

Bringing Home the Goods? Ethnic and Regional Distributive Politics in the Post-Soviet States

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ABSTRACT

Existing research on the ethnic determinants of public goods provision suggests that co-ethnics of national leaders see significant benefits during their time in office. Much of this research, however, has been undertaken using data from Sub-Saharan African countries, which exhibit comparatively high levels of rotation in the ethnic identities of national executives. Given the institutional legacies of ethnic titular dominance in the post-Soviet states that have roots in early Soviet programs of indigenization (korenizatsiia), there is almost a complete lack of rotation in the ethnic identity of national executives in these states. Given that there is little competition among ethnic groups for control of leading national positions, I additionally focus on the role of regional identity as a determinant of public goods provision. Under the “minimum winning coalition” logic that has been shown to function under both democratic and non-democratic conditions, the significant majority of the population represented by ethnic titulars would be a larger coalition than is strictly needed to gain and hold on to power. Additionally, undifferentiated distribution of benefits to this group would leave few of the material “spoils of office” for governing elites that motivate them to struggle for power in the first place. A narrower constituency that leaders, first, arguably have considerable arational affect towards and, second, about which they possess a high level of information about preferences and salient local power dynamics is the base of co-ethnics from their home region. This is likely where the leader initially developed political power and elite ties that are constitutive of the base of their vertical of power. Thus, while co-ethnics of the national leader should be advantaged in their access to public goods and services relative to non-co-ethnics throughout the country, co-ethnics from the leader’s home region might be additionally favored in the distribution of resources. This approach combines insights from the comparative literature on ethnic politics as well as literature about the structure of post-Soviet politics, particularly Hale’s patronal politics model. I will examine this approach through quantitative analysis of data from USAID’s Demographic and Health Surveys dataset, particularly focusing on the impact of ethnic and regional match with national executives in the distribution of resources used to support first year child survival and full child immunization. The countries for which these data are available are Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Ukraine, and Uzbekistan.

Public goods, despite both popular understandings and elite framings as being non-excludable and universally provided, can and often are employed as tools to reward key political constituencies or punish opposition. This is true not only with public goods that are localized in production and use, such as roads, but also with public goods that are generally perceived as being beyond the remit of political manipulation, with Brian Min's (2015) research on electrification serving as a valuable example. Although there are a number of categorical lines along which favoritism in the provision of public goods and resources can take place, including region, class, gender, and even age, for a number of reasons ethnicity—and, specifically, titular ethnicity—is a salient category in the post-Soviet states. In separate research I illustrate, first, that ethnic Kyrgyz in Kyrgyzstan have systematically higher evaluations across a range of public goods and services and, second, that informal connections play a role in exacerbating these intergroup differences. Specifically, higher levels of informal social connectedness for ethnic Kyrgyz are related to more positive evaluations of public goods and service provision relative to non-Kyrgyz. I employ qualitative evidence collected during a year of fieldwork in Kyrgyzstan that provides a sense of how both elite and non-elite ethnic Kyrgyz and non-Kyrgyz comprehend their relationship with the state. These qualitative data suggest that, even in the highly ethnicized setting of Kyrgyzstan, ethnic identity is not monolithic.¹

¹ Many ethnic Kyrgyz feel that local and national governmental institutions are unresponsive and corrupt, despite co-ethnic dominance of these structures. There is a common recognition that ethnic Kyrgyz without financial or social capital have little voice in the distribution of government resources for public goods and services. A generational gap also presents itself, as many young ethnic Kyrgyz claim that members of older generations remain entrenched in Soviet norms of dependency, rather than taking a proactive stance in relation to administrative structures. Non-titulars, on average, have a much different attitude towards state structures and the role of the state in providing public goods and services. For one, as illustrated most strikingly in reaction to the urban development projects in southern Kyrgyzstan, the state and its agents are primarily perceived as predatory and to be avoided. Among ethnic Uzbeks, in particular, it is commonly believed that there are no public institutions to turn to for support or defense because ethnic Kyrgyz dominate these administrative structures. This has a few primary consequences. Materially, non-titulars are often required to depend on the patronage of local "big men", many of whom send money from abroad, to complete projects such as road pavement and school repair. There is also a significant dependence on non-governmental organizations, particularly as regards issues of human security and legal defense. From a social psychological perspective, the lack

Existing research focuses primarily on the effects of ethnic diversity (Alesina, Baqir, and Easterly 1999; Gisselquist 2014; Habyarimana et al. 2007; Miguel and Gugerty 2005) or top-down co-ethnic favoritism (Ejdemyr, Kramon, and Robinson 2017; Kramon and Posner 2013; Lee 2017) on the provision of public goods and services. My broad research goal is to demonstrate how Soviet institutional legacies of institutionalized affirmative action for ethnic titulars in the non-Russian Federation Union republics and the social embeddedness of informal practices designed to gain access to official networks through informal networks combine to create titular advantages in both the supply (top-down) and demand (bottom-up or horizontal) elements of public goods and service provision. This theoretical approach to ethnic politics should apply not only to Kyrgyzstan, but also to post-Soviet states more broadly. Towards this end, in this paper I analyze large-N data from the USAID's Demographic and Health Surveys. This allows me to look comparatively across eight post-Soviet states and multiple dependent variables. The results suggest that ethnicization of representative and administrative structures, in combination with regionally-based "verticals of power," have consistently positive distributional effects for co-ethnics and co-regionalists of national leaders for critical outcomes including first year child survival, while the results for full immunization of children are indicative of favoritism but less definitive.

