

# Human Security Index Paper: Ukraine

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## **Executive Summary**

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## Introduction

Ukraine is a country at the crossroads not only of Europe and Asia but also of developed and developing countries. It is a state with a deep, rich yet tumultuous history. Re-emerging from the Soviet Union in 1991, Ukraine has been plagued by numerous human security issues as the country attempts to re-orient itself in an increasingly globalized world.

### *What is Human Security?*

We define human security as a multidimensional and people-centered approach to deal with the consequence of complex threats, such as HIV and human trafficking, in a universal and preventative manner. Human security must be multidimensional as these problems are highly complex and not only require multidisciplinary approaches but also non-traditional responses. Human security must also be people-centered, as the nature, acuteness, and practicability of solving such problems can be identified only if one realizes how these issues are seen by the people who immediately face them and will have to solve them. Tackling such complex problems requires policies and solutions that are both universal and preventative, as a reactionary response would never solve many of these issues. Our definition is heavily influenced by the 1994 United Nations Development Program (UNDP) report.

### *Ukraine (Human Security Problems)*

Ukraine is a country under severe duress, with a wide range of human security problems. The first and foremost problem is the economy, which is a primary driver for the other human security issues. The collapse of the Soviet Union and the ensuing rapid introduction to market capitalism created a market shock to the Ukrainian economy from which Ukraine is still trying to recover. Additionally, decades of command and control economy under the Soviet Union had left the Ukrainian economy uncompetitive in the global marketplace.

Undoubtedly, the economic situation has resulted in high unemployment, with the consequences of large-scale drug abuse and a dramatic rise in both human trafficking and crime. Furthermore, as the economy fluctuated between highs and lows, Ukrainians became impatient waiting for economic and political transformation.<sup>1</sup> The Orange Revolution<sup>i</sup> of 2004-2005 and the 2013-2014 Euromaidan clashes<sup>ii</sup> were a direct result of public perceptions of the Ukrainian government failing to address economic and political transformation.<sup>2</sup> Consequently, there has been a decrease both in the stability of the Ukrainian government as well as reductions in freedom of the press and freedom of association. Unfortunately, this has led to an increase in politically motivated violence as actors vie for political control.

### *Human Security Indicators*

As a result of the aforementioned human security problems, we have selected four indicators which may help describe the human security problems faced by Ukraine from 2003 to 2013. The first indicator is economic security, which can be described as the government assuring a basic income for individuals, usually for productive and remunerative work. The second indicator is health security, defined as a government attempts to provide minimum protection from diseases and unhealthy lifestyles. The third indicator is personal security, which is roughly defined as the government aiming to protect people from harm. Finally, the fourth indicator is political security, which is defined as whether the government not only honors basic human rights but allows for freedom of ideas and information.

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<sup>i</sup> The Orange Revolution was a series of protests and political conflicts which took place in Ukraine from late 2004 to 2005. The Orange Revolution was sparked by the immediate aftermath of the 2004 Ukrainian election, in which the large segments of the Ukrainian population claimed massive corruption and electoral fraud. The end result was a second run-off election under intense domestic and international scrutiny.

<sup>ii</sup> After been mired by years of corruption, mismanagement, lack of economic and an inability to secure funding from public markets, Ukrainian President Yanukovich fled the country in the face of increasing political unrest, including occupations of government institutions and a covert Russian invasion of the Crimea oblast (province). Subsequently, protests and a pro-Russian separatist movements followed in some south-eastern regions of Ukraine...

### *Baseline Assessment*

Ukraine was making steady albeit slow progress in economic, personal, and political security. Health security was consistently on a downward trend. Unfortunately, the political upheaval of the Orange Revolution of 2004-2005 and the economic downturn brought on by the 2007-2009 “Great Recession” both undermined and scaled back the previous progress. The economic downturn also produced political instability, and as a result of both the political and economic downturn, the health and personal security within the country deteriorated.

Regrettably, the recent dramatic upheavals caused by the “Euromaidan” revolution and subsequent Russian occupations of Ukrainian territory have not only undermined all the aforementioned security indicators but have made collecting data increasingly difficult. Additionally, the low intensity conflict amongst the Ukrainian government and pro-Russian separatists occasionally escalates into a full blown civil war with significant casualties and transfers of territory. Thus, the human security problems faced by Ukraine are tragically likely to increase significantly.

### *Methodology*

This paper is organized as follows: The Assessment section will evaluate the human security situation in Ukraine by identifying the most pressing security problems, as well as explain the relationship between these human security problems and Ukraine’s political and economic characteristics. The Analysis section will create an index to measure human security in Ukraine, and track the changes over time. The Analysis section will also operationalize the previous section’s indicators through the explanation of which variables are appropriate for measuring those indicators. Finally, the Analysis section will include a composite human security index for Ukraine in 2003 and 2013. All data within the analysis section will be

compared across the European region, to greatly enhance the utility of the data. The Conclusion section will briefly reiterate the findings of the Assessment and Analysis, as well as the implications of the results.

## **Assessment**

### *Most Pressing Problems & Relationship between Human Security problems and Ukraine.*

While Ukraine faced many human security problems in 2003-2013, some were more pressing than others. These included the overall state of the economy, the fragile and tumultuous political system, the lack of healthcare, and increasing threat of personal safety to the Ukrainian public. The Ukrainian economy from 2003 to 2013 was significantly hampered by years of corruption, mismanagement, lack of economic growth, and an inability to secure funding from public markets;<sup>3</sup> however, the continued high rate of unemployment, officially and unofficially, and the rising price of natural gas imports were some of the most pressing economic problems.

The deficiency of the economy led to a highly charged political atmosphere. President Leonid Kuchma who had reigned as president in Ukraine from 1994 to 2005 was surrounded by numerous corruption scandals and the suppression of both political and media rights. With President Kuchma constitutionally forbidden from running again, the 2004-2005 elections ignited numerous political tensions within Ukraine.<sup>4</sup> The subsequent Orange Revolution displayed how divisive politics had become in Ukraine. Large scale protests, suppression of the media, and wide claims of corruption were prevalent. Within pro-Russian and pro-Yanukovich regions there were calls for the possible breakup of Ukraine, should Yuschenko declare victory. Only the intervention of the Ukrainian Supreme Court and an internationally as well as domestically supervised run-off prevented further violence.<sup>5</sup> The crisis, however, demonstrated how pressing the problems of government stability and political freedom had become.

The lack of adequate healthcare was a problem facing Ukraine from 2003 to 2013. The most severe and pressing lack of adequate healthcare was providing to those Ukrainians who were living with HIV, as well as those suffering from substance abuse. Insufficient access to healthcare for these communities disposed them to additional hardships, even as the prevalence of such communities continued to rise in Ukraine.

As effective governance and economic activity dwindled, there rose significant personal safety concerns. Faced with the lack of prospects within Ukraine, many Ukrainians attempted to migrate or provide for their families through overseas work. Unfortunately, this led many Ukrainians to be highly susceptible to human trafficking. Consequently, there was an explosion in human trafficking within Ukraine. In tandem with the rise of human trafficking came a significant rise in crime. Ukraine held one of the highest global incarceration rates during the time of the Orange Revolution. While these rates have declined, they are still a prevalent issue as the flawed justice system, arbitrary detentions, and poor prison conditions continue.

## **Analysis**

### *Four Indicators*

In order to determine our composite Human Security Index scores for 2003 and 2013, we studied four indicators with two individual variables. These indicators and variables are: 1) Economic security, using unemployment rate and heat energy price index; 2) Health security, using HIV rates and substance abuse; 3) Personal security, using incarceration rates and human trafficking; and 4) Political security, using voice & accountability and political stability.

