# The Majority-Minority Divide in Attitudes Toward Internal Migration: Evidence from Mumbai[*]

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## Abstract

Rapid urbanization is among the major processes affecting the developing world. The influx of internal migrants to cities frequently provokes antagonism on the part of long-term residents, manifested in labor-market discrimination, political nativism, and even violence. We implemented a novel, face-to-face survey experiment on a representative sample of the population of Mumbai to elucidate the causes of anti-migrant hostility. Our findings point to the centrality of material self-interest in the formation of native attitudes. Dominant-group members fail to heed migrants' ethnic attributes, yet for minority-group respondents, considerations of ethnicity and economic threat cross-cut one another. We introduce a new political mechanism to explain this divergence in majority/minority opinion. Minority communities facing persistent discrimination view in-migration by co-ethnics as a means of enlarging their demographic and electoral base, thereby achieving "safety in numbers." Our paper sheds new light on the drivers of preferences over internal migration, while contributing to policy debates over urban expansion.

Keywords: migration, urbanization, migration attitudes, electoral demography, cross-cutting cleavages, labor-market competition, ethnic prejudice

Word Count: 9,995

The freedom to move and settle anywhere within one's country of citizenship is a right enshrined in numerous constitutions, as well as in the Universal Declaration of Human Rights (1948). Across the world, at least 763 million people are estimated to be internal migrants (Bell and Charles-Edwards 2013). Rural-to-urban migration has served a pivotal economic role historically. By achieving a more efficient allocation of labor and creating new markets for goods and services, the relocation of peoples to cities—as well as between them—can lend a transformative boost to growth.

Yet despite the long-run benefits of free internal labor movement for the economy at large, migrants frequently encounter hostility upon entering urban areas. Cities' long-term residents, often anxious to curb migrant flows, employ various strategies both to discourage potential migrants from coming, and to withhold opportunities from outsiders on arrival. In China, for example, the *hukou* registration system denies city-based rural migrants equal access to education, healthcare, and employment. Violence against migrant workers has been widely documented, ranging from Swedish townships during the industrial revolution, to Indian, Malaysian, and South African conurbations in recent decades (Weiner 1978).

What causes anti-migrant discrimination? In ethnically divided states, do economic and ethno-cultural considerations cross-cut one another in shaping popular preferences over internal migration? And do these determinants vary across identity-based social groups? We report new experimental evidence from Mumbai, India—a crucial case in which to glean an understanding of anti-migrant hostility and its causes. Mumbai, along with the likes of São Paulo, Jakarta and Lagos, ranks among the world's evolving megacities. According to recent estimates, "Mumbai Metropolitan Region's GDP is projected to reach $265 billion by 2030, larger than the GDP of many countries today, including Portugal, Colombia, and Malaysia" (Sankhe et al. 2010, 16). Its development is dependent on inflows of both skilled and unskilled labor from other parts of India. At the same time, political movements have arisen to articulate and rally the anti-migrant sentiment

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that prevails among segments of the city's native population. Demands for employment quotas, discriminatory language stipulations, and attacks on migrants are commonplace (Katzenstein 1979; Pashlikar 2004).

Our explanation for what drives the preferences of cities' native residents over internal migration centers on two major sets of determinants: one material and the other ethno-cultural. Economic concerns might lead natives to evaluate incoming migrants using information about migrant skill level and likely occupation. Natives may fear influxes of low-skilled, low-wage workers whose demands for public welfare might impose an extra fiscal burden on cities' current residents. Additionally, if natives anticipate that direct job competition will lead to downward pressure on earnings, migrants who seek to fill occupations similar to those held by locals should provoke special animosity.[1] By contrast, non-economic, ethno-cultural factors may be paramount. Individuals living within a city commonly possess certain shared ascriptive characteristics—be they racial, tribal, religious, or linguistic. Communities define themselves according to these ethnic group traits (Tajfel 1970). Natives intent on safeguarding the social status quo should oppose entry by migrants perceived as belonging to ethnic "out groups."[2]

Adjudicating the relative importance of these factors is a crucial first step toward understanding native preferences. However, a focus on each determinant in isolation misses the potential for offsetting or reinforcing effects. For example, do natives evaluate incoming migrants based on their skill or occupational profiles in a "color-bind" way—

[1]For studies of how labor-market competition impacts attitudes in the domain of international immigration, see: Scheve and Slaughter 2001; Mayda 2006; Hainmueller and Hiscox 2010; Dancygier and Donnelly 2013; Malhotra, Margalit and Mo 2013. Studies highlighting fiscal concerns include: Facchini and Mayda 2009; Hanson, Scheve and Slaughter 2007.

[2]See, e.g., Hainmueller and Hopkins 2014a; Brader, Valentino and Suhay 2008; Hopkins 2015; Adida 2014.

that is, without regard to the ethnic or cultural background of the migrants in question? Theories in comparative politics posit that affinity between individuals or groups along one dimension of identity—say, caste—can help render differences along other markers of identity (such as class) less salient (Dunning and Harrison 2010; Nordlinger 1972). Applying this cross-cutting cleavages insight to internal migration, we hypothesize that natives' willingness to oppose migrants possessing skill or occupational attributes deemed threatening from an economic standpoint is contingent on migrants' ethno-cultural profile—specifically, whether or not a migrant's ethnicity is aligned with that of the native individual or group in question. Our prior is that natives will judge *non*-co-ethnic migrants endowed with undesirable skill sets more harshly than they would otherwise identical *co*-ethnic migrants.

A final consideration pertains to the social identity group background of natives themselves. In particular, do natives belonging to different ethnic groups weigh the economic and cultural attributes of migrants in a similar fashion? Where equality prevails between ethnic groups, we might expect preferences over internal migration to be quite uniform. However, in ranked ethnic systems, minority status correlates with material hardship, threats to physical security, and deficient political representation (Horowitz 1985). Under such conditions, minority-group members have been shown to be more attuned to ethnic identity than their majority-group counterparts (Leonardelli, Pickett and Brewer 2010). Since internal migrants possess full voting rights in destination cities, their arrival can potentially alter the distribution of political power. We posit that minority respondents intent on increasing their group's electoral standing may place greater emphasis on co-ethnicity when evaluating incoming migrants.

The purpose of this paper is to devise and implement rigorous tests of these hypotheses. Our main findings are based on a large representative survey of Mumbai's native population. The survey incorporated a description of a hypothetical migrant wishing to enter the city to work. We randomly manipulated two key characteristics of the

migrant—his religion and skill profile—in order to gauge the average impact on respondent favorability. By highlighting ethnic and skill/occupational attributes simultaneously in a factorial experimental design, we effectively control for any confounding effects induced by "correlated threats," or statistical discrimination: the tendency for individuals to associate migrants' economic attributes with particular cultural backgrounds (Malhotra, Margalit and Mo 2013, 395).[3] Crucially, this only works because all permutations of migrants' skill and ethnic backgrounds are equally plausible in the Mumbai scenario—something that is rarely true in other migration contexts. Hence we are able to more cleanly disentangle and interpret the effects of economic concerns and ethnic favoritism than previous scholarship. Additionally, we substantially oversample Mumbai's Muslim community in order to gain statistical purchase on the hypothesized divergence in majority/minority attitudes.

To foreshadow the main results, we observe a strong overall preference for high-skilled migrants, although this effect is driven by lower-income respondents. This finding builds on economic theories of attitude formation, suggesting that all natives may resent the fiscal burden imposed by low-skilled migration, while reacting differently to the perceived labor-market and wage impacts associated with migrants of different skill levels. Next, the skills-based economic concerns of minority Muslim natives are significantly attenuated in cases where migrants were signaled to share the ethnicity of the native interviewee. This buttresses the cross-cutting theory of migration preferences. The reactions of majority Hindu respondents differed, however. Individuals belonging to this group consistently

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[3]To illustrate, citizens could believe that most low-skilled migrants belong to a certain ethnic group. Suppose a study finds strong popular animosity toward low-skilled migration—a seemingly economic-based resentment. Yet, we cannot automatically take this finding to mean that citizens oppose low-skilled migration on economic grounds *per se*; a non-economic interpretation—for instance, widespread ethnic prejudice—would be equally tenable.

discriminated against migrants based on economic considerations; they proved indifferent to the religious profile of prospective newcomers, and revealed no sign that their aversion toward workers who posed a material threat was conditioned by the ethnic background of the hypothetical migrant presented to them. We contend that the reason for these asymmetric findings across communities has to do with "safety in numbers": the attempt by a city's vulnerable minority population to use internal migration by co-ethnics to shore up its electoral base.

