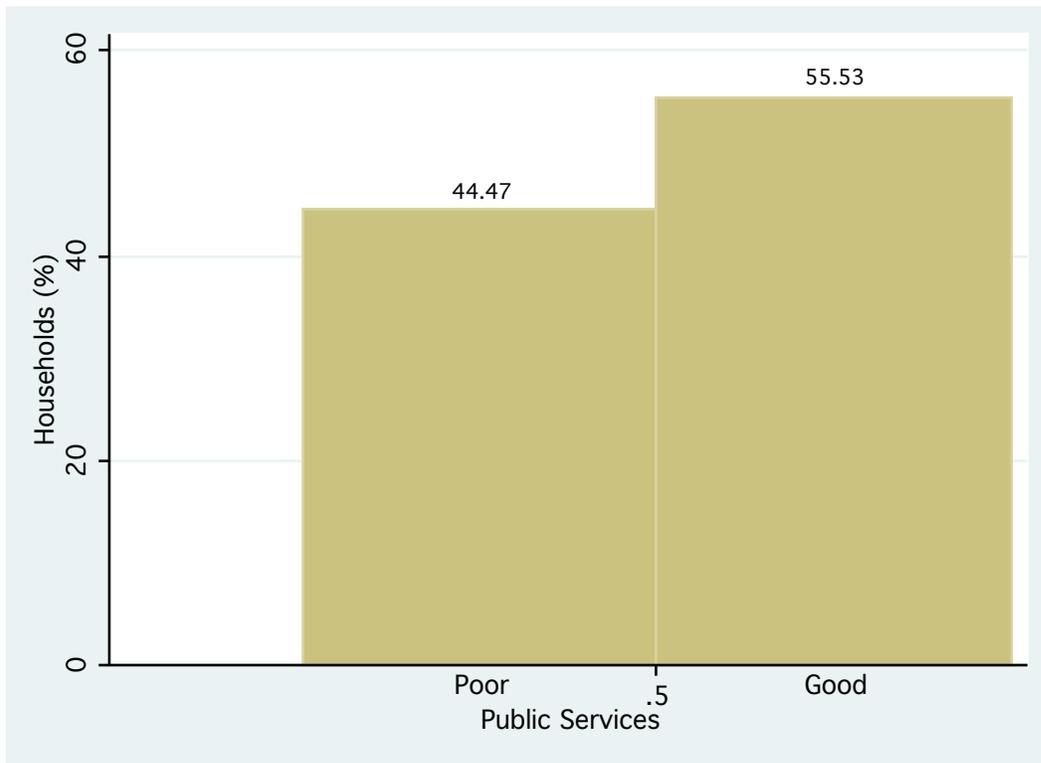
How is this unequal distribution of services related to our basic socioeconomic control variables?   Figure 3 shows a strong and linear relationship between education and access to quality of services.   This no doubt reflects the tight relationship between education and class. Figure 4 confirms what one might have predicted, namely that the SCs receive much lower services than OBCs and the FCs (the difference between FC and OBC households is marginal). The fact that 59.5% of the SC/ST households get poor services, compared to 39.4% of the OBC, suggests that a good portion of SCs live in ghettos. In contrast, Figure 5 suggests that religion does not seem to have any statistically significant relationship to services (for instance, 43.8 percent of Hindu households get poor services compared to 46.8 percent Muslim households and 45.6 percent Christian households). *Muslim households are as well serviced as any other religion.*[23]

When we look at BSDII across housing types, we get our strongest finding yet. The relationship here is very linear (Figure 6). It is not surprising that about 90 percent of households in informal settlements and 73.4 percent in slums receive poor services. In contrast about 77.4 percent of upper class households and 71 percent of middle class households receive good services.

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[23] Mohammed-Arif (2012) comes to a roughly similar conclusion.

