BEYOND EAST AND WEST: HOW LAWLESSNESS AND ECONOMIC VULNERABILITY DESTROYED SUPPORT FOR PRIVATIZATION IN UKRAINE

by

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A thesis submitted in partial fulfillment of
the requirements for the degree of

MA in Economic Analysis.

Kyiv School of Economics

2021

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Kyiv School of Economics

Abstract

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This paper explores how crime rates and living standards in Ukrainian regions relate to support for privatization reform. The dynamics of support for the privatization of land, large and small enterprises, were heterogeneous in different regions, where the west of Ukraine maintained more pro-market attitudes than the east, the south, and the center. We show that the effect of market transition on market attitudes of the population was uneven among Ukrainian regions due to their differences in industrial structure and level of urbanization inherited from the Soviet past. Instrumenting average crime rate by the structure of regions' residence, we find that increase in per capita crime rate is associated with a decrease in support for the privatization of land and large enterprises. Average regional incomes, life expectancy, age of the population, and confidence in leaders have an expected impact on different specifications.

TABLE OF CONTENTS

LIST OF FIGURES

Number *Page*

LIST OF TABLES

Number *Page*

ACKNOWLEDGMENTS

I thank Professor Tymofii Brik for his intellectual dedication, ease of collaboration, broad-mindedness, and laid-back ability to steer ideas in the right direction. I am also grateful to Professor Maksym Obrizan for the timely advice to stop for a moment, look at my universe-scale ideas and concentrate on the main thing. It was a small thing that did a lot for my work. I also thank my loved ones, relatives, and friends for not letting me fall.

LIST OF ABBREVIATIONS

USSR. The Union of Soviet Socialist Republics

Ukrainian SSR. Ukrainian Soviet Socialist Republic

GRP. Gross Regional Product.

IS NANU. The Institute of Sociology of the National Academy of Sciences of Ukraine

Chapter 1

INTRODUCTION

The key institutions that distinguish a market economy from others are private property, markets, and firms. Ideally, the main goal of market reforms in the early 1990s, especially privatization, was to lay the foundations for economic growth by creating a broad class of private owners and market-based exchange mechanisms. At the time of the USSR's collapse, the system that existed suffered from massive inefficiency, lack of incentives, and shortages. The idea of privatizing property was to remove an enormous burden of often unprofitable and poorly managed enterprises from the budget and provide resources and incentives for the entrepreneurship of citizens.

Creative destruction promised transitional difficulties, especially for the massive military-industrial complex. Part of the ineffective economy had to collapse, being unnecessary in the new conditions. However, Ukraine was the second economy of the USSR, and it was predicted a great future. In 1990, Deutsche Bank predicted that the Ukrainian economy would grow fastest among the former Soviet republics due to its advantages such as educated population, proximity to Europe, the balance of agriculture and industry, significant natural resources (Starr and Dawisha 1996).

After a long dying stagnation of the Soviet planned economy, which at best began in the 1980s, in the early 1990s, the population of Ukraine was positively disposed towards market reforms and democratization. Significant fatigue and high expectations gave rise to greater legitimacy for the new post-Soviet leaders and their advertised recipes for large-scale changes. As follows from the monitoring surveys of the IS NASU, at the beginning of independence, in 1992, 63.5% of Ukrainians were positive about the privatization of land (only 13.9% were

negative), 56.2% were positive about the privatization of small enterprises (13.6% were negative), 25.1% were positive about the privatization of large enterprises (31.6% were negative).

Despite the still strong communist representation in parliament, the widespread thirst for change was immense. With the collapse of the USSR, changes became not only desirable but also inevitable. Regardless of whether citizens, elites, and institutions were in tune with them and had a working plan.

But things went wrong. Ukraine has been a disaster since then, and the attitude of citizens to market transformation worsened every year. By the end of the 1990s, among the post-Soviet countries, the citizens of Ukraine had the worst assessment of their economic and political systems (Rovelli and Zaiceva 2011).

There may be several reasons for this, which may lie both in the difficulties of the transition period itself and the nature of the system formed in the country afterward.

First, the unequal distribution of benefits and losses from reforms. The transitional crisis turned out to be very protracted and painful, the key industrial assets of Ukrainian SSR were never distributed in favor of the most efficient owners, and Ukraine did not become a market democracy. Instead, a system of crony capitalism and corrupt democracy was formed, where political power and economic opportunities are distributed not according to the principle of meritocracy and democratic equality in rights, but according to the possibilities of individual citizens to influence state institutions and use them in their own interests.

In the early 1990s, privatization was blocked by the communist elite and the then managers of state enterprises, who were called "red directors." Many of them used their control over state enterprises to enrich themselves and "nationalize" losses. Then the lion's share of the surviving state enterprises passed into their

hands due to opaque privatization. In any case, a broad class of entrepreneurs and new economic opportunities for most of the population did not arise, while budgetary resources were depleted by ineffective and predatory policies (Hellman et al. 1998).

Thus, the unfairness of the process and citizens' dissatisfaction with the subsequent inequality of wealth and opportunity could become the main factor reducing support for reforms throughout Ukraine's post-Soviet history.

Likewise, transitional suffering and falling living standards could also play a huge role. The transition was accompanied by hyperinflation, which destroyed the savings of the least protected groups of the population. Ukrainian GDP declined by 63 percent from 1991 to 1998. By the mid-2000s, Ukraine had the worst economic growth rates among the 15 post-Soviet republics, surpassing only Moldova. The average growth of the Ukrainian economy in 1990-2004 was negative 2.8% (Frye 2010).

Unemployment was massive. Although official estimates of unemployment were around 3 percent, the International Labor Organization gave a score of 9.8, while individual surveys and surveys of enterprises showed figures that reached 14-15 percent. In some regions, the levels of hidden unemployment reached 58 percent (Foglesong and Solomon 2001). Many of the official or hidden unemployed turned to the shadow economy, which by 1996 reached 60 percent of GDP. Thus, the fall in real living conditions has become another possible factor erasing support for market reforms.

Moreover, the collapse of the economy and institutions could provoke another defining factor in support of reforms. The massive poverty, the expansion of shadow activity, the collapse of social safety nets, and the inability of legal institutions to protect people have made the transition excessively criminogenic.

In the 1990s opinion polls, unemployment, uncontrolled inflation, and rising crime were among the top three social threats that worried the population. Throughout the 1990s, the rise in crime was one of the biggest fears for 60-70 percent of the population, falling to 43 percent only by 2010 (Kupets et al. 2013).

Thus, the third possible reason for the collapse of support for market reforms is lawlessness and citizens' vulnerability to it.

Since Market views of Ukrainians have deteriorated already in the post-Soviet era, the transitional post-Soviet factors should have played a significant role. Yet another question is why these factors worked differently for different regions of Ukraine and what role the inherited historical reasons could play.

Thus, we will explain why western Ukraine managed to maintain more support for privatization during the independence, while the citizens of eastern, southern, and central Ukraine became more pessimistic. In this work, we will abstract from the influence of such intangible factors as long-term culture, mentality, Soviet ideology, or try to see what is behind them.

The first supposed reason is the economy. Inherited Economic structure and vulnerability to the transient and subsequent shocks can affect attitudes (Guriev and Ananyev 2018).

Residents of the southeast and the center could lose faith in privatization simply because they had more to lose if something went wrong. The southeast and the center are more industrial than the west. This inherited industrial structure could have influenced their vulnerability to transient and subsequent shocks. However, it is surprising that industrial regions were also more negative to land privatization than agricultural regions, which were more vulnerable.

The second possible reason can be related to the previous one. Ukraine could suffer from a kind of resource curse that hit different regions in different ways

depending on the abundance of resources for redistribution in the face of institutional failure (Koziuk and Dluhopolskyi 2018).

During the transition, not only raw materials could become cursed resources but also production assets, which in the conditions of lawlessness became a source of rent. That is, more industrialized regions with an abundance of resources could face more significant redistribution and, as a result, higher subsequent wealth inequality and crime. Therefore, we will examine the impact of crime on falling privatization support and why it differs as we move to the southeast.

To do this, we must consider another important factor associated with both industrialization and crime. It could be urbanization, which has deep historical roots. During the Soviet period (and even before it), the urbanization of Ukrainian regions was strongly associated with industrialization. It could also influence the crime rate, as more urbanized areas tend to have higher crime rates (Ladbrook 1988).

Since the crime rate in different regions may differ depending on their level of industrialization and urbanization, this provides us with a natural experiment that may allow studying the causal effect of crime on attitudes.

Chapter 2

LITERATURE REVIEW

2.1 The Determinants of Reform Support

When it comes to citizens' attitudes towards reform, previous studies have revealed many factors that determine them (Khemani 2017). For transition countries, we can classify them into three groups.

