www.elsevier.com

Corruption and Political Stability: Does the Youth Bulge Matter?

Mohammad Reza Farzanegan, Stefan Witthuhn

PII: S0176-2680(16)30347-0
DOI: http://dx.doi.org/10.1016/j.ejpoleco.2016.12.007
Reference: POLECO1619

To appear in: *European Journal of Political Economy*

Received date: 5 May 2016
Revised date: 17 December 2016
Accepted date: 17 December 2016

Cite this article as: Mohammad Reza Farzanegan and Stefan Witthuhn Corruption and Political Stability: Does the Youth Bulge Matter?, *European Journal of Political Economy,* http://dx.doi.org/10.1016/j.ejpoleco.2016.12.007

This version: 16.12.2016

Corruption and Political Stability: Does the Youth Bulge Matter?

Mohammad Reza Farzanegan[a*] and Stefan Witthuhn[b]

[a] Philipps-Universität Marburg, Center for Near and Middle Eastern Studies (CNMS), Marburg, Germany and CESifo (Munich), MACIE (Marburg), ERF (Cairo)

[b]Berghof Foundation, Tübingen, Germany

Abstract

This study shows that the relative size of the youth bulge matters in how corruption affects the internal stability of a political system. Using panel data covering the 1984–2012 period for more than 100 countries, we find that the effect of corruption on political stability depends on the youth bulge. Corruption is a destabilizing factor for political systems when the share of the youth population in the adult population exceeds a critical level of approximately 20%. The moderating effect of the youth bulge in the stability–corruption nexus is robust, controlling for country and year fixed effects, a set of control variables that may affect internal political stability, an alternative operationalization of the youth bulge, corruption, and a dynamic panel estimation method.

Keywords: demographic transition, youth bulge, political stability, corruption

JEL Codes: D73, D74, E02, H56, J11

[*]Correspondence address: CNMS, Economics of the Middle East Research Group, Deutschhausstrasse 12, 35032 Marburg, Germany. Email: farzanegan@uni-marburg.de. We thank the useful comments of two referees, Toke Aidt (Editor), Pooya Alaedini, Sajjad Dizaji, Dalia Fadly, Jerg Gutmann, Alireza Naghavi, Florian Neumeier, Jan-Egbert Sturm, and partcipants in the 71st Annual Congress of the International Institute of Public Finance (2015, Dublin), Silvaplana 24th Workshop on Political Economy (2015, Pontresina), European Public Choice Society (2015, Groningen), CNMS-Institutskolloquium (2015, Marburg), and MACIE Brown Bag Seminar (2016, Marburg).

1- Introduction

We aim to illuminate better the influence of the perception of corruption on political stability[1] and the moderating role of demography. Does the effect of corruption on political stability depend on the level of the youth bulge size? The answer to this question will guide policy makers and international organizations in allocating the anti-corruption budget better, taking into account the demographic structure of societies and the risk of political instability. The tangible economic costs of corruption are significant. According to the World Bank, estimations from sources such as worldwide surveys of enterprises, and household surveys, more than US$1 trillion is paid in bribes each year (Dreher et al., 2007). These estimations, however, exclude the extent of embezzlement of public funds and the theft (or misuse) of public assets. The costs of corruption will increase if we take into account the significant losses in investment, private sector development, and economic growth, or to the increases in infant mortality, poverty, and inequality, all resulting from corruption and misgoverning. The World Bank calculations show that there is a 400% governance dividend in control of corruption: countries that improve on control of corruption and rule of law can expect (on average) and in the long run a four-fold increase in incomes per capita.[2]

In addition, the political costs of corruption are sizeable. Across world regions, the Middle East and North Africa (MENA) region provides a significant example of the costs of conflict and instability. A recent study by Rother et al. (2016) shows the massive costs of conflicts in the MENA region; for example, after four years of civil war, GDP in Syria in 2015 sank to less than half its pre-conflict level in 2010. Yemen is another major example whose economic loss due to conflict is estimated at 25–35% of its GDP in 2015. The costs of conflict are not limited to the MENA borders but extend also to the ongoing flow of refugees that has affected the budgets and security of other countries around the world. Corruption is often cited as one of the key drivers of these massive and ongoing conflicts and instabilities in the MENA region. About five years before the Arab Spring, the results of the Zogby International (Zogby, 2005) poll showed that besides expanding employment opportunities and improving the health care system, ending corruption and nepotism was among the top three concerns in the Arab world. According to Diwan (2013), "the perceived corruption of the political and business elites was a key driving force of popular discontent." He quotes the Pew survey in 2010, in which the corruption was ranked as the main concern of 46% of Egyptians, ahead of other concerns such

[1]In this study, we follow Bjorvatn and Farzanegan (2015) and use "internal conflict" and "political instability" interchangeably. We use the internal conflict index of the International Country Risk Guide (ICRG, 2015) published by the Political Risk Services (PRS) group.

[2]See http://go.worldbank.org/KQH743GKF1.

as the lack of democracy and poor economic conditions. Corruption is also argued to be behind the emergence and persistence of terrorist groups in Iraq and Nigeria and their success in attracting the marginalized parts of the population and, in particular, the youth bulge (Onuoha, 2014 and Transparency International, 2015).

There are arguments in the literature for both the positive and negative effects of corruption on political stability. We show that one key intermediary factor in the stability–corruption nexus is the relative size of the youth bulge of population. Mobilization of protests in corrupt countries requires a sizable youth population that is suffering more than others from corruption. Corruption, as a regressive tax, puts more pressures on smaller enterprises and poorer households. The youth participation in the Arab Spring (since 2011), the Iranian Green Movement (the post-2009 presidential election), and the Color revolutions (e.g., in Yugoslavia's Bulldozer Revolution [2000], in Georgia's Rose Revolution [2003], and in the Ukraine's Orange Revolution [2004]) is well documented (Diuk, 2013 and Nesvaderani and Memarian, 2010).

The importance of the youth bulge as an *agent of change* is also emphasized by Samuel P. Huntington in his well-known book, *The Clash of Civilizations and the Remaking of World Order*. Huntington (1996) presents some historical examples on the population structure of countries before the political changes and concludes that (p. 261): "[*s*]*hifts in the demographic balances and youth bulges of 20 percent or more account for many of the intercivilizational conflicts of the late twentieth century. They do not, however, explain all of them*." We show that youth bulge is a trigger factor in the stability–corruption nexus. Thus, we support Huntington's argument that youth bulge by itself does not explain all conflicts. The joint effect of corruption and the youth bulge matters significantly. As our contribution to the political stability–corruption literature, we take into account the youthful demographic structure of countries in determining the effect of corruption on stability of political systems.

We use panel data country and year fixed-effect regressions for more than 100 countries from 1984 to 2012. By controlling for the main drivers of political stability, our results show that the final effects of corruption on political stability depend on the youth bulge. This result is robust to different measurements of the youth bulge, corruption, and the inclusion of other relevant interaction terms. Increasing corruption in countries that have a sizable youth bulge (larger than approximately 20% of the adult population) leads to political instability. Anti-corruption budgets will be more effective and needed in countries with a high relative size of youth population.

The remainder of this paper is structured as follows. Section 2 discusses the literature on political stability–corruption and political stability–youth bulge. It also explains how the effects

of corruption on economic development may have implications for political stability. Section 3 presents the data and our empirical strategy. The results and robustness checks are presented and discussed in Section 4. Section 5 concludes the paper.

2- Review of literature

Political stability and corruption

Corruption, which is defined as abuse of public office for private benefits (e.g., Shleifer and Vishny, 1993), has characteristics that may either stabilize or destabilize the political system. Rose-Ackerman (1999) and Manzetti and Wilson (2007) suggest that political corruption is misusing state resources to expand political power. The expansion of power can happen by buying political loyalty through illegitimate distribution of private gains and privileges by public office holders among elites or selected parts of the population. Such gains and privileges include, among others, tax exemptions and subsidies, low-interest loans to selective layers of society, access to highly subsidized foreign currency for connected firms and individuals, public employment, land allocations, lucrative licenses for imports and exports, and discriminatory enforcements of the law. Political corruption through these illegitimate rents distributions produces so-called patronage politics (see Johnston, 1986, and Acemoglu et al., 2004). Patronage politics aims to secure reelection and regime stability, practicing frequently in resource-rich countries (Alesina et al., 1998; Auty, 2001; Robinson et al., 2006; and Bjorvatn and Farzanegan, 2013). Clients in such patronage politics in return announce their loyalty to the patron who is giving them access to the rents.

Allocation of national budget funds in politically corrupt economies is also distorted toward well-connected elites. Dizaji et al. (2016) show that autocratic and often corrupt regimes spend more on their militaries and less on education and health. The latter categories benefit a larger cohort of population, and the former group of spending benefits limited military elites who may protect the regime at the time of crisis.

In a study titled *Political Corruption and Institutional Stability*, Fjelde and Hegre (2014) show that political corruption *allows nondemocratic leaders to build political support*, extending the duration of their regimes. In other words, corruption can increase stability of political systems in autocratic regimes. In democracies, however, lower corruption leads to more stability. In another study, Fjelde (2009) investigates the effect of oil rents on political stability. She shows that corruption can moderate the negative stability effects of oil rents. She

concludes that a "selective accommodation of private interests" through political corruption may reduce the risk of armed conflict in (oil) resource-rich countries.

Some other studies, such as Neudorfer and Theuerkauf (2014), have different opinions on the effect of corruption on stability. Neudorfer and Theuerkauf show a positive (i.e., increasing) effect of corruption on the risk of ethnic civil war, which is a main factor in government instability. They suggest that corruption distorts political decision making and increases the political and economic inequalities between different ethnic groups and, ultimately, the risk of large-scale conflict and instability. Andvig (2008) provides a review of empirical corruption research and the empirical research about civil wars and examines the relationship between conflict and corruption.

Political stability and the youth bulge

The term "youth bulge" has been highlighted mostly by political scholars such as Fuller (1995), Goldstone (1991), and Heinsohn (2006, 2007). A high population growth over a limited period of time consequently leads to a relatively large youth cohort, the so-called "window of opportunity." Although some countries can take advantage of this opportunity, a large, young, working-age population can also be a challenge if the state's capability to address the situation is limited (Nordås and Davenport, 2013). If a large youth cohort coincides with a stagnant economy, then the chances for political instability also rise because of the low opportunity costs of engaging in political violence incurred by young men (Barakat and Urdal, 2009; Collier and Hoeffler, 2004; Weber, 2013; Bricker and Foley, 2013; and Yousef, 2003). The demographic transition in countries with a high corruption may not lead to a demographic bonus. Instead, we may expect to experience a demographic curse, especially with respect to political stability.

The related literature on the effects of a youth bulge on political stability has also considered the moderating factors. Goldstone (2002) and Urdal (2006) show that the risk of political instability is higher when autocratic states face a youth bulge. Political participation is limited in autocratic states, and large youth cohorts imply that more young people compete for few opportunities, which leads to frustration and a willingness to engage in political violence. The combined effect of education and the youth bulge on stability has also been investigated. The results of an interaction term for the youth bulge and education suggest that conflict (and its resulting instability) is more likely to occur when the level of education is low (Barakat and Urdal, 2009).

Economic development and corruption: Implications for political stability

Another strand of the literature focuses on the effects of corruption on economic growth. This literature is not primarily investigating the effects of corruption on political stability. Its focus is on developmental consequences of corruption that then may influence the stability of a political system.

A group of studies provides support for the greasing the wheels hypothesis, in which corruption helps reduce the negative effects of dysfunctional regulations and low-quality institutions (Leff, 1964; Huntington, 1968; Dreher and Gassebner, 2013; Méon and Weill, 2010). According to the World Bank Enterprise Surveys, approximately 20% of firms around the world are being asked to give gifts to public officials "to get things done". There is variation across the world; the lowest percentage of such experience is reported for the Organisation for Economic Co-operation and Development (OECD) firms (8%) and the highest for Sub-Saharan African firms (27%).[3] This stream of literature suggests that corruption assists firms in addressing widespread inefficiency in public governance and the provision of public goods (see Vial and Hanoteau, 2010; and Kato and Sato, 2015).

In contrast to this strand of the literature, some studies suggest that corruption is (more) an obstacle to development. Aidt (2009) challenges the greasing the wheels hypothesis by mentioning that corruption is only improving efficiency in a second-best sense. This is mainly because that corrupt economy is still allocatively inefficient. The distortions created by government regulations increase the cost of doing business, and corruption can help agents bypass such distortions. The distortions caused by cumbersome regulations that corruption is supposed to help agents overcome may be put in place precisely because of their corruption potential. The first best is therefore removing such costly distortions by the government. In addition, Aidt et al. (2008) show that in economies with high-quality political institutions, *corruption has a substantial negative impact on growth*. The effect of corruption on growth in countries with a low quality of political institutions is insignificant.

Corruption distorts public funds and directs them toward areas where bribes can be more easily collected, such as capital-intensive infrastructure projects, rather than investing in the employment-intensive health care and education sectors (Mauro, 1995; Gupta et al., 2001; Blackburn and Sarmah, 2008). Peoples' talents concentrate on rent seeking in corrupt societies rather than on long-term benefits (Mo, 2001). Corruption affects the poor by reducing social services. By contrast, it can be argued that it benefits the well-connected individuals of society,

[3]http://www.enterprisesurveys.org/data/exploretopics/corruption.

who are likely to be found in the high-income class (Gupta et al., 2002). Mo (2001) shows that a one-unit increase in corruption in the 1999 Transparency International-CPI corruption index reduces economic growth by 0.545 percentage points. Mo argues that one of the major transmission channels of the growth effects of corruption is political (in)stability. Political instability following increasing corruption accounts for 53% of the total negative effect of corruption on growth. His study shows that other channels through which corruption reduces growth are the negative effects on human capital and private investment. In a recent study, Dorsch et al. (2015) show that corruption (in the form of rent seeking) triggers instability effects of macro-economic shocks in autocracies.

Regardless of positive or negative effects of corruption on economic growth, the literature has shown strong interconnections of growth with political stability. For example, Paldam (1998) refers to two hypotheses: the good-growth hypothesis and the destabilizing-growth hypothesis. The former hypothesis suggests that income growth can increase life satisfaction of the population and, thus, its support of the ruling state. The latter hypothesis argues that complex changes following growth can happen by increasing the economic status and bargaining power of the middle class, which may challenge the political system. The examples are Iran and South Korea. Rapid economic growth led to a theocracy in Iran and democracy in South Korea.

