


Urbanization, the Youth, and Protest: A Cross-National Analysis

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Abstract

Demographic changes associated with the transformation from traditional to advanced economies are the basis for many of today's theories of violent and non-violent protest formation. Both levels of urbanization and the size of the "youth bulge" have shown to be reliable measures for predicting protest events in a country. As these two processes result from modernization, it seems logical to hypothesize that the combined effect of the rise in urbanization and the increase in the youth population, urban youth bulge, would be a more relevant predictor for protests. Our tests on cross-national time-series data from 1950 to 2010 for 98 countries reveal that the combined effect of the two forces is an important predictor of anti-government protests. It may seem that the role of the urban youth bulge would appear to be an issue of the past as in more recent decades the proportion of the urban youth tends to decline in most countries of the world. However, this factor tends to be very relevant for many developing countries where both youth bulges have been growing for several decades and the general urban population is on the rise.

Keywords

protests, urbanization, youth bulge, urban social movements, economic development

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Introduction

It is well-known that violent and non-violent protests (hereafter “protests”) tend to occur in urban settings during important social movements. Cities such as Boston, Manchester, Grenoble, Paris, Lyon, Brussels, and Amsterdam were commonly the arena for street politics used by the first social movements in the 19th century as well as their more primitive ancestors in the previous century (Tarrow, 2003, pp. 39–40; Tilly & Wood, 2009). As the majority of the working class eventually came to be clustered in urban environments very early in the newly democratic nations, these cities quickly became the scene for the most contentious gatherings (Tarrow, 2003, p. 64; Tilly & Wood, 2009). This is not by mistake. As parliamentarization, capitalization, and proletarianization started to occur in the United States and Western Europe in the 18th and early 19th centuries, cities became the centers of power, holding large percentages of the population and societal wealth (Tilly & Wood, 2009, pp. 25–29; Zinkina, et al., 2019, pp. 153–181). Non-coincidentally we tend to find more political protests in countries with the socio-political features associated with the rise of capitalist economies, for example, political democratization, urbanization, and the expansion of formal education (Brenner, 2013; Gleditsch & Rivera, 2017; Korotayev et al., 2018, 2021; Lipset, 1959; Przeworski & Limongi, 1997; Tarrow, 2003, p. 64).

At the same time, we find that with advancements in capitalist development, the mortality rate in a country also declines, leading to large population booms of youth. These resulting “youth bulges” have been suggested to be a major factor in many collective action efforts from revolutions to riots to terrorism (Urdal, 2008; Goldstone & McAdam, 2001; Huntington, 1996; Korotayev, et al., 2011). Studies concerning the Arab Spring protests, for example, have shown the protesters tended to be highly educated, yet financially disenfranchised youth (Korotayev & Zinkina, 2011; Korotayev et al., 2014).

Urbanization and demographic transition are likely to be results of economic development. Young people tend to be those who migrate from rural areas to cities as urban centers become the focus for most of the economic activity in a country. The first-generation urban residents often face difficult working and living conditions, particularly because their skill-sets are not required by the modern economic sectors. This mechanism has been shown to lead to a significant number of destabilizing events in developing countries (Korotayev, et al., 2011). As both urbanization and the youth population are relevant for protest events, when taken jointly, they are likely to coincide with protest activity. Our current study thus focuses on the question of urban youth and hypothesizes that the level of the “urban youth bulge” will be an important and positive predictor of protests in modernizing countries. We introduced two measures of the urban youth bulge: the proportion of urban youth in the

total adult population and the proportion of urban youth in the urban adult population. We found that the two operationalizations of the urban youth bulge are not correlated and have different effects on the number of protests.

It may seem that the role the urban youth play in protest formation in developed countries is an issue of the past: in recent decades, the proportion of the urban youth in the total adult population in the developed world systematically declines. Urban youth bulges, for example, could hardly account for the wave of protests that hit most developed countries in the early 2010s (see [Korotayev et al., 2018](#)). However, this factor is still relevant for many developing countries, for example, those in Sub-Saharan Africa where both youth bulges have been growing for several decades and the general urban population is on the rise.

Literature Review

Urbanization

Urbanization plays an important role in many of the theories involving the emergence of protests and social movements ([Ang et al., 2014](#); [Gleditsch & Rivera, 2017](#); [Grinin & Korotayev, 2009](#); [Goldstone, 2002](#); [Tilly, 1995](#);). According to Political Opportunity theory, social-structural phenomena, for example, urbanization, population growth, and industrialization, can lead to political cleavages in a society when they are coupled with democratization, politicization, and mobilization ([Tilly, 1995](#); [Bartolini & Mair 1990](#), p. 216). Protests tend to occur in urban areas where people enjoy a greater share of society's resources and have denser personal networks, all of which make them more likely to protest ([Gleditsch & Rivera, 2017](#)). Political entrepreneurs are thus more able to connect and direct the actions of the masses as urbanization levels increase, which creates a large body of diverse sections of the population ready to be activated based on various social cleavages ([Tilly, 1995](#)). Moreover, because the efforts to undermine state forces are more effective in the cities, certain key cities and large metropolitan areas become key targets for leaders of social movements ([Gleditsch & Rivera, 2017](#)).

Beginning with Castell's *The City and the Grassroots* (1983), much research concerning social movements has focused on those taking place in urban environments. It has been suggested that the modern metropolis has become the focus of the efforts of movements and other social forces on par with the factory for 19th and 20th-century movements, due to it becoming the "space of the common" ([Hardt & Negri, 2009](#), p. 250). These "urban social movements" came to prominence in the 1960s with the various movements for the urban poor. They are defined by their demands to have a "right to the city" and they usually have as an objective the transformation of social relations within the urban space ([Hamel, 2014](#); [Harvey, 2012](#); see also [Castells, 1972](#);

Eckstein, 1989; Escobar & Alvarez, 1992; Jelin, 1987; Schuurman & Naerssen, 2011; Slater, 1985; Wignaraja, 1993). Unlike the industrial workers of the 19th century, who viewed the city as the primary arena for their struggle (Tarrow, 2003, p. 64), for modern urban social movements the city represents not only the arena of their struggle but also the stakes (Brenner, 2013). For example, one can find several Latin American cases that successfully transplanted community councils and cooperative businesses onto the previously existing institutions to democratize the community (Zibechi, 2010).

