Institutional Persistence Redux: Exploring the Relationship between Economic Development and the Rule of Law

by Jari Eloranta, Mikael Hernesniemi, and Andrei Markevich (University of Helsinki)

Contact info: jari.eloranta@helsinki.fi

Abstract:

The most recent (2024) Nobel Prize in economics has reminded us about the importance of a deeper understanding of institutional dynamics, including how they are linked to the concept of rule of law. Here we illustrate some patterns pertaining to the rule of law, economic development, and post-Soviet states (including Eastern European polities) via the lens of institutional persistence. *First*, while most of the world displays some positive relationship between the rule of law and economic development over the last 200 years, countries like Russia, stuck in a persistent pattern of weak rule of law, seem to be outliers in this respect. *Second*, Eastern Europe exhibits, by and large, more the characteristics of other European nations, with certain institutional continuities augmenting the relatively positive economic impact of the rule of law and a catch-up process since the fall of the USSR. *Third*, the study of Russia, rule of law, and the economy has boomed since the 2008 financial crisis, after which the rule of law has weakened globally, along with other factors that have amplified various populist and fragmentary tendencies amid the waning globalization wave. *Fourth*, our review of the literature concerning the post-Soviet states and Eastern Europe found that typically studies have found a positive link between the rule of law, in its various forms, and economic development. The magnitude of the impact seems to vary substantially, most likely depending on institutional gateways. *Fifth*, we emphasize that we need to direct more focus on understanding the persistence effects pertaining to the case of Russia, i.e. how the various massive political changes have impacted the deeper institutional patterns. Therefore, we will next focus on a deeper analysis of both the property rights and the credibility of the political commitment mechanisms in this region in the long run.

Introduction

Does enhancing the rule of law guarantee economic growth? This is one of the key questions that plagues academics and policymakers in today's world, especially in the increased global uncertainty and societal fragmentation since the 2008 financial crisis and the various crises that have emerged since. In this paper, we will provide a descriptive review of some of the key indicators and literature linked to this topic, so that we can discern development patterns and research gaps. In particular, we are interested in Russia/USSR, and the countries directly linked to the USSR and its collapse (hereafter referred to as post-Soviet states and Eastern European former satellite states). We posit that these countries, attached to the USSR's historical fortunes at least since the Second World War, are useful case studies in the development of the rule of law and economic growth in the long run, although other similar states and regions certainly exist as well. In essence, these nations form our focus due to the rapid institutional shocks brought on by the world wars, collapse of the USSR, and several geopolitical and economic shifts. Moreover, we argue that the reversals in the rule of law in some of these countries, with more positive initial outcomes and then notable declines in Eastern Europe, are rooted in historical patterns of persistence, i.e. that the informal institutional practices are most important in understanding these processes, especially in Russia. Similarly, the positive economic impacts typically come at a substantial delay, although the scholarly estimates of this delay vary greatly, as do also the estimates of the magnitude of the impacts, depending on the complex institutional gateways involved. Our claim is that the economic impacts of the rule of law, however measured, can only be understood fully by examining the historical persistence mechanisms related to a broad set of institutions.

In fact, the awarding of the Nobel Memorial Prize in Economic Sciences in 2024 to the team of Acemoglu, Johnson, and Robinson (from hereafter, AJR) has again highlighted the persistent role played by institutions in economic development. They have built on the foundation laid by many institutional economists in the past, such as Ronald Coase, Oliver Williamson, and Douglass C. North. (see e.g. Ménard, 2018; Menard & Shirley, 2005) As AJR have indicated in their many publications, stable and inclusive institutions that enable the protection of property rights, equal access to the economy, competition and innovation, as well as transparent treatment of the members of the society in the eyes of the legal system lead to economic success, often in the form of advancing along a "narrow corridor" towards higher living standards. (Acemoglu & Robinson, 2016) Respectively, extractive institutions, such as instituted in many colonies and other subjugated societies, comprise concentration of power and property in the hands of the elite, with few constraints on their extractive power, often leading to substantive political rents and economic inequality. (Acemoglu & Robinson, 2001) The narrow corridor, via the so-called Red Queen effect, implies a constant competition and push-pull dynamic between the *state* and the *society*, in which the institutional foundation tempers and frames this competition. (Acemoglu & Robinson, 2019, 2023) The idea of a Red Queen and organizational competition has been expressed before by scholars, but not in such a clear way to suggest a dynamic and evolving modernization path towards higher living standards. (see e.g. Barnett & Hansen, 1996; Barnett & Pontikes, 2004; Garzarelli & Galli, 2020; Nownes & Bell, 2018)

Another cross-cutting theme in AJR's extensive scholarly catalogue refers to the importance of transparent and credible institutional commitments, one of which is typically centered around democracy in some form. Academics have been keen on evaluating, in particular, the potential causal relationship between democracy (however defined or measured) and economic growth (typically measured by GDP per capita). Usually, some type of positive link is found to exist, although the magnitude, the direction of the causal relation, and the mechanisms of the impact are not as clear, nor are the long-term historical patterns necessarily linear. (Colagrossi et al., 2020; Eloranta et al., 2014; Ghardallou & Sridi, 2020) The AJR arguments on this process have emphasized the lagged positive effects of democratizations, the various channels of influence that provide greater public good, and the need to disaggregate the economic development measures. Thus, they argue that democracy does ultimately cause economic growth, and that institutions are pivotal in the democratization effect. (Acemoglu et al., 2019) The various limitations of this argument are also related to the interplay with the rule of law, which is the key component in a functional society, although not entirely exclusively limited to a democratic one.

What, then, is the rule of law? How can we define it? As in the case of democracy, there are various ways of doing this, as well as numerous ways of measuring it quantitatively through proxy variables or indices. (Taekema, 2021; Versteeg & Ginsburg, 2017) Typically, it refers to a set of institutional (or simply legal/judicial) arrangements that guarantee property and other rights in the society as a whole to wider segment of the population. Here we cannot get too deep into the debate about the indicators rather than utilize two of the most common ones: the World Justice Project's Rule of Law Index (https://worldjusticeproject.org/rule-of-law-index/) (see also Dougherty et al., 2018), and the one compiled by Our World in Data, based on the V-Dem data (https://ourworldindata.org/grapher/rule-of-law-index). The latter also provides longer time series, which can be used to evaluate historical patterns more broadly, similar to various Polity indices and others that aim to capture elements of democracy. (see also Beqiraj & Moxham, 2022; Lewkowicz et al., 2024)

Rule of law cannot be reduced to just democracy either. For example, in some studies, rule of law induces economic growth, whereas democracy does not, and vice versa. (for more, see e.g. Butkiewicz & Yanikkaya, 2006) Moreover, rule of law is obviously linked to democratic institutions, with contracts and political commitments enhancing their effectiveness. Rule of law can also be a potential link between democracy and economic growth, in essence representing the credibility of the democratic institutions in practice. In more developed societies, formal institutions can be more effectively moderated and targeted to improve economic performance, minimizing the lesser societal risks for firms and other economic actors. In less developed ones and polities in transition, informal institutional arrangements can be more important, akin to the Northian paradigm. (Castiglione et al., 2015; Haggard et al., 2008; Haggard & Tiede, 2011; North, 1997)