The first group relates to how the gains and losses from reforms are distributed. In early studies (Fidrmuc 1999; Hayo 1999) showed that the fall in living standards due to transitional inflation and unemployment had a more significant impact on the political future of post-Soviet countries than their differences in the history, culture, and scale of communist legacy.

Rising unemployment during reforms reduces support for parties associated with the reforms and increases support for left-wing parties. The growth of the private sector increases the popularity of the reformers (Fidrmuc 1997).

Economic shocks can affect different groups of population in different ways when economic factors interact with cultural ones. As (De Haas et al. 2016) found, the Great Recession of 2009 had a different impact on the support for market economy and democracy in western and eastern Ukraine. Market support fell more in the east as it was hit harder by the crisis. But the effect increased as it got closer to the northeast border, which shows the possible influence of cultural factors.

The second group of factors is the question of the fairness of reforms for people. An important role is attributed to issues of inequality, especially inequality of opportunity. As (Milanovic 1998) shows, the rise in inequality in post-Soviet countries was enormous. Ukraine was one of the three post-Soviet countries hit

hardest by rising income inequality. However, (Gimpelson and Treisman 2015) show that policy preferences are more influenced by perceived inequality than actual income inequality, as demonstrated by the Ginny Index. Subsequent research (EBRD 2016) showed that only the "unfair" component of inequality - income inequality due to differences in opportunities - harms support for reforms.

The third group of factors that influence support for reforms in transition countries includes the trust and legitimacy of leaders. Legitimacy itself is closely linked to issues of efficiency and corruption.

The higher the corruption and the ability of influential interest groups to use the state for private purposes, the more all groups of the population oppose market reforms (Denisova 2016). This applies even to the most educated citizens, who can get more benefits from economic liberalization. Thus, corruption can signal that success does not depend on hard work and better skills in this system. Therefore, incentives to invest in skills and education are diminishing, as are incentives to support economic liberalization. And vice versa, trust in governments and support for market the economy grows if corruption decreases. The effect of corruption on attitudes can exceed economic factors such as income and employment (EBRD 2016).

In contrast to the above works, we will study the impact of lawlessness expressed in reported crime rate on support for privatization while controlling for factors such as living standards, inequality, and trust in leaders. To investigate the causal effect of crime on support for privatization, we use historical heterogeneity in crime rates between Ukrainian regions, depending on their level of industrialization and the accompanying urbanization. Therefore, we use literature on the determinants of crime, the impact of urbanization on crime, and the possible impact of urbanization on attitudes.

2.2 Social Strain and Economic Vulnerability as the Determinants of Crime

Classical works in social sciences well explain the sharp rise in crime in the post-Soviet period. The institutions of transitional countries were supposed to maintain law and order. The welfare state had to support the least protected from deprivation and poverty. The emergence of new economic opportunities resulting from healthy liberalization was supposed to keep people's faith in the system and market ideas. Yet, none of this worked in Ukraine during the transition.

The anomie theory of the American classical sociologist Robert K. Merton suggests that criminality arises from the inability of people to achieve their goals by socially accepted means. Faced with the impossibility of satisfying their needs in legal ways, especially when the law itself becomes the subject of decay, a person turns to other methods (Merton 1938).

Crime in post-Soviet Ukraine can be seen as a reaction to social strain and mirror the broader problems of a transitional society. The late Soviet and post-Soviet periods were accompanied by a perfect set of factors producing social strain. The sharp impoverishment of the population with a parallel enrichment of the narrow politically connected groups created massive unfair inequality. At the same time, very few had access to legal ways of obtaining wealth. Such transitional problems as unemployment, poverty, and growth of shadow activities could play a vital role in the overall growth of crime (Fanjzylber et al. 1998, 2002).

However, gaps remain regarding the significant differences in crime between macro-regions. The analysis of the spatial distribution of crime in Ukraine carried out by (Iavorskyi 2011) confirms a substantial difference in crime levels between the western and eastern regions. He concludes that economic development as such has little or no effect on crime. More critical are sociodemographic parameters such as the high concentration of the population in urban areas, the

effectiveness of police, the level of education, and the death rate, which may reflect other socioeconomic problems of the regions.

2.3 The Effect of Urbanization on Crime

Many works on criminology, economics, sociology show that the growth of crime and urbanization go together. The reasons can be a high population density and increased clashes between people (Ladbrook 1988), higher inequality (Soares 2004), more resources to redistribute (Buonanno 2003; Glaeser and Sacerdote 1999), a large proportion of young people and migrants, less interpersonal cohesion (Baumer and Wolff 2014; World Bank 2017).

As we will show below, the economic structure of Ukrainian regions, the level of their urbanization, and the level of crime are well correlated. The reasons for this are rooted in the Soviet (and pre-Soviet) history of Ukraine. Industrialization went hand in hand with the movement of people to cities, and it was the industrial regions that were more susceptible to crime. Thus, the more industrial cities of southeastern Ukraine were also the most urbanized and were associated with higher crime in both the Soviet and post-Soviet periods. The rise in crime in Soviet Ukraine began in the 1970s. From 1972 to 1989, in the Ukrainian SSR, the share of citizens living in urban areas grew from 56 to 66 percent. During the same time, levels of crime more than doubled (Foglesong and Solomon 2001).

Nor should we overlook the possibility that urbanization can directly influence people's views, and therefore could be responsible for different economic and political views of the eastern and southern regions. As (Putnam 2000; Steinhardt and Delhey 2020) show, rapid urbanization can be accompanied by the disintegration of common identity, traditional family, and communal ties. This, in turn, may mean a decrease in social capital and people's ability to cooperate, which are the basis for democracy and the market economy.

Chapter 3

DATA

The work discloses two main data sources. The first dataset is the Results of the Annual National Monitoring Surveys for 1992-2018. It covers Ukrainian citizens' political, economic, and social views and attitudes and a large set of demographic indicators such as residence patterns. The data were collected by the Institute of Sociology of the National Academy of Sciences of Ukraine every year or every two years. Namely, there are years 1992, 1994-2006 2008, 2010, 2012, 2014, 2016, and 2018. The data is available and representative for all Ukraine regions, except for the Autonomous Republic of Crimea and the occupied part of Donetsk and Luhansk regions since 2014.

From this dataset, we take the main dependent variables on the attitude of Ukrainian citizens towards privatization of land, large and small enterprises. We also use other variables from this dataset about the identity and set of economic and political views of Ukrainians for research analysis to find relationships between real factors of residence and citizens' views. Also, from here, we get data for explanatory variables and instrumental variables. There is demographic data on the age structure of the population of the regions, the structure of the residence, the income of the population, and confidence in political leaders during 1992-2018. Residence variables are used to construct instrumental variables on the proportion of each region's urban and rural population.

To integrate with other socioeconomic variables, these data are aggregated by region and year. Thus, in categorical variables, we use the proportions of citizens of certain regions in specific years who have particular views and attitudes. For numeric or continuous variables, we use the regional average for a specific year.

The second source is state statistics, mainly from regional statistical compilations (reports) by the State Statistics Service of Ukraine or provided by requests for access to public information.

In particular, data for the following variables are available for the next years: life expectancy by Region (1992-2018), number of registered crimes by Region (1995-2018), nominal gross regional product per capita (1996, 2000-2018), population by Region, for calculating other variables in per capita terms (1992-2018), Gini index by Region (2000-2018). To form two other instrumental variables about the economic specialization of regions, we use the share of citizens employed in industry (2000-2018) and the percentage of citizens employed in agricultural production (2000-2018).

It is noteworthy that since some years are missing in the data from sociological monitoring, we consider the same years for Ukrstat socioeconomic data. Namely, for each variable, data are taken only for the following years 1992, 1994-2006, and then every two years - 2008, 2010, 2012, 2014, 2016, and 2018. Therefore, in the models' estimates, the years from 2000 to 2006 are mainly taken continuously, and then every second year until 2018.

Chapter 4

METHODOLOGY

4.1. Background. Explaining Differences between Ukrainian East and West

As Figure 1 shows, the dynamics of citizens' attitudes towards privatization in post-Soviet Ukraine were unambiguous. The average proportion of those who support privatization of land, large and small enterprises, was most at the beginning transition (in 1992), but subsequently only declined, reaching minimum by 2016-2018 (see Figure 1).

