In this paper, I argue that migration responses to push factors differ along ethnic lines. I examine this hypothesis using panel survey data from the Russia Longitudinal Monitoring Survey, census data, and regional-level political data from Russia. I hypothesize that nationalist political parties send signals of antiminority sentiment, which ethnic minorities interpret as threatening to their prospects in the region. This leads to a demand for an adaptive response, generating out-migration. I estimate an event history model and find that, although ethnic minorities do not demonstrate a higher propensity to migrate than the majority group, they do respond differently to political and economic push factors, in particular, to signals sent by nationalist parties.

In December of 2010, an ethnic riot erupted in Moscow (Barry 2010). The event appeared to be the result of a build up of ethnic tensions, fueled by xenophobic politics and sparked by episodic incidents of violence. While President Vladimir Putin has remained relatively conservative in his use of ethnicity in speeches, anti-minority sentiment in mainstream politics has been steadily growing, even as the country experiences more economic stability than at any other time after the fall of the USSR. The fourth largest political party in Russia is Vladimir Zhirinovsky's so-called Liberal Democratic Party of Russia. A stable ideological party, with varying regional success at the polls, it is rooted in deep-seated xenophobia and ethnonationalist rhetoric. Its success poses a threat to the life chances of ethnic minorities. Drawing on Hale's (2008) relational theory of ethnic politics, I argue that this threat generates a demand for adaptive response. Two major venues through which actors may adapt are *exit* (i.e. migration) and *voice* (i.e. political advocacy). With opportunities for minority group advocacy severely limited in Putin's Russia, this research focuses on migration as an adaptive response to ethnic politics. I hypothesize that nationalism, as a component of ethnic politics, contributes to out-migration of ethnic minorities in contemporary Russia.

To arrive at the outcome of migration as an adaptive response in which minorities engage, two processes are necessary. First, an individual making the decision to migrate must interpret ethnic tensions as a threat to her life chances, and she must evaluate her future prospects in this ethnically charged

framework. Second, the option of migration must be a viable one. That is, an individual must consider herself the plausible target of the threat of diminishing life chances, conclude that an adaptive response is required, and determine that the benefits of migrating outweigh the costs. In order to explain these processes, I employ the relational theory of ethnic politics (Hale) and demographic theories. I estimate an event history model using regional, household, and individual-level data from Russian censuses and the Russia Longitudinal Monitoring Survey. I find evidence that political push factors affect minority groups differently than the ethnic majority, suggesting that the success of ethnonationalist politics in a region signals vulnerability to ethnic minorities, influencing migration decisions.

Ethnic Tensions and Life Chances in Russia

When does an individual interpret ethnic tensions as a threat to her own life chances? Why might minorities flee Russia in the face of ethnic tension, even if the sentiment is not directly aimed at or destructive towards them? Hale's (2008) relational theory of ethnic politics distinguishes between ethnicity as a mechanism to reduce uncertainty and ethnic politics as the strategies a group engages in to increase life chances. Identity, generally speaking, is a way in which actors make sense of their world. Ethnic identity, then, becomes salient when this particular point of reference "come[s] to have greater importance in people's lives, when people's lives are seen to be affected in more significant ways by the referent," (2008:36). This is especially true when one group has the power to affect the other group's average life chances, as through employment discrimination. Ethnic identification must not only be salient, but also be accessible (i.e. through contextual clues or repeated exposure) and must fit the situation (even if based on incomplete or wholly inaccurate stereotypes). In addition, ethnicity is a particularly "sticky" identifier, as it encompasses four categories that increase its accessibility and fit to social life: 1) ethnicity implies a common fate; 2) ethnicity tends to involve barriers to communication (both linguistically and culturally); 3) ethnicity carries visible physical differences that are hard to change; and 4) ethnic traits are usually correlated with less visible traits (such as attitudes and values) (2008:42–

43). Thus, while ethnicity may not be the only information in a given scenario, it is an important one for simplifying and making sense of social life.

If ethnicity is pre-rational and exists as a mechanism to reduce uncertainty, then what people do in their newly simplified world is ethnic politics. Ethnic politics is a categorical way of thinking applied to widespread human desires. Hale defines these human desires as material gain, power, status, and/or security. When referring to life chances, henceforth, I am referring to these four categories of human desires. Material well-being is a long-term desire, in which groups take a prospective approach to economic gains, potentially seeing a temporary tradeoff as a lifelong impediment. Power is a fungible good that may lead to other gains, such as economic prosperity or physical security. Status and self-esteem may be desires that, if left unfulfilled, lead to resentment and ethnic tension. Security can be considered a survival motive. It is likely to be important when "physical well-being is potentially at stake along group lines" (2008:54). When threatened with a reduction in life chances, then, ethnic identity becomes salient and actionable.

Ethnicity certainly appears to be salient in Russia. The Russian language differentiates between ethnic Russians, *russkii*, and citizens of Russia, *rossiiskii*, and nationalist parties tend to follow suit, using the ethnic term for Russian when calling for a return of the country to its people ("*Rossiya dlya russkikh*" or "Russia for [ethnic] Russians"). Historically, the Russian Federation has taken a "fill-in-the-blank" approach to self-identified ethnicity. The Russian Census has respondents fill in their identified ethnicity; with no categorical options that one sees on the U.S. Census. In 2010, the Russian Census recorded over 160 ethnic groups residing within its borders. Table 1 shows the most numerous ethnic groups in the Russian Federation, as measured by the 2010 Russian Census.

[Table 1 about here]

Although official statistics are unavailable, reports of discrimination and violence against ethnic "others" is common, and an oft-cited area of concern for the United Nations (Kulaeva et al. 2013; Verkhovsky,

Kozhevnikova, and Sibireva 2010). Tension with minorities and migrants is evident in opinion polling as well as the media. Since 2000, the Levada Center has consistently reported that a majority of a representative sample supported the phrase "Russia for ethnic Russians" (Anon 2011a). In 2012, nearly 30% of respondents said that they can feel ethnic tensions in the city or town in which they live. When asked "Are violent ethnic clashes possible in Russia now?" 43% answered yes, and when asked the same question about their specific communities, 23% of respondents answered yes. Over 40% of respondents reported feeling annoyance or dislike toward residents of the "southern" republics (the Caucasus), and 42% reported that population restrictions should be placed on people from the north Caucasus ethnic groups living in Russia¹. In a 2005 Levada Center opinion poll, a majority of respondents answered that they felt negatively about the employment of migrants in law enforcement, public service, and private enterprise. Similarly, the poll found a majority disapproval of migrants acquiring any type of property. The proportion of respondents who answered that they did not want a foreigner as a neighbor varied by origin of the foreigner, ranging from under 20% for Ukraine to over 70% for the Caucasus, Central Asia, or China.