These movements become more prominent as economies develop and urbanization increases due to the increasing number of people living in poverty in urban dwellings. Social inequality is known to be a significant side-effect of urbanization (Black & Henderson, 1999). According to the estimates of the UN Human Settlements Program, the percentage of the urban population living in slums with inadequate living conditions was 30% in 2014, a figure equivalent to nearly 881 million residents (UN United Nations Habitat, 2016, p. 13). This section of the urban population, when spurred to action, can resort to protests and rioting when their structural position in society is perceived as being unfair, such as with the anti-IMF protests of the 1980s (Davis, 2017, pp. 158–163; Walton & Ragin, 1990; Walton & Seddon, 1994, pp. 39–45). For example, in a 1990 study of protest in 56 debtor countries, Walton and Ragin (1990) discovered a link between those countries that are both “over urbanized” and have the involvement of international agencies, such as the International Monetary Fund, on domestic economic policy and the intensity in anti-government protests.

Youth Bulges

The youth bulge has become a common topic and unit of analysis for those researching “population pressure” and socio-political destabilization (Goldstone & McAdam, 2001; Korotayev & Zinkina, 2011; Moller, 1968; Urdal, 2008). Goldstone and McAdam (2001) argue, that this can be observed, for example, in the rise and significance of the New Left in the United States and Europe. The large “baby boomer” generation, who were the beneficiaries of the unprecedented economic boom and rise in levels of education, made them more prone to “risk-taking.” Another example can be seen in the case of the Soviet Union. Using panel data from 1984–2012 for more than 100 countries, (Farzanegan & Witthuhn, 2017) found that corruption was only a destabilizing factor when accompanied by a “ticking time-bomb” of large youth bulge of 20% or more. Goldstone (2002) argues that the youth bulges in the Central Asian countries, in addition to a large number of young people with technical education, yet a perceived lack of opportunities, could have been a major indirect cause for the fall of the Soviet bloc. It is for these reasons

that Goldstone (1991) claims that factors such as the youth bulge are often accompanied by occurrences of socio-political destabilization.

The youth bulge phenomenon is most common in the developing economies: the decrease in infant and child mortality is followed by a subsequent increase in the youth population (Moller, 1968). One can find a handful of research on the link between the youth bulge and instability. In India, Urdal (2008) found that, in cases of high urban inequality, youth bulges exert a significant positive relationship with armed conflict, politically motivated violence, and riots. Within a certain context, such as high unemployment, increased access to education without a corresponding increase in employment, a lack of political openness, or increased levels of urbanization, the youth are statistically more likely to resort to violent acts. Urdal specifically pointed at male youth bulges as significant positive indicators of violence. Østby et al. (2011) came to a similar conclusion concerning population pressure and inequality in Indonesia. Since the events of the Arab Spring, the study of youth bulges has gained much attention over the past decade (Korotayev, et al., 2014; LaGraffe, 2012). It has been demonstrated that the masses of disenfranchised young people could have led to the protests across the region and the downfall of the authoritarian regimes in Tunisia and Egypt (e.g., Korotayev et al., 2011; Korotayev & Zinkina, 2011; Korotayev et al., 2014). In Sri Lanka, as Braunghart (1984) has shown, the increase in population in 1971 led to a larger body of young people without work in later years and significantly predicted increased levels of political violence. It was shown that the 1970s separatist movement in Iranian Kurdistan was provoked by a large youth bulge consisting of 33.1% of the total population alongside economic crisis (Khodunov, 2014). Lia (2007) has noted that there is a significant link between terrorist activity in a given country and said country's youth population. For socio-political destabilization to occur, youth bulges must exist within the context of socio-economic problems (Lia, 2007). For his part, concerning radical Islamic terrorism Huntington (1996) has claimed that Islam as a religion is not any more violent than other religions per se. He explained this phenomenon via the rise of the population growth rate in certain Islamic countries in the 60s and 70s, which helped feed the terrorist movements in later decades (Huntington, 1996). As a whole, a positive correlation between youth bulges and political violence has been discovered in several studies (Fluckiger and Ludwig, 2018; Goldstone, 1991, 2002; Huntington, 1996; Urdal, 2004, 2006, 2008; Urdal & Hoelscher, 2012; Weber, 2019; Yair & Miodownik, 2016), while a smaller number of studies suggested this relationship to be insignificant (Collier & Hoeffler, 2004; Fearon & Laitin, 2004).

Younger people are more prone to protest while older people do so at a lower rate (Kostelka & Rovny, 2019; Machado et al., 2011; Moller, 1968; Moseley, 2015). In Tan et al. (2013) computational study on the Twitter

activity of Occupy Wall Street protesters, it was found that the “younger and more technically-inclined generation” made up a large part of the movement (Tan et al., 2013). This has often been made sense of by the youth’s innate attraction to direct action and to new ideas and ideologies that offer an improvement over the ills of society (Goldstone, 2002; Moller, 1968).

It is argued that the youth bulges are significant suppliers of anti-government protest movements for several reasons. Goldstone asserts that “large youth cohorts are often drawn to new ideas and heterodox religions, challenging older forms of authority. In addition, because most young people have fewer responsibilities for families and careers, they are relatively easily mobilized for social or political conflicts” (Goldstone, 2002, pp. 10–11). Urdal (2006) provides us with a similar explanation, claiming that the propensity of the youth, who face low opportunity costs relative to older age groups, to join in on protest and other activities is expressed in times when the state is unable to provide for the needs of young people (Urdal, 2006). Goldstein explains young males’ predisposition to participate with their hormonal level (Goldstein, 2004; Hudson & Den Boer, 2004).

The Case for “Urban Youth Bulges” as a Contributing Factor to Protest Activity

Given the strong interrelation between factors such as urbanization and the creation of larger youth bulges during the modernization process, this begs the question of whether these two processes, when considered together, could be responsible for the proliferation of protests. If it is true that protest events tend to occur more often in urban environments (Gleditsch & Rivera, 2017; Tilly, 1995) and the younger generations are more likely to attend protests (Goldstone, 2002, p. 10–11; Kostelka & Rovny, 2019; Machado et al., 2011; Moseley, 2015; Urdal, 2006), the joint effect of the processes should likely result in higher protest activity.