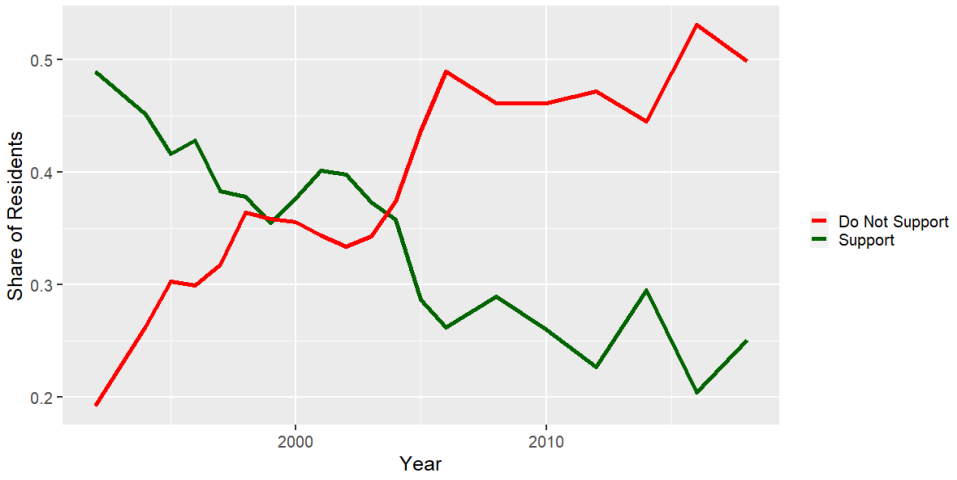

Figure 1. Annual Dynamics of the share of Ukrainian Citizens Who Support or Do Not Support Privatization (average for privatization of land, large and small enterprises)

The share of Ukrainians who do not support each of the three types of privatization has constantly been growing. The percentage of citizens with a positive attitude has been steadily declining (except for 1999-2004 and 2014,

which indicates the possible influence of political factors and two revolutions, which could form positive expectations). These post-Soviet dynamics and sensitivity to current political events suggest that the primary reasons for the negative trend in support may originate not in the Soviet past but the factors of the post-Soviet period. The above transitional difficulties could affect the economic views of citizens.

More interesting is why these views behaved differently in different parts of the country. Even though average support for privatization declined in all regions, in the Western regions, it decreased significantly less. During the years of independence, the country's west has retained a substantially more positive attitude towards privatization than central, southern, and, especially, eastern macro-regions. There is a clear tendency: the further we move to the southeast, the more negative the attitude towards privatization is. The west is a clear outlier (see Figure 2).

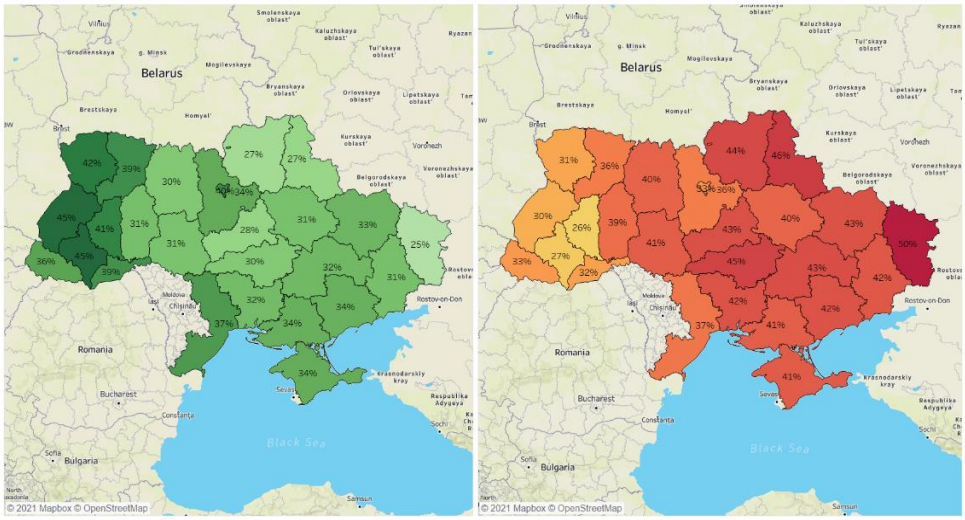

Figure 2. Share of Citizens with Positive (Left Panel) or Negative (Right Panel) Attitude to Privatization by Region (average for privatization of land, large and small enterprises)

Having a wide range of variables at the regional level, we can try to find what more tangible dimensions distinguish different macro-regions of the country. Looking at the social data, we can see that similar patterns are repeated with average life expectancy by Region and concerning the level of registered crime by Region. As we move southeast, life expectancy declines, while per capita crime rates rise significantly (see Figure 3).

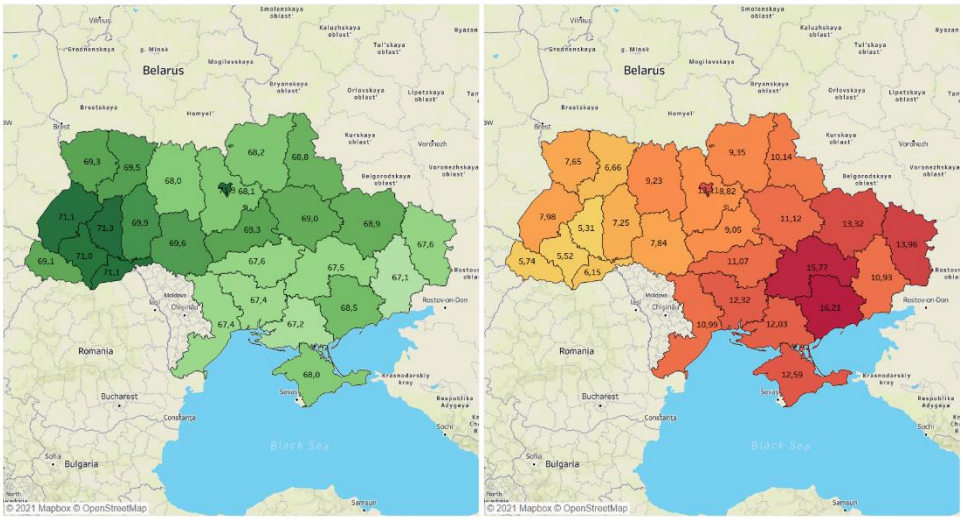

Figure 3. Average Life Expectancy for 1992-2018 (Left Panel) and Crime Per Capita for 1995-2018 (Right Panel) by Region

Long-term structural variables may have influenced real socioeconomic variables such as life expectancy or crime rates, which may have determined the difference in economic views of the population in the post-Soviet period.

Namely, the structure of the residence and the structure of the regional economy. While the vast rise in post-Soviet crime rates may have been due to transitional difficulties, from the work of (Foglesong and Solomon 2001), we know that the

crime rate began to grow significantly back in the Ukrainian SSR in 1972-1989 (see Figure 4). At that time, the country was experiencing a wave of urbanization, and during the same period, the average share of the urban population increased by 10 percent.

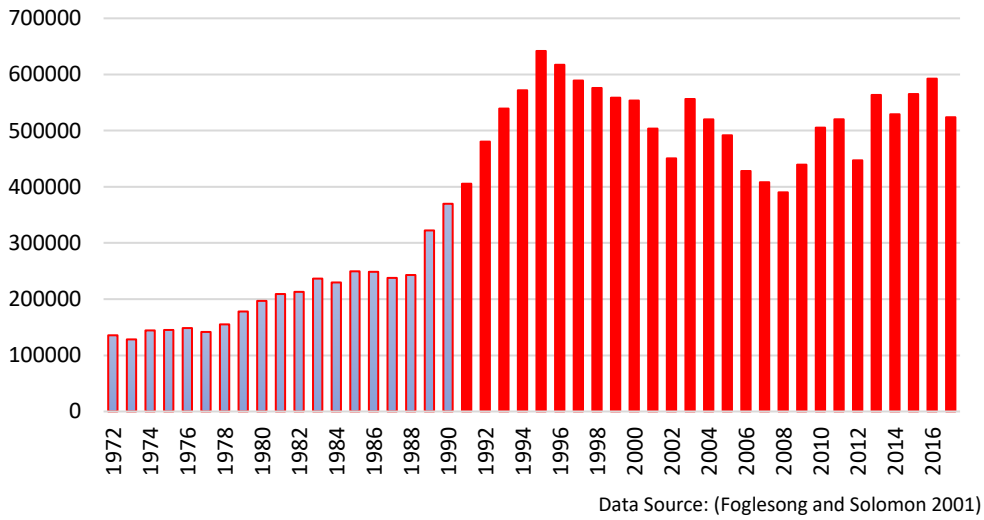

Figure 4. Number of Registered Crimes (Ukrainian SSR 1972-1991, Ukraine 1991-2017)

In addition, the urbanization of Ukrainian regions is closely related to their economic structure. It depends on the historical background. The Soviet economy was highly specialized in agricultural production and heavy industry. In contrast, small-scale production of consumer goods and the service sector developed very weakly and had low shares in the economy (Lytvyn 2011). This influenced the fact that more agricultural regions remained predominantly rural (see Left Panel of Figure 5 and Left Panel of Figure 6). In comparison, more industrialized regions continued to urbanize (see Right Panel of Figure 5 and Right Panel of Figure 6).