This is the first paper to investigate attitude formation in the field of *internal* as opposed to international migration. To be sure, important similarities could exist between native responses to both types of migration—if, for example, the local wage effects of domestic and foreign migrants are equivalent. Yet, in thinking about natives attitudes, three key differences between internal and international immigration merit attention. First, whereas non-citizen immigrants typically remain electorally disenfranchised in democratic settings, internal migrants are guaranteed voting rights in destination regions, potentially leading natives to weigh the electoral ramifications of within-country migration. Second, differing legal frameworks govern internal and international migration. Local citizens' inability to regulate the volume and composition of internal migration may intensify hostility toward this group.[4] Third, and inversely, co-citizens possess a shared national identity and heritage, which could serve to mitigate hostility against internal migrants, regardless of their other attributes. Evaluating the political and social conflicts associated with internal migration thus introduces a fresh set of theoretical concerns that warrant empirical testing, while also speaking to classic political economy debates surrounding the distributive impacts of migration.

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[4]On the other hand, if natives perceive that international immigrants have entered the country illegally, domestic migrants might be preferred.

# Why Study Migration in Mumbai?

Mumbai is an island city on India's western coast that first flourished as a maritime port, textiles center, and trading hub during British colonial rule (Gaikwad 2014). Home to over 20 million residents, the city has attracted a near-constant inflow of migrants since India's independence. First-generation migrants comprised 39 percent of the total population at the time of the 2001 census enumeration (see Figure 1). Of these individuals, 63 percent arrived from outside Maharashtra—the state in which Mumbai is located—and 68 percent came from rural areas (Singh 2007). Most migrants cite better employment opportunities as the primary reason for moving (Government of India 2001).[5]

[Figure 1 about here]

Five features of Mumbai make it aptly suited to an experimental test of the influence of material self-interest and ethnicity in shaping native opinion on migration.

**Political Nativism**   Migration is a politically contested topic in the city. Nativist political movements, beginning in the 1920s, have garnered wide popular support (Katzenstein 1979; Joshi 1968*a*). The most prominent of these, the Shiv Sena, was founded as a political party in 1966 "to safeguard the welfare of the people of Maharashtra," whom it termed "sons of the soil" (Joshi 1968*b*, 967; Weiner 1978). "[E]conomics, and more specifically job opportunities...explained the emergence of the Shiv Sena," according to one author; "the object of this movement during its formation was the competition over jobs between Maharashtrians and non–Maharashtrians" (Billimoria-Zenieris 1997, 130). Along with its more recent offshoot, the Maharashtra Navnirman Sena (MNS), the Shiv

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[5]Principal migrants are typically young: 68 percent of migrants to Mumbai were below the age of 25 at the time of migration (Prasad et al. 2009). Most are joined by their families after finding employment and housing (Gupta, Arnold and Lhungdim 2009, 26–7).

Sena has played a dominant role in the city's politics, repeatedly winning elected office at the municipal and state levels.

Nativist politicians espouse such goals as:

- Reserving public-sector jobs for speakers of the regional language, Marathi (Hansen 2000, 52).

- Limiting publicly funded college education to in-state students (Weiner 1978, 316-344).

- Denying migrants voter identification cards, housing, and various other public services (Pashlikar 2004, 1500).

- Mandating knowledge of Marathi and residence of at least 15 years for workers seeking government-licensed private employment in Mumbai (Gavaskar 2010, 17).

- Orchestrating violence and engaging in extra-legal intimidation of migrants at the neighborhood level, sometimes as punishment for celebrating "non-local" festivals (Pashlikar 2004; *Tehelka* February 16, 2008; *India Today* February 7, 2008).

- Enjoining private employers (sometimes by violent threat) to hire more natives (Pashlikar 2004, 5-6).

Campaigns of this sort have fostered serious tensions between long-term residents and incoming migrants, and have made a deep impact on city and state politics.

**Skill Diversity**   The skill attributes of the city's labor force are variegated. Highly trained bankers, executives, and engineers work cheek by jowl alongside unskilled hawkers, rickshaw-drivers, and domestic workers (see Supplementary Appendix [SA], Tables A1-A2). Migrants, too, enter the city in search of a wide assortment of jobs—professional, technical, and informal (Zachariah 1966, 382).[6]  While hardly surprising, such an occupational mix is an essential prerequisite for our experimental design, which asks survey respondents to imagine hypothetical migrants belonging to disparate skill categories.

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[6]Nationally representative survey data indicate that 38 percent of urban male migrants in India were college graduates, while 17 percent were not literate (Government of India 2010).

**Ethnic Diversity** Society in Mumbai cleaves along multiple axes of ethnic identity. Historically, the Hindu-Muslim communal divide represents the city's most salient social cleft (Hansen 2001; Menon 2011). Mumbai's population is 67 percent Hindu and 19 percent Muslim. The roots of animosity between these communities run deep (Jaffrelot 1999). For example, between December 1992 and January 1993, religious rioters killed at least 900 people citywide—mostly Muslims—and looted and set alight entire localities in what was then the deadliest episode of ethnic violence in the country's history (Masselos 1994). Discrimination on religious grounds is prevalent to this day, much of it endorsed by political elites (Banerjee 2000). This record of inter-group animus leads us to predict that Mumbai natives will be closely attuned to the religious identity of migrant newcomers.

**Cross-cutting Ethnic and Skill Diversity** Employment data from the National Sample Survey (64th round) demonstrate that the distribution of skill endowments among Hindus and Muslims in the Mumbai workforce is roughly similar (see Figure 2). This real-world variation is a major boon to our research design because it implies that randomly varying a fictitious migrant's skill level (high/low) and religion (Hindu/Muslim) will yield four migrant categories that are equally credible in the minds of native respondents.

[Figure 2 about here]

**Migration's Fiscal Impact** A sizable welfare state exists in Mumbai. Social protection for permanent migrants is available via the Public Distribution System, which provides state-subsidized food and cooking fuel to poor households (Bhatia and Chatterjee 2010, 24). Migrant families also make disproportionate use of municipally-provided public schools and health services (Mili 2011). The outlays of the Municipal Corporation—which employs 108,000 people and has an annual budget of Rs.310 billion—are funded primarily by levying property taxes and octroi. While richer, propertied residents contribute a larger share to municipal revenues, poorer natives, too, foot a substantial portion of

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city bills via regressive taxes like octroi and sales tax (Karnik, Rath and Sharma 2004). By contrast, migrants contribute less, both because the informal settlements where most migrants live are not directly taxed, and also because migrants remit a large part of their incomes to rural areas, which limits their spending in the local economy. Importantly, natives widely perceive that migrants are responsible for overcrowded city services.[7]

To sum up, political nativism, coupled with the cross-cutting diversity in skill endowments and ethnicity which characterizes its workforce, make Mumbai an ideal case for understanding the factors that engender popular hostility toward internal migration. Beyond that, Mumbai's sheer size—the city's population is bigger than Denmark, Sweden, and Norway combined, and roughly matches that of Australia—make it worthy of study in itself.

## Determinants of Attitudes on Internal Migration

By studying how specific characteristics of migrants inform nativist opinions, we aim to shed light on the underlying determinants of anti-migrant sentiment in cities experiencing rapid growth. For clarity, we describe a simple utility function for natives evaluating migrants seeking to enter into a city and its labor market. We presume that the utility citizen $i$ derives from "accepting" a particular migrant is a function of two observable attributes of the $j$th migrant: his economic profile (operationalized as skill set and likely

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[7]For example, one complaint is that migrant slum dwellers illegally connect to the water grid, harming "honest tax paying citizen[s] of Borivali and Dahisar who often face water cuts and shortages," in the words of one wealthy resident (Graham, Desai and McFarlane 2013, 126). Capturing these frustrations, MNS politician Raj Thackeray has commented that, "[t]he city cannot take the burden anymore. Look at our roads, our trains and parks. On the pipes that bring water to Mumbai are 40,000 huts...The footpaths too have been taken over by migrants" (*Times of India*, February 10, 2008).

occupation, $S_j$) and ethno-cultural affiliation (operationalized as religion, $R_j$):

$$U_{ij} = U(S_j, R_j; \varepsilon_i, \zeta_i) \tag{1}$$

Citizen-specific tastes about migration are captured by $\varepsilon_i$, while $\zeta_i$ represents an indicator variable denoting natives' ethnic group status (majority/minority).

**Economic Determinants**   $S_j$ highlights the employment and fiscal concerns harbored by natives with respect to migration policy. We invoke standard economic models to understand the material consequences of internal migration for natives and, in turn, their attitudes.[8] One theory of economic preferences homes in on migrants' impact on public finances. According to this view, *all* natives may oppose low-skilled migration. Taxpayers, and especially the rich, anticipate that poorer migrants will impose a pecuniary burden on natives, caused by heightened demand for civic amenities and government transfers. Meanwhile, holding tax rates constant, poorer natives may worry about a net reduction in per-capita transfers when low-skilled migrants enter the local economy and increase competition for public goods and services (Facchini and Mayda 2009; Hanson, Scheve and Slaughter 2007). An alternate theory focuses on labor-market competition (LMC). In the Heckscher-Ohlin factor proportions model, native workers experience a decline (or increase) in real wages as migrants with similar (or different) skill competencies enter the labor market. Native workers should therefore favor migrants who possess different skill endowments to their own and oppose migrants whose skill profiles are closely akin

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[8]Studies in the regional economics literature employ standard trade models to elucidate the *local* labor-market impacts of migration shocks (Card 1990; Borjas, Freeman and Katz 1996). We use these models in an analogous manner, drawing out their implications for the attitudes of native city residents.