In earlier research, urban youth have been identified as a major component of the so-called “trap at the escape from the Malthusian trap” (Korotayev et al., 2011). The Malthusian trap is a situation of increasing poverty, famine, and mortality, which is a result of a combination of population growth on a limited territory with constant productivity. Essentially, the Malthusian trap is characteristic of an agricultural society with poor technological development. The escape from the Malthusian trap happens when a country’s economic development is faster than population growth; however, at this point the country experiences major sociopolitical upheavals. It can be explained in the following way. Economic development brings about a precipitous decline in the mortality rate, leading to large population growth and youth bulges, the group most inclined to radical politics. At the same time, urban centers begin to expand and industrialization pushes workers out of rural environments and

into the cities. Massive levels of rural-urban migration create a significant number of dissatisfied and precarious workers as they are only able to get unskilled low-paying jobs and low-quality housing. While job creation expands in the urban areas, typically it is not enough to keep up with the large increase in the population, thus creating higher levels of unemployment among the youth. This “army” of dissatisfied youth has the potential to participate in various destabilizing forms of collective action such as civil wars, revolutions, or protests. Ultimately, the escape from the “Malthusian trap” requires the development of new sectors of the economy at the expense of old ones which necessarily leads to painful structural changes that foster a radicalization of the working class. Thus, countries living in the world system periphery and semi-periphery which possess large youth populations living in conditions of urban poverty could find protest to be a reasonable way in which to ameliorate their conditions (Davis, 2017, pp. 158–163; Korotayev, et al., 2011; Piven & Cloward, 1978).

As previously stated, families that live in urban environments tend to have dense personal networks and are more likely to be connected with a political entrepreneur (Tilly, 1995). The urban societal resources lower costs of campaigns’ sustainment, movement leadership, and allow for a more effective supporters’ mobilization and pressure of authorities (Morris & Staggenborg, 2004, pp. 174–176; Rejai & Phillips, 1988; Veltmeyer & Petras, 2002). Access to resources is also essential for both the education of the youth and their access to internet technologies, both of which increase the tendency of people to take to the streets in protest (Hall et al., 1986; Jenkins & Wallace, 1996; Korotayev et al., 2018; Olson, 1963; Tan et al., 2013). Thus, access to the societal resources accumulated in urban centers may be a possible encouraging factor for the youth to protest.

Furthermore, if one recalls that urban anti-government protests also happen more often because efforts to undermine state forces are more effective there, as Gleditsch and Rivera (2017) report, it seems logical that some actors should be willing to actually do the job of “undermining” during these events. Thus, as Goldstone and McAdam (2001) claim, the youth, who are more prone to risk-taking and the beneficiaries of the economic opportunities provided by an urban life could lead to them being the agents that dare to undermine state authorities. Note that when Jack Goldstone wrote in his classic *Revolution and Rebellion in the Early Modern World* about the role of youth bulges in revolution, he explicitly used an *interactive formulation* specifying that the impact of age structure was dependent on urbanization rate (Goldstone 1991, pp. 138–139).

Considering that the youth often face higher unemployment rates, have less access to capital, and have less influence on state officials than the older generations, they may be more prone to participate in urban social movements. Urdal’s (2006) theory mirrors this as it claims that the youth, who face

low opportunity costs to join in on protests, will feel inclined to do so when the state is unable to provide for the needs of the younger generations. As a result, urban social movements may gather to demand the democratization of social relations in terms more favorable to the youth (Hamel, 2014; Harvey, 2012; see also Castells, 1972; Eckstein, 1989; Escobar & Alvarez, 1992; Jelin, 1987; Schuurman & Naerssen, 2011; Slater, 1985; Wignaraja, 1993).

Despite the fact that young people are considered to be more prone to engage in both non-violent (Ang et al., 2014; Valenzuela et al., 2012, 2014) and violent protest action (Korotayev, et al., 2013; Urdal, 2006, 2008), the novelty of our research is that we provide readers with empirical testing on the relationship between “urban youth bulges” and protests which has not been previously tested. Note that only Ang et al. (2014) have tested the relationship between ordinary youth bulges and intensity of anti-government demonstrations, and there are grounds to believe that the effect of “urban youth bulges” on protest dynamics should attract more attention than the ordinary youth bulges.

However, we propose that the share of urban youth (“urban youth bulge”) should be an important predictor of protests. We apply two possible operationalizations of this share: the share in the total adult population and the share in the urban adult population. Contrast two cases. Under the first operationalization, the urban youth bulge in Jordan in 1989 was 39% and under the second one, the urban youth bulge was 53%. Under the first operationalization, the urban youth bulge in Burundi in 1980 was 2% and under the second one, the urban youth bulge was 51%. We have grounds to expect that only the first operationalization should demonstrate a high correlation with the intensity of protests. The theory spelled out above suggests that we should expect an especially high intensity of protests where the growth of the youth bulge happens together with the growth of urbanization, when we have simultaneously a high proportion of youth and a high level of urbanization (a high share of urban population). This will only be observed with the first operationalization, whereas with the second operationalization we can have a very high share of youth in the adult population against the background of a very low overall level of urbanization (the above mentioned case of Burundi can serve here as a very good example), and we have no grounds to expect a very high intensity of protests in such cases.

Materials and Methods

Data and Empirical method

To test for a relationship between the size of the “urban youth bulge” and the intensity of protests, we constructed a dataset, the scope of which spans from

1950 to 2010 and includes 98 countries, with some observations being absent due to a lack of data for specific countries or periods.

Our method involves the use of a negative binomial regression which allows one to avoid the biases associated with a non-normalized Poisson distribution of a dependent variable with a great overdispersion, which is the case for our dependent variable (with its mean equal to 1.456 and variance 30.093). This being the case, we are unable to apply a standard parametric OLS regression, which cannot account for a Poisson-distributed dependent variable (see [Hilbe, 2011](#)). We hence use negative binomial regression. Moreover, as our data involves observations for both country and year, organized as panel data, we introduce fixed effects for both to account for this. Finally, for all of the reported models, we used heteroscedastic robust standard errors.

All the calculations were done in R, version 4.1.0, and the negative binomial regressions were done with `fixest` package ([Bergé, 2018](#)).

Dependent Variable

We take data denoting protests (both violent and non-violent) from the Cross-National Time-Series Database ([Banks & Wilson, 2019](#)), which contains our main dependent variables of interest: non-violent “anti-government demonstrations” and violent “riots.” We take the sum of these two variables (see [Table 1](#) with the descriptive statistics for this and other variables).