### *Economic Security*

Economic security can be defined as “access to basic needs infrastructure pertaining to health, education, dwelling, information, and social protection, as well as work-related



security.”<sup>6</sup> The economy drives many other factors of life, including social and health issues. Ukraine’s economy is very vulnerable to global and regional economic shifts, including energy price changes, contributing to unemployment, emigration, alcohol and drug use and many other problems. Using the variables of unemployment and energy price, we determined indicator scores of 0.914 for 2003 and 0.902 for 2013. While these numbers do show a decrease, they only give a small idea of the economic issues facing Ukraine.

$$(0.829+0.998)/2 = \underline{0.914} \text{ (2003) Economic Security}$$

$$(0.810+0.994)/2 = \underline{0.902} \text{ (2013) Economic Security}$$

### I. Unemployment

Unemployment rate refers to the percentage of the total labor force that is without work but seeking work and able to work.<sup>7</sup> Especially in recent years, unemployment has been a problem in Europe as a whole because of the economic recession and shifting economies. Ukraine has also struggled with unemployment since its independence in 1991. The unemployment in Ukraine has caused a variety of other problems such as increased alcohol and drug abuse, increased black market and cybercrime, and even increased presence of organized crime and human trafficking.

Unemployment especially effects youth and those who have received higher education. In 2012, compared to an overall unemployment rate of 7.7%, youth unemployment for the total percent of the labor force ages 15-24 was 17.3%.<sup>8</sup> The latest available data for unemployment among those with secondary and tertiary education in Ukraine is from 2008, where the rate was listed at 39.7% for those with tertiary education and at 52.9% for those with only secondary education.<sup>9</sup><sup>10</sup> Ukraine has one of the lowest returns on higher education, which creates a disincentive for people to continue their education after high school, even though unemployment rates are significantly higher among that demographic.<sup>11</sup> These two unemployed groups are not

only typically the most likely to migrate out of Ukraine, but they are also the most susceptible to being trafficking or getting involved with cybercrime or organized crime.<sup>12</sup>

In comparison the rest of Europe, Ukraine's unemployment level was about average with the EU-28 and Euro area total unemployment rates in 2003, and was below the EU-28 and Euro area averages in 2013.<sup>13</sup> In both years, Spain, the Baltic countries, and the Balkan Peninsula countries had the highest rates of unemployment, with Macedonia at the highest in both 2003 and 2013. In order to determine the variable score for unemployment we looked at the unemployment rates for Ukraine for 2003 and 2013, along with the highest and lowest unemployment rates in European countries for those years. Ukraine's unemployment rate was 9.1% for 2003 and 8.2% for 2013. For 2003, the lowest rate was Iceland's at 3.4%, and the highest was Macedonia's at 36.7%. In 2013, Norway had the lowest rate at 3.1%, and Macedonia had the highest rate at 30.0%.<sup>1415</sup>

$$1 - \left[ \frac{(9.1 - 3.4)}{(36.7 - 3.4)} \right] = \underline{0.829} \text{ (2003) Unemployment Rate Variable}$$

$$1 - \left[ \frac{(8.2 - 3.1)}{(30.0 - 3.1)} \right] = \underline{0.810} \text{ (2013) Unemployment Rate Variable}$$

Ukraine's scores for the unemployment rate variable were relatively high for both years, but, unfortunately, this data does not account for those who have stopped looking for work, are not able to work, are not registered as unemployed, or have migrated out of Ukraine for work.

## II. Index of Heat Energy Prices (HEP)

Energy security is a major factor in Ukraine's economic security. In order to show this, we are using the variable of Index of Heat Energy Prices, which is "estimated using a sample of prices for a defined set of goods or services from heat energy category. Heat energy comprises hot water and steam purchased from district heating plants."<sup>16</sup> This index was created by

Euromonitor as an indicator of energy prices and availability for heating by compiling data on heat energy, as well as households, population, inflation, and the units of local currency at fixed and year-over-year rates compared to various major currencies. We are using this data to look at natural gas and energy prices because other datasets on natural gas prices or even general energy import prices were not available for multiple countries over a period of time.

Natural gas is one of Ukraine's largest imports and makes up about 40% of the country's energy supply. Natural gas supply has been one of the major sources of concern, regarding both energy resource and the economy, as prices for Ukraine's gas imports have risen drastically in the past decade and shortages are common. Although Ukraine has been trying to switch to nuclear power, it still relies heavily on natural gas, especially from Russia. The country ranks fifth in Europe for gas consumption and thirteenth in the world. Ukraine is also the main transit route for Russian gas imported to the rest of Europe.<sup>17</sup>

Over the years, gas consumption in Ukraine has decreased, but prices and imports from Russia have increased. Ukraine has essentially eliminated their supply of gas from Central Asia, switching to Russian supplies in 2010.<sup>18</sup> Ukraine has had disputes with Russia over gas many times before, resulting in Russia suspending gas supply to them several times since the early 1990s. These disputes were often over price changes and Ukraine's debt to Gazprom, the major Russian supplier. In winter of 2009, one of the disputes led to gas being turned off in Ukraine for 13 days. Ukraine's debts to the company reach around \$4.5 billion dollars.<sup>19</sup> The gas price changes show the biggest economic problems, with prices rising from \$50 per 1000 cubic meters (m<sup>3</sup>) in 2005 to \$426 per 1000m<sup>3</sup> in 2012.<sup>20</sup>

The drastic increase in the Index of Heat Energy Prices score reflects this change in price, rising from 443.5 in 2003 to 2,175.8 in 2013. Belarus maintains the highest index score for both

years, at 172,979.1 in 2003 and 352,683.5 in 2013. These scores make Belarus an outlier, even though their gas prices are significantly lower than Ukraine's, reaching \$175 per 1000m3 in 2013.<sup>21</sup> Germany had the lowest index scores at 80.6 and 83.9 for 2003 and 2013 respectively.<sup>22</sup>

$$1 - \frac{(443.5 - 80.6)}{(172979.1 - 80.6)} = \underline{0.998} \text{ (2003) Index of HEP Variable}$$

$$1 - \frac{(2175.8 - 83.9)}{(352683.5 - 83.9)} = \underline{0.994} \text{ (2013) Index of HEP Variable}$$

Because of Belarus's large index scores, Ukraine has very high scores for this variable. Better indicators of energy prices or a more direct connection of natural gas to this index would most likely give a more realistic picture of Ukraine's situation in regards to natural gas import prices.

### *Health Security*

The impact of health on the individuals and society are a serious component of human security. When an individual is unhealthy, the areas of impact which are to be considered include; economic and demographic, labor productivity, agricultural production, pressures on the health system, the role of families and households, discrimination, and the impact of adverse health conditions on the individual.<sup>23</sup> The prevailing economic situation in Ukraine has also led to a sharp increase in substance abuse.

$$(0+0.575)/2 = \underline{0.288} \text{ (2003) Health Security}$$

$$(0+0.718)/2 = \underline{0.359} \text{ (2013) Health Security}$$

#### I. HIV/AIDS

Ukraine is home to one of the worst HIV/AIDS epidemics in Europe. According to the UNAIDS classification, the HIV epidemic in Ukraine is at a concentrated stage.<sup>iii24</sup> The economic crisis of the 1990s, resulting from the collapse of the former Soviet industrial sectors in Eastern and Southern parts of Ukraine, led to widespread unemployment, alcoholism, and drug abuse. These factors set the conditions required for a wider spread of the epidemic.

