Are civil liberties contagious? Analysis of determinants of de facto civil rights protection in post-socialist countries

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Abstract
In this paper, we contribute to the debate on determinants of civil liberties protection by extending the standard approach using spatial components. Our analysis highlights three categories of civil liberties—private civil liberties, political civil liberties and physical integrity rights. The focus of the paper is the region of post-socialist countries in Central and Eastern Europe. Our results imply the existence of institutional diffusion of de facto civil liberties protection between countries. What is more, we identify clusters of civil rights protection relevant for post-socialist states. The conclusions are based on an empirical study (a spatial panel Durbin GMM model and Local Moran I statistic).

Keywords Civil liberties · Economic analysis of human rights · de jure and de facto rights protection · Institutional diffusion

JEL Classification K38 · P26 · P37

1 Introduction
Nowadays, standards of human rights protection around the world are highly diversified. The question that arises in this context is: why do some state actors abuse a person’s dignity? Finding a credible answer would entail numerous policy implications, as high standards of human rights protection contribute to the social and economic development of a country.

The process of development of a country must be perceived as a process of expanding the real freedoms that people enjoy (Sen 1999). A state actors aspiring to achieve economic and social development should aim to eliminate the major sources of the lack of freedom such as, *inter alia*, poverty, tyranny, poor economic opportunities, systematic social deprivation or overactivity of repressive states. High
standards of human rights protection contribute to increased foreign direct investment inflow to the country (see for example Bénassy-Quéré et al. 2007, Blume and Voigt 2007, Farber 2002). Moreover, they influence the level of subjective well-being of citizens in a positive way (see for example Nikolova 2016, Bjørnskov et al. 2010).

It is possible to distinguish two types of determinants of civil rights protection: spatial and aspatial. In this paper, we focus primarily on spatial determinants i.e. those related to institutional diffusion between countries. Women's suffrage rights constitute an example of a right that spread universally in the twentieth century. The reason a large number of otherwise dissimilar nation-state actors have decided to follow a similar path in the political incorporation of women is the existence, development, diffusion, and influence of a more inclusive model of political citizenship (Ramirez et al. 1997).

In this context, diffusion is understood as a process characterised by a certain uncoordinated interdependence between entities. Diffusion research is motivated by the observation that countries or other regional units choose similar institutions within a specified period of time (Elkins and Simmons 2005). As a result, temporal and spatial clusters of policy reform occur. We argue that civil rights spread between countries via mechanisms such as learning, persuasion, coercion, competition and acculturation. The probability of emergence of a given mechanism depends on geographical and cultural proximity between states. In our analysis, we account as well for aspatial determinants, i.e. those related solely to the conditions in a given country.

The question of determinants of human rights protection remains particularly important in the case of post-socialist countries. This group of states is characterised by diversified regimes (from democratic to almost authoritarian), members of the European Union, the Council of Europe and the Commonwealth of Independent States, as well as countries that in the late 80s/early 90s gained independence and declared post-socialist constitutions. What is more, this group of countries is susceptible to various international influences that could shape its institutional de jure and de facto qualities.

The main aim of the paper is to verify what the spatial and aspatial determinants of protection of a specific type of human rights are, for example, civil liberties in post-socialist countries. Civil rights constitute a broad category of human rights. The analysis highlights three categories of civil liberties–private civil liberties, political civil liberties and physical integrity rights. We focus on answering the following research questions: (1) are spatial interactions between countries a significant explanant of de facto civil liberties protection? (2) is this effect different for post-socialist states in comparison to the rest of the world? (3) what is the impact of geographical and cultural proximity on the occurrence of spatial diffusion of civil liberties? (4) what are the clusters of de facto civil liberties protection impacting post-socialist states? In order to answer the questions stated above, we propose a theoretical framework of determinants of civil liberties and test it empirically with advanced econometric techniques (a Local Moran I statistic and a spatial panel Durbin GMM model with two types of spatial weight matrices: geographical proximity weight matrix and cultural proximity weight matrix). To the best of our knowledge,
this is the first study dealing with spatial determinants of de facto civil liberties protection in post-socialist countries.

The paper is structured as follows. Firstly, we describe the characteristics of civil liberties within the scope of our analysis. In the following few sections, we expound upon spatial and aspatial determinants of civil liberties protection, develop a theoretical framework and then test it empirically with the usage of spatial econometrics techniques. Section 5 discusses civil rights protection in post-socialist states. Section 6 includes a description of the data, variables and methodology used in the empirical study, and discusses the obtained model results. The paper finishes with conclusions and policy implications.

2 The characteristics of civil liberties

Human rights constitute a broad category of rights with various objects of protection. According to Brian Orend, there are five main abstractly-defined objects of human rights (Orend 2002). These are physical security, material subsistence, personal liberty, elemental equality, and social recognition. Another possible classification involves the division of rights into positive and negative rights. A positive right is a claim to something (like a share of material goods or an access to a particular good such as health services), while a negative right is a right that something shall not be done to a person—a right to not be interfered with in forbidden ways (Fried 1978). Positive and negative rights differ in terms of their determinants and possible social outcomes. As an example, Bjørnskov and Mchangama analysed the outcomes of economic, social and cultural rights and did not find robust evidence of their positive effects but found adverse medium-term effects on education and inflation (Bjørnskov and Mchangama 2019). In this paper, we focus on first-generation negative civil liberties and use three indices of de facto civil liberties protection from the VDem database (Coppedge et al. 2016):

- Private civil liberties index—captures the extent to which the government respects private liberties understood as freedom of movement, freedom of religion, freedom from forced labour, and property rights,
- Political civil liberties index—envisages to what extent the government respects political liberties such as freedom of association and freedom of expression,
- Physical violence index—indicates the extent to which physical integrity is respected, i.e. citizens enjoy freedom from political killings and torture by the government.

Civil rights have a clear, identifiable beneficiary—they primarily benefit those who are typically not privileged in society, that is ethnic, religious, geographic, or ideological minorities (Mukand and Rodrik 2020). They protect the personal space within which citizens are free to make important decisions in their lives (Orend 2002). The provision of civil rights is costly to the majority and largely unnecessary for the elite of society (Mukand and Rodrik 2020). The question that arises in this context is why do governments decide to ensure civil rights protection?
3 Mechanisms of rights diffusion

Diffusion is a process characterised by a certain uncoordinated interdependence between entities. Diffusion research is motivated by the observation that countries or other regional units choose similar institutions within a specified period of time (Elkins and Simmons 2005). As a result, temporal and spatial clusters of policy reform occur. An example of institutional diffusion may be observed in the context of constitutional design. Nowadays, constitution-making is an international and comparative process (Horowitz 2002). "International" in a sense that the involvement of experts and practitioners across boundaries has become widespread, and "comparative" because countries make attempts to learn from the experience of similarly situated states and societies (Horowitz 2002). Institutions that spread through that mechanism are, inter alia, proportional representation, judicial review, and the idea of liberal democracy.

We start the analysis of institutional diffusion by discussing the norm "life cycle". It may be divided into three stages: (1) norm emergence, (2) norm cascade, (3) internalisation (Finnemore and Sikkink 1998). The first stage is characterised by the presence of persuasion by norm entrepreneurs, who attempt to convince a critical mass of state governments (norm leaders) to implement a new norm. In the second stage, the norm leaders seek to socialise other governments to become followers, and the norm cascades occur through the rest of the states. At the end of the norm "life cycle", internalisation takes place—the norm is perceived as an inherent part of the legal system and is no longer a matter of public debate. This is the stage which is crucial from the point of view of this paper. The question arises, why do some state actors decide to follow the norm leaders and implement a new norm to their legal systems?