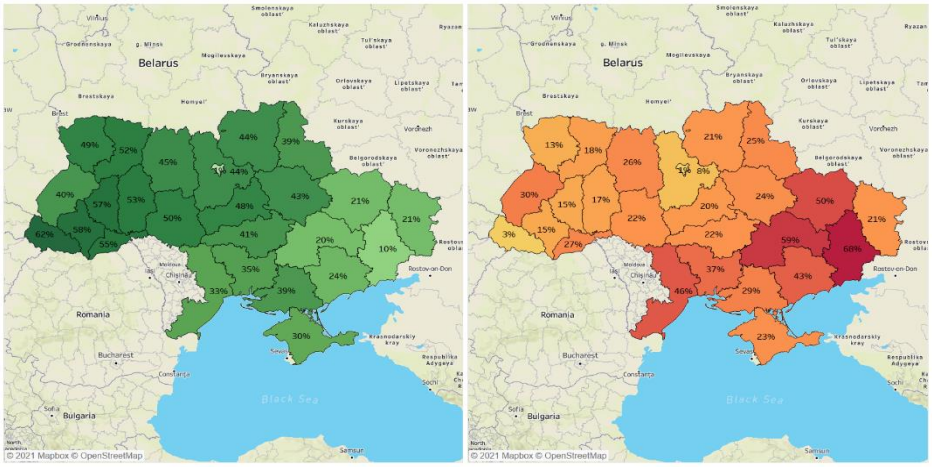

Figure 5. Average Share of Citizens Living in Rural (Left Panel) or Urban Area (Right Panel) by Region for 1992-2018

This was especially typical for the southeast of Ukraine and partly for the central regions, where the share of citizens both employed in industrial production and living in cities is much higher. While moving to the west, Ukrainian regions are more rural, and a larger share of the population is engaged in agriculture.

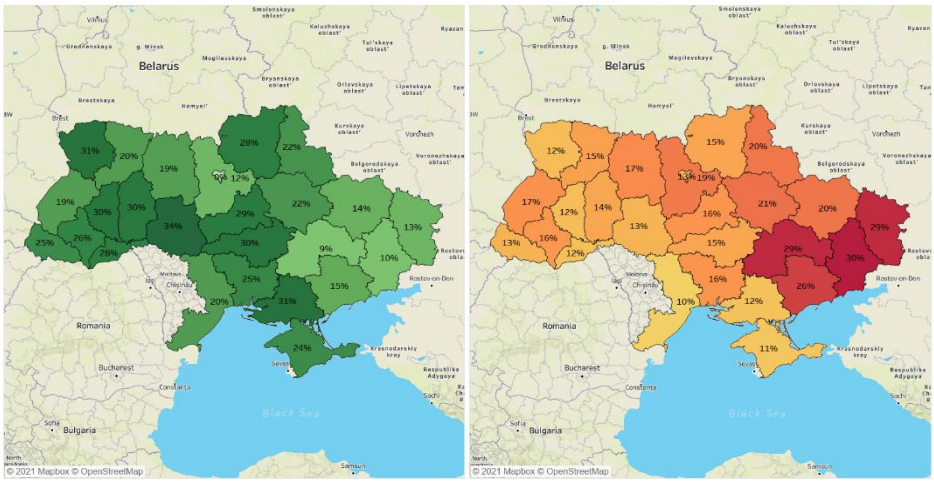

Figure 6. Share of Citizens Employed in Agro (Left Panel) and Industry (Right Panel) by Region for 2000-2018

Analyzing the data on the attitudes, we see a significant difference between industrial and non-industrial regions. We call industrial regions those where the share of industrial employment for 2000-2018 exceeds the national average of 17%.

In industrial regions, the negative attitude towards privatization is on average 5.8 percent higher (42.3% for industrial, 36.6% for non-industrial). The positive attitude towards privatization is 5 percent lower. Industrial regions are also 6.7 percent more supportive of socialism and 4.5 percent less support for capitalism. They are also 3.1 percent more supportive of the planned economy and 2.5 percent less likely to support minimizing government intervention in the economy (see Table 1).

Table 1. Summary Statistics of Key Variables by Regional Economic S

	Specialization			
	Industrial	Non-Industrial	Agro	Non-Agro
Privatization Negative	42.3%	36.6%	38.0%	39.3%
Privatization Positive	31.0%	36.0%	33.9%	34.7%
Socialism Support	25.8%	19.1%	21.6%	21.4%
Capitalism Support	9.8%	14.4%	13.1%	12.4%
Plan Economy Support	31.0%	28.0%	29.5%	28.4%
State Role Minimization Support	5.9%	8.4%	8.3%	6.5%
Crime Per Capita	12.2	8.8	8.8	11.5
Life Expectancy	68.2	69.3	69.1	68.7
Industrial Employment Share	23.5%	13.8%	14.7%	20.6%
Agricultural Employment Share	15.2%	25.4%	27.8%	13.8%
Share of Urban Residence	71.1%	55.2%	54.9%	70.1%
Share of Rural Residence	29.7%	46.4%	47.0%	30.6%

Industrial and non-industrial regions also differ in more intangible parameters. Thus, the average crime per capita in industrial regions for 1995-2018 is 12.2, and in non-industrial regions, it is 8.8. Life expectancy differs by 1.1 years in favor of less industrialized regions.

From the point of view of this study, the main difference between industrial and non-industrial regions is urbanization. The share of the urban population in industrial regions is 71.1 percent, and in non-industrial regions - 55.2 percent. The percentage of the rural population in industrial regions is 29.7 percent, and in non-industrial regions - 46.4 percent.

In addition, if we look at agricultural regions in which the share of the population employed in agriculture in 2000-2018 was more than 20 percent, then we see the opposite picture. The percentage of the urban population in agricultural regions is 54.9 percent, and in the non-agricultural areas - 70.1 percent. The share of the rural population is 47.0 percent versus 30.6 percent.

Figure 7. Distributions of Key Explanatory Variables in Industrial and Non-Industrial Regions

This specificity of the residence and industrial structure patterns between different regions of Ukraine provides a natural experiment that may allow studying the causal effect of crime on attitudes. We use these patterns to construct instrumental variables for reported crime rates.

Namely, we will test the following four instrumental variables. (1) The share of the Region's citizens employed in agriculture and the accompanying variable (2) the share of the region's citizens living in the rural area. These two variables have a strong negative linear relationship with the reported crime rate per capita. The following two instruments are (3) the share of the Region's residents employed in industry and the accompanying variable (4) the share of the region's residents living in cities. These two variables strongly correlate with the crime rate, although the industrial employment variable has signs of a nonlinear relationship with crime. We also expect a high correlation between the level of urbanization and the economic structure of the regions, which can make some of the instruments excessive.

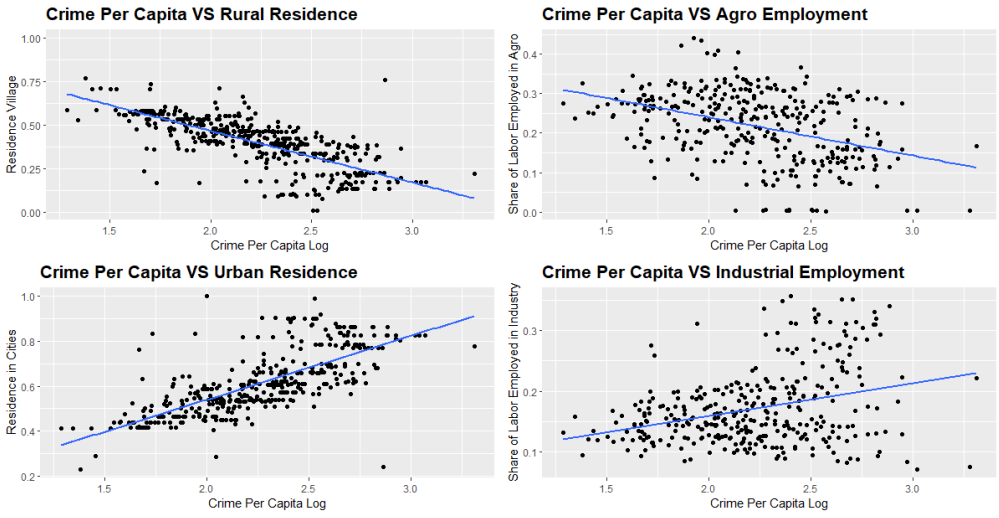

Figure 8. Potential Instrumental Variables

4.2 Potential Problems and Other Explanations

Political Mobilization as an Alternative Channel. An alternative explanation of why support for reforms was lower in the central and southeastern regions and fell more in the post-Soviet period is political mobilization. One of the key impediments to privatization was the Soviet political and bureaucratic elite, especially the so-called "red directors" or heads of numerous state-owned enterprises, who had a significant representation in parliament and greatly influenced politics. The Red Directors were interested in maintaining the status quo. It was beneficial for the heads of state-owned enterprises to retain control over them in the context of partial liberalization of the economy privatizing excess profits and nationalizing losses, receiving massive subsidies from the budget and loans from state banks.

