Migration, Machines and Reform[*]

Alexander Bolton[1], James R. Hollyer[2], and Leonard Wantchekon[3]

[1]Duke University
[2]University of Minnesota
[3]Princeton University

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PRELIMINARY

Abstract

A well established literature in comparative politics finds that ethnic fractionalization is associated with reduced public goods provision and clientelist politics. A related literature in American politics contends that political machines were nurtured by immigrant constituencies. In this paper, we examine the effect of socio-demographic *changes* on the abandonment of clientelism and adoption of programmatic politics. Ironically, influxes of populations willing to participate in clientelist politics tends to induce reforms design to limit machine politics. Native clients of the machine perceive that political competition is likely, in the future, to steer transfers toward these new migrant groups and away from natives. Native clients thus support political reforms to curtail clientelism. However, when migrants are perceived as ideologically extreme relative to the native population – and hence unwilling to participate in machine politics – no such incentive arises. We test these claims using data drawn from a sample of US municipalities during the 'Age of Reform,' running roughly from 1880-1940.

Social scientists increasingly agree on the set of social structures that promote clientelistic politics. Political parties are most likely to target relatively poor voters for personalized transfers of goods and services, for which these parties will expect political support (Chubb, 1982; Kitschelt and Wilkinson, 2007; Stokes, 2005; Stokes et al., 2013). Such transfers are eased in instances where preexisting social networks within the targeted community provide ready access to local notables, who might act as 'brokers' between politicians and voters (Keefer and Vlaicu, 2008; Stokes et al., 2013). Clientelism is most likely to thrive where social organizations are relatively fragmented, preventing the emergence of a more class-based or ideological politics (Chubb, 1982). And politicians may need to resort to clientelistic transfers when they – or their parties – have yet to establish a reputation for delivering programmatic policies to the electorate, whether because of a lack of organization among voters or a failure to consult voters in formulating precise policy objectives (Keefer and Vlaicu, 2008; Fujiwara and Wantchekon, 2013).

While these claims enjoy considerable empirical support, they are predominantly static in nature. Given the existence of clientelist political competition, these theories tell us which groups parties are most likely to target for personal transfers. They are of more limited utility, however, in telling us when clientelism is likely to be abandoned or curtailed in favor of more programmatic political strategies (Stokes et al., 2013). This then raises a natural question: Can changes in the socio-demographic composition of the electorate lead to the curtailment of clientelism?

In this paper, we answer this question with a qualified 'yes.' To do so, we exploit shocks to the demographic composition of US municipalities during the late-19th and early-20th centuries. These shocks arose both from considerable European immigration to the US – this period is often referred to as the Era of Mass Migration – and from internal migration by African-Americans from the rural south to industrial northern cities – the Great Migration. This era also witnessed significant institutional changes in the government of US municipalities, as (some) cities introduced civil service protections, city-manager forms of government, and at-large electoral systems. These reforms were largely intended to curtail clientelistic practices or, to use the parlance of US municipal politics, 'political machines.' All were part of what Hofstadter (1955) terms the 'Age of Reform.'

However, focusing on dynamics, we argue, yields ironic predictions. Large influxes of migrants who were, or were perceived to be, amenable to clientelist transfers tends to induce reform. Reform, in this instance, is driven by the reaction of natives to the threat posed by the formation of migrant-centered political machines. Existing political parties cannot commit to maintain resource flows to current constituencies in the face of such demographic change. Hence natives, both those who are currently harmed by clientelism and those who benefit, may join ranks to impose barriers to inhibit clientelism and promote the provision of more public goods, from which they stand to benefit even in the face of demographic change. In so-doing, they cut off the risk the rise of immigrant constituencies poses to their material welfare.

Contrastingly, influxes of migrants who were less likely trade votes for personalized benefits will not induce natives to pursue reform. Native constituents of the clientelist machine have less reason to fear displacement by such new arrivals. Moreover, insofar as these migrants resist clientelism because of

strong ideological attachments – in this instance likely because of ties to the political left – native politicians may cling to clientelist tactics as a means of ensuring this ideology does not gain a stronger political foothold.

Based on the literature, we identify two migrant groups as susceptible to clientelist transfers: Irish immigrants and African-American internal migrants. We further identify two groups perceived as more likely to be associated with ideologically leftist positions: German and Italian immigrants. We demonstrate that influxes of Irish and African-American migrants are associated with civil service reforms, aimed at curbing clientelism. Influxes of German and Italian migrants show no such association.

We term this finding ironic because, where (despite reform) political machines continue to function, they are likely to cater to Irish and African-American constituents. Yet precisely because of this, influxes of migrants from these communities induces natives to support reform. By contrast, German and Italian immigrants were comparatively unlikely to be clients of a political machine. Yet, influxes of German and Italian immigrants does little to promote reform.

In what follows, we first develop our argument in greater detail, with a particular aim of providing context for the empirical case. We then review the relation of our claims to the literature on clientelism and on US municipal reforms. We then present a formalization of our arguments and test our theoretical claims through regression analysis in sections 3 and 4. Section 5 concludes.

1 Argument

The latter half of the 19th century, and first few decades of the 20th, witnessed a profound transformation of US demographics. This transformation was wrought by a tremendous wave of immigration: Abramitzky, Boustan and Eriksson (2012) estimate that, between 1850 and 1913, the inflow of migrants to the US amounted to some 30 million individuals. Goldin (1993) puts the number of immigrants at 17 million over the 25 years to 1921. This dramatic inflow was attributable, in part, to the US federal government's open-door policy with regard to (European) immigrants. Prior to the Emergency Quota Act of 1921, such immigration was virtually unrestricted.[1]

This period of mass migration roughly coincided with a period of profound change in American political institutions, which Richard Hofstadter famously dubbed the 'Age of Reform' (1955). Beginning in the 1880s, with the passage of the Pendleton Act affecting the federal bureaucracy (1883) and the creation of municipal civil service boards in such cities as Boston (1885), a wave of 'good government' reforms was launched at the federal, state and municipal levels (*Civil Service Agencies in the United States: A 1937 Census*, 1938). This wave of reforms would reach its height in the early 20th century, when the governing institutions of many US cities were radically restructured – including the creation of civil service protections; the replacement of mayors and city councils by commissions with dual executive and legislative powers;

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[1]The open-door did not extend to non-European migrants. Notably, the Chinese Exclusion Act of 1882 effectively banned Chinese immigration. Restrictions on Japanese immigration were agreed to in the bilateral 'Gentleman's Agreement' with the government of Japan in 1907.

the creation of professionalized city managers with authority over budgeting; and the replacement of ward (district) elections with at-large (city-wide) races (see, for instance Rauch, 1995). Local governments varied widely in their willingness to adopt such reforms, and in the timing of adoption where reform did take place. Several states would not adopt systematic civil service protections until well past the middle of the 20th century (Folke, Hirano and Snyder, 2011). The Age of Reform thus generated considerable variation in the institutional structure of local government, some of which persists to this day (though, on correlations between different types of reform, see Lapuente, 2010).