In the context of norms related to human rights, there are three basic approaches of interstate interaction which explain the emergence of human rights regimes—realist, ideational and scapegoat approaches to interstate interactions (Moravcsik 2000; Vreeland 1999). According to the realist theory, governments accept obligations because they are forced to do so by great powers that externalise their ideology. Establishment of a binding human rights regime requires a group of powerful governments willing to coerce or induce other governments to accept, adjust to, and comply with international human rights norms. On the other hand, the ideational view highlights the importance of idealistic or altruistic motivations for spreading liberal values. According to this theory, governments accept human rights norms because they are swayed by the overpowering ideological and normative appeal of the values that underlie them. The scapegoat approach, with its roots in public choice, highlights that a government enters into an international agreement or includes a set of rights in its constitution in order to avoid criticism. The approach was developed in the context of the International Monetary Fund (IMF), which provides countries with increased access to foreign exchange during balance of payments crises. The loan is granted under certain conditions. Some governments enter into IMF agreements, even when they do not need a foreign exchange, in order to strengthen their position against domestic
opponents of economic reform (Vreeland 1999). The IMF conditions serve as a justification of government policies that otherwise would not be approved (Vreeland 1999). In the context of emergence of human rights regime, a government may include a set of rights in the constitution simply in order to protect its international reputation.

There are several mechanisms that play a role in norms diffusion. The first one is the spread of knowledge between citizens and governments. So-called "lesson-drawing" addresses the following question—under what circumstances and to what extent can a programme that is effective in one place transfer to another (Rose 1991)? The choice of lessons to be learnt depends on a subjective definition of proximity, the presence of communities linking experts together, functional interdependence between governments, and the authority of international institutions (Rose 1991). Countries, while implementing new institutional policies, choose between experimentation and imitation, that is they invent new policy incurring all of the costs associated with it or imitate the policy chosen by the successful leader (Mukand and Rodrik 2005). The probability of learning from another country decreases with the distance between the countries. Simmons and Elkins distinguish three ways of institutional policy learning, including learning from success, learning through communication and learning from cultural reference group (Simmons and Elkins 2004). Rose identifies five alternative ways of drawing a lesson from programmes implemented in other jurisdictions (Rose 1991). These are—copying, emulation, hybridisation, synthesis and inspiration.

The second mechanism is diffusion through persuasion. Some beliefs are shaped through direct observations, but a considerable share of information constituting a base on which economic and political decisions are made is provided by agents who themselves have an interest in the outcome (DellaVigna and Gentzkow 2010). Persuaded political actors internalise new norms and rules of behaviour and as a result modify their interests and identities (Pegram 2010). The social judgement theory of persuasion states that in communication, the extent to which an argument is perceived as persuasive depends mainly on the distance between one’s attitude and the received message (Elkink 2011). In other words, while one is communicating with someone with a similar ideological outlook, he or she is likely to convince that person and become even closer. On the other hand, communication with a person with very different convictions often confirms those differences and deepens the distance (Elkink 2011).

The next mechanism of diffusion is coercion, which has roots, as an example, in imperialism, wars, conquests and occupation. Coercive policy transfer is characteristic of the colonial era, when a transfer of legal codes, governing institutions and bureaucratic institutions from the imperial centre to the colonies occurred. One of sub-categories of coercion is conditionality referring to the use of coercion through specific conditions attached to the distribution of benefits to the recipient countries (Pegram 2010). This mechanism is visible in the harmonisation programmes that accompany the accession of new states into the European Union. In the context of human rights, restricting membership to countries with higher human rights protection standards may facilitate cooperation among regime participants (Goodman and Jinks 2004).
The existence of competition between countries to create a trade and investment-friendly environment constitutes another factor conductive to human rights diffusion (Lewczuk 2019). State actors have incentives to modify their institutions in order to better exploit foreign opportunities related to supplying foreign markets, attracting FDI or counteracting perceived political threats (Faber and Gerritse 2009). A ‘competition effect’ may occur when countries compete for foreign investment by improving institutions (Qian and Roland 1998). Given the quality of state A’s institutions, the quality of institutions in the neighbouring countries determines whether trade or FDI flows from third countries will be allocated to A or in its neighbours (Bosker and Garretsen 2009). A country may be preferred by investors as a trading or investment partner because of the relatively lower quality of institutions in the nearby states.

Acculturation is defined as a process by which actors adopt the beliefs and behavioural patterns of the surrounding culture (Goodman and Jinks 2004). The process of acculturation emphasises the importance of relational environment of the actor and not of the content of the reform adopted (Pegram 2010). Goodman and Jinks state that individual and community-level behavioural regularities are in part a function of social structure—the relations between individual actors and some reference groups (Goodman and Jinks 2004). Identification with a given reference group generates internal and social pressures (real or imagined) to conform. Internal pressures are associated with the socio-psychological outcomes of non-conforming (such as anxiety, regret, and guilt) and with the benefits of conforming to group norms (such as cognitive comfort). Social pressures consist of the positive and negative responses applied by the group. In addition, the norms subject to acculturation are not only international political norms but also norms among voters in a specific country. The effect of acculturation of norms preferred by voters may vary with political regime. Voter norms affect the political process to the extent that voters are politically important in the country. Therefore, part of acculturation processes may only be relevant in democracies. Furthermore, in the context of post-socialist states, acculturation may take effect through two different mechanisms—either through the adaptation of Western norms or through returning to pre-communist norms.

In the context of the analysis of mechanisms of human rights diffusion, an additional question arises: what increases the probability of a given mechanism to occur between given states? We argue that the main factor influencing the spread of rights protection is the geographical and cultural proximity between states.

Ramirez, Soysal and Shanahan, in their research on female suffrage, demonstrated the human rights contagion effect on the regional level i.e. once a norm is institutionalised, a strong predictor for whether an individual state will enact that norm is whether other states in its region have done so in the past five years (Ramirez et al. 1997). Simmons states that governments are motivated to sign human rights treaties in order to enjoy praise and acceptance and avoid criticism (Simmons 2009). As a result, they often respond to social pressures to ratify when other countries in their region do so. In the short run, this kind of strategy provides certain benefits: it is difficult for rights activists and international organisations to single out one country for criticism when the entire region is not compliant with a treaty regime. On the other hand, non-compliant states are much easier to target and shame than those that
behave like everyone else. Therefore, it can be concluded that geographical proximity between states shall constitute a factor increasing the probability of the existence of the rights diffusion mechanism.

Cultural proximity between societies increases the probability of the occurrence of rights diffusion as well, which may be justified from the point of view of the social identity theory. The social identity theory stresses that an individual’s behaviour reflects his or her larger societal units, i.e. individual’s identification with societal units such as groups, organisations or cultures guides’ internal structures and processes (Padilla and Perez 2003). Socialisation constitutes one of the most influential sociological processes in the international system, and significantly affects the rate of compliance with international law (Hirsch 2015). The major actors of international socialisation include regional or ideological groups of states, and certain non-state actors, such as international organisations. Citizens identify mostly with foreign societies that share similar cultural heritage and values.

On the whole, the rights diffusion mechanisms lead to the occurrence of temporal and spatial clusters of policy reform. Elkins and Simmons enlist three general classes of explanation of policy clustering (Elkins and Simmons 2005). The first is that countries respond similarly but independently to similar domestic conditions. The second alternative assumes that clustered policy making is coordinated by a group of nations, a hegemonic power, or an international organisation. Finally, the third explanation is a mixture of the previous two—it claims that there exists a set of processes characterised by interdependent, but uncoordinated, decision-making. This concept assumes that governments are independent because they make their own decisions without cooperation or coercion, but, at the same time, are interdependent in the sense that they factor in the choices of other governments (Elkins and Simmons 2005).

We argue that the mechanisms described above play a role in diffusion of civil rights in the post-socialist region. In the next section, we present other possible determinants of civil rights protection and propose a theoretical model explaining the potential determinants of de facto civil rights protection.