(Benhabib 1996).[9]

One line of research lends empirical support to the LMC theory (Mayda 2006; Scheve and Slaughter 2001). Yet, other studies have found that all natives (including the high skilled) prefer high-skilled migrants (e.g. Hainmueller and Hiscox 2010).[10] This has been interpreted as evidence disconfirming the LMC hypothesis. However, such a conclusion may be unwarranted. For one, this finding does not disprove LMC among low-skilled natives. Further, it is conceivable that LMC may in fact operate among high-skilled natives, but its effects are masked by competing fiscal mechanisms. Consider a high-income native. She may be apprehensive about the fiscal burden that low-skilled migrants are likely to place on municipal goods and services. At the same time, she perceives no job-market threat emanating from less-skilled workers, and her relative wages may even increase due to the abundant supply of cheap labor. Now consider a low-income native forming his attitude about low-skilled migration. He worries, too, about the strain on public resources. Yet he additionally fears job competition and wage cutting, since the migrant labor is easily interchangeable with his own. If correct, native income levels should prove a significant predictor of attitudes toward migrants of varying economic profiles, with low-income natives voicing unequivocal opposition to low-skilled migration, and high-skilled natives expressing overall ambivalence.

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[9]Nuancing LMC predictions, the Ricardo-Viner specific factors model implies that native workers will opt to evaluate the wage effects of migration at the sector level (rather than the factor level)—above all when intersectoral labor mobility is low or costly (Dancygier and Donnelly 2013).

[10]That said, Malhotra, Margalit and Mo (2013) demonstrate that high-skilled natives *do* perceive labor-market competition when occupational threats are sufficiently finely targeted.

**Cultural Determinants**  Citizens' non-economic concerns about migrants are captured by $R_j$ in the utility framework. Extensive social scientific research demonstrates that individuals evidence a "taste" for people similar to themselves (Becker 1971). The comparative politics literature contends that ethnocentrism and cultural stereotyping also help shape native sentiments about incoming migrants (Weiner 1978). Several causal pathways plausibly connect migrant "out-groupness" to native hostility, including psychological anxiety, specific norms related to group cues, and fears of interbreeding (cf. Brader, Valentino and Suhay 2008; Hopkins 2015). While culture can be conceived of in a variety of ways—for example, skin tone, religion, region of migrant origin, language, and race—the common presumption is that ethno-cultural dissimilarity between natives and migrants engenders antagonism, whereas ethnic sameness promotes affinity.

**Cross-cutting Hypothesis**  Cross-cutting cleavages models posit that inter-personal antipathy along one dimension of identity (e.g. race) may be offset by kinship along another axis (for instance, gender) (Nordlinger 1972). Most scholarship has focused either on the cross-cutting effects of ascriptive identities—a phenomenon used to explain vote choice, coalition politics, and democratic persistence (Dunning and Harrison 2010; Laitin 1986; Chandra 2005)—or on competing dimensions of economic interests (Rogowski 1989). Several studies also examine how these two sets of cleavages interact (e.g. Roemer, Lee and Van der Straeten 2007). We apply this line of inquiry to internal migration, an area often characterized by ethnic contestation as well as sharp distributional conflicts over employment and welfare. Specifically, we explore how ethno-cultural cleavages might cut across economic skill and occupational profiles in forming individual native attitudes.

In the present scenario, consider a native respondent who is asked to express an opinion over an incoming migrant—one who is said to be either a co-ethnic (the same ethnicity as her) or non-co-ethnic, and either threatening to her personal economic well-

being or non-threatening. To simplify, let us assume that the respondent derives a utility of $-1$ from accepting an economically threatening migrant into Mumbai, and a positive utility of $+1$ from accepting a non-threatening migrant. And let ethnic alignment entail a similar scoring structure, with $+1$ granted to a co-ethnic and $-1$ to a non-co-ethnic. As Table 1 illustrates, there exist four possible payoffs. Holding constant one attribute while adjusting the other, we see a powerful effect on natives' overall evaluation, with native sentiment shifting from indifference to definite acceptance or rejection.

[Table 1 about here]

**Majority-Minority Status**   An overarching question addressed by this paper is whether native respondents hailing from different ethnic identity-group backgrounds evidence similar preferences over internal migration. Prior work has been preoccupied with attitudes among majority population groups. This overlooks a striking result from survey research, namely that ethnic minorities, though disproportionately hard-hit by migration shocks in economic terms, time and again show themselves to be most receptive to in-migration (Citrin et al. 1997, 872; Scheve and Slaughter 2001, 140).

In ethnically divided states, minority group members frequently suffer from deficient political representation and lag on key welfare indicators, including income, education, access to healthcare, and physical security. Minorities vote en bloc in many settings, because doing so increases the odds that they will become politically pivotal; this, in turn, incentivizes politicians to be responsive to minority concerns (Wilkinson 2004). Against this backdrop, migration may assume special significance because of its impact on electoral demography. Unlike international immigrants, all within-country migrants possess the formal right to vote in their destination cities. Therefore, minority groups that lack adequate representation in the political sphere may view migration by co-ethnics as a valuable tool for shoring up their group's electoral base.[11]   This is less likely to be

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[11]In a similar vein, Dancygier (2010) argues that where immigrant groups cast decisive

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true of majority group members, who typically enjoy political *over*-representation, and may thus prioritize factors other than ethnicity when evaluating prospective migrants.

To frame these predictions in terms of the utility model, we contend that the relative sensitivity of citizen $i$ to migrant attributes $S_j$ and $R_j$ is in part a function of $i$'s majority/minority group attachment.[12]

## Experimental Design and Sampling Strategy

To study the determinants of attitudes over internal migration, we implemented a large face-to-face survey experiment on a representative sample of the Greater Mumbai Metropolitan Area between November 2012 and March 2013. A team of 28 enumerators overseen by 14 field supervisors interviewed a total of 1,585 adult Mumbai residents.[13] Our experimental treatments were administered at the very start of the survey, after informed consent was obtained, and comprised the following passage of text:[14]

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votes, immigrants are able to secure scarce public resources from the state, worsening immigrant-native conflict.

[12]To illustrate this intuition formally: $U_{ij} = \alpha S_j + \gamma \mathbb{1}\{\zeta_i\}S_j + \beta R_j + \delta \mathbb{1}\{\zeta_i\}R_j + \varepsilon_i$, where $\zeta_i = 1$ when the respondent belongs to the majority group, and $\zeta_i = 0$ when the respondent belongs to the minority group.

[13]A novelty of our study was the use of hand-held tablet devices that automated the randomization and considerably eased the interview process. A random-number generator was used to assign respondents to treatment conditions; data were immediately uploaded to a central server; interview location was geo-coded; and a number of checks on enumerator probity were put in place.

[14]Because Mumbai is a multi-lingual environment, we administered the survey in one of three languages, Hindi, English, or Marathi, as per the respondent's choice. The translations were carefully checked and reverse translated to ensure for equivalence in

As you may know, people come from other parts of India to this city looking for work. There was an article in a major national newspaper recently about a man named [*Hindu name/Muslim name*] from outside of Maharashtra. According to the report, he is [*highly skilled/not highly skilled*] and wants to come to Mumbai to work as [*occupation*]. We want to know what you think.

The treatment leverages a two-by-two factorial design that randomly assigns one of four basic profiles to the prospective migrant described in this passage: highly skilled Hindu; not highly skilled Hindu; highly skilled Muslim; not highly skilled Muslim. We now describe the manipulations used to signal these attributes.

**Religion**  Communal relations are a highly sensitive topic in India. To alleviate concerns about social desirability bias—a problem that might materialize if direct references to religion trigger norms of egalitarianism among respondents—we gave migrants fictitious names that only indirectly indicated religious affiliation. Names are known to serve as religious and caste identifiers in India such that a prospective migrant ascribed a Hindu-sounding name will be presumed by survey respondents to be Hindu, and prospective migrants with Muslim-sounding names will be recognized as Muslim.[15] Table 2 lists the names and religious characteristics of the fictitious migrants employed in our study.

[Table 2 about here]

**Skill Level**  Apart from manipulating the religious profiles of migrants, we also varied their skill profiles. A randomly chosen half of the fictitious migrants were described as being "highly skilled," while the remainder were said to be "not highly skilled."[16] To enhance the realism and distinctiveness of these categories, we further assigned each

meaning.

[15]The SA reports results from various manipulation checks.

[16]In order to prevent negative priming, we used the terminology "not highly skilled" rather than "low skilled" to denote lower skill status.

prospective migrant an occupation appropriate to his respective skill level (see Table 2). Occupations were drawn at random from either a list of five highly skilled jobs or from a list of five not highly skilled jobs. These lists were generated using survey data on employment in Mumbai.