Theoretical expectations

An impressive and growing literature on the ethnic determinants of public goods and service distribution suggests a benefit for the co-ethnics of those with influence over public resources. This has been found to be the case for education (Kramon and Posner 2012, 2013; Li 2018),

of options for Hirschman's (1970) "voice" or "loyalty" has the consequence of many opting for "exit". This takes the form of both physical exit as labor migrants, primarily to Russia, or "exit without exit," as exemplified variously by general disaffection, Soviet nostalgia among some who had experienced communism, or Islamicization among those of all generations. The latter two ideological currents contrast the "dirty", particularistic politics of Kyrgyzstan as it is perceived in the present with an honest and egalitarian ideal (Pelkmans 2017).

electrification (Dickens 2016; De Luca et al. 2018), water infrastructure (Ejdemyr, Kramon, and Robinson 2017), and road building (Burgess et al. 2015). Ethnic titulars should benefit from government decisions on the distribution of resources as a result both of the co-ethnic affinity of elected politicians and administrators (the supply side of my argument) and the relatively greater density and lesser informal network distance to these same actors among both elite and non-elite ethnic titulars (the demand side of my argument).²

Another implication of my argument would imply that the fall of the Soviet Union serves as a critical juncture in governance practices. Even assuming that titular dominance of administrative structures in the Soviet period positively influenced the distribution of state resources in the direction of ethnic titulars, large portions of union republic budgets were non-discretionary and determined in Moscow. Given the paramount concern among central Soviet elites to maintain social and political stability, there were almost certainly informal limits set on the extent of distributive co-ethnic favoritism. We should thus expect that ethnic titular advantage increases in the post-Soviet period, as external oversight is lifted, providing ethnic titular leaders at the national and sub-national level with extensive autonomy over resource distribution, a view supported by the analysis of a number of specialists on post-Soviet ethnic politics in the years following the USSR's dissolution (Brubaker 1994; Khazanov 1995; Tishkov 1997).

While much of the existing literature suggests that, given co-ethnic political and administrative dominance, ethnic titulars should be favorably targeted with public goods and services, a number of arguments can be made to temper these expectations. First, and most

² Unfortunately, and in contrast to the *Life in Kyrgyzstan* data used for my Kyrgyzstan-centric analysis, the *Demographic and Health Surveys* data does not contain any variables that might serve as adequate proxies for the extent of individual respondents' informal social networks, prohibiting me from disentangling the effects of the supply and demand elements of ethnicized public goods provision.

significantly, because of the intentional Soviet delimitation of Union republics which contained—excepting the Kazakh SSR—ethnic titular majorities, undifferentiated favoritism towards all co-ethnics by titular national leaders would be politically inefficient.

This suggests serious consideration of the significance of Hale's (2014) patronal politics model of post-Soviet regime dynamics. Founded on the idea that a social equilibrium of low interpersonal trust aggregates to a cyclical pattern in which horizontally limited patronal pyramids of hierarchical reciprocity follow one after another, it suggests a rather constrained flow of resources to those outside of minimum winning coalitions. Given the titular dominance of post-Soviet electoral politics and administrative structures, it would be sensible to assume that patronal pyramids in the post-Soviet states exhibit a high degree of (titular) ethnic homogeneity. Even so, the limited horizontal extent across the ethnic group of such pyramids would mean that the benefits remain concentrated within one or a few verticals of power to such an extent that they do not cumulate broadly to lead to systematic difference in outcomes for ethnic titulars and non-titulars.

If favoritism were, then, to be motivated by political considerations of gaining and maintaining power and control, it is necessary to consider more limited sub-populations that might be targeted in a favorable manner. Sub-national regions and regional loyalties, in particular, have played critical roles in the domestic political dynamics of post-Soviet states (Luong 2003). Additionally, as a minor gesture towards the end of responding to a call to more deeply consider the comparability of the post-Soviet Eurasian and postcolonial African states (Beissinger and Crawford Young 2002), I note that recent research has found abundant evidence of co-regional favoritism by African leaders (Dreher et al. 2016; Hodler and Raschky 2014; Öhler and Nunnenkamp 2014). For this reason, it is critical to examine whether there is evidence that national leaders in the post-Soviet states direct resources to favored regions in a disproportionate manner,

and how this might relate to co-ethnic favoritism. In particular, I will examine whether or not both co-ethnic and co-regional favoritism co-exist and whether or not co-ethnics in a leaders' home regions are additionally favored relative to co-ethnics elsewhere in the country.

Second, we should not take for granted that descriptive political representation of ethnic groups leads inexorably to substantive representation. Although Pitkin (1967) did not examine the issue in any systematic manner, she controversially suggested that descriptive representation might in fact decrease substantive accountability and responsiveness. Descriptive representation on one facet of identity—here ethnicity—may be cross cutting with other, similarly important, categorical groupings, such as class background, rural versus urban residence, or cosmopolitanism. Soviet social barriers between the *nomenklatura* and the average citizen, as well as post-Soviet distinctions between the “New Russians/Uzbeks/Georgians” and those much more numerous individuals struggling to provide for themselves and their families, suggest that there might be large spaces of non-overlap in the preferences, worldviews, and interests of elite and non-elite ethnic titulars that might attenuate the impact of co-ethnic administrative dominance.

Finally, co-ethnicity with political elites is associated with negative distributive consequences under certain conditions. Kasara (2007) found that farmers in Sub-Saharan Africa who are co-ethnics of the head of state were taxed at higher rates due to better vertical control of administrative structures in their home regions, where co-ethnics tend to be concentrated. A similar relationship may be present in the post-Soviet case, with politicians and administrators more capable of extracting scarce resources for their own private use from co-ethnics.