Independent Variable

The data for the main independent variables are provided by the UN Population Division or are based on the data provided by it. The share of the urban population in total population (“urbanization”) was extracted from the World Urbanization Prospects ([UNDP, 2018](#)) and the share of youth in the adult population (“youth bulge”) was extracted from the World Population Prospects ([United Nations Population Division, 2019](#)). For the two measures of the “urban youth bulge” (the share of urban youth in the total adult population and the share of urban youth in the total urban adult population), data were extracted from the *Urban and Rural Population by Age and Sex, 1980-2015* ([UNDP 2020](#)). Note that since the data provided by the United Nations Population Division for some variables only contain observations at intervals of 5 years, we use linear interpolation to complete omitted values. Since the first two databases cover 1950–2020 and the third database covers 1980–2015 years, the number of observations varies.

We would also like to note here that the two operationalizations of the urban youth bulge, although having the same numerator, are uncorrelated (i.e., the correlation between them is insignificantly different from zero).

Table 1. Descriptive Statistics.

	1st Quartile		Median	Mean	3rd Quartile		Years Available
	Minimum	Upper Limit			Upper Limit	Maximum	
Protests	0	0	0	1.456	1	197	1919–2019
Youth bulge	0.161	0.339	0.436	0.406	0.475	0.567	1950–2020
Urbanization	1.70	26.24	45.19	46.91	67.15	100.00	1950–2020
Share of youth (15–29) in total adult population	0.022	0.146	0.198	0.204	0.259	0.475	1980–2015
Share of youth (15–29) in urban adult population	0.115	0.315	0.431	0.411	0.505	0.625	1980–2015
Share of youth (15–29) in rural adult population	0.143	0.310	0.428	0.394	0.474	0.564	1980–2015
Tertiary school enrollment	0.003	0.299	2.143	10.126	12.737	95.084	1919–2010
GDP per capita	373	1932	4671	9062	11052	156299	1919–2018
Polity	–10	–7	1	0.796	9	10	1919–2018
Population	25	1469	5265	26616	15964	1439324	1950–2020

Note. quartiles divide the sample into four equal subsamples. The first quartile upper limit splits the lower 25% from the top 75%, the third quartile upper limit splits the lower 75% from the top 25%. Here, the quartile limit columns show upper limits of the respective quartiles of the variables from the first column.

Control Variables

Our variable for GDP per capita figures originates from the Maddison Project Database (Bolt et al., 2018). Our variable for tertiary enrollment, defined as the “percentage of the tertiary school-aged population enrolled in tertiary school,” originates from the Varieties of Democracy (V-Dem) dataset (Coppedge, et al., 2019). We also controlled for political regime using the Polity Index (Center for Systemic Peace, 2021). We expected political regime to have a curvilinear effect on the number of protests, and, thus, added a quadratic term. As those countries with larger populations have a higher propensity to have more protests, due to sheer demographic largess, we take this into account in our models by introducing a control for the size of the population in a given country. The data for population size originates from the V-Dem dataset (Coppedge et al., 2019) and has been logged in order to ensure a less skewed distribution. From the point of view of Rational Choice Theory, Nam (2007) explains that larger populations can promote opportunities for communication and organization conducive to the outbreak of anti-government demonstrations by offering a solution to Lichbach’s (1998) “Rebel’s Dilemma.” Powell (1982) has noted that the size of one’s population has a large influence on the onset of riots and protests in democratic countries due to the fact that state authorities find it more challenging to curb the outbreak of various forms of collective action when the population size is larger. For their part, Wilson and Dyson (2017) claim that progress in the demographic transition, associated with changes in mortality, fertility, and age structure, can in effect influence democratization in *underlying ways*, which consequently, can promote the expansion of anti-government protests.

Empirical Results

First, we test the impact of urbanization and youth bulge separately (see Table 2, Model 1). The youth bulge coefficient turns out to be insignificant, and the urbanization coefficient is significant and is in the predicted direction. As we have previously hypothesized, their joint effect should have a significant effect on the number of protests. To test the hypothesis, we introduced the interaction term between youth bulge and urbanization. The results of the respective test can be found in Table 2 (Model 2). As it comes from Table 2, one could see that youth bulge taken alone is not a significant predictor of the number of protests in a country. However, when we introduce an interaction term between youth bulge and urbanization rate, the interaction term is positive and significant. The inclusion of the interaction term also makes the youth bulge term significant, which hints that simple linear youth bulge term is an incorrect specification. Overall, the findings for Models 1 and 2 support the hypothesis that rapid urbanization could strengthen the effect of youth bulges on protest

Table 2. Predictors of Violent and Non-Violent Protests, 1950–2010.

Variables	Model 1	Model 2
Youth bulge	–1.5089 (1.4123)	–6.6246* (3.0877)
Urbanization	0.0218*** (0.0079)	–0.0175 (0.0208)
Urbanization * Youth bulge		0.0932* (0.0457)
Share of students	–0.0141** (0.0051)	–0.6609*** (0.1349)
GDP per capita (logged)	–0.626*** (0.1333)	0.0156* (0.0069)
Polity Index	0.0163* (0.0069)	–0.0086*** (0.0015)
Polity Index (squared)	–0.0086*** (0.0014)	–0.1039 (0.2875)
Population (logged)	0.1047 (0.2792)	0.0932* (0.0457)
Time fixed-effects	Yes	Yes
Country fixed-effects	Yes	Yes
The number of countries	98	98
Observations	5198	5198
Log likelihood	–5908.445	–5906.423
Theta	0.4919*** (0.0238)	0.4924*** (0.0238)
Akaike Inf. Crit.	12146.89	12144.846
Bayesian Inf. Crit.	13228.634	13233.147

Notes. “Youth Bulge” = percent of youth (ages 15–29) in total adult population (15+).

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

activity. At the same time, the urbanization term has become insignificant and also changed its sign from positive to negative (albeit no longer significant).

The results above suggest that though youth bulge is an insignificant predictor of high levels of protests when viewed without an interaction term, the “urban youth bulge” should be a significant predictor of protests. Results of the second test of this hypothesis with two operationalizations mentioned above (i.e., urban youth in total adult population and urban youth in urban adult population) are presented in [Table 3](#).

The results for the Model 3 provide support for the urban bulge hypothesis: the urban youth bulges (with their first operationalization—as share of urban youth in total adult population) appear to be an important predictor of protests. As we expected, with the introduction of controls for democratization, education, GDP per capita, and population, the variable for the level of the

Table 3. Predictors of Anti-Government Protests, 1980–2010.