Ethnicity is a matter of importance to contemporary politics and politicians as well. The current president, Vladimir Putin, has written publicly about 'the ethnicity issue,' both calling for harsh legal action against disrespectful internal migrants, and suggesting that ethnic groups must live in harmony in order to secure the Russian state (Putin 2012). More recently, Putin explicitly used the Russian ethnic background and shared linguistic and cultural history as pretext for the invasion of Ukraine's Crimean region, fueling fears about the implications of Putin's bold geopolitical action (Conant 2014). The main ethnonationalist political party in Russia, the LDPR, targets ethnic minorities through its rhetoric exalting ethnic Russians above all others, and pledging to return Russia to its ethnic Russian inhabitants. Thus, ethnicity is salient for both ethnic Russians and ethnic minorities in Russia, primarily through a hierarchy constructed in which ethnic Russians are above all others. For this reason, I do not focus on any one

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¹ It is worth noting here that residents of the north Caucasus are citizens of the Russian Federation. The north Caucasus consists of the Russian *oblasts* of Dagestan, Chechnya, Ingushetia, North Ossetia, Kabardino-Balkaria, Karachay-Cherkessia, parts of Krasnodar Krai, Adygea, and parts of Stavropolskii Krai.

particular ethnic group, and instead I focus on the division between ethnic Russians and ethnic non-Russians. I argue that the signal sent by ethnonationalist groups will resonate differently between ethnic Russians and ethnic non-Russians, while specific ethnic groups may not have differential interpretations of the same signal. For instance, minorities may interpret the protest banner that reads "Russia for ethnic Russians" as a signal of worsening prospects. A policy of returning the Russian Federation to its rightful ethnic Russian owners will likely be threatening to minority individuals, regardless of specific ethnic group identification.

Nationalism as a Signal of Worsening Prospects

Nationalism in Russia takes many forms, and is far from new. In this research, I focus on the right-wing platform of ethnonationalism, in which the primary building block of nationalist rhetoric is anti-minority sentiment. As an indicator of the success of ethnonationalism, I use the vote share of a single party representing this platform, the so-called Liberal Democratic Party of Russia (LDPR). LDPR is the major ethnonationalist force in the Duma and has been one of the most stable political parties in Russia since the mid-1990s (Hanson 2010). It is an ideological party, relying on rhetoric that defines the future of Russia under an ideal LDPR leadership. "The central features of [Zhirinovsky's] political creed... have been remarkably clear and consistent since nearly the beginning of his career as a public politician in the late Soviet period," (Hanson 2010:195). Those features have changed little from Zhirinovsky's first publications in the early 1990s to the LDPR's published programs in 2014. The political creed includes an aim to "return to the [ethnic] Russian people the status of nation-state... What's good for Russians is good for all. For [ethnic] Russians, along with all those indigenous people of Russia, we will build our common Russian home," and to spread a political ideology that reunites the ethnic Russian people toward the common goal of restoring Russian boundaries to their "historical territory". The LDPR program explicitly demands a universal system in which the Russian language is studied by every one, without alteration. LDPR claims to aim to "defend the country from migrants" and maintain a "continuous regime of counterterrorism operation" in the north Caucasus (Zhirinovsky n.d.).

This familiar nationalist rhetoric places the ethnic Russian on top of an ethnic hierarchy and demands for the restoration of land and status to the population, while defending it from the threats of immigration and foreign politics.

The LDPR is stable, with "remarkable organizational capacity in many of Russia's regions" (Hanson 2010:208). It is widely recognized party that has gained not only traction in legislative elections, but also media attention. This is important, because it indicates that Russians *know* what this party stands for, and are familiar with the platform on which it runs. Its success or failure in a region *signals* information to individuals living in that region, upon which these individuals may evaluate their future prospects in the region and determine the need for adaptation (Lohmann 1993). What, then, is the signal that the success of the LDPR sends?

LDPR's registered leader, Vladimir Zhirinovsky, is blatantly anti-immigrant, anti-minority, and misogynistic. He has been quoted as claiming to intend to "close [all of Russia's] borders on the day after the election," (Bidder 2008), and threatening to "seize Alaska from the United States, to launch a nuclear strike on Japan, to flood Germany with radioactive waste, and to occupy the Baltic states," (Anon 2000). While some consider Zhirinovsky to be merely a showman on the Russian political scene, he has had major successes, including LDPR's first-place win in the legislative election of 1993 and his own presidential run, which landed him third place in both 1991 and 2008 (Hanson 2010). Zhirinovsky is not the only outspoken nationalist representing the party. Andrei Lugovi famously sits in parliament for LDPR, despite being wanted in Britain for his alleged connection to the poisoning death of Alexander Litvinenko (Anon 2011b). Despite the tendency of Westerners to write off Zhirinovsky because of his theatrics, experts see the LDPR as a successful, ideological political party (Hanson 2010). Because LDPR is explicitly nationalist and pro-ethnic Russian, I argue that it serves as a proximate signal of a broader anti-minority sentiment. The interpretation of this signal as future risk of harm to life chances will delineate along ethnic lines. Thus, ethnic minorities receiving this signal update their information about their status in the environment and determine that adaptation is necessary, while ethnic Russians do not.

How strong must a signal be in order to contribute to the costly decision of migration? Perhaps vote share, in a struggling political democracy, may not be the proxy of choice in determining political signals. To further extend this discussion, I also include a measure of hate crimes. These data are from the SOVA Center of Information and Analytics, based in Moscow. The center reports hate crimes annually, and breaks the crimes down in a number of ways, including violence (murder, credible threats of murder, stabbing, beating) and vandalism (arson, graffiti, breaking of windows). Like lynching in the U.S. South, hate crimes in today's Russia are characterized by the victim's membership in an ethnic minority group. They are rare, and centered in places of political power. However, just as with Tolnay and Beck's (1992) study on lynching, I expect that hate crimes will have an effect on out-migration of ethnic minorities. I argue that although locally varying and rare, these events will trigger an evaluation of worsening prospects for minority individuals.