4 Determinants of civil rights protection

In this section, we develop a theoretical framework explaining the potential determinants of de facto civil rights protection. Figure 1 presents the outline of the framework.

The framework consists of both aspatial and spatial determinants of civil rights protection. Spatial determinants of rights protection are discussed in the previous section. In this section, we focus on aspatial determinants i.e. the ones linked solely to the conditions in a given country.

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1 De jure rights are envisaged in law of a particular country, while de facto rights refer to the real level of rights protection (Melton 2013).
There are seven main determinants of de facto civil rights protection in a given country. The first ones are the presence of de jure rights protection such as constitutional provisions referring to civil rights combined with the independent judiciary. According to the general belief, the best way to safeguard individual freedoms is through the enumeration of rights in the constitution and through ensuring their protection by the judiciary (Keith et al. 2009). Governments should be less willing to abuse rights that are clearly and publicly promised to their citizens in a legally binding document and that are supported by the constitutional mechanisms, such as independent judiciary (Keith et al. 2009). However, sometimes constitutional provisions are not upheld in practice, and, in such a case, a constitution may be classified as a sham constitution (Law and Versteeg 2013).

Furthermore, the political regime type also plays a role as a determinant of civil rights protection. The presence of a democratic regime constitutes a factor decreasing the probability of the occurrence of civil rights violations. It may be attributed to the fact that democratic principles emphasise bargaining, compromise, and elections as the only appropriate measures to resolve disagreements (Keith 2002). What is more, fully participatory and competitive elections discourage a potentially abusive leader, as he or she may feel vulnerable to public discontent at the polls. Such a leader may be restrained by the system of checks and balances, which place judicial or legislative constraints on the executive powers. Davenport claims that the change in the regime type is an important determinant of the state of human rights practices (Davenport 1999). Autocratisation contributes to the increased violations of human rights, and the effect persists over several years after the regime change. On the other hand, democratisation instantly leads to withdrawals of repressions, and the effect lasts over the course of several years. With respect to the determinants related to political regimes, the presence of a military leader should be controlled for. In a military regime, political leaders have direct control over the instruments of coercion, and, as a result, face fewer barriers than other leaders if they choose to act respectively (Poe et al. 1999).

Moreover, a government is most likely to repress human rights if it appears to be the most effective means to achieve its ends. This situation occurs when threats exist, either real or perceived, to a leader’s goals. Threats, which are crucial in this context, are the presence of internal or external conflict (Poe et al. 1999). Therefore,
the level of civil rights de facto protection shall fall as regimes are faced with a threat in a form of civil war or international conflict. In such circumstances, the government is also likely to declare a state of emergency, usually entailing suspension of some basic rights (Bjørnskov and Voigt 2018).

The economic conditions and the level of development of a country also play an important role in ensuring de facto human rights protection. Good economic conditions decrease the probability of human rights repressions, as the government has more resources to peacefully resolve social conflicts. On the other hand, poor economic conditions evoke social unrest and increase the probability of human rights conditions. Additionally, richer voters are less likely to be accepting of violations of civil rights. This may in be explained through the theory of postmodern values transitions, which highlights that economic development is linked to a shift from absolute norms and values towards those that are increasingly rational, tolerant, trusting, and participatory (Inglehart and Baker 2000). Furthermore, a better economic situation of voters contributes to the decreasing marginal returns to income, which implies that other factors, such as standards of civil rights protection, become relatively more important to them.

Membership in international organisations and ratification of human rights protection treaties shall raise the standards of both de jure and de facto civil rights protection standards. Regional international organisations contribute to the spread of civil rights protection by standard setting, capacity building, network facilitating, and membership granting (Cardenas 2003). International human rights documents, such as Universal Declaration of Human Rights, have contributed to the proliferation of human rights provisions in a number of countries’ constitutions (Elkins et al. 2013). As a result, the states became legally committed to the agreements. One of the channels of international treaties’ efficacy in human rights protection is through domestic constitutions (Elkins et al. 2013). What is more, violators of international human rights norms may be punished in terms of lower levels of foreign aid. Lebovic and Voeten argue that the United Nations Commission on Human Rights resolution, which explicitly criticises governments for their human rights records, gives political cover for the World Bank and other liberal multilateral aid institutions seeking to sanction human rights violators (Lebovic and Voeten 2009). The process of punishment for violating international human rights norms is selective—international organisations play a vital role in the selection process. Therefore, governments may be more prone to respect international human rights in order to avoid economic sanctions.

5 Human rights protection in post-socialist countries

On the whole, this paper investigates the question: what are the spatial and aspatial determinants of de facto civil rights protection for post-socialist countries? Post-socialist countries are understood as those situated in Central and Eastern Europe, ²

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² Albania, Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovakia.
countries in former Yugoslavia and in the former USSR. This group of states, on the one hand, is strongly diversified, and, on the other, shares multiple similarities as an effect of analogy in historical development. The diversity may be observed in such aspects as, inter alia, the level of the economic development, the size and structure of the market, and membership in international organisations (Matkowski 2004). The similarity is associated with the fact that, in the late 80s, the process of transformation of economic and political systems began, in that the countries experienced the transition from communist or socialist system to democracy and from centrally planned economy to a free-market. In this period, the countries adopted new constitutions based on the rule of law, with broad catalogues of rights and freedoms.

The motivation behind the implementation of international human rights regimes in post-socialist countries is mainly associated with the need for the newly established (or re-established) democracies to employ international commitments to consolidate democracy, i.e. to "lock in" the domestic political status quo against their nondemocratic opponents (Moravcsik 2000). In this case, the spatial location of a post-socialist country is of the utmost importance. Post-socialist states bordering countries with sound a human rights protection regime have incentive to take measures to comply with and raise the quality of their human rights regime in order to gain greater recognition and better position in international politics. On a contrary,

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3 Bosnia and Herzegovina, Croatia, Montenegro, Macedonia, Serbia, Slovenia.

4 Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kirgizstan, Lithuania, Latvia, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.
Fig. 3  Spatial distribution of private civil liberties index in 2017. Note: Author’s own elaboration

Fig. 4  Spatial distribution of political civil liberties index in 2017. Note: Author’s own elaboration
countries bordering non-democratic powerful regimes characterised by poor protection of human rights may lower their standards in order to adjust to their neighbours’ standards.

The above-mentioned pattern is visible in Figs. 2, 3 and 4. The maps present spatial distributions of the measures of de facto protection of civil rights, lying within the scope of the analysis of our research. The darker the colour, the higher the standards of the rights protection are in a given country. On the maps, a clustering of post-socialist countries with well-functioning and poor-functioning human rights protection is visible, which justifies further empirical analysis.

6 The model

The following section of the paper discusses the empirical specification and results of an econometric model, that is the spatial panel Durbin model (SDM). The aim of the model is to answer the following research questions:

Research question 1: Are spatial interactions between countries a significant explanant of de facto civil rights protection in post-socialist states?

Research question 2: Is the above-mentioned effect different for post-socialist states in comparison to the rest of the world?

Research question 3: What is the impact of geographical and cultural proximity on the occurrence of spatial diffusion of civil rights?

In addition, using the Local Moran I statistic, we analyse clusters of de facto civil rights protection and aim to answer one more research question:

Research question 4: What are the clusters of de facto civil rights protection which impact post-socialist states?

6.1 Data and variables

The main data source of the level de facto civil rights protection is the V-Dem database (Coppedge et al. 2016). The data span is 1995–2017 for the 171 countries of the world. This time span has been chosen due to the fact that the majority of post-socialist countries gained their independence in the early 90s. The V-Dem database (Coppedge et al. 2016) contains a variety of institutional, social and economic indicators that are used in the study as well. The data concerning de jure rights protection come from the Comparative Constitution Project database (Elkins et al. 2014). Table 1 presents the definitions and sources of all variables used in the study, and Tables 2 and 3 contain their descriptive statistics.