Variables	Model 3	Model 4
Share of urban youth (ages 15–29) in total adult population	8.6111** (2.615)	
Share of urban youth (ages 15–29) in urban adult population		–2.1191 (2.2888)
Share of students	0.0155* (0.0072)	0.008 (0.007)
GDP per capita (logged)	–0.7733** (0.2428)	–0.8949*** (0.2601)
Polity Index	–0.0237* (0.011)	–0.0171 (0.011)
Polity Index (squared)	–0.0129*** (0.0024)	–0.0134*** (0.0024)
Population (logged)	0.5057 (0.6568)	1.1642 (0.6392)
Time fixed-effects	Yes	Yes
Country fixed-effects	Yes	Yes
The number of countries	97	97
Observations	2874	2874
Log likelihood	–3222.662	–3227.435
Theta	0.5066*** (0.0331)	0.4991*** (0.0324)
Akaike Inf. Crit.	6711.324	6720.869
Bayesian Inf. Crit.	7504.464	7514.009

Notes. “Urban Youth Bulge” = urban adult youth (ages 15–29).

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

“urban youth bulge” remains highly significant. At the same time, Models 3 and 4 show that our theoretical expectations regarding the operationalization of the urban youth bulge have turned out to be totally justified. The share of urban youth in total adult population turned out to be statistically significant, whereas the share of urban youth in *urban* adult population turns out to be a totally insignificant predictor of the protest intensity.

Discussion and Conclusion

In the current article, we highlight the important influence of “urban youth bulges” as a factor of the processes of urbanization and the expansion of the youth population, with regard to the proliferation of anti-government protests. We point out two strong factors of protests: they happen much more often in cities (Gleditsch & Rivera, 2017; Tilly, 1995) and younger people are more

likely to attend protests (Goldstone, 2002, p. 10–11; Kostelka & Rovny, 2019; Machado et al., 2011; Moseley, 2015; Urdal, 2006). Hence, we found it reasonable to hypothesize that combination of these factors, namely, urban youth bulge, should be important. The interaction effect as well as the share of urban youth in total adult population were found to be prone to a number of control variables, whereas a simple youth bulge was insignificant. At the same time, the urban youth bulge defined as a share of urban youth in urban adult population was found to be insignificant.

Both of our variables of interest, youth bulges and urbanization, are probably the product of economic development. As economies advance, new technologies and practices lead to decreases in child mortality, which in turn leads to higher youth populations (Korotayev, et al., 2011). Also, economic growth sees large portions of the population move from rural areas, where the traditional forms of employment exist, to the cities where societal resources are accumulated (Zinkina et al., 2019, pp. 131–134). The expansion of income per capita also tends to unleash other powerful socio-political forces that impact levels of protest, for example, democratization, population growth, and the proliferation of education. Thus, while urbanization and the growth of the urban youth population together are significant indicators of protest activity, ultimately, economic forces are probably the ultimate driver of these changes.

Thus, our current study has important implications for social movement theory. The movement of people, especially the youth, from rural to urban environments appears to be a significant factor in the expansion of protests. Social movement theorists would do well to take this general social phenomenon in mind when performing research on social movements outside of the core countries of the world system which are currently undergoing the modernization process. Hence, this study provides further evidence for the thesis of the “trap at the escape from the Malthusian Trap” that could lead to situations of socio-political destabilization in the periphery and the semi-periphery countries. In other words, the very factor (economic development) that initiates modernization and potentially helps to end total poverty may provoke the processes that damages the social order.

The urban youth bulge was found to be a highly significant predictor of protests, and we suppose that there are three ways they reveal themselves. First, these are the social movements advocating for various forms of democratization, especially in authoritarian regimes. Second, these are urban social movements whose goal it is to transform social relations within the city to benefit more of its inhabitants. And third, these are the poor people’s movements searching for economic or political justice (in Muslim-majority countries this, incidentally, is often done under Islamist slogans [e.g., Grinin & Korotayev, 2019; Grinin et al., 2019]). An example of this dynamic can be observed in the lead up to the October 1988 riots in Algeria that finally led to an attempted Islamic Revolution in this country. We would note as a foreword

that 49% of the urban adult population were young (aged 15–29), and 26% of the total adult population were urban youth:

“... A population explosion had thrust the children of the *fellahs* (farmers) into the cities and their outskirts, where conditions were precarious ... In 1989, 40 percent of Algeria’s population of 24 million were under 15 years of age; the urban population was in excess of 50 percent of the total population ... The official unemployment rate was 18.1 percent of the working population, though in reality joblessness was much higher; in 1995 it rose—again officially—to 28 percent. The young urban poor of Algeria were mocked as *hittistes*—from the Arab word hit, “wall”. This jibe derived from the image of jobless young men with nothing to do all day but lean against a wall. The joke was that, in a socialist country where in theory everyone was supposed to have a job, the profession of a *hittiste* consisted in propping up walls that would otherwise collapse. The *hittistes* were assumed to be passive—unlike the Iranian ones, who were glorified by religious movements and hailed as the messengers of history and the Revelation” (Kepel 2006: 159).

Gilles Kepel (2006: 160) further notes that, at the time the October 1988 riots, oil and gas accounted for 95 percent of national exports and provided more than 60 percent of the government’s annual budget, while the Algerian state used its oil revenues to buy social peace. Thus, the balance of power ultimately depended on the fragile economic equilibrium created by high oil prices. In 1986, when oil prices collapsed, half of Algeria’s budget was destroyed and the entire structure fell into ruins. In addition, the population explosion created a demand for urban infrastructure, housing and jobs that continued to grow. The construction industry, in particular, did not keep pace with the demand for housing. The result were slums and overcrowded urban conditions that invariably lead to social explosion.

“It was in this deteriorating climate, punctuated by continual strikes, that riots broke out on October 4, 1988. Mobs of impoverished Algerian youths attacked such symbols of the state as buses, road signs, and Air Algeria agencies, along with any automobile that looked expensive ... These days ... marked the emergence of the young urban poor as a force to be reckoned with. The once ridiculed *hittistes* had shown that they could seize and hold power in the streets, shaking to its foundations a regime that had excluded them and whose legitimacy they scorned” (Kepel 2006: 161).