Migration as an Adaptive Response

Migration is a costly event, taken on as an adaptive response to both push factors at the origin and pull factors at the destination, with consideration of both personal factors and intervening obstacles (Lee 1966). Different theoretical camps have suggested mechanisms at every level of motivation. Macro neoclassical economic theory attempts to explain labor migration with the wage differential caused by variations in supply and demand between origin and destination countries, while micro neoclassical economic theory focuses on individual decision-making in which a rational actor weighs the costs and benefits of migration (Massey et al. 1993). For economists and demographers using a rational decision-making approach to migration, these costs and benefits have been almost exclusively economic ones. The new economics of migration pivots from the individual to the household unit as the primary location of decision-making in order to diversify risk and increase exposure to favorable markets as a whole unit, thus characterizing migration as a family-unit strategy to increase household resources (Stark and Bloom 1985). In short, these theories are all making claims about a decision to maximize life chances through migration.

Although many demographic studies of migration have focused on migration as a strategy to maximize economic well-being, some case studies have emerged to consider other aspects of life chance maximization, particularly when conflict occurs in the sending or origin location. Tolnay and Beck (1992) find that, in the early 20th century, lynching significantly contributed to the out-migration of the black population from southern U.S. states. The authors use county-level data for a sample of southern states, and model the net out-migration of blacks as a function of the frequency of lynchings. They find that blacks were more likely to leave counties where they were denied education, and where they were economically disadvantaged (Tolnay and Beck 1992). Importantly, the authors conclude that while white lynchings did occur, and while white migration did occur, the effect was not significant. Thus, "[t]he threat of violence was salient only for blacks in the South, and represented a motivation for migration only for them," (1992:112). This evidence encourages the argument of this research, that ethnicity will be salient for minority ethnic groups in Russia, but not necessarily motivate the adaptive actions of the ethnic Russian majority group.

Conflict, more generally speaking, has been shown to contribute to out-migration. Some of the highest rates of emigration in the world have been attributed to conflict. Between 1990 and 2003, amidst armed conflict with Russia, Georgia lost an estimated 20% of its residents to out-migration (Gerber and Torosyan 2013). This stream of migrants is similar to what the U.S. South experienced in black out-migration, mentioned above. Likewise, in the months after gun battles associated with a larger conflict in Nepal, researchers have found a 67% increase in the likelihood of out-migration (Williams et al. 2012). These authors address cases of armed, state-level conflict. However, studies of the effect of lynching in the American South or hate crimes in contemporary Russia, present unique challenges. The events are rare, and it is difficult to interpret the threat of an individual event net of other contextual factors, although that is precisely what our statistical models ask of the data. Further, the data I use include hate crimes and nationalist vote share, both of which operate at a lower intensity than a state-level armed conflict.

Research has offered support to the notion that non-violent, non-national level events may affect migration. Work on nationalist policies geared to provide economic advantages to Francophones over the previously dominant Anglophones has shown the effect of such policies on out-migration of Anglophones from Quebec (Pettinicchio 2012). The characteristic of speaking English was a significant predictor of migration, as was the interaction of being an English speaker and a professional, providing evidence that ethnonationalist policy that provided economic advantages to French speakers also contributed to emigration of Anglophones. Turning to social and economic tension, researchers used a 2005 survey to investigate differences in propensity to out-migrate among Asians and Europeans in Kyrgyzstan. In justifying their focus on ethnicity, the authors note "because the collapse of the Soviet Union brought to the fore and rearranged ethnic identities and because ethnicity has been a major factor in post-Soviet migration, [they] focus in particular on ethnic differences in migration intentions," (Agadjanian, Nedoluzhko, and Kumskov 2008:621). The authors find few differences among ethnic groups in their propensities to migrate. They note the rarity of ethnic violence in their discussion. Finally, a qualitative study in post-Soviet Uzbekistan investigated the political and economic motivations of out-migration (Radnitz 2006). The author finds that the forces leading to migration exist not in the political factors alone (such as discrimination, insularity, or ethnic violence) but in their interaction with economic factors. Thus, when faced with both a fledgling economy and ethnic tensions, Uzbeks were more likely to emigrate than when faced with one or the other independently.

Data & Methodology

Does nationalism contribute to ethnic minorities' propensity to migrate in contemporary Russia? In order to investigate this question, I use panel data from the Russia Longitudinal Monitoring Survey 2009-2012, combined with regional data from the Russian Census and the SOVA Center for Information and Analytics.

The Russia Longitudinal Monitoring Survey– HSE, is conducted by the National Research University Higher School of Economics and ZAO "Demoscope" together with Carolina Population

Center, University of North Carolina at Chapel Hill and the Institute of Sociology RAS, and is henceforth referred to as the RLMS². The RLMS is considered the only nationally representative survey in Russia. This survey has been repeated annually since 1994. Figure 1 maps the 25 sampled areas (shown in blue and gold) of Russia's 87 regions³, stretching over multiple economic regions.

[Figure 1 about here]

Data are collected at both the household and individual level, with a unique household and 'site' identified for each observation. Household-level variables include a detailed roster, reasons for members to have left the household, income and expenditures, and home ownership (among many others). Variables at the individual level include birthplace, self-identified ethnicity, previous migration experience, language(s) spoken, religious practice, and labor force participation (among many others). For each year, I merge the household and individual files, matching each individual to her corresponding record in the household roster. Generally speaking, not all members of the household will be in the individual file. This requires that some members of the household receive an ethnicity indicator based on the other members of the household. This decision relies on the important assumption that while only one individual in the household may be an ethnic minority, even an inter-ethnic married couple will interpret anti-minority sentiment as a threat to their future prospects. Thus, theoretical justification may be made for similar migration decision-making and heightened ethnic awareness for households in which even one ethnic minority resides. Using this method, approximately 19,000 observations with missing ethnicity information are deemed ethnic Russians, roughly 2,600 are deemed ethnic minorities, and a little over 2,000 cannot be determined, and are dropped from the analysis.

² The RLMS can be accessed at http://www.cpc.unc.edu/projects/rlms-hse

³ Russia's regions, commonly referred to as 'oblasts', are federal subjects officially called 'oblasts', 'krai', 'republics', and 'federal cities'. With the exception of the federal cities Moscow and St. Petersburg, regions are roughly equivalent to U.S. states. They range in size, population, and autonomy.