There are three explanatory variables related to de facto civil rights protection (defined above):

- The physical violence index,
- The political civil liberties index,
- The private civil liberties index.
| Variable                        | Definition                                                                 | Source                                                                 |
|--------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------|
| Physical violence index        | Continuous variable, indicates the extent to which physical integrity is respected, i.e. citizens enjoy freedom from political killings and torture by the government | V-Dem database (Coppedge et al. 2016)                                  |
| Political civil liberties index | Continuous variable, envisages to what extent the government respects political liberties, such as freedom of association and freedom of expression | V-Dem database (Coppedge et al. 2016)                                  |
| Private civil liberties index   | Continuous variable, captures the extent to which the government respects private liberties understood as freedom of movement, freedom of religion, freedom from forced labour, and property rights | V-Dem database (Coppedge et al. 2016)                                  |
| Freedom of expression de jure   | Binary variable. 1—the constitution provides for the freedom of expression or speech, 0—otherwise | Comparative Constitution Project database (Elkins et al. 2014)          |
| Freedom of association de jure  | Binary variable. 1—the constitution provides for the freedom of association or speech, 0—otherwise | Comparative Constitution Project database (Elkins et al. 2014)          |
| Freedom of religion de jure     | Binary variable. 1—the constitution provides for the freedom of religion, 0—otherwise | Comparative Constitution Project database (Elkins et al. 2014)          |
| Freedom of movement de jure     | Binary variable. 1—the constitution provides for the freedom of movement, 0—otherwise | Comparative Constitution Project database (Elkins et al. 2014)          |
| Expropriation de jure           | Binary variable. 1—the constitution gives the right to the government to expropriate private property under at least some conditions, 0—otherwise | Comparative Constitution Project database (Elkins et al. 2014)          |
| Freedom from forced labour de jure | Binary variable. 1—the constitution prohibits slavery, servitude, or forced labor, 0—otherwise | Comparative Constitution Project database (Elkins et al. 2014)          |
| Freedom from torture            | Binary variable. 1—the constitution prohibits torture, 0—otherwise         | Comparative Constitution Project database (Elkins et al. 2014)          |
| Freedom of press de jure        | Binary variable. 1—the constitution provides for the freedom of press, 0—otherwise | Comparative Constitution Project database (Elkins et al. 2014)          |
| Freedom from censorship de jure  | Binary variable. 1—the constitution prohibits censorship, 0—otherwise      | Comparative Constitution Project database (Elkins et al. 2014)          |
Table 1 (continued)

| Variable                      | Definition                                                                                                                                                                                                 | Source                                                                                     |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Independence of judiciary de facto | Ordinal variable (0–4) variable, captures the extent to which judges, while ruling in cases that are salient to the government, make decisions that reflect government wishes, regardless of their sincere view of the legal record. The higher the score, the greater the judicial independence | V-Dem database (Coppedge et al. 2016)                                                      |
| gdp per capita                 | GDP per capita                                                                                                                                                                                            | World Bank (2019)                                                                            |
| Civil war                     | Binary variable. 1—at least one intra-state war with at least 1,000 battle deaths, 0—otherwise                                                                                                           | V-Dem database (Coppedge et al. 2016)                                                      |
| Democracy                     | Binary variable. 1—regime is considered a democracy, 0—otherwise                                                                                                                                          | V-Dem database (Coppedge et al. 2016) on the basis of Cheibub et al. (2010)                 |
| Military                      | Binary variable. 1—the chief executive a military officer, 0—otherwise                                                                                                                               | V-Dem database (Coppedge et al. 2016)                                                      |
| EU                            | Binary variable. 1—country is a member of the European Union, 0—otherwise                                                                                                                               | V-Dem database (Coppedge et al. 2016)                                                      |
| ex-USSR                       | Binary variable. 1—Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kirgizstan, Lithuania, Latvia, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan, 0—otherwise | V-Dem database (Coppedge et al. 2016)                                                      |
| ex-Yugoslavia                  | Binary variable. 1—Bosnia and Herzegovina, Croatia, Montenegro, Macedonia, Serbia, Slovenia, 0—otherwise                                                                                             | V-Dem database (Coppedge et al. 2016)                                                      |
| CE Europe                     | Binary variable. 1—Albania, Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovakia, 0—otherwise                                                                                               | V-Dem database (Coppedge et al. 2016)                                                      |
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Table 2  Descriptive statistics (continuous variables)

| Variable name                        | Number of observations | Mean       | Minimum    | Maximum    |
|--------------------------------------|------------------------|------------|------------|------------|
| Physical violence index              | 3910                   | 0.6783629  | 0.0202555  | 0.9888235  |
| Political civil liberties index      | 3910                   | 0.7129398  | 0.0117031  | 0.9752557  |
| Private civil liberties index        | 3910                   | 0.6994702  | 0.0248742  | 0.9884896  |
| Independence of judiciary de facto   | 3910                   | 0.4560451  | −3.333435  | 3.497019   |
| ln(gdp per capita)                   | 3910                   | 8.073197   | 4.631277   | 11.68877   |

Table 3  Descriptive statistics (discrete variables)

| Variable name                        | Number of observations | Percentage |
|--------------------------------------|------------------------|------------|
| Freedom of expression de jure        | 1 3638                 | 93.04      |
|                                      | 0 272                  | 6.96       |
| Freedom of association de jure       | 1 3611                 | 92.35      |
|                                      | 0 299                  | 7.65       |
| Freedom of religion de jure          | 1 3605                 | 92.20      |
|                                      | 0 305                  | 7.80       |
| Freedom of movement de jure          | 1 3443                 | 88.06      |
|                                      | 0 467                  | 11.94      |
| Expropriation de jure                | 1 3637                 | 93.02      |
|                                      | 0 273                  | 6.98       |
| Freedom from forced labour de jure   | 1 1347                 | 34.45      |
|                                      | 0 2563                 | 65.55      |
| Freedom from torture de jure         | 1 2910                 | 74.42      |
|                                      | 0 1000                 | 25.58      |
| Freedom of press de jure             | 1 2657                 | 67.95      |
|                                      | 0 1253                 | 32.05      |
| Freedom from censorship de jure      | 1 1323                 | 33.84      |
|                                      | 0 2587                 | 66.16      |
| Civil war                            | 1 111                  | 2.84       |
|                                      | 0 3799                 | 97.16      |
| Democracy                            | 1 1267                 | 32.40      |
|                                      | 0 2643                 | 67.60      |
| Military head of the government      | 1 562                  | 14.37      |
|                                      | 0 3348                 | 85.63      |
| EU                                   | 1 498                  | 12.74      |
|                                      | 0 3412                 | 87.26      |
| ex-USSR                              | 1 230                  | 5.88       |
|                                      | 0 3680                 | 94.12      |
| ex-Yugoslavia                        | 1 138                  | 3.53       |
|                                      | 0 3772                 | 96.47      |
| CE Europe                            | 1 230                  | 5.88       |
|                                      | 0 3680                 | 94.12      |
Such a division deepens the analysis in order to better understand the nature of civil liberties.

Furthermore, the data set comprises a range of control variables, which are possible determinants of de facto civil rights protection. The determinants are chosen on the basis of broad political science and law & economics literature concerning the levels of de facto rights protection. The first set of independent variables constitute the characteristics of a country’s political system, such as political regime type (democracy) and the presence of the military head of the government (military). We include as well the presence of de jure right protection in the constitution (CR de jure), the degree of de facto independence of judiciary (judiciary), state of civil war (civil war) and post-socialist heritage (post-socialist), membership in European Union (EU) and gross domestic product per capita (gdppc). We divide the post-socialist states present in the sample into three groups: countries of the former Soviet Union (ex-USSR), countries of former Yugoslavia (ex-Yugoslavia) and countries of Central and Eastern Europe (CE Europe).