The current study suggests multiple avenues for further research. For example, the “trap at the escape of the Malthusian trap” theory implies that the urban youth bulge must have different effects on different stages of modernization. Hence, it would be appropriate for further research to test for the difference in youth bulge and urban youth bulge on consecutive stages of

modernization. We suppose that the effects of the (urban) youth bulge become less relevant over time due to the saturation effect with regards to urbanization, the completion of the demographic transition, and consequent population aging. In these latter countries, other factors come into the foreground. Moreover, our results would imply a need to investigate the role of the urban youth in fully developed countries with regard to political protests. Also, a number of studies have demonstrated that males are much more likely to participate in protests than are females (Moseley, 2015; Ong & Han, 2019), though, Burean and Badescu (2013), as well as Menashe Oren (2020) suggest the opposite to be true. Thus, another promising direction for future research may be to investigate the effect that gender-specific youth bulges in the cities have on violent and non-violent protest intensity.

Finally, there are also several seemingly relevant factors that stimulate protests. For example, Inglehart and Welzel (2005) suggest that an expansion of GDP per capita in the modern world is accompanied by a transition from materialist survival values to post-materialist values of self-expression, and individuals who adhere to values of self-expression statistically tend to participate in anti-government demonstrations at a higher rate than adherents with survival values. Moreover, even if such individuals have not participated in protests, they still claim to have the desire to protest more often than those with survival values (Inglehart & Welzel, 2005). As the small number of data points for which we have empirical data related to survival values would have dramatically shrunk the size of our sample, we found it inappropriate to add these values as a control for our regression model. That having been said, an analysis of the role that values plays in the proliferation of anti-government protests may be a promising direction for future research.

Appendix I

The List of Countries in the Dataset.

Zimbabwe

United Kingdom

Sierra Leone

South Africa

Sri Lanka

Switzerland

Portugal

Paraguay

Netherlands

New Zealand

Costa Rica

El Salvador

Indonesia
Malaysia
Mauritius
Honduras
Nicaragua
Bangladesh
Cambodia
Cote d'Ivoire
Guatemala
Philippines
Colombia
United States
Argentina
Australia
Mozambique
Afghanistan
Pakistan
Cameroon
Bulgaria
Thailand
Uruguay
Uganda
Sweden
Romania
Poland
Panama
Norway
Niger
Mexico
Liberia
Lesotho
Japan
Jamaica
Italy
Ireland
Hungary
Greece
Ghana
Germany
France
Finland
Denmark
Cyprus

Cuba
China
Chile
Canada
Brazil
Benin
Belgium
Austria
Albania
Kuwait
India
Serbia
Morocco
Malawi
Egypt
Mali
Algeria
Senegal
Peru
Zambia
Ecuador
Jordan
Tunisia
Libya
Yemen
Myanmar
Spain
Togo
Haiti
Nepal
Turkey
Iraq
Kenya
Venezuela, Bolivarian Republic of
Congo, the Democratic Republic of the
Korea, Republic of
Dominican Republic
Iran, Islamic Republic of
Bolivia, Plurinational State of
Russian Federation
Syrian Arab Republic
Trinidad and Tobago
Taiwan

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References

- Ang, A. U., Dinar, S., & Lucas, R. E. (2014). Protests by the young and digitally restless: the means, motives, and opportunities of anti-government demonstrations. *Information, Communication & Society, 17*(10), 1228–1249. <http://doi.org/10.1080/1369118x.2014.918635>
- Banks, A., & Wilson, K. (2019). *Cross-national time-series data archive*. Databanks International. <http://www.databanksinternational.com>
- Bartolini, S., & Mair, P. (1990). *Identity, competition, and electoral availability: The stability of European electorates, 1885-1985*. Cambridge University Press.
- Bergé, L. (2018). *Efficient estimation of maximum likelihood models with multiple fixed-effects: the R package FENmlm*. CREA Discussion Papers.
- Black, D., & Henderson, V. (1999). A theory of urban growth. *Journal of Political Economy, 107*(2), 252–284. <https://doi.org/10.1086/250060>.
- Bolt, J., Inklaar, R., de Jong, H., & Luiten van Zanden, J. (2018). *Maddison project database, version 2018*. <https://www.rug.nl/ggdc/historicaldevelopment/maddison/releases/maddison-project-database-2018>
- Braunghart, R. G. (1984). Historical generations and generation units: A global pattern of youth movements. *Journal of Political & Military Sociology, 12*(1), 113–135.
- Brenner, N. (2013). Theses on urbanization. *Public Culture, 25*(1 69), 85–114. <https://doi.org/10.1215/08992363-1890477>
- Burean, T., & Badescu, G. (2013). *Online and offline political participation in Romania*. <http://dx.doi.org/10.2139/ssrn.2304567>.
- Castells, M. (1972). *La question urbaine [the urban question]*. François Maspéro.
- Center for Systemic Peace. (2021). *Polity5 annual time-series, 1948-2018*. <http://www.systemicpeace.org/inscr/p5v2018.xls>
- Collier, P., & Hoeffler, A. (2004). Greed and grievance in civil war. *Oxford economic Papers, 56*(4), 563–595.
- Coppedge, M., Gerring, J., Knutsen, C. H., Lindberg, S., Teorell, J., Altman, D., Bernhard, M., Fish, M. S., Glynn, A., Hicken, A., Lührmann, A., Marquardt, K. L., McManh, K., Paxton, P., Pemstein, D., Seim, B., Sigman, R., Skaaning, S., Staton, J., & Ziblatt, D. (2019). *V-dem dataset v9. Varieties of democracy (V-Dem) project*. <https://doi.org/10.23696/vdemcy19>