Figure 3: Education and Public Services

Education

| No Schooling | Primary | Middle | Secondary | College/Above |

Public Services

Low

High

[n=4037; Chi2 = 197.2***; Cramer's V = 0.22]
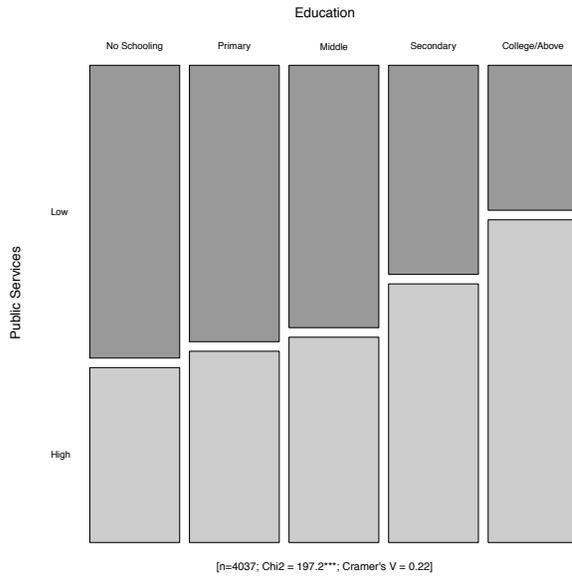
Figure 4: Caste and Public Services

Caste

| SC/ST | OBC | Forward |

Public Services

Low

High

[n=4040; Chi2 = 117.5***; Cramer's V = 0.20]
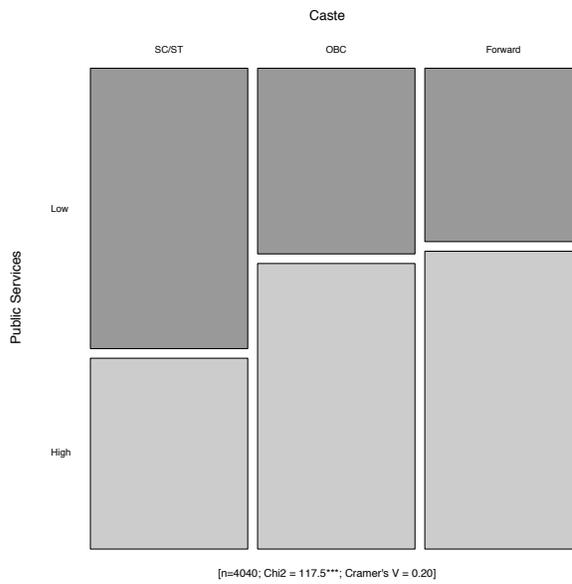
Figure 5: Religion and Public Services

Religion

[n=4040; Chi2 = 3.7; Cramer's V = 0.03]
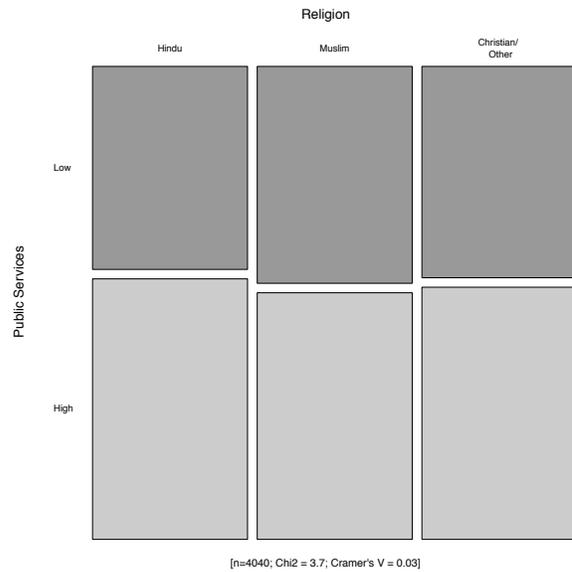
Figure 6: Class and Public Services

[n=4041; Chi2 = 367.4***;Cramer's V = 0.30]
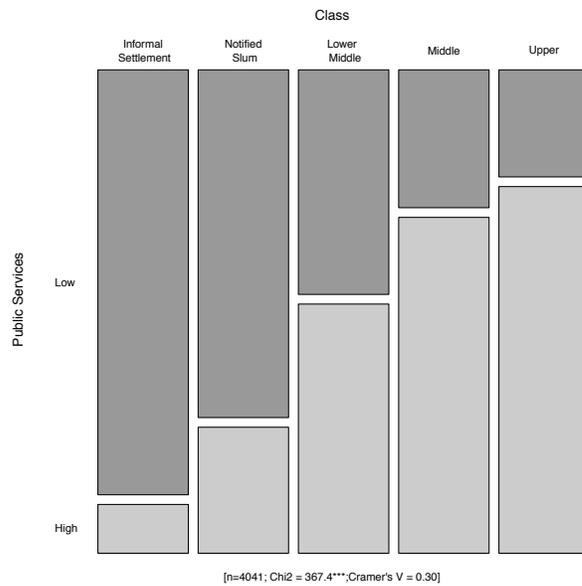
MODELS AND RESULTS