Regardless of the causal mechanism or the intricacies of the various components of these institutional markers, it seems that rule of law would, like in most studies, have some type of positive link to economic development, especially via secure property rights and credible commitments to maintaining the Red Queen competition by the elites. Yet another component in this equation is, of course, the state, a classic topic of study for social scientists. The more recent literature, which has provided more conceptual and empirical depth to the study of the state formation processes, is centered around the concept of state capacity. (Acemoglu et al., 2015, 2016; Besley & Persson, 2009; Dincecco & Katz, 2016; Knutsen, 2013; O'Reilly & Murphy, 2022; Williams, 2021) The is typically one of the key organizational conduits for both the exercise of the rule of law and its constraints. While it is hard to define an optimal form for a state, one that provides both credible public goods, space for societal competition and innovation, and thus ensures economic growth would likely represent this dimension the best. Such societies would also embody strong inclusive institutions and the rule of law. (Grier et al., 2022; O'Reilly &

Murphy, 2022; Taylor & Ward, 2016) Interestingly, a lot of newer research on economic history and institutions is delving deeper into the analysis of regional and local effects of geography and institution, as the state is in historical terms a fluid conception, which holds great promise. (see e.g. Cermeno & Enflo, 2019; Henning et al., 2013; Matera & Sokołowicz, 2023)

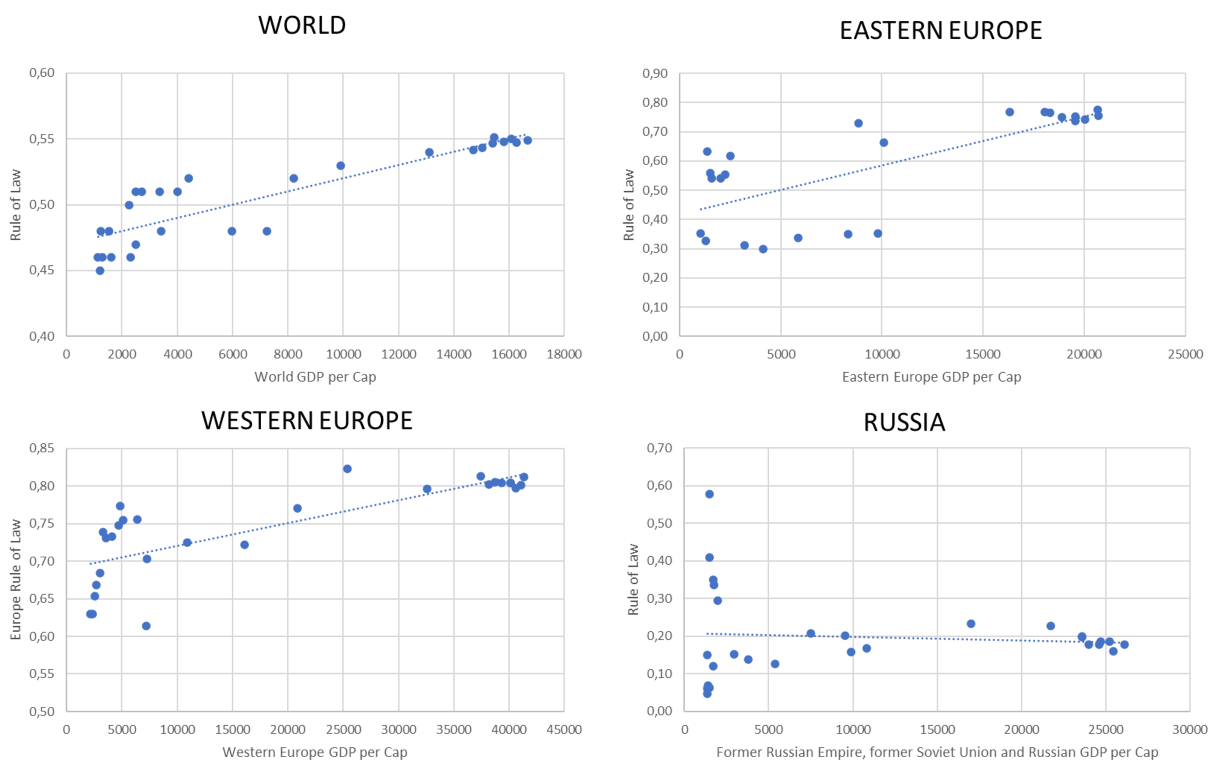
Economic historians and economists, along with some political scientists, have recently been focused on understanding the persistence effects of various institutions and cultural/societal factors, sometimes of over periods of hundreds or even thousands of years. (Abad & Maurer, 2021; Cioni et al., 2022; Cirone & Pepinsky, 2022; Nunn, 2009) Some scholars have also invoked the need to look at geography and climate as potential explanatory factors. (Giuliano & Nunn, 2021; Nunn, 2009) AJR and their co-authors instead make a case for institutional persistence effects, or some type of path dependence. (Acemoglu et al., 2021; Bednar et al., 2015; North, 1990; Ogilvie & Carus, 2014) Again, the jury is out on the exact structures that might cause the persistence effects, but institutions are certainly part of the lock-in mechanism in these studies, with the possibility of different types of historical equilibria. (Allen & Donaldson, 2022; Puffert, 2024; Roos, 2024) This finding reinforces our earlier point that a) institutional persistence effect can be very deep and last for long periods of time, and b) such structures can serve as either institutional accelerants or retardants in the process that leads in some form from the rule of law via various gateways or equilibria towards economic growth, the stated goal of most policymakers.

To summarize, most scholars have found a linkage or, more accurately, various linkages between the rule of law and economic growth, but we must also recognize the difficulty in identifying the actual mechanisms involved. In addition, we have to be careful in assessing the historical persistence of various institutions from period X and how they might affect the political and economic outcomes in period Y. Most likely, the various different institutional phenomena like democracy and rule of way, however represented by constructed indices and variables, are describing different aspects of the institutional nexus that provides the impetus for economic growth. Persistence studies typically ignore too much the smaller historical lock-in patterns and gateways that are formed by the events, while doing a better job of recognizing some of the deeper institutional continuities. Next, we will examine some patterns emerging from the data and the extant literature on the post-Soviet and Eastern European cases.

Exploratory Findings: Indices and Data in the Long Run

Here we will first try to identify some selected long-run patterns in the data, by using historical time series and indicators of economic development, rule of law, and geographic differences. Thus, what can we say from these aggregate measures, especially if the positive correlation between the rule of law and economic growth exists, as well as how the Russian (and connected) cases are represented by the data. While examination of the patterns is illustrative, it of course does not convey definitive evidence of the linkages; that would require more complicated quantitative strategies, categorizations, and various types of indicators in panel settings, in addition to lengthier qualitative cases studies. Our more modest goal here is to suggest some fruitful targets for further inquiries.