Corruption also has serious implications for the quality of public goods. One example is the negative effects of corruption on environmental quality, increasing deforestation and air pollution and reducing access to public goods such as drinking water and sanitation (e.g., Fredriksson and Svensson, 2003; Anbarci et al., 2009; Aidt, 2009 and 2011; and Biswas et al., 2012). Several studies have shown the role of environmental degradation in political instabilities across the world (Hendrix and Salehyan, 2012; Hsiang et al., 2011). For examples, there is evidence of the role of a poor quality of environment and weak governance of natural resources in outbreaks of civil conflicts around the world, such as in Syria (recent civil war) and Sudan (conflict in Darfur) (for more details see Werrell and Femia, 2013).

3- Empirical research design

Data, specification, and empirical strategy

Our main hypothesis is that the demographic transition and, in particular, the relative size of the youth bulge matters for whether corruption is a politically stabilizing or destabilizing force. Specifically, corruption is more likely to have a destabilizing effect when the youth bulge

is relatively large. In this context, we also control for competing interaction terms, which may influence the stability–corruption nexus (e.g., the relevance of democracy, economic performance, and education). This strategy helps reduce the risk of ignoring other important moderating channels noted in the literature.

We test our hypothesis by using panel regressions for more than 100 countries from the 1984–2012 period. To estimate whether the relationship between corruption and political stability varies systematically with the level of the youth bulge, we use the following specification:

$$Stability_{it} = \alpha + \beta_1 \cdot corruption_{it-1} + \beta_2 \cdot youth_{it-1} + \beta_3 \cdot (corruption_{it-1} \times youth_{it-1}) + \beta_4 \cdot Z_{it-1} + u_i + \theta_t + \varepsilon_{it}, \quad (1)$$

with country *i* and time *t*, where *stability* is the political stability index, *corruption* is a measure of the perception of corruption, *youth* is the relative size of the youth cohort, *corruption* × *youth* is the interaction of corruption and the youth bulge, and *Z* is the control variables. All explanatory variables are lagged one year to reduce the possible reverse feedback. According to our expectations, the sign of the interaction term coefficient should be negative ($\beta_3 < 0$); the higher the relative size of the youth bulge is, the lower the effect of corruption on stability should be.

The marginal effect of corruption on stability can be calculated by examining the following partial derivative in Equation (1):

$$\frac{\partial(stability_{it})}{\partial(corruption_{it-1})} = \beta_1 + \beta_3 \cdot (youth_{it-1}) \quad (2)$$

Dependent variable: Political stability (stability)

Our dependent variable is a measure of political stability. In this study, our main proxy for measuring stability is the *internal conflict* index of the International Country Risk Guide (ICRG, 2015) published by the Political Risk Services (PRS) group. This index varies from 0 (the least stable system) to 12 (the most stable system). Higher scores mean a *lower* risk of internal conflict and terrorism, in other words, higher internal political stability. Higher scores are given to countries in which *there is no armed or civil opposition to the government and the government does not indulge in arbitrary violence, directly or indirectly, against its own people.* The lowest scores are given to countries that are *experiencing an ongoing civil war*. Thus, this index is related to the experience of violence or political instability.

The index is the sum of the following three sub-components directly related to internal stability: civil war/coup threat; terrorism/political violence; and civil disorder. Civil disorder refers to mass protests, such as anti-government demonstrations, and strikes and the potential risk they pose to governance or investment. Terrorism is defined in terms of forces opposed to the government that perpetrate violent acts against civilian or state targets to achieve a political goal. The fundamental difference between a terrorist campaign and a civil war is that the former does not hold and manage territory within a nation state. The ICRG internal conflict index as a continuous variable is also used in a large number of studies on political stability (e.g., Gupta et al., 2004; Jinjarak, 2009; Bjorvatn and Farzanegan, 2013, 2015; Long, 2008; Neumayer, 2004; Lessmann, 2016).[4]

Independent variables

Corruption

We use the ICRG corruption index in our main analysis (ICRG, 2015). The ICRG annual index of corruption is based on assessments by country experts. The subjective indicators of corruption across countries tend to be highly correlated with each other and with cross-country surveys of business and households (Treisman, 2000). The corruption index of ICRG has the longest time period coverage (since 1984) among other available indexes. In addition, its definition not only covers the perception of bribery, but its main focus is on corruption in public sector by recording the "actual corruption in the form of excessive patronage, nepotism, job reservations or quid pro quo deals, secret party funding, and suspiciously close ties between politics and business." According to Hessami (2014), because the ICRG corruption index is not a composite index, its year-to-year comparisons are *more reliable* than other indicators such as Transparency International and World Governance Indicators.

The ICRG corruption index is from 0 (most corrupt) to 6 (least corrupt). We have re-scaled the index from 1 (least corrupt) to 7 (most corrupt). In robustness checks, we also use the corruption index from World Governance Indicators of the World Bank.

[4]There is a negative and significant correlation (–0.55) between the risk of internal conflicts from ICRG and an objective measure of conflict, namely, the *maxintyearv413* variable in the UCDP Monadic Conflict Onset and Incidence Dataset (Themnér and Wallensteen, 2014; Gleditsch et al., 2002). Lessmann (2016) shows that the ICRG conflict scores and binary conflict variables are correlated, and both point in the same direction. We use the ICRG index because we are more interested in the risk of internal conflict following increasing corruption and youth population.

A potential concern is that perceptions may also be vulnerable to the news about corruption cases across countries. If locals and country experts are following the news about corrupt cases, depending on the frequency of such news in the media, then they may change their perception. Countries that monitor and censor the media may avoid a negative reputation for having a corrupt government. However, the literature shows a positive correlation between control of the corruption perception index and freedom of the press. In other words, perceptions of corruption in countries with less-free media are higher (see Besley and Prat, 2006; Brunetti and Weder, 2003; and Sung, 2002). [5]

Youth bulge (youth)

The relative size of the youth population is our moderating variable in the stability–corruption nexus. There are two frequently used proxies for measuring the size of the youth bulge in the literature. One group of studies uses the share of youth (typically defined as the number of individuals in the population 15 to 24 years of age) in the total population. For example, Collier (2000), Fearon and Laitin (2003), Collier and Hoeffler (2004), Goldstone (2001), and Huntington (1996) apply this proxy to measure the relative importance of the youth bulge. The second group uses the share of the youth population (with the same definition) in the total number of individuals in the adult population (15 years of age and older).

Urdal (2004) argues that the first proxy (youth as a share of the total population) produces *serious flaws that could easily jeopardize the possibilities of revealing the effects of youth bulges*" on conflict. From the theoretical framework on the youth revolts, this is the competition between younger and older cohorts, which can lead to conflict. From an empirical perspective, in countries with a higher population growth, the use of the youth population as a share of the total population tends to *underestimate* the importance of the youth cohort. The reason is the population under 15 years of age that *inflates* the total population. To avoid this problem, Urdal (2004, 2006, and 2012) recommends the second proxy. We use Urdal's suggested proxy in our main analysis to measure the relative size of the youth bulge, applying other measurements in robustness checks. The source of information for calculating the youth bulge indicators is the Population Estimates and Projections database of the World Bank.[6]

[5]The literature is not conclusive on the validity of perception indicators of corruption. On one side, some studies such as Fisman and Miguel (2007) and Fisman and Wei (2009) provide some interesting evidence for the objective validation of subjective perceptions of corruption. On the other side, there are studies that question the link between perception indicators of corruption and real experience of corruption (Olken, 2009; Donchev and Ujhelyi, 2014).

[6] See http://data.worldbank.org/data-catalog/population-projection-tables.

Country and time fixed effects

Country-specific factors may also shape the stability of a political system. Factors such as geographical location, cultural and historical heritage, norms and regional conventions related to political power, and religion may foster political instability or secure the stability of a system. Ethnolinguistic fractionalization is another country-specific factor that is relevant to the stability of political systems (Collier and Hoeffler, 1998). We control for such unobserved time-invariant factors by including country fixed effects (μ_i). In addition, we control for the common time shocks that may affect the political stability of all countries in our sample simultaneously (δ_t). Examples include events such as the financial and economic crisis in 2008–2009, the Iraq war in 2003, and the Arab Spring. If such country-specific or time-specific factors are correlated with a youth bulge or corruption, then both pooled cross-section and random-effects estimations may lead to biased and inconsistent results.

Control variables

In addition to our main variables of interest such as corruption, the youth bulge, and their interaction term, we also control for a set of other drivers of political stability in our estimations. The source for the control variables (with exception of inequality and democracy) is the World Bank (2016). In the following, we briefly explain their association with political stability.

Income inequality: Corruption can affect political stability through the distribution of income in society. A highly unequal distribution of income and wealth is shown to be a significant driver of political instability and conflict (Sigelman and Simpson, 1977; Alesina and Perotti, 1996). In a sample of 114 countries from 1985 to 2012, Krieger and Meierrieks (2016) find a robust association between higher levels of income inequality and terrorism (as part of internal conflict). We use market income inequality data from the Standardized World Income Inequality Database (Solt, 2009).[7]

Democracy: The level of democracy can influence both political stability and corruption. It can also moderate the association between political stability and corruption (Fjelde and Hegre, 2014) and the association between political stability and the youth bulge (Urdal, 2006). Political participation in democracies may reduce the willingness to engage in civil disorder and terrorism (Li, 2005). However, democratic regimes, due to protection of civil

[7] The results are the same when we use the net Gini index (post-tax, post-transfer Gini).

liberties and political freedoms, may encounter more complications in dealing with challengers of stability of the political system (Li, 2005). Therefore, the final direct effect of democracy on stability is not clear. To measure democracy, we follow Dahl's (1971) discussion of democracy and use the Vanhanen index of democracy. The two main components of the Vanhanen index of democracy are political competition and political participation (Vanhanen, 2000). Unlike other measures of democracy, it is based on objective information. The correlation between this objective measure of democracy and the subjective measure of voice and accountability of the World Governance Indicators[8] is significant and positive (0.81).

Economics growth: We also control for the GDP per capita growth rate to take into account the opportunity costs of participation in civil disorder for the youth population (de Soysa, 2002). Brückner and Gradstein (2015) examine the effects of GDP per capita growth on political risk. They find a negative effect of income growth on countries' political risk. We use the first difference of logarithm of real GDP per capita (in U.S. dollars).

Oil rents: Oil rents are noted as an important factor in buying peace or war. Some, like Collier and Hoeffler (2004), suggest that resource rents finance rebel groups and reduce the opportunity cost for rebellion. Fearon and Laitin (2003) highlight the weak state capacity in corruption prevention in oil-producing countries. Furthermore, following an increasing flow of rents, the value of the state increases as well, inducing conflicts over the state as a "prize." Some other studies show that in the case of higher political corruption or lower balance of political power, oil rents may lead to more political stability (Fjelde, 2009; Bjorvatn and Farzanegan, 2015). We use oil rents as a share of GDP in our estimations.

Education: Higher education can increase the economic opportunities for young people, raising the economic costs of civil disorder. Education itself can also moderate the association between political stability and the youth bulge and/or political stability and corruption. We use gross secondary school enrollment (%), which is the total enrollment in secondary education, regardless of the age of the students, expressed as a percentage of the population at the official secondary education age.

Fertility rate: The literature has identified a couple of channels through which population pressure is connected to environmental degradation and civil conflict. To elaborate the effects of population burden on conflict, Kahl (1998) *deprivation, state weakness* and *state exploitation*. Deprivation hypothesis suggests that population growth, following increasing

[8]This index captures the perceptions of the extent to which a country's citizens are able to participate in selecting their government, in addition to freedom of expression, freedom of association, and a free media. In the regressions, we control the Vanhanen index to avoid multicollinearity problems by including both the voice and corruption indices from the WGI on the right-hand side of the model.

fertility rates, and its subsequent environmental burden can impoverish individuals, reducing the opportunity cost of civil disorder. The state weakness hypothesis agrees with the deprivation thesis but adds that impoverished individuals may not automatically engage in civil disorder, which depends on the effects of the population growth and the capacity of the state to maintain order. Kahl (1998, 2006) explains the *state exploitation hypothesis* as his own contribution in more detail: "[*S*]*tates need not totally collapse for population growth and environmental pressures to produce violent internal conflicts; violence can also result from the purposive actions of state elites.*"

Investment rate: Capital formation is another confounding variable that may be correlated with both corruption and political stability. On one side, increasing investment and boosting economy may provide new opportunities for politicians to implement favoritism. Tanzi and Davoodi (1997) find a positive association between corruption and public investment. On the other side, higher investment by creating more job opportunities may increase the opportunity costs of regime change and instability for individuals. We control for this channel by using fixed capital formation as percent of GDP.

Government spending: Higher government expenditures may signal the willingness of the state to provide public goods rather than use public funds for personal enrichment. Governments can also buy the political support of some segments of the population by offering them public employment or subsidies that are parts of general government spending (Bratton and Van de Walle, 1997; Acemoglu et al., 2004). In an empirical analysis of 141 countries from 1965 to 2006, Fjelde and de Soysa (2009) show that countries with large government expenditure ratios to GDP are less likely to experience violent conflict. However, Thies (2010), by using an instrumental variable approach, shows that government spending has no significant effect on large civil wars. We use general government final consumption expenditure (% of GDP) as a control variable.

Military spending: Military spending has a mixed effect on political stability. Some studies, such as that of Henderson and Singer (2000), argue that military spending crowds out social spending on education and health. This may lead to citizens' frustration in the long run, fueling conflict and violence. Collier and Hoeffler (2007) also show that military spending is not an effective tool to reduce internal conflict. In addition, allocating larger sums of the budget to the military sector may equip the potential opposition within the military, increasing the risk of overthrowing the regime by opposition. Collier and Hoeffler (2007) highlight the different effects of military spending on conflict in democracies and autocracies. In the former type of regimes, military spending may provide more public goods for citizens in the form of domestic

and international security. In autocracies with lower levels of transparency, increasing military spending may increase repression with some short-term positive effects on stability. However, it can also amplify the problem of corruption, which would be a challenge for national security in the long term. In a recent study, Bodea et al. (2016) showed that "higher levels of military spending in oil-rich countries are associated with lower risks of both small- and large-scale conflict," They suggest that as the resource rents grow, increasing military spending "may be called for either for repression, patronage to regime loyalists, or direct rents to the military to prevent possible coup attempts." This increases political stability. They also show that at lower levels of oil rents, larger military spending by reducing the size of social spending may fuel grievance. Therefore, larger military spending in this latter case may increase political instability. We control for military expenditure (% of GDP) in our regressions.