We contend that these two momentous trends were not merely temporally proximate, but causally linked. Immigrant communities formed the largest constituencies for clientelistic parties – political machines – against which the political reformers of the late-19th and early 20th centuries railed. This was particularly true of Irish communities, which already exercised political power in such prominent machines as the Tweed Ring (Ackerman, 2005) that formed somewhat prior to the start of our dataset, which runs from roughly 1880-1940. In the words of Buenker (1973, 6), "All told, the political [machine] system provided ethnic minorities with vital benefits that the economic and social order often denied them. None achieved more success by this route than the Irish." African-American internal migrants would also come to form localized political machines in such areas as the south side of Chicago (Royko, 1971).

When faced with an influx of such migrants, native citizens recognized that machine politics would likely become more entrenched. These natives included members of the upper and middle classes, who stood to lose from any form of clientelism (Weitz-Shapiro, 2014). But, importantly, they also included current participants in the machine, who recognized that, as a result of inward migration, patronage would likely shift away from their community and toward these new arrivals. As a result, in municipalities faced with large volume of Irish and Black inward migration, a majority of white natives supported reforms aimed at curbing machine politics. Such reforms limited the efficacy of the patronage mechanism, and instead channeled political competition toward the provision of public goods, the benefits of which would be enjoyed by natives and migrants alike.

Our contention that immigrants constituted particularly attractive targets for clientelistic transfers is widely supported by observers. Banfield and Wilson (1963) contend that the political machine found its roots in poorer immigrant and first generation centers, and did not extend to the 'newspaper wards' of the middle class. Hofstadter (1955) goes so far as to refer to clientelist systems as the 'boss-machine-immigrant complex.'

Immigrants made attractive clients for political machines for a variety of reasons. Relative to the native population during this period, immigrants were predominantly poor, and therefore benefited disproportionately from small monetary transfers and services (Kitschelt and Wilkinson, 2007; Stokes, 2005; Stokes et al., 2013). In addition to this material deprivation, immigrants faced particularistic needs regarding naturalization and voter registration, and were likely more reliant on services than similar natives, given their lack of familiarity with American political institutions. Political machines were well-placed to fill these needs, and were particularly active in naturalizing new migrants and ensuring they registered to vote (Ackerman,

2005; Higham, 1955). Moreover, precisely because immigrants lacked experience with American politics, they were unlikely to have strong existing partisan loyalties. Both Republican and Democratic parties competed vigorously for the votes of new immigrants from the 1880s through the 1920s (Buenker, 1973). One of the most consistent predictions from theories of redistribution and electoral conflict is that ideologically unaffiliated groups should prove particularly attractive targets for transfers (Dixit and Londregan, 1995; Lindbeck and Weibull, 1987).[2]

However, not all migrants were alike, or perceived as being alike, in this regard. In particular, migrants varied in their perceived ideological attachments. Whereas Irish immigrants had already begun to integrate and subsume existing urban machines by the start of our sample, and African-Americans were sufficiently disenfranchised that they could at most gain marginal benefits from localized political machines and did not pose a radical threat; other migrant groups were seen as ideologically committed to the radical left – particularly to anarchism. This was notably true of German immigrants, who were widely associated with Socialism and Anarchism following they Haymarket bombings in 1886 (Higham, 1955). Italian immigrants were also often seen as radicals, as evidenced by the Sacco and Vanzetti trial.

The threat posed by these migrants, while very much on the mind of urban reformers (for a striking example, see Strong, 1885), was quite distinct from that posed by less ideologically motivated groups. Ideologically motivated voters are unlikely to be responsive to the promise of material transfers (Dixit and Londregan, 1996). Hence, rather than threatening to siphon benefits away from natives under the existing (clientelist) system, ideological migrants threatened the prevailing political order. Natives would not face a material inducement to reform in this instance, and may be less willing to forgo clientelism as a potential tool against radicals.

At the national level, while virtually no restrictions on European migration existed until the passage of immigration quotas 1921, other restrictions – notably a literacy requirement for migrants – were prominently considered as early as 1897. Indeed, a literacy test for would-be immigrants repeatedly passed both the House and Senate, only to face presidential vetoes, passing only via a veto override in 1917 (Goldin, 1993). In addition to attempting to stem the inward flow of migration, the nativist backlash at the national level encompassed attempts to toughen naturalization requirements, thereby diminishing immigrants' political power. For instance, the Naturalization Act of 1906 centralized the naturalization process at the federal level, removing this authority from the hands of state and local officials. This move was particularly aimed at local political machines, who had previously tended to distribute naturalization papers on the eve of elections as part of a clientelistic exchange with residents thereby granted the ability to vote (Higham, 1955).

Local level governments, naturally, had no direct ability to control immigration rates, nor – despite their influence over naturalization administration prior to 1906 – to legislate naturalization requirements. Hence, the local level backlash took on alternative forms. Notably, local level institutional reforms could effectively restrict the political power of immigrants, or redirect the energies of politicians competing for immigrant

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[2]Though, for a caveat, see Stokes et al. (2013).

votes. Notably, civil service reforms, which limited the ability of political machines to distribute government posts as patronage appointments, substantially diminished the effectiveness of clientelist strategies.[3] Patronage acts as the life-blood of political machines – patronage posts are one of the primary means through which the brokers responsible for conducting clientelist transactions are rewarded by their politician superiors (for an extensive discussion of the workings of patronage in the Chicago Daley-Cermak machine, see Royko, 1971). Patronage posts both act as a reward for brokers and as a source of motivation, since a broker's continued employment is contingent on her party's success at the polls (Robinson and Verdier, 2013). Restrictions to the use of patronage are thus among the most fundamental reforms aimed at the reduction of clientelism. Civil service protections served as a means by which natives might mitigate the immigrant threat.

Other efforts in the municipal reform movement of the late-19th and early-20th centuries had similar aims. For instance, efforts to alter the system of representation from a geographic (ward) basis to at-large municipal elections were spurred by beliefs that malapportionment tended to favor poorer and more immigrant populated areas at the expense of the middle and upper classes (Buenker, 1973; Hays, 1964). Advocacy for city-manager forms of government – in which a professional bureaucrat would be in charge of such matters as budgeting – were intended to remove power from the hands of clientelist parties (Hays, 1964; Rauch, 1995). And municipal reformers were often also supporters of the temperance movement – which emphasized the preservation of native and protestant values in the face of immigrant, and often Catholic immigrant, social influence (Buenker, 1973).

The link between municipal reform and nativist attitudes has been commented by modern observers, and is clearly present in contemporaneous accounts. Higham (1955, 41) argues that, "In the mid-eighties, as the movement to redeem the cities became an organized crusade ... it displayed an unabashed nativism." Buenker (1973, 12) writes that "[Pro-business] legislators feared the rise of an urban, immigrant America because they saw it as a threat to their own political and cultural hegemony."

A contemporaneous account, Strong (1885), expresses the concerns of many municipal reformers, and the nativist sentiments underpinning these views.