We implemented a multi-stage sampling protocol in order to obtain a representative sample of Mumbai (for complete details, see SA). Two kinds of individuals were excluded from the experiment. First, respondents identifying as neither Hindu nor Muslim were omitted from the survey. Mumbai is home to small Buddhist, Sikh, Christian, Parsi, and Jain communities, collectively comprising around 14 percent of the city's population. However, our theory and method were not applicable to these groups, nor did our research reveal them to be central to migration debates in the city. Second, since the primary focus of our study was on the attitudes of Mumbai natives, we stipulated that interviewees should have lived in Mumbai for at least ten years.[17]

Descriptive statistics are given in SA Table A3. Our randomizations resulted in observably similar groups of respondents distributed between each of the treatment conditions. Table 3 demonstrates that our sample appears balanced across a range of covariates. As we might expect by chance when considering a set of statistical comparisons this large, one pre-treatment variable (income) is significant at the 5 percent level (two-tailed test). We include basic demographic controls in our estimations to correct for this slight imbalance; this carries the added benefit of enhancing the precision of our estimates.[18] We also employed multinomial logit to predict treatment assignment as a function of the seven covariates displayed in Table 3; as expected, the overall likelihood ratio test is insignificant ($LR = 19.78$, $p = 0.53$).

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[17]Residence of between 10 and 15 years has been one of the criteria of nativeness stipulated by the Shiv Sena (Katzenstein 1973, 387).

[18]In the SA (Tables A4-A5), we show that the main results are robust to excluding control variables.

[Table 3 about here]

Data for the experiment were analyzed using difference-in-means tests or in the equivalent linear probability regression framework employing robust standard errors. The results are qualitatively identical when we re-estimate the models with a probit link function (see SA, Tables A6-A7).

# Experimental Results

Immediately after reading the treatment passage, survey enumerators asked respondents, "Do you want [*Hindu name/Muslim name*] and [*highly skilled/not highly skilled*] people like him in the city? Please simply answer yes or no." This main outcome sought to elicit individuals' favor or disfavor toward the fictitious migrants described in the treatment text.

## Effect of Skills Treatment

Do considerations of material self-interest explain nativist attitudes toward internal migration? To answer this question, we scrutinize the effects of our skills/occupation treatments. Table 4 reports the average attitudes of respondents expressed toward highly skilled versus lower-skilled migrants in the full sample. Column 1 indicates a powerful effect of incoming migrant skill type on native perceptions. By replacing the words "not highly skilled" with "highly skilled" and assigning a highly skilled occupation to the migrant rather than one that was low-skilled, our treatment increased ratings of migrant favorability by 7 percentage points ($p = .001$).[19] Given that the average acceptance rate for low-skilled migrants—the comparison group—was 63 percent, this effect represents a substantial 11 percent lift in support.

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[19] All subsequent reported p-values are from one-tailed tests.

[Table 4 about here]

The LMC hypothesis implies that natives should favor migrants whose skill profiles are dissimilar to their own and oppose those possessing congruent skill attributes.[20] As discussed, fiscal considerations plausibly intersect with, and, among high-income groups, even cancel out, these fears. Breaking our sample according to monthly household income allows us to probe this claim. We find that the preference for high-skilled migrants is indeed concentrated among low-income respondents. As the marginal effects plot in Figure 3 illustrates, respondents earning less than Rs.30,000 (approximately 500 USD) evidence strong partiality toward highly skilled newcomers. The treatment effect is strongest when income is lowest, and diminishes in magnitude as income grows. Beyond a monthly income of Rs.30,000, migrant skill profiles exert a statistically indistinguishable impact on respondents' stated attitudes. This supplies suggestive evidence for a neutralizing effect of LMC and fiscal concerns among higher-income natives. For low-skilled respondents, by contrast, the "perfect storm" of perceived employment competition, crowding of public services, and resource burdens associated with low-skilled migration motivates more pronounced opposition.[21]

[Figure 3 about here]

In order to further unpack the role played by material concerns among higher-income

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[20]Employment-based competition was a frequently heard refrain in our respondents' open-ended comments about migration's likely impact, e.g.: "I am in favor of opposing outsiders because they take away the jobs from localities and also make the city dirty." See also Katzenstein (1979, 81).

[21]SA Table A15 reveals a robust positive association between native dissatisfaction with neighborhood-level public services (roads, water, and electricity), and anti-migrant hostility, suggesting that crowding out concerns are an important determinant of nativism.

respondents, we conduct an additional test. It may be that high-skilled natives, while generally more permissive of migration, do adopt protectionist positions when primed to consider more finely targeted labor market threats. To assess whether this is true, we posed a further outcome question: "Do you agree or disagree that the government should put in place reservations to protect the jobs of Marathi-speaking people from [*Hindu name/ Muslim name*] and [*highly skilled/not highly skilled*] people like him who come here to work?" Job reservations in India are disproportionately available to better-skilled workers. Therefore, invoking reservations should mark out the labor-market threat for these natives, yet should not do so for low-skilled natives. A finding that higher-skilled respondents prefer "protectionist" reservations when assigned a highly skilled migrant, therefore, could reasonably be taken to indicate that higher-skilled natives display concern about employment competition when threats are more precisely defined.

This is the case, as Table 5 demonstrates. For this outcome, the sign of the coefficient effectively flips in comparison to Table 4. Higher-skilled natives are 13 percentage points more likely to back anti-migrant reservation policies when presented with a highly skilled migrant rather than one who is not highly skilled ($p = 0.017$). This meshes with the LMC hypothesis. The null result seen among lower-skilled natives, whose chances of availing reservations are minimal irrespective of the kinds of migrants that come, further reinforce this interpretation.

[Table 5 about here]

Notably, regressing our main outcome on respondents' years of education or on binary indicators for different education levels yields no result of statistical or substantive significance, and the treatment effect of migrant skill type is not conditioned by these covariates. Thus education does not appear to increase tolerance of migrants, as could be the case if it nurtures cosmopolitan values or promotes ideas about the economic benefits of internal migration. Additionally, our results do not corroborate a "sociotropic" view of attitude formation, which predicts that *all* natives, irrespective of their skill level, prefer

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high-skilled migrants over low-skilled ones. The stark differences in partiality toward migrant skill types that we detect between natives endowed with varying income profiles indicate, by contrast, that concerns about migration differ according to individuals' personal economic circumstances. Taken together, our results offer compelling evidence that economic self-interest drives native attitudes.

## Effect of Ethnicity Treatment

How does migrant religion—the main identity cleavage in Mumbai—impact native attitudes? According to the theory of ethnic in-group favoritism outlined earlier, we predict heterogeneous effects on this score, depending on the respondent's own religious affiliation. The results, presented in Table 6, are lopsided with respect to co-ethnic preferences. Hindu respondents demonstrate no evidence of religious bias: almost precisely the same proportion that expressed willingness to have a migrant with a Muslim-sounding name be in the city was willing to accept a Hindu-named migrant, all else equal. Clearly, the experimental treatment did not shift attitudes within this group. But for Muslim respondents, Muslim-named migrants are much preferred to those ascribed Hindu names. The difference is 6.9 percentage points ($p = 0.009$). Whereas the comparative politics literature finds extensive evidence of co-ethnic bias (e.g. Horowitz 1985), we demonstrate that ethno-cultural anxieties appear irrelevant for the majority of Mumbai's residents—at least on the salient identity cleavage we manipulate.

[Table 6 about here]

A noteworthy feature of the Muslim result is its uniformity across respondent types. In particular, Muslim respondents' religiosity does not influence the extent of co-ethnic favoritism (see SA Table 8). For Hindus, we do see evidence of an interaction, with more devout Hindu respondents showing greater in-group bias than less-devout ones. However, it is important to stress that for the 85 percent of Hindus who report praying daily, the

co-ethnic effect is null. A further striking finding to emerge from Table 6 is that *average* levels of support for internal migration are much higher among Muslim respondents compared to Hindu respondents. One reason for this could be that minorities (here, Muslims) tend to feel greater empathy toward members of other marginalized groups (in this case, migrants) than majorities. A second possibility is that nativist political mobilization explains this favorability gap. We noted earlier that the platforms of two of the city's foremost political parties—the Shiv Sena and the MNS—are built explicitly on anti-migrant resentments. These parties also solicit support overwhelmingly from Mumbai's Hindu population (Masselos 1994). SA Table A9 shows that the acceptance rates of Hindus who do *not* express support for nativist parties—approximately half of the Hindus in the sample—converge to a major extent on Muslims' average support for would-be migrants. It is conceivable that Mumbai's nativist movement works to intensify anti-migrant hostility among its target support base, i.e. Hindus.