Inflation: There is a body of literature that explains the association between inflation and political stability. Paldam (1987) examined this association for eight Latin American countries from 1946 to 1983. His theoretical arguments and descriptive data show that there is a two-way relationship between inflation and stability. Responsibility hypothesis explains how inflation can affect stability. People hold governments responsible for economic outcomes such as macroeconomic instability and higher costs of inflation. Furthermore, several empirical studies have found evidence of a positive association between income inequality (which is one of our control variables) and inflation (Al-Marhubi, 1997). Income inequality that is higher in countries with higher inflation is shown to be one of the robust drivers of instability and conflict (Krieger and Meierrieks, 2016). We control for inflation by using the consumer price index growth rate.

Trade openness: The effects of trade openness, which is defined as total trade (imports + exports) as a share of GDP, on political stability are mixed. Higher levels of trade can increase stability by increasing economic opportunities and reducing the poverty of locals. They may also lead to more income inequality, especially in countries with a high level of corruption and rent seeking, destabilizing the political system. Barbieri and Schneider (1999) provide a review of the literature on the trade–conflict nexus.

Our main interaction term is the one between corruption and the youth bulge. However, we also check for competing hypotheses by controlling for the interactions of youth and corruption with other discussed variables in literature such as growth, education, democracy, and oil rents.

We control for arbitrary heteroscedasticity and serial correlation by using cluster-robust standard errors at the country level (Wooldridge, 2002). Table A1 in the Appendix presents the

summary statistics for all the variables used in the main estimation. The descriptions of the variables are presented in Table A2 in the Appendix.

4- Main results

Table 1 presents the country and year fixed-effects regression results, which show how *within-country* changes in the right hand side variables are affecting the *within-country* changes in political stability. In line with our theoretical expectation, the negative interaction term between corruption and the youth bulge is robust in its sign, size, and significance in Models 1.1 to 1.11. The final effect of corruption on political stability depends on the level of the youth bulge. At higher levels of the youth bulge, more corruption can become a destabilizing element within the countries. Although the direct effect of corruption on political stability across all models is positive, it lacks statistical significance. Among the controls, we see a robust pattern of effect for income inequality, inflation, and military spending burden (negative and statistically significant in all 11 models), fertility rate (negative and statistically significant in 8 models), and investment rate (positive and statistically significant in 11 models).

In Models 1.2 to 1.11, we also check for competing, moderating channels between corruption and political stability in addition to our main channel. For example, the final effect of corruption on stability may depend on level of democracy. Model 1.2 controls for this, and results show lack of significant interaction term. In Model 1.3, we control for interaction of youth and democracy. In this case, we find a positive and statistically significant moderating effect. The youth bulge combined with democracy can reduce the risk of internal conflict. Model 1.4 controls for both of these interaction terms, re-confirming the previous finding. Models 1.5 and 1.6 control for interactions of corruption and the youth bulge with economic growth rate. Although both terms are positive for stability, they are far from statistical significance. Models 1.8 and 1.9 control for the moderating role of education in the final effects of corruption and the youth bulge on political stability. It confirms the earlier findings of Urdal (2006) that higher education can be helpful in increasing the positive effects of youth on stability. Finally, in Model 1.11, we control for all competing interaction terms in addition to our main one. The only competing moderating channel that is significant in addition to our main one is the youth bulge and education. None of the interaction terms of corruption with alternative factors (e.g., education, growth, democracy, and oil rents) proves to be significant. The joint negative effect of corruption and the youth bulge on stability survives after these additional checks.

The next step is to calculate the marginal effect of corruption on political stability at different levels of the youth bulge. Following estimation of our baseline model (Model 1.1 in Table 1), we compute the slope for *stability* on *corruption* while holding the value of the moderator variable, *youth*, constant at values running from 11 (minimum) to 41 (maximum). The results show that after a critical point of 21% in the youth bulge, the final effect of corruption on stability becomes negative and statistically significant (at 95% confidence intervals). In other words, corruption at the youth bulge levels beyond 21% is a significant destabilizer factor. Overall, there is no statistically significant evidence for the pro-stability effect of corruption.

Table 2 shows the average marginal effects of corruption on political stability with robust standard errors. For example, at the youth bulge level of 21%, a one-unit increase in the corruption index leads to a reduction of political stability index by 0.149, *ceteris paribus*. In this case, the point estimate implies that a 1 standard deviation increase in corruption index last year decreases political stability at the current year by about 0.1 standard deviations.[9] When the youth bulge is at its highest level of 41%, a similar increase in corruption index in the last year leads to reduction of stability at the current year by approximately 0.6 units. In this latter case, a 1 standard deviation increase in corruption reduces stability by about 0.4 standard deviations.

—Table 1 here—

—Table 2 here—

—Figure 1 here—

Figure 1 is a graphical presentation of Table 2. It shows the marginal effects of (the lag of) corruption on stability at different levels of (the lag of) the youth bulge while reporting the 95% confidence intervals around the marginal effects. The results show that the marginal negative effects of corruption on political stability are statistically significant at the youth bulge level of 21% and beyond.

[9]The result is obtained by first multiplying the absolute value of the coefficient 0.149 associated with the individual marginal effect of corruption (from Table 2) by the standard deviation 1.36 of the latter from Table A1 and then by dividing the product by the standard deviation of stability 2.10, also from Table A1 (i.e., 0.149 × 1.36/2.10 = 0.1).

Robustness checks

Alternative operationalization of the youth bulge

We have replicated our estimations in Table 1 by using the youth population (15–24 years of age) as a share of the *total population*. This alternative youth bulge proxy is critically reviewed by Urdal (2006). The results, which are in line with the previous findings in Table 1, are shown in Table 3. Using the alternative definition, the effects of corruption on stability significantly decrease in countries with a relatively larger size of the youth bulge. The interaction term between the youth bulge and corruption is negative and highly statistically significant in all 11 specifications. The difference with Table 1 results is the direct positive effect of corruption on stability, which is statistically significant in 8 out of 11 models.

The effects of control variables on political stability are similar to Table 1. Inflation, fertility rate, military spending burden, and income inequality are the most robust negative drivers of political stability. The only positive and robust driver of political stability in our sample of analysis is investment rate. We have 108 countries in our sample, which are similar to those countries in Table 1. Figure 2 shows the marginal effect of corruption on political stability at different levels of the first alternative definition of the youth bulge. We use our baseline specification (Model 3.1) for this calculation. The results are similar to our earlier findings in Figure 1.

Table 4 shows the statistically significant critical level in the youth bulge (% of total population), which makes corruption a serious problem for political stability. We have found strong evidence that if the share of youth (15–24 years of age) in total population exceeds 19%, the risk of internal conflict following higher corruption will be significant. Our calculated critical level of the youth bulge is close to the discussed critical level of 20% by Huntington in his 1996 Clash of Civilizations hypothesis. Huntington reached this critical level by investigating patterns of historical political events such as revolutions and population age structure of countries before such events. We show that this critical level alone is not leading to instability. Corruption and other moderating factors matter as well.

Another operationalization of the youth bulge in the literature examines the relative size of the population of 20–29 years of age. Some studies (e.g., Mehryar and Ahmad-Nia, 2006) classify those aged 15–19 as adolescents who need parental care and full-time education, whereas those aged 20–29 are defined as youths. This latter age group may still be in some formal education programs, but the majority of these individuals are looking for jobs and establishing their families. Thus, their relative size can be a major concern in countries with higher corruption. Table 5 shows the results, using the share of the population 20–29 years of

age in the total population 20 years of age and higher. The estimation results are highly consistent with the previous findings. Figure 3 shows the marginal effect of corruption on political stability at different levels of the youth bulge (20–29 years old) share in population beyond 20 years old. It re-confirms our earlier results. Regardless of the youth bulge relative size definition, after a critical level, more corruption is significantly destabilizing to the political system. By calculating the average marginal effects, we find that the statistically significant critical level in this latter youth bulge definition is 22%. Beyond this critical size of youth bulge, higher corruption leads to lower internal stability, controlling for other drivers of political stability, country, and year fixed effects. Table 6 presents this result.

—Table 3 here—

—Figure 2 here—

—Table 4 here—

—Table 5 here—

—Figure 3 here—

—Table 6 here—

Alternative corruption index

For robustness check, we use the control of corruption index of the World Governance Indicators (WGI) of the World Bank (Kaufmann et al., 2010) from 1996 to 2012. It captures "[the views and perceptions of firms and households] of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as 'capture' of the state by elites and private interests." The index varies from approximately –2.5 (the most corrupt) to 2.5 (the least corrupt). We reversed the scale to interpret higher values as more corruption. The index is based on an aggregation of information from several other sources (households, businesses, and NGO surveys) that reflect both the perception and the experience of corruption. This composite corruption index is the first principal component of a number of other commonly used corruption indices. It is highly correlated with Transparency International (TI) corruption scores. The control of corruption index of the World Governance Indicator has been extensively used in related literature (e.g., Fisman and Miguel, 2007; Fisman and Wei, 2009). However, annual changes in the WGI corruption index do not only contain information on improvement or degradation of countries in their control of corruption

performance. The annual changes may also be due to (i) changes in the underlying source data, (ii) the addition of new data sources for a country that are only available in the more recent period, and (iii) changes in the weights used to aggregate the individual sources.

We re-examine the main estimations presented in Table 1 by using the WGI index of corruption from 1996 to 2012. The youth bulge is defined as share of youth population (15–24 years of age) in the adult population (above 15 years of age). The results are presented in Table 7. Our earlier main result on the negative moderating role of the youth bulge in the political stability–corruption nexus remains robust. The negative interaction term is statistically significant in all 11 models. There are a few differences with results in Table 1. For example, the negative effect of income inequality on stability is not any more statistically significant. This may be due to the shorter time horizon when we use the WGI corruption index. GDP per capita growth is now a significant positive driver of political stability. In addition, the role of increasing participation in secondary education in increasing the stability of a political system is more significant compared to earlier results. The fertility rate is no longer a significant negative driver of stability during the sample period of 1996 to 2012. The fertility rate has declined since the early 1990s in many developing countries. Similar to earlier results, we can see a very robust positive effect of investment rate on political stability. Inflation rate and military spending are no longer major drivers of political stability within the sample period. Our main moderating channel, namely the youth bulge, survives even after controlling for other competing moderating channels. Figure 4 shows the marginal effects of WGI corruption on political stability at different levels of the youth bulge (% of adult population). Similar patterns as in earlier results can be seen here. In addition, we have estimated average marginal effects and Table 8 shows the results. We can observe that the significant critical level in the youth bulge, beyond which more corruption can lead to greater internal conflict, is 24% for sample period of 1996 to 2012.

—Table 7 here—

—Figure 4 here—

—Table 8 here—

Issues of outliers

Are our results presented in, for example, our baseline specification in Model 1.1 and the illustrated marginal effects in Figure 1 due to outliers or influential observations? We

examine the residuals to identify observations with very large leverage or very large squared residuals. We follow the procedure in Bjorvatn and Farzanegan (2013). Following identification of the large residuals, we apply the *robust regression*, which gives lower weights to possible outliers (Hamilton, 1991). We re-estimate Model 1.1 in Table 1 by using pooled Ordinary Least Squares (OLS) with country and time fixed effects. In the next step, we use the *lvr2plot* command, which produces a figure that shows the leverage versus the squared residuals. Following this step, we calculate the Cook's D and its cut-off, which is 4/total observation in the estimated Model 1.1, namely, 1503. Finally, to address outliers, we run the *robust estimator.*[10] The results are shown in Table 9. Our main results from robust regressions that deal with main outliers are qualitatively and quantitatively similar to the previous results.

—Table 9 here—

Dynamic panel data estimation

The previous results were based on static panel fixed effects. It is also likely that the current internal stability (as our dependent variable) is affected by its recent experience. Including the lag of internal stability as one of the predictors of current internal stability can increase the explanatory power of our estimation (see Beck and Katz, 1995). In addition, the lag of political stability can also control for other possible variables for which we have not controlled but that may have an impact on current internal stability. With the presence of the lagged dependent variable, the standard fixed effects estimator becomes consistent only when the number of periods in the sample increases to infinity. In large N, small T samples including the lagged dependent variable with fixed effects may lead to the so-called Nickell bias (see Nickell, 1981). Therefore, we estimate dynamic panel data that also address the endogeneity of the lagged dependent variable and a couple of other main variables of interest through internal instruments.

For a robustness check, we re-estimate Model 1.1 of Table 1, using the two- and one-step difference generalized method of moments (GMM). This method is outlined by Arellano and Bond (1991). We treat the lags of political stability, corruption, the youth bulge, and interaction of the youth bulge and corruption as potentially endogenous variables. We use three

[10] We used the *rreg* command to estimate robust regressions. *rreg* first performs an initial screening based on Cook's distance >1 to eliminate gross outliers before calculating starting values and then performs Huber iterations followed by biweight iterations, as suggested by Li (1985).

lags of potentially endogenous variables as instruments. The Hansen test of over-identification restrictions validates the adequacy of the instruments, and the failure to reject the null hypothesis of the validity of the instruments shows that the specification is correct and instruments are valid. Furthermore, the absence of a first-order serial correlation is rejected and the absence of a second-order serial correlation is not rejected. One of the main advantages of difference GMM is that it removes country-specific effects or any time-invariant variable and therefore helps reduce any endogeneity because of the correlation of these country-specific effects and the explanatory variables. Finally, by first differencing the variables, it addressed the possible non-stationarity of the variables in our analysis (Baltagi et al., 2009).

—Table 10 here—

Following Roodman (2009), we also use orthogonal deviations and apply robust standard errors that are consistent with panel-specific autocorrelation and heteroscedasticity. The results of first- and second-step difference GMM are presented in Table 10. They re-confirm our earlier findings. Figure 5 shows the marginal effect of corruption on political stability at different levels of the youth bulge, using estimations of Model 10.2. Overall, the results are comparable to earlier findings. The only difference in marginal effects based on the GMM model is that at very low levels of the youth bulge, the marginal effect of corruption on political stability is positive and statistically significant at 90% confidence intervals. Nevertheless, as in earlier results, at the higher levels of the youth bulge, it becomes negative and significant.