Due to the prevalence of drugs and alcohol, the HIV/AIDS rate in Ukraine is increasing, particularly among the under-30 population. Additionally, since the HIV/AIDS epidemic is concentrated amongst the young, the rate of infection caused by unsafe sex and parent-to-child transmission has increased dramatically.<sup>25</sup> While the HIV/AIDS infection rates in the former Soviet Union countries are all rising, Ukraine has the fastest-growing AIDS infection rate in the entire region. Another problem is that the ignorance and fear of HIV among medical staff members has led them to demonstrate a hostile or fearful attitude toward HIV-positive patients.<sup>26</sup> Furthermore, the growing number of HIV-positivity among pregnant woman and potential blood donors presents a significant human security threat. Accompanied by low government health expenditure, the deteriorating quality of life may cause a significant population decline in Ukraine. Another often under-looked issue is the high rate of HIV prevalence within the Ukrainian prison system. Ukraine has a significant number of prisoners, about 400 per 100,000 people (in comparison Western European countries on average are closer to 100-150 per 100,000 people).<sup>27</sup> HIV prevalence among Ukrainian prisoners alone increased from 6% in 1999 to 14% by mid-2006.<sup>28</sup> This represents a clear subpopulation of the Ukrainian people who, upon release, may introduce the disease into the general population.

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<sup>iii</sup> According to the UN, concentrated epidemics exist when HIV has spread rapidly in a defined sub-population, but is not well-established in the general population. This stage of an epidemic suggests that active networks of risk within the sub-population. The future course of the epidemic is determined by the frequency and nature of the links between the highly infected sub-population and the general population.

Finally, the social and political stigmas associated with being HIV positive in Ukraine may lead to under-reporting of the actual number of HIV positive individuals. Unquestionably, if a Ukrainian is discovered to be HIV positive they may face termination of their employment and a severe social stigma, in a country where the prevailing view is that HIV sufferers are merely homosexuals or injecting drug users.<sup>29</sup> Consequently, this leads to a high degree of vulnerability for those carrying HIV as well as those affiliated with those who carry the disease. Ukrainians living with HIV not only face verbal and physical assaults but face discrimination within the workplace, with the possibility of either the loss of their job or employment opportunities refused.<sup>30</sup>

Utilizing data from UNAIDS and Euromonitor International, we can demonstrate that HIV infection rates continue to increase in Ukraine. In 2001, 0.9% of the population was identified as HIV positive.<sup>31</sup> In 2012, that number had climbed to 1% of the Ukrainian population. In raw numbers that is 230,000 people living with HIV in 2001, and 270,000 people living with HIV in 2012 in Ukraine.<sup>32</sup> Those numbers make Ukraine the European country with the highest prevalence of HIV.<sup>iv</sup> In comparison, Norway, the country with the lowest rate in Europe has 0.1% of the population identified as HIV positive in both 2001 and 2012.<sup>33</sup> In raw numbers that is 2,400 HIV positive Norwegians in 2001 and 3,600 HIV positive Norwegians in 2012.<sup>34</sup>

$$1 - \left[ \frac{(0.9 - 0.1)}{(0.9 - 0.1)} \right] = \underline{0} \text{ (2001) HIV Variable}$$

$$1 - \left[ \frac{(1.0 - 0.1)}{(1.0 - 0.1)} \right] = \underline{0} \text{ (2012) HIV Variable}$$

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<sup>iv</sup> There is a possibility that the Russian Federation may actually be the European country with the Highest HIV rate, but obtaining accurate data from Russia is problematic. The data either does not exist or is not easily accessible. This is a direct result of the government of the Russian Federation being unwilling to provide actual data.

**(1.0 - 0.1)**

The high variable number is consistent with the data, showing that Ukraine has the highest HIV rates within Europe. Unfortunately, this also highlights the lack of effective change within Ukraine in combating the human security threat posed by HIV. Additionally, while high HIV rates are a bad indicator, not all HIV infected persons develop the condition known as AIDS which is significantly worse. Unfortunately, lack of available data and recording issues made us rely on HIV infection rates instead of AIDS rates.

**II. Substance Abuse (First Admissions to Drug Treatment Centers)**

Substance abuse has been an epidemic for the last few decades in Ukraine. The consumption of alcoholic beverages alone is estimated to be responsible for about 9% of the total disease burden within Ukraine.<sup>35</sup> Unfortunately, the use of injected drugs far surpasses the human security problems caused by alcohol. Injected drug abuse not only creates the additional burden of increasing diseases but also removes individuals from the economy and has significant socio-economic effects.

The geographical location of Ukraine not only makes it transit point as a part of the globalized drug trafficking network but also has incentivized creating a local market for those drugs. In tandem with the degrading economy, many Ukrainians turned towards substance abuse as an outlet. To investigate the public attitudes of Ukrainians to the problems of drugs, a socio-economic survey was conducted by the health authorities of Ukraine. Entitled the “Youth of Ukraine,” the survey results had 56% of respondents respond that drug addicted people are sick, while 27.5% respondents felt that drug users are not only sick but criminals.<sup>36</sup>

Unfortunately, the diverse views of drug abuse are not limited to the general public. There is ongoing tension between the Ministry of Interior’s strong opposition to the expansion of harm

reduction approaches and the Ministry of Health's overall approach of drug abuse as a medical and public health problem, which requires harm reduction approaches.<sup>37</sup> Furthermore, the strong stigma attached to drug abuse, in conjunction with Ministry of Interior support has led to the introduction of severe legislation with regards to substance abuse. These unusually restrictive national narcotic laws and regulations set unreasonable security requirements (alarms, safes, etc.) for even minimal supplies of narcotics that cannot be met by most medical or treatment facilities.<sup>38</sup> These laws also require a three-physician commission to approve any dose change as well as the limit to a one-day supply of methadone<sup>v</sup> to any patient.<sup>39 40</sup>

Utilizing data on first admissions to drug treatment centers from Euromonitor International and the World Health Organizations (WHO) offers the most comprehensive view of the substance abuse problem within Ukraine.<sup>vi</sup> Attempting to utilize incarceration data or indexes taking into account legal responses not only failed to adequately provide a clear picture but also had severe data limitations, such as counting the same person being incarcerated numerous times within the same data set.

Consequently, in 2003 Ukraine had 28.1 first admissions to drug treatment centers. France was the highest in Europe with 63.4 first time admissions and Turkey was the lowest with 2 first time admissions. In 2013, Ukraine had 26.6 (a decrease of 1.5 from 2003) first time admissions. France once again had the highest number of admissions with 87.9 (a rise of 24.5) and Turkey remained the lowest with 2.5 (a 0.5 increase) first time admissions.

$$1 - \frac{(28.1 - 2.0)}{(63.4 - 2.0)} = \underline{.575} \text{ (2003) Drug Treatment Variable}$$

<sup>v</sup> Methadone is a synthetic opioid utilized medically as an analgesic and a maintenance anti-addictive. It is heavily utilized for patients with opioid dependence.

<sup>vi</sup> See the Appendix Section (B.1) for a full detailed breakdown of this data set of selected European countries.



$$1 - \frac{(26.6 - 2.5)}{(87.9 - 2.5)} = \underline{.718} \text{ (2013) Drug Treatment Variable}$$

Therefore, with this data it, we can determine that Ukraine made significant progress in first admissions to drug treatment centers; however, this could also indicate that the programs may actually have failed and that fewer Ukrainians are seeking drug treatment help, either due to the stigmas attached to drug abuse or the possibility of criminal prosecution by the Ministry of Interior.