Figure 1. Rule of Law (Index) and Real GDP per Capita (2011 USD), Decadal, 1820-2022



Sources: Our World in Data (V-Dem) and Bolt & Van Zanden, 2020. Decadal values, except for 2015-2022. *Note*! Some real GDP per capita decadal values for the world in the early 19th century generated using average annual world real GDP per capita values. Russian GDP per capita figures are missing before 1860.

As seen in Figure 1, there seems to be an apparent positive correlation between real GDP per capita and the rule of law (as measured by an index constructed from the V-Dem data) in most parts of the world in the last 200 years; namely, as world GDP per capita increased, so did the rule of law. This does not imply causation, of course, but the two phenomena are clearly linked in some fashion. This period, of course, encompasses massive societal changes like industrialization, globalization, wars and crises, and geopolitical shifts, so there is a lot of noise in the data that cannot be simply overlooked. A deeper understanding of this relationship would require in-depth quantitative testing that we are not engaging in here, although we will explore some of the time series characteristics more below. Moreover, this correlation is not quite as clear for Eastern Europe - and, for Russia, there is no such correlation, or it is negative. And, as Appendix Table 1 displays, the impact of the rule of law in these countries in the 2020s has mostly been in a modest decline. However, given the severity of two shocks – namely, Covid-19 pandemic and the Russian invasion of Ukraine – the higher income countries in this Table, mostly in Eastern Europe, have made substantial advances in the rule of law just during the last few years, with the opposite being the case in the others. (see also Anghel, 2024) Therefore, it seems prudent to explore further the historical roots of the institutional processes that have led to the decline in some states and regions, and to examine how anomalous for example the Russian case actually might be, especially from the perspective of economic growth. (see also Belitski et al., 2024)

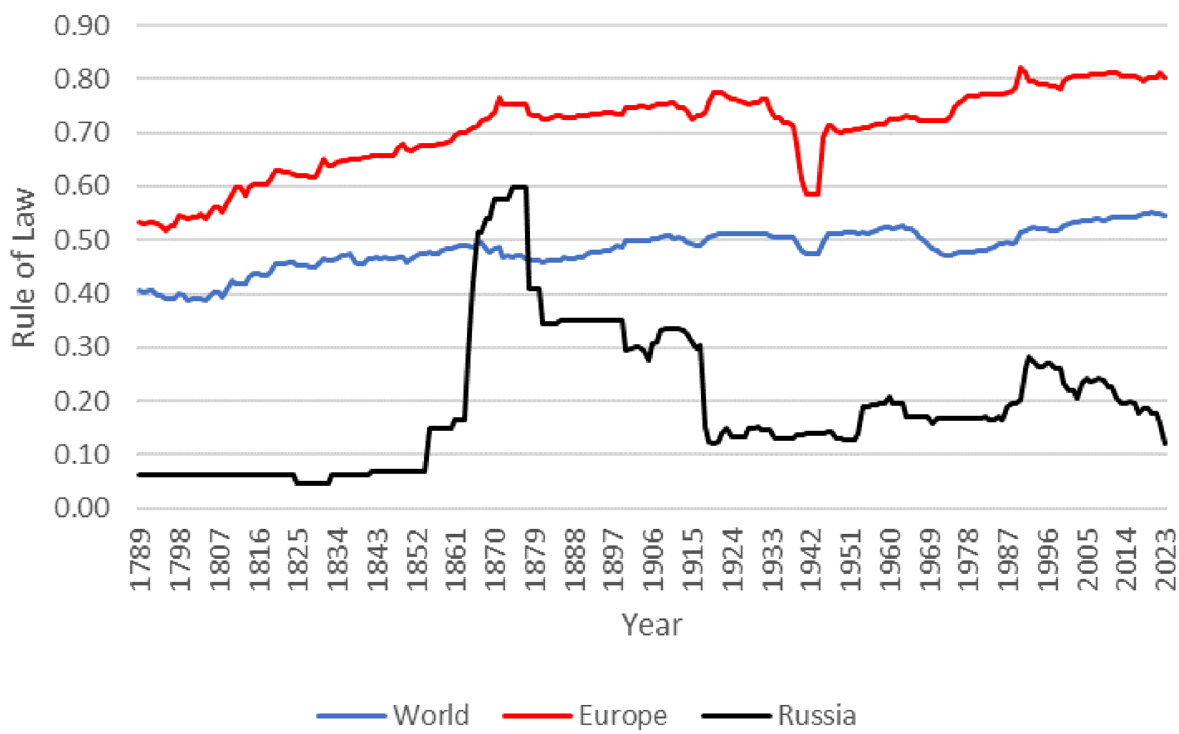
Table 1. Time Series Characteristics of the Rule of Law and Real GDP per Capita for Selected Regions, 1820-2022

Variable	**Correlation Respective of Region's Other Variable (at 0, 20, and 35 Years)**	**Granger Causality with Region's Other Variable**	**Presence of a Unit Root(s) for the Variable**	**Number of Cointegration Equations between the Region's Variables**	**Structural Break Years (Sequential), Variable Regressed Against Other Region Variable and Constant**
World: Rule of Law	0.69, 0.29, -0.01	No	Yes	2	1967 1897 1991 1943
World: GDP per Capita	0.69, 030, 0.07	Yes	Yes	(same)	1969 1996 1939 1884
Europe: Rule of Law	0.67, 0.32, -0.04	No	Yes	2	1934 1994
Europe: GDP per Capita	0.67, 0.38, 0.18	Yes	Yes	(same)	1948 1997 1924 1972
Eastern Europe: Rule of Law	0.36, -0.08, -0.49	Yes	Yes	1	1990 1940 1916
Eastern Europe: GDP per Capita	0.36, 0.30, 0.31	No	Yes	(same)	1964 1992 1925
Russia: Rule of Law	-0.36, -0.38, -0.55	No	Yes	0	1918 1991 1884
Russia: GDP per Capita	-0.36, 0.02, 0.12	No	Yes	(same)	1968 1999 1935

Sources: as in the previous figures. Note! The Granger (non) causality tests were performed at a lag of two years. Unit roots were measured by the ADF tests, with the null of unit root only rejected if the p-value is 0.05 or smaller. Cointegration tests used here were the unrestricted Johansen cointegration tests available in EViews 12 software., with the null of no cointegration rejected at the 0.05 level. The structural tests utilized here were the Bai-Perron tests of L+1 vs. L sequentially determined breaks, to measure for multiple breakpoints.