## Reinforcing/Offsetting Effects of Economics and Culture

Cross-cutting cleavages theories suggest that cultural similarities may serve to offset hostility triggered by perceived economic threat. The factorial experimental design allows us to test for this. We estimate a linear probability model of the form:

$$Y_i = \alpha + \pi x_1 + \gamma x_2 + \theta x_1 x_2 + \boldsymbol{X}_i'\boldsymbol{\beta} + u_i \tag{2}$$

Here, $Y_i$ represents our outcome of interest, with $i$ indexing individual respondents, $\pi$ and $\gamma$ measure the conditional marginal effects of our exogenous variables $x_1$ (skills) and $x_2$ (religion), $\boldsymbol{X}_i$ is a $K \times 1$ vector of pre-treatment covariates, and $u_i$ is the idiosyncratic error term. Any interaction between the treatments is captured by $\theta$.

Estimates of Equation 2 are presented in Table 7, models 2 and 4. We see no evidence of an interaction effect among Hindu subjects (model 2). Conversely, for the 785 Muslim

respondents in model 4, we observe a statistically significant result on the $\theta$ term ($\theta = 9.8$ percentage points). To clarify its meaning, we restrict the sample to Muslim respondents and compute a table of averages under each treatment condition (Figure 4).[22] Conceived as the difference-in-differences estimator, $\theta$ captures the difference between Boxes G and H in the diagram. It is apparent that Muslim respondents discriminate based on a migrant's skill profile *only when that migrant is a Hindu*. On being assigned to a Hindu treatment condition, Muslims demonstrate a clear preference for high-skilled migrants. When evaluating Muslim migrants, however, Muslim respondents were unconcerned by the skill and occupation of the fictitious migrant.

[Table 7 about here]

[Figure 4 about here]

To summarize, majority-group Hindu respondents in our sample were unmoved by the religious background of the fictitious newcomer, nor were their skills-based evaluations in any way mediated by this ethnic variable. Yet Muslims respondents disregarded the skill attributes of co-ethnic migrants, while discriminating strongly on skill profiles when presented with non-co-ethnics.

## Explaining the Majority-Minority Divide

What explains the asymmetry in majority-minority attitudes? That is, why do minority-group respondents prefer co-ethnic migrants to such a great degree, while majority-group respondents care only about economic attributes? As we shall now document, Muslims in Mumbai experience pervasive political underrepresentation, with upshots for minority welfare and political behavior. On our interpretation, the asymmetric effects observed in Tables 6–7 form one facet of this behavior: marginalized groups use internal migration by

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[22]The equivalent calculations for Hindus are presented in SA Figure A1.

co-ethnics as a means of augmenting their electoral base. This helps ensure that minority interests are articulated in the formulation and implementation of policy.

Mumbai's Muslims are politically underrepresented relative to their 19 percent share of the city population. In the Municipal Corporation Elections of 2012, Muslim candidates secured victory in just 23 out of 228 electoral wards (10 percent). Not one of these corporators was affiliated with the party that ultimately gained control of the city council. A similar picture obtains at the state level. At the time of our survey, 5 of the city's 36 Members of the State Legislature were Muslim, and Muslim assembly candidates garnered only 10 percent of total votes cast in the city in the 2009 state elections. Overall, Muslims' input into the day-to-day running of the city and state government is negligible, therefore. A follow-up telephone survey on a random sample of the Mumbai population highlights a perceptual gulf on the issue of representation. Citizens were asked: "How well are people of your religion represented in city and state politics?" Muslim respondents were 21 percentage points more likely to answer "not well represented" compared to Hindus (see SA Tables A10 and A11).

These hindrances to the meaningful articulation of minority interests in politics adversely affect socio-economic wellbeing and physical security. In our survey, Mumbai's Muslims report greater job insecurity, wage fluctuations, and pessimism about future job prospects compared to the city's Hindu residents (see SA Table A12). Muslims are 22 percentage points more likely than Hindus to say that they would face religious-based discrimination when trying to obtain a job (see SA Table A10). Data on public employment lend credence to this perception: Muslims comprise a mere 4.4 percent of state government employees.[23] Supplementing economic disadvantage, anti-Muslim violence is rife in Mumbai. The city police is seen as heavily biased toward Hindus (Hansen 2001, 127). Only 4.2 percent of the Maharashtra police force (including the Mumbai police) is Muslim, and reports cite "an alarming pattern of police indifference to, collusion with and

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[23]Our findings from Mumbai mirror trends discernible across India (see SA Table A13).

active participation during Hindutva attacks on Muslim communities" (Government of Maharashtra 1998). Religious riots and bombings engulfed Mumbai in late 1992 and early 1993, paving the way for increased Hindu-Muslim residential ghettoization. Since then, political elites have periodically attempted to reignite religious hatreds—a strategy shown to yield electoral dividends to parties of the Hindu-nationalist right (Wilkinson 2004).

Importantly, enhanced political representation presents at least a partial solution to these problems. Anti-discrimination laws, regulation, and quotas have been shown to ameliorate the conditions of marginalized groups (e.g. Pande 2003). Minorities themselves believe this to be the case. Nationwide surveys reveal that 88 percent of Indian Muslims support employment reservation policies for their community (see SA Table A13). In a post-treatment question, we asked respondents: "In your opinion, could the government protect the jobs of local people if it wanted to?" 56 percent answered "yes" while 26 percent answered "no" (the rest said "don't know"). Furthermore, as Wilkinson (2004) establishes for the all-India level, where Muslims are electorally pivotal, governments are more likely to step in to subdue Hindu-Muslim riots. Thus, it is understandable that putting in power leaders who are responsive to the minority cause is a priority for Muslim citizens.

The crux of our "safety in numbers" argument is that, in the presence of anti-minority discrimination, and given the potential for improved political representation to overcome it, minority-group respondents view in-migration by co-ethnics as an effective way to tilt electoral demographics to their advantage and thereby expand their political influence. By contrast, majorities are entrenched in a position of political dominance, and encounter few of the daily depredations confronting marginalized groups. This leads them to view relative numerical strength as less of a pressing concern, explaining why majorities de-emphasize co-ethnicity when evaluating future migrants.

Two pieces of quantitative evidence support the notion that Muslims see future elec-

toral gains for Muslim-backed parties and candidates as an important factor when judging incoming migrants—much more so than Hindus. First, an observable implication of the theory is that, among minority respondents, politically engaged individuals should be more inclined to privilege migrant co-ethnicity than individuals who are less politically engaged. Those alive to the political ground realities are presumably better aware of the potential for migration to effect favorable shifts in the composition of the electorate; thus, for these individuals, co-ethnic considerations should come more to the fore in rendering judgments over prospective migrants.

To test this claim, we partitioned our sample into respondents who are more and less politically engaged. Next, we re-ran the baseline specification from Table 6 on the resultant subgroups. The analysis is presented in Table 8. Consistent with the theory, it shows that politically engaged Muslims are significantly more likely to consider cultural attributes when assessing migrant profiles. The co-ethnic treatment effect is 10 percentage points among politically active Muslim respondents ($p = 0.002$) but vanishes to statistical insignificance for less politically active Muslims. There are no parallel subgroup effects within the group of Hindu respondents: political engagement does not shape the propensity of majority-group members to discriminate between migrants on co-ethnic grounds. These findings corroborate the role played by political calculations in determining the migration preferences of minority Muslim respondents.

[Table 8 about here]

A second, direct test of whether cross-group preferences for co-ethnic migration abide by a representational logic is to compare attitudes toward migrant enfranchisement. If electoral weight is a primary concern, minorities should be more eager to grant co-ethnic migrants the ability to vote in the city than majority-group respondents. To study this, we examine respondents' willingness to provide voter identification cards to prospective migrants of different religious backgrounds. Voter ID cards are constituency-specific, and are required by Mumbai residents to participate in city, state, and national elections

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there. Acquiring these cards is no mean feat for India's internal migrant population. Our qualitative interviews revealed that restricting migrant access to voter ID cards is a technique utilized by Mumbai's political elite to curb political participation by disfavored groups.[24] If politics undergirds migration preferences, willingness to dole out these cards should be impacted by ethnic cues in the asymmetric manner we suggest.

Following the treatment vignette, we posed an additional outcome question: "Do you think the Mumbai government should provide [*Hindu name/Muslim name*] and [*highly skilled/not highly skilled*] people like him with voter ID cards?" We find that answers to this question diverge sharply across religious communities. The results are presented in Table 9. Muslim respondents are substantially more inclined to grant voter ID cards to Muslim migrants than to migrants presumed to be Hindu. The difference is 8.5 percentage points ($p = 0.006$). The same is not true of Hindu respondents, who evince no concern about migrants' religious affiliation. While our prior experimental findings demonstrated that respondent religion influences overall assessments of prospective migrants (Table 6), this result shows that forecasts about relative political group strength yield a compelling explanation for the majority/minority divide in the drivers of migration preferences.