### *Personal Security*

Personal security is often defined as the protection of individuals from abuse, violence, and other forms of harm.<sup>41</sup> Ukraine lacks personal security in many areas, with many people vulnerable to human trafficking, domestic violence, and even abuse while imprisoned. Using the variables of incarceration rates and human trafficking, we determined that Ukraine had a personal security indicator score of 0.182 for 2003 and 0.197 for 2013.

$$(0.364+0)/2 = \underline{0.182} \text{ (2003) Personal Security}$$

$$(0.393+0)/2 = \underline{0.197} \text{ (2013) Personal Security}$$

#### I. Incarceration Rates (prisoners per 100,000 people)

Incarceration rates can be measured as the number of prisoners per 100,000 people in a country. In the past, Ukraine had one of the highest incarceration rates in the world and continues to have one of the highest in Europe, especially in comparison to Western European countries. Incarceration rates become a personal security issue because more prisoners can potentially mean more crime and because of the number of political and other arbitrary imprisonments that Ukrainians face.<sup>42</sup> A major example of this is the arrest and three-year imprisonment of former Prime Minister Yulia Tymoshenko and her major supporters, which was believed to be largely

politically motivated. Activists and protesters have also been arrested and detained throughout the Euromaidan movement.<sup>43</sup>

Another factor that spikes incarceration rates is that, in Ukraine, all those on trial for petty crimes and felonies are detained before the trial. According to recent reports, pre-trial detainees make up almost 20% of prisoners in Ukraine.<sup>44</sup> Both pre-trial and regular detention centers are notoriously in poor condition. Suicides, HIV/AIDS, tuberculosis, hepatitis C, and general mortality are all serious issues within the Ukrainian prison system. Other issues such as abuse of prisoners and lack of adequate food and light were also problems. In 2013, 830 individuals died in custody, including 77 from suicide.<sup>45</sup>

Ukraine's incarceration rate is higher than most in Europe, only behind Russia and Belarus for both 2003. In 2013, however, Russia, Belarus, and Lithuania were ahead of Ukraine, and Latvia's rate almost equaled Ukraine's rate. In both years, Russia had the highest number of prisoners per 100,000 people, at 633 in 2003 and 475 in 2013. In 2003, Denmark had the lowest at 21, and in 2013, Iceland had the lowest at 42. In 2001, Ukraine's incarceration rate was at 410, which was the most recent data in 2003. The rate dropped to 305 in 2013.<sup>46,47</sup>

$$1 - \left[ \frac{(410 - 21)}{(633 - 21)} \right] = \underline{0.364} \text{ (2003) Incarceration Rate Variable}$$

$$1 - \left[ \frac{(305 - 42)}{(475 - 42)} \right] = \underline{0.393} \text{ (2013) Incarceration Rate Variable}$$

For both years, the scores were relatively low, showing only a slight increase from 2003, regardless of Ukraine's global standing. Unfortunately data on crime rates in comparison to imprisonment was not accessible, and disaggregated data on reasons for detention was non-existent.

## II. Human Trafficking

Human trafficking is a major human security issue in Ukraine and has been since the fall of the Soviet Union. Increased unemployment as well as high rates of emigration contribute to increased vulnerability to trafficking for many Ukrainians. In general, adults tend to be more susceptible to trafficking, especially women in their late teens to mid-20s and men over the age of 30. IOM reports that since the year 2000, over 9,000 Ukrainian victims of trafficking have received help from their victim reintegration program.<sup>48</sup>

In 2013, Ukraine was also dropped down to Tier 2 Watch List on the Department of State's annual Trafficking in Persons (TIP) report, meaning that they do not meet minimum standards for combating trafficking and are not making significant efforts to do so. It had consistently been on Tier 2 until that year.<sup>49</sup> Ukraine has also had a recent increase in internal trafficking, especially labor trafficking of foreign workers. The current conflict has also caused increased vulnerability as over 270,000 from the Donbas region have fled their homes and a reported 820,000 citizens have entered Russia since the Kiev military operation started.<sup>50</sup>

For this variable, we compared data from IOM's victim reintegration program and from the TIP report. For both years, IOM rescued more victims from Ukraine than from any other European country by far.<sup>51</sup> In the 2003 TIP report, Ukraine ranked as Tier 2 with many other Eastern European countries, while most Western European countries were listed as Tier 1.<sup>52</sup> In 2013, Ukraine was listed as Tier 2 Watch List along with Belarus and Albania.<sup>53</sup> In order to measure this variable, we created a composite score using the number of victims assisted by IOM in 2003 and 2013 and the Tier level from the TIP report. Numbers of victims helped were ranked in number categories (0-100=1; 101-200=2,...901+=10), and Tiers were also ranked with numbers (Tier 1=1; Tier 2=2; Tier 2 Watch List=2.5; Tier 3=3). For 2003, Ukraine had 525

victims helped by IOM and was listed as Tier 2, giving it an 8 for a composite score, the highest existing score for that year. In 2013, Ukraine had 929 victims assisted by IOM and was listed as Tier 2 Watch List, giving it a composite score of 12.5, also the highest existing score. In both years, Sweden had the lowest score, with a Tier 1 ranking and only 1 victim assisted.<sup>54</sup>

$$1 - \frac{(8-2)}{(8-2)} = \underline{0} \text{ (2001) Human Trafficking Variable}$$

$$1 - \frac{(12.5 - 2)}{(12.5 - 2)} = \underline{0} \text{ (2012) Human Trafficking Variable}$$

For both years, Ukraine had a score of 0 for the variable of human trafficking because it had the worst numbers for this dataset. With more obtainable data from each country in terms of number of victims, we probably would have achieved slightly different results, although it is clear that Ukraine's human trafficking situation is one of the worst in Europe.

### *Political Security*

Political security, according to the 1994 UNDP report, is concerned with whether people live in a society that honors their basic rights.<sup>55</sup> We expand on that notion by arguing that political security is often the result of political stability and the ability to voice concerns to those actors who are able to drive change. Additionally, the relative unstable political environment in Ukraine has created considerable human security issues, including the current crisis in Eastern Ukraine.

$$(0.290+0.345)/2 = \underline{0.318} \text{ (2003) Political Security}$$

$$(0.412+0.160)/2 = \underline{0.286} \text{ (2013) Political Security}$$

#### I. Voice and Accountability

Voice and Accountability captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of

association, and freedom of the press. Broadly, this variable captures the process by which governments are selected, monitored, and replaced.<sup>56</sup> In the context of Ukraine, the increasing role of the media within the country and the power of individuals to be able to participate in the accountability of public officials dropped severely from 2003 to 2005, then leveled out, rose slightly in 2008, only to once again start a downward trend from 2010 to 2013. This rise and fall of political voice and accountability represents a human security threat, as it leads to the marginalization of certain elements of society and leaves the public at large uninformed as the media is suppressed.

Utilizing the World Bank Worldwide Governance Indicator (WGI) for Voice and Accountability, which is a composite index allows us to quickly determine the overall political and media freedoms within Ukraine. In 2003, Denmark had the highest score with 1.6. Ukraine had a score of -0.6, followed by Belarus with a score of -1.5. Denmark retained the highest score with 1.7, with Ukraine dropping to -0.3, but with Belarus increasing to -1.7

$$\frac{(-0.6 - -1.5)}{(1.6 - -1.5)} = \underline{0.290} \text{ (2003) Voice and Accountability Variable}$$

$$\frac{(-0.3 - -1.7)}{(1.7 - -1.7)} = \underline{0.412} \text{ (2013) Voice and Accountability Variable}$$

As the data shows, Ukraine increased by 0.122 on the Voice and Accountability Index from 2003 to 2013 but continues to remain relatively low.