—Figure 5 here—

Sub-samples: Countries with low and high youth bulge

In our main results, we show that the effects of corruption on political stability depend on the level of the youth bulge. At higher than a critical level of the youth bulge (based on Table 1 results, this critical level is about 20%), an increase in corruption leads to a significant reduction of internal political stability. At lower than this critical level, the effect of corruption on political stability is insignificant. Another approach to investigate this association is to split the sample into two groups of countries and re-estimate Model 1.1 of Table 1; the first group is

those countries in which the share of the youth bulge in the adult population is larger than the minimum of 11% and smaller than the critical level of 20%. The second group is those countries in which the youth bulge is larger than 20% and smaller than the maximum of 42%. The question is whether the coefficient of corruption in the political stability–corruption nexus will change the sign and significance in these two samples of countries. The estimation results are shown in Table 11. As expected, the effect of corruption on stability in the first group of countries is positive but insignificant. In the second group, this effect becomes negative and statistically significant at 99% confidence intervals. Which countries are experiencing negative effects of corruption on political stability? Table A3 in the Appendix presents the list of 79 countries that are in the sample of Model 11.1. These countries can potentially experience negative effects of corruption on their internal political stability due to their critical youth demographic structure.

—Table 11 here—

5- Conclusion

We investigated how the effect of increases in corruption on political stability may be contingent on the relative size of the youth bulge. To test this hypothesis, we employed panel data covering the 1984–2012 period and more than 100 countries. Our theoretical argument is supported by the data. In particular, corruption becomes a political destabilizer when the youth bulge exceeds a critical level of approximately 20%.

Our main results hold when we control for a set of socioeconomic and political explanatory factors in addition to country and year fixed effects. We also show that our main interaction term of corruption and youth remains robust when we control for other competing moderating channels between political stability and corruption as well as political stability and the youth bulge. Our results are robust after using different corruption and the youth bulge indicators and dynamic panel specification. A combination of increasing corruption and the demographic burden of youth is a ticking time bomb like the one we have already experienced in the political re-configuration in the Middle East and North Africa since 2011.

References

Acemoglu, D., Robinson, J.A., Verdier, T., 2004. Kleptocracy and divide and rule: a model of personal rule. Journal of the European Economic Association 2, 162–192.

Aidt, T. S., 2009. Corruption, institutions, and economic development. Oxford Review of Economic Policy 25, 271–291.

Aidt, T. S., 2011. Corruption and sustainable development. In: Rose-Ackerman, S., Søreide, T. (Eds.). International Handbook on the Economics of Corruption, Volume Two. Edward Elgar Publishing, pp. 3-51.

Aidt, T.S., Dutta, J., Sena, V., 2008. Governance regimes, corruption and growth: theory and evidence. Journal of Comparative Economics 36, 195-220.

Alesina, A., Baqir, R., Easterly, W., 1998. Redistributive public employment. Journal of Urban Economics 48, 219–241.

Alesina, A., Perotti, R., 1996. Income distribution, political instability, and investment. European Economic Review 40, 1203–28.

Al-Marhubi, F., 1997. A note on the link between income inequality and inflation. Economics Letters 55, 317–319.

Anbarci, N., Escalares, M., Register, C.A., 2009. The ill effects of public sector corruption in the water and sanitation sector. Land Economics 85, 363-377.

Andvig, J. C., 2008. Corruption and armed conflicts: some stirring around in the governance soup. Economics Discussion Papers, No 2008-3, Kiel Institute for the World Economy.

Arellano, M., Bond, S., 1991. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. Review of Economic Studies 58, 277–297.

Auty, R. M., 2001. Resource abundance and economic development. Oxford: Oxford University Press.

Baltagi, B. H., Demetriades, P. O., Law, S. H., 2009. Financial development and openness: Evidence from panel data. Journal of Development Economics 89, 285–296.

Barakat, B., Urdal, H., 2009. Breaking the waves? Does education mediate the relationship between youth bulges and political violence? Policy Research Working Papers. The World Bank.

Barbieri, K., Schneider, G., 1999. Globalization and peace: assessing new directions in the study of trade and conflict. Journal of Peace Research 36, 387-404.

Beck, N., Katz, J.N., 1995. What to do (and not to do) with time-series cross-section data. American Political Science Review 89, 634–647.

Besley, T., Prat, A., 2006. Handcuffs for the grabbing hand? Media capture and government accountability. American Economic Review 96, 720–736.

Biswas, A.K., Farzanegan, M.R., Thum, M., 2012. Pollution, shadow economy and corruption: theory and evidence. Ecological Economics 75, 114-25.

Bjorvatn, K., Farzanegan, M.R., 2015. Resource rents, balance of power, and political stability. Journal of Peace Research 52, 758-773.

Bjorvatn, K., Farzanegan, M.R., 2013. Demographic transition in resource rich countries: a blessing or a curse? World Development 45, 337–351.

Blackburn, K., Sarmah, R., 2008. Corruption, development and demography. Economics of Governance 9, 341–62.

Bodea, C., Higashijima, M., Singh, R., 2016. Oil and Civil Conflict: Can Public Spending Have a Mitigation Effect? World Development 78, 1–12.

Bratton, M., van de Walle, N., 1997. Democratic experiments in Africa: Regime transitions in comparative perspective. New York: Cambridge University Press.

Bricker, N. Q., Foley, M. C., 2013. The effect of youth demographics on violence: the importance of the labor market. International Journal of Conflict and Violence 7, 179-194.

Brückner, M., Gradstein, M., 2015. Income growth, ethnic polarization, and political risk: Evidence from international oil price shocks. Journal of Comparative Economics 43, 575–594.

Brunetti, A., Weder, B., 2003. A free press is bad news for corruption. Journal of Public Economics 87, 1801–24.

Collier, P., 2000. Doing well out of war: an economic perspective. In: Berdal, M., Malone, D.M. (Eds.), Greed and Grievance: Economic Agendas in Civil Wars. Boulder, CO and London: Lynne Rienner, pp. 91–111.

Collier, P., Hoeffler, A., 2007. Military spending and the risks of coups d'etat. Centre for the Study of African Economies, Oxford University, Mimeo.

Collier, P., Hoeffler, A., 1998. On economic causes of civil war. Oxford Economic Papers 50, 563-573.

Collier, P., Hoeffler, A., 2004. Greed and grievance in civil war. Oxford Economic Papers 56, 563-595.

Dahl, R. A., 1971. Polyarchy: participation and opposition. New Haven and London: Yale University Press.

de Soysa, I., 2002. Paradise is a bazaar? Greed, creed, and governance in civil war, 1989–99. Journal of Peace Research 39, 395–416.

Diuk, N., 2013. Youth as an agent for change: the next generation in Ukraine. Demokratizatsiya 21, 179-196.

Diwan, I., 2013. Understanding revolution in the Middle East: the central role of the middle class. Middle East Development Journal 05, 1-30.

Dizaji, S.F., Farzanegan, M.R., Naghavi, A. 2016. Political institutions and government spending behavior: theory and evidence from Iran. International Tax and Public Finance 23, 522–549.

Donchev, D., Ujhelyi, G., 2014. What do corruption indices measure? Economics & Politics 26, 309–331.

Dorsch, M.T., Dunz, K., Maarek, P., 2015. Macro shocks and costly political action in nondemocracies. Public Choice 162, 381–404.

Dreher, A., Gassebner, M., 2013. Greasing the wheels? The impact of regulations and corruption on firm entry. Public Choice 155, 413-432.

Dreher, A., Kotsogiannis, C., McCorriston, S., 2007. Corruption around the world: Evidence from a structural model. Journal of Comparative Economics 35, 443–466.

Fearon, J. D., Laitin, D. D., 2003. Ethnicity, insurgency, and civil war. American Political Science Review 97, 75-90.

Fisman, R., Miguel, E., 2007. Corruption, norms, and legal enforcement: evidence from diplomatic parking tickets. Journal of Political Economy 115, 1020-1048.

Fisman, R., Wie, S-J., 2009. The smuggling of art, and the art of smuggling: uncovering the illicit trade in cultural property and antiques. American Economic Journal: Applied Economics 1, 82-96.

Fjelde, H., 2009. Buying peace? Oil wealth, corruption and civil war, 1985–99. Journal of Peace Research 46, 199–218.

Fjelde, H., de Soysa, I., 2009. Coercion, co-optation, or cooperation: State capacity and the risk of Civil War, 1961–2004. Conflict Management and Peace Science, 26(5), 5–25.

Fjelde, H., Hegre, H., 2014. Political corruption and institutional stability. Studies in Comparative International Development 49, 267–299.

Fredriksson, P.G., Svensson, J., 2003. Political instability, corruption and policy formation: the case of environmental policy. Journal of Public Economics 87, 1383-1405.

Fuller, G. E., 1995. The demographic backdrop to ethnic conflict: a geographic overview. In: Central Intelligence Agency (Ed.), The Challenge of Ethnic Conflict to National and International Order in the 1990's, Washington DC: CIA (RTT 95-10039), pp. 151-154.

Gleditsch, N. P., Wallensteen, P., Eriksson, M., Sollenberg, M., Strand, H., 2002. Armed conflict 1946-2001: a new dataset. Journal of Peace Research 39, 615-637.

Goldstone, J., 2002. Population and security: how demographic change can lead to violent conflict. Journal of International Affairs 56, 3–21.

Goldstone, J., 2001. Demography, environment, and security. In: Paul F. Diehl and Nils Petter Gleditsch, eds., Environmental Conflict. Boulder, CO: Westview, pp. 84–108.

Goldstone, J., 1991. Revolution and rebellion in the early modern world. Berkeley: University of California Press.

Gupta, S., Clements, B., Bhattacharya, R., Chakravarti, S., 2004. Fiscal consequences of armed conflict and terrorism in low- and middle-income countries. European Journal of Political Economy 20, 403-421.

Gupta, S., Davoodi, H., Alonso-Terme, R., 2002. Does corruption affect income inequality and poverty? Economics of Governance 3, 23–45.

Gupta, S., Davoodi, H., Tiongson, E., 2001. Corruption and the provision of health care and education services. In: Jain, A. K. (Ed.), The Political Economy of Corruption. Routledge, London; New York, pp. 111-141.

Hamilton, L. C., 1991. How robust is robust regression? Stata Technical Bulletin 2, 21–26.

Heinsohn, G., 2006. Demography and war. Presentation at the city defence forum roundtable. Available at: http://davidbau.com/downloads/heinsohn_slides.pdf

Heinsohn, G., 2007. Islamism and war: the demographics of rage. Open Democracy, July. Available at: https://www.opendemocracy.net/conflicts/democracy_terror/islamism_war_demographics_rage

Henderson, E., Singer, D., 2000. Civil war in the post-colonial world, 1946–1992. Journal of Peace Research, 37(3), 275–299.

Hendrix, C., Salehyan, I., 2012. Climate change, rainfall, and social conflict in Africa. Journal of Peace Research 49, 35-50.

Hessami, Z., 2014. Political corruption, public procurement, and budget composition: Theory and evidence from OECD countries. European Journal of Political Economy 34, 372–389.

Hsiang, S., Meng, K., Cane, M., 2011. Civil conflicts are associated with global climate. Nature 476, 438–441.

Huntington, S. P., 1996. The clash of civilizations and the remaking of world order. New York: Simon & Schuster.

Huntington, S. P., 1968. Political order in changing societies. Yale University Press.

ICRG, 2015. International Country Risk Guide. The PRS Group, New York.

Jinjarak, Y., 2009. Trade variety and political conflict: Some international evidence. Economics Letters 103, 26–28.

Johnston, M., 1986. The political consequences of corruption. A reassessment. Comparative Politics 18, 459–477.

Kahl, C.H., 1998. Population growth, environmental degradation, and state-sponsored violence: The case of Kenya, 1991-93. International Security 23, 80-119.

Kahl, C. H., 2006. States, scarcity, and civil strife in the developing world. Princeton and Oxford: Princeton University Press.

Kato, A., Sato, T., 2015. Greasing the wheels? The effect of corruption in regulated manufacturing sectors of India. Canadian Journal of Development Studies/ Revue canadienne d'études du développement, DOI: 10.1080/02255189.2015.1026312

Kaufmann, D., Kraay, A., Mastruzzi, M., 2010. The worldwide governance indicators: methodology and analytical issues. World Bank Policy Research Working Paper No. 5430.

Krieger, T., Meierrieks, D., 2016. Does income inequality lead to terrorism? CESifo Working Paper Series Nr. 5821, Munich.

Leff, N., 1964. Economic development through bureaucratic corruption. American Behavioural Scientist 8, 8-14.

Lessmann, C., 2016. Regional inequality and conflict. German Economic Review 17, 157-191.

Li, G., 1985. Robust regression. In: Hoaglin, D. C., Mosteller, C. F., Tukey, J. W. (Eds.). Exploring Data Tables, Trends, and Shapes, pp. 281–340. New York: Wiley.

Li, Q., 2005. Does democracy promote or reduce transnational terrorist incidents? Journal of Conflict Resolution 49, 278-297.

Long, A.G., 2008. Bilateral trade in the shadow of armed conflict. International Studies Quarterly 52, 1468-1478.

Manzetti, L, Wilson C.J., 2007. Why do corrupt government maintain public support. Comparative Political Studies 40, 949–970.

Mauro, P., 1995. Corruption and growth. The Quarterly Journal of Economics 110, 681–712.

Mehryar, A. H., Ahmad-Nia, S., 2006. Age-structural transition in Iran: short- and long-term consequences of drastic fertility swings during the final decades of the twentieth century. In: Pool, I., Wong, L.R., Vilquin, E. (Eds.), Age-Structural Transitions: Challenges for Development. Committee for International Cooperation in National Research in Demography, Paris, pp 319-358.

Méon, P.G., Weill, L., 2010. Is corruption an efficient grease? World Development 38, 244–259.

Mo, P. H., 2001. Corruption and economic growth. Journal of Comparative Economics 29, 66–79.

Nesvaderani, T., Memarian, O., 2010. Iran's youth: agents of change. USIP Peace Brief 51, 1-5.

Neudorfer, N.S., Theuerkauf, U.G., 2014. Buying war not peace: the influence of corruption on the risk of ethnic war. Comparative Political Studies 47, 1856-1886.

Neumayer, E., 2004. The impact of political violence on tourism: Dynamic cross national estimation. Journal of Conflict Resolution 48, 259-281.

Nickell, S., 1981. Biases in dynamic models with fixed effects. Econometrica 49, 1417-1426.

Nordås, R., Davenport, C., 2013. Fight the youth: youth bulges and state repression. American Journal of Political Science 57, 926-940

Olken, B., 2009. Corruption perceptions vs. corruption reality. Journal of Public Economics 93, 950–964.

Onuoha, F., 2014. Why do youth join Boko Haram? Special Report Nr. 348, United States Institute of Peace, Washington DC.

Paldam, M., 1987. Inflation and political instability in eight Latin American countries 1946–83, Public Choice 52, 143–68

Paldam, M., 1998. Does economic growth lead to political stability? In. Borner, S., Paldam, M. (Eds.), The Political Dimension of Economic Growth. Palgrave Macmillan, London, pp. 171-190.