I have structured the data in a person-year file in which individuals are nested within households within regions. The RLMS provides repeated observations of households and individuals over time, in which respondents may enter or exit the dataset at any time due to new sampling that year or to non-response. The repeated household roster is a significant asset to the RLMS. Interviewers surveying a household in the first year in which the household enters the survey take detailed notes about every person living in the household, including birthdate, gender, and relationship to others on the roster. In subsequent years, the interviewer takes the roster table back to the household and updates it. Thus, if a member of a household leaves, the survey captures a general timeline of migration (i.e. if the member is present in 2009 but absent in 2010, but is present in 2011, we can make some migration duration assumptions) as well as the reason for absence (i.e. why is the person no longer in the household) and the distance the individual moved (i.e. responses to the 'why' question include: lives in this building, but in a different household, lives in this settlement but at a different address, lives outside of this settlement, moved for university, died, and other). This nuanced coding of individual moves was new to the RLMS in 2009.

Dependent Variable

I define out-migration as an individual migrating by T₂ given that the independent variables are measured at T₁. Moves count as out-migration if the individual moves out of their household *and* current population center for any reason other than to attend university. The household must exist to report the individual's migration, and therefore, whole household migrations are not considered. The RLMS has produced few studies on migration and mobility. One exception is Guido Friebel and Sergei Guriev's work on the effect of in-kind payments received by workers on their mobility. The authors use Rounds 6 and 7 of the RLMS and measure intent to move in Round 6 as well as actual moving in Round 7. Friebel defines a "move" as a move to a different population center or "community".

The dependent variable *move* takes a value of 0 if an interviewed individual in round VI lived in the same community round VII and a value of 1 if interviewers were unable to find that individual in the same community in round VII. The value of the category

move=1 thus also includes nonrespondents and people who died between the two rounds, meaning that is an imperfect measure of regional mobility. (Friebel and Guriev 2005:191)

In another study by Yuri Andrienko and Sergei Guriev, the authors use this same measure as an estimate of informal migration to supplement aggregated official statistics in a paper on the determinants of interregional mobility in Russia. This method of operationalizing migration and mobility is demonstrative of the limitations of the early rounds of RLMS, which the authors use for its inclusion of the variable indicating intention to move. Unfortunately, the authors using these measures of migration are also counting death and non-response. Using later rounds of the data, however, allow this research to differentiate between individuals no longer in the household due to death, university, or out-migration from the region.

Many studies on the years immediately following the collapse of the Soviet Union take into account official statistics, and take advantage of the *propiska*, or internal passport, that has historically been a part of the story of Russian mobility since the 1930s (as well as before the revolution, in the Russian empire). The Soviet *propiska* system was officially abolished after the collapse, but registration continues in a few FSU countries, including Russia. In Russia, registration is necessary if a person lives in one place for 90 days or more. It is generally accepted that penalties are rarely enforced, that firms hire unregistered employees regularly, and that informal migration is significant, and according to some estimates, as high as formal migration. Internal migration is penalized at much lower rates than international migration if unregistered. This presents some challenges to studies using official migration statistics to measure interregional mobility.

Explanatory Variables

1 - Vote Share

To each individual observation, I attach the official vote share data for the Liberal Democratic Party of Russia, which was collected from the Central Election Committee of Russia and compiled by Electoral Geography. This vote share is disaggregated to the region level, and is time-lagged so that each

person-year receives the score of the most recent legislative election that occurred at least one year ago. Thus, an individual record in survey year 2011 receives the vote share for 2007, and the same record in survey year 2012 receives the vote share for the election 2011. In this way, the vote share is both time-lagged, and time-varying, although it does not change annually. I restrict my calculation of vote share to legislative elections instead of including presidential elections. Legislative votes are based more on party platforms than presidential elections, which may be more focused on individual candidates. Presidential elections in Russia in this time period are problematic to measure, as official corruption tends to be concentrated and highly public in presidential elections. In addition, with Vladimir Putin carrying the bulk of the vote share in these elections, the other candidates divvy up much less of the remaining vote share. Legislative elections allow the entrance of many more parties and have more meaningful results for smaller parties. While not ignoring the possibility of corruption during the height of Putin's popularity, I note that much of the protest around vote rigging has occurred after 2012, which is outside the scope of this study. For the period sampled, none of the regions produced a vote share of 0% for LDPR or for turnout. Vote shares for the sampled regions are summarized in Table 2.

[Table 2 about here]

Each sampled region has a corresponding, mutually exclusive site ID in the RLMS. Both the level of vote share and the percentage change in the share of votes captured by the LDPR contain regional and temporal variability⁴.

2 – Hate Crimes

In order to control for ethnically motivated factors outside of anti-minority sentiment, I include an indicator for hate crimes. I use annual hate crime count data from the SOVA Center for Information and Analysis, time-lagged by one year. The SOVA Center is a Moscow-based Russian non-profit organization

⁴ See supplemental information, Figures S.2 and S.3.

that was founded in 2002. The center collects information about human rights violations in Russia and is funded by the Open Society Foundation, the National Endowment for Democracy, the Henry M. Jackson Foundation, the Russian Federation through the State Club Foundation, among many others. The center regularly publishes articles and books in addition to monthly counts of hate crime data, classified by region and victim identity. Systematic counts of violence were collected every month between 2009 and 2012. Table 3 shows a snapshot of the targets of hate crimes nationwide, over the last five years.

[Table 3 about here]

The SOVA Center classifies an incident as a hate crime if it is motivated by the target's identity. Incidents of violence include murder, beating, stabbing, wounding, or threats of murder. Incidents of vandalism include breaking windows, arson, and graffiti. A major limitation to the SOVA Center's statistics is gross underreporting and the inability for the SOVA Center to identify minority status of many victims of apparent hate crimes. Therefore, the reported hate crime figures are very conservative numbers.

3 – Minority Status

I operationalize minority status as non-Russian ethnicity. Often the terms nationality and ethnicity are used interchangeably in the Russian context. This is largely a result of imperial and Stalinist policies.