The empirical strategy used consists of two steps. Firstly, we estimate a spatial panel Durbin model (SDM). In the second step, we deepen the analysis using spatial Moran statistics.

### 6.2 GMM spatial panel Durbin model

The main reason to use the spatial panel data estimation lies in the fact that it manages the problem of existence of the spatial interdependence in the data. Essentially, not including it in the model specification may result in biased and inefficient estimates. What is more, the use of such methodology boosts the analysis of the influence of the level of human rights protection in one country on that of the neighbouring countries. The spatial model specification used in the study is a spatial Durbin model (SDM). It contains spatial lags of explained and explanatory variables, that is

\[
Y = \rho W Y + X \beta + W X \beta_2 + \varepsilon,
\]

where \( Y \) is the dependent variable, \( X \) is the set of independent variables, \( W \) is the spatial weight matrix, \( \rho W Y \) represents spatial lags of dependent variable, and \( W X \)– the spatial lags of dependent variables. The choice of the model’s specification is supported by a twofold argument relating to both the econometric and interpretational correctness of the model. SDM is a global spillover specification (LeSage 2014). A spatial spillover appears when the \( n \)th characteristic of the \( i \)th agent located at position \( i \) in space exerts a significant influence on the outcomes (\( y_j \)) of an agent located at position \( j \). A spillover may be defined as global when the endogenous interaction and feedback are present and when changes in one agent trigger a sequence of adjustments in potentially all regions in the sample (LeSage 2014).

We use two spatial weight matrices—inverse squared distance matrix and cultural proximity matrix. Each of these matrices expresses a different type of interactions between countries. The inverse distance matrix with weights equal \( 1/d_{ij} \), where \( d_{ij} \) stands for distance between country \( i \) and country \( j \), captures linear relations of neighbours with all territorial units (the strength of this relationship is proportional
to the distance between units). The squared inverse distance matrix, with weights equal to $1/d^2_{ij}$, represents both all-to-all relations and the neighbourhood clusters with stronger links (Kopczewska et al. 2017).

Additionally, we use the cultural proximity matrix proposed by Eff (2008). Eff measures cultural proximity between states by language phylogeny. Language phylogenies classify languages into categories, each of whose members can be hypothesized to have spoken a common ancestral language (Eff 2008). They have a network structure, forming a tree with a single root and multiple branches with contemporary languages located at the tips. The cultural proximity $w_{rk}$ between countries $r$ and $k$ is calculated as follows:

$$w_{rk} = \sum_i \sum_j p_{ik} p_{jr} s_{ij}$$

where $p_{ik}$ is the percentage of the population in country $k$ speaking language $i$, $p_{jr}$ is the percentage of the population in country $r$ speaking language $j$, and $s_{ij}$ is the proximity measure between language $i$ and language $j$. Each language in country $r$ is compared to each language in country $k$. The measure expresses the expected similarity of the languages spoken by two persons, one drawn at random from each country. High values of $w_{rk}$ will occur only when both countries have a high percent of their population in similar languages.

SDM exploits the complicated dependence structure between observations and parameter estimates. A change in a single observation associated with any given explanatory variable will affect the region itself (a direct impact) and potentially affect all other regions indirectly (an indirect impact) (LeSage and Pace 2009). Furthermore, an effect of feedback loops occurs, i.e. observation $i$ affects observation $j$ and observation $j$ also affects observation $i$ (LeSage and Pace 2009). In a spatial Durbin model, the direct effect is expressed by the coefficient estimate of the explanatory variable, while its indirect effect is represented by the coefficient estimate of spatial lagged values of explained and explanatory variables. The SDM is estimated using the lagged dependent variable (LDV) GMM approach with instrumental variables (as recommended in Davis and Vadlamannati (2013) for a similar econometric problem). The instruments are the weighted averages of the other nations’ exogenous variables. Using this methodology, problems related to inclusion of LDV into the spatial model can be overcome.

The existence of spatial dependence in the model is confirmed by the outcomes of the Baltagi, Song, Jung and Koh joint test, which indicated the existence of spatial dependence in error terms in the data.\(^5\)

The estimated model equation is as follows:

---

\(^5\) The value of the LM-H statistics for specification with physical violence index: 20,000, for the specification with private civil liberties index: 30,000, for the specification with political civil liberties index: 30,000.
where $CRI$ is one of civil rights indices described above, $region$ is one of the post-socialist regions (ex-ussr, ex-Yugoslavia, CE Europe). The model specification contains time lag of the dependent variable and a set of independent variables including: spatial lags of civil rights indices and democracy, and a set of interactions. We use interactions of all independent variables (except military, as in the dataset there are no military regimes in post-socialist region) with the $region$ variable in order to analyse the peculiarity of post-socialist states compared to the world sample. This technique makes it possible to capture the effects for post-socialist countries. Restricting the model solely to the post-socialist region would deprive us of the information regarding spatial interactions between post-socialist and non-post-socialist countries. What is more, we include an interaction between the spatial lags of civil rights indices and the democracy variable to analyse the effect of democratic regimes on the spread of civil rights protection standards. We followed the estimation strategy “from general to specific”—as recommended in the literature (see e.g. Kopczewska et al. 2017).

### 6.3 Local Moran I statistic

The Local Moran I statistic measures whether a given region is surrounded by regions with similar or different attribute values compared to the random distribution of these values in space. It is given by the formula:

$$I_i = \frac{(x_i - \bar{x}) \sum_{i=1,i\neq j}^n w_{ij} (x_j - \bar{x})}{\sum_{i=1}^n (x_j - \bar{x})^2 / n}$$

where $x_i$ is an attribute for feature $i$, $\bar{x}$ is the mean of the corresponding attribute, $w_{ij}$ is the spatial weight between feature $i$ and $j$, and $n$ equals the total number of observations. A positive value for $I$ indicates that a region has neighbours with similarly high or low attribute values. It signifies that this region constitutes a part of a cluster. A negative value for $I$ indicates that region’s neighbours are characterised by dissimilar values, making this region an outlier. In each case, the statistical significance of the effect is verified.
6.4 Estimation results

Table 4 presents the estimation results for both cultural and inverse squared distance matrices, while Table 5 presents the summary of the main results related to spatial diffusion.

The outcomes indicate the significant and positive impact of spatial lag of the civil liberties index in explaining the level of de facto civil liberties protection in a given country. The result holds for physical integrity and private civil liberties. Therefore, we conclude that spatial interactions constitute a significant explanant of de facto civil rights protection, i.e. there exists an institutional diffusion in this regard. For certain categories of civil liberties, this effect is different for post-socialist states compared to the rest of the world. In the case of the former USSR states, the institutional diffusion effect of physical integrity rights is weaker in comparison to the average effect for the global sample (a significant and negative intercept of interaction $CRI_{lags#ex-USSR}$). On the other hand, we may observe a stronger effect of institutional diffusion of physical integrity and private civil liberties for former Yugoslavian states compared to the global sample. For these regions, the positive neighbourhood effect on de facto standards of protection of liberties such as freedom of movement, freedom of religion, freedom from forced labour, and property rights is a stronger determinant than for an average country. Moreover, the effect of physical integrity rights diffusion is stronger in democracies, which is in line with theoretical predictions presented in Sect. 4. Democracies are more prone to the diffusion of civil liberties, as they possess better institutional infrastructure for adopting new norms and standards of protection.