Data and methods

I explore how co-ethnicity and co-regionality with national leaders influences the distribution of public goods and services using USAID's *Demographic and Health Surveys* (DHS) data. The DHS are national surveys that collect data on health, education, and childhood nutrition in developing countries across world regions. Survey waves generally take place once every 5 years and collect information from representative samples of thousands of households. The data are collected in a consistent manner across countries and waves, a fact that provides fertile ground for analysis.

The existence of household-level data, and individual responses from household members, also avoids the problems of ecological inference commonly found in research on ethnic favoritism. Rather than looking at locality-level data and making assumptions about the strategies of co-ethnic leaders in their targeting of resources to villages or municipalities that have higher or lower levels of co-ethnic concentration, the DHS data allow me to be relatively confident in my analysis of the role of individual ethnicity and co-regionality in public goods and service distribution. Additionally, although the lack of any variables that would serve as fitting proxies of informal social connectedness in the DHS data do not allow me to measure its role directly, this mechanism should be seen to operate at the individual level, providing further reason to suggest that these are appropriate data on which to test my theoretical approach.

I examine all post-Soviet countries for which there are data and for all existing survey waves conducted within these countries. This gives me the following countries and waves: Armenia (2000, 2005, 2010, 2015), Azerbaijan (2006), Kazakhstan (1995, 1999), Kyrgyzstan (1997, 2012), Moldova (2005), Tajikistan (2012, 2017), Ukraine (2007), and Uzbekistan (1996).

While the DHS data has the fortuitous characteristics that I have described, that which exists for these countries does exhibit two limitations.

First, precisely because of the institutionalized titular dominance that is a constitutive element of post-Soviet ethnic politics, there has been very limited ethnic rotation of executive power in these states within the time period of these data.³ As a result, I cannot take advantage of the arguably exogenous treatment of leadership co-ethnicity in the manner of Franck and Rainer (2012) and Kramon and Posner (2013) for Sub-Saharan African states. This makes it more difficult to claim that there is a causal relationship between co-ethnicity with national political leaders and favorable public goods and service distribution. However, for five of the eight countries analyzed—Armenia, Azerbaijan, Kyrgyzstan, Moldova, and Ukraine—there has been regional rotation of leadership in the time period of the DHS data, which allows for more reliable inferences about the impact of co-regionality with national leaders.

With the above caveat on the lack of executive ethnic turnover noted, to the extent that individual ethnic identity is endogenous to governance and, specifically, public goods and service provision, I would contend that it should be in the direction of moderating the positive relationship between ethnic titularity and public goods provision. Imagine that individuals from non-titular ethnic groups, with the set of background individual and social factors that this categorical identity carries with it, officially or unofficially alter their ethnic identity to become titulars. Is there any

³ The sole non-titular national executive in the period of the DHS data that I analyze is Vasile Tarlev, an ethnic Bulgarian who served as Prime Minister of Moldova from 2001 until 2008. Additionally, former Ukrainian Prime Minister and President Viktor Yanukovich, who was orphaned as a child but is believed to be of Russian, Polish, and Belarusian descent, first became Prime Minister in 2006. Due to the one and two year lags placed on the ethnic match and region match variables for all models, however, this ethnic rotation of leadership is not recorded in the Ukraine data here, which was collected in 2007. Not only is Tarlev the only non-titular executive in the period covered by the data, using the standards for executive type provided by Hale (2014), he and Yanukovich have been the only non-titular executives in the fourteen non-RSFSR post-Soviet countries throughout the period of independence.

reason to believe that non-titulars who have particularly advantageous relationships to the state and its distributive mechanisms would take this opportunity? Alternatively, are individuals more likely to alter their ethnic identity in settings where being a non-titular is particularly disadvantageous in the competition for government resources? If, as I would posit, the second is more likely to be the case, we should expect that, *ceteris paribus*, the effect of “passing” would be to decrease the link between ethnicity and public goods provision, with those who have been more harshly discriminated against in the distribution of government resources having greater incentive to alter their ethnic identity.⁴

The other, at first apparently more substantial, issue with the DHS data from these post-Soviet states is that not all of them have information on the ethnicity of the household head.⁵ Apart from being suggestive of the highly contested nature of interethnic relations across the surveyed countries, this initially presents itself as an insurmountable obstacle to the estimation of the effect of ethnicity on public goods and service provision. However, in recognition of the historically strong link between ethnic identity and language in the Soviet era and post-Soviet states (Smith et al. 1998), the DHS variable measuring the self-reported native language of the respondent represents a fitting proxy for ethnicity. The distribution of native language among respondents is generally close to the population proportions in the temporally proximate national census.⁶

⁴ A potentially persuasive counterargument would be that those (relatively rare) non-titulars with strong informal social ties to government administrators with some control over personal records and demographic data would be both more capable of having their official ethnicity altered in countries that still record this data *and* to influence the flow of government resources in their direction. While this is an intriguing avenue for further investigation, in my experience in the field, the only individuals I have met who have changed their “passport ethnicity” were those who, first, had mixed ethnic parentage and, second, perceived themselves as being economically and/or physically under threat due to their ethnic background.

⁵ This is the case for Armenia (2005, 2010, 2015), Kyrgyzstan (2012), Tajikistan (2012), and Ukraine (2007).