Robinson, J. A., Torvik, R., Verdier, T., 2006. Political foundations of the resource curse. Journal of Development Economics 79, 447–468.

Roodman, D., 2009. How to do xtabond2: an introduction to "difference" and "system" GMM in Stata. Stata Journal 9, 86-136.

Rose-Ackerman S., 1999 Corruption and government: causes, consequences and reform. Cambridge, United Kingdom: Cambridge University Press.

Rother, B., Pierre, G., Lombardo, D., Herrala, R., Toffano, P., Roos, E., Auclair, G., Manasseh, K., 2016. The economic impact of conflicts and the refugee crisis in the Middle East and North Africa. IMF Staff Discussion Notes No. 16/8, Washington DC.

Shleifer, A, Vishny, R.W., 1993. Corruption. Quarterly Journal of Economics.108, 599–617.

Sigelman, L., Simpson, M., 1977. Cross-national test of linkage between economic inequality and political violence. Journal of Conflict Resolution 21, 105-128.

Solt, F., 2009. Standardizing the world income inequality database. Social Science Quarterly 90, 231–242.

Sung, H.-E., 2002. A convergence approach to the analysis of political corruption: a cross-national study. Crime, Law and Social Change 38, 137–160.

Tanzi, V., Davoodi, H.R., 1997. Corruption, public investment, and growth. IMF Working Paper No. 97/139; Washington DC.

Themnér, L., Wallensteen, P., 2014. Armed conflict, 1946-2013. Journal of Peace Research 51, 541-554.

Thies, C., 2010. Of rulers, rebels, and revenue: State capacity, Civil War onset, and primary commodities. Journal of Peace Research, 47(3), 321–332.

Transparency International, 2015. Tackle instability and terrorism by fighting corruption. Retrieved from: https://www.transparency.org/news/feature/tackle_instability_and_terrorism_by_fighting_corruption (14.12.2016)

Treisman, D., 2000. The causes of corruption: a cross-national study. Journal of Public Economics 76, 399–457.

Urdal, H., 2006. A clash of generations? Youth bulges and political violence. International Studies Quarterly 50, 607–629.

Urdal, H., 2004. The devil in the demographics: The effect of youth bulges on domestic armed conflict, 1950–2000. Social Development Papers, Conflict Prevention & Reconstruction. Washington, D.C.: World Bank.

Urdal, H., 2012. A clash of generations? Youth bulges and political violence. Expert Paper No. 2012/1. United Nations Department of Economic and Social Affairs, United Nations New York.

Vanhanen, T., 2000. A new dataset for measuring democracy, 1810-1998". Journal of Peace Research 37, 251-265.

Vial, V., Hanoteau, J., 2010. Corruption, manufacturing plant growth and the Asian paradox: micro-level evidence from Indonesia. World Development 38, 693-705.

Weber, H., 2013. Demography and democracy: the impact of youth cohort size on democratic stability in the world. Democratization 20, 335–357.

Werrell, C.E., Femia, F. (Eds), 2013. The Arab Spring and climate change. The Center for Climate and Security, Washington DC.

Wooldridge, J. M., 2002. Econometric analysis of cross section and panel data. Cambridge, MA: MIT Press.

World Bank, 2016. World Development Indicators. Washington D.C.

Yousef, T., 2003. Youth in the Middle East and North Africa: demography, employment, and conflict. In: Ruble, B. A., Tulchin, J. S., Varat, D. H., Hanley, L. M. (Eds.), Youth Explosion in Developing World Cities. Woodrow Wilson International Center for Scholars, Washington, D.C, pp. 9-24.

Zogby, J., 2005. Attitudes of Arabs: 2005. Zogby International. Available at: http://www.aaiusa.org/attitudes-of-arabs-2005 (Access 20.10.2016)

Appendix

—Table A1 here—

—Table A2 here—

—Table A3 here—

Table 1. Political stability, corruption and youth (country and time fixed effects OLS panel regressions). Dependent variable: *stability*

	(1.1)	(1.2)	(1.3)	(1.4)	(1.5)	(1.6)	(1.7)	(1.8)	(1.9)	(1.10)	(1.11)
corruption	0.321	0.552	0.301	0.554*	0.299	0.330	0.311	0.492	0.283	0.936	0.882
	(1.48)	(1.64)	(1.44)	(1.67)	(1.39)	(1.55)	(1.47)	(0.84)	(1.35)	(1.65)	(1.52)
youth	0.125**	0.149**	0.065	0.090	0.124**	0.125**	0.124**	0.138**	-0.030	-0.004	-0.023
	(2.40)	(2.43)	(1.02)	(1.29)	(2.41)	(2.40)	(2.41)	(2.30)	(-0.36)	(-0.04)	(-0.26)
*corruption*youth*	-0.022***	-0.028***	-0.021***	-0.027**	-0.022***	-0.023***	-0.023***	-0.026**	-0.021**	-0.033***	-0.032**
	(-2.71)	(-2.63)	(-2.64)	(-2.61)	(-2.72)	(-2.79)	(-2.79)	(-1.99)	(-2.61)	(-2.64)	(-2.35)
inequality	-0.033***	-0.033***	-0.031**	-0.031**	-0.032***	-0.033***	-0.032***	-0.032***	-0.033***	-0.032***	-0.031**
	(-2.78)	(-2.81)	(-2.56)	(-2.58)	(-2.74)	(-2.77)	(-2.75)	(-2.78)	(-2.74)	(-2.69)	(-2.57)
democracy	0.010	0.028	-0.061**	-0.042	0.010	0.010	0.010	0.011	0.004	0.004	-0.028
	(0.85)	(1.21)	(-2.12)	(-1.23)	(0.84)	(0.82)	(0.81)	(0.86)	(0.30)	(0.35)	(-0.82)
growth	1.369	1.379	1.294	1.304	-1.936	-2.101	-4.059	1.343	1.503	1.423	-4.936
	(1.10)	(1.10)	(1.04)	(1.04)	(-0.58)	(-0.69)	(-1.02)	(1.08)	(1.21)	(1.14)	(-1.23)
oil rent	-0.008	-0.008	-0.007	-0.007	-0.009	-0.009	-0.009	-0.007	-0.006	-0.005	0.007
	(-0.44)	(-0.47)	(-0.36)	(-0.39)	(-0.52)	(-0.49)	(-0.55)	(-0.42)	(-0.33)	(-0.25)	(0.09)
education	0.012	0.013	0.012	0.012	0.012	0.012	0.012	0.016	-0.028*	-0.021	-0.018
	(1.49)	(1.52)	(1.41)	(1.44)	(1.51)	(1.50)	(1.52)	(1.26)	(-1.97)	(-1.39)	(-1.13)
fertility	-0.732***	-0.704***	-0.604**	-0.572**	-0.731***	-0.725***	-0.726***	-0.748***	-0.342	-0.345	-0.325
	(-3.01)	(-2.83)	(-2.49)	(-2.31)	(-3.02)	(-2.98)	(-3.00)	(-3.06)	(-1.14)	(-1.17)	(-1.08)
investment	0.048***	0.048***	0.047***	0.047***	0.048***	0.049***	0.049***	0.048***	0.046***	0.047***	0.048***
	(3.92)	(3.91)	(3.89)	(3.87)	(3.89)	(3.99)	(3.92)	(3.87)	(3.75)	(3.71)	(3.85)
government spending	0.017	0.017	0.018	0.017	0.015	0.017	0.016	0.017	0.013	0.012	0.011
	(0.51)	(0.50)	(0.53)	(0.52)	(0.44)	(0.52)	(0.46)	(0.51)	(0.37)	(0.36)	(0.33)
inflation	-0.026**	-0.026**	-0.026**	-0.025**	-0.027**	-0.025**	-0.026**	-0.026**	-0.025**	-0.025**	-0.024**
	(-2.31)	(-2.27)	(-2.21)	(-2.17)	(-2.41)	(-2.29)	(-2.35)	(-2.30)	(-2.19)	(-2.13)	(-2.13)
military spending	-0.265**	-0.268**	-0.277**	-0.279**	-0.265**	-0.264**	-0.264**	-0.266**	-0.265**	-0.269**	-0.269**
	(-2.28)	(-2.32)	(-2.33)	(-2.37)	(-2.29)	(-2.27)	(-2.27)	(-2.31)	(-2.30)	(-2.38)	(-2.28)
trade	0.002	0.002	0.001	0.001	0.002	0.002	0.002	0.002	0.003	0.002	0.002
	(0.34)	(0.38)	(0.21)	(0.25)	(0.35)	(0.36)	(0.36)	(0.31)	(0.49)	(0.41)	(0.37)
*corruption*democracy*		-0.005		-0.005							0.001
		(-0.84)		(-0.91)							(0.09)
*youth*democracy*			0.003**	0.003**							0.001

			(2.29)	(2.30)							(0.74)
*corruption*growth*					0.800		0.640				0.510
					(1.02)		(0.79)				(0.62)
*youth*growth*						0.129	0.103				0.157
						(1.03)	(0.79)				(1.16)
*corruption*education*								-0.001		-0.004	-0.004
								(-0.31)		(-1.23)	(-1.03)
*youth*education*									0.002**	0.002***	0.002*
									(2.43)	(2.65)	(1.93)
*corruption*oil rents*											-0.003
											(-0.18)
Obs. (108 countries)	1503	1503	1503	1503	1503	1503	1503	1503	1503	1503	1503
(Within) R^2	0.34	0.34	0.35	0.35	0.34	0.34	0.34	0.34	0.35	0.35	0.36

Robust *t-statistics* are in parentheses (clustered standard errors at country level). All independent variables are lagged by one year. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 2. Average marginal effects of corruption on political stability at different levels of the youth bulge

	d(*stability*)/d(*corruption* in previous year)	robust s.e.	z	p-value
Youth % (previous year)				
11	0.074	0.136	0.55	0.585
16	-0.037	0.106	-0.35	0.727
21	-0.149	0.086	-1.73	0.084
26	-0.26	0.083	-3.12	0.002
31	-0.372	0.099	-3.74	0.000
36	-0.484	0.127	-3.8	0.000
41	-0.596	0.161	-3.69	0.000

Table 3. Political stability, corruption and youth bulge (15-24 years of age/total population)(country and time fixed effects OLS panel regressions): Dependent variable: *stability*

	(3.1)	(3.2)	(3.3)	(3.4)	(3.5)	(3.6)	(3.7)	(3.8)	(3.9)	(3.10)	(3.11)
corruption	0.868**	1.069**	0.716**	0.850*	0.860**	0.878**	0.863**	0.971	0.678*	0.958	0.838
	(2.55)	(2.27)	(2.29)	(1.94)	(2.55)	(2.62)	(2.59)	(1.45)	(1.97)	(1.47)	(1.29)
youth	0.325***	0.353***	0.176	0.197	0.328***	0.323***	0.327***	0.337***	0.001	0.022	-0.027
	(3.82)	(3.49)	(1.50)	(1.54)	(3.90)	(3.81)	(3.87)	(3.20)	(0.01)	(0.12)	(-0.14)
corruption youth*	-0.06***	-0.07***	-0.05***	-0.06***	-0.06***	-0.06***	-0.06***	-0.067**	-0.05***	-0.062**	-0.05**
	(-3.43)	(-3.14)	(-3.12)	(-2.78)	(-3.53)	(-3.51)	(-3.56)	(-2.56)	(-2.86)	(-2.40)	(-2.09)
inequality	-0.03***	-0.03***	-0.03***	-0.03***	-0.03***	-0.03***	-0.03***	-0.03***	-0.03***	-0.03***	-0.03**
	(-2.78)	(-2.76)	(-2.65)	(-2.64)	(-2.75)	(-2.77)	(-2.75)	(-2.78)	(-2.75)	(-2.68)	(-2.61)
democracy	0.009	0.023	-0.083**	-0.072	0.009	0.009	0.009	0.010	0.004	0.004	-0.031
	(0.78)	(0.96)	(-1.99)	(-1.65)	(0.76)	(0.75)	(0.75)	(0.78)	(0.35)	(0.37)	(-0.58)
growth	1.403	1.423	1.318	1.333	-2.515	-1.666	-3.337	1.392	1.434	1.404	-5.502
	(1.14)	(1.15)	(1.06)	(1.07)	(-0.77)	(-0.31)	(-0.58)	(1.13)	(1.16)	(1.14)	(-0.96)
oil rent	-0.006	-0.006	-0.004	-0.004	-0.008	-0.007	-0.008	-0.006	-0.004	-0.003	0.007
	(-0.35)	(-0.35)	(-0.21)	(-0.21)	(-0.43)	(-0.38)	(-0.43)	(-0.33)	(-0.21)	(-0.17)	(0.10)
education	0.014*	0.014*	0.013	0.013	0.014*	0.014*	0.014*	0.016	-0.038*	-0.034	-0.032
	(1.75)	(1.77)	(1.59)	(1.60)	(1.78)	(1.75)	(1.78)	(1.49)	(-1.84)	(-1.62)	(-1.19)
fertility	-0.609**	-0.588**	-0.557**	-0.544**	-0.610**	-0.608**	-0.610**	-0.616**	-0.416	-0.426	-0.447
	(-2.36)	(-2.25)	(-2.16)	(-2.07)	(-2.38)	(-2.35)	(-2.38)	(-2.33)	(-1.46)	(-1.49)	(-1.54)
investment	0.046***	0.047***	0.045***	0.046***	0.046***	0.047***	0.046***	0.047***	0.045***	0.046***	0.04***
	(3.72)	(3.72)	(3.67)	(3.66)	(3.69)	(3.75)	(3.69)	(3.67)	(3.62)	(3.59)	(3.70)
government spending	0.018	0.018	0.018	0.018	0.016	0.018	0.016	0.018	0.014	0.014	0.012
	(0.54)	(0.53)	(0.54)	(0.53)	(0.46)	(0.54)	(0.46)	(0.54)	(0.41)	(0.40)	(0.35)
inflation	-0.025**	-0.025**	-0.023*	-0.023*	-0.025**	-0.024**	-0.025**	-0.025**	-0.024**	-0.023**	-0.02**
	(-2.10)	(-2.07)	(-1.90)	(-1.89)	(-2.21)	(-2.09)	(-2.18)	(-2.09)	(-2.01)	(-1.99)	(-1.99)
military spending	-0.259**	-0.261**	-0.261**	-0.262**	-0.259**	-0.258**	-0.258**	-0.260**	-0.252**	-0.253**	-0.25**
	(-2.18)	(-2.20)	(-2.14)	(-2.16)	(-2.18)	(-2.17)	(-2.18)	(-2.20)	(-2.15)	(-2.17)	(-2.07)
trade	0.002	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002
	(0.40)	(0.43)	(0.28)	(0.30)	(0.41)	(0.41)	(0.41)	(0.39)	(0.50)	(0.48)	(0.41)
corruption democracy*		-0.003		-0.002							0.003
		(-0.67)		(-0.45)							(0.52)
youth democracy*			0.005**	0.005**							0.001
			(2.14)	(2.10)							(0.33)
corruption growth*					0.949		0.908				0.722
					(1.24)		(1.15)				(0.90)
youth growth*						0.172	0.055				0.218

							(0.53)	(0.16)				(0.64)
corruption education*									-0.001		-0.002	-0.003
									(-0.20)		(-0.59)	(-0.70)
youth education*										0.003**	0.003**	0.003
										(2.30)	(2.36)	(1.56)
corruption oil rents*												-0.002
												(-0.16)
Obs. (108 countries)		1503	1503	1503	1503	1503	1503	1503	1503	1503	1503	1503
(Within) R^2		0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.36	0.36	0.36

Note as in Table 1.