Thus, the idea is that at the beginning of the transition, the communist political elite, which had more support as it moved to the southeast, mobilized the population of these regions against privatization.

Thus, socialists, communists, and red directors (using both representative bodies of power and state enterprises) could mobilize the population and, especially, employees of state enterprises against privatization. More industrial regions (as well as more urbanized and criminal ones) could be more prone to the influence of this mobilization. Therefore, the real reason for the drop in support for reforms could be precisely the factor of political mobilization, which worked better in more urbanized and more criminal regions since they were more industrial. Then the influence of the crime rate on the support of reforms, even when using the instrument of urbanization and industrial specialization, maybe due to the simple correlation of crime, urbanization, and industrial specialization with the propensity of such regions to the more significant political influence of communists.

In fact, at the beginning of the transition, a significant political mobilization of the southeast and the center against privatization took place. Historical sources

show that since 1993, the communists, who blocked privatization in parliament, really managed to mobilize miners and industrial workers in the southeastern regions to protest against privatization (Lytvyn 2011).

At the same time, this channel of influence can hardly be the root one. The more significant political mobilization of industrial regions indeed took place. However, it was a consequence of some deeper factors that determined both the opposition of certain regions to privatization and the ease mobilize them against it. These deeper factors could be industrial specialization and the significant vulnerability of these regions to the transition. As we have shown in the literature, industrial regions were tied in the industrial chains of the USSR. They did not have an easy way: vast shares of their economy became unnecessary with the collapse of the industrial and, especially, the military-industrial complex of the USSR. The single-industry towns, where most of the population was employed in several large enterprises, fell into despair as soon as the Soviet state and the general industrial complex began to disintegrate.

Another reason why political mobilization could hardly have played a fundamental role in both the decline in support for reforms throughout the entire period of independence and the formation of the difference in relations between east and west is the change in political attitudes.

As the transition proceeded, post-Soviet leaders and parties lost the ability to mobilize people. Support for political leaders and parties has dropped dramatically. If in 1994 only 25 percent of citizens answered that there were no effective leaders in the country, then in 2018, it was already 49 percent. The support of the communists and socialists also fell. If in 1998 it grew and was 22 percent, then by 2018 it fell to 3 percent. On average, from 1992 to 2018, 52.5 percent of Ukrainians answered that they either did not support any of the political movements, or that they had not yet decided, or that they did not understand them at all.

Simultaneously, the share of citizens who do not support each of the three types of privatization on average increased from 19 percent to 50, and the average share of those who support each of the three types of privatization has dropped from 49 percent to 25.

The Omitted Corruption and Unfairness of Post-Soviet Society. It also can be suggested that people's beliefs influenced support for market reforms about the fair distribution of their results. People's beliefs about the fairness of distribution of national wealth, political power, and economic opportunities in post-Soviet Ukraine should influence the legitimacy of the privatization reform.

To reflect this fully, we would have to include such additional variables as the regional level of corruption, fairness (evenness) in the redistribution of resources and assets during the transition period, and the even distribution of economic opportunities in post-Soviet Ukraine. We understand that in Ukraine, these factors can play a decisive role. Yet, these factors are difficult to measure and display in the data, so we cannot include them directly in our model.

However, existing data can at least partially compensate for these missing variables. At the regional level, they can be represented by three variables that we include in the model.

The first is confidence in leaders. As (Guriev 2017) shows, corruption is one of the main factors influencing trust in leaders. We assume that the confidence of Ukrainians in leaders is directly related to the conviction that they are corrupt. Therefore, the variable of confidence in leaders should at least partially serve as a proxy for the perceived level of corruption of the political class. The second is crime. We expect recorded crime to both, directly and indirectly, account for corruption and abuse of power.

The third is industrial employment, which will serve as an explanatory variable for endogenous crime in the 2SLS model. We assume that the crime rate partially

reflects the process of redistribution of property in the transition period. It is likely that in regions with many resources and enterprises for redistribution, shadow activity and crime were greater.

It is also possible that economic variables such as gross regional product, Gini index, and average life expectancy partially reflect the missing variable (the "fairness" of Ukrainian transition and post-Soviet society).

Cities and Influence of Moscow. Another possible channel of influence is institutional and bureaucratic. Ukrainian cities developed hand in hand with industrialization, which to a large extent took place when Ukraine was part of the Russian Empire or the USSR. In each case, the cities were more influenced by Moscow's institutions, bureaucracy, and ideology. The policy of the metropolis was aimed at assimilation and destruction of local identity (for example, russification or anti-Western narratives). At the same time, traditional Ukrainian identity was better preserved in the villages. And in Western Ukrainian villages, there was also a strong orientation towards the west. This may explain the influence of residence on attitudes towards market ideas, while urbanization may correlate with the crime. We acknowledge that this channel may also work, but testing this hypothesis is beyond our data and research scope.

4.3 The Model. Key Variables and Specifications

In this model, we expect to assess the impact of crime on attitudes towards privatization, where crime depends on such historical factors inherited from the Soviet past as the economic specialization of Ukrainian regions and the level of their urbanization. At the same time, we control the effect on the influence of other variables that have been considered in the previous literature. In particular, we expect the impact of living standards on support for privatization, whether directly or indirectly reflected. To estimate the direct effects, we include an explanatory

variable, the logarithm of GRP per capita. In one of the OLS specifications, we also use the average regional incomes in dollar terms from the surveys (which have been available since 1992).

To estimate the indirect impact, we include a life expectancy variable that is highly dependent on the living conditions of people and their environment. We also include the average age of the population in the Region, as we expect that regions with a higher proportion of the elderly may have lower support for reforms either due to the more significant traumatic impact of the transition or due to the longer Soviet experience. Another essential variable is citizens' confidence that there are political leaders in the country who can govern effectively. We also view this variable as a partial proxy for corruption and the ineffectiveness of governance and expect people who are disillusioned with politicians to be less likely to support the reforms they propose. Finally, we control the effect on the impact of income inequality as reflected by the regional Gini. Rising inequality is expected to negatively impact support for liberal economic policies. But at the same time, this index may not reflect the inequality of opportunity, which, according to the literature, influences economic attitudes (see Table 2).

Table 2. Explanatory Variables and Their Expected Effects

Explanatory Variable	Expected Effect
Registered crime per capita	Negative
Gross regional product per capita	Positive
Age	Negative
Life expectancy	Positive
Leaders No	Negative
Gini	Negative

Our identification strategy is designed to test a causal notion that more people oppose privatization as crime levels go up. If this is true, the data should reject the null hypothesis about the absence of any statistical association between crime level and privatization support:

HYPOTHESIS H0. Change in privatization support does not differ between the regions with the different predicted change in crime (while crime level is predicted by regional economic and residence structure).

$$Priv\_Support_{ij} = \beta_0 + \beta_1 log(Crime_{PC})_{ij} + \sum_n \beta_n Controls_{ij} + e_{ij} \quad (1)$$

$Priv\_Support_{ij}$ – Approval or disapproval of one of the types of privatization (privatization of land, of large or small enterprises) for the region "i," year "j";

$\beta_1 log(Crime_{PC})_{ij}$ – Logarithm of the registered level of crime per capita for the region "i," year "j";

$Controls_{ij}$:

- $log(GRP_{PC})_{ij}$ – Nominal Gross Regional Product per capita for the region "i," year "j" (one specification uses $log(\text{dollar\_income})_{ij}$ instead);
- Age_{ij} – Average age of residents for the region "i," year "j";
- $LifeExpect_{ij}$ – Life expectancy for the region "i," year "j";
- $Leaders_{NO\,ij}$ – Percentage of the population who believe that there are no leaders in the country who can effectively govern for the region "i," year "j";
- $Gini_{ij}$ – Regional Gini coefficient for the region "i," year "j";
- $Year_{ij}$ – Factor variable for a year as a trend control.

As crime per capita is an endogenous variable, we use the 2SLS technique with the first stage as follows:

$$log(Crime_{PC})_{ij} = \lambda_0 + \lambda_1 EconomStr_{ij} + \lambda_2 ResidenceStr_{ij} + \lambda_3 Controls_{ij} + u_{ij} \quad (2)$$

$EconomStr_{ij}$ – Share of the population employed in agriculture and/or industry for the region "i," year "j";

$ResidenceStr_{ij}$ – Share of the population living in rural and/or urban area for the region "i," year "j";

$Controls_{ij}$ – The entire set of control variables used in a structural equation.