- Davis, M. (2017). *Planet of slums*. Verso.
- Eckstein, S. (1989). *Power and popular protest in: Latin American social movements*. University of California Press.
- Escobar, A., & Alvarez, S. (1992). *The making of social movements in Latin America: Identity, strategy, and democracy*. Westview Press.
- Farzanegan, M. R., & Witthuhn, S. (2017). Corruption and political stability: Does the youth bulge matter? *European Journal of Political Economy*, 49, 47-70. <https://doi.org/10.1016/j.ejpoleco.2016.12.007>.
- Fearon, J., & Laitin, D. (2004). Ethnicity, insurgency, and civil war. *American Political Science Review*, 97(1), 75–90. <http://doi.org/10.1017/s0003055403000534>
- Flückiger, M., & Ludwig, M. (2018). Youth bulges and civil conflict. *Journal of Conflict Resolution*, 62(9), 1932–1962. <http://doi.org/10.1177/0022002717707303>
- Gleditsch, K. S., & Rivera, M. (2017). The diffusion of nonviolent campaigns. *Journal of Conflict Resolution*, 61(5), 1120–1145. <http://doi.org/10.1177/0022002715603101>
- Goldstein, J. (2004). *War and gender*. Cambridge University Press
- Goldstone, J. (1991). *Revolution and rebellion in the early modern world*. University of California Press.
- Goldstone, J. (2002). Population and security: How demographic change can lead to violent conflict. *Journal of International Affairs*, 56(1), 3–21.
- Goldstone, J. A., & McAdam, D. (2001). Contention in demographic and life-course context, silence and voice in the study of contentious politics. In R. Aminzade, J. Goldstone, D. McAdam, E. Perry, W. Sewell, S. Tarrow, & C. Tilly (Eds.), *Silence and voice in the study of contentious politics* (pp. 195–221). Cambridge University Press.
- Grinin, L., & Korotayev, A. (2009). Urbanization and political instability: To the development of mathematical models of political processes. *Polis-Politicheskaya Issledovaniya*, (4), 34-52.
- Grinin, L., & Korotayev, A. (2019). Islamism and its sociopolitical functions. *The Islamic Quarterly*, 63(3), 427–452.
- Grinin, L., Korotayev, A., & Tausch, A. (2019). *Islamism, Arab spring, and the future of democracy. World system and world values perspectives*. Springer.
- Hall, R. L., Rodeghier, M., & Useem, B. (1986). Effects of education on attitude to protest. *American Sociological Review*, 51(4), 564–573. <http://dx.doi.org/10.2307/2095588>
- Hamel, P. (2014). Urban social movements. In H. van der Heijden (Eds.), *Handbook of political citizenship and social movements*, (pp. 464–492). Edward Elgar Publishing Limited.
- Hardt, M., & Negri, A. (2009). *Commonwealth*. Belknap Press of Harvard University Press.
- Harvey, D. (2012). *Rebel cities: From the right of the city to urban revolution*. Verso.
- Hilbe, J. (2011). *Negative binomial regression*. Cambridge University Press.
- Hudson, V., & Den Boer, A. (2004). *Bare branches: The security implications of Asia's surplus male population*. MIT Press.

- Huntington, S. (1996). *The clash of civilizations and the remaking of world order*. Simon & Schuster.
- Inglehart, R., & Welzel, C. (2005). *Modernization. Cultural change, and democracy: The human development sequence*. Cambridge University Press:
- Jelin, E. (1987). *Ciudadania e Identidad: Las Mujeres en los Movimientos Sociales Latino-Americanos*. United Nations.
- Jenkins, C., & Wallace, M. (1996). The generalized action potential of protest movements: The new class, social trends, and political exclusion explanations. *Sociological Forum*, 11(2), 183–207, Kluwer Academic Publishers-Plenum Publishers. <http://doi.org/10.1007/bf02408364>
- Kepel, G. (2006). *Jihad: The trail of political Islam*. Belknap Press.
- Khodunov, A. (2014). Iran: Politico-demographicheskioe razvitiye kak faktor stabilnosti i potryaseniya [Iran: politico-demographic development as a factor of stability and instability], *Azia I Afrika Segodnya*, 7, 26–30.
- Korotayev, A., Bilyuga, S., & Shishkina, A. (2018). GDP Per capita and protest activity: A quantitative reanalysis. *Cross-Cultural Research*, 52(4), 406–440. <http://doi.org/10.1177/1069397117732328>
- Korotayev, A., Issaev, L., Shishkina, A., & Malkov, S. (2013). Developing the methods of estimation and forecasting the Arab spring. *Central European Journal of International and Security Studies*, 7(4), 28–58.
- Korotayev, A., Issaev, L., Malkov, A., & Shishkina, S. (2014). The Arab Spring: A quantitative analysis. *Arab Studies Quarterly*, 36(2), 149–169. <http://doi.org/10.13169/arabstudquar.36.2.0149>.
- Korotayev, A., Meshcherina, K., & Shishkina, A. (2018). A wave of global socio-political destabilization of the 2010s: A quantitative analysis. *Democracy and Security*, 14(4), 331–357. <http://doi.org/10.1080/17419166.2018.1517337>
- Korotayev, A., Sawyer, P., & Romanov, D. (2021). Socio-Economic Development and Protests. A Quantitative Reanalysis. *Comparative Sociology*, 20(1), 195–222. DOI:10.1163/15691330-bja10030.
- Korotayev, A., & Zinkina, J. (2011). Egyptian revolution: A demographic structural analysis. *Entelequia. Revista Interdisciplinar*, 13, 139–169.
- Korotayev, A., Zinkina, J., Kobzeva, S., Bozhevolnov, J., Khaltourina, D., Malkov, A., & Malkov, S. (2011). A trap at the escape from the trap? Demographic-structural factors of political instability in modern Africa and West Asia. *Cliodynamics*, 2(2), 276–303. <http://dx.doi.org/10.21237/c7clio22217>
- Kostelka, F., & Rovny, J. (2019). It's not the left: Ideology and protest participation in old and new democracies. *Comparative Political Studies*, 52(11), 1677–1712. <http://doi.org/10.1177/0010414019830717>
- LaGraffe, D. (2012). The youth bulge in Egypt: An intersection of demographics, security, and the Arab spring. *Journal of Strategic Security*, 5(2), 65–80. <http://doi.org/10.5038/1944-0472.5.2.4>
- Lia, B. (2007). *Globalisation and the future of terrorism: Patterns and predictions*. Routledge.