[Table 9 about here]

Finally, qualitative evidence reaffirms the link between minority status and preferences over co-ethnic migration. At the end of the survey, enumerators put an open-ended question to respondents, inviting them to comment on the consequences of internal migration for Mumbai. We coded the 293 valid responses into three categories: mentions

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[24]For example, an NGO employee advocating on behalf of Muslim migrants stated: "Most poor migrants that arrive in Mumbai lack basic civic entitlements that regular citizens in the city take for granted. Obtaining a voter identification card is typically out of question due to the politics and bribery involved in proving one's residency in the city" (author interview, October 2013).

of political impacts, socio-economic impacts, and miscellaneous. In all, 56 percent of Muslim respondents mentioned politics, compared to 35 percent of Hindus. Conversely, only 29 percent of Muslims mentioned economics, against 47 percent of Hindus. These numbers accord with the notion that Mumbai's minority population interpret migration in primarily political as opposed to economic terms, while Hindus perceive the reverse.[25]

## Alternative Explanations

We investigate several alternative explanations for the asymmetry in majority/minority attitudes. First, it may be that differing levels of religious tolerance or fundamentalism between Hindus and Muslims explain the divergence. If true, more ethnically prejudiced groups should discriminate more harshly than the less prejudiced ones. Relatedly, social desirability bias could be correlated with Hindu/Muslim group affiliation, producing the discordant results. Again, if accurate, the group more willing to openly express hostile attitudes toward ethnic out-groups should be more likely to display co-ethnic bias in evaluating migrants. Further analysis leads us to reject both possibilities. Using a standard battery of questions administered post-treatment, we created an ethnocentrism index.[26] Contrary to the experimental findings, this index reveals that Muslims are *less* overtly ethnocentric on average than Hindu respondents (a 5 percentage point difference, $p < 0.001$). Clearly, fundamentalism and/or differential willingness to respond to religious cues do not hold traction as alternative accounts.

Second, there is greater caste heterogeneity within Hindu communities than within Muslim communities in India. These divisions could diminish bonds of mutuality and comradeship among Hindus in a way that is not true for Muslims, thereby reducing

[25]Case-study literature on the electoral strategies of Mumbai politicians reinforces the voter-level evidence (see SA, p.22).

[26]The index comprised answers to questions about how capable, polite, hardworking, and trustworthy respondents considered members of the other religious group to be.

in-group favoritism. Anticipating this possibility, we designed our experimental manipulations such that six of the treatment names (three Hindu and three Muslim) displayed in Table 2 signaled lower-caste backgrounds, while the remainder signaled higher-caste backgrounds. We then coded a treatment match or mismatch with respondents based on their self-reported caste background. Statistical tests indicated no signs of caste-based favoritism within either religious category, showing that caste differences (at least as they pertain to migration) do not undermine co-ethnic solidarity among Hindus (see SA Table A14).

Third, Maratha identity (the regional ethnicity based on the Marathi language) prevails mostly among Hindu respondents in our sample: 80 percent of respondents claiming to be ethnically Maratha were Hindu, and 65 percent of Hindus said they were Maratha. Since the nativist movement in Mumbai usually defines itself as a protector of the interests of Marathi speakers, such an overlap might account for Hindu respondents' apparent disinterest in the religion of the hypothetical migrant: put simply, Maratha identity might trump the religious cleavage for these individuals. Yet, even if we restrict the sample to Hindus who do not identify as ethnically Maratha, we uncover no trace of a co-ethnic treatment effect ($\beta = 0.018$, $p = 0.334$). In short, this alternative explanation, too, seems unable to account for the difference in co-ethnic preferences between Hindus and Muslims in Mumbai.

## Conclusion

We have collected evidence from a novel survey experiment in Mumbai, India, elucidating the causes of native preferences over internal migration. The results point to the centrality of economic concerns in shaping native attitudes. Migrants purporting to be highly skilled enjoy a substantial advantage over migrants described as low-skilled, yet this skill premium is concentrated among low-income respondents. Pursuant to cross-

cutting cleavages theories, considerations of material self-interest and co-ethnicity interact in shaping attitudes over internal migration, but only among natives belonging to the minority ethnic community. Our explanation for this asymmetry lies in "safety in numbers." Minorities facing socio-economic deprivation and impediments to representation in the political arena view in-migration by co-ethnics as a means of boosting their demographic and electoral weight in the city.

In terms of contributions, these findings deepen our understanding of the economic drivers of native attitudes on migration. In particular, recent scholarship has characterized the LMC hypothesis as a "zombie theory" (Hainmueller and Hopkins 2014b, 241). Yet this conclusion is based principally on the failure of LMC to be confirmed among higher-income workers. Several explanations have been proposed for this anomaly. For example, studies reveal that LMC-type concerns *are* evident among high-skilled workers when sector-level considerations are factored in (Dancygier and Donnelly 2013), or when labor-market threats are finely defined (Malhotra, Margalit and Mo 2013). Our results suggest an alternate account in which LMC and fiscal burden mechanisms function concurrently, masking LMC's effects among high-income natives. Put simply, high-income respondents may give a black mark to poorer migrants owing to the perceived fiscal burden of mass low-skill migration; but, for these respondents, high-skilled migrants evoke equal antipathy due to the labor market-threat they pose. Overall, such countervailing pressures cause high-income respondents to appear indifferent to migrant skill level. For low-income respondents, meanwhile, low-skilled migration induces especially strong and negative reactions because of the dual, reinforcing perceptions of heightened job competition and increased strain on public resources. Our evidence—which supports this perspective—points to a need for scholars to reconsider LMC's role in forming native preferences. LMC may be present, even its effects may be hard to decipher in aggregate statistical analyses.

A further contribution of the paper is to highlight the centrality of political and elec-

toral calculations in forming minority attitudes on migration. But to what extent do our findings on "safety in numbers" generalize? We make several points. Noteworthily, the fact that both practicing and non-practicing Muslims display a similar preference for in-group migrants suggests that adherence to particular religious tenets does not itself drive the results. To better establish that our findings are not limited to Islamic minorities, future research could flip the equation by investigating minority attitudes toward internal migration in Muslim-majority settings—for example, cities in Turkey or Malaysia. It is also worth stressing that anti-minority discrimination of the kind experienced by Indian Muslims is by no means unique. As SA Table A16 documents, minority groups of many kinds—religious, linguistic, racial, etc.—face comparable political and economic discrimination in fast-urbanizing countries worldwide, indicating that the conditions required for the "safety in numbers" mechanism to operate are endemic.[27] Anecdotally, case-study evidence speaks to the theory's wider applicability. For example, Bolivia's indigenous minority displays exceptionally high rates of rural-to-urban migration; in destination cities, indigenous migrants tend to "emphasise their ethnic identity" in the political arena, which has boosted this group's urban political representation (Heins 2011, 16). Likewise, in Chicago during the Great Migration, the black population increased eight-fold between 1900 and 1930, and native city-born blacks quickly formed political coalitions with migrant newcomers (Katznelson 1973, 88-9).

Nevertheless, a rigorous evaluation of the paper's core predictions in diverse settings is important. Debates over the management of internal population flows look set to intensify in the coming years as compositional shifts in emerging-market economies increase returns to urban employment and residence.[28] In this sense, Mumbai is representative of a large

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[27]Studying internal migration in settings where other types of identity cleavages exist—perhaps using quasi-natural variation along the lines of Adida, Laitin and Valfort (2014)—could help assess the mechanism's external validity.

[28]In India alone, for example, the city-dwelling population is expected to double be-

set of cases in the global south—from São Paulo to Cape Town to Kuala Lumpur—where faced-paced urbanization is occurring within charged political and social environments. Our findings on migration-induced job competition, fiscal strain, and inter-ethnic conflict raise a productive set of questions for future research. First, are internal migration conflicts similarly structured in authoritarian regimes where the electoral mechanism is absent but where economic and cultural cleavages still obtain?[29] Also, to what extent do discriminatory mass preferences translate into real-world policy outcomes and political elite behavior? Answers to these questions can help guide governments endeavoring to mitigate social dislocation in the wake of rapid urban growth, and protect the rights and wellbeing of migrants, who count among the world's most marginalized population groups.

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tween 2010 and 2040; at the same time cities will account for 70 percent of all new jobs in the country (Sankhe et al. 2010).

[29]To further extend the scope conditions of the "safety in numbers" electoral mechanism, future research could test whether it holds in cases where *international*, non-citizen immigrants enjoy certain voting rights—e.g., for local elections in certain European countries.