> "...[T]here is no more serious menace to our civilization than our rabble-ruled cities,"

Strong contends. Irish and German immigrants were particularly identified as threatening:

> "Immigration has created the 'German vote' and the 'Irish vote,' for which politicians bid and which have already been decisive of state elections, and might easily determine national." (p. 43)

On the one hand, these threats were ideological – from 'dangerous elements' (p. 135):

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[3]It is not our contention that such reforms completely eliminated the utility of such strategies, or prevented the use of patronage. For instance, the Daley-Cermak machine circumvented long-standing civil service requirements in Chicago by distributing patronage through 'temporary' appointments, which were not covered by civil service laws (Royko, 1971). It is merely our contention that the existence of such reforms made the exercise of patronage more difficult, diminishing the marginal benefits from clientelism.

> "A mass of men but little acquainted with our institutions, who act in concert and who are controlled largely by their appetites and prejudices, constitute a very paradise for demagogues," (p. 43).

Clientelist politics in immigrant populations posed another threat:

> "[Politicians] are gamblers, saloon-keepers, pugilists or worse, who have made a trade of controlling votes and of buying and selling offices and official acts. ... Popular government in the city is degenerating into government by a 'boss'," (Strong, 1885, 135-6).

This backlash was likely to be most pronounced in localities facing a large influx of migrants in a short span of time. Under circumstances in which these migrants were likely targets for clientelist transfer, natives would anticipate large shifts in the political order were institutional reform not adopted. Hopkins (2010) documents a similar effect in more modern times – US local governments in the 1990s and 2000s were most likely to adopt anti-immigrant ordinances when faced with a large influx in the local immigrant population. However, while Hopkins (2010) emphasizes the role of emotions/attitudes in driving this response – building on theories of racial threat – we note that the backlash may have a rational basis.[4]

Clientelist parties were unable to commit to maintain targeting benefits at existing constituents in the face of large demographic changes.[5] Hence, members of the then-current electorate may have favored the adoption of institutional reforms designed to curb clientelism as a means of ensuring parties did not redistribute clientelist transfers too heavily toward new immigrants. Those not currently enmeshed in clientelist networks – and hence taxed to support clientelist transfers – had an incentive to do this to prevent still further redistribution toward other groups. And, if the influx of new migrants was sufficiently large, those targeted for clientelist transfers *ex ante* may have a similar incentive, as they anticipated that future transfers would be diverted to new migrant groups and away from themselves.

While our argument primarily focuses on material incentives, ethnic and religious animosity no doubt also motivated native responses to migration during this period. However, insofar as we emphasize that natives perceived different threats from different groups, our argument suggests that ethnic and racial animosity were channeled through rational calculation and material conflict.[6]

We thus contend that civil service reform largely emerged as the result of normatively questionable – even anti-democratic – impulses. Buenker (1973, 26) contends, "Viewed in the broader perspective of historical development, many of these [reform] proposals [(civil service, city manager systems)] were fundamentally undemocratic." According to Stromquist (2002, 145), these reforms led to "political alienation

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[4]Our approach also shares similarities with Dancygier's (2010) account of immigrant-native conflict in Europe. Like us, she emphasizes distributional concerns as motivating conflict between immigrant and native groups. Our accounts depart insofar as (1) our focus is on institutional change resulting from conflict, rather than conflict itself, and (2) Dancygier's account focuses on a setting where clientelism is largely absent.

[5]Indeed, a substantial literature argues that the inability of politicians to commit to policies lies at the root of clientelism (Keefer, 2007; Keefer and Vlaicu, 2008; Robinson and Verdier, 2013).

[6]We use the term 'rational' in this instance in the narrow and technical sense. Individuals are rational if they exhibit consistent preference orderings and act on those preferences – regardless of what those preferences might be. Thus, individuals may 'rationally' act on xenophobic or racist sentiments, even if these sentiments themselves are 'irrational' in the colloquial sense.

of large segments of the new immigrant working class who were effectively disenfranchised by the new politics of reform."

Our theoretical model does not specify why, however, these anti-democratic impulses were limited to 'good government' reforms. After all, natives could potentially take more direct steps to disenfranchise new migrants – and, of course, white citizens did take any number of more direct steps to disenfranchise minorities, particularly black citizens, during (and after) this era. We contend that the native backlash manifested itself through institutional reforms for two reasons: (1) The most direct means to limit migrant political power – i.e., reforms to the naturalization process and quotas on immigration – could only be enacted by the federal government and was beyond the scope of municipal power. (2) Reforms to the civil service, and other good government reforms, were already on the political agenda due to mechanisms exogenous those we document in this paper. The responses by the native population to immigration shifted local support for these reforms, but is not wholly responsible for their origin.

Despite the largely anti-democratic motives underlying support for reform, we contend that the adoption of civil service reforms also provided benefits, in the form of public goods provision. Existing empirical work suggests that the adoption of civil service reforms during this period expanded spending on roads and sewers (Rauch, 1995). Here we contend that these reforms had this effect by channeling political competition away from clientelism.

Civil service reforms should unambiguously be associated with increased public goods provision in our theory. We contend that public goods and clientelist transfers act as substitute mechanisms through which parties may obtain political support. As civil service reform renders clientelism less productive in terms of generating votes, parties naturally shift resources toward public goods provision. Insofar as migrant inflows promote civil service reform, therefore, the association between inflows and public goods provision should be positive.

However, the direct effect of inflows – i.e., effects that are not mediated by civil service reform – are anticipated to be ambiguously signed. On the one hand, in any model involving electoral platforms consisting both of public goods and private transfers, an expansion of the size of the electorate should increase the former and diminish the latter. This is because the marginal benefit to parties from appealing to any one voter or group of voters through clientelist transfers falls, relative to the marginal benefit of appealing to many voters through public goods provision, as the electorate expands (Lizzeri and Persico, 2001).[7] Influxes of ideological migrants, therefore, should unambiguously promote public goods provision. On the other hand, influxes of less ideological immigrants expand the electorate grows due to an influx of voters who are particularly responsive to clientelist transfers, increasing parties' incentives to use these as tool. Either effect may dominate.

Whatever the direct effect of migrant influxes on public goods absent reform, this effect should be more positive in the presence of reform. The intuition here is straightforward – since clientelism is rendered less productive by reform, the addition of a block of voters is more likely to induce politicians to adopt

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[7]This mechanism also at work in Bueno de Mesquita et al. (2003).

programmatic strategies where reform has been enacted than would have been the case were reform absent.

Our arguments with respect to public goods provision also find support in the historical literature. By the early 20th century, many reformers were arguing for the expansion of public services – including public services from which the migrant community could benefit. This impulse was reflected in the 'Americanization' movement, which aimed to expand urban social services and education, which, when aimed at immigrants, was argued to foster assimilation (Higham, 1955). Naturally, such service expansions were also demanded by immigrants themselves (Stromquist, 2002). Historians largely attribute this consensus around public goods provision as giving rise to a new 'urban liberalism,' which – in turn – would eventually influence the presidential campaigns of Al Smith and Franklin Roosevelt (Huthmacher, 1962).