## II. Political Stability and Absence of Violence/Terrorism

Political Stability and Absence of Violence measures the perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism.<sup>57</sup> This also includes the capacity of the government to effectively formulate and implement sound policies.

In the case of Ukraine, political stability has been elusive ever since the Orange Revolution, which exposed numerous cleavages within Ukrainian society. The politicization of these cleavages has drastically reduced political stability and increased politically inspired violence. This represents a clear human security threat, in that Ukrainians are not only unable to rely on an effective government to meet and guarantee essential rights but also that politically inspired violence threatens to break the country apart (especially in the pro-Russian vs. pro-Western groups).

Utilizing the World Bank Worldwide Governance Indicator (WGI) for Political Stability and Absence of Violence / Terrorism, which is a composite index, allows us to quickly determine the overall political stability in Ukraine. In 2003, Malta had the highest index rating with 1.5. Ukraine on the hand a negative rating of -0.4, with Georgia having the lowest rating of -1.4. In 2013, Austria had the highest rating with 1.3. Ukraine in 2013 had an index rating of -0.8 followed by Turkey with the lowest rating of -1.2.

$$\frac{(-0.4 - -1.4)}{(1.5 - -1.4)} = \underline{\underline{0.345}} \text{ (2003) Political Stability Variable}$$

$$\frac{(-0.8 - -1.2)}{(1.3 - -1.2)} = \underline{\underline{0.160}} \text{ (2013) Political Stability Variable}$$

This data demonstrates that Ukraine had a reduction in political stability and absence of violence/terrorism of 0.185 from 2003 to 2013.

#### *Composite Human Security Index Number*

The human security index will be calculated by adding the four indicator indices for each year and dividing them by four. A value of 1.0 would be interpreted as a complete realization of

human security, whereas a value of 0.0 would be interpreted as a complete absence of human security.

$$\text{HSI (2003)} = (0.914 + 0.288 + 0.182 + 0.318) / 4 \rightarrow \underline{0.426}$$

$$\text{HSI (2013)} = (0.902 + 0.359 + 0.197 + 0.286) / 4 \rightarrow \underline{0.436}$$

When comparing the composite human security indexes (2003 & 2013) for Ukraine, one can see that the human security situation in Ukraine improved only slightly, with a rise of 0.010.

### Conclusion

Ukraine is still a country in state of transition. Continuing to emerge from its Soviet past, Ukraine has been plagued by a variety of human security problems. While the overall human security situation has slightly increased in Ukraine, considerable progress still needs to be made in areas such as political stability, human trafficking, and combatting HIV/AIDS. These variables are all exceptionally high and continued to increase over the studied timeframe. Unfortunately, the use of such data also de-humanizes the human security problems to an extent, because a .010 increase does not translate into much value for many Ukrainians. Furthermore, while this data may be useful to policymakers and academic studies, the results have not been comprehensive enough to warrant specific solutions. Regrettably, the situation in Ukraine has deteriorated even further due to some of the indicators we identified. The over-dependence on Russian gas exports in conjunction with political instability and economic fragility have spurred numerous ethnic and regional conflicts within Ukraine, threatening to break the country apart.

Appendix

Appendix A (Economic Security)

Change View		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Index of Heat Energy Prices												
	Belarus	172,979.1	217,192.5	188,778.4	191,309.3	173,420.9	215,653.7	273,839.2	283,131.7	308,436.3	374,514.4	352,683.5
	Bulgaria	18,711.5	19,966.1	22,453.4	26,459.7	26,382.1	27,948.4	30,493.5	31,003.8	36,323.0	40,584.5	37,852.1
	Turkey	4,824.9	5,104.7	6,065.5	7,136.8	7,765.6	9,430.9	9,974.9	10,688.0	11,828.2	15,227.2	16,501.1
	Serbia	3,060.6	3,600.4	4,088.4	4,879.8	5,522.3	5,729.6	7,750.2	8,348.8	9,656.6	10,666.1	12,198.4
	Romania	5,120.6	4,697.3	4,761.7	5,141.9	5,962.4	6,536.3	7,145.1	7,599.3	8,893.6	10,372.2	11,477.1
	Turkmenistan	5,064.2	5,413.0	6,065.1	6,638.8	7,175.6	8,344.2	8,255.9	8,722.5	9,314.5	9,941.9	10,844.1
	Kazakhstan	5,348.5	5,447.6	5,444.1	5,469.8	5,893.7	6,224.8	7,055.3	7,768.5	7,820.9	8,187.5	8,542.8
	Russia	1,718.5	2,178.8	3,130.9	3,772.0	4,181.4	4,858.3	6,087.7	7,522.5	8,521.8	8,171.6	7,902.8
	Uzbekistan	1,143.0	1,248.6	1,401.9	1,590.9	1,765.9	1,971.0	2,272.4	2,485.6	2,810.8	3,187.2	3,586.2
	Iran	600.4	723.3	886.3	926.4	1,061.6	1,207.0	1,207.3	1,562.5	1,865.6	2,387.6	3,387.9
	Ukraine	443.5	529.6	614.4	809.1	1,146.6	1,314.6	1,666.7	1,810.0	2,063.3	2,153.8	2,175.8
	Slovenia	293.0	279.2	301.4	351.4	365.2	407.1	397.1	464.2	491.6	550.9	591.1
	Lithuania	261.0	257.0	249.3	261.9	295.5	381.0	506.6	483.4	547.1	615.8	565.2
	Hungary	307.9	346.6	365.0	368.1	515.2	553.8	583.3	512.3	563.3	611.8	543.3
	South Korea	212.8	219.4	243.0	290.0	299.7	342.8	378.3	385.3	397.6	464.9	495.5
	Slovakia	271.6	293.4	320.8	377.1	401.8	427.7	423.7	412.6	454.2	479.5	488.7
	Estonia	196.9	198.9	202.3	210.0	238.3	331.7	367.3	379.4	388.1	452.2	487.8
	Latvia	165.6	175.4	182.0	208.1	246.2	370.1	415.7	418.7	426.9	488.9	470.5
	Macedonia	169.6	174.2	176.9	185.0	193.5	215.9	217.3	233.3	260.7	321.2	351.1
	Czech Republic	201.3	204.5	211.7	235.8	243.1	266.3	284.8	296.5	306.3	333.4	342.3
	Poland	227.2	230.1	237.2	236.6	242.4	253.3	267.7	284.1	303.9	324.0	335.3
	China	202.4	220.4	229.4	240.1	253.8	270.9	269.4	278.1	293.6	301.6	309.4
	Netherlands	166.0	169.8	191.4	213.8	224.3	267.5	269.2	242.8	261.2	277.2	285.2
	Israel	169.1	176.1	191.5	191.5	190.1	218.3	221.8	220.1	237.2	259.5	267.9
	Bosnia-Herzegovina	122.6	124.7	139.1	160.9	171.1	186.4	202.2	214.6	229.4	240.0	250.4
	Georgia	169.0	169.8	175.5	204.1	252.9	274.2	260.0	257.1	263.2	262.3	250.4
	France	117.5	117.6	123.2	133.7	144.1	160.2	198.2	198.2	206.0	219.5	234.0
	Finland	126.5	125.5	133.8	145.6	155.8	168.6	182.5	186.6	204.7	213.1	227.2
	Sweden	127.3	134.8	136.6	139.7	143.0	146.7	163.3	177.1	181.9	187.6	190.6
	Montenegro	139.4	143.5	147.2	151.8	151.2	161.0	177.0	170.1	168.0	185.1	188.9
	Croatia	131.4	129.3	132.8	134.7	111.8	116.7	131.0	151.2	151.7	161.9	172.6
	Austria	113.7	118.1	121.2	130.4	134.1	137.6	143.2	145.9	152.5	165.7	171.2
	Switzerland	115.0	119.2	126.4	140.7	149.6	171.0	156.5	149.4	157.8	163.8	164.9
	Italy	116.2	116.3	125.2	137.6	138.7	151.6	151.5	142.4	153.4	160.9	163.3
	New Zealand	123.9	127.9	130.1	131.0	132.9	137.9	140.9	146.6	149.4	152.0	153.6
	Denmark	119.1	115.7	114.9	118.8	122.8	122.4	130.2	138.6	142.4	147.3	152.8
	Norway	154.0	137.4	133.7	171.0	129.8	160.0	126.6	162.2	164.2	119.5	143.6
	Azerbaijan	102.2	101.0	99.6	113.4	101.5	98.3	89.6	86.2	107.7	107.6	109.9
	Germany	80.6	84.5	75.8	69.9	71.0	80.7	78.9	93.0	82.8	79.3	83.9