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**Figure 1: Growth in Mumbai's overall and migrant population, 1901-2001**
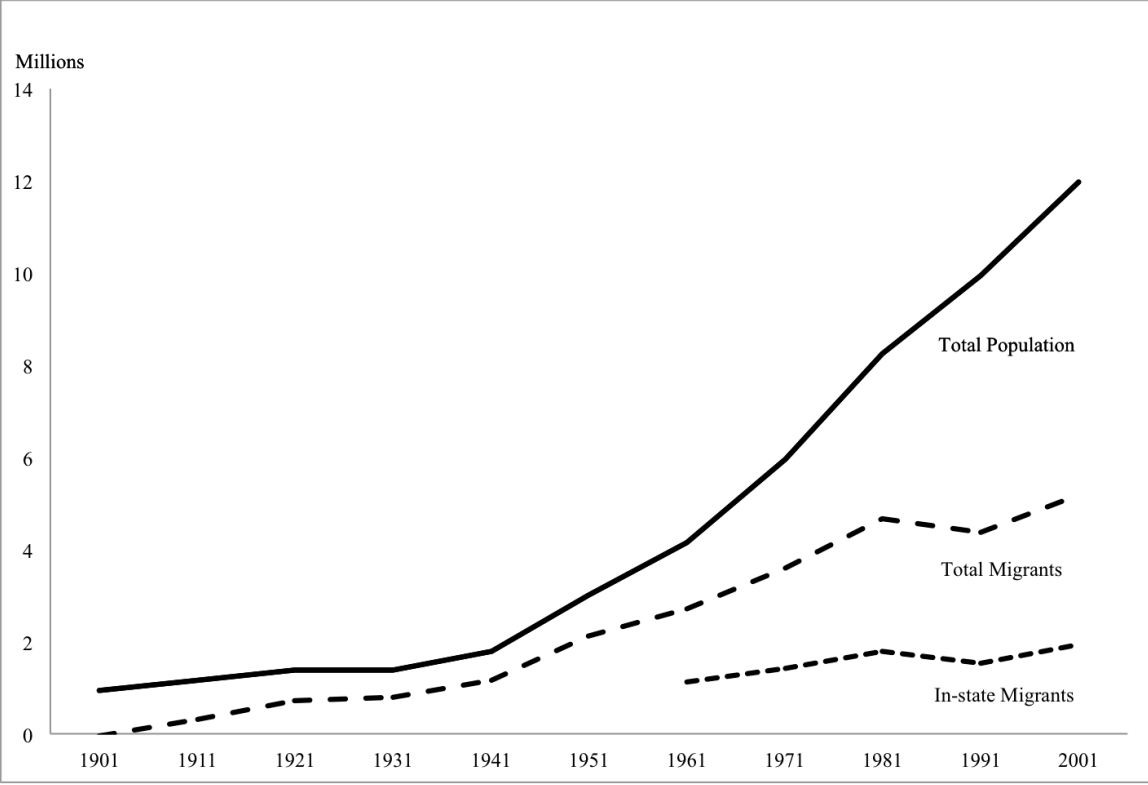


*Notes:* Data are compiled from the Census of India, Mumbai Human Development Report (2009), and Singh (2007).

**Figure 2: Occupational diversity of Hindus and Muslims in Mumbai grouped by skill-level**
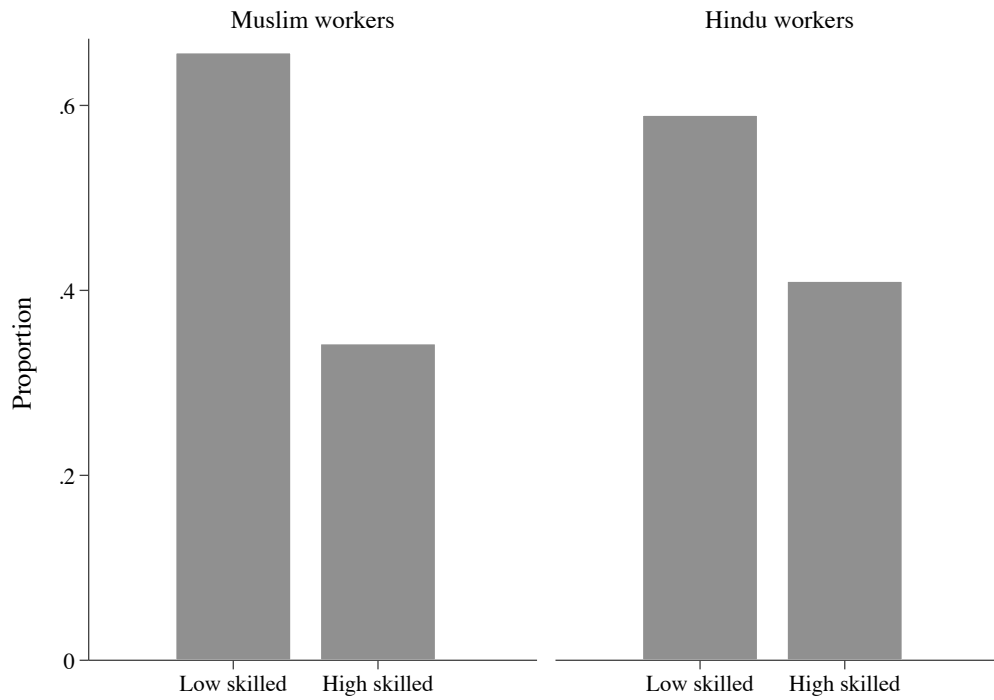


*Notes:* Proportion of sampled Hindu and Muslim workers in Mumbai in high- and low-skilled occupations. Data are taken from the 64th round of the National Sample Survey, 2007-2008 (*N*=1,148). Skill categories are based on the Indian National Classification of Occupations (2004).

**Figure 3: Marginal effect of migrant skill treatment at different levels of respondent income**
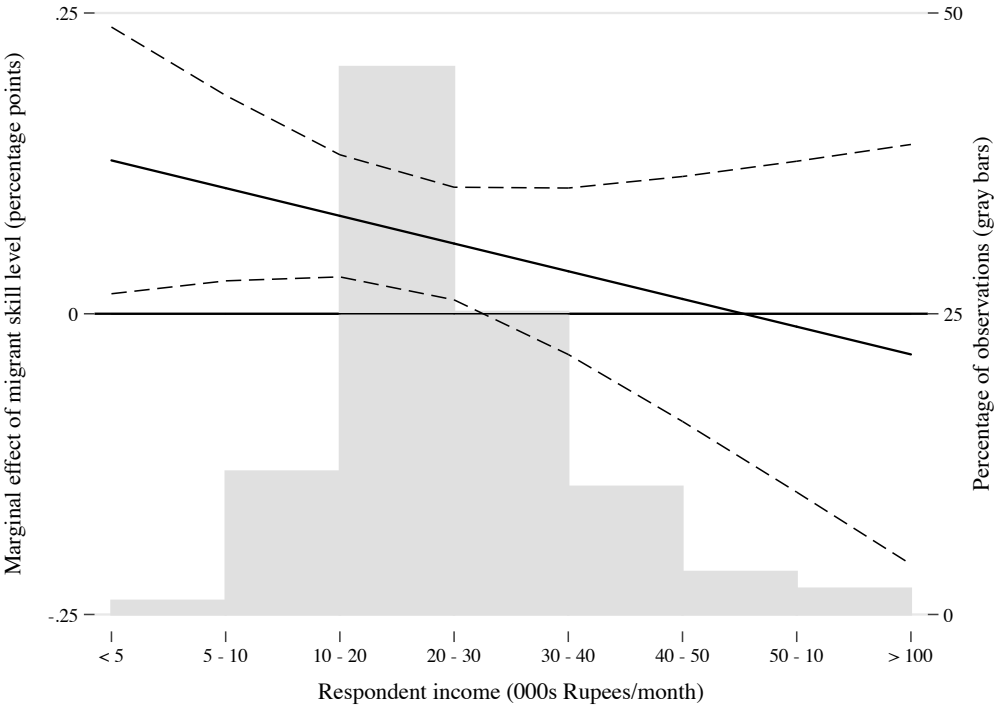


*Notes*: This chart represents the change in respondent favorability as the hypothetical migrant goes from being "not-highly skilled" (treatment=0) to one who is "highly skilled" (treatment=1).

**Figure 4: Attitudes of Muslim respondents under different treatment conditions**
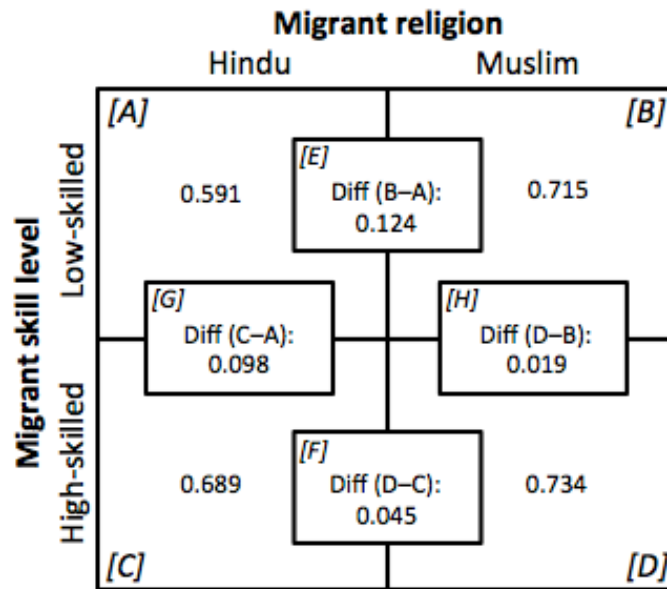


*Notes:* Boxes [A] through [D] represent the proportion of Muslim respondents answering "yes" to the main outcome question when presented with migrants of varying religion and skill characteristics.