Note that these contentions regarding public goods provision run somewhat contrary to the findings of a literature on ethnic politics. The bulk of this literature finds a negative association between ethnic fractionalization and public goods provision (Easterly and Levine, 1997; Miguel, 2004; Miguel and Gugerty, 2005). This effect is largely seen as the result of clientelism – ethnic parties are better able to target co-ethnics either for transfers (Habyarimana et al., 2009) or taxation (Kasara, 2007), resulting in parties that focus their platforms on targeted appeals to ethnic communities.

While we do not seek to dispute these findings, this paper suggests that demographic *changes* resulting in increased fractionalization may have wildly divergent effects from fractionalization measured in levels. As argued above, certain changes in demographics threaten to upend the *status quo* distribution of resources under clientelism, leading to institutional reforms that curb clientelist competition and promote public goods provision. Such reforms are only likely to take place, however, if (1) these demographic changes take place in a democracy, (2) natives are unable to limit inward migration, and (3) migrants are non-ideological, or perceived as such.

2 Existing Literature

This paper relates to, and draws on, a variety of existing arguments across several subfields of political science and economics. Most directly, it relates to literatures in American and comparative politics on the creation of meritocratic bureaucracies and civil service protections. Most of these pieces examine reforms at the national level – for instance, the adoption of the Pendleton Act in the US (Johnson and Libecap, 1994; Skowronek, 1982), or the gradual development of autonomy by US bureaucratic agencies (Carpenter, 2001). A related literature examines the creation of independent bureaucracies and civil service laws, typically from a historical and comparative perspective (Hollyer, 2011; Popa, N.d.; Silberman, 1993). These works generally point to reform as increasing the capacity of the state, and improving subsequent public service provision – broadly defined.[8]

The mechanisms in our paper more closely relate to a subset of the literature on bureaucratic reform,

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[8]For work in a similar vein, using subnational data, see Lapuente and Nistotskaya (2009).

which deal with electoral competition and political machines. These works contend that an increase in political competitiveness drives the adoption of meritocratic reform, and the abandonment of patronage as a clientelistic tool. This argument was first advanced by Geddes (1994), with application to Latin America. Typically, the mechanism underlying the relationship between electoral competitiveness and bureaucratic reforms is posited to be one of 'lock-in': incumbents seek to disable potential rival successors by limiting their ability to use patronage as an electoral tool. This argument is formalized by Mueller (2009) and Ting et al. (2013). Ting et al. (2013) further test this claim in a sample of US municipalities similar to that used here, while Folke, Hirano and Snyder (2011) find related evidence in this sample that patronage tends to benefit incumbent parties.

Our mechanism is also one of 'lock-in,' insofar as natives are attempting to secure their political advantages against a threat posed by migrant groups. But, it differs in two ways from the mechanism described above: First, political divisions in our theory occur along ethnic or racial, rather than partisan, lines. Second, 'lock-in' is demanded by citizens, rather than initiated by politicians. In our conception, it is native constituents that demand security from an emergent migrant threat. When this threat is from non-ideological migrants, citizens support reforms designed to curb clientelism. In our regression results, we control for electoral competitiveness and find that the contentions of Ting et al. (2013) continue to enjoy support.

Our findings also pertain to a growing literature in economics and political science on the political and economic effects of immigration. Our contention that migrant influxes constitute a threat to native populations draws directly on Hopkins (2010). However, unlike his work, we examine the role of institutional reforms as a response to this threat. Several other prominent pieces examine native backlash to immigration. These can roughly be divided into pieces that view the threat posed by migrants as primarily economic in nature (e.g. Goldin, 1993; Scheve and Slaughter, 2001) and those that view the threat as primarily cultural or racial (Hainmueller and Hiscox, 2010; Hainmueller and Hangartner, 2013).[9] Malhotra, Margalit and Mo (2013) offer evidence for both forms of threat. In our conception, the nature of the threat depends on perceptions of migrant groups. Where migrant groups are perceived as non-ideological, the threat is electoral and material. (Dancygier (2010) advances a similar account of involving the political/material threat posed by immigration to natives.) When migrants are perceived as ideological, the threat is one of radicalism.

A growing literature in economics examines immigration into the US during the era that is our focus. Abramitzky, Boustan and Eriksson (2012) examine the incentives for migration and the frequency with which migration was permanent, as opposed to when migrants returned to their source countries after an stay in the US. Ager and Brückner (2010) document a positive relationship between inward migration and economic growth in US localities. Rodriguez-Pose and von Berlepsch (2012) demonstrate that the positive effect of migration on growth during this period persists through to the present day. In this paper, we examine one mechanism through which migration might effect growth: the reshaping of political institutions.

Finally, our paper relates to a broad literature in comparative politics on clientelism and the mecha-

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[9]More generally, see Key (1949) on the mechanism of racial threat.

nisms by which polities escape from clientelism. A literature far too vast to survey here examines the use of clientelistic transfers, and their value in achieving electoral success (prominent examples include Chubb, 1982; Kitschelt and Wilkinson, 2007; Stokes, 2005; Wantchekon, 2003). This literature, coupled with historical evidence, supports our contention that certain groups of new migrants form likely targets for clientelist parties. A smaller set of works examine the mechanisms by which polities escape clientelism and adopt programmatic party competition. The mechanisms emphasized by this literature include economic development and the spread of mass media (Stokes et al., 2013), investments by political parties in credibility for delivering on programmatic promises (Keefer, 2007; Keefer and Vlaicu, 2008), and parties' investment in policy expertise and development of precise policy platforms (Fujiwara and Wantchekon, 2013). To our knowledge, we are the first to document a role of demographic shocks in prompting the curtailment of clientelistic electioneering.

3 Model

We illustrate the 'threat' mechanism described above with a simple theoretical model. This model builds on a probabilistic voting framework (Dixit and Londregan, 1995; Lindbeck and Weibull, 1987). It bears a particularly close semblance to Lizzeri and Persico (2004), in that (1) we consider electoral competition based on both clientelist transfers and public goods provision and (2) we examine the effects of changing the size of the electorate. However, unlike these works, we consider an expansion comprised of voters who may or may not be particularly susceptible to clientelist transfers and we examine the incentives for parties to introduce a reform that reduces the marginal benefits of such transfers, and boosts the relative electoral value of public goods.

3.1 Model Primitives

We consider an electoral environment in which there are two parties $\mathcal{P} \in \{A, B\}$ and a continuum of voters. Voters are partitioned into three groups $\mathcal{G} \in \{R, P, M\}$, where each group has mass $N_{\mathcal{G}}$, $N_R + N_P = 1$. Individual voters are denoted i, where i is indexed over the interval $[0, 1 + N_M]$. Thus, the magnitude of N_M denotes the size of the influx of immigrant voters and will be the variable of principal theoretical interest. The interaction takes place over two periods $t \in \{1, 2\}$.