In order to analyse the impact of geographical and cultural proximity on the occurrence of spatial diffusion of civil rights, we used two types of spatial weight matrices: inverse squared distance matrix and cultural distance matrix. For both types of matrices, we observe significant spatial diffusion. Therefore, we may conclude that institutional diffusion of civil liberties depends not only on geographical distance but also on cultural proximity between the states, which is supported by the acculturation and socialisation theorems discussed above.

Furthermore, the model indicates two particularly relevant determinants of all categories of de facto civil liberties—the independent judiciary and civil war. The first variable is positively related to de facto civil liberties protection, while the second demonstrates a negative relation. The effect of the independent judiciary is weaker for all categories of rights for post-socialist states of Central and Eastern Europe and for physical integrity rights in former USSR states in comparison to the rest of the world. The estimation indicates the positive and significant effect of democratic regime for physical integrity rights. In addition, we may observe a significant effect connected to spatial lag of democracy variable for physical integrity and private civil liberties. It signifies that the level of civil rights protection in a given country is related to the regime type of the neighbouring states. In general, the effect of democracy does not differ for post-socialist states when compared to the rest of the sample—the pattern is different (stronger) solely for the ex-USSR states with respect to private civil liberties. The presence of the military head of the government constitutes a significant and negative explanant only for physical integrity.
## Table 4  Estimation results of SDM model

|                      | Physical violence index (cultural distance matrix) | Physical violence index (inverse squared distance matrix) | Private civil liberties index (cultural distance matrix) | Private civil liberties index (inverse squared distance matrix) | Political civil liberties index (cultural distance matrix) | Political civil liberties index (inverse squared distance matrix) |
|----------------------|---------------------------------------------------|--------------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|
| CRI_lag              | 0.7685**                                          | 0.7677**                                               | 0.3724**                                            | 0.3751**                                                   | 0.8031**                                                 | 0.8026**                                                 |
|                      | (84.61)                                           | (84.55)                                                | (38.35)                                              | (38.57)                                                   | (98.29)                                                  | (98.16)                                                  |
| CRI_lags             | 0.01843                                           | 0.0404*                                                | 0.1867**                                            | 0.2116**                                                   | 0.0177                                                   | 0.03221                                                  |
|                      | (0.74)                                            | (1.65)                                                 | (5.25)                                               | (5.98)                                                    | (0.76)                                                   | (1.41)                                                   |
| Democracy            | −0.02398                                          | −0.0259*                                               | −0.0115                                             | −0.0040                                                   | 0.0126                                                   | 0.0125                                                   |
|                      | (−1.58)                                           | (−1.72)                                                | (−0.73)                                              | (−0.26)                                                   | (1.5)                                                    | (1.06)                                                   |
| Military             | −0.0098**                                         | −0.0099**                                              | 0.0037                                              | 0.0034                                                    | 0.0008                                                   | 0.0009                                                   |
|                      | (−2.22)                                           | (−2.25)                                                | (0.89)                                               | (0.83)                                                    | (0.23)                                                   | (0.27)                                                   |
| Judiciary            | 0.0368**                                          | 0.0368**                                               | 0.0188**                                            | 0.0171**                                                   | 0.0321**                                                 | 0.0321**                                                 |
|                      | (15.86)                                           | (15.90)                                                | (8.54)                                              | (7.69)                                                    | (17.37)                                                  | (17.40)                                                  |
| Civil war            | −0.0237**                                         | −0.0229**                                              | −0.0346**                                           | −0.0328**                                                  | −0.0159**                                                 | −0.0155**                                                 |
|                      | (−4.00)                                           | (−3.88)                                                | (−6.26)                                             | (−6.00)                                                   | (−3.50)                                                  | (−3.43)                                                  |
| Freedom from torture | 0.000020                                          | 4.2316×10⁻⁵                                           | –                                                   | –                                                         | –                                                        | –                                                        |
| de jure              | (0.9704)                                          | (0.01)                                                 | –                                                   | –                                                         | –                                                        | –                                                        |
| Freedom from forced  | –                                                 | –                                                     | −0.0051                                             | −0.0072                                                   | –                                                        | –                                                        |
| labour de jure       | –                                                 | –                                                     | (−1.19)                                             | (−1.65)                                                   | –                                                        | –                                                        |
| Expropriation de jure| –                                                 | –                                                     | −0.03180**                                          | −0.0247**                                                  | –                                                        | –                                                        |
|                      | –                                                 | –                                                     | (−2.85)                                             | (−2.24)                                                   | –                                                        | –                                                        |
| Freedom of movement  | –                                                 | –                                                     | 0.0072                                              | 0.0059                                                    | –                                                        | –                                                        |
| de jure              | –                                                 | –                                                     | (1.03)                                              | (0.83)                                                    | –                                                        | –                                                        |
| Freedom of religion  | –                                                 | –                                                     | 0.0194**                                            | 0.0159**                                                   | –                                                        | –                                                        |
| de jure              | –                                                 | –                                                     | (2.56)                                              | (2.11)                                                    | –                                                        | –                                                        |
| Freedom from censor- | –                                                 | –                                                     | –                                                   | −0.0041                                                   | −0.0041                                                  | –                                                        |
| ship de jure         | –                                                 | –                                                     | –                                                   | (−0.93)                                                   | (−0.93)                                                  | –                                                        |
|                              | Physical violence index (cultural distance matrix) | Physical violence index (inverse squared distance matrix) | Private civil liberties index (cultural distance matrix) | Private civil liberties index (inverse squared distance matrix) | Political civil liberties index (cultural distance matrix) | Political civil liberties index (inverse squared distance matrix) |
|------------------------------|---------------------------------------------------|------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|
| Freedom of press de jure     | 0.0036*                                           | 0.0035*                                              | 0.0036*                                                | 0.0035*                                                | 0.0036*                                                | 0.0035*                                                |
| Freedom of association de jure| 0.0036*                                           | 0.0035*                                              | 0.0036*                                                | 0.0035*                                                | 0.0036*                                                | 0.0035*                                                |
| Freedom of expression de jure | 0.0036*                                           | 0.0035*                                              | 0.0036*                                                | 0.0035*                                                | 0.0036*                                                | 0.0035*                                                |
| ln(gdppc)                    | $-3.09 \times 10^{-7}$                            | $-3.14 \times 10^{-7}$                              | $-6.78 \times 10^{-7}$                                | $-6.78 \times 10^{-7}$                                | $-6.78 \times 10^{-7}$                                | $-6.78 \times 10^{-7}$                                |
| EU                           | 0.0036*                                           | 0.0035*                                              | 0.0036*                                                | 0.0035*                                                | 0.0036*                                                | 0.0035*                                                |
| Democracy_lags               | $-0.0003*$                                        | $-0.0003*$                                           | $-0.0004**                                             | $-0.0004**                                             | $-0.0005**                                             | $-0.0005**                                             |
| CRI_lags#democracy           | 0.0047**                                          | 0.0046**                                             | 0.0047**                                               | 0.0046**                                               | 0.0047**                                               | 0.0046**                                               |
| CRI_lags#CE Europe           | $-0.05391$                                        | $-0.0700$                                            | $0.1082$                                               | $0.1164$                                               | $-0.0343$                                              | $0.0376$                                               |
| CRI_lags#ex-USSR             | $-0.1552*$                                        | $-0.1245$                                            | $-0.2118$                                             | $-0.0121$                                             | 0.0381                                                 | 0.0298                                                 |
| CRI_lags#ex-Yugoslavia       | 0.1260*                                           | 0.1383                                               | 1.1110**                                              | 1.4738**                                               | 0.0182                                                 | 0.0163                                                 |
| Democracy#CE Europe          | 0.00031                                           | 0.0004                                               | 0.0041                                                | 0.0049                                                | 0.0003                                                 | $-0.0003$                                              |
Table 4 (continued)