Figure 1: Euromonitor International. (2014). "Index by Heat Energy Price."

Appendix B (Health Security)

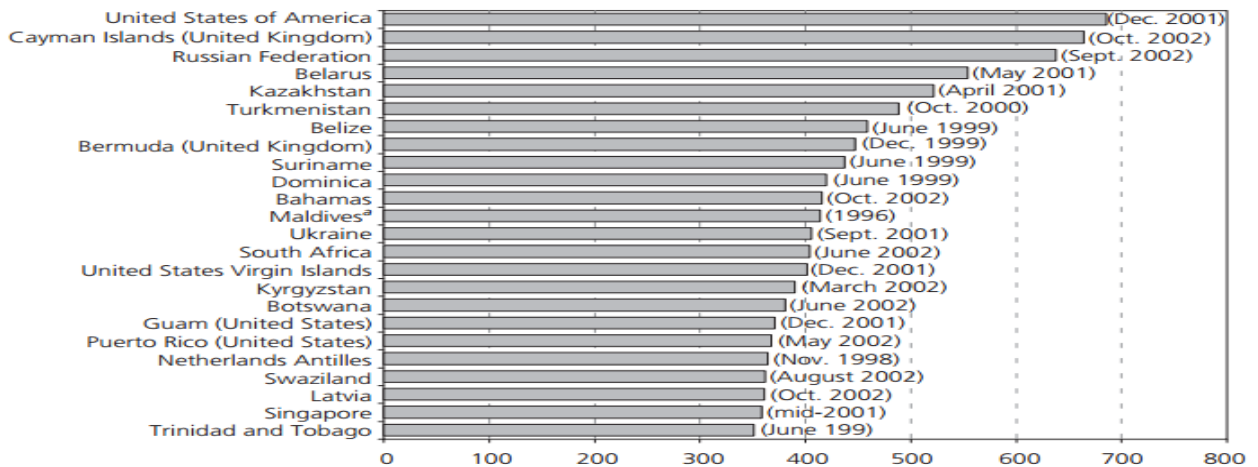
1. First Admissions to Drug Treatment Centers European Comparison Table



Change View		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
First Admissions to Drug Treatment Centres												
<input type="checkbox"/> <input checked="" type="checkbox"/>	France	63.4	67.7	71.5	74.5	76.8	78.9	80.7	82.3	84.2	86.1	87.9
<input type="checkbox"/> <input checked="" type="checkbox"/>	Portugal	49.8	47.8	45.9	44.8	48.3	66.1	71.9	79.9	80.4	83.1	84.5
<input type="checkbox"/> <input checked="" type="checkbox"/>	Ireland	56.4	46.0	49.7	53.7	57.1	61.4	66.6	71.9	65.1	65.6	66.6
<input type="checkbox"/> <input checked="" type="checkbox"/>	Hungary	58.8	56.0	62.6	56.3	40.3	46.2	37.9	53.4	58.0	59.3	62.6
<input type="checkbox"/> <input checked="" type="checkbox"/>	Spain	52.5	58.6	56.6	50.7	51.3	52.2	53.4	52.6	53.1	53.5	53.8
<input type="checkbox"/> <input checked="" type="checkbox"/>	Malta	28.6	34.9	26.3	102.6	96.6	78.5	60.4	55.5	51.4	48.6	46.7
<input type="checkbox"/> <input checked="" type="checkbox"/>	Netherlands	31.4	29.8	26.7	30.1	33.0	34.1	34.5	42.7	44.3	38.3	39.4
<input type="checkbox"/> <input checked="" type="checkbox"/>	Czech Republic	33.7	34.6	36.3	35.2	37.4	34.9	34.6	30.1	35.2	34.0	33.8
<input type="checkbox"/> <input checked="" type="checkbox"/>	Denmark	32.4	31.4	29.1	24.5	27.8	37.8	45.0	42.4	33.2	34.5	33.7
<input type="checkbox"/> <input checked="" type="checkbox"/>	Belgium	-	-	-	-	-	-	-	-	18.0	26.2	28.9
<input type="checkbox"/> <input checked="" type="checkbox"/>	Ukraine	28.1	22.8	23.8	26.2	23.2	24.5	23.4	24.6	25.6	26.2	26.6
<input type="checkbox"/> <input checked="" type="checkbox"/>	Croatia	41.4	36.5	39.9	45.1	40.1	38.3	33.0	26.7	26.1	26.2	23.2
<input type="checkbox"/> <input checked="" type="checkbox"/>	Poland	29.8	35.4	27.0	32.5	34.0	26.9	24.4	25.1	25.9	23.9	23.1
<input type="checkbox"/> <input checked="" type="checkbox"/>	Slovakia	16.2	19.3	17.8	15.6	16.4	17.3	16.5	20.0	18.9	19.1	19.6
<input type="checkbox"/> <input checked="" type="checkbox"/>	Belarus	8.3	6.4	5.7	12.4	12.8	6.3	8.1	9.7	10.4	13.3	15.1
<input type="checkbox"/> <input checked="" type="checkbox"/>	Albania	-	-	-	-	-	9.7	11.4	12.5	13.4	14.0	14.3
<input type="checkbox"/> <input checked="" type="checkbox"/>	Estonia	45.0	37.4	29.8	22.3	15.7	13.1	11.9	13.1	12.2	9.7	8.8
<input type="checkbox"/> <input checked="" type="checkbox"/>	Slovenia	25.2	26.1	17.1	14.4	13.7	13.6	18.2	13.5	10.1	9.2	8.1
<input type="checkbox"/> <input checked="" type="checkbox"/>	Moldova	8.9	7.9	8.0	8.7	10.3	8.7	6.8	7.1	7.2	7.5	7.2
<input type="checkbox"/> <input checked="" type="checkbox"/>	Lithuania	10.3	12.3	10.2	9.5	9.4	8.1	10.3	10.0	7.8	7.2	7.0
<input type="checkbox"/> <input checked="" type="checkbox"/>	Romania	4.3	3.3	3.0	3.7	4.3	6.9	7.4	6.4	5.2	5.7	5.4
<input type="checkbox"/> <input checked="" type="checkbox"/>	Turkey	2.0	2.1	1.4	2.2	2.0	1.6	2.0	2.3	2.3	2.4	2.5

Appendix C (Personal Security)

Figure I. Countries and territories with the highest prison population rates  
Prisoners (per 100,000 inhabitants)



\*Sentenced prisoners only.