In the second period, each voter i may cast her vote $v_{i,2} \in \{0, 1\}$, where $v_{i,2} = 1$ denotes a vote for party A. In the first period of play, only members of R and P may cast a vote, $v_{i,1} \in \{0, 1\}$. Elections take place via simple majority rule.

To attract votes, each party must craft a platform consisting of clientelist transfers and public goods investments. During the first period of play, platforms will also consist of a stance on civil service reform, $r \in \{0, 1\}$, where $r = 1$ denotes favoring reform. Platforms are binding – whichever party is elected must implement its platform. However, parties cannot make binding commitments in the first period regarding

their platforms or policies in the second.[10]

Transfers can only be targeted at groups, not at individual voters. Let $c_{\mathcal{G},\mathcal{P},t} \in \mathbb{R}$ denote the transfers offered by party $\mathcal{P}$ to group $\mathcal{G}$ in period t. Negative transfers denote taxation of a particular group. Taxes are levied against initial endowments $\omega_{\mathcal{G}}$, where $\omega_R > \omega_P \geq \omega_M \geq 0$.

Analogously, let $I_{\mathcal{P},t}$ denote the level of public goods investment offered by party $\mathcal{P}$ in period t. Public goods are produced according to the production function $g(I)$ where $g' > 0$, $g'' < 0$, $g'(0) = \infty$, and $g(0) = 0$.

Attempts by parties to deliver positive clientelist transfers to voters may be subject to a 'leaky bucket' (Dixit and Londregan, 1995). Let $C_{\mathcal{G},\mathcal{P},t}$ denote the amount budgeted by party $\mathcal{P}$ for targeting at group $\mathcal{G}$. Then the amount that actually reaches voters in this group is given by $c_{\mathcal{G},\mathcal{P},t} = \begin{cases} (1-r\alpha)C_{\mathcal{G},\mathcal{P},t} \text{ for } C_{\mathcal{G},\mathcal{P},t} > 0 \\ C_{\mathcal{G},\mathcal{P},t} \text{ otherwise.} \end{cases}$ Recall that $r = 1$ in the second period of play if reform is adopted. Thus, we make a primitive assumption that civil service reforms, by constraining the ability of machines to employ patronage, render clientelist transfers less effective, and $\alpha \in (0,1)$ indexes the efficacy of this reform.

Parties must allocate spending subject to a balanced budget constraint: $\sum_{\mathcal{G}} N_{\mathcal{G}} C_{\mathcal{G},\mathcal{P},t} + I_{\mathcal{P},t} = 0$ for all parties and time periods. Several additional constrains apply to spending: First, immigrants are effectively absent from the game in the first period, so $C_{M,\mathcal{P},1} = 0$. Second, no group can be taxed such that its total income $y_{\mathcal{G},\mathcal{P},t} = \omega_{\mathcal{G}} + c_{\mathcal{G},\mathcal{P},t}$ falls below zero.

Parties are interested only in attaining power. Voters, by contrast, have both material and ideological incentives. Let voter i's utility of electing party B be given by the quasi-linear function $u(y_{\mathcal{G},B,t} + g(I_{B,t})) + x_i$ and her utility of electing party A be $u(y_{\mathcal{G},A,t} + g(I_{A,t}))$, where $u(\cdot)$ is such that $u' > 0$, $u'' < 0$, $u'(0) = \infty$. $x_i \in \mathbb{R}$ thus reflects voter i's ideological preference for party B over party A. This term is known to i, but is unknown to any party. Each party, however, is informed that x_i is distributed according to the CDF $F_{\mathcal{G}}(\cdot)$ – with associated PDF $f_{\mathcal{G}}(\cdot)$ – in group $\mathcal{G}$. We place a regularity condition on $F_{\mathcal{G}}(\cdot)$ such that for any j, k, $F_{\mathcal{G}}(u(j) - u(k))$ is strictly concave in j and strictly convex in k (Lindbeck and Weibull, 1987). We additionally make the following assumptions, the first of which restricts the relative densities $f_{\mathcal{G}}(\cdot)$ across the rich and poor natives:

Assumption 1. $\frac{u'(\omega_P)}{u'(\omega_R)} > \frac{f_R(0)}{f_P(0)}$

The second assumption is that the measure of poor natives strictly exceeds that of the rich:

Assumption 2. $N_P > N_R$

Assumption 1 ensures that, prior to any immigration influx, parties have a preference for targeting positive clientelist transfers at the poor and redistributing away from the rich. This assumption is backed by an extensive literature on clientelism, and would be guaranteed to hold were the distribution of ideology identical in each group.

The order of play is as follows:

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[10]We impose such a restriction by limiting the action space. But, note, in the presence of shifting demographics, future promises would be disregarded as incredible in any subgame perfect equilibrium.

1. A and B compose a platform consisting of a vector of transfers to groups $R,\ P$, a level of public goods spending $I_{\mathcal{P},1}$ and a position on reform.

2. All voters i in groups A and B ($i \leq 1$) cast their votes. Party A enters office if $\int_0^1 v_i di \geq 0.5$ and party B enters otherwise. The victorious party implements her platform.

3. A and B compose a platform consisting of a vector of transfers to *all* groups $\mathcal{G}$ and a level of public goods spending $I_{\mathcal{P},2}$.

4. All voters i cast their votes. Party A enters office if $\frac{1}{1+N_M} \int_0^{1+N_M} v_i di \geq 0.5$ and party B enters otherwise. The victorious party implements her platform.

5. All payoffs are realized and the game ends.

3.2 Equilibrium and Comparative Statics

We look for a subgame perfect equilibrium to this interaction. Such an equilibrium will consist of a strategy profile in which the strategy of each player constitutes a best response in every subgame of the interaction. A strategy for each political party will consist of a mapping from group masses $N_{\mathcal{G}}$ and endowments $\omega_{\mathcal{G}}$ into a vector of transfers and public goods spending in each period of the game. In the first period of play, parties' strategies will additionally consist of a mapping from all three groups' masses $N_{\mathcal{G}}$ and endowments $\omega_{\mathcal{G}}$ into a binary reform decision $r \in \{0, 1\}$. A voter's strategy consists of a mapping from candidate platforms over transfers $c_{\mathcal{G},\mathcal{P},t}$ and public goods spending $I_{\mathcal{P},t}$ – and, in the first round, reform stance r – and the voter's ideological preference x_i into a voting decision $v_i \in \{0, 1\}$.

Each voter will make her voting decision based on her utility evaluations of the parties' respective platforms and her ideological preference x_i. Hence, voter i prefers party A over party B if $u(\omega_{\mathcal{G}} + c_{\mathcal{G},A,t} + g(I_{A,t})) - u(\omega_{\mathcal{G}} + c_{\mathcal{G},B,t} + g(I_{B,t})) \geq x_i$. The total mass of voters holding such preferences in group $\mathcal{G}$ is given by $F_{\mathcal{G}}(u(\omega_{\mathcal{G}} + c_{\mathcal{G},A,t} + g(I_{A,t})) - u(\omega_{\mathcal{G}} + c_{\mathcal{G},B,t} + g(I_{B,t})))$. It simplifies our analysis considerably to note that, as is standard with such models, the two parties are symmetric – and hence their equilibrium platforms are identical.