|                          | Physical violence index (cultural distance matrix) | Physical violence index (inverse squared distance matrix) | Private civil liberties index (cultural distance matrix) | Private civil liberties index (inverse squared distance matrix) | Political civil liberties index (cultural distance matrix) | Political civil liberties index (inverse squared distance matrix) |
|--------------------------|--------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------|
| Democracy#ex-USSR        | 0.00116                                          | −0.000867493                                            | 0.0597**                                               | 0.0539**                                                        | −0.0059                                             | −0.0069                                                  |
|                          | (0.1)                                            | (−0.08)                                                 | (5.39)                                                 | (5.07)                                                          | (−0.69)                                             | (−0.81)                                                   |
| Democracy#ex-Yugoslavia  | 0.00976                                          | 0.008243227                                             | 0.0120                                                 | 0.0053                                                          | 0.0097                                              | 0.0088                                                   |
|                          | (0.64)                                           | (0.54)                                                  | (0.80)                                                 | (0.38)                                                          | (0.82)                                              | (0.74)                                                   |
| Judiciary#CE Europe      | −0.0565**                                         | −0.0563**                                               | −0.0315**                                              | −0.0336**                                                       | −0.0155*                                            | −0.0154*                                                  |
|                          | (−4.85)                                          | (−4.83)                                                 | (−2.99)                                                | (−3.16)                                                         | (−1.73)                                             | (−1.72)                                                   |
| Judiciary#ex-USSR        | −0.015040598*                                    | −0.0144*                                                | −0.0128                                                | −0.0122                                                         | −0.0008                                             | −0.0001                                                   |
|                          | (−1.73)                                          | (−1.67)                                                 | (−1.57)                                                | (−1.48)                                                         | (−0.13)                                             | (−0.01)                                                   |
| Judiciary#ex-Yugoslavia  | −0.0282**                                         | −0.0282**                                               | −0.0037                                                | −0.0001                                                         | −0.0178**                                           | −0.0179**                                                  |
|                          | (−3.24)                                          | (−3.25)                                                 | (−0.49)                                                | (−0.01)                                                         | (−2.65)                                             | (−2.68)                                                   |
| ln(gdppc)#CE Europe      | 1.79×10⁻⁷                                        | 1.73×10⁻⁷                                               | 7.91×10⁻⁷                                              | 1.33×10⁻⁷                                                       | 1.21×10⁻⁷                                           | 1.16×10⁻⁷                                                 |
|                          | (1.12)                                           | (1.09)                                                  | (0.48)                                                 | (0.83)                                                          | (0.97)                                              | (0.93)                                                    |
| ln(gdppc)#ex-USSR        | 2.12×10⁻⁷                                        | 2.07×10⁻⁷                                               | −9.18×10⁻⁷                                            | −1.64×10⁻⁷                                                      | −2.44×10⁻⁷**                                         | −2.42×10⁻⁷**                                               |
|                          | (1.34)                                           | (1.3)                                                   | (−0.06)                                                | (−1.14)                                                         | (−2.09)                                             | (−2.07)                                                   |
| ln(gdppc)#ex-Yugoslavia  | −2.1×10⁻⁷                                        | −4.09×10⁻⁷                                              | −7.76×10⁻⁷                                            | −6.34×10⁻⁷                                                      | −7.15×10⁻⁷                                          | −7.54×10⁻⁷                                                 |
|                          | (−0.09)                                          | (−0.18)                                                 | (−0.31)                                                | (−0.26)                                                         | (−0.39)                                             | (−0.42)                                                   |
| Civil war#CE Europe      | −                                                | −                                                       | −                                                      | −                                                                | −                                                   | −                                                        |
| Civil war#ex-USSR        | 0.0375*                                          | 0.0381*                                                 | 0.0500**                                               | 0.0354*                                                         | −0.0055                                             | 0.0034                                                   |
|                          | (1.87)                                           | (1.9)                                                   | (2.69)                                                 | (1.91)                                                          | (−0.36)                                             | (0.21)                                                    |
| Civil war#ex-Yugoslavia  | 0.04556                                          | 0.0445                                                  | −0.4129**                                              | −0.4220**                                                       | −0.0284                                             | −0.0123                                                   |
|                          | (0.88)                                           | (0.86)                                                  | (−8.92)                                                | (−8.88)                                                         | (−0.71)                                             | (−0.74)                                                   |
Table 4 (continued)