Table 1 above helps us identify some key time series characteristics for the World, Europe, Eastern Europe, and Russia for the rule of law index and real GDP per capita. We first examined correlations between these two variables, and they indicated positive correlation (even over time) for the World and Europe, with murkier results for Eastern Europe and mostly negative correlations for Russia. We then explored potential Granger (non) causality relationships (for more on recent advances, see e.g. Shojaie & Fox, 2022), which can be suggestive of temporal correlations at a time lag (not real causality, of course). Some such relationships were found for all three but Russia. We then performed unit root tests, since non-stationary time series can yield misleading results. (O'Reilly & Murphy, 2023) All the time series were non-stationary, which is typical for this type of data, featuring crises and upheavals. Therefore, it makes sense to test for cointegration to explore deeper structural connections between the series. (Sobel & Coyne, 2011)

Figure 2. Rule of Law in the World, Europe, and Russia, 1789-2023



Source: Our World in Data (V-Dem).

For the World and Europe, there were two cointegration equations between the series, implying long-run correlation. For Eastern Europe, the evidence was weaker, and for Russia it was absent entirely. In total, even these cursory time series tests affirm that the rule of law and economic development were integrally and positively linked globally and in Europe, whereas in Eastern Europe those linkages were fewer and weaker. In Russia, they were absent or even negative. The structural breakpoints for the series were also somewhat similar – with breaks in late 19th century, the Great Depression and the Second World War, late 1960s, and the fall of the USSR (and its aftermath) – suggesting that institutional shocks and changes were important globally.

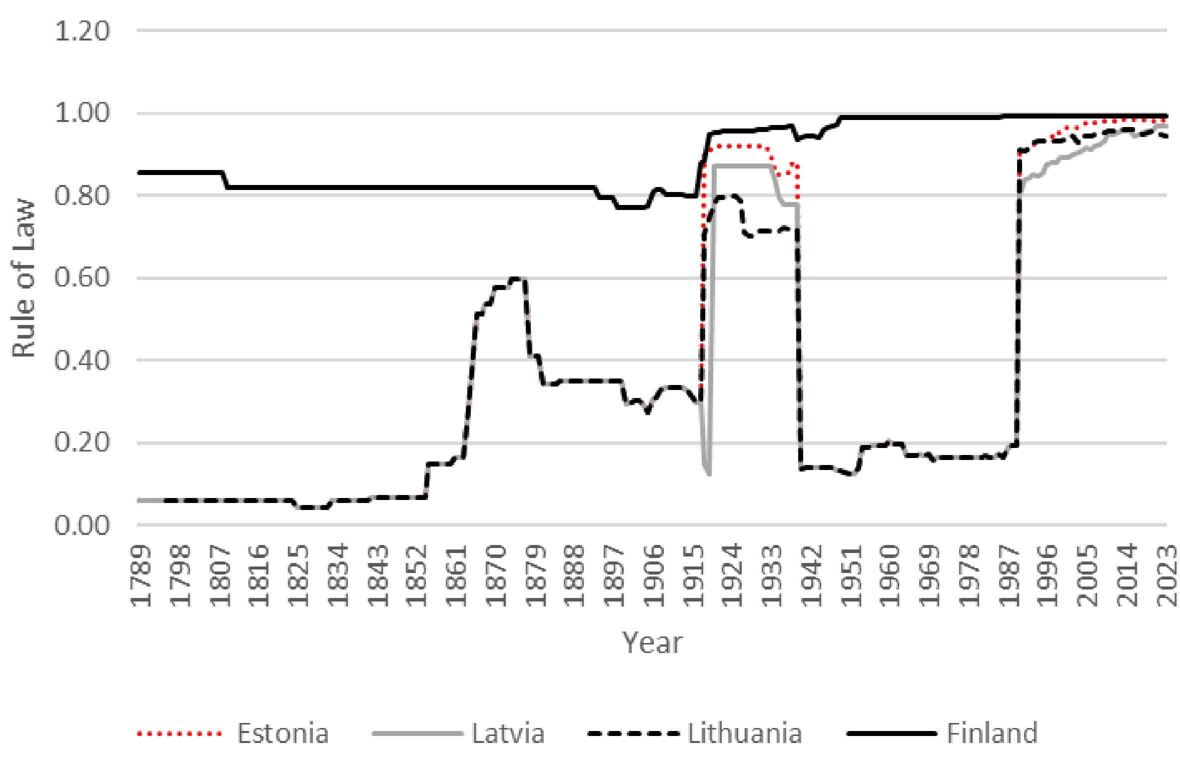
Thus, we need to highlight the observation that Russia, Eastern Europe, the former Russian Empire, and the former Soviet Union (our Russia+ cases) seem to form a region that is deviating from the "generalized" global patterns in the rule of law development over the last 150 years. Indeed, as Figure 2 demonstrates, the rule of law index was gradually increasing over the last two hundred forty years in Europe, North America, and the world on average. In contrast in Russia, the rule of law index has been traditionally at much lower levels than in other countries during most of modern history, and the Russian rule of law experience does not seem to exhibit linear progress over time.

Before the middle of the 19th century, the rule of law in the Russian empire was at very low levels, like in many other traditional autocracies. The Great Reforms by Alexander the Second (1855-1881), including the famous judicial reform of 1864, set up a court system independent from the executive branch and dramatically improved the enforcement of laws in the country. (Eklof et al., 1994) These achievements, however, were short-lived. Already, the last years of the reign of Alexander the Second saw a partial refund of earlier judicial practices, consolidated by Alexander the Third (1881-1894) counter-reform legislation. The communist experiment (1917-1991) ruined the rule of law index almost back to its pre-1850s level. The collapse of the Soviet Union triggered limited improvements in the rule of law in Russia, with gradual weakening over the last three decades. (see also Belitski et al., 2024) The current value for the rule of law index for modern Russia is at the level of the Soviet Union in the interwar period.

The economic development of the region and how much it is associated with the progress in the rule of law also have many differences with global trends. For example, Alexander the Second's judicial reform of 1864 had a limited impact on imperial national income that started booming only two decades later. (Zhuravskaya et al., 2024) Similarly, the Soviet economy demonstrated substantial progress during Stalin's great leap forward. (Cheremukhin et al., 2017) Also, modern Russia's resource-based economic growth coincides with a depreciation of the rule of law indicators.

At the same time, several countries in the region demonstrated very different patterns. As seen in Figure 3, Finland already had a high level of rule of law even as a part of Sweden in the 18th century, similar to some indices of state capacity, significantly above most of Europe. (Acemoglu et al., 2012; Eloranta et al., 2022, 2024; O'Reilly & Murphy, 2022) The Baltics were already catching up before the First World War (enjoying the consequences of the same Alexander the Second reforms that benefited Russia at that time), and then they exhibited big increases during the interwar period and independence. (Ziemele, 2021) These states, respectively, experienced a significant decline under the Soviet influence and satellite status, which arose also from their brutal experiences during the war period. However, they also bounced back with significant and fast increases since the collapse of the Soviet Union in 1991, quickly catching up to Europe and Finland. (Matsepa, 2008) In many ways, they seem to be good cases to postulate for an institutional persistence effect, which helped them develop several aspects of the rule of law with haste. (Bukovskis, 2022) In general, there seems to have been lots of variety in the speed of economic growth and the rule of law experience in the region after the collapse of the Soviet Union, and the seemingly controversial relationship between the two indicators for some countries is an interesting and instructive finding that needs to be explored further. Next, we will examine more closely the literature linking the two phenomena among the scholars studying these countries, to see if they have asserted a linkage between the rule of law and economic development, as well as the potential mechanisms involved.