We can now proceed via backward induction to discern the subgame perfect equilibrium. In each period of play, parties will allocate transfers and public goods spending in a manner to maximize their probability of election. This implies that parties equalize the marginal costs – in terms of lost votes – from taxing one group, to the marginal gains from transferring to another group or spending on public goods. Absent civil service reforms, the relevant equilibrium condition – identical to that of Lizzeri and Persico (2004) – is:

$$u'(\omega_{\mathcal{G}} + c^*_{\mathcal{G},\mathcal{P},2} + g(I^*_{\mathcal{P},2}))f_{\mathcal{G}}(0) \leq g'(I^*_{\mathcal{P},2}) \sum_{\mathcal{G}} N_{\mathcal{G}} f_{\mathcal{G}}(0) u'(\omega_{\mathcal{G}} + c^*_{\mathcal{G},\mathcal{P},2} + g(I^*_{\mathcal{P},2})) \qquad (1)$$

which must hold at equality whenever $c^*_{\mathcal{G},\mathcal{P},2} \neq -\omega_{\mathcal{G}}$. Since we need to compare these values to those under reform, we denote equilibrium values absent reform with a * superscript and denote values with

reform with a ^{*r} superscript.

In the presence of civil service reform, the relevant expression is made somewhat more complicated due to the presence of the 'leaky bucket' for positive transfers. The parties' first-order conditions imply that, for any $c^{*r}_{\mathcal{G},\mathcal{P},2} < 0$, an identical condition to that in expression 1 must hold. Again, the expression must hold at equality for any $c^{*r}_{\mathcal{G},\mathcal{P},2} \neq -\omega_{\mathcal{G}}$. For any $c^{*r}_{\mathcal{G},\mathcal{P},2} \geq 0$, it must be the case that:

$$(1-\alpha)u'(\omega_{\mathcal{G}} + c^{*r}_{\mathcal{G},\mathcal{P},2} + g(I^{*r}_{\mathcal{P},2}))f_{\mathcal{G}}(0) \leq g'(I^{*r}_{\mathcal{P},2})\sum_{\mathcal{G}} N_{\mathcal{G}}f_{\mathcal{G}}(0)u'(\omega_{\mathcal{G}} + c^{*r}_{\mathcal{G},\mathcal{P},2} + g(I^{*r}_{\mathcal{P},2})) \qquad (2)$$

where expression 2 must hold at equality for any $c^{*r}_{\mathcal{G},\mathcal{P},2} \neq 0$.

Expressions 1 and 2 guarantee that, whenever $c^{*}_{\mathcal{G},\mathcal{P},2} > 0$, then $c^{*r}_{\mathcal{G},\mathcal{P},2} < c^{*}_{\mathcal{G},\mathcal{P},2}$. In other words, any group that receives positive clientelist transfers absent reform receives fewer such transfers with reform. Parties then use the resultant free funds on some combination of increased public goods provision and/or reduced taxes.

Reform thus cannot be supported by any group that would otherwise have received positive clientelist transfers (for whom $c^{*}_{\mathcal{G},\mathcal{P},2} > 0$). Note that any increase in public goods provision will not compensate for this loss, since parties construct platforms that optimize the mix between public goods and transfers from the perspective of attracting votes. By contrast, those paying taxes unambiguously support reform. When $t = 1$, assumption 1 guarantees that this group is comprised of the rich – who thus always prefer a platform with $r = 1$. In this conclusion, our model is consistent with historical accounts that argue that the drive for municipal reform came from the upper and middle urban classes (Buenker, 1973; Higham, 1955; Hofstadter, 1955; Huthmacher, 1962). Its also consistent with the findings of Weitz-Shapiro (2014), who examines the class-composition of support for clientelism in Argentina.

Whether or not the native poor support reform will depend on two factors: (1) the size of inflow of migrants N_M, (2) the ideological attachments of these migrants. Specifically, (2) implies that the native poor's attitude toward reform will depend on the following expression of migrant ideology:

$$\frac{u'(\omega_M)}{u'(\omega_P)} \underset{>}{\overset{\leq}{\gtreqless}} \frac{f_P(0)}{f_M(0)} \qquad (3)$$

If migrants are non-ideological ($f_M(\cdot)$ is relatively tightly distributed), then if any subset of voters receives clientelistic transfers in the second period of play, that subset must include migrants. This will hold whenever $\frac{u'(\omega_M)}{u'(\omega_P)} \geq \frac{f_P(0)}{f_M(0)}$. If, contrastingly, a large number of migrants are highly ideological, $f_m(\cdot)$ is relatively dispersed, and $\frac{u'(\omega_M)}{u'(\omega_P)} < \frac{f_P(0)}{f_M(0)}$.

In the first period of play, expression 1 must again hold for all relevant groups $\{R, P\}$, save only that the summation on the right-hand side of the expression is only over groups R and P. If any group receives positive transfers, assumption 1 ensures that it will be the poor; whereas, the rich receive negative transfers (pay taxes) in any equilibrium.

It remains then to characterize platforms over reform. Parties will propose reform whenever this is

supported by a majority of voters. This, in turn, will depend on the size of the group of migrants and expression 3. We first characterize the equilibrium when migrants are non-ideological in Proposition 1:

Proposition 1. *If $\frac{u'(\omega_M)}{u'(\omega_P)} > \frac{f_P(0)}{f_M(0)}$, there exists a value of N_M, which we denote $\bar{N}_M$ such that, for all $N_M \geq \bar{N}_M$ all parties' equilibrium reform position is $r^* = 1$. For $N_M < \bar{N}_M$, all parties' equilibrium reform position is $r^* = 0$.*

The intuition underlying Proposition 1 is as follows: As described above, whenever a group faces non-positive transfers in the second period absent reform $c^*_{\mathcal{G},\mathcal{P},2} \leq 0$, it supports reform in the first. Hence, the rich always support reform. The preferences of the poor are more complex. Absent any migrant influx, the poor only (weakly) prefer reform in the presence of a corner solution – if $g(\cdot)$ is such that all tax revenue is devoted to public goods provision. However, if $\frac{u'(\omega_M)}{u'(\omega_P)} \geq \frac{f_P(0)}{f_M(0)}$, an influx of migrants diverts transfers away from the poor: $\frac{\partial c^*_{P,\mathcal{P},2}}{\partial N_M} < 0$. Parties tax the rich and spend on transfers to migrants and on public goods provision, until the marginal returns from these two activities are driven down to the point that they equal the marginal return from targeting transfers at the poor. If this point cannot be reached given tax revenues from the rich, the poor receive no transfers and – in some circumstances – will be targeted for taxation themselves. As the migrant influx grows, the total amount of transfers going to the migrant community must rise, hence the transfers going to the poor must fall. For a sufficiently large influx, this value falls to zero. $\bar{N}_M$ is thus implicitly defined as the value such that $c^*_{P,\mathcal{P},2} = 0$. Once the poor become net contributors to the fiscal purse, they prefer reform.