Figure 2: Walmsley, R. (2003). "Global Incarceration and Prison Trends."

TIER 1			
AUSTRIA	GERMANY	MOROCCO	SWEDEN
BELGIUM	GHANA	THE NETHERLANDS	SWITZERLAND
BENIN	HONG KONG	NORWAY	TAIWAN
COLOMBIA	ITALY	POLAND	UNITED ARAB EMIRATES
CZECH REPUBLIC	LITHUANIA	PORTUGAL	UNITED KINGDOM
DENMARK	MACEDONIA	KOREA, REP. OF	
FRANCE	MAURITIUS	SPAIN	
TIER 2			
ALBANIA	CROATIA	LAOS	SAUDI ARABIA
ANGOLA	EL SALVADOR	LATVIA	SENEGAL
ARMENIA	EQUATORIAL GUINEA	LEBANON	SERBIA & MONTENEGRO
BAHRAIN	ESTONIA	MALAWI	SIERRA LEONE
BANGLADESH	ETHIOPIA	MALAYSIA	SLOVAK REPUBLIC
BELARUS	FINLAND	MALI	SLOVENIA
BOLIVIA	GABON	MEXICO	SOUTH AFRICA
BRAZIL	THE GAMBIA	MOLDOVA, REP.	SRI LANKA
BRUNEI	GUATEMALA	MOZAMBIQUE	TAJIKISTAN
BULGARIA	HONDURAS	NEPAL	TANZANIA
BURKINA FASO	HUNGARY	NICARAGUA	THAILAND
BURUNDI	INDIA	NIGER	TOGO
CAMBODIA	INDONESIA	NIGERIA	UGANDA
CAMEROON	ISRAEL	PAKISTAN	UKRAINE
CANADA	JAMAICA	PHILIPPINES	VENEZUELA
CHINA, PEOPLE'S REP. OF	JAPAN	QATAR	VIETNAM
CONGO, DEM. REP. OF	KENYA	ROMANIA	ZAMBIA
COSTA RICA	KUWAIT	RUSSIA	ZIMBABWE
COTE D'IVOIRE	KYRGYZ REP.	RWANDA	
TIER 3			
BELIZE	DOMINICAN REPUBLIC	KAZAKHSTAN	SURINAME
BOSNIA & HERZEGOVIA	GEORGIA	LIBERIA	TURKEY
BURMA	GREECE	NORTH KOREA	UZBEKISTAN
CUBA	HAITI	SUDAN	

Figure 3: US Department of State. (2003). "Trafficking in Persons Report June 2003."



Figure 4: US Department of State. (2013). "Trafficking in Persons Report June 2013."

## Appendix D (Political Security)

### 1. Political Stability and Absence of Violence/Terrorism Variables (World Bank)

#### Political Stability and Absence of Violence/Terrorism

*Political Stability and Absence of Violence/Terrorism measures perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism. This table lists the individual variables from each data sources used to construct this measure in the Worldwide Governance Indicators*

##### Representative Sources

<b>EIU</b>	Orderly transfers Armed conflict Violent demonstrations Social Unrest International tensions / terrorist threat
<b>GCS</b>	Cost of Terrorism
<b>HUM</b>	Frequency of political killings (CIRI) Frequency of disappearances (CIRI) Frequency of tortures (CIRI) Political terror scale (PTS)
<b>IJT</b>	Security Risk Rating
<b>IPD</b>	Intensity of internal conflicts: ethnic, religious or regional Intensity of violent activities...of underground political organizations Intensity of social conflicts (excluding conflicts relating to land)
<b>PRS</b>	Government stability Internal conflict External conflict Ethnic tensions
<b>WMO</b>	<i>Civil unrest</i> How widespread political unrest is, and how great a threat it poses to investors. Demonstrations in themselves may not be cause for concern, but they will cause major disruption if they escalate into severe violence. At the extreme, this factor would amount to civil war.  <i>Terrorism</i> Whether the country suffers from a sustained terrorist threat, and from how many sources. The degree of localisation of the threat is assessed, and whether the active groups are likely to target or affect businesses.

##### Non-representative Sources

<b>WCY</b>	The risk of political instability is very high
<b>WJP</b>	Factor 3.2: Civil conflict is effectively limited (Order and Security)

Code	Data Source Name
ADB	African Development Bank Country Policy and Institutional Assessments
AFR	Afrobarometer
ASD	Asian Development Bank Country Policy and Institutional Assessments
BPS	Business Enterprise Environment Survey
BTI	Bertelsmann Transformation Index
CCR	Freedom House Countries at the Crossroads
EBR	European Bank for Reconstruction and Development Transition Report
EIU	Economist Intelligence Unit Riskwire & Democracy Index
FRH	Freedom House
GCB	Transparency International Global Corruption Barometer Survey
GCS	World Economic Forum Global Competitiveness Report
GII	Global Integrity Index
GWP	Gallup World Poll
HER	Heritage Foundation Index of Economic Freedom
HUM	Cingranelli Richards Human Rights Database and Political Terror Scale
IFD	IFAD Rural Sector Performance Assessments
IJT	iJET Country Security Risk Ratings
IPD	Institutional Profiles Database
IRP	IREEP African Electoral Index
LBO	Latinobarometro

2. *Political Stability and Absence of Violence/Terrorism Index (Europe).*

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Malta	1.5	1.3	1.4	1.2	1.3	1.3	1.2	1.2	1.0	1.0	1.0
Iceland	1.5	1.4	1.5	1.4	1.5	1.2	1.2	1.0	1.2	1.2	1.3
Ireland	1.3	1.2	1.3	1.1	1.2	1.1	1.0	1.0	0.9	0.9	0.9
Sweden	1.3	1.3	1.3	1.3	1.2	1.1	1.1	1.1	1.2	1.2	1.1
Portugal	1.3	1.0	1.0	0.9	0.8	1.0	0.8	0.7	0.7	0.8	0.7
Denmark	1.2	1.1	1.0	1.0	1.1	1.1	1.0	1.0	1.1	0.9	0.9
Slovenia	1.2	1.0	1.1	1.1	1.1	1.1	0.9	0.8	0.9	0.9	0.9
Netherlands	1.1	1.0	0.9	0.9	0.8	0.9	0.9	0.9	1.1	1.2	1.1
Hungary	1.1	0.8	1.0	1.0	0.7	0.7	0.5	0.7	0.7	0.7	0.8
Lithuania	1.0	0.7	0.7	0.8	0.8	0.7	0.6	0.7	0.6	0.7	0.9
Latvia	1.0	0.6	0.8	0.8	0.6	0.2	0.3	0.5	0.3	0.4	0.6
Austria	0.9	1.1	1.1	1.1	1.3	1.3	1.2	1.1	1.2	1.3	1.3
Slovakia	0.9	0.5	0.8	0.8	1.0	1.1	0.9	1.0	1.0	1.1	1.1
Estonia	0.9	0.7	0.6	0.7	0.6	0.5	0.5	0.6	0.6	0.6	0.7
Czech Republic	0.8	0.6	0.9	1.0	1.0	1.0	0.9	1.0	1.1	1.0	1.1
Belgium	0.8	0.7	0.8	0.8	0.8	0.6	0.8	0.8	0.9	0.9	0.9
Belarus	0.7	0.2	0.3	0.1	0.3	0.5	0.5	-0.1	-0.1	0.0	0.0
Poland	0.5	0.1	0.3	0.3	0.6	0.9	0.9	1.0	1.1	1.0	0.9
Croatia	0.5	0.6	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Greece	0.5	0.5	0.5	0.6	0.5	0.3	-0.2	-0.1	-0.1	-0.2	-0.2
Italy	0.4	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.5	0.5	0.5
Romania	0.3	0.0	0.1	0.1	0.2	0.2	0.4	0.2	0.2	0.1	0.2
United Kingdom	0.3	0.2	0.1	0.6	0.6	0.5	0.1	0.4	0.4	0.4	0.5
France	0.2	0.3	0.4	0.6	0.6	0.5	0.5	0.7	0.6	0.6	0.4
Spain	0.0	0.0	0.2	-0.2	-0.3	-0.4	-0.5	-0.3	0.0	0.0	0.0
Moldova	-0.2	-0.3	-0.4	-0.4	-0.1	-0.3	-0.6	-0.4	-0.1	0.0	0.0
Albania	-0.3	-0.4	-0.5	-0.5	-0.2	0.0	-0.1	-0.2	-0.3	-0.2	0.1
Ukraine	-0.4	-0.5	-0.3	0.0	0.2	0.0	-0.3	0.0	-0.1	-0.1	-0.8
Turkey	-0.8	-0.8	-0.6	-0.6	-0.8	-0.8	-1.0	-0.9	-1.0	-1.2	-1.2