We model basic service delivery and infrastructure provision as a function of citizenship and socio-economic controls including class, caste, religion, education of respondent, migrant status, and location of household (in inner or outer wards). The

relationship between citizenship and basic service delivery and infrastructure is estimated using Ordinary Least Squares (OLS) regression of the form:

$$BSDII_i = \beta_0 + \beta_1 Citizenship_i + \beta_2 Controls_i + \varepsilon_i$$

The results are reported in Tables 8 and 9, (models 1-4).[24] Models 1 and 3 are baseline models for the Hindu sample and the larger sample including all respondents, respectively. The baseline models include only the control variables.[25] These baseline models (1 & 3) confirm what emerged from Figures 3-6. Our class variable is statistically significant and follows expected signs. Informal settlements and households in notified slums (HT 1 and 2) exhibit significantly lower levels of public service provision relative to lower middle housing (the reference category in our models), while middle and upper class housing indicate higher levels. We also find that basic service delivery and infrastructure for the SC and ST households are significantly lower than OBC households (the reference category) while there is no difference between OBC and forward caste households. We also find that service provision and infrastructure in Muslim households is not statistically different from non-Muslim households (Model 2).[26]

Households with respondents having a secondary or higher level of education are associated with higher levels of basic public services relative to households where respondents had no schooling. We don't observe any statistical differences in public services to households with respondents below the middle school. In sum, education is positively correlated on access to infrastructure and there is also a clear threshold effect. That is, it only makes a difference once one is educated above the middle school.[27]

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[24] The results presented here are from un-weighted models. We find that the results do not change when we weight the models to account for the oversampling of the SC/ST population.

[25] We recode all control variables into dummy variables that take on values of 0 and 1.

[26] For religion, we include only a Muslim dummy variable that identifies a Muslim household (1) or otherwise (non-Muslim) (0).

[27] A respondent's level of education is an individual level attribute that we use to represent household education level. However, we do not find significant difference in the result when we substitute it with the education level of the chief wage earner in the household.

We also find that households in wards in the outer areas of Bangalore are characterized by lower levels of basic service provision and infrastructure relative to those in wards that lie in the inner city. However there is no statistical difference between non-migrant (those who have lived their entire lives in Bangalore) and migrant households when it comes to service provision and infrastructure.

Models 2 and 4 include the variable of interest, citizenship.[28] We find that the effect of citizenship, while positive, is not statistically significant in either model. This implies that citizenship has no effect on the levels of public services a household receives. The introduction of citizenship does not change any of the effects of the control variables. The coefficients for the control variables are stable, consistent with expectations, and statistically significant.[29]

TABLE 8: The Effect of Citizenship on Basic Service Delivery and Infrastructure

Dependent Variable: Basic Service Delivery and Infrastructure Index				
Independent Variable	1 Baseline Model (Hindus Only)	2 Baseline Model + Citizenship (Hindus Only)	3 Baseline Model (All Sample)	4 Baseline Model + Citizenship (All Sample)
Class				
HT 1	-0.302 (0.027)***	-0.294 (0.027)***	-0.299 (0.026)***	-0.292 (0.026)***
HT 2	-0.103 (0.012)***	-0.099 (0.012)***	-0.121 (0.010)***	-0.118 (0.010)***
HT 4	0.057 (0.007)***	0.057 (0.007)***	0.065 (0.006)***	0.063 (0.006)***
HT 5	0.071 (0.013)***	0.072 (0.013)***	0.088 (0.011)***	0.089 (0.011)***
Caste				
SC/ST	-0.048 (0.009)***	-0.047 (0.009)***	-	-
Forward	0.0006 (0.008)	0.0006 (0.008)		
Religion	-	-		
Muslim			0.001 (0.007)	0.003 (0.007)
Education Level				
Primary	0.022 (0.022)	0.021 (0.022)	0.017 (0.018)	0.016 (0.018)
Middle	0.017 (0.014)	0.016 (0.014)***	0.010 (0.011)	0.010 (0.011)
Secondary	0.058 (0.012)***	0.054 (0.012)***	0.048 (0.010)***	0.046 (0.010)***
College & Above	0.081 (0.012)***	0.078 (0.012)***	0.079 (0.010)***	0.078 (0.010)***
Location (Outer Ward)	-0.046 (0.007)***	-0.046 (0.008)***	-0.050 (0.006)***	-0.049 (0.008)***
Non-Migrant	0.004 (0.006)	0.002 (0.006)	0.002 (0.005)	0.002 (0.005)
Citizenship	-	0.035 (0.019)	-	0.025 (0.017)