⁶ In Armenia, the 2011 census reports that 98.3 percent of those in the country are Armenian, while the proportions of self-reported Armenian speakers in the DHS data waves range from 99.4 percent Armenian in 2005 to 98.6 percent in 2015. Ethnic Kyrgyz are 73 percent of the population, according to the 2010 Kyrgyzstani census, while 77.3 percent of the 2012 DHS respondents are self-identified Kyrgyz native speakers. In Tajikistan, the ethnic Tajik proportion of

In coding for the separate co-ethnicity and co-regionality with national executives, each observation is coded as a match if they are of the same ethnicity or from the home region of a national leader during a period of time relevant for the dependent variable. Given that co-ethnic and co-regional favoritism likely take time to come into effect, I place one year lags on the match variables. Results are substantively and statistically identical when two year lags are employed. Thus, for first year child survival dependent variable, the relevant time period is the year after which the child was born. For the full child immunization variable, the relevant time period is the first four full years of a child's life, and a match is coded if there is ethnic or regional overlap for any of these years.

Dependent Variables

Child Survival

Infant survival, a fundamental measure of health and well-being, is particularly responsive to governmental action (Franco, Álvarez-Dardet, and Ruiz 2004; Kudamatsu 2012; Wang 2003). It has also been shown to be subject to co-ethnic and regional favoritism in Sub-Saharan African countries (Brockerhoff and Hewett 2000; Franck and Rainer 2012; Kramon and Posner 2013). There are many determinants of child survival likely to be affected by governmental decisions about the allocation of resources, including women's education, access to primary health care, access to clean water, first year vaccination, and sanitation.

the population in the 2010 census is 84.3, while Tajik native speakers account for 88.1 percent of the 2012 DHS and 86.9 percent in 2017. Ukraine has the largest gap, with the 2001 census reporting that 77 percent of the population is Ukrainian, while only about 65 percent of 2007 DHS respondents report Ukrainian as their native language. There are many russophone ethnic Ukrainians in the east and south of Ukraine, as well as in Kiev, and language is arguably a greater social and political cleavage in Ukraine than ethnicity.

In order to evaluate the effect of co-ethnicity and co-regionality on first year child survival, I have assembled datasets that include the available surveys from these post-Soviet countries. The unit of observation is live births, with a dichotomous variable indicating whether the child survived at least 12 months from birth. The DHS contains retrospective data from mothers about each live birth that they have given at any point in their lives, with dates of birth and, if it applies, death. The retrospective nature of the data means that it extends back many years, in some cases to the 1960s or before. In the models evaluating ethnic and regional favoritism's relationship to child survival across the post-Soviet period, I include all cases of live births from 1992 and later.

The DHS data contain many variables that are widely recognized to influence child survival. I include control variables commonly shown in the public health literature to be influential, including child gender, the child's birth order relative to other siblings (and its square), whether the child is a multiple birth (a twin, triplet, and so on), mother's age (and its square), and a dichotomous variable indicating whether the child was born less than 24 months after a sibling. I also include a dichotomous variable for type of region (urban or rural), under the assumption that medical facilities will be both better provisioned and more numerous in urban areas. I include region fixed effects to control for persistent interregional differences that might influence the factors underlying infant health and nutrition.⁷

Child Immunization

Similar to child survival, resources for immunization programs are to a large extent controlled and distributed by national governments. Lack of accessibility to vaccination sites, long distances from

⁷ Because of the presence of singularities, birth year fixed effects are not possible. Future versions of this work will include a linear time trend to somewhat take cognizance of the effect of time child survival, as rates have increased almost universally throughout the region in the post-Soviet period.

medical facilities, extended waiting times due to a dearth of resources, and maternal access to health care are some of the factors shown to be significant in determining child immunization (Abdulraheem et al. 2011; Etana and Deressa 2012; Jani et al. 2008). Full childhood immunization is a critical determinant of infant survival and a number of other positive outcomes (Bawah et al. 2010; Ozawa et al. 2012). I construct a dichotomous variable of whether a child has a complete immunization record.⁸ Only children four years of age are included in the models, as multistage vaccination regimens are spaced out over a number of months. All children born during and after 1992 are included in these models. I include controls for child gender, an indicator for rural residence, child age, and birth year fixed effects.

Different goods, different expectations?

Many of the existing explorations of favoritism—ethnic or otherwise—in the distribution of public goods have focused on a single outcome. In part, this is because collection of objective data pertaining to, as an example, road construction in less developed settings is time consuming and can require significant economic, social, and political capital. Kramon and Posner (2013) suggest that, while favoritism may have certain distributive consequences for one type of good or service, this relationship may not travel to others goods or services, and the relationship may even run in the opposite direction. Because governments operate with limited resources, preferential distribution for one output may need to be compensated for by diminished distribution of resources for others. As they suggest,

The problem lies in the fact that governments can favor constituencies through the targeting of multiple public and private goods—roads, schools, clinics, electrification, cash grants and transfers, irrigation schemes, subsidies, tax breaks, public service jobs, and so on. Yet nearly all of the studies in the empirical distributive politics literature focus exclusively on

⁸ This includes immunizations for BCG, measles, diphtheria-pertussis-tininitus 1-3, and poliovirus 1-3 (Brockerhoff and Hewett 2000).

just one or a small subset of these goods. So while the inferences these analyses draw about favoritism with respect to the particular outcome being studied may be warranted, conclusions about who benefits from distributive politics *per se* rest on shaky foundations. And if inferences about who benefits are open to question then so too are the conclusions reached about which theoretical approaches are best supported by the data. (462)

Expectations about the extent to which governments have both the desire and ability to alter the flow of resources affecting the above outcomes varies. First, the persistence of goods and services over time varies widely. In the post-Soviet countries, much of the infrastructure for water and electricity provision—as well as for education—was constructed prior to independence, whereas individual data on child immunizations and survival can easily be linked to a relevant temporal period. These goods and services additionally vary in the extent to which they are principally dependent on production and distribution by the government, as opposed to sharing responsibilities with third parties such as international NGOs, domestic NGOs, or private/semiprivate utility companies. Post, Bronsoler, and Salman (2017), for instance, have developed a useful framework that differentiates the political dynamics of local public goods provision on two dimensions: direct versus indirect provision by the state and the extent of formal state penetration in society. While national governments in less developed countries often maintain significant control over educational institutions and infrastructural investment, it is also the case that significant portions of the resources that go towards childhood immunization and maternal nutrition are provided by non-governmental sources.