**Table 1: Hypothesized crosscutting effects of migrant religion and skills on native attitudes**

| | | $S_j$ *(Migrant skills)* | |
|---|---|---|---|
| | | **Threatening to native** (-1) | **Non-Threatening to native** (+1) |
| $R_j$ *(Migrant religion)* | **Co-ethnic of native** (+1) | 0 (Offsetting) | 2 (Reinforcing) |
| | **Not co-ethnic of native** (-1) | -2 (Reinforcing) | 0 (Offsetting) |

*Notes:* Numbers represent the hypothetical utility to native$_i$ from accepting migrant$_j$ with varying religion and skill characteristics.

**Table 2: Religion treatment names and occupations**

| Hindu first names | Hindu last names | Muslim first names | Muslim last names | Not highly skilled | Highly skilled |
|---|---|---|---|---|---|
| Amit | Agarwal | Nadeem | Sheikh | hawker | IT professional |
| Rajiv | Joshi | Abdul | Pathan | rickshaw driver | doctor |
| Ram | Gupta | Moshin | Syed | construction worker | engineer |
| Neeraj | Teli | Salman | Ansari | cleaner | financial analyst |
| Alok | Gurjar | Rashid | Qureshi | factory worker | lawyer |
| Arjun | Kori | Zafar | Mansoori | | |

**Table 3: Tests of covariate balance**

| | Treatment: | | | | | |
| | Migrant religion: | | | Migrant skill level: | | |
| | Muslim | Hindu | Diff. (col. 2–1) | Not highly skilled | Highly skilled | Diff. (col. 5–4) |
| | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| *Respondent characteristics* | | | | | | |
| Age | 38.87 | 39.08 | 0.214 | 39.58 | 38.41 | -1.173 |
| | | | (0.626) | | | (0.627) |
| Education | 10.95 | 10.79 | -0.160 | 10.89 | 10.85 | -0.039 |
| | | | (0.227) | | | (0.226) |
| College | 0.244 | 0.230 | -0.014 | 0.234 | 0.234 | 0.005 |
| | | | (0.021) | | | (0.021) |
| Income (1-8) | 3.514 | 3.523 | 0.009 | 3.579 | 3.461 | -0.118 |
| | | | (0.057) | | | (0.057) |
| Hindu | 0.499 | 0.508 | 0.009 | 0.494 | 0.512 | 0.018 |
| | | | (0.025) | | | (0.025) |
| Female | 0.259 | 0.274 | 0.015 | 0.277 | 0.257 | -0.019 |
| | | | (0.022) | | | (0.022) |
| Born in Mumbai | 0.669 | 0.645 | -0.025 | 0.650 | 0.662 | 0.012 |
| | | | (0.024) | | | (0.024) |
| Marathi speaking level | 3.72 | 3.69 | -0.031 | 3.69 | 3.72 | 0.025 |
| | | | (0.068) | | | (0.068) |
| F-test | | | 0.31 | | | 1.44 |
| [p-value] | | | [0.96] | | | [0.18] |
| *N* | 738 | 847 | | 777 | 808 | |

*Notes:* Columns 1, 2, 4, and 5 report the group means of the covariates under different treatment conditions. Columns 3 and 6 display the results of two-sided t-tests between the treatment conditions, assuming unequal variances. F-statistics are tests for the joint significance of all covariates in explaining treatment assignment. Robust standard errors in parentheses.

**Table 4: OLS estimates of the effect of varying migrant skill level on main outcome**

| | Model: | |
| --- | --- | --- |
| | Main treatment effect | Interaction with respondent income |
| | (1) | (2) |
| Migrant skill treatment | 0.070 | 0.084 |
| (1=highly; 0=not highly) | (0.023) | (0.025) |
| Respondent income | | 0.136 |
| (1=high; 0=low) | | (0.040) |
| *Interaction:* | | |
| Migrant skill treatment x | | -0.112 |
| respondent income | | (0.057) |
| | | |
| Constant (control mean) | 0.632 | 0.770 |
| | | |
| *N* | 1578 | 1578 |

*Notes:* Dependent variable takes 1 (accept migrant) or 0 (don't accept migrant). Robust standard errors in parentheses. Specifications include controls for demographic, pre-treatment respondent characteristics: age, gender, born in Mumbai, and (in model 1) income.

**Table 5: OLS estimates of the effect of migrant skill treatment on attitudes toward restrictive reservation policy**

|  | Respondent income level: | |
| --- | --- | --- |
|  | High-income | Low-income |
|  | (1) | (2) |
| Migrant skill treatment | 0.131 | 0.037 |
| (1=highly; 0=not highly) | (0.062) | (0.025) |
|  |  |  |
| Constant (control mean) | 0.230 | 0.655 |
|  |  |  |
| *N* | 257 | 1320 |

*Notes:* Dependent variable takes 1 (favor reservations) or 0 (don't favor reservations). Robust standard errors in parentheses. Specifications include controls for demographic, pre-treatment respondent characteristics: age, gender, and born in Mumbai.

**Table 6: OLS estimates of the effect of varying migrant religion on main outcome**

| | Respondent religion: | |
| --- | --- | --- |
| | Muslim | Hindu |
| | (1) | (2) |
| Migrant religion treatment (1=Hindu; 0=Muslim) | -0.069 (0.029) | -0.005 (0.034) |
| Constant (control mean) | 0.736 | 0.584 |
| *N* | 785 | 793 |

*Notes:* Dependent variable takes 1 (accept migrant) or 0 (don't accept migrant). Robust standard errors in parentheses. Specifications include controls for demographic, pre-treatment respondent characteristics: age, gender, born in Mumbai, and income.

**Table 7: OLS estimates of the interaction of migrant skill and religion on main outcome**

| | Respondent religion: | | | |
| | Hindu | | Muslim | |
| | (1) | (2) | (3) | (4) |
| | Main effects | Interaction | Main effects | Interaction |
| Migrant skill treatment | 0.081 | 0.057 | 0.071 | 0.019 |
| (1=highly; 0=not highly) | (0.034) | (0.050) | (0.029) | (0.040) |
| Migrant religion treatment | -0.006 | -0.029 | -0.075 | -0.124 |
| (1=Hindu; 0=Muslim) | (0.034) | (0.050) | (0.029) | (0.043) |
| *Interaction:* | | | | |
| Migrant skill treatment x | | -0.045 | | -0.098 |
| religion treatment | | (0.068) | | (0.058) |
| | | | | |
| | | | | |
| Constant (control mean) | 0.525 | 0.539 | 0.696 | 0.715 |
| | | | | |
| N | 793 | 793 | 785 | 785 |

*Notes:* Dependent variable takes 1 (accept migrant) or 0 (don't accept migrant). Robust standard errors in parentheses. Specifications include controls for demographic, pre-treatment respondent characteristics: age, gender, born in Mumbai, and income.

**Table 8: OLS estimates of the effect of varying migrant religion on main outcome, by respondents' political engagement**

| | Respondent Religion: | | | |
| | Muslim | | Hindu | |
| | More Politically Engaged (1) | Less Politically Engaged (2) | More Politically Engaged (3) | Less Politically Engaged (4) |
|---|---|---|---|---|
| Migrant religion treatment (1=Hindu; 0=Muslim) | -0.098 (0.034) | -0.004 (0.056) | -0.026 (0.040) | 0.039 (0.064) |
| Constant | 0.744 (0.084) | 0.710 (0.141) | 0.556 (0.100) | 0.608 (0.169) |
| N | 531 | 254 | 565 | 228 |

*Notes:* After saying which party they voted for in the most recent city elections, respondents were asked: ``Do you consider yourself to be a strong supporter of this party?'' Respondents who answered ``yes'' were coded as more politically engaged, and respondents who answered ``no'' were coded as less politically engaged. Dependent variable takes 1 (accept migrant) or 0 (don't accept migrant). Robust standard errors in parentheses. Specifications include controls for demographic, pre-treatment respondent characteristics: age, gender, born in Mumbai, and income.

**Table 9: OLS estimates of the effect of varying migrant religion on voter ID card outcome**

| | Respondent religion: | |
| | Muslim | Hindu |
| | (1) | (2) |
|---|---|---|
| Migrant religion treatment (1=Hindu; 0=Muslim) | -0.085 (0.033) | -0.004 (0.035) |
| Constant (control mean) | 0.601 | 0.551 |
| N | 784 | 793 |

*Notes:* Dependent variable takes 1 (grant migrant voter ID card) or 0 (don't grant). Robust standard errors in parentheses. Specifications include controls for demographic, pre-treatment respondent characteristics: age, gender, born in Mumbai, and income.