Figure 3. Rule of Law in Europe, the Baltics, and Finland, 1789-2023



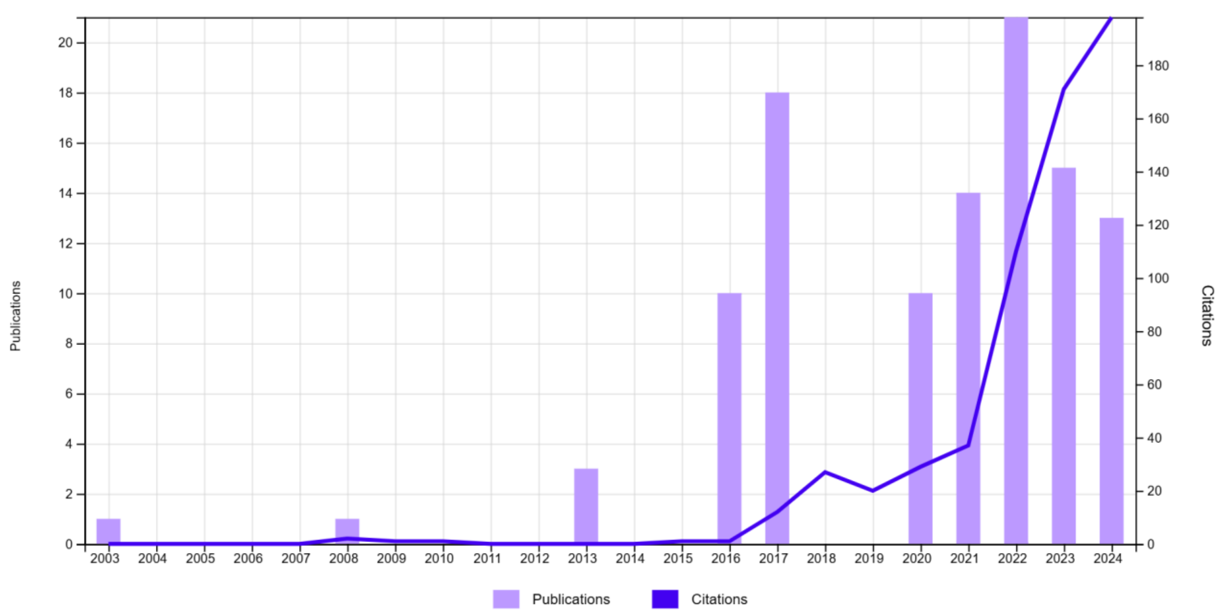
Source: Our World in Data (V-Dem).

What Can the Scholarly Literature on Russia+ Nations Tell Us?

In this section, we will discuss some of the literature connected to the rule of law in among our example countries, first by examining the incidence of the concept in scholarly literature, and second by providing examples of the linkages between rule of law and economic growth. Overall, there is a rapidly growing literature focused on this potential linkage, which provides some illuminating findings to examine further. This literature is also highlighting the special case of Russia, and to certain extent the region, something that many scholars are now keen on analyzing in a deeper and more quantitative way.

As we can see in Figure 4, there was a rapid increase in publications focusing on the rule of law in the Russian case, after the dissolution of the USSR, viewed through the lens of the economy. However, we can observe a clearer increase in the 2010s, both in terms of publications and citations. It is likely that this increase is related to the decline in the rule of law since the early 2000s, thus emerging at a delay in the scholarly discussions. This authoritarian turn was less observable at first, which is also reflected in the persistent political optimism that was part of international diplomacy too. Moreover, this increase is also linked to the global, regional, and national uncertainty brought on by the aftermath of the 2008 financial crisis and the waning of the preceding globalization wave, which has provided an impetus to populist politics and societal fragmentation. (see e.g. Gozgor, 2022; Scheiring et al., 2024)

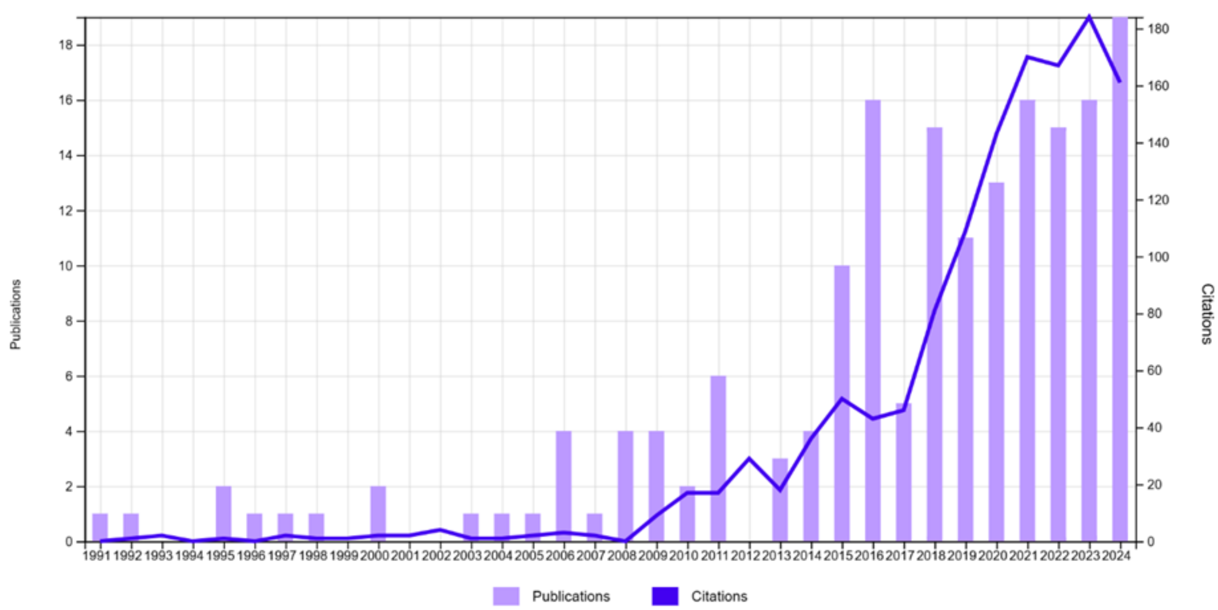
Figure 4. References to “Rule of Law”, “Economic”, and “Russia” in Web of Science (WoS)



Source: Web of Science (WOS). Retrieved: December 12, 2024. Total number of publications: 106. Times cited: 611. *Note*! We performed similar searches with Google N-Gram (on books) and Scopus, and the results were very similar to these.