Although donor agencies and NGOs may be assumed to have less stark incentives to engage in the sort of favoritism that is attributed to politicians and government administrators, the valued goods that these entities provide have been shown to be targeted strategically to key constituencies of national leaders. Dreher et al. (2016) find that Chinese development aid in Sub-

Saharan Africa has been systematically directed towards home regions of heads of state. Briggs (2014) shows that project aid in Kenya tends to find its way into the possession of core constituencies of the president, with Jablonski (2014) more specifically illustrating how foreign aid is redirected towards presidential co-ethnic communities in that country. National governments can place any number of informal roadblocks in front of aid agencies that might have the consequence of inordinately steering the distribution of resources towards one region or subpopulation. Thus, while the substantive extent of favoritism may be lessened by third-party contributions, we should not assume that some public goods and services are inherently less likely to be subject to political favoritism simply because of their private or nongovernmental modes of provision.

Results

My analysis is designed to observe whether co-ethnicity and co-regionality with national leaders is related to positive outcomes that can be attributed to favorable distribution of public goods and services. I explore this through statistical analysis of whether being an ethnic or regional match to national leaders during a relevant period of time translates to positive outcomes across multiple variables: first year child survival and complete child immunization. These are estimated employing logit models. Results from the regressions estimating the effect of favoritism on the distribution of these outcomes in the post-Soviet period are found in Tables 3-4. As the regression results of interaction terms are often difficult to interpret, I display plots comparing the effect of co-ethnicity with national leaders for those within the leaders home region and those without in Figures 1-4. (All tables and figures at end of paper.)

Observing the influence of co-ethnic and co-regional favoritism on first year child survival across all eight post-Soviet countries for which DHS data exist (Table 3, Models 1-4), there is substantial evidence that both explanatory variables have statistically reliable and substantively quite large positive effects. Moreover, these effects are independent from each other (Model 3). The effect of co-regionality is particularly large, and remains so when the explanatory variables are interacted (Model 4). The same remains true when only post-Soviet states that have had rotation in regional leadership are observed (Models 5-8). In fact, the effect of both explanatory variables is notably larger than in the models without region fixed effects. The interaction also remains insignificant (Figure 2), suggesting that favoritism is not so fine-grained as to target specifically co-ethnics within national leaders' home regions.

Child immunization (Table 4), additionally, is related to co-ethnicity and co-regionality with national leaders in a manner much less consistent with first year child survival. In models including all country cases (Models 1-4), coefficients for co-ethnicity and co-regionality are positive, whereas only regional match is weakly statistically significant as predictor of full childhood immunization. The substantive results are identical for models including only states that experienced regional turnover of executives, but no explanatory variables are statistically significant.

Discussion and Conclusion

The above results suggest that domination of political institutions by ethnic titular groups in the post-Soviet states does not translate directly into a distribution of resources for valued public goods and resources that favors titular co-ethnics. Analyzing the effect of titularity across the public goods and services observed, the contention that Kramon and Posner (2013) put forward and

empirically illustrated in a subset of Sub-Saharan African states is bolstered: the conclusions one comes away with depend in significant part on the outcomes one studies. For these post-Soviet countries, co-ethnic co-regional favoritism was clearly displayed for inputs that influence a critical outcomes: infant survival.

The results suggesting a weak positive relationship between co-ethnicity co-regionality with national leaders and the complete vaccination of children require more investigation. A period of tumult following the Soviet collapse was accompanied by reorganization and general deterioration in the quality of medical service provision throughout the post-Soviet states. This was followed by outbreaks of diseases that were believed to be eradicated only years earlier (for the case of diphtheria in Azerbaijan, Vitek and Velibekov 2000). The relatively free movement of individuals in the 1990s and mass internal and external migration placed many individuals in new and unfamiliar disease environments, particularly in urban areas. Many less educated urban in-migrants were distrustful of vaccinations (for studies of attitudes towards vaccination in Kazakhstan and Kyrgyzstan, Akmatov et al. 2007, 2009). Additionally, foreign donor agencies and international NGOs were (and are) heavily involved in vaccination programs, which may suggest that some public goods and services provided by such organizations are more likely to be distributed in a manner favorable to co-ethnics of national leaders and administrators than others.

In this paper, I have analyzed data from USAID's *Demographic and Health Surveys* to explore the relationship between ethnicity, regional identity, and favoritism in the distribution of public goods and services. The results are illustrative of variation in the extent of ethnic titular advantage and, as previously illustrated in a different regional context (Kramon and Posner 2013), the conclusions arrived at are wholly dependent on the public goods and services that are the focus of one's inquiry.