Chapter 5

ESTIMATION RESULTS

We first show the OLS results with data for 1992-2018 to cover the transition period of the 1990s (see Table 3). We regress the regional share of support for the three types of privatization on the log of reported crime rates and an array of controls. Dependent variables are the share of positive and negative citizens about the privatization of land - model (1) and (2), the percentage of positive and negative citizens about the privatization of large enterprises - model (3) and (4), the share of positive and negative citizens about privatization of small enterprises - model (5) and (6).

As dependent variables, we use both positive and negative attitudes since they are not opposites of each other due to the third category of citizens who found it difficult to answer. It makes sense to give both categories since both for each type of privatization and between types of privatization, these shares differ. For example, the percentage of those opposed to large-scale privatization has consistently exceeded the share of those who support it. In contrast, for the privatization of small enterprises - on the contrary - although support has constantly been falling, the average number of those who support it has always been higher than those who are against it.

In addition, in this model, instead of GRP per capita, we use the average individual income in dollar terms (obtained from surveys and aggregated at the regional level), which is available for all years from 1992 to 2018. We also exclude the Gini coefficient from this model, which is available only since 2000. Thus, this model estimates the impact of crime and other control variables on privatization support over 1992-2018.

Table 3. Privatization Support by Type. Long OLS (1992-2018)

	Dependent variable:					
	priv_land_pos	priv_land_neg	priv_large_pos	priv_large_neg	priv_small_pos	priv_small_neg
	(1)	(2)	(3)	(4)	(5)	(6)
log(crime_pc)	-0.062***	0.091***	-0.061***	0.111***	0.003	0.030**
	(0.021)	(0.021)	(0.015)	(0.021)	(0.022)	(0.015)
log(inc_dol)	0.004	-0.011	0.027	-0.010	0.038	-0.003
	(0.019)	(0.018)	(0.018)	(0.021)	(0.026)	(0.014)
Age	-0.012***	0.012***	-0.007***	0.007**	-0.012***	0.010***
	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)	(0.002)
Life_Expect	0.020***	-0.021***	0.003	-0.013***	0.019***	-0.019***
	(0.005)	(0.005)	(0.003)	(0.004)	(0.004)	(0.003)
Leaders_no	-0.094*	0.020	-0.110***	0.107*	-0.074	0.034
	(0.057)	(0.060)	(0.035)	(0.062)	(0.054)	(0.049)
Constant	-0.191	0.990**	0.421	0.766*	-0.331	0.954***
	(0.419)	(0.428)	(0.274)	(0.394)	(0.391)	(0.269)
Observations	451	451	448	450	451	446
R^2	0.585	0.578	0.293	0.403	0.410	0.411
Adjusted R^2	0.563	0.557	0.257	0.373	0.379	0.380
Residual Std. Error	0.109 (df = 428)	0.114 (df = 428)	0.075 (df = 425)	0.112 (df = 427)	0.105 (df = 428)	0.087 (df = 423)
F Statistic	27.375*** (df = 22; 428)	26.670*** (df = 22; 428)	8.023*** (df = 22; 425)	13.119*** (df = 22; 427)	13.509*** (df = 22; 428)	13.415*** (df = 22; 423)

Note: *p**p***p<0.01

Factor variable Year is omitted from the table

The model shows the statistically significant impact of crime on support for privatization. The rise in crime is associated with a fall in the share of citizens who support the privatization of land and large enterprises and associated with an increase in negative attitudes towards all three types of privatization.

There is also a highly statistically significant effect of the average age with expected signs and the effect of life expectancy for attitudes towards all types of privatization, except for a positive attitude towards large privatization. The higher average age of residents is associated with less support for all types of privatization

and with an increase in negative attitudes for all types. An increase in life expectancy is associated with a decrease in negative attitudes. Trust in leaders is significant in several models and has the expected effects of being associated with lower support for land privatization and large privatization.

We also estimate a shorter OLS model (2000-2018) where we include the same variables that we will later use for the 2SLS method (see Table 4). In contrast to the first OLS, we include GRP per capita and the Gini index.

Table 4. Privatization Support by Type. Short OLS (2000-2018)

	Dependent variable:					
	priv_land_pos	priv_land_neg	priv_large_pos	priv_large_neg	priv_small_pos	priv_small_neg
	(1)	(2)	(3)	(4)	(5)	(6)
log(crime_pc)	-0.051	0.078**	-0.060***	0.131***	0.012	0.033
	(0.031)	(0.032)	(0.022)	(0.033)	(0.030)	(0.023)
log(GRP_pc)	-0.009	0.013	0.017	-0.008	0.030	-0.007
	(0.021)	(0.021)	(0.016)	(0.021)	(0.020)	(0.015)
Age	-0.011***	0.013***	-0.009***	0.010***	-0.011***	0.010***
	(0.004)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)
Life_expect	0.020***	-0.021***	0.001	-0.009	0.016***	-0.016***
	(0.006)	(0.006)	(0.004)	(0.006)	(0.005)	(0.004)
Leaders_no	-0.077	0.064	-0.116***	0.135*	-0.146**	0.080
	(0.070)	(0.076)	(0.041)	(0.079)	(0.061)	(0.059)
Gini	-0.186	-0.099	-0.048	-0.274	-0.185	0.020
	(0.268)	(0.262)	(0.201)	(0.297)	(0.211)	(0.169)
Constant	-0.210	0.929*	0.574**	0.399	-0.211	0.785**
	(0.488)	(0.498)	(0.284)	(0.480)	(0.414)	(0.316)
Observations	306	306	305	305	306	301
R^2	0.570	0.554	0.273	0.374	0.402	0.379
Adjusted R^2	0.545	0.527	0.230	0.337	0.367	0.342
Residual Std. Error	0.108 (df = 288)	0.118 (df = 288)	0.077 (df = 287)	0.112 (df = 287)	0.103 (df = 288)	0.088 (df = 283)

Note: *p**p***p<0.01

Factor variable Year is omitted from the table

At the same time, OLS estimations cannot be interpreted causally since crime per capita and an omitted variable can jointly determine support for reforms.

This problem can be addressed through the instrumental variable approach. Since the industrial structure of Ukraine was formed during the Soviet era, and the level of urbanization was significantly tied to Soviet industrialization, it is plausibly exogenous to the change in post-Soviet support for privatization.

Table 5 shows the first stage of the 2SLS assessment using the instrumental variables of urban residence and industrial employment.

Table 5. First-stage estimates: Determinants of Crime (Urban-Industrial)

	Dependent variable:					
	log(crime_pc)					
	(1)	(2)	(3)	(4)	(5)	(6)
Place_resid_cities	1.496***	1.256***	1.340***	1.047***	0.972***	0.969***
	(0.129)	(0.128)	(0.131)	(0.122)	(0.124)	(0.125)
Prom_empl_sh	0.316	-0.180	-0.356	0.181	0.233	0.242
	(0.306)	(0.311)	(0.315)	(0.286)	(0.284)	(0.286)
log(GRP_pc)		0.345***	0.346***	0.196***	0.204***	0.203***
		(0.063)	(0.062)	(0.058)	(0.057)	(0.057)
Age			0.018**	0.004	0.004	0.004
			(0.007)	(0.006)	(0.006)	(0.006)
Life_expect				-0.074***	-0.067***	-0.066***
				(0.009)	(0.010)	(0.010)
Leaders_no					0.326***	0.324***
					(0.120)	(0.120)
Gini						0.164
						(0.503)
Observations	286	270	270	269	267	267
R^2	0.586	0.647	0.656	0.736	0.741	0.742
Note:				*p**p***p<0.01		

Factor variable Year is omitted from the table

We test the instrumental variables with all possible combinations of control variables for a clearer picture of potential relationships. Across all specifications, the share of urban residence explains per capita crime and is associated with its rise. This instrument is a statistically and economically significant predictor of crime during 2000-2018 across Ukrainian regions.

Industrial employment is statistically insignificant and does not have an independent explanatory power on the crime rate due to its strong correlation with urban residence (separately, the industrial employment variable is statistically and economically significant).

Table 6 presents the second stage assessment, where the positive and negative attitudes of the residents of Ukrainian regions towards the three types of privatization regressed on the explained crime rate per capita and a set of control variables.

To evaluate the models, robust standard errors were used, and robustness checks were carried out. The Weak instruments test did not reveal such in any of the six models. The Wu-Hausman test shows endogeneity for the first and second models (land privatization), justifying the need for an instrumental variable. At the same time, the Wu-Hausman test showed no endogeneity in the 3, 4, 6 models, which means that OLS assessments may also be valid.

The coefficient on crime per capita is statistically and economically significant in four specifications, representing positive and negative attitudes towards land privatization and privatization of large enterprises. The coefficient is statistically insignificant for the privatization of small enterprises.