Table 4. Average marginal effects of corruption on political stability at different levels of the youth bulge (% of total population)

	d(*stability*)/d(*corruption* in previous year)	robust s.e.	z	p-value
Youth% (previous year)				
10	0.227	0.165	1.37	0.17
13	0.035	0.120	0.29	0.768
16	-0.156	0.088	-1.76	0.078
19	-0.348	0.086	-4.02	0
22	-0.540	0.115	-4.68	0
25	-0.732	0.159	-4.59	0

Table 5. Political stability, corruption and an alternative youth bulge (20-29 years of age/20 years of age and higher): Dependent variable: *Stability*

	(5.1)	**(5.2)**	**(5.3)**	**(5.4)**	**(5.5)**	**(5.6)**	**(5.7)**	**(5.8)**	**(5.9)**	**(5.10)**	**(5.11)**
corruption	0.271	0.385	0.213	0.320	0.250	0.277	0.256	0.286	0.191	0.544	0.403
	(1.18)	(1.01)	(0.97)	(0.89)	(1.09)	(1.22)	(1.13)	(0.49)	(0.87)	(0.99)	(0.72)
youth	0.126**	0.136**	0.058	0.068	0.126**	0.125**	0.125**	0.127**	-0.016	-0.004	-0.036
	(2.37)	(2.16)	(0.94)	(0.97)	(2.39)	(2.34)	(2.36)	(2.12)	(-0.21)	(-0.05)	(-0.45)
*corruption*youth*	-0.020**	-0.022*	-0.017**	-0.020*	-0.020**	-0.020**	-0.020**	-0.020	-0.017**	-0.023**	-0.020
	(-2.36)	(-1.98)	(-2.14)	(-1.83)	(-2.38)	(-2.41)	(-2.41)	(-1.59)	(-2.18)	(-1.99)	(-1.56)
inequality	-0.029**	-0.029**	-0.027**	-0.027**	-0.029**	-0.030**	-0.029**	-0.029**	-0.029**	-0.028**	-0.027**
	(-2.48)	(-2.47)	(-2.27)	(-2.26)	(-2.45)	(-2.49)	(-2.46)	(-2.49)	(-2.37)	(-2.30)	(-2.21)
democracy	0.010	0.019	-0.066**	-0.058	0.010	0.010	0.009	0.010	0.004	0.005	-0.041
	(0.80)	(0.73)	(-2.09)	(-1.55)	(0.79)	(0.77)	(0.77)	(0.78)	(0.37)	(0.41)	(-1.07)
growth	1.341	1.347	1.331	1.338	-1.938	-0.883	-3.084	1.339	1.523	1.485	-3.527
	(1.07)	(1.07)	(1.05)	(1.06)	(-0.57)	(-0.27)	(-0.74)	(1.07)	(1.20)	(1.17)	(-0.83)
oil rent	-0.009	-0.009	-0.008	-0.008	-0.010	-0.009	-0.010	-0.009	-0.008	-0.007	0.015
	(-0.50)	(-0.51)	(-0.42)	(-0.43)	(-0.58)	(-0.52)	(-0.59)	(-0.49)	(-0.42)	(-0.38)	(0.21)
education	0.011	0.011	0.009	0.009	0.011	0.011	0.011	0.011	-0.032*	-0.029	-0.025
	(1.37)	(1.37)	(1.15)	(1.15)	(1.39)	(1.37)	(1.39)	(0.98)	(-1.96)	(-1.65)	(-1.29)
fertility	-0.692***	-0.676***	-0.556**	-0.540**	-0.691***	-0.689***	-0.689***	-0.693***	-0.295	-0.294	-0.287
	(-2.81)	(-2.66)	(-2.28)	(-2.14)	(-2.82)	(-2.79)	(-2.81)	(-2.80)	(-0.94)	(-0.95)	(-0.91)
investment	0.046***	0.046***	0.044***	0.044***	0.045***	0.046***	0.046***	0.046***	0.043***	0.043***	0.044***
	(3.69)	(3.68)	(3.67)	(3.66)	(3.66)	(3.71)	(3.64)	(3.67)	(3.45)	(3.46)	(3.58)
government spending	0.018	0.017	0.018	0.018	0.015	0.018	0.016	0.018	0.013	0.013	0.013
	(0.52)	(0.51)	(0.55)	(0.54)	(0.45)	(0.52)	(0.46)	(0.52)	(0.39)	(0.38)	(0.37)
inflation	-0.026**	-0.026**	-0.025**	-0.025**	-0.026**	-0.025**	-0.026**	-0.026**	-0.024**	-0.024**	-0.024*
	(-2.18)	(-2.16)	(-2.03)	(-2.02)	(-2.28)	(-2.16)	(-2.23)	(-2.18)	(-2.02)	(-1.99)	(-1.96)
military spending	-0.256**	-0.256**	-0.269**	-0.270**	-0.255**	-0.255**	-0.255**	-0.256**	-0.251**	-0.252**	-0.254**
	(-2.14)	(-2.15)	(-2.18)	(-2.19)	(-2.14)	(-2.13)	(-2.14)	(-2.15)	(-2.09)	(-2.11)	(-2.05)
trade	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.002
	(0.42)	(0.45)	(0.33)	(0.36)	(0.43)	(0.44)	(0.44)	(0.42)	(0.56)	(0.54)	(0.46)
corruption democracy*		-0.002		-0.002							0.002
		(-0.40)		(-0.39)							(0.26)
youth democracy*			0.003**	0.003**							0.001
			(2.22)	(2.22)							(0.85)
corruption growth*					0.794		0.720				0.501
					(1.01)		(0.89)				(0.61)
*youth*growth*						0.078	0.051				0.103
						(0.60)	(0.37)				(0.72)
corruption education*								-0.000		-0.002	-0.002

								(-0.03)		(-0.72)	(-0.57)
*youth*education*									0.002**	0.002**	0.002
									(2.27)	(2.40)	(1.62)
corruption oil rents*											-0.005
											(-0.34)
Obs. (108 countries)	1503	1503	1503	1503	1503	1503	1503	1503	1503	1503	1503
(Within) R^2	0.34	0.34	0.35	0.35	0.34	0.34	0.34	0.34	0.35	0.35	0.35

Table 6. Average marginal effects of corruption on political stability at different levels of the youth bulge (20-29 years of age as % of total population beyond 20 years of age)

	d(*stability*)/d(*corruption* in previous year)	robust s.e.	z	p-value
Youth % (previous year)				
13	0.017	0.135	0.13	0.9
16	-0.041	0.116	-0.36	0.722
19	-0.100	0.100	-0.99	0.321
22	-0.158	0.089	-1.78	0.075
25	-0.217	0.083	-2.61	0.009
28	-0.276	0.084	-3.26	0.001
31	-0.334	0.092	-3.6	0
34	-0.393	0.106	-3.7	0
37	-0.452	0.123	-3.66	0
40	-0.510	0.142	-3.57	0

43			-	
	-0.569	0.163	3.48	0.001

Table 7. Political stability, WGI corruption and youth (country and time fixed effects OLS panel regressions).

	(7.1)	**(7.2)**	**(7.3)**	**(7.4)**	**(7.5)**	**(7.6)**	**(7.7)**	**(7.8)**	**(7.9)**	**(7.10)**	**(7.11)**
corruption	1.622***	1.155	1.645***	1.022	1.625***	1.66***	1.66***	0.323	1.401**	0.596	0.093
	(2.68)	(1.51)	(2.74)	(1.34)	(2.70)	(2.79)	(2.79)	(0.33)	(2.58)	(0.48)	(0.08)
youth	-0.027	-0.020	-0.019	0.029	-0.026	-0.023	-0.023	-0.022	-0.140	-0.082	-0.055
	(-0.46)	(-0.34)	(-0.20)	(0.30)	(-0.42)	(-0.38)	(-0.38)	(-0.37)	(-1.09)	(-0.50)	(-0.34)
*corruption*youth*	-0.08***	-0.07***	-0.08***	-0.07***	-0.08***	-0.08***	-0.08***	-0.06**	-0.07***	-0.06**	-0.057*
	(-3.18)	(-2.67)	(-3.24)	(-2.69)	(-3.15)	(-3.28)	(-3.29)	(-2.19)	(-3.14)	(-2.14)	(-1.89)
inequality	-0.004	-0.003	-0.005	-0.003	-0.005	-0.005	-0.005	-0.001	-0.003	-0.002	-0.001
	(-0.26)	(-0.18)	(-0.27)	(-0.18)	(-0.28)	(-0.29)	(-0.29)	(-0.08)	(-0.20)	(-0.10)	(-0.04)
democracy	-0.001	-0.000	0.007	0.044	-0.000	-0.000	-0.000	-0.003	-0.004	-0.004	0.069
	(-0.05)	(-0.00)	(0.14)	(0.81)	(-0.02)	(-0.01)	(-0.01)	(-0.19)	(-0.23)	(-0.24)	(1.18)
growth	2.327**	2.269**	2.353**	2.380**	2.415**	5.908**	5.853	2.339**	2.247**	2.294**	6.686*
	(2.03)	(2.07)	(2.25)	(2.34)	(2.14)	(2.01)	(1.65)	(2.07)	(1.97)	(2.05)	(1.95)
oil rent	0.017	0.019	0.017	0.020	0.020	0.019	0.019	0.018	0.017	0.017	0.021
	(0.77)	(0.87)	(0.77)	(0.89)	(0.85)	(0.84)	(0.82)	(0.78)	(0.76)	(0.78)	(0.69)
education	0.012*	0.011*	0.012*	0.012*	0.012*	0.013*	0.012*	0.022**	-0.011	0.007	-0.010
	(1.78)	(1.67)	(1.80)	(1.70)	(1.78)	(1.84)	(1.83)	(2.13)	(-0.58)	(0.19)	(-0.26)
fertility	0.089	0.067	0.082	0.019	0.111	0.127	0.127	0.120	0.273	0.206	0.245
	(0.27)	(0.20)	(0.23)	(0.05)	(0.33)	(0.38)	(0.38)	(0.36)	(0.74)	(0.50)	(0.61)
investment	0.041***	0.041***	0.041***	0.041***	0.041***	0.039**	0.039**	0.040***	0.040**	0.039**	0.035**
	(2.82)	(2.82)	(2.82)	(2.81)	(2.80)	(2.57)	(2.58)	(2.67)	(2.62)	(2.62)	(2.27)
government spending	-0.031	-0.031	-0.031	-0.031	-0.029	-0.031	-0.031	-0.032	-0.031	-0.031	-0.031
	(-0.81)	(-0.81)	(-0.81)	(-0.82)	(-0.76)	(-0.81)	(-0.81)	(-0.84)	(-0.80)	(-0.83)	(-0.80)
inflation	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(-0.19)	(-0.23)	(-0.20)	(-0.29)	(-0.23)	(-0.13)	(-0.13)	(-0.23)	(-0.17)	(-0.21)	(-0.25)
military spending	0.003	0.006	0.004	0.011	0.003	0.001	0.001	0.020	0.003	0.015	0.019
	(0.02)	(0.04)	(0.03)	(0.08)	(0.02)	(0.01)	(0.01)	(0.13)	(0.02)	(0.10)	(0.13)
trade	-0.005	-0.006	-0.005	-0.006	-0.005	-0.006	-0.006	-0.005	-0.005	-0.005	-0.006
	(-1.16)	(-1.25)	(-1.14)	(-1.24)	(-1.18)	(-1.22)	(-1.22)	(-1.05)	(-1.08)	(-1.04)	(-1.19)
*corruption*democracy*		0.011		0.018							0.024*
		(0.95)		(1.54)							(1.90)
*youth*democracy*			-0.000	-0.002							-0.003
			(-0.13)	(-0.69)							(-1.06)
*corruption*growth*					-0.620		-0.032				-0.029
					(-0.78)		(-0.03)				(-0.03)
*youth*growth*						-0.145	-0.142				-0.175
						(-1.28)	(-1.04)				(-1.29)
*corruption*education*								0.009		0.006	0.004
								(1.48)		(0.75)	(0.45)
*youth*education*									0.001	0.001	0.001
									(1.15)	(0.44)	(0.87)

*corruption*oil rents*											0.002
											(0.08)
Obs. (104 countries)	810	810	810	810	810	810	810	810	810	810	810
(Within) R^2	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.24	0.23	0.24	0.25

See notes of Table 1. The WGI corruption (reversed by *-1) is used.