Table 3. Regression Results

	<i>Dependent variable:</i>							
	First year child survival							
	Ethnicity (1)	Region (2)	Both (3)	Interaction (4)	Ethnicity (Region FEs) (5)	Region (Region FEs) (6)	Both (Region FEs) (7)	Interaction (Region FEs) (8)
Ethnic Match	0.203*** (0.028)		0.188*** (0.028)	0.192*** (0.030)	0.447*** (0.039)		0.476*** (0.040)	0.482*** (0.043)
Regional Match		0.469*** (0.032)	0.462*** (0.032)	0.484*** (0.067)		0.995*** (0.049)	1.012*** (0.049)	1.036*** (0.091)
Ethnicity*Region				-0.027 (0.075)				-0.033 (0.103)
Observations	97,626	97,626	97,626	97,626	53,836	53,836	53,836	53,836
Log Likelihood	-33,190.830	-33,100.270	-33,078.150	-33,078.090	-17,618.600	-17,448.920	-17,379.720	-17,379.670
Akaike Inf. Crit.	66,415.650	66,234.540	66,192.300	66,194.170	35,285.210	34,945.830	34,809.440	34,811.340

Note:

All models include controls for birth order and its square, mother's age at birth and its square, and indicators for multiple birth and short birth interval. Country fixed effects for all models. Ethnic and region match variables are lagged one year from executive coming into power.

*p<0.1; **p<0.05; ***p<0.01

Figure 1.

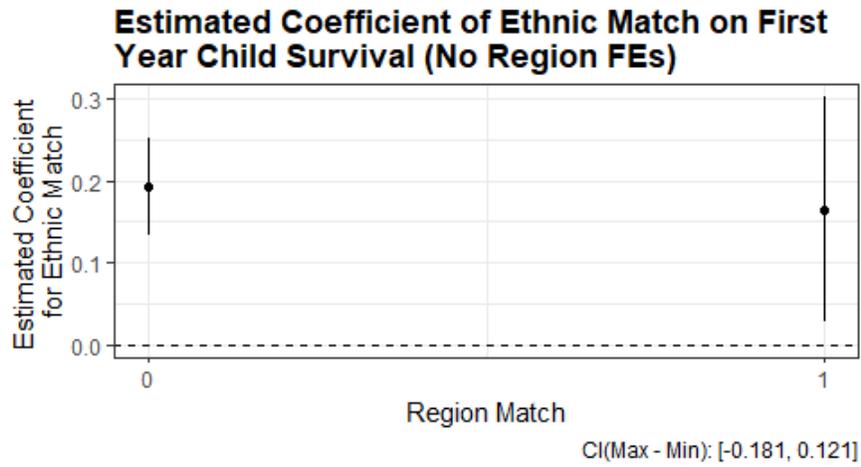


Figure 2.

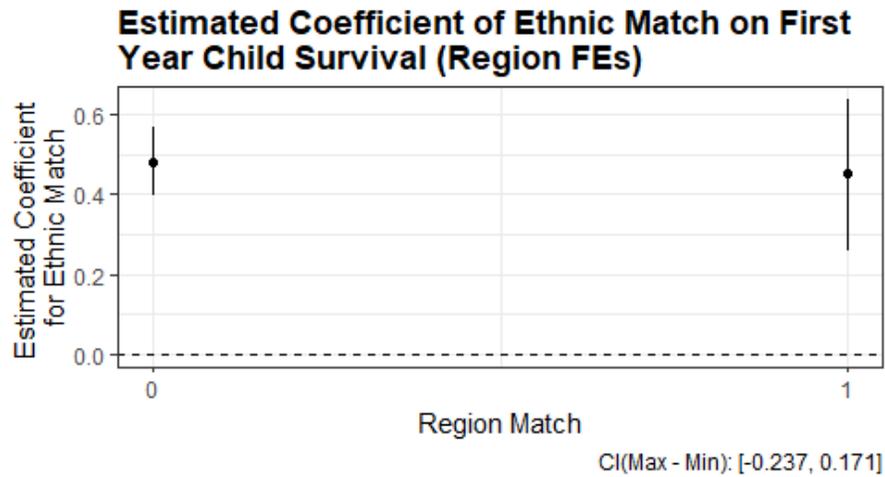


Table 4. Regression Results

	Child Immunization							
	Dependent variable:		Ethnicity		Region		Both	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Ethnic Match	0.062 (0.127)		0.064 (0.127)	0.019 (0.132)	0.495 (0.330)		0.503 (0.331)	0.435 (0.339)
Regional Match		0.233* (0.134)	0.233* (0.134)	-0.220 (0.417)		0.343 (0.303)	0.351 (0.303)	-1.366 (1.463)
Ethnicity*Region				0.508 (0.440)				1.766 (1.481)
Observations	4,916	4,916	4,916	4,916	2,671	2,671	2,671	2,671
Log Likelihood	-2,322.717	-2,321.322	-2,321.196	-2,320.515	-977.037	-977.443	-976.348	-975.699
Akaike Inf. Crit.	4,663.435	4,660.645	4,662.391	4,663.029	1,988.074	1,988.886	1,988.697	1,989.399

Note:

Controls for rural residence and child gender for all models. Country fixed effects for all models. Ethnic and region match variables are lagged one year from executive coming into power.

*p<0.1; **p<0.05; ***p<0.01

Figure 3.