[28] As noted earlier, the citizenship variable used in the models presented is an additive aggregation of the knowledge and participation components. We also derived a measure of citizenship using principal components analysis. When using the latter measure we find that while the magnitude of association changes, the signs and significance do not. We do not present these results here, but are available upon request.

[29] To identify potentially influential observations, we examined the DFITS and Cook's Distance statistics. Using the conventional cut-off for Cook's D, we identify about 5 percent of observations as likely influential. Estimating the models without these observations does not change the results substantially. We repeat this procedure for all the models we estimate in this study.

Constant	0.614 (0.013)***	0.605 (0.014)***	0.609 (0.010)***	0.602 (0.011)***
Observations	2871	2804	4041	3943
F	70.61	63.40	95.61	85.40
Root MSE	0.164	0.165	0.167	0.167
Robust standard errors in parentheses			[*** p<0.01, ** p<0.05, * p<0.1]	

This general relationship however must be significantly qualified when we introduce the second set of models 5 through 8 presented in Table 18. In models 5 – 8, we test for conditional effects of citizenship on public services. That is, instead of a constant effect on service delivery and infrastructure levels across all housing types, the effect of citizenship is expected to vary across class. We estimate a set of multiplicative interaction models that estimate the effects of citizenship on public services conditional on: (a) class, (b) education (c) caste and (d) religion.[30]

Specifically, we anticipate citizenship to have a larger (positive) effect on public service delivery for poor households relative to the wealthier households, who can get by without political participation and making demands politically. Similarly, we anticipate citizenship to mitigate the effects of lower levels of education, lower caste, and religious minority (i.e. Muslim) status on basic service delivery and infrastructure.

All models in Table 18 show that citizenship conditional on the lowest housing types has a significant effect on service delivery and infrastructure. That is, an increase in effective citizenship of respondents living in the lowest housing types correlates with an increase in the level of basic service and infrastructure those households receive (relative to the wealthier households i.e. HTs3, 4 and 5).[31]

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[30] The model is:

$$BSDII_i = \beta_0 + \beta_1 Citizenship_i + \beta_X X_i + \beta_{CX}(Citizenship * X)_i + \beta_2 Controls_i + \varepsilon_i$$

where X is: (a) class, (b) education (c) caste and (d) religion.

[31] In these models, we recode the class variable into a dummy variable that equals 1 for HT1 and HT2; and 0 for HT3, HT4, and HT5. Similarly, all respondents reporting no education are coded as 1 (non-literate) and others as 0. Caste equals 1 for SC/ST households and others 0, and Muslim households are coded as 1 and others (non-Muslim) as 0.

TABLE 9: Conditional Effects of Citizenship on Basic Service Delivery and Infrastructure

Independent Variables	Dependent Variable: Basic Service Delivery and Infrastructure Index			
	5 (Hindus Only)	6 (All Sample)	7 (Hindus Only)	8 (All Sample)
Citizenship	0.028 (0.019)	0.015 (0.021)	0.049 (0.021)	0.036 (0.019)
Class	-0.212 (0.023)***	-0.218 (0.019)***	-0.223 (0.024)***	-0.228 (0.020)
Citizenship* Class	**0.291 (0.081)***	**0.244 (0.066)***	**0.272 (0.082)***	**0.200 (0.067)***
Caste				
SC/ST	-0.057 (0.009)***	-	-0.044 (0.018)**	-
Forward	0.003 (0.008)	-	-	-
Citizenship*(SC/ST)	-	-	-0.083 (0.050)	-
Religion				
Muslim	-	-0.0006 (0.007)	-	-0.008 (0.017)
Citizenship *Muslim	-	-	-	-0.025 (0.045)
Education Level				
Primary	0.031 (0.023)	0.022 (0.019)	-	-
Middle	0.028 (0.014)	0.017 (0.011)	-	-
Secondary	0.065 (0.012)***	0.056 (0.010)***	-	-
College & Above	0.105 (0.012)***	0.109 (0.010)***	-	-
Non-Literate	-	-	-0.129 (0.025)***	-0.092 (0.021)***
Citizenship*(Non-Literate)	-	-	**0.233 (0.079)***	**0.128 (0.067)***
Location (Outer Ward)	-0.057 (0.007)***	-0.061 (0.006)***	-0.057 (0.007)	-0.059 (0.006)***
Constant	0.621 (0.014)***	0.617 (0.011)***	0.696 (0.008)***	0.682 (0.007)***
Observations	2804	3943	2804	3943
F	63.34	85.65	70.37	75.58
Root MSE	0.167	0.171	0.169	0.173
Robust standard errors in parentheses [*** p<0.01, ** p<0.05, * p<0.1]				