Table 8. Average marginal effects of WGI corruption on political stability at different levels of the youth bulge (15-24 years of age as % of total adult population beyond 15 years of age)

	d(*stability*)/d(wgi *corruption* in previous year)	robust s.e.	z	p-value
Youth % (previous year)				
12	0.595	0.326	1.82	0.06
15	0.338	0.273	1.24	0.21
18	0.081	0.236	0.35	0.72
21	-0.174	0.223	-0.78	0.43
24	-0.431	0.238	-1.81	0.07
27	-0.688	0.277	-2.48	0.01
30	-0.944	0.331	-2.85	0.004
33	-1.201	0.395	-3.04	0.002
36	-1.458	0.463	-3.14	0.002
39	-1.714	0.536	-3.2	0.001

Table 9. Comparing OLS and robust estimators, (1984–2012). Dependent variable: *Stability*

	(9.1)	**(9.2)**
	OLS (Model 1.1 in Table 1)	Robust estimator
corruption	0.321*	0.239
	(2.07)	(1.96)
youth	0.125***	0.127***
	(3.51)	(4.52)
*corruption*youth*	-0.0224***	-0.0161***
	(-3.88)	(-3.54)
inequality	-0.0326***	-0.0321***
	(-3.66)	(-4.57)
democracy	0.0105	0.00315
	(1.44)	(0.55)
growth	1.369	0.969
	(1.61)	(1.44)
oil rent	-0.00778	-0.0118
	(-0.47)	(-0.91)
education	0.0123**	0.00964**
	(3.00)	(2.99)
fertility	-0.732***	-0.936***
	(-6.23)	(-10.13)
investment	0.0481***	0.0396***
	(5.63)	(5.88)
government spending	0.0173	-0.00490
	(1.03)	(-0.37)
inflation	-0.0261*	-0.0364***
	(-2.04)	(-3.62)
military spending	-0.265***	-0.00927
	(-5.27)	(-0.23)
trade	0.00177	0.00194
	(0.73)	(1.02)
Obs	1503	1502
R^2	0.79	0.86

Note: *t statistics* are in parenthesis. We use ordinary standard errors because leverage plot is not available for robust standard errors in Stata. All independent variables are lagged by one year. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 10. Dynamic panel data estimation. Dependent variable: *Stability*

	(10.1)	**(10.2)**	**(10.3)**	**(10.4)**
	two-step diff GMM	one-step diff GMM	two-step diff GMM	one-step diff GMM
corruption (ICRG)	1.240*	1.252**		
	(1.95)	(2.24)		
corruption (WGI)			3.007	3.556
			(1.03)	(1.57)
youth	0.366**	0.363***	0.026	-0.038
	(2.46)	(2.64)	(0.12)	(-0.22)
*corruption (ICRG)*youth*	-0.044**	-0.044**		
	(-2.11)	(-2.39)		
*corruption (WGI)*youth*			-0.145	-0.153*
			(-1.36)	(-1.66)
inequality	-0.018	-0.032	-0.020	-0.074
	(-0.51)	(-0.98)	(-0.30)	(-0.90)
democracy	-0.063**	-0.063**	0.006	-0.082
	(-2.23)	(-2.31)	(0.06)	(-1.19)
growth	-3.781	-3.247	-2.793	-2.036
	(-1.50)	(-1.44)	(-0.56)	(-0.51)
oil rent	-0.035	-0.008	0.088	0.067
	(-0.60)	(-0.18)	(0.83)	(0.71)
education	0.034*	0.035*	-0.029	-0.004
	(1.75)	(1.94)	(-0.87)	(-0.09)
fertility	-0.500	-0.413	-0.846	0.253
	(-1.41)	(-1.49)	(-0.73)	(0.21)
investment	0.027	0.037	-0.018	-0.076
	(0.98)	(1.50)	(-0.28)	(-1.42)
government spending	-0.092	-0.088	-0.162	-0.110
	(-1.26)	(-1.30)	(-0.89)	(-0.57)
inflation	-0.127	-0.113	-1.296	-3.499
	(-0.97)	(-1.00)	(-0.50)	(-1.59)
military spending	0.060	0.009	0.565	1.484
	(0.30)	(0.05)	(0.72)	(1.48)
trade	0.001	0.001	0.008	-0.004
	(0.06)	(0.07)	(0.41)	(-0.26)
lag of stability	0.764***	0.750***	0.742***	0.713***
	(9.62)	(9.78)	(2.71)	(3.85)
Obs.	1395	1395	699	699
Countries	104	104	95	95
Hansen test (p-value)	0.274	0.274	0.162	0.162
AR(1)- p value	0.000	0.000	0.064	0.022
AR(2)- p-value	0.173	0.099	0.756	0.482

Note: Robust *t statistics* are in parentheses. One year lag of independent variables is used. Year fixed effects are included. To estimate the GMM specifications, we use the *xtabond2* procedure which is presented in details by Roodman (2009). ***,**, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 11. Political stability, corruption and youth in sub-samples (panel OLS country and year fixed effects). Dependent variable: *stability*

	(11.1)	**(11.2)**
	20<youth<42	11<youth<20
corruption	-0.315***	0.059
	(-2.82)	(0.60)
youth	0.007	0.087
	(0.10)	(1.35)
inequality	-0.013	-0.041**
	(-0.69)	(-2.19)
democracy	0.014	-0.012
	(0.79)	(-1.10)
growth	1.679	2.338*
	(1.06)	(1.98)
oil rent	0.005	-0.084
	(0.22)	(-1.55)
education	0.020	0.002
	(1.16)	(0.47)
fertility	-0.018	0.065
	(-0.05)	(0.12)
investment	0.045***	0.027
	(3.00)	(1.21)
government spending	0.026	-0.038
	(0.61)	(-0.98)
inflation	-0.021*	0.052
	(-1.67)	(1.51)
military spending	-0.245	-0.095
	(-1.59)	(-0.69)
trade	-0.001	0.003
	(-0.11)	(0.65)
Obs.	881	622
Countries	79	42
R^2	0.37	0.41

Note: Robust *t-statistics* are in parentheses (clustered standard errors at country level). All independent variables are lagged by one year. Re-scaled ICRG corruption is used. Youth is defined as youth population as % of adult population. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table A1. Summary statistics of variables (sample of Model 1.1.in Table 1)

Variable	Obs.	Mean	Std. Dev.	Min	Max
stability	1503	9.58	2.10	0	12
corruption	1503	3.58	1.36	1	7
Youth (% of adult population)	1503	24.38	7.99	11.48	40.80
Inequality (market Gini index)	1503	44.36	6.93	24.28	69.95
Democracy (Vanhanen index)	1503	22.72	12.76	0	49
growth	1503	0.022	0.042	-0.18	0.40
oil rent (% of GDP)	1503	2.45	6.82	0	68.84
Education (secondary school enrollment rate)	1503	79.28	30.45	5.13	162.61
fertility	1503	2.62	1.51	1.07	7.74
Investment (fixed capital formation % of GDP)	1503	22.19	5.44	4.27	43.58
government spending (% of GDP)	1503	15.94	5.05	3.13	42.50
inflation	1503	21.93	224.70	-4.47	7481.66
military spending (% of GDP)	1503	2.04	1.54	0	17.68
Trade (% of GDP)	1503	74.51	41.02	13.25	348.39

Note: stability is the ICRG internal conflict index (higher means less internal conflict) and *corruption* is the ICRG index of corruption (re-scaled, higher means now more corruption).

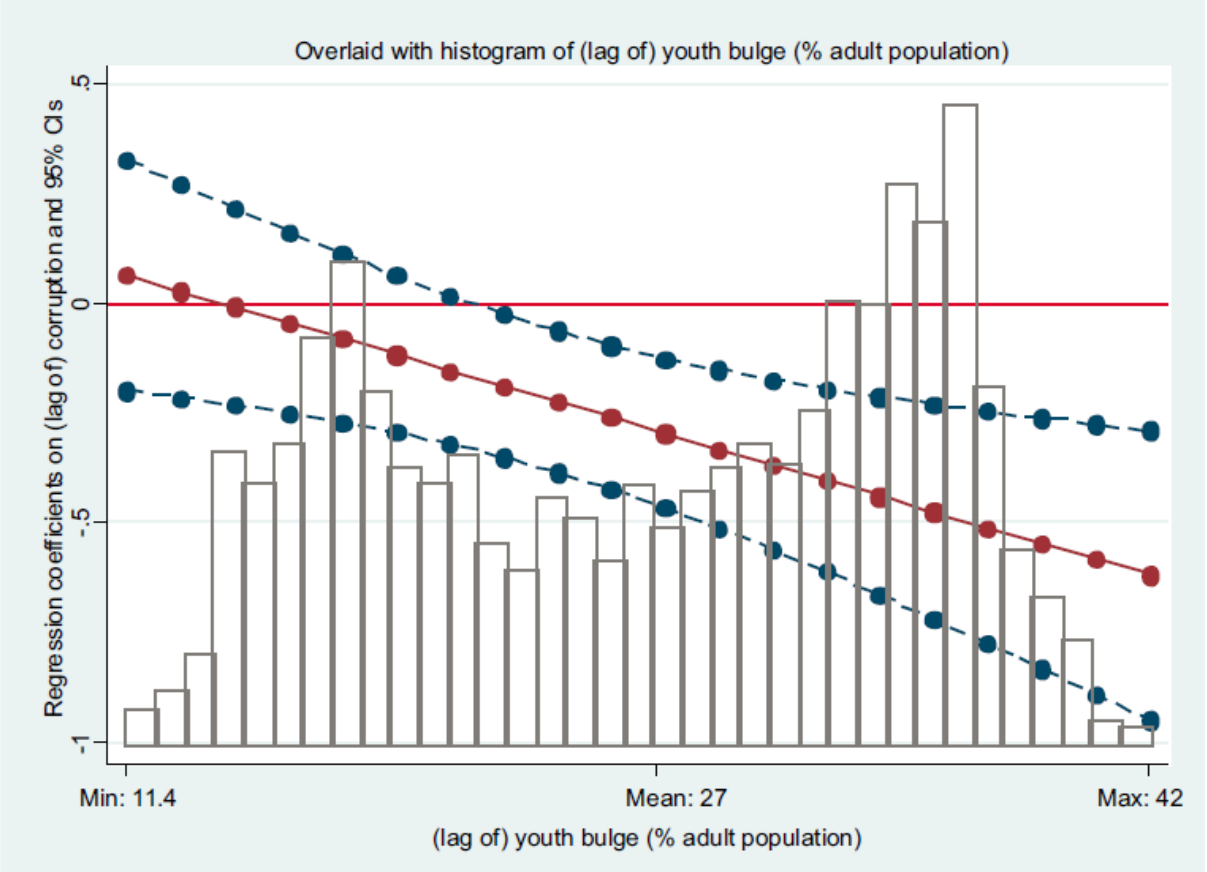
Table A2. Description of variables

Variable	Definition and source
stability	This is an assessment of political violence in the country and its actual or potential impact on governance. The highest rating is given to those countries where there is no armed or civil opposition to the government and the government does not indulge in arbitrary violence, direct or indirect, against its own people. The lowest rating is given to a country embroiled in an on-going civil war. The risk rating assigned is the sum of three subcomponents, each with a maximum score of four points and a minimum score of 0 points. A score of 4 points equates to Very Low Risk and a score of 0 points to Very High Risk. The three elements in this index are: Civil War/Coup Threat, Terrorism/Political Violence, Civil Disorder. Its range is from 0 to 12. The higher score means lower internal conflict or higher internal stability. Source: ICRG (2015)
corruption	Corruption index of ICRG: is an assessment of corruption within the political system. It is from 0 (most corrupt) to 6 (least corrupt). We have rescaled it by subtracting their scores from 7. Higher re-scaled values mean more political corruption. Source: ICRG (2013). Corruption of World Governance Indicators: It "captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests". The *WGI Corruption* is from about -2.5 to 2.5. We have reversed it by multiplying it with (-1). Higher scores in this revised index mean more corruption. Source: http://data.worldbank.org/data-catalog/worldwide-governance-indicators
youth	The share of youth population (15 to 24 years) in adult population (15+). Also we use the share of youth population in total population and share of population between 20 and 29 years of age in population beyond 20 years of age. Source: http://data.worldbank.org/data-catalog/population-projection-tables
fertility	Total fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with age-specific fertility rates of the specified year.. Source: World Bank (2016)
growth	GDP per capita (constant 2010 US$) growth rate Source: World Bank (2016)
investment	Gross fixed capital formation (% of GDP). It includes land improvements; plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Source: World Bank (2016)
trade	Trade is the sum of exports and imports of goods and services measured as a share of gross domestic product. Source: World Bank (2016)
government spending	General government final consumption expenditure (% of GDP). Source: World Bank (2016)
military spending	Military expenditure (% of GDP). Source: World Bank (2016)
inflation	Consumer price index changes. Source: World Bank (2016)
education	Gross enrolment ratio, secondary, both sexes (%).Secondary education completes the provision of basic education that began at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction using more specialized teachers. Source: World Bank (2016)
oil rent	Oil rents (% of GDP). Oil rents are the difference between the value of crude oil production at world prices and total costs of production. Source: World Bank (2016)
democracy	Vanhanen index of democracy. Source: http://www.fsd.uta.fi/en/data/catalogue/FSD1289/meF1289e.html
inequality	Market income inequality (pretax, pre-transfer). Source: Solt (2009)

Table A3. List of 79 countries in sample of Model 11.1 in Table 11 (20<youth<42)