The first three models also have a statistically and economically significant impact of nominal GDP per capita on reform support. The coefficient has the expected sign, that is, it is associated with more substantial support for reforms.

Table 6. Privatization Support by Type (Instrument: Urban Residence)

	Dependent variable:					
	priv_land_pos	priv_land_neg	priv_large_pos	priv_large_neg	priv_small_pos	priv_small_neg
	(1)	(2)	(3)	(4)	(5)	(6)
log(crime_pc)	-0.245***	0.203***	-0.112**	0.194**	0.071	-0.073
	(0.083)	(0.073)	(0.047)	(0.076)	(0.072)	(0.070)
log(GRP_pc)	0.097**	-0.073*	0.054*	-0.047	0.038	0.016
	(0.049)	(0.042)	(0.029)	(0.047)	(0.047)	(0.039)
Age	-0.014***	0.014***	-0.009***	0.011***	-0.012***	0.009***
	(0.004)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)
Life_expect	0.007	-0.014	-0.002	-0.004	0.027***	-0.028***
	(0.010)	(0.008)	(0.005)	(0.009)	(0.009)	(0.008)
Leaders_no	0.027	0.049	-0.101*	0.161*	-0.162**	0.154**
	(0.088)	(0.084)	(0.055)	(0.086)	(0.077)	(0.073)
Gini	-0.249	-0.021	0.113	-0.422	0.060	-0.127
	(0.283)	(0.229)	(0.186)	(0.270)	(0.290)	(0.194)
Constant	0.451	0.740	0.572	0.215	-1.192	1.678***
	(0.765)	(0.674)	(0.426)	(0.726)	(0.744)	(0.556)
Weak instruments	0	0	0	0	0	0
Wu-Hausman	0	0.1	0.38	0.32	0.2	0.12
Observations	267	267	266	267	267	265
R^2	0.559	0.607	0.301	0.382	0.400	0.360
Adjusted R^2	0.529	0.580	0.253	0.340	0.359	0.316
Residual Std. Error	0.108 (df = 249)	0.108 (df = 249)	0.071 (df = 248)	0.110 (df = 249)	0.101 (df = 249)	0.089 (df = 247)

Note: *p**p***p<0.01

Factor variable Year is omitted from the table

In all models, the effect of average regional age is highly statistically (but not economically) significant. It is associated with a decrease in support for reforms and an increase in negative attitudes towards them. In models 5 and 6 of small privatization, the coefficient of life expectancy is highly statistically significant, as well as the coefficient of the variable reflecting the average belief of the Region's residents that there are no effective leaders in the country. Increased life expectancy

is associated with greater support for reform, and disappointment with leaders is associated with less.

We also applied a second set of instrumental variables to explain crime rates through agricultural employment and rural residence.

Table 7 shows the first stage of the 2SLS assessment using the instrumental variables of rural residence and agricultural employment.

Table 7. First-stage estimates: Determinants of Crime Per Capita (Rural-Agro)

	Dependent variable:					
	log(crime_pc)					
	(1)	(2)	(3)	(4)	(5)	(6)
Place_resid_vil	-1.902***	-1.596***	-1.600***	-1.383***	-1.331***	-1.320***
	(0.113)	(0.107)	(0.107)	(0.105)	(0.107)	(0.107)
Agro_empl_sh	0.096***	0.231***	0.218***	0.119***	0.118***	0.124***
	(0.032)	(0.033)	(0.034)	(0.033)	(0.033)	(0.034)
log(grp_pc)		0.490***	0.473***	0.288***	0.295***	0.303***
		(0.056)	(0.057)	(0.059)	(0.059)	(0.059)
Age			0.010	0.005	0.005	0.004
			(0.006)	(0.006)	(0.006)	(0.006)
Life_expect				-0.063***	-0.059***	-0.057***
				(0.009)	(0.009)	(0.009)
Leaders_no					0.229**	0.215**
					(0.106)	(0.106)
Gini						0.600
						(0.405)
Observations	322	299	299	297	295	295
R^2	0.623	0.716	0.719	0.772	0.774	0.775

Note: *p**p***p<0.01

Factor variable Year is omitted from the table

Across all specifications, the share of rural residence explains per capita crime and is associated with its decline. This instrument is a statistically and economically significant predictor of crime during 2000-2018 across Ukrainian regions.

Agricultural employment is statistically insignificant and does not have an independent explanatory power on the crime rate due to its strong correlation with urban residence (separately, the industrial employment variable is statistically and economically significant). Agricultural employment is also statistically (but to a much lesser extent economically) significant but has the opposite sign, associated with increased crime. However, in a separate assessment of non-rural livelihoods, agricultural employment has a negative impact on crime. Due to the relatively small economic effect and its mixed nature, we include rural residence in the second stage estimation.

Table 8 presents the second stage assessment, where the positive and negative attitudes of the residents of Ukrainian regions towards the three types of privatization regressed on the explained crime rate per capita and a set of control variables.

To evaluate the models, robust standard errors were used, and robustness checks were carried out. The Weak instruments test did not reveal such in any of the six models. The Wu-Hausman test shows endogeneity for the first and second models (land privatization), justifying the need for an instrumental variable. At the same time, the Wu-Hausman test showed no endogeneity in the 3-6 models, which means that OLS assessments may also be valid.

The coefficient on crime per capita is statistically and economically significant in four specifications, representing positive and negative attitudes towards land privatization and privatization of large enterprises. As in the previous specification, the coefficient is statistically insignificant for the privatization of small enterprises.

Table 8. Privatization Support by Type (Instrument: Rural Residence)

	Dependent variable:					
	priv_land_pos	priv_land_neg	priv_large_pos	priv_large_neg	priv_small_pos	priv_small_neg
	(1)	(2)	(3)	(4)	(5)	(6)
log(crime_pc)	-0.299***	0.260***	-0.125***	0.203***	-0.040	0.011
	(0.080)	(0.074)	(0.043)	(0.076)	(0.067)	(0.054)
log(GRP_pc)	0.128***	-0.093**	0.056**	-0.040	0.083**	-0.008
	(0.043)	(0.042)	(0.028)	(0.048)	(0.038)	(0.034)
Age	-0.012***	0.014***	-0.009***	0.011***	-0.012***	0.010***
	(0.004)	(0.004)	(0.002)	(0.003)	(0.003)	(0.003)
Life_expect	0.001	-0.008	-0.004	-0.002	0.015*	-0.020***
	(0.010)	(0.009)	(0.005)	(0.009)	(0.008)	(0.006)
Leaders_no	0.047	-0.025	-0.085*	0.102	-0.122*	0.087
	(0.092)	(0.086)	(0.050)	(0.086)	(0.073)	(0.068)
Gini	0.124	-0.350	0.040	-0.309	-0.018	0.010
	(0.348)	(0.326)	(0.224)	(0.330)	(0.232)	(0.191)
Constant	0.556	0.464	0.718*	-0.011	-0.490	1.074***
	(0.756)	(0.707)	(0.376)	(0.652)	(0.614)	(0.396)
Weak instruments	0	0	0	0	0	0
Wu-Hausman	0	0	0.11	0.25	0.45	0.57
Observations	295	295	294	294	295	290
R^2	0.454	0.494	0.261	0.362	0.388	0.374
Adjusted R^2	0.420	0.463	0.215	0.323	0.351	0.335
Residual Std. Error	0.122 (df = 277)	0.126 (df = 277)	0.079 (df = 276)	0.114 (df = 276)	0.104 (df = 277)	0.089 (df = 272)

Note: *p**p***p<0.01

Factor variable Year is omitted from the table

The first two models on the attitude to land privatization also show a statistically and economically significant effect of GRP per capita. The growth of GRP is associated with an increase in support and a decrease in negative attitudes towards land privatization. Also, GRP shows significant effects on a positive attitude towards large and small privatization.

In all models, as in the previous estimation, the effect of average regional age is highly statistically (but not economically) significant. It is associated with a decrease in support for reforms and an increase in negative attitudes towards them. In model 6 of small privatization, the life expectancy coefficient is highly statistically significant (but less economically).

The coefficient on dissatisfaction with leaders is weakly statistically significant but has more considerable economic significance.

Chapter 6

CONCLUSIONS AND POLICY RECOMMENDATIONS

This paper investigates the relationship between the level of post-Soviet crime in the regions of Ukraine and the attitude of citizens towards privatization. The results, which can be partially interpreted causally, show the influence of crime rates on market attitudes. The rise in the registered crime rate of Ukrainian regions, depending on their level of industrialization and urbanization, leads to a decrease in support for privatization. Every 10 percent increase in registered crime is associated with a 2.5-3 percent decline in support for land privatization and an increase in negative attitudes towards this reform by 2-2.6 percent. Every 10 percent increase in registered crime is associated with a 1.1-1.3 percent decline in support for the privatization of large enterprises and an increase in negative attitudes towards this reform by 1.9-2 percent. This effect is significant, given that during 1989-1995 the overall level of registered crime in Ukraine doubled, and throughout the post-Soviet history, it was highly variable.