We interpret this result as implying that large influxes of non-ideological migrants should be correlated with the adoption of civil service reforms.

We can now turn our attention to the equilibrium when migrants are ideological, which we characterize in Proposition 2:

Proposition 2. *If $\frac{u'(\omega_M)}{u'(\omega_P)} \leq \frac{f_P(0)}{f_M(0)}$, reform is never adopted $r^* = 0$.*

The intuition underlying Proposition 2 is as follows: Because migrants are ideologically extreme, relative to the native poor, they are less desirable targets for clientelist transfers. If any subset of citizens receive transfers in equilibrium, that subset must include the native poor. As noted above, no group that receives positive transfers in the second period of play can support reform in the first. Moreover, since Assumption 2 guarantees that the native poor are in the majority at the outset of the game, reform can never be implemented in equilibrium.

Empirically we interpret Proposition 2 as implying that influxes of ideological migrants should not be associated with the adoption of civil service reforms.

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4 Empirics

4.1 Data Description

Our outcome variable is a simple binary $\{0, 1\}$ indicator that takes the value 1 if a given US municipality adopted a civil service board in a given year. This indicator is coded based on two surveys conducted by the Civil Service Assembly of the United States and Canada in 1937 and 1940, along with an addendum to the 1940 survey published in 1943 (*Civil Service Agencies in the United States: A 1937 Census*, 1938; *Civil Service Agencies in the United States: A 1940 Census*, 1940; *Civil Service Agencies in the United States: A 1943 Supplement*, 1943). These surveys note whether a given municipality has a civil service board in operation during the year in which the survey was conducted and – if a civil service board is in place – the year in which that board began operation.

We code this variable as multiple record survival data. That is, each municipality enters the dataset with the outcome variable coded as zero. Municipalities remain in our dataset until they fail – that is, until they adopt a civil service board. In the year in which the civil service board is adopted, the outcome variable equals 1. After that year, all observations of that municipality are treated as censored.

This coding precludes the possibility that municipalities abolish and then re-create civil service boards multiple times in the dataset. Moreover, it is possible that our outcome measure misses instances of civil service reform as a result of abolition. If a given municipality created and then abolished a civil service board prior to 1937, it will appear in our data as if no such board was ever created. In practice, this concern is unlikely to substantially influence our results. Instances in which municipalities abolished civil service boards between 1937 and 1940 – the years during which the surveys used to code the outcome variable were conducted – are exceedingly rare. Ting et al. (2013) similarly note that, in practice, once civil service boards are created, they are never abolished.

Our data run from 1883-1943. The former date corresponds to the first adoption of the first municipal civil service boards – and with the passage of the Pendleton Act and the birth of the reform movement. All years prior to this date are left-censored. 1943 corresponds to the last year coded by the civil service surveys we rely on to construct our outcome measure. All observations after this date are treated as right-censored.

We code our central explanatory variables – the change in the fraction of the municipal population comprised by a given migrant group – based on the Integrated Public Use Microdata Series (IPUMS) dataset. The IPUMS dataset contains over ten million individualized census records from samples of the 1880, 1900, 1910, 1920, and 1930 censuses. We aggregate these individual records to the county level and then match the cities and municipalities for which we have civil service data to their counties in the IPUMS dataset.[11,12] Following the existing literature (e.g. Abramitzky, Boustan and Eriksson, 2012;

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[11]Unfortunately, it is not possible to match individual records directly to all the cities and municipalities in our dataset. For this reason, we use the county-level data, which is the closest geographic and political subunit available for all observations in our data.

[12]We drop New York City from our data both because of its unique history with regard to immigration in the US and because it

Rodriguez-Pose and von Berlepsch, 2012), we code immigrants as individuals who were born outside of the United States or who had both parents born outside of the United States. We use the country of birth or country of parents' birth to identify migrant groups, and the census' racial categorization to identify African-Americans. We then linearly interpolate the resultant municipality-level measures to merge with our other data, which are available on a more frequent basis. The change in the migrant population is calculated by municipality over the 10 year interval between censuses. The rate of change treated as constant in all years between censuses.

To reiterate, we identify German and Italian immigrants as migrant groups viewed as prone to (leftist) extremism. Irish immigrants and African-Americans are treated less ideological migrant communities. And we examine the change in the percentage of the municipal population comprised by a given group as a measure of migrant influxes. In all instances, we also control for the 10 year lagged value of the percentage of the population comprised by a given group, measured in levels.

In addition migrant influxes, we use the IPUMS data to construct a variety of control variables. We control for a variety of demographic demographic (e.g., mean age) and economic (e.g., female labor force participation) features of municipalities using these data.

We additionally include a control for a measure of electoral competitiveness, given the results of Ting et al. (2013), who contend that the threat of future electoral losses induces incumbents to adopt civil service reforms, preventing their successors from using patronage effectively. This contention gels with a literature in comparative politics (Geddes, 1994; Mueller, 2009). Our competitiveness measure is based two-party (Republican, Democrat) vote share in presidential elections (*United States Historical Election Returns, 1824-1968*, 1999). Specifically, it is equal to $\frac{Rep.\ Vote}{Rep.\ Vote+Dem.\ Vote} \times \frac{Dem.Vote}{Rep.Vote+Dem.Vote} \times 400$, where the last term is simply a scaling factor that ensures that the competitiveness variable lies in the interval $[0, 100]$. A score of 100 indicates that both parties received exactly the same vote total (50 percent of the two party share), whereas a score of zero indicates that one party received a positive number of votes while the other received none.

4.2   Migrant Influxes and Civil Service Reform

We begin our empirical analysis by assessing the relationship between the hazard of civil service board adoption and influxes of new migrants. To reiterate, Proposition 1 predicts that current citizens respond to the threat of shifts in clientelist transfers brought about by influxes of non-ideological migrants by erecting barriers to clientelism. Hence influxes of such migrants are anticipated to predict the creation of civil service boards – the coefficient on our empirical measure of the percentage change in the migrant community is expected to be positive.

We test this claim using a binary time series cross section model, as proposed by Beck, Katz and Tucker (1998). As noted above, our outcome variable is coded as equal to zero until the year in which a civil service board is adopted. It takes a value of one in the year of adoption and – afterward – the

is the only municipality in our sample to span multiple (five) counties.

observation is dropped from the sample. Hence, we estimate the hazard rate of civil service reform – the probability a reform is adopted in year t given that it has not yet been adopted prior to t. We control for duration dependence using cubic polynomials of time (Carter and Signorino, 2010). And we estimate our models using a logistic regression model. Hence, our empirical model is:

$$Reform_{i,t} = logit^{-1}(\gamma \ Change \ Migrant_{i,t} + \mathbf{X_{i,t}}\beta)$$

where i denotes municipality, t denotes year, and $\mathbf{X_{i,t}}$ is a vector of controls with associated coefficients β. Our theory posits that $\gamma > 0$ for groups seen as non-ideological and $\gamma \not> 0$ for groups seen as ideological. All standard errors are clustered by municipality, to adjust for un-modeled intertemporal correlation of the error process. In all regressions, we drop extreme outliers (the top 5% of municipalities in terms of migrant change).