Nearly always ethnicity is self-identified. This is true on the Russian census, which typically returns hundreds of ethnic group responses. In the RLMS, variables that capture ethnicity are as follows:

- 1 "What nationality do you consider yourself?" Interviewers write down the answer in a blank space.
- 2 "Were you born in the place of your current residence or elsewhere?"
 - 1 In another place
 - 2 In the place where I live now
 - 7 Doesn't know
 - 8 Refuses to answer

3 - (for those who answered "in another place" for *borndp*) "In what republic of the former USSR were you born?

I have constructed a variable called "minority" in which I give a "0" outcome to individuals who responded either that they were born in the place they were surveyed (all survey sites are in Russia), or that they were born elsewhere in Russia, and a "1" if they were born elsewhere, not in Russia or self-identify as a non-Russian ethnicity. Ethnic Russians make up the majority of the dataset, but with some significant categories of other ethnic groups. I create a household level variable representing minority households. Figure 2 shows the geographic dispersion of person-years contributed by Ethnic Russian and non-Russians in the RLMS sample from 2009 to 2012.

[Figure 2 about here]

I have aggregated the 87 regions into their economic region counterparts. The economic regions are mutually exclusive. Ethnic non-Russians reside in every economic region and in the federal cities of Moscow and St. Petersburg, although some regions consist of a much larger proportion of minorities in the sample than others. Major cities are included, but not separately counted in the Full Sample calculation. Instead, they are counted as part of the Northwestern (St. Petersburg) or Central (Moscow) economic regions⁵.

Control Variables

I control for demographic and economic conditions at the individual, household, and regional level. I calculate the respondent's age using birth year and allow it to vary each year. The data are not restricted by a maximum age, but all children under the age of 18 are removed. I include gender in the

⁵ For full counts in each economic region, refer to Table A1 in the Appendix.

model, with female respondents receiving a 1 and male respondents receiving a 0 on the indicator. Gender previously reported for the same individual is assumed to continue through to subsequent years.

Individual respondents report their monthly income and home ownership status. However, for the vast majority of households, only one individual reports these figures. I carry these indicators forward to all members of the household. Although this means that the wages reported are not 'real' household wages, they are useful in generating relative income versus other respondents. For use in the model, I standardize the income figures, so that one unit increase is equivalent to one standard deviation increase. This allows for the coefficient to be large enough to be legible in the model. Household ownership in the model indicates that the household in which the members reside is owned by someone living in the household, but does not differentiate between which members of the household own the home. Both income and home ownership status may vary by time. Once the household is owned, however, subsequent missing data may be replaced based on previous status in the same household.

At the regional level, I include a standardized measure of the regional Gross Domestic Product (GDP) per capita in 2009. I also include a standardized measure of the regional population in 2010 according to the Russian Census. For both of these standardized regional levels, a unit increase is equivalent to one (sample) standard deviation increase. Neither variable is time varying, but both provide regional variability. I also include the year of the survey in the model to control for any period effects that may be unobserved. Table 4 summarizes the averages of these control variables for both ethnic Russians and minorities.

[Table 4 about here]

We expect some variables to be correlated, such as population and GDP, for instance. Table 5 shows the correlation between each variable included in the analysis, and includes an indicator for statistical significance. Discussed further in the limitations section of this paper, it should be noted that the majority

of hate crimes are carried out in places of political power, such as Moscow. These places tend to also be those of large populations and high GDPs.

[Table 5 about here]

After merging the rounds of data, the result is a panel data set, with each row containing an individual who carries the properties of her self, her household, and her region. The total number of person-years in the data is nearly 90,000. Individuals who are gone from their households at the beginning of the case study time period are censored (dropped) entirely. Table 6 shows the migration status for each of the person-years by survey year.

[Table 6 about here]

Reflecting the officially reported population make-up, ethnic Russians dominate the dataset. However, as Table 7 shows, approximately the same proportion of ethnic Russians and ethnic non-Russians migrate out each year.

[Table 7 about here]

Leveraging the longitudinal design of the RLMS, and the unbalanced panel construction described above, I estimate a discrete-time event history model (Allison 1984). I focus on a respondent's first instance of migration, which simplifies the model and computational requirements, while also recognizing that it is impossible to distinguish a respondent who leaves every fall for a few months, returns in the spring, and leaves in the fall again and a respondent who is absent for multiple years. Thus, subsequent moves are not considered in this model. I restrict my analysis to those at risk of migrating out. Thus, all those in 2009 who are marked as absent (i.e. we don't know when these individuals migrated out) are removed from the

data. After any individual's first migration out, they are also removed from the analysis. Right censoring occurs here if an individual does not migrate within this observation period, and no new information is available on that individual. The event history model allows for time varying explanatory and control variables. Because each observation is a person-year, indicators may change over time, as subsequent years for the same individual become additional observations. In this model, any individual may have between one and four observations, depending on when they enter and/or exit the sample. Table 8 shows an example of this kind of repeated observation for an individual in the RLMS.

[Table 8 about here]

In the example shown in Table 8, a single individual has four observations in the data. Her age, income, home ownership status, exposure to nationalist vote share, and migration status are all allowed to vary by time. Repeated observations for each individual in the RLMS make it appealing to follow an individual and investigate their migration experience. However, repeated observations also generate statistical dependence between observations and are likely to underestimate p-values. To account for this dependence, I estimate clustered standard errors around the individual, so that standard errors are measured on the person and not the person-year (cite).

I expect to find that political factors affect ethnic minorities *differently* from ethnic Russians. I estimate a total of four event history models, outlined below. Each model uses a dichotomous indicator of whether or not a respondent migrates out this year as the dependent variable. I use two separate sampling frames for the models – 1) ethnic Russians only, and 2) ethnic non-Russians only. Within each sampling frame I model first the individual and household control variables (age, sex, home ownership, income, and survey year) and second the full model with regional-level variables included (GDP, Population, LDPR vote share, and count of hate crimes).

Findings & Discussion

Table 9, below, shows the results from the four event history models, along with the clustered standard errors, BIC and log-likelihood.