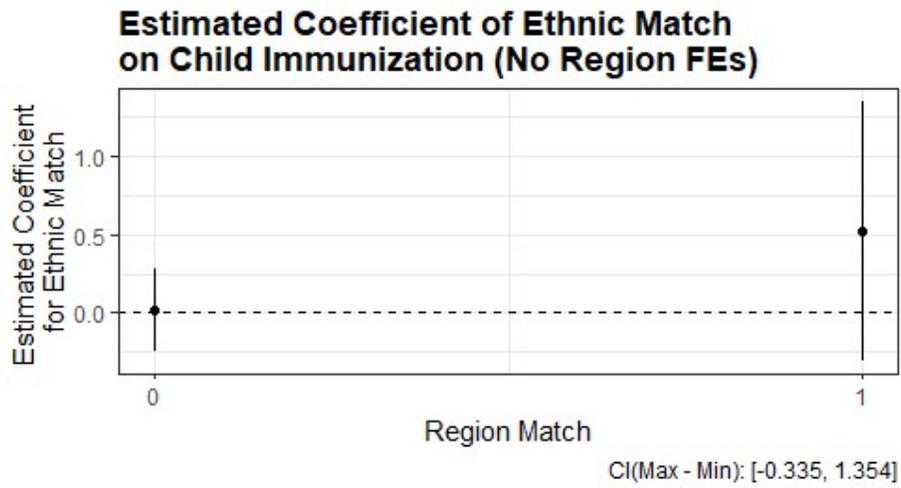
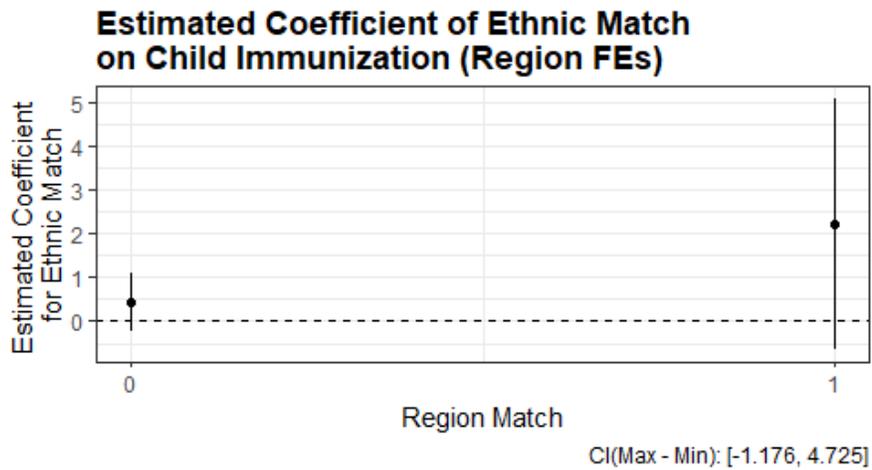


Figure 4.



Works Cited

- Abdulraheem, I. S., A. T. Onajole, A. A. G. Jimoh, and A. R. Oladipo. 2011. "Reasons for Incomplete Vaccination and Factors for Missed Opportunities among Rural Nigerian Children." *Journal of Public Health and Epidemiology* 3(4): 194–203.
- Akmatov, M. K., M. Kretzschmar, A. Krämer, and R. T. Mikolajczyk. 2007. "Determinants of Childhood Vaccination Coverage in Kazakhstan in a Period of Societal Change: Implications for Vaccination Policies." *Vaccine* 25(10): 1756–63.
- Akmatov, M. K., R. T. Mikolajczyk, M. Kretzschmar, and A. Krämer. 2009. "Attitudes and Beliefs of Parents about Childhood Vaccinations in Post-Soviet Countries: The Example of Kyrgyzstan." *The Pediatric infectious disease journal* 28(7): 637–40.
- Alesina, A., R. Baqir, and W. Easterly. 1999. "Public Goods and Ethnic Divisions." *The Quarterly Journal of Economics* 114(4): 1243–84. <https://academic.oup.com/qje/article-lookup/doi/10.1162/003355399556269>.
- Bawah, A. A. et al. 2010. "The Impact of Immunization on the Association between Poverty and Child Survival: Evidence from Kassena-Nankana District of Northern Ghana." *Scandinavian journal of public health* 38(1): 95–103.
- Beissinger, Mark, and M. eds. Crawford Young. 2002. *Beyond State Crisis?: Post-Colonial Africa and Post-Soviet Eurasia in Comparative Perspective*. Woodrow Wilson Center Press.
- Briggs, Ryan C. 2014. "Aiding and Abetting: Project Aid and Ethnic Politics in Kenya." *World Development* 64: 194–205.
- Brockhoff, M., and P. Hewett. 2000. "Inequality of Child Mortality among Ethnic Groups in Sub-Saharan Africa." *Bulletin of the World Health Organization* 78(1): 30–41.
- Brubaker, Rogers. 1994. "Nationhood and the National Question in the Soviet Union and Post-Soviet Eurasia: An Institutional Account." *Theory and Society* 23(1): 47–78.
- Burgess, Robin et al. 2015. "The Value of Democracy: Evidence from Road Building in Kenya." *American Economic Review* 105(6): 1817–51.