Table 10 presents the marginal effects of citizenship conditional on (a) class (HT1 and HT2) (b) education (non-literate) (c) caste (SC/ST households) and (d) religion (Muslim households) along with standard errors, and 95% confidence intervals.

Table 19: Marginal Effects, Standard Errors, and 95% Confidence Intervals

	Marginal Effect of Citizenship	Standard Error	95% Confidence Interval
Class			
HT1 & HT2	0.24	0.07	0.10 to 0.37
Education			
Non-Literate	0.16	0.07	0.03 to 0.29
Caste			
SC/ST	-0.03	0.04	-0.12 to 0.06
Religion			

| Muslim | 0.01 | 0.04 | -0.07 to 0.09 |

We find that the marginal effect of citizenship on public service delivery conditional on class is positive and statistically significant, and ranges from 0.37 to 0.10 (from model 8). *The poor have less of citizenship and less of public service delivery and infrastructure, but they get more services and infrastructure for their citizenship than others.* The marginal return to citizenship is higher for the poor. For instance, a standard deviation increase in citizenship is associated with an approximately ten percent increase in infrastructure and services for the poor.[32]

Citizenship has similar effects for those without schooling. The marginal effect of citizenship on services for non-literate households is positive, greater than that for literate households, and statistically significant. The magnitude of this relationship is smaller than that for class. However, we find that a conditional effect does not exist for SC/ST (from model 7) or Muslim households (from model 8). *While citizenship mitigates the effect of class and illiteracy, it does not seem to do the same for caste, particularly SC/ST or for religion.*

Conclusion

Historically, cities have been associated with greater associational freedom and more social and economic opportunity. In India, constitutional guarantees and political practices have secured basic political and civic rights. But social rights have only recently been made constitutional rights, and this does not include the basic services that most urban residents expect. This then leads to two important questions. First, can all citizens, irrespective of their socio-economic status, use these civic and political rights effectively? Second, to what extent can citizens

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[32] We compute predicted values for non-Muslim, non-literate, and inner households.

secure basic services as a matter of rights? Can citizenship, as Marshall so famously argued, abate the effects of class and, more broadly, social exclusion?

We addressed these two core questions on the strength of a survey of over 4,000 households in Bangalore. On the whole, the answer to both questions would appear to be negative. On the one hand we found that citizenship in practice is very unevenly distributed, and that this distribution closely tracks class, caste, religion and gender. On the other hand, we found that basic services and infrastructure are highly unevenly distributed and that class, though not caste and religion, drive much of this effect. Given that Bangalore has not only been the poster child of India's recent economic success - indeed a global icon of the information technology revolution – and it has also generally been perceived as India's best governed mega-city, it is alarming that such large swaths of the city are deprived of adequate services.

Taken together, our finding of highly uneven patterns of service delivery and clear evidence of class-based social exclusion might suggest that citizenship doesn't make a difference, or worse yet, that levels of citizenship reflect and reinforce social inequality. Women, Muslims, SCs/STs and lower classes enjoy less effective citizenship than men, Hindus/Christians, OBCs/FCs and middle and upper classes. This is not entirely surprising, and supports arguments in the literature, most notably by Chatterjee (2004), that citizenship in India is largely the preserve of elites. But lurking behind this aggregate finding are some patterns that suggest a more complicated picture.