[Table 9 about here]

These findings support the hypothesis that the migration process for ethnic minorities in contemporary Russia is fundamentally different from that of ethnic Russians. Although both ethnic Russians and ethnic minorities are out-migrating, this outcome has a different relationship to nationalism among ethnic Russians and ethnic minorities. The regional LDPR vote share has a statistically significant positive relationship to out-migration among ethnic non-Russians, and a statistically non-significant relationship to out-migration among ethnic Russians. This implies a very different migration story for ethnic minorities from their ethnic Russian counterparts. Above and beyond regional economic conditions and individual factors, ethnic minorities are more likely to migrate when residing in a region with higher nationalist vote share. This is consistent with the argument that the nationalist vote share acts as a signal to minorities about their future prospects, which demands an adaptive response. In this context, some ethnic minorities decide to adapt by way of migration. In contrast to the migration story of individuals maximizing or diversifying their resources, the model for ethnic minorities suggests that, even controlling for economic factors, part of the migration story is the desire to protect life chances that are being threatened by the success of ethnonationalism. Table 10 shows the difference in coefficients of the nationalist vote share between ethnic Russians (.1463) and ethnic non-Russians (3.4997). I conducted additional tests that revealed that these two coefficients are not statistically significantly different. However, the sizes of the two coefficients are quite different. The small sample of ethnic non-Russians results in a large standard error for the vote share coefficient in that model. This makes it mathematically difficult to reject the null hypothesis that the coefficient for vote share is the same for ethnic Russians and ethnic non-Russians.

The hate crimes indicator was not statistically significant in any of the models. Supplementary analysis revealed no effect of hate crimes when included as a rate, or when focusing on violence alone, without counting vandalism. There could be a number of reasons for the non-significance in the model. It is worth noting here the correlation⁶ between population, major city residence and hate crimes. The vast

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⁶ The variables are correlated, but not necessarily collinear. Regression diagnostics reveal VIF of under 5.0 which, although not ideal, is not massive.

majority of hate crimes occur in Moscow and St. Petersburg, which is also where much of the Russian population resides. However, including one of the variables without the others risks conflating explanatory mechanisms. Statistical significance of the 2010 population tells a different story than significance of the hate crime count. What this means, then, is that the hate crimes indicator carries a heavy burden in the model, which is to be statistically significant net of both population and residence in Moscow or St. Petersburg. Without those two controls, however, the hate crimes count picks up too much of the effect of urban living. A substantive limitation of the hate crimes data is potentially more restraining, that of underreporting. In 2010, the SOVA Center reported a decline in violence against ethnic minorities, noting that the decline could be a result of anti-violence measures. However, "it [had become increasingly apparent that information about [racist violence] incidents fails to make it into the public sphere – and we learn about them not right after the crime is committed, but once the attacker receives his court sentence" (Kozhevnikova 2010). This underreporting may be occurring universally, or may be geographically biased, but with the current data, it is impossible to know. A third reason for why hate crimes may not be significant lies in the difference between the social-psychological effects of targeted violence and random violence. I have argued that signals from the nationalist party conveys the idea of ethnic Russian superiority, and that ethnic minorities interpret this signal as threatening to their future prospects in a certain region. Targeted violence that appears to focus on phenotypical differences, specific ethnic groups, or particular symbols of minority status (such as attacking Muslims wearing the hijab) may create acute fear within that minority group, but may not have the same aggregated effect of the signal that nationalist success sends. That is, when a specific ethnic group is targeted by violence, that ethnic group may respond. However, when the superiority of ethnic Russians over all other groups is touted, then the signal is sent to all minorities, regardless of group identification. This underlines the importance of creating a dichotomous variable to represent minority status. Although, rightfully so, attacks against Chechens and migrants from Central Asia receive media and political attention, antiminority sentiment against Jews, Muslims, Westerners, Roma, and even Slavic minorities such as Ukranians and Belarussian is prolific. Thus, dividing ethnic groups not only reduces statistical power, but

also forces the researcher to make too many arbitrary decisions about which minority group should rightfully fear the success of Zhirinovsky and the LDPR in their region.

The models share other similarities. The significance of the survey year indicator speaks to a period effect, net of all other factors. That is, with each subsequent year, the propensity to migrate increases for all respondents. In both subsamples, a statistically significant negative relationship exists between age and migration, favoring younger respondents. This is consistent with existing demographic research on migration decision-making. I found no effect when adding an age-squared term to the model. In none of the models is home ownership significant, likely because of the high rates of home ownership among both subsamples.

For the ethnic Russians, we find evidence of selectivity based on income, regional GDP, regional population, and residence in Moscow or St. Petersburg. This suggests that a respondent is more likely to migrate when experiencing lower income, but higher GDP and population. Respondents are much less likely to migrate if residing in Moscow or St. Petersburg. This tells a migration story of young ethnic Russian men striving to maximize their life chances through migration. The lower income but higher GDP and population suggests that men with lower income but *access to* resources in the community may be more likely to migrate. Respondents from extremely impoverished regions may not be able to shoulder the high cost of migration, despite the opportunity to maximize life chances.

However, a different migration story emerges for ethnic minorities. While ethnic minorities are more likely to migrate while young, the gender effect disappears for this subsample. The statistical significance of income, regional GDP, and regional population also disappears. The regional factor that remains is the nationalist (LDPR) vote share.

Concluding Discussion

These findings have implications for the way that the demographers analyze the factors leading to migration in heterogeneous societies. In regional contexts of ethnic tension, migration decision-making may differ along ethnic lines. Including race and ethnicity indicators in the statistical models might

improve research examining the causes of migration. However, the this research shows that simply including an interaction term of the explanatory variable with minority status may not reveal the differential effect of 'push' factors. By subsetting the data to focus on ethnic minorities, I find support that contextual factors may play a very different role in migration decision-making for majority and minority groups.

Limitations

One limitation of this work is that although the sample size for the RLMS is quite large, the number of observations is dramatically reduced if the data are subset based on specific ethnic groups.

There are over 75 ethnic groups represented in the RLMS sample, which include both Central Asian and Indo-European minorities. I have decided to use the dichotomy of ethnic Russians and ethnic non-Russians in order to avoid making arbitrary or incorrect decisions based on assumptions of the phenotypic features of an ethnic group. Using this distinction, I limit the discussion of targeted groups such as Central Asians and internal migrants from the North Caucasus. However, I make this tradeoff in order to underline the idea that anti-minority sentiment is *not* necessarily targeted at a specific named ethnic group, but at the larger group of 'non-Russians' which includes not only minorities from Central Asia and the North Caucasus, but also Europeans, Jews, and Roma.

Another limitation of this study is based on the structure of the data. The RLMS only has nuanced measures of migration from 2009 on, which limits the scope of the study. Additionally, individual economic factors are not ideal, and should be interpreted with care, due to the necessity of carrying forward information over an entire household. (The household survey contains the dependent variable of out-migration, as well as birthdate and gender of the household members. The ethnicity and monthly income indicators are measured in the individual interviews, and must be assumed for the rest of the household.)