- Lichbach, M. (1998). *The rebel's Dilemma*. University of Michigan Press.
- Lipset, S. M. (1959). Some social requisites of democracy: Economic development and political legitimacy. *American Political Science Review*, 53(1), 69–105. <http://dx.doi.org/10.2307/1951731>
- Machado, F., Scartascini, C., & Tommasi, M. (2011). Political institutions and street protests in Latin America. *Journal of Conflict Resolution*, 55(3), 340–365. <http://doi.org/10.1177/0022002711400864>
- Menashe Oren, A. (2020). Migrant-based youth bulges and social conflict in urban sub-Saharan Africa. *Demographic Research*, 42(3): 57–98. <http://doi.org/10.4054/demres.2020.42.3>
- Moller, H. (1968). Youth as a force in the modern world. *Comparative Studies in Society and History*, 10(3), 237–260. <http://doi.org/10.1017/s0010417500004898>
- Morris, A. D., & Staggenborg, S. (2004). Leadership in social movements. In D. Snow, S. Soule, & H. Kriesi (Eds.), *The blackwell companion to social movements* (pp. 171–196). Blackwell Publishing.
- Moseley, M. W. (2015). Contentious engagement: Understanding protest participation in Latin American democracies. *Journal of Politics in Latin America*, 7(3), 3–48. <http://doi.org/10.1177/1866802x1500700301>
- Nam, T. (2007). Rough days in democracies: Comparing protests in democracies. *European Journal of Political Research*, 46(1), 97–120. <http://doi.org/10.1111/j.1475-6765.2006.00645.x>
- Olson, M. (1963). Rapid growth as a destabilizing force. *The Journal of Economic History*, 23(4), 529–552. <http://doi.org/10.1017/s0022050700109210>
- Ong, L. H., & Han, D. (2019). What drives people to protest in an authoritarian country? Resources and rewards vs risks of protests in urban and rural China. *Political Studies*, 67(1), 224–248. <http://doi.org/10.1177/0032321718763558>
- Østby, G., Urdal, H., Tadjoeiddin, M., Murshed, M., & Strand, H. (2011). Population pressure, horizontal inequality and political violence: A disaggregated study of Indonesian provinces, 1990–2003. *Journal of Development Studies*, 47(3), 377–398. <http://doi.org/10.1080/00220388.2010.506911>
- Piven, F., & Cloward, R. (1978). *Poor people's movements: Why they succeed, how they fail*. Vintage.
- Powell, B. (1982). *Contemporary Democracies*. Harvard University Press.
- Przeworski, A., & Limongi, F. (1997). Modernization: Theories and facts. *World Politics*, 49(2), 155–183. <http://doi.org/10.1353/wp.1997.0004>
- Rejai, M., & Phillips, K. (1988). *Loyalists and revolutionaries: Political leaders compared*. Praeger.
- Schuurman, F., & Naerssen, V. T. (2011). *Urban social movements in the third world*. Routledge.
- Slater, D. (1985). *Cultures in conflict: Social movements and the state in Peru*. University of California Press.
- Tan, L., Ponnamp, S., Gillham, P., Edwards, B., & , and Johnson, E. (2013). *Analyzing the impact of social media on social movements: A computational study of Twitter*

- and the occupy wall street movement. Paper presented at IEEE/ACM International Conference on Advances in Social Network Analysis and Mining, August 25-29, 2013, Niagara, Ontario, Canada.
- Tarrow, S. (2003). *Power in movement: Social movements and contentious politics*. (2nd ed.). Cambridge University Press.
- Tilly, C. (1995). Contentious repertoires in great Britain, 1758-1835. In M. Traugott (Ed.), *Repertoires and cycles of collective action* (pp. 15–42). Duke University Press.
- Tilly, C., & Wood, L. (2009). *Social movements, 1768-2008*. Paradigm Publishers.
- United Nations Habitat. (2016). *World cities report 2016*. http://wcr.unhabitat.org/wp-content/uploads/2017/02/WCR-2016_-Abridged-version-1.pdf
- United Nations Population Division (2019). *World population prospects 2019*, Online Edition. <https://population.un.org/wpp/Download/>
- United Nations Population Division. (2020). *Urban and rural population by age and Sex, 1980-2015*. United Nations.
- United Nations, Department of Economic and Social Affairs, Population Division(2018). *World urbanization prospects: The 2018 revision*, Online Edition. <https://population.un.org/wup/Download/>
- Urdal, H. (2004). *The devil in the demographics: The effect of youth bulges on domestic armed conflict, 1950-2000*. World Bank.
- Urdal, H. (2006). A clash of generations? Youth bulges and political violence. *International Studies Quarterly*, 50(3), 607–629.
- Urdal, H. (2008). Population, Resources, and Political Violence. *Journal of Conflict Resolution*, 52(4), 590–617. <https://doi.org/10.1177/0022002708316741>
- Urdal, H., & Hoelscher, K. (2012). Explaining urban social disorder and violence: An empirical study of event data from Asian and sub-Saharan African cities. *International Interactions*, 38(4), 512–528. <http://doi.org/10.1080/03050629.2012.697427>
- Valenzuela, S., Arriagada, A., & Scherman, A. (2012). The social media basis of youth protest behavior: The case of Chile. *Journal of Communication*, 62(2), 299–314. <http://doi.org/10.1111/j.1460-2466.2012.01635.x>
- Valenzuela, S., Arriagada, A., & Scherman, A. (2014). Facebook, Twitter, and youth engagement: A quasi-experimental study of social media use and protest behavior using propensity score matching. *International Journal of Communication*, 8, 25–39.
- Veltmeyer, H., & Petras, J. (2002). The social dynamics of Brazil's rural landless workers' movement: Ten hypotheses on successful leadership. *Canadian Review of Sociology and Anthropology*, 39(1), 1–21. <http://doi.org/10.1111/j.1755-618x.2002.tb00612.x>
- Walton, J., & Ragin, C. (1990). Global and national sources of political protest: Third world responses to the debt crisis. *American Sociological Review*, 55(6), 876–890. <http://doi.org/10.2307/2095752>

- Walton, J., & Seddon, D. (1994). *Free markets and food riots: The politics of structural adjustment*. Blackwell.
- Weber, H. (2019). Age structure and political violence: A re-assessment of the “youth bulge” hypothesis. *International Interactions*, 45(1), 80–112. <http://doi.org/10.1080/03050629.2019.1522310>
- Wignaraja, P. (1993). *New social movements in the south: Empowering the people*. Zed.
- Wilson, B., & Dyson, T. (2017). Democracy and the demographic transition. *Democratization*, 24(4), 594–612. <http://doi.org/10.1080/13510347.2016.1194396>
- Yair, O., & Miodownik, D. (2016). Youth bulge and civil war: Why a country’s share of young adults explains only non-ethnic wars. *Conflict Management and Peace Science*, 33(1), 25–44. <http://doi.org/10.1177/0738894214544613>
- Zibechi, R. (2010). *Dispersing power: Social movements as anti-state forces*. AK Press.
- Zinkina, J., Christian, D., Grinin, L., Ilyin, I., Andreev, A., Aleshkovski, I., Shulgin, S., & Korotayev, A. (2019). *A big history of globalization: The emergence of a global world system*. Springer.

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