Since we disaggregate citizenship into knowledge and participation, we are able to statistically identify that the two components -- knowledge and participation -- work in opposite directions. Socio-economic difference, including gender, drives significant differences in knowledge. The more privileged one is, the more one knows about the system and presumably how to use it. Participation works in quite the opposite direction, with the poor, SCs/STs and Muslims participating much

more than the rich (who in fact participate very little), OBCs/FCs and Christians and Hindus. Participation is the lifeblood of citizenship for the poor. This supports an existing body of literature that has found that the poor and lower castes are far more active electorally than the rich and upper castes.[33]

But our final conclusion is far away the most important one. While the urban poor have lower effective citizenship than the middle class, the poor get more out of their exercise of citizenship than the middle class, and specifically that if it were not for the citizenship they do have, they would have less access to basic services and infrastructure. In sum, the poor suffer from citizenship deficits as well as public service and infrastructure deficits, but these latter deficits would be greater without the poor exercising their citizenship rights. While citizenship has not closed the gap between the classes, it does make a significant difference for the poor. Citizenship significantly abates class in Bangalore. Only further research will establish whether this and other findings of this study would hold in urban India in general.

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[33] Yadav and Palshikar, 2009.

References

Ahluwalia Committee, Isher J, 2011, Report on Indian Urban Infrastructure and Services, Delhi: ICRIER.

Baiocchi, Gianpaolo, Heller, Patrick, and Silva, Marcelo K, 2011, *Bootstrapping Democracy: Transforming Local Governance and Civil Society in Brazil* , Stanford University Press.

Bhan, Gautam, and Arindam Jana, 2013, "Of Slums or Poverty: Notes of Caution from Census 2011", *Economic and Political Weekly*, May 4.

Breeding, Mary, 2011, "The Micropolitics of Vote Banks in Karnataka", *Economic and Political Weekly*, April 2.

Brubaker, Rogers, 1998, *Citizenship and Nationhood in France and Germany,* Harvard University Press.

Chatterjee, Partha, 2006, *Politics of the Governed,* Columbia University Press.

Fox, Jonathan. 1994. "The Difficult Transition From Clientelism to Citizenship." *World Politics* 46(2):151-184.

Heller, Patrick, 2000, "Degrees of Democracy: Some Comparative Lessons from India", *World Politics* 52(4).

Heller, Patrick. 2013. "Democracy, Participatory Politics and Development: Some Comparative Lessons from Brazil, India and South Africa," *Polity*, 44, 643-665.

Heller, Patrick, and Peter Evans, 2010. "Taking Tilly South: Durable Inequalities, Democratic Contestation and Citizenship in the Southern Metropolis," *Theory and Society*, 39.

Jayal, Niraja Gopal, 2013, *Citizenship and its Discontents: An Indian History*, Harvard University Press.

Joseph, J. (2014,). *Regularizing the Illegal: How does Akrama Sakrama affect you.* http://bangalore.citizenmatters.in/articles/how-does-akrama-sakrama-affect-you

Jodhka, Surinder S. (2010): "Dalits in Business: Self Employed Scheduled Castes in Northwest India", *Economic and Political Weekly*, 45(11).

Kamath, Lalitha, and M. Vijaybhaskar, 2014, "Sum-based Collective Action in Bangalore: Contestations and Convergences in a Time of Market Reforms", *Journal of South Asian Development,* Vol. 9. No. 2, August, 121-146.

Mahajan, Gurpreet. 1999. "Civil Society and its Avtars: What Happened to Freedom and Democracy." *Economic and Political Weekly* 34:1188-1196.

Marshall, T.H. 1950, *Citizenship and Social Class*, Pluto Press.

Marshall, T.H., 1992, *Citizenship and Social Class, With a Commentary from Tom Bottomore*, Pluto Classics Series, Pluto Press

Massey, DS. 2007. *Categorically Unequal: The American Stratification System*.

Mohammed-Arif, Aminah, 2012, "Muslims in Bangalore: A Minority at Ease", in Gayer, Laurent, and Christophe Jaffrelot, eds, *Muslims in Indian Cities: The Trajectories of Marginalization*, Delhi: Harper Collins.

Murthy, N.R. Narayana, Krishnamurthy, Swati Ramanathan and Ramesh Ramanathan, 2012, "The Urban Voter, Not on a Roll", *The Indian Express*, August 1.

Portes, Alejandro and Kelly Hoffman. 2003. "Latin American Class Structures: Their Composition and Change during the Neoliberal Era." *Latin American Research Review* 38(1):41–82.