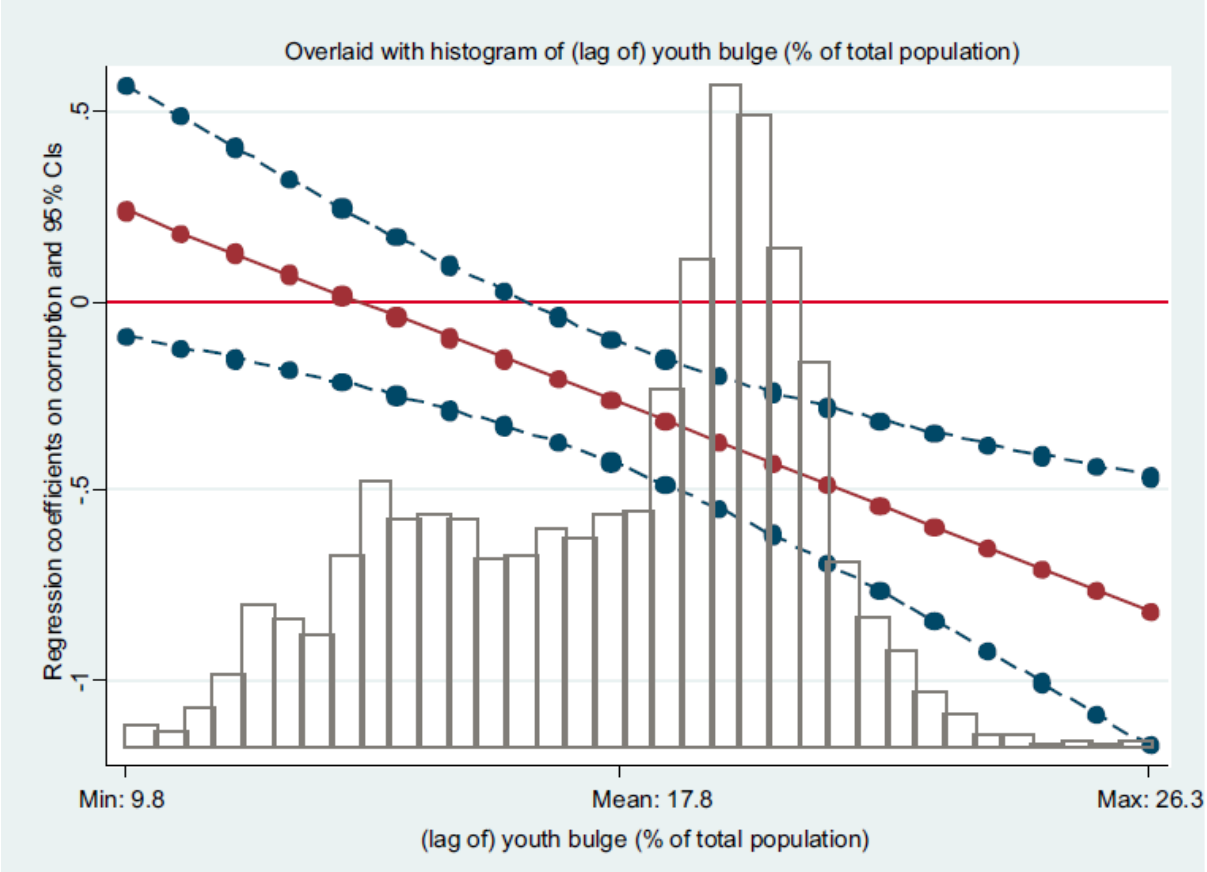
Albania	Algeria	Angola	Argentina	Armenia	Azerbaijan	Bangladesh	Bolivia
Botswana	Burkina Faso	Cameroon	Chile	China	Colombia	Costa Rica	Cyprus
Czech Republic	Dominican Republic	Ecuador	Egypt	El Salvador	Gambia	Ghana	Guatemala
Guinea-Bissau	Honduras	India	Indonesia	Iran	Iraq	Ireland	Israel
Jamaica	Jordan	Kazakhstan	Kenya	Korea Rep.	Madagascar	Malawi	Malaysia
Mali	Mexico	Moldova	Mongolia	Morocco	Mozambique	Namibia	Netherlands
New Zealand	Nicaragua	Niger	Nigeria	Pakistan	Panama	Papua New Guinea	Paraguay
Peru	Philippines	Poland	Portugal	Romania	Russian Federation	Senegal	Sierra Leone
Slovak Republic	South Africa	Spain	Sri Lanka	Tanzania	Thailand	Togo	Trinidad and Tobago
Tunisia	Turkey	Uganda	Uruguay	Venezuela	Yemen Rep.	Zimbabwe	

Figure 1. Marginal effects of *corruption* (previous period) on political *stability* at different levels of the previous period *youth* bulge (15-24 years of age/15 years of age and higher)



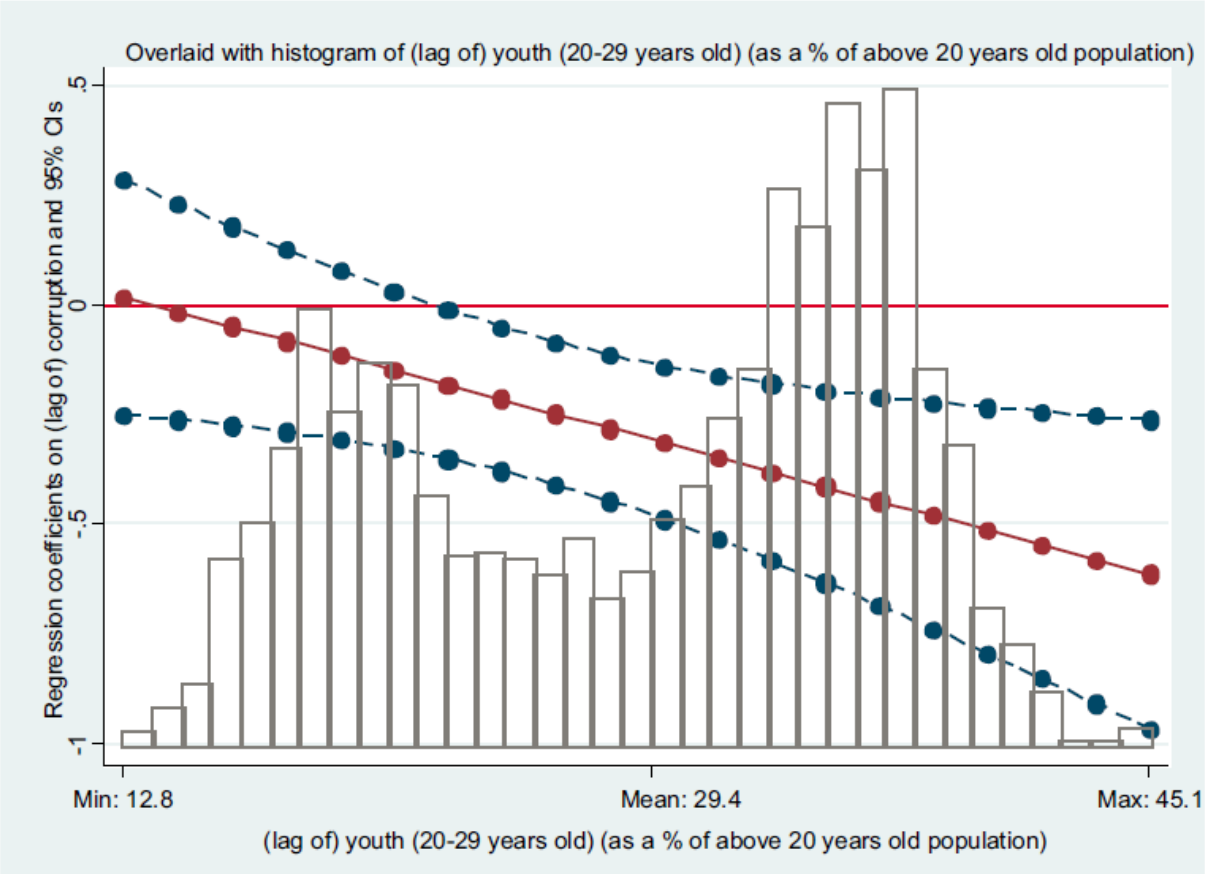
Note: solid middle line shows the marginal effects and dashed lines are confidence intervals at 95% level. Calculations are based on Model 1.1 in Table 1.

Figure 2. Marginal effects of *corruption* (previous period) on political *stability* at different levels of the previous period youth population (% of total population)



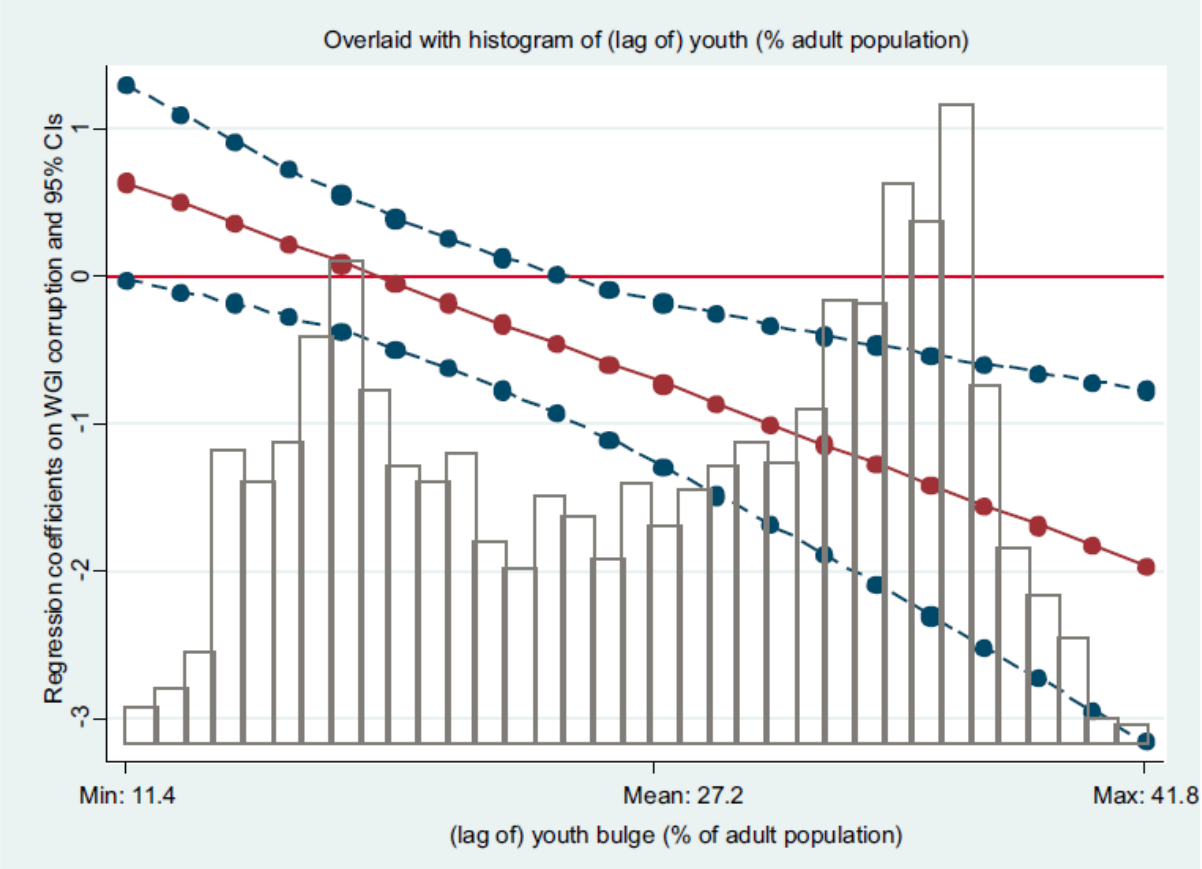
Note: solid middle line shows the marginal effects and dashed lines are confidence intervals at 95% level. Calculations are based on Model 3.1 in Table 3.

Figure 3. Marginal effects of *corruption* (previous period) on political *stability* at different levels of the previous period youth population (20-29 years old as % of total population above 20 years old)



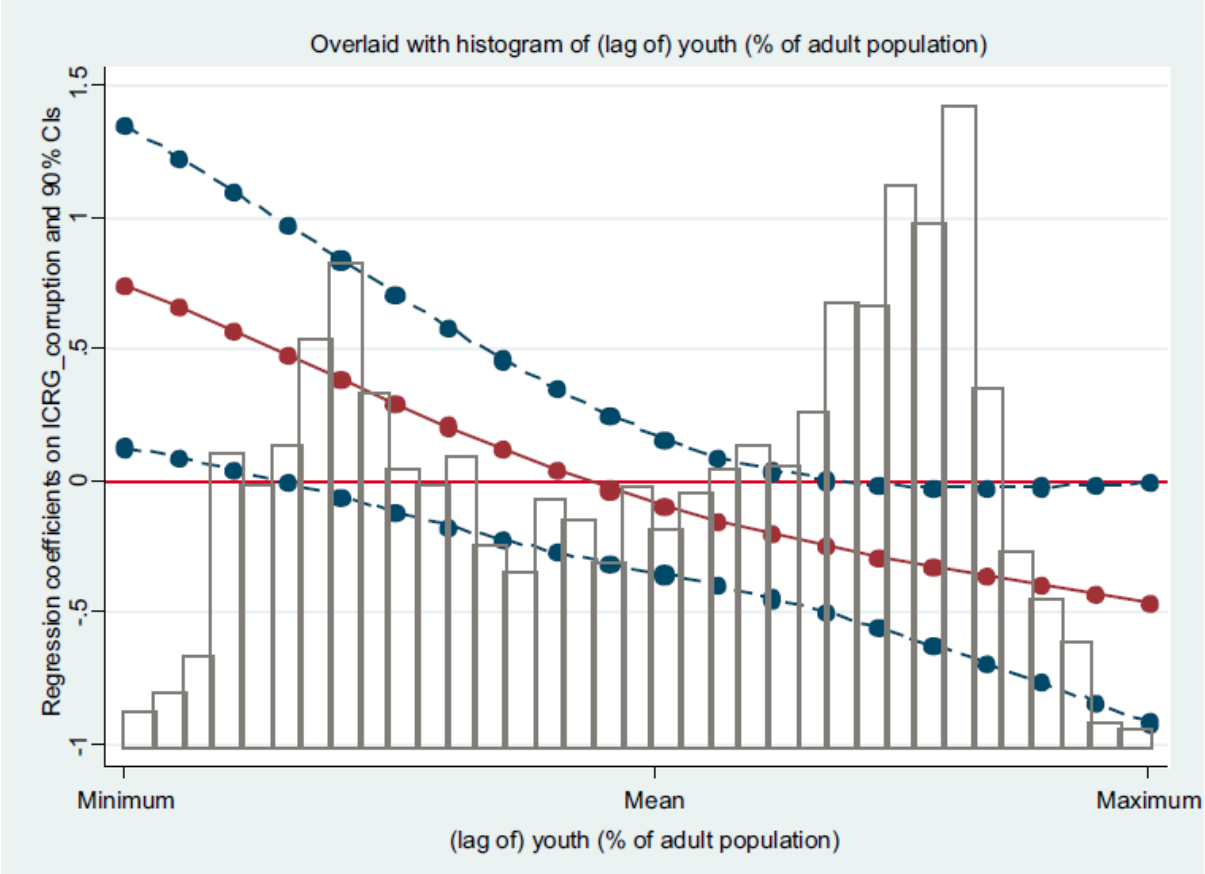
Note: solid middle line shows the marginal effects and dashed lines are confidence intervals at 95% level. Calculations are based on Model 5.1 in Table 5.

Figure 4. Marginal effects of WGI *corruption* (reversed, previous period) on political *stability* at different levels of the previous period youth population (15-24 years old as % of adult population above 15 years old)



Note: solid middle line shows the marginal effects and dashed lines are confidence intervals at 95% level. Calculations are based on Model 7.1 in Table 7.

Figure 5. Marginal effects of ICRG *corruption* (re-scaled, previous period) on political *stability* at different levels of the previous period youth population (15-24 years old as % of adult population above 15 years old)



Note: solid middle line shows the marginal effects and dashed lines are confidence intervals at 90% level. Calculations are based on Model 10.2 in Table 10.

Highlights

- Relative size of the youth matters in how corruption affects the stability
- We use panel data from 1984 to 2012 for more than 100 countries
- Corruption is a destabilizing factor when youth exceeds 20% of adult population