Average income growth can also have a significant impact, especially in the long term. A 10 percent increase in GRP per capita is associated with increasing the share of people who support land privatization by 1-1.3 percent and privatization of large enterprises by about 0.5 percent (although this effect is less statistically significant and cannot be interpreted causally).

It is also interesting that there is no statistically significant impact of crime on support for the privatization of small enterprises. It is more influenced by the population's life expectancy, age structure, and confidence in political leaders. Life expectancy growth, which is highly dependent on the quality of life, increases support for small privatization. Incomes have an effect on one of the specifications. Also, this type of privatization is more supported by regions with a younger

population. However, most of all, support for small-scale privatization has to do with people's confidence in political leaders. While these results cannot be interpreted causally, a 10% decline in the proportion of people who believe the country has effective leaders is associated with a 1.2-1.6% decline in support for small-scale privatization. Considering that since the beginning of the country's independence, the number of people who are not confident in leaders has almost doubled, this factor should not be underestimated.

On the other hand, this work tries to answer why different macro-regions of Ukraine have different economic preferences. "The east and the west," or rather, "the west and the rest" of Ukrainian macro-regions differ in identity, in economic attitudes, in confidence in leaders. However, they also differ in living conditions, crime rates, life expectancy, and other more tangible parameters of society. These parameters, in turn, can have deep historical preconditions.

The southeast and, essentially, the country's central regions underwent greater industrialization during the Soviet years, making them both more urbanized and more criminal (especially in post-Soviet times when criminal redistribution of assets took place). This natural experiment allows us to conclude that the economic structure of regions, the structure of their residence, and the subsequent level of crime can wield explanatory power when it comes to the views of the population.

When developing reforms of economic liberalization, it should be borne in mind that their support may depend on the real living conditions of citizens. Rising lawlessness and falling living standards can convince citizens that these reforms should not be supported since their fruits will be distributed neither efficiently nor fairly, and the reform process itself can be accompanied by real dangers without citizens being able to protect themselves.

WORKS CITED

Baumer, Eric P., and Kevin T. Wolff. 2014. "The Breadth and Causes of Contemporary Cross-National Homicide Trends." *Crime and Justice* 43 (September): 231–87. https://doi.org/10.1086/677663.

Buonanno, Paolo. 2003. "The Socioeconomic Determinants of Crime. A Review of the Literature." 63. *Working Papers*. Working Papers. University of Milano-Bicocca, Department of Economics. https://ideas.repec.org/p/mib/wpaper/63.html.

De Haas, Ralph, Milena Djourelova, and Elena Nikolova. 2016. "The Great Recession and Social Preferences: Evidence from Ukraine." *Journal of Comparative Economics*, Ukraine\: Escape from Post-Soviet Legacy, 44 (1): 92–107. https://doi.org/10.1016/j.jce.2015.10.007.

Denisova, Irina. 2016. "Institutions and the Support for Market Reforms." *IZA World of Labor*. https://econpapers.repec.org/article/izaizawol/journl_3ay_3a2016_3an_3a258.htm.

"EBRD Transition Report 2016-17." n.d. Accessed May 22, 2021. //www.ebrd.com/news/publications/transition-report/transition-report-201617.html.

Fajnzylber, Pablo, Daniel Lederman, and Norman Loayza. 2002. "Inequality and Violent Crime." *Journal of Law and Economics* 45 (1): 1–40.

Fajnzylber, Pablo, Daniel Lederman, and Norman V. Loayza. 1998. *Determinants of Crime Rates in Latin America and the World :* World Bank,. https://digitallibrary.un.org/record/267478.

Fidrmuc, J. 1997. "Strength and Advantages of Eastern Europe- EU's Net Gains from Accession." ir97019. *Working Papers*. Working Papers. International Institute for Applied Systems Analysis. https://ideas.repec.org/p/wop/iasawp/ir97019.html.

Fidrmuc, Jan, Julius Horvath, and Jarko Fidrmuc. 1999. "Stability of Monetary Unions: Lessons from the Break-up of Czechoslovakia." B 17-1999. *ZEI Working Papers*. ZEI Working Papers. University of Bonn, ZEI - Center for European Integration Studies. https://ideas.repec.org/p/zbw/zeiwps/b171999.html.

Foglesong, Todd S., and Peter H. Solomon. 2001. *Crime, Criminal Justice and Criminology in Post-Soviet Ukraine*. U.S. Department of Justice.

Frye, Timothy. 2010. *Building States and Markets after Communism: The Perils of Polarized Democracy*. Cambridge Studies in Comparative Politics. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511779718.

Gimpelson, Vladimir, and Daniel Treisman. 2015. "Misperceiving Inequality." NBER Working Paper 21174. National Bureau of Economic Research, Inc. https://econpapers.repec.org/paper/nbrnberwo/21174.htm.

Glaeser, Edward L., and Bruce Sacerdote. 1999. "Why Is There More Crime in Cities?" *Journal of Political Economy* 107 (S6): S225–58. https://doi.org/10.1086/250109.

Guriev, Sergei, and Maxim Ananiev. 2015. "Effect of Income on Trust: Evidence from the 2009 Crisis in Russia." Sciences Po Economics Discussion Paper 2015–02. Sciences Po Departement of Economics. https://econpapers.repec.org/paper/spowpecon/info_3ahdl_3a2441_2f18morovaof8fdbvqtbkas8cvhm.htm.

Hayo, Bernd. 1999. "Micro and Macro Determinants of Public Support for Market Reforms in Eastern Europe." B 25-1999. *ZEI Working Papers*. ZEI Working Papers. University of Bonn, ZEI - Center for European Integration Studies. https://ideas.repec.org/p/zbw/zeiwps/b251999.html.

Hellman, Joel S., Geraint Jones, and Daniel Kaufmann. 2003. "Seize the State, Seize the Day: State Capture and Influence in Transition Economies." *Journal of Comparative Economics* 31 (4): 751–73.

Khemani, Stuti. 2017. "Political Economy of Reform." 8224. *Policy Research Working Paper Series*. Policy Research Working Paper Series. The World Bank. https://ideas.repec.org/p/wbk/wbrwps/8224.html.

Koziuk, Viktor, and O. Dluhopolskyi. 2018. "Resource Curse: The Role of Weak Institutions and Cronysectors." *Ideology and Politics Journal* 9 (January): 3–5.

Kupets, Olga, Volodymyr Vakhitov, and Svitlana Babenko. 2013. "Ukraine Case Study: Jobs and Demographic Change." *Background Paper for World Development Report*, 8258024–192.

Ladbrook, Denis A. 1988. "Why Are Crime Rates Higher in Urban than in Rural Areas? — Evidence from Japan." *Australian & New Zealand Journal of Criminology* 21 (2): 81–103. https://doi.org/10.1177/000486588802100203.

Lytvyn, Volodymyr, 2011. Ekonomichna istoriia Ukrainy: Istoryko-ekonomichne doslidzhennia: v 2 t. Institute of History of Ukraine

Merton, Robert K. 1938. "Social Structure and Anomie." *American Sociological Review* 3 (5): 672–82. https://doi.org/10.2307/2084686.

Milanovic, Branko. 1999. "Explaining the Increase in Inequality during Transition." *The Economics of Transition* 7 (2): 299–341.

Putnam, Robert. 2000. "Bowling Alone: The Collapse and Revival of American Community." In, 357. https://doi.org/10.1145/358916.361990.

Rovelli, R., and A. Zaiceva. 2011. "Individual Support for Economic and Political Changes: Evidence from Transition Countries, 1991-2004." wp736. *Working Papers*. Working Papers. Dipartimento Scienze Economiche, Universita' di Bologna. https://ideas.repec.org/p/bol/bodewp/wp736.html.

Soares, Rodrigo R. 2004. "Development, Crime and Punishment: Accounting for the International Differences in Crime Rates." *Journal of Development Economics* 73 (1): 155–84.

Starr, S. Frederick, and Karen Dawisha. 2016. *The International Politics of Eurasia: V. 8: Economic Transition in Russia and the New States of Eurasia*. Routledge.

Steinhardt, H. Christoph, and Jan Delhey. 2020. "Socioeconomic Modernization and the 'Crisis of Trust' in China: A Multi-Level Analysis of General and Particular Trust." *Social Indicators Research: An International and Interdisciplinary Journal for Quality-of-Life Measurement* 152 (3): 923–49.

World Development Report 2017: Governance and the Law. 2017. World Development Report. The World Bank. https://doi.org/10.1596/978-1-4648-0950-7.

Yavorskiy, Pavlo. 2011. Distribution of crime across Ukraine, Kyiv School of Economics