Rueschemeyer, Dietrich, Evelyn Huber Stephens, and John D Stephens. 1992. *Capitalist development and democracy*, University of Chicago Press.

Schensul, Daniel and Patrick Heller. 2010. *"Legacies, Change and Transformation in the Post-Apartheid City: Towards an Urban Sociological Cartography,"* *International Journal of Urban and Regional Research*.

Somers, Margaret, 1993, "Citizenship and the Place of the Public Sphere: Law, Community, and Political Culture in the Transition to Democracy", *American Sociological Review,* 58 (5)

Tilly, Charles. 2004. *Social Movements, 1768-2004*. Boulder, Colo.: Paradigm Publishers.

Tilly, Charles. 1998. *Durable Inequality*. Berkeley, Calif.: University of California Press.

United Nations, 2012, *World Urbanization Prospects: The 2011 Revision*, United Nations Secretariat: Department of Social and Economic Affairs

Varshney, Ashutosh, 1995, D*emocracy, Development and the Countryside: Urban-Rural Struggles in India*, Cambridge University Press.

Varshney, Ashutosh, 2013, *Battles Half Won: India's Improbable Democracy*, Penguin.

Varshney, Ashutosh, 2015, Asian Democracy Through an Indian Prism", *The Journal of Asian Studies*, November 2015.

Yadav, Yogendra, and Suhas Palshikar, 2009. "Revisiting Third Electoral System: Mapping Electoral Trends in India, 2004-09" in Sandeep Shastri et.al., *Electoral Politics in Indian States*. Delhi: Oxford University Press.

Wright, Erik Olin. 1985. *Classes*. London: Verso.

Appendix 1: Variable Description and Summary Statistics

Variable	Description	N	Mean	SD	Min	Max
Basic Service Delivery and Infrastructure Index (BSDII)		4041	0.65	0.18	0	1
Water	Provider of primary source of water: Private=0; Public=1• Location of primary water source: Outside=0;					

	Inside=1• Water storage system for primary water source: No=0; Yes=1 • Gaps in supply: No=0;Yes=1• Water use: Only general or drinking (0); Both (1)					
Power	Metered electricity connection: No=0; Yes=1•Frequency of power cuts: More than 18 hours =0 to No power cuts=1					
Sanitation	Pit (own or shared) or open defecation (=0) •Community septic tank, flush latrine or dry latrine (=1) •Septic tank/flush latrine-own or shared (=2)					
Roads	Type of road: Unpaved=0; Paved=1 •Road Condition: Poor=0; Good=1 •Water logging in monsoon: No=0; Yes=1					
Citizenship		3994	0.32	0.16	0	1
Political Knowledge	Name of party or coalition of parties is currently ruling at the national level: Incorrect=0; Correct=1•Name of party/coalition of parties is currently ruling at the state level: Incorrect=0; Correct=1•Name of Corporator (of respondent's ward) Incorrect=0; Correct=1					
Civic Knowledge	Name of (respondent's) ward Incorrect=0; Correct=1•Name of public agency responsible for providing: (a) Water Supply (b) Electricity (c) Public Transport (d) Traffic: Incorrect=0; Correct=1•Purpose of Right to Information Act: Incorrect=0; Correct=1					
Electoral Participation (Voting)	Voted in 2010 BBMP Elections: No=0; Yes=1•Voted in 2013 Karnataka State Assembly Elections: No=0; Yes=1•Voted in 2009 *Lok Sabha* Elections No=0; Yes=1					
Political Participation	Respondent (or someone in household) contributes time to campaigns during municipal elections: Never=0; Always/ Sometimes=1•Respondent (or someone in household) participates in meetings or rallies organized by political parties or officials outside of election time: Never =0; Always/ Sometimes=1 •Respondent (or someone in household) talks to friends, neighbors or others in the community about supporting a candidate: No=0; Yes=1.					
Civic Participation	Respondent (or someone in household) participates in (a) Non-government organizations (b) Resident Welfare Associations (c) Caste organizations (d) Religious organizations (e) Non-caste, non-religious organizations: No=0; Yes=1•Respondent (or someone in household) attended ward committee meetings: No=0; Yes=1.					
Housing Type (HT)		4093				
Informal Settlement (HT1)	Self-built dwelling often made from:		0.01	0.13	0	1