- Dickens, Andrew. 2016. "Ethnolinguistic Favoritism in African Politics." *American Economic Journal: Applied Economics*.
- Dreher, A. et al. 2016. *Aid on Demand: African Leaders and the Geography of China's Foreign Assistance*.
- Ejdemyr, Simon, Eric Kramon, and Amanda Lea Robinson. 2017. "Segregation, Ethnic Favoritism, and the Strategic Targeting of Local Public Goods Comparative." *Comparative Political Studies*: 1–33.
- Etana, Belachew, and Wakgari Deressa. 2012. "Factors Associated with Complete Immunization Coverage in Children Aged 12–23 Months in Ambo Woreda, Central Ethiopia." *BMC public health* 12(1): 566.
- Franck, Raphaël, and Ilia Rainer. 2012. "Does the Leader's Ethnicity Matter? Ethnic Favoritism, Education, and Health in Sub-Saharan Africa." *American Political Science Review* 106(02): 294–325.
- Franco, Álvaro, Carlos Álvarez-Dardet, and Maria Teresa Ruiz. 2004. "Effect of Democracy on Health: Ecological Study." *British Medical Journal* 329: 1421–23.
- Gisselquist, Rachel M. 2014. "Ethnic Divisions and Public Goods Provision, Revisited." *Ethnic and Racial Studies* 37: 1605–27.
- Habyarimana, James, Macartan Humphreys, Daniel Posner, and Jeremy M Weinstein. 2007. "Why Does Ethnic Diversity Undermine Public Goods Provision?" *American political science review*: 709–25.
- Hale, Henry. 2014. *Patronal Politics: Eurasian Regime Dynamics in Comparative Perspective*. Cambridge University Press.
- Hodler, Roland, and Paul A. Raschky. 2014. "Regional Favoritism." *Quarterly Journal of Economics*.
- Jablonski, Ryan. 2014. "How Aid Targets Votes: The Impact of Electoral Incentives on Foreign Aid Distribution." *World Politics* 66(2): 293–330.
- Jani, J. V., C. De Schacht, I. V. Jani, and G. Bjune. 2008. "Risk Factors for Incomplete

- Vaccination and Missed Opportunity for Immunization in Rural Mozambique.” *BMC public health* 8(1): 161.
- Kasara, Kimuli. 2007. “Tax Me If You Can: Ethnic Geography, Democracy, and the Taxation of Agriculture in Africa.” *American Political Science Review* 10(1): 159–72.
- Khazanov, Anatoly Michailovich. 1995. *After the USSR: Ethnicity, Nationalism and Politics in the Commonwealth of Independent States*. University of Wisconsin Press.
- Kramon, Eric, and Daniel Posner. 2013. “Who Benefits from Distributive Politics? How the Outcome One Studies Affects the Answer One Gets.” *Perspectives on Politics* 11(2): 461.
- Kramon, Eric, and Daniel N. Posner. 2012. *Ethnic Favoritism in Primary Education in Kenya*.
- Kudamatsu, Masayuki. 2012. “Has Democratization Reduced Infant Mortality in Sub-Saharan Africa? Evidence from Micro Data.” *Journal of the European Economic Association* 10(6): 1294–1317.
- Lee, Alexander. 2017. “Ethnic Diversity and Ethnic Discrimination: Explaining Local Public Goods Provision.” *Comparative Politics Studies*: 1–33.
- Li, Jia. 2018. “Ethnic Favoritism in Primary Education in Kenya: Effects of Coethnicity with the President.” *Education Economics* 26(2): 194–2012.
- De Luca, G., R. Hodler, P. A. Raschky, and M. Valsecchi. 2018. “Ethnic Favoritism: An Axiom of Politics?” *Journal of Development Economics* 132: 115–29.
- Luong, Paula J. 2003. *Institutional Change and Political Continuity in Post-Soviet Central Asia: Power, Perceptions, and Pacts*. Cambridge, Mass.: Cambridge University Press.
- Miguel, Edward, and Mary Kay Gugerty. 2005. “Ethnic Diversity, Social Sanctions, and Public Goods in Kenya.” *Journal of public economics* 89(11): 2325–68.
<http://www.sciencedirect.com/science/article/pii/S0047272704001562>.
- Min, Brian. 2015. *Power and the Vote: Elections and Electricity in the Developing World*. Cambridge University Press.
- Öhler, Hannes, and Peter Nunnenkamp. 2014. “Needs-Based Targeting or Favoritism? The

- Regional Allocation of Multilateral Aid within Recipient Countries.” *Kyklos*.
- Ozawa, S. et al. 2012. “Cost-Effectiveness and Economic Benefits of Vaccines in Low-and Middle-Income Countries: A Systematic Review.” *Vaccine* 31(1): 96–108.
- Peyrouse, Sebastien. 2013. “Former Colonists on the Move: The Migration of Russian-Speaking Populations.” In *Migration and Social Upheaval as the Face of Globalization in Central Asia*, ed. Marlene Laruelle. Leiden, Netherlands: Brill, 215–38.
- Pitkin, Hannah. 1967. *The Concept of Representation*. Univ of California Press.
- Post, Alison E., Vivian Bronsoler, and Lana Salman. 2017. “Hybrid Regimes for Local Public Goods Provision: A Framework for Analysis.” *Perspectives on Politics* 15(4): 952–66.
- Sadovskaya, Elena Y. 2013. “Contemporary International Migration in Central Asia and the Rise of Migrants’ Diasporas and Networks.” In *Migration and Social Upheaval as the Face of Globalization in Central Asia*, ed. Marlene Laruelle. Leiden, Netherlands: Brill.
- Silova, I., M. Johnson, and S. Heyneman. 2007. “Education and the Crisis of Social Cohesion in Azerbaijan and Central Asia.” *Comparative Education Review* 51(2): 159–80.
- Smith, G. et al., eds. 1998. *Nation-Building in the Post-Soviet Borderlands: The Politics of National Identities*. Cambridge University Press.
- Tishkov, Valery. 1997. *Ethnicity, Nationalism and Conflict in and after the Soviet Union: The Mind Aflame*. SAGE Publications Ltd.
- Vitek, C. R., and A. S. Velibekov. 2000. “Epidemic Diphtheria in the 1990s: Azerbaijan.” *Journal of Infectious Diseases* 181: S73–79.
- Wang, Limin. 2003. “Determinants of Child Mortality in LDCs: Empirical Findings from Demographic and Health Surveys.” *Health Policy* 65(3): 277–99.