In terms of publications and citations containing both “rule of law”, “economic”, and “Russia”, there was a major increase in such scholarship since the financial crisis of 2008, reflecting the unequal development of the rule of law globally afterwards. We would also posit that it likely also reflects the increasing scholarly attention, both theoretically and empirically, on the measurement of this phenomenon, especially given Russia’s turn towards more autocratic rule. (Chapman, 2021; Smyth, 2020) This increase in publications and scholarly attention is likely also due to the rise of interest in the study of institutional changes from an economic lens, which the AJR scholarship has influenced greatly. Moreover, the emergence of new types and volume of data, both quantitative and qualitative in the digital realm, has facilitated this growth. (see more Eloranta et al., 2020; Guldi, 2021; von Hodenberg et al., 2024) A similar pattern can be seen in Figure 5, concerning “rule of law” and “Eastern Europe”, with a growth trend emerging at least after the year 2008. Partially this has also coincided with the deterioration of the rule of law and the rise of populist authoritarian tendencies in some countries, most notably in Hungary. (see e.g. Kos, 2023)

Figure 5. Citations to “Rule of Law” and “Eastern Europe” in WOS



Source: Web of Science (WOS). Total number of publications: 176. Times cited: 1305.

Therefore, the often-elusive relationship between the rule of law and economic growth has become an increasingly important area of research. While the rule of law encompasses a wide range of different perspectives, the research literature has placed particular emphasis on property rights and the institutional structures needed to enforce them, such as mechanisms of government control and judicial independence. (Haggard & Tiede, 2011) Through these factors, the rule of law has been identified as an important driver of economic growth. (e.g. Nedanovski & Kocevska, 2023;

Shevchuk, 2020; Voigt et al., 2015; Rigobon & Rodrik, 2005; Crafts & Kaiser, 2004) Our review of the literature focusing on the relationship between rule of law and economic development, seen in Appendix Table 2, for our region of interest showcases the aggregate findings in the relevant literature.

As such, the path toward a credible rule of law is difficult, and new democracies are typically quite volatile. (Acemoglu et al., 2019; Fukuyama, 2010; Genyi, 2015) The paradox is that transition countries have often achieved positive economic outcomes even when legal institutions are weak. However, these come at a price. In particular, emerging economies face the challenge of the so-called “double trap”, where the poor quality of legal and other institutions does not allow for higher economic growth and hence institutional development. (Kar et al., 2019) Also, societies with a strong tradition of private property protection have often been better able to create the conditions for institutional development and thus a better framework for economic growth. (Socoliuc et al., 2021)

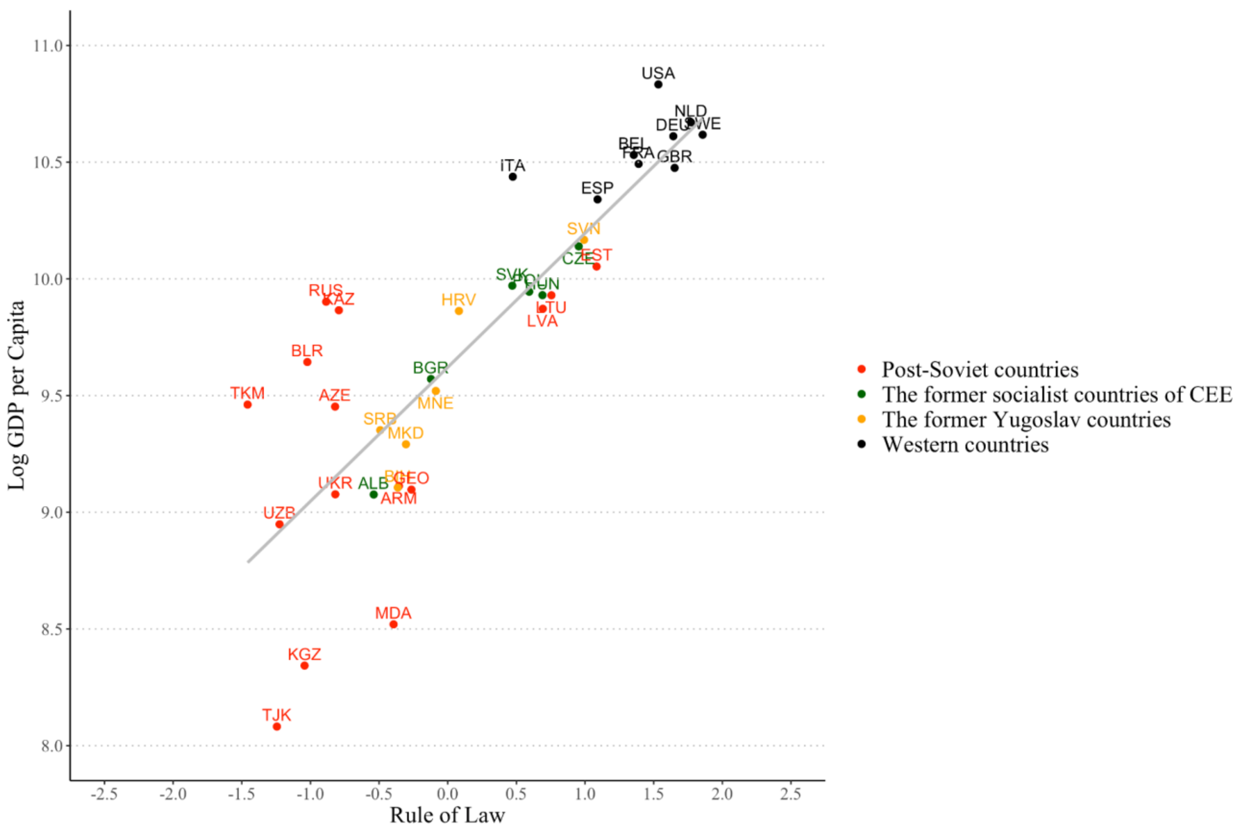
Several interrelated factors determine the effectiveness of the rule of law in practice, including the role of veto players, the credibility of the independence of the judiciary, the level of corruption, and the potential for integration into democratic institutions. The concentration of power in the hands of a small political elite has enabled (often resource-based) economic growth, but it has also stunted institutional development, leaving the country's economy and politics vulnerable to long-term instability. (Commander & Prieskienyte, 2022; Farhadi, 2015) This resource curse, in its various forms, can have path dependent impacts on the political economy of a state. (Narh, 2023; Savoia & Sen, 2021)