			Mean	SD	Min	Max
		reclaimed wood, fabric, tarpaulin, corrugated metal, and/or sack-cloth. Not located on street-fronts, often located in vacant lots, behind buildings, on sidewalk, road medians, small green spaces, under overpasses, and construction sites. Sometimes also located in larger vacant or abandoned/under-construction non-self-made structure, but using self-made materials within that building (such as tents). Almost always single floor single room dwellings.				
Notified Slum (HT2)		One-room *pucca* row house with corrugated metal roof and densely packed. Typically located behind buildings, in gullys, and not on main street. Few windows, small windows, with shutters and single entrance.	0.11	0.31	0	1
Lower Middle (HT3)		Single or multi-floored concrete (only) structures, with 2-3 rooms. If housed within an apartment building, they generally have shared balconies, small windows, publically accessible staircases outside, no gate, wall, or security, and may have commercial units on the ground floor.	0.52	0.49	0	1
Middle (HT4)		Independent house or apartment building and often a shared dwelling between independent family units indicated by multiple mailboxes and different entrances. Gate present but usually no high-wall present around house. Apartment buildings often have outdoor staircases, may have a gate entrance to building but generally not part of a complex or gated community. Mostly concrete structures but some have additional materials such as glass, wood, and/or brick. Apartments often have private balconies.	0.29	0.45	0	1
Upper Class (HT5)		Independent house or apartment building, often constructed using concrete, wood, glass with a surrounding wall and gate in front of house, and security guarding entrance. Outdoor staircases are rare, and size of individual apartments is large with multiple balconies for one apartment and large windows	0.04	0.20	0	1
Caste (Hindu Only)	2911	Self-classification into official categories of Scheduled Castes or Scheduled Tribes (ST&ST), Other Backward Castes (OBC), and Forward Castes (FC)				
Forward Caste			53.7		0	1
Other Backward Classes			17.6		0	1
Scheduled Caste & Tribe			28.7		0	1
Religion	4092	Self-classification into official categories of: Hindu, Muslim, Christian, Sikh, Jain, and Buddhist				

Hindu			72.9		0	1
Muslim			18.0		0	1
Christian			8.6		0	1
Other (Sikh, Jain, Buddhist)			0.3		0	1
Education		4089				
No Schooling			11.0		0	1
Primary			3.25		0	1
Middle			14.9		0	1
Secondary			39.2		0	1
College and Above			31.6		0	1
Location	Respondent: lives in outer ward (=0); inner ward (=1)	4093	0.21	0.40	0	1
Migrant	Respondent: has always lived in Bangalore (=0); Migrant (=1)	4093	0.56	0.49	1	1

## Appendix 2: Housing Types

Informal Settlements (HT1)
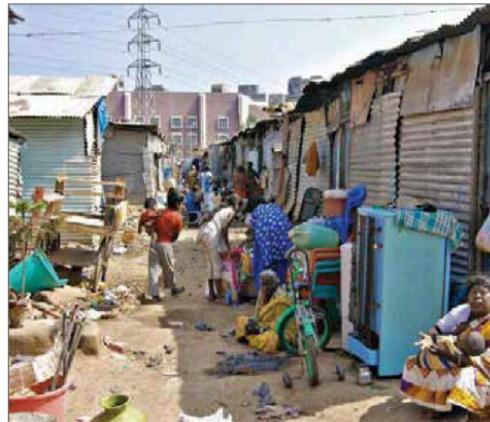
Notified Slum (HT2)

Lower Middle Housing (HT3)
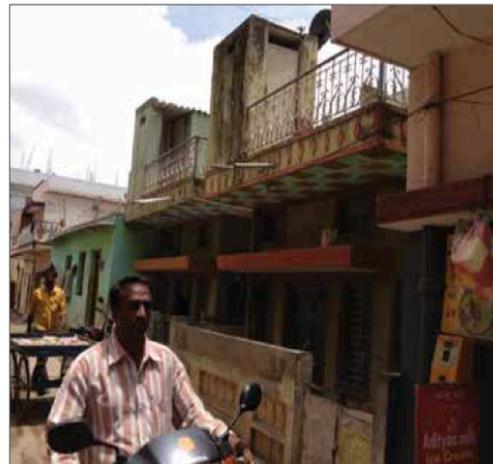
Middle Class (HT4)

Upper Class (HT5)