Additionally, I find no statistically significant effect of the regional count of hate crimes. I found no significant difference in results when calculating the hate crime rate per 1,000 persons or when using

violent crimes only. While the nationalist vote share is a convenient, officially recorded, and publically available proxy for anti-minority sentiment, the count of hate crimes is a far more difficult indicator to manage. It is regionally biased, with a massive difference between hate crimes in Moscow and hate crimes elsewhere (often with ratios of 100:1 or more). Much like other political events, hate crimes appear to be concentrated in areas of political power, such as Moscow and St. Petersburg. There are a few regions in which no hate crimes occurred during the study period, and even more in which at least one year there were no reported hate crimes. This is even more troublesome when combined with the problem of underreporting of hate crimes, described above.

Future Research

Nationalist vote share appears to have some effect on migration decision-making by ethnic minorities in Russia. These findings hold even when controlling for regional economic variables. I have argued that nationalist vote share is a proxy for anti-minority sentiment, and that this sentiment is interpreted by ethnic minorities as contributing to a context in which life chances are at risk. Thus, ethnic minorities interpret this context as demanding an adaption. In climates of limited political advocacy, this adaptation may be out-migration.

Further research is needed to unpack and better nuance these political factors. As the measurement of hate crimes is a significant limitation to the indicator, a better representation of violence against minorities should be explored. The nationalist vote share as a proxy for anti-minority sentiment certainly does not capture the universe of racist undertones in the Russian Federation. Indeed, scholars have remarked at the pace at which mainstream politics under Putin have adopted radical ethnonationalist stances (Hanson 2010). Content analysis focusing on media may allow for a more accurate measurement of anti-minority sentiment.

An unexpected finding was the difference in the gender effect between ethnic Russians and minorities. Young Russian men were more likely to migrate, but the gender coefficient was not statistically significant for ethnic non-Russians. This is not likely a story of family reunification, as the

only migration the data measures is that of an individual who leaves her household behind. Thus, these are not whole households moving, but rather individual women with the same propensity to migrate as individual men who are also ethnic minorities. Subsequent qualitative work may shed light on the decision-making process for minority women versus that of Russian women.

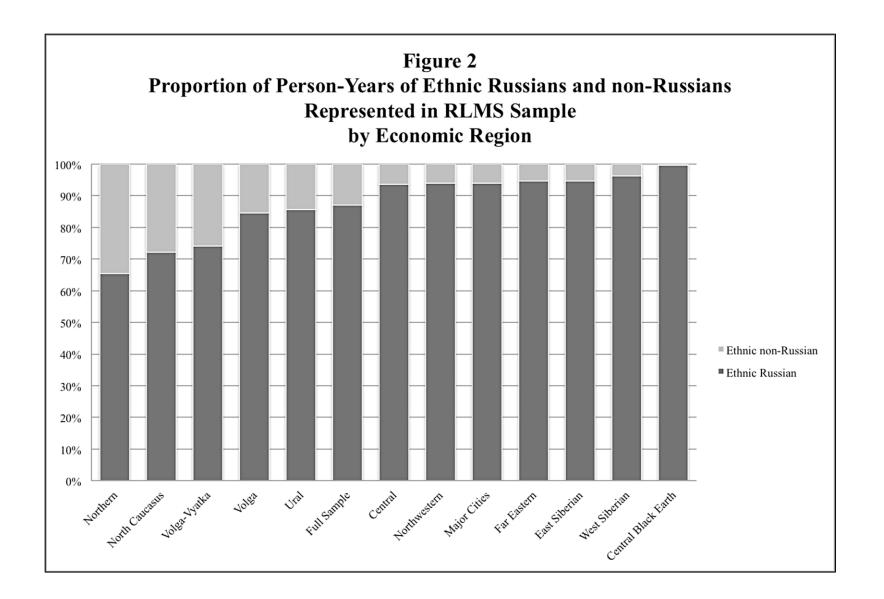
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Figure 1 Map of the RLMS Sampling Sites in the Russian Federation





Tables

Table	1. Ethnic Groups in	hnic Groups in the Russian Federation			
Ethnic Group	Number of Residents	% of Population	Language Group		
Russians	115,889,107	79.83	Indo-European		
Tatars	5,554,601	3.83	Turkic		
Ukrainians	2,942,961	2.03	Indo-European		
Bashkirs	1,674,389	1.15	Turkic		
Chuvashs	1,637,094	1.13	Turkic		
Chechens	1,360,253	0.94	Caucasian		
Armenians	1,130,491	0.78	Indo-European		
Belarusians	807,970	0.56	Indo-European		
Kazakhs	653,962	0.45	Turkic		
Germans	597,212	0.41	Indo-European		

Regions	2007	2011
Altai	6.45%	10.65%
Amurskaya	10.13%	20.99%
Chelyabinskaya	9.45%	11.77%
Chuvashia	8.49%	10.67%
Kabardino-Balkaria	0.41%	0.08%
Kaliningradskaya	10.17%	14.10%
Kaluzhskaya	8.23%	14.36%
Khanty-Mansiisky AD	13.19%	22.53%
Komi	11.42%	11.91%
Krasnodarsky krai	8.07%	10.45%
Krasnoyarsky krai	10.56%	16.99%
Leningradskaya Oblast	8.64%	14.78%
Lipeckaya	9.65%	14.40%
Moscow city	7.14%	9.45%
Novgorodskaya	9.55%	11.48%
Penzenskaya	5.86%	10.12%
Rostovskaya	5.36%	10.15%
Saint-Petersburg city	7.48%	10.30%
Saratovskaya	6.22%	7.24%
Smolenskaya	11.99%	14.75%
Tambovskaya	7.68%	7.09%
Tatarstan	3.88%	3.48%
Tomskaya	13.20%	17.85%
Tulskaya	7.13%	9.21%
Volgogradskaya	9.03%	13.28%
ALL RUSSIA	8.15%	11.68%

Table 3 - Targets of	Table 3 - Targets of Hate Crimes (Violence or Vandalism), 2009-2014					
	2009	2010	2011	2012	2013	Total
Central Asia	132	103	49	42	62	397
Caucasus	96	48	22	18	29	213
Blacks	61	28	20	26	5	140
Arab world	2	2	5		1	10
Other Asian countries	48	21	13	5	6	93
Other "non-Slavic"	59	109	26	16	33	243
Jews	4	3	3		2	12