Furthermore, economic efficiency suffers in countries where property protection is unpredictable and interference with private property is arbitrary. Weak rule of law discourages innovation and investment, and uncertain property rights increase capital flight as firms and individuals move assets abroad to protect them from uncertain local conditions. (Bulatov, 2022) As long as politicians or officials demand bribes, firms have little financial incentive to invest. This not only limits firms' growth opportunities, but also reduces their demand for external finance. (Johnson et al., 2002) In such an investment environment, firms may prefer to imitate other innovations rather than invest in developing new technologies. As a result, the potential growth benefits of intellectual property rights are missed. (Neves et al., 2021)

The absence of institutional veto players undermines the credibility of property rights protection. The positive effect of property rights on economic growth depends on the distribution of political power among multiple veto players. However, neither political power-sharing nor the strengthening of property rights alone is sufficient; rather, their interaction is crucial for economic growth. (Justesen, 2014) Moreover, the Red Queen competition is absent in such polities, replaced by more predatory forms of rent seeking. (Choi & Storr, 2019; De la Croix & Delavallade, 2011)

However, while formal (de jure) judicial institutions can protect private property and strengthen the rule of law, only practical (de facto) judicial independence seems to be consistently associated with economic growth. For example, it allows courts to make politically independent decisions without government interference in the judiciary. The mere promise of an independent judiciary is not enough to attract investment if it is not put into practice. De facto judicial independence enhances the credibility of the rule of law, which contributes to long-term economic stability. Transition economies often face economic transition costs as new institutional structures are put in place. This can lead to short-term instability, but in the long run the benefits of institutional reform can outweigh the costs. However, the long-term benefits require complementary institutional reforms. (Bjornskov, 2015; Voigt et al., 2015)

Figure 6. Rule of Law and Living Standards in Former and Post Soviet Spheres, 1992-2022



Sources: See previous figures. *Note!* This graph shows the relationship between the Rule of Law Index and the log-transformed GDP per capita across countries. Values are averaged by country over the period 1992 to 2022. GDP per capita is expressed in real terms and sourced from the Maddison Project Database. The Rule of Law Index, sourced from the World Bank's Worldwide Governance Indicators, ranges from -2.5 (worst) to 2.5 (best).

As seen in Figure 6, the varying opportunities for integration into European institutions have significantly influenced the development of the rule of law. In the 1990s, for example, the CEE and Baltic states were offered the opportunity to become members of the European Union, which acted as a catalyst for the development of the rule of law and the promotion of democratic institutions. By contrast, many countries of the former Soviet Union lacked similar integration prospects for a long time. It was not until 2008-2009 that the European Union offered Georgia, Moldova and Ukraine political association and a comprehensive free trade agreement (DCFTA), which was formally signed in 2014. This delay had a negative impact on the development of the rule of law in these countries and delayed reforms. (Dabrowski, 2022; Crafts & Kaiser, 2004)

On the whole, we can assert that there has been a complicated relationship between the development of the rule of law and economic outcomes. The methods, data, and analytical solutions adopted differed between the various studies. However, it seems that: a) the political and economic transitions in this region since the fall of the USSR have been messy and nonlinear; b) one point increase in the rule of law index (or some alternative measure, like the property rights or economic freedom) typically resulted in 2-10 per cent increase in (real) GDP per capita; c) Eastern Europe fared better in the transitions toward more inclusive institutions, compared to Russia or those states that were formerly a part of the USSR; d) the development of other democratic institutions and/or higher living standards increased the “bang for the buck” with measures of rule of law.

Findings and Future Directions

Review of some of the long-run historical data on the rule of law (and other institutional indicators) and economic development indicate a positive relationship, except for certain regions and states, with Russia as our key example. Our review of the extant literature exploring the theoretical literature and the studies of the post-USSR states suggest that historical path dependencies, i.e. persistence effects, are the key to understanding this dynamic. The concept of a narrow corridor, introduced by the most recent Nobel Prize winners AJR, is based on the premise of Red Queen competition between the state and the society, is useful in understanding these historical continuity patterns, which are likely non-linear and based on a complex set of institutional gateways. However, strengthening the rule of law seems to have led to positive outcomes in most empirical cases, albeit at a time lag of varying lengths. The size of the impact also seems to vary substantially by cases or regions. Here we have explored various types of institutional mechanisms that can enable us to understand such transitions better. In particular, in more developed societies, changes in the formal institutional framework can have a positive and observable impact, while in lesser developed polities informal institutions are crucial mechanisms of transition, i.e. whether they succeed or not in the long run.

This brief review of some of the key indicators and their time series characteristics, as well as literature expounding on the linkages between the rule of law and economic development has given us a deeper understanding of the role institutions might play in these processes, particularly the intricate interplay of various aspects of the Red Queen competition (democratic institutions, rule of law, and the state, along with historical lock-in mechanisms). However, we need to look more closely at Russia, Eastern Europe, and other post-USSR states, as this relationship gets murkier, and in fact disappears in the case of Russia. For example, the Baltic states were able to catch up to their Nordic and Central European neighbors in terms of rule of law fairly quickly. The main reason for these differences appears to lie in the formal and informal institutional reforms and historical patterns, yet more research is needed to uncover the actual mechanisms. Moreover, reversals in some of these states may be related to, in addition to the geopolitical shifts and the waning globalization wave, embedded institutional path dependencies.

In our future work, we need to explore the complicated case of the dissolution of the USSR further via the dynamic of formal and informal institutional change, especially to gauge why there have been such pronounced differences in the rule of law outcomes in the last 30 years or so. Moreover, we will attempt to estimate and analyze the persistence effects, via formal and informal institutions, in the Russian case from the 19th century to today, using also various quantitative proxies and analytical strategies. This can help us understand the hidden path-dependent structures behind the Russian descent towards a more authoritarian society in the last 20 years. In addition, we will try to estimate these linkages more broadly quantitatively, thus exploring the methodological challenges and opportunities in such endeavors, along with evaluating the historical/qualitative nuances explored by historians.

Our analytical review here is, of course, largely only a descriptive appraisal of a huge topic and a plethora of data. There is a great deal of work that can provide us with a greater understanding of the multitude of institutional factors, especially those related to informal institutions that typically are the deep structures that explain how societies function in the long run. Moreover, we need to investigate certain key characteristics of the rule of law in different types of societies as they grow and decline economically, particularly property rights and court systems as well as elite commitment mechanisms, as they form key components of the narrow corridor constraints. Furthermore, developing credible persistence strategies and methodologies is another frontier that needs to be explored. The availability of longer and deeper institutional data is making this development possible. Focusing on a particular region with many institutional and economic transitions, with a great deal of variability and gaps in the research, is part of the new research frontier in the study of the rule of law.