We report the results of these regressions in Table 1. In all specifications, in addition to demographic, economic and political controls, we include a fixed-effect for the American South. The economic and political climate of the south at this time was such that it attracted very few immigrants. And Jim Crow restrictions ensured that African-Americans posed a minimal threat to racist white hegemony. Its unique political history may also have affected the likelihood of civil service reform. Each column in Table 1 corresponds to estimates of the influx of a particular migrant group. Estimates of the relationship between reform and African-American migration is presented in the far left column; the relationship with Irish, German and Italian immigration is presented in the next three columns. The final column presents the estimated relationship between reform and the influx of all immigrant groups (excluding internal migration by African-Americans).

As can be seen from Table 1, the influx of non-ideological migrants – who might be expected to be most amenable to clientelism – is associated with reform, while influxes of migrants from groups perceived as more containing ideological extremists is not. Influxes of Irish immigrants are particularly strongly associated with reform. A one standard deviation increase in the rate of the influx of Irish migrants is associated with a roughly 45 percent increase in the hazard of reform, a result that is significant at the 95 percent level. Influxes of African-American migrants have a similar, if smaller and less precisely estimated association with reform. A one standard deviation increase in the percentage of black migrants (which varies more than influxes of Irish immigrants in our sample), is associated with a roughly 45 percent increase in the hazard of reform, a result which is significant at the 90 percent level.

Contrastingly, influxes of German and Italian immigrants are not significantly associated with the hazard of reform. Estimated effects are positive, but are very imprecisely estimated. Similarly, total immigration rates are not significantly associated with reform – indeed the point estimate of the coefficient on this term is very slightly negative.

We also find some support for theories of reform emphasizing the importance of political contestation (notably Ting et al., 2013). Higher levels of electoral competition, measured by presidential election returns, are indeed associated with an increased hazard of civil service board adoption.

Table 1: The Effect of Immigrant Rate of Change

	African-American	Irish	German	Italian	Total Immigration
Δ Black	0.082*				
	(0.047)				
Black$_{t-10}$	-0.861				
	(1.116)				
Δ Irish		0.262**			
		(0.123)			
Irish$_{t-10}$		17.222***			
		(4.373)			
Δ German			0.037		
			(0.051)		
German$_{t-10}$			0.890		
			(2.297)		
Δ Italian				0.052	
				(0.061)	
Italian$_{t-10}$				0.890	
				(3.744)	
Δ Immigrant					-0.005
					(0.013)
Immigrant$_{t-10}$					-0.099
					(0.322)
Agriculture	-2.077*	-0.350	-1.075	-1.601	-1.762
	(1.112)	(1.206)	(1.107)	(1.098)	(1.088)
Female Labor	1.515	1.749	1.405	1.028	0.958
	(1.012)	(1.067)	(1.001)	(0.993)	(1.040)
Age	0.029	0.014	0.012	0.029	0.034
	(0.021)	(0.022)	(0.022)	(0.020)	(0.021)
Literacy	5.753***	9.351***	8.348***	5.406***	5.260***
	(1.892)	(2.204)	(1.972)	(1.683)	(1.733)
Population	-0.081	-0.066	-0.016	-0.044	-0.059
	(0.050)	(0.051)	(0.049)	(0.048)	(0.052)
Competitiveness	0.008***	0.008***	0.008***	0.007**	0.008***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
South	0.507*	0.153	0.043	-0.094	0.044
	(0.305)	(0.232)	(0.217)	(0.222)	(0.236)
Cubic Time Polynomial	✓	✓	✓	✓	✓
N	24121	24123	24131	24089	21212

Coefficients from a logistic regression of the adoption of civil service boards on listed covariates with standard errors clustered by municipality in parentheses. All regressions include controls for temporal dependence. Sample dates range from 1883-1939. *$p < 0.10$, **$p < 0.05$, ***$p < 0.01$, two-tailed tests.

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5   Conclusion

Civil service reforms in US municipalities are thus related to changes in the demographic composition of the electorate. Large influxes of migrant groups who commonly participated in machine politics – particularly influxes of Irish immigrants – are associated with reform. These effects are substantively large – a one standard deviation increase in the inflow of Irish immigrants or African-American migrants is associated with a 45 percent increase in the hazard of reform. Influxes of migrants who are less commonly associated with political machines – and who were perceived as affiliated with ideologically radical politics – show less evidence of such a relationship.

This result is consistent with a theoretical mechanism stressing the 'threatening' nature of migration for native populations. An influx of ideologically unaffiliated migrants induces a material threat when politics is characterized by clientelism. Native populations, anticipating a loss of political power due to changing demographics brought about via migration, respond via institutional reform. These reforms, in effect, act as a commitment mechanism: they bind parties to continue to offer platforms that are relatively beneficial to native populations and prevent parties from targeting clientelist transfers at new migrants.

Contrastingly, when migrants are viewed as ideologically extreme, they do not pose a material threat. Such communities are unlikely to be attractive sources of clients for existing political machines. Reforms are thus not adopted – indeed native communities and politicians may increasingly favor clientelist politics to ensure that ideologically extreme politics do not take hold.

Reform is thus, in some senses, anti-democratic and certainly anti-immigrant. This claim is consistent with a substantial literature in history on the roots of the progressive and populist movements for municipal reform around the turn of the 19th into the 20th century.

Despite these normatively dubious motivations, reform has some positive effects in our theory. By hindering the patronage mechanism, civil service reforms encourage parties to increasingly stress the delivery of public services in their platforms. While this may be detrimental to immigrant populations in the short-term, over the longer term a shift away from clientelism and toward public goods provision may improve economic performance, governance and citizen welfare more generally.

These findings are pertinent to several literatures in political science. First, and most directly, they speak to a literature on clientelism and patronage – and the forces the lead to the abandonment of these electoral strategies. To our knowledge, we are the first to stress this 'threat' mechanism in this literature and to point out the manner in which demographic shifts in the electorate can lead to the dismantlement of political machines.

These findings are also relevant to a growing literature on the political effects of migration. Most directly, these results are consistent with existing work emphasizing the importance of 'racial threat' to native responses to immigration (Hopkins, 2010). This piece emphasizes that such a threat can have rationalist roots, and – unlike other work on migration – it points to the manner in which this threat prompts an institutional, rather than merely policy, response.

Finally – and most broadly – these results speak to a literature that views political institutions as a

mechanism for overcoming commitment problems in dynamic settings. This view conceives of political institutions such as democracy (Acemoglu and Robinson, 2006) or autocratic councils (Myerson, 2008) as means of overcoming politicians' inability to credibly commit to rewarding current supporters in a changing environment. In our telling, municipal civil service reforms were, in part, motivated by the inability of political parties to commit to continue to direct benefits at native populations as environmental factors shifted due to mass migration. Our empirical evidence offers unusually direct evidence of the value of political institutions in ensuring politicians' commitments in such settings.

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