Table 4 – Descr	riptive Statistics of Ex	planatory an	d Control Variables, by Ethr	iicity
	Ethnic Russians	Std. Dev.	Ethnic non-Russians	Std. Dev.
Median Age	43	17.82	45	17.69
Median Monthly	10,000	19160.9	9,723	33176.19
Income (rubles)				
Median 2009 GDP	15,098	9649.469	15,290	8472.784
in Region of				
Residence				
Median 2010	2,521,892	2,968,800	1,521,420	2,549,721
Population in				
Region of				
Residence				
Median LDPR	.0945	.0335932	.0849	.0492
vote share in				
region of residence				
Median Count of	4	42.75704	3	33.82214
Hate Crimes in				
Region of				

Averages and proportions counted on the basis of person-years and not unique individuals. These figures can be interpreted as the average or proportion over the number of observations, and thus the average contributed to the model, instead of the raw average for individuals.

Residence		
	Ethnic Russians	Ethnic non-Russians
Proportion in	91.23%	90.83%
Owned Homes		
Proportion Female	57.31%	54.55%

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	Correlations with statistical significance indicators for the subsample of ethnic Russians are above the line (grey), Below the line (white) for the ethnic minority subsample.										
	Migrates Out This Year	Sex	Age	Std. Mo. Income	Home Owned	Survey Year	Std. 2009 GDP	Std. 2010 Pop.	LDPR vote share	Hate Crimes Count	Major Cities
Migrates Out This Year	1.00	-0.0325*	-0.0730*	0.0017	-0.0695*	0.0682*	0.0188*	0.0289*	0.0159*	0.0252*	0.0165*
Sex	0.0047	1.00	0.1230*	-0.0996*	0.0088*	-0.0059	0.0080	0.0052	-0.0029	0.0051	0.0072
Age	-0.0549*	0.1207*	1.00	-0.0136*	0.1758*	0.0043	0.0156*	0.0262*	-0.0285*	0.0298*	0.0281*
Std. Mo. Income	0.0189*	-0.0874*	0.012*	1.00	0.0120*	0.0761*	0.1588*	0.1600*	0.0342*	0.1497*	0.1521*
Home Owned	-0.0409*	0.0334*	-0.097*	-0.0689*	1.00	-0.0129*	0.0245*	0.0615*	-0.0618*	0.0436*	0.0398*
Survey Year	0.061*	-0.0030	-0.006	0.0613*	-0.0121	1.00	0.0081*	0.0134*	0.4437*	-0.1034*	0.0020
Std. 2009 GDP	0.0529*	0.0367*	0.012*	0.1258*	-0.1117*	0.0296*	1.00	0.5885*	0.0705*	0.6369*	0.6808*
Std. 2010 Population	0.0396*	0.0013	0.007	0.0639*	-0.1600*	0.0326*	0.6755*	1.00	-0.2837*	0.8614*	0.7750*
LDPR vote share	0.0449*	-0.0027	0.001	0.0887*	-0.1020*	0.1746*	0.3364*	0.0609*	1.00	-0.2640*	-0.2130*
Hate Crimes Count	0.0283*	0.0115	0.007	0.0639*	-0.1055*	-0.0773*	0.6213*	0.8380*	0.0471*	1.00	0.8356*
Major Cities	0.0205*	0.0233*	0.010*	0.0606*	-0.0580*	0.0140	0.6413*	0.7762*	0.0273*	0.8638*	1.00

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 $^{^{\}rm 8}$ Residence in Moscow or St. Petersburg city limits.

Table 6 –	6 – Count of Person-Years Represented in the RLMS Sample, 2009-2010 by Migration Status					
Year	Does not migrate out this year	Migrates out this year	Totals			
2009	11,549	0 (censored)	11,549			
2010	24,274	1,152	25,426			
2011	24,166	1,568	25,734			
2012	25,446	1,333	26,779			
Total	85,435	4,053	89,488			

	Table 7 – Proportion of Individuals in the Sample Migrating Out Each Year						
	Ethnic Russian	Majority		Ethnic Non-Ru	ssian Minority		
Year	Total # of Individuals	Individuals Migrating Out This Year	Percent Migrating Out	Total # of Individuals	Individuals Migrating Out This Year	Percent Migrating Out	
2009	3,961	0 (censored)	n/a	560	0 (censored)	n/a	
2010	7,919	750	9.47%	1150	124	10.78%	
2011	8,432	1,313	15.57%	1177	166	14.10%	
2012	9,804	1,068	10.89%	1377	139	10.09%	

Table	Table 8 – Example of Repeated Observation for Individual in RLMS Data Using an Event-History Model								
Yea	ır	Individual ID	Gender	Age	Ethnicity	Income	Home Ownership	Vote Share	Migrates Out This Year
200	9	PERSON A	FEMALE	32	Russian	12,000	No	11.2%	No
201	0	PERSON A	FEMALE	33	Russian	15,000	No	11.2%	No
201	1	PERSON A	FEMALE	34	Russian	15,000	Yes	11.2%	No

2012	PERSON A	FEMALE	35	Russian	16,000	Yes	14.5%	Yes
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	Model I		Model II	
	Ethnic Russian Subsam	ole	Ethnic non-Russian Subs	sample
	Coeff.	CSE	Coeff.	CSE
Survey Year	.6762***	.0438	.2951***	.0744
Age	0446***	.0030	0358***	.0075
Sex	3417***	.0784	.17998	.2088
Home Owned	.1622	.1360	.5227	.3762
Std. Mo. Income	3572***	.0658	5585	.3655
LDPR	.1463	1.196	3.4997*	2.006
Std. 2009 GDP	.0939*	.0524	.0845	.1265
Std. 2010 Pop.	.1611**	.0766	.0793	.1887
Major Cities	7045**	.3060	7942	.9148
Count of Hate Crimes	.0004	.0023	.0056	.0071
Intercept	-1362.39***	87.98	-597.1734***	149.77
BIC ⁹	6825.09		1154.371	

⁹ Because the Bayesian information criterion (BIC) uses the number of observations in its calculation, BIC should be compared within like sampling frames only when assessing model fit.