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APPENDIX:

Table 1. Rule of Law in 2021 and 2024 among the Russia+ Countries (And Germany)

Country	**Income Group**	**WJP Rule of Law Index 2024**	**WJP Rule of Law Index 2021**	**Change from 2021 to 2024**
Afghanistan	Low	0,32	0,35	-0.03
Albania	Upper middle	0,48	0,49	-0.01
Belarus	Upper middle	0,45	0,48	-0.03
Bosnia and Herzegovina	Upper middle	0,52	0,52	0
Bulgaria	Upper middle	0,56	0,54	+0.02
Croatia	High	0,61	0,50	+0.11
Czechia	High	0,74	0,61	+0.13
Estonia	High	0,82	0,73	+0.09
Georgia	Upper middle	0,60	0,81	-0.21
Germany	High	0,83	0,61	+0.22
Hungary	High	0,51	0,84	-0.33
Kazakhstan	Upper middle	0,54	0,52	+0.02
Kosovo	Upper middle	0,56	0,52	+0.04

Kyrgyz Republic	Lower middle	0,45	0,55	-0.10
Latvia	High	0,73	0,47	+0.26
Lithuania	High	0,77	0,71	+0.06
Moldova	Upper middle	0,54	0,75	-0.21
Montenegro	Upper middle	0,57	0,51	+0.06
North Macedonia	Upper middle	0,53	0,53	0
Poland	High	0,66	0,64	+0.02
Romania	High	0,62	0,63	-0.01
Russian Federation	Upper middle	0,43	0,46	-0.03
Serbia	Upper middle	0,47	0,49	-0.02
Slovak Republic	High	0,66	0,66	0
Slovenia	High	0,69	0,68	+0.01
Ukraine	Lower middle	0,49	0,51	-0.02
Uzbekistan	Lower middle	0,49	0,49	0

Source: World Justice Project Rule of Law Index, 2024: www.worldjusticeproject.org.

Table 2. Summary of the Literature Review

Article	Dependent Variable	Measure	Magnitude of Effect	Area	Citation Index
Nedanovski & Kocevska (2023)	GDP per capita growth	Rule of Law (WGI)	1% increase → 0.07-0.1 percentage points GDP growth on average	South-Eastern Europe; 1996-2020	11
Dabrowski (2022a; 2022b)	Economic reforms and GDP per capita growth	Institutional factors (e.g. Rule of Law (WGI))	Varies regionally; e.g., Baltic countries benefited from EU membership, achieving institutional reform and liberal democracy. Other regions showed mixed results with less consistent reforms. For instance, Central Asia's autocratic tendencies negatively impacted reforms.	Former Soviet Union; 1991-2021	13
Bulatov (2022)	Capital flight	Multinational enterprises (MNE)	\$70–74 billion (0.8% of accumulated GDP) due to weak property rights	Russia; 2015–2020	4
Commander & Prieskienyte (2022)	Economic growth	Politics and institutions	Kazakhstan's case demonstrates that an authoritarian system can achieve economic growth, but the development of institutions and the rule of law often suffer as a result of this political system.	Kazakhstan; 1991→	4
Babic & Zaric (2021)	GDP per capita	International Property Rights Index (IPRI)	e.g. 1% increase in IPRI → GDP growth: Serbia 5.23%, Hungary 2.93%, Sweden 1.71%, UK 1.98%, Germany 1.72%	Germany, Czech Republic, Hungary, Serbia, Italy, UK, Spain, and Sweden	4
Neves et al. (2021)	Innovation and economic growth	Intellectual Property Rights (IPR)	The average effect of IPR on growth is positive, as is the average effect of IPR on innovation. Positive in high-income countries; weaker in developing economies.	Global	108
Socoliuc (2021)	GDP per capita	Property rights & legal structure index (Fraser Institute)	Inclusive institutions combined with property rights have led to positive growth in the Czech Republic, but weak institutions have been a barrier to growth in Romania.	Czech Republic, Romania; 1995–2018	1
Shevchuk et al. (2020)	GDP growth	Rule of law (WJP)	Increasing Ukraine's rule of law index level to the level of Georgia → GDP growth rate +0.6 percentage points.	CEE and the former Soviet Union, Latin America; 2013-2019	10
Shevchuk et al. (2020)	Inflation	Rule of law (WJP)	Increasing Ukraine's rule of law index level to the level of Poland → inflation -2.6 percentage points.	CEE and the former Soviet Union, Latin America; 2013-2018	10
Luong et al. (2020)	Shadow economy (% GDP)	Rule of law (WGI)	1% increase rule of law → the size of the shadow economy -0.088%.	Transition economies; 2002-2015	64
Alexiou et al. (2020)	GDP growth	Rule of law (WGI)	Long-term benefits only.	27 post-socialist countries, 1996-2016	27

Article	Dependent Variable	Measure	Magnitude of Effect	Area	Citation Index
Berkowitz et al. (2014)	Regional economic outcomes in 2007	Number of spetsbanks per million	A one standard deviation increase in property rights protections enhances the marginal impact of a spetsbank on annual economic growth by nearly 1 percentage point.	Russia; 1995–2007	88
Justesen et al. (2014)	GDP per capita	Property rights & legal structure index (Fraser Institute)	The growth effect of property rights increases when institutional veto players make property rights institutions credible and hard to change. Weak effect in countries with low democratic capital.	Developing countries; 1970–2000	41
Harper et al. (2007)	Bank assets/capita; liquid liabilities/GDP; domestic credit/GDP; claims on the private sector/GDP	Rule of law (Political Risk Services "Law and Order" index)	Former Soviet countries show 21–28 percentage points lower financial intermediation compared to developing countries, while non-Soviet transitional economies have a smaller gap but are still 22.6 percentage points lower.	17 transitional economies of Central and Eastern Europe (71 developing countries for comparison); 1993–2001	30
Badun (2005)	GDP per capita growth	Rule of law (WGI)	1-point increase → 15.04% growth in transition economies, 4.28% in EU member states.	14 EU states, 11 transition economies; 1995–2001	34
Rigobon & Rodrik (2005)	GDP per capita	Rule of law (WGI)	The study finds a strong causal impact from economic institutions (rule of law) to incomes (although the estimated coefficient is only borderline significant with the colony split).	Global (subsamples: North-South vs. East-West; Colony vs. non-colony)	1018
Crafts & Kaiser (2004)	GDP per capita growth	Rule of law (WGI)	If Tajikistan were to have Slovenian levels of institutional quality (rule of law), its projected growth would increase by almost 2.6 p.p. The benefits of enhanced institutional quality following EU membership could increase growth by 3.14 p.p. for accession candidates.	Transition economies; 1960–1995 (projections for growth starting 2000)	85
Havrylyshyn & Van Rooden (2003)	Real GDP growth rate	Property rights (Heritage Foundation); Legal Reform Index (EBRD); Rule of law and public administration (Freedom House)	Strengthening the rule of law is crucial for ensuring long-term economic growth in transition economies. Central and Eastern European and Baltic countries have better records due to shorter communist history and better initial institutions.	Transition economies; 1991–1998	264
Johnson et al. (2002)	Reinvestment of profits	Property rights	As long as officials demand bribes, firms have little financial incentive to invest. This limits firm growth opportunities and reduces demand for external finance.	Poland, Romania, Slovakia, Ukraine, and Russia; 1997	1557

Sources: listed in the table.