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Macedonia	-1.0	-0.9	-1.2	-0.7	-0.4	-0.3	-0.3	-0.5	-0.6	-0.4	-0.4
Russia	-1.2	-1.5	-1.3	-0.9	-0.9	-0.8	-1.0	-0.9	-1.0	-0.8	-0.8
Georgia	-1.4	-0.9	-0.7	-0.9	-0.6	-0.9	-0.9	-0.7	-0.7	-0.7	-0.5

### 3. Voice and Accountability Variables (World Bank).

## Voice and Accountability

*Voice and accountability captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. This table lists the individual variables from each data sources used to construct this measure in the Worldwide Governance Indicators*

#### Representative Sources

<b>EIU</b>	Democracy Index
	Vested interests
	Accountability of Public Officials
	Human Rights
	Freedom of association
<b>FRH</b>	Political Rights (FRW)
	Civil Liberties (FRW)
	Press Freedom Index (FRP)
	Media (FNT)
	Civil Society (FNT)
	Electoral Process (FNT)
<b>GCS</b>	Transparency of government policymaking
	Freedom of the Press
	Favoritism in Decisions of Government Officials
	Effectiveness of Law-Making Body
<b>GWP</b>	Confidence in honesty of elections
<b>HUM</b>	Restrictions on domestic and foreign travel (CIRI)
	Freedom of political participation (CIRI)
	Imprisonments because of ethnicity, race, or political, religious beliefs (CIRI)
	Freedom of Speech (CIRI)
<b>IPD</b>	Freedom of elections at national level
	Are electoral processes flawed?
	Do the representative Institutions (e.g. parliament) operate in accordance with the formal rules in force (e.g. Constitution)?
	Freedom of the Press (freedom of access to information, protection of journalists, etc.)
	Freedom of Association
	Freedom of assembly, demonstration
	Respect for the rights and freedoms of minorities (ethnic, religious, linguistic, immigrants...)
	Is the report produced by the IMF under Article IV published?
	Reliability of State budget (completeness, credibility, performance...)
	Reliability of State accounts (completeness, audit, review law...)
	Reliability of State-owned firms' accounts
	Reliability of basic economic and financial statistics (e.g. national accounts, price indices, foreign trade, currency and credit, etc.)
	Reliability of State-owned banks' accounts
	Is the State economic policy (e.g. budgetary, fiscal, etc.)... communicated?
	Is the State economic policy (e.g. budgetary, fiscal, etc.)... publicly debated?
	Degree of transparency in public procurement
	Freedom to leave the country (i.e. passports, exit visas, etc.)
	Freedom of entry for foreigners (excluding citizens of countries under agreements on free movement, e.g. Schengen Area, etc.)
	Freedom of movement for nationals around the world
	Genuine Media Pluralism
	Freedom of access, navigation and publishing on Internet
<b>PRS</b>	Military in politics
	Democratic accountability
<b>RSF</b>	Press Freedom Index
<b>WMO</b>	Institutional permanence: An assessment of how mature and well-established the political system is. It is also an assessment of how far political opposition operates within the system or attempts to undermine it from outside.

4. *Voice and Accountability Index (Europe).*

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Denmark	1.6	1.8	1.8	1.6	1.5	1.6	1.6	1.6	1.6	1.7	1.7
Sweden	1.5	1.8	1.6	1.5	1.5	1.6	1.6	1.6	1.7	1.7	1.7
Netherlands	1.5	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.6	1.6	1.6
Austria	1.3	1.5	1.4	1.4	1.4	1.4	1.4	1.5	1.4	1.5	1.5
Iceland	1.5	1.6	1.6	1.5	1.5	1.5	1.4	1.5	1.4	1.5	1.5
Belgium	1.5	1.4	1.4	1.4	1.4	1.3	1.4	1.4	1.3	1.3	1.4
United Kingdom	1.3	1.6	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Ireland	1.2	1.5	1.6	1.4	1.4	1.5	1.4	1.3	1.3	1.3	1.3
France	1.1	1.4	1.5	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2
Malta	1.3	1.3	1.2	1.2	1.2	1.2	1.1	1.2	1.1	1.1	1.1
Estonia	1.1	1.1	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Portugal	1.4	1.5	1.4	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0
Slovenia	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.1	1.0	1.0
Poland	1.0	1.0	0.9	0.8	0.8	0.9	1.0	1.0	1.0	1.0	1.0
Spain	1.2	1.3	1.1	1.1	1.1	1.2	1.2	1.1	1.1	1.0	1.0
Czech Republic	1.0	1.0	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	1.0
Slovakia	0.9	1.0	0.9	0.9	0.9	0.9	0.9	0.9	1.0	0.9	0.9
Italy	1.0	1.2	1.0	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9
Lithuania	0.9	0.9	0.9	0.8	0.9	0.8	0.9	0.9	0.8	0.9	0.9
Latvia	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7
Hungary	1.1	1.1	1.2	1.0	1.0	1.0	0.9	0.9	0.8	0.7	0.7
Greece	1.1	1.1	1.0	0.9	1.0	0.9	0.9	0.9	0.8	0.7	0.7
Croatia	0.6	0.6	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.5	0.5
Romania	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3
Georgia	-0.2	-0.2	-0.1	-0.1	-0.3	-0.3	-0.2	-0.2	-0.2	0.0	0.1
Albania	0.1	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.0
Macedonia	0.0	-0.1	-0.1	0.1	0.2	0.2	0.2	0.1	0.0	0.0	0.0
Moldova	-0.5	-0.6	-0.5	-0.3	-0.3	-0.3	-0.3	-0.1	0.0	-0.1	-0.1
Turkey	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.3
Ukraine	-0.6	-0.6	-0.2	0.0	0.0	0.1	0.0	-0.1	-0.1	-0.3	-0.3
Russia	-0.6	-0.6	-0.7	-0.9	-0.9	-0.8	-0.9	-0.9	-0.9	-1.0	-1.0
Belarus	-1.5	-1.6	-1.8	-1.7	-1.7	-1.6	-1.5	-1.5	-1.6	-1.5	-1.5



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