|                                      | Physical violence index (cultural distance matrix) | Physical violence index (inverse squared distance matrix) | Private civil liberties index (cultural distance matrix) | Private civil liberties index (inverse squared distance matrix) | Political civil liberties index (cultural distance matrix) | Political civil liberties index (inverse squared distance matrix) |
|--------------------------------------|--------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------|
| Freedom from torture de jure #CE Europe | 0.00465                                          | 0.0042                                                   | –                                                      | –                                                            | –                                                         | –                                                            |
|                                       | (0.24)                                            | (0.22)                                                   | –                                                      | –                                                            | –                                                         | –                                                            |
| Freedom from torture de jure #ex-USSR | –                                                | –                                                        | –                                                      | –                                                            | –                                                         | –                                                            |
| Freedom from torture de jure #ex-Yugoslavia | 0.0604**                                        | 0.0616**                                                 | –                                                      | –                                                            | –                                                         | –                                                            |
|                                       | (1.46)                                            | (1.51)                                                   | –                                                      | –                                                            | –                                                         | –                                                            |
| Freedom from forced labour de jure #CE Europe | –                                                | –                                                        | –0.0193                                               | –0.0095                                                      | –                                                         | –                                                            |
|                                       | –                                                | –                                                        | (−1.13)                                               | (−0.55)                                                      | –                                                         | –                                                            |
| Freedom from forced labour de jure #ex-USSR | –                                                | –                                                        | 0.0183                                                | 0.0274                                                      | –                                                         | –                                                            |
|                                       | –                                                | –                                                        | (0.86)                                                | (1.34)                                                      | –                                                         | –                                                            |
| Freedom from forced labour de jure #ex-Yugoslavia | –                                                | –                                                        | 0.0126                                                | 0.0321**                                                     | –                                                         | –                                                            |
|                                       | –                                                | –                                                        | (0.79)                                                | (2.01)                                                      | –                                                         | –                                                            |
| Expropriation de jure #CE Europe | –                                                | –                                                        | 0.0114                                                | 0.01269                                                      | –                                                         | –                                                            |
|                                       | –                                                | –                                                        | (0.58)                                                | (0.63)                                                      | –                                                         | –                                                            |
| Expropriation de jure #ex-USSR | –                                                | –                                                        | −0.0067                                               | −0.0475                                                      | –                                                         | –                                                            |
|                                       | –                                                | –                                                        | (−0.23)                                               | (−1.61)                                                      | –                                                         | –                                                            |
| Expropriation de jure #ex-Yugoslavia | –                                                | –                                                        | –                                                      | –                                                            | –                                                         | –                                                            |
| Freedom of movement de jure #CE Europe | –                                                | –                                                        | −0.0285                                               | −0.0246                                                      | –                                                         | –                                                            |
|                                       | –                                                | –                                                        | (−0.62)                                               | (−0.53)                                                      | –                                                         | –                                                            |
|                            | Physical violence index (cultural distance matrix) | Physical violence index (inverse squared distance matrix) | Private civil liberties index (cultural distance matrix) | Private civil liberties index (inverse squared distance matrix) | Political civil liberties index (cultural distance matrix) | Political civil liberties index (inverse squared distance matrix) |
|---------------------------|---------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------|
| Freedom of movement de jure #ex-USSR | –                                                 | –                                                       | –                                                   | –                                                             | –                                                         | –                                                             |
| Freedom of movement de jure #ex-Yugoslavia | –                                                 | –                                                       | –                                                   | –                                                             | –                                                         | –                                                             |
| Freedom of religion de jure #CE Europe | –                                                 | –                                                       | –0.0165                                             | –0.0018                                                       | –                                                         | –                                                             |
| Freedom of religion de jure #ex-USSR | –                                                 | –                                                       | – (−0.30)                                           | −0.03                                                          | –                                                         | –                                                             |
| Freedom of religion de jure #ex-Yugoslavia | –                                                 | –                                                       | –                                                   | –                                                             | –                                                         | –                                                             |
| Freedom from censorship de jure #CE Europe | –                                                 | –                                                       | –                                                   | –                                                             | 0.0029                                                   | 0.0034                                                       |
| Freedom from censorship de jure #ex-USSR | –                                                 | –                                                       | –                                                   | –                                                             | −0.0118                                                   | −0.0123                                                       |
| Freedom from censorship de jure #ex-Yugoslavia | –                                                 | –                                                       | –                                                   | –                                                             | −0.72                                                     | −0.74                                                       |
| Freedom of press de jure #CE Europe | –                                                 | –                                                       | –                                                   | −0.0206                                                       | −0.02022                                                  | −0.02022                                                       |
| Freedom of press de jure #ex-USSR | –                                                 | –                                                       | –                                                   | (−1.07)                                                       | (−1.05)                                                   | (−1.05)                                                       |
| Freedom of press de jure #ex-Yugoslavia | –                                                 | –                                                       | –                                                   | 0.0137                                                        | 0.0143                                                    | 0.0143                                                       |
| Freedom of press de jure #ex-Yugoslavia | Physical violence index (cultural distance matrix) | Physical violence index (inverse squared distance matrix) | Private civil liberties index (cultural distance matrix) | Private civil liberties index (inverse squared distance matrix) | Political civil liberties index (cultural distance matrix) | Political civil liberties index (inverse squared distance matrix) |
|-----------------------------------------|--------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|
|                                        | −                                                | −                                                       | −                                                       | −                                                       | − 0.0036                                                 | − 0.0031                                                 |
| Freedom of association de jure #CE Europe | −                                                | −                                                       | −                                                       | −                                                       | −                                                       | (− 0.24)                                                 |
| Freedom of association de jure #ex-USSR | −                                                | −                                                       | −                                                       | −                                                       | −                                                       | (− 0.20)                                                 |
| Freedom of association de jure #ex-Yugoslavia | −                                                | −                                                       | −                                                       | −                                                       | −                                                       | −                                                       |
| Freedom of expression de jure #CE Europe | −                                                | −                                                       | −                                                       | −                                                       | − 0.0628**                                               | − 0.0622**                                               |
| Freedom of expression de jure #ex-USSR | −                                                | −                                                       | −                                                       | −                                                       | (− 1.73)                                                 | (− 1.72)                                                 |
| Freedom of expression de jure #ex-Yugoslavia | −                                                | −                                                       | −                                                       | −                                                       | −                                                       | −                                                       |
| eu#CE Europe                            | − 0.0227                                         | − 0.0211                                                | − 0.1501**                                              | − 0.1435**                                              | − 0.0107                                                 | − 0.0109                                                 |
|                                         | (− 0.90)                                         | (− 0.83)                                                | (− 6.26)                                                | (− 6.12)                                                | (− 0.55)                                                 | (− 0.56)                                                 |
| eu#ex-USSR                               | − 0.0636*                                        | − 0.0657*                                               | − 0.0665*                                               | − 0.0542                                                | − 0.0502*                                                | − 0.0512*                                                |
|                                         | (− 1.78)                                         | (− 1.84)                                                | (− 1.88)                                                | (− 1.57)                                                | (− 1.78)                                                 | (− 1.82)                                                 |
| eu#ex-Yugoslavia                         | − 0.00267                                        | − 0.001129052                                           | − 0.1699**                                              | − 0.15888                                               | − 0.0122                                                 | − 0.0124                                                 |
|                                         | (− 0.09)                                         | (− 0.04)                                                | (− 6.02)                                                | (− 5.62)                                                | (− 0.53)                                                 | (− 0.53)                                                 |

Values of $t$ statistics in brackets. **Significant at 5% level. *Significant at 10% level. Source: Author’s calculations
Table 5  Summary of the main results related to spatial diffusion. Source: Author’s calculations

| Dependent variable: physical violence index (cultural distance matrix) | Dependent variable: physical violence index (inverse squared distance matrix) | Dependent variable: private civil liberties index (cultural distance matrix) | Dependent variable: private civil liberties index (inverse squared distance matrix) | Dependent variable: political civil liberties index (cultural distance matrix) | Dependent variable: political civil liberties index (inverse squared distance matrix) |
|---|---|---|---|---|---|
| Global sample | Insignificant | Positive effect | Positive effect | Positive effect | Insignificant | Insignificant |
| Countries with democratic regime as compared to the global sample | Stronger effect | Stronger effect | Insignificant | Insignificant | Insignificant | Insignificant |
| Post-socialist countries of Central and Eastern Europe as compared to the global sample | | | Insignificant | Insignificant | Insignificant | Insignificant |
| ex-USSR post-socialist countries as compared to the global sample | | | Weaker effect | Insignificant | Insignificant | Insignificant |
| ex-Yugoslavian post-socialist countries as compared to the global sample | Stronger effect | Insignificant | Stronger effect | Stronger effect | Insignificant | Insignificant |
rights, while membership in the European Union constitutes a positive explanant for the private civil liberties. The effect of membership in the European Union is weaker for ex-USSR countries for all categories of civil liberties and for Central and Eastern Europe and former Yugoslavian states in terms of private civil liberties. We may also observe a significant, but negligible effect of gross domestic product per capita. The results suggest five significant explanants related to de jure rights protection. Constitutional provisions ensuring the freedom of religion, freedom of press, freedom of association and the freedom of religion exert a positive influence on the state of de facto civil liberties protection, while the effect of provision enabling expropriation is negative. Overall, the effect of de jure civil liberties protection does not differ for post-socialist states in comparison to the world sample.

Figures 5, 6 and 7 present maps with values of Local Moran I statistics calculated for de facto civil rights protection indices in 2017 using cultural proximity spatial weight matrix.

The values of the Local Moran I statistic indicate the existence of significant clusters of the values of de facto civil liberties protection indices. For each index, the post-socialist countries of Central and Eastern Europe and former Yugoslavia belong to the same cluster. The size of clusters differs for each index. The smallest cluster may be observed for the physical integrity index, whereas the largest is observed for the political civil liberties index. Once accounting for a spatial distribution of de facto civil rights protection indices such as those presented in Figs. 2, 3 and 4, we may assume that there are two general clusters relevant for post-socialist states—one comprised of countries of Central and Eastern Europe

![Fig. 5 Local Moran I statistic—physical violence index in 2017. Note: Author’s own elaboration](image-url)
Fig. 6  Local Moran I statistic—private civil liberties index in 2017. Note: Author’s own elaboration

Fig. 7  Local Moran I statistic—political civil liberties index in 2017. Note: Author’s own elaboration
and former Yugoslavia and the second including countries of the former Soviet Union. Therefore, one may conclude that within these clusters mechanisms occur, which lead to institutional diffusion, and therefore the patterns of civil rights protection are similar within these groups.

7 Conclusion

The paper provides a comprehensive analysis of the various determinants of de facto civil rights protection, with particular attention on the region of post-socialist states. The empirical analysis was based on two econometric techniques—a spatial panel Durbin GMM model with two types of spatial weight matrices: geographical proximity weight matrix and cultural proximity weight matrix and the Local Moran I statistic. The obtained outcomes answer the following research questions: (1) are spatial interactions between countries a significant explanant of de facto civil rights protection?, (2) is this effect different for post-socialist states in comparison to the rest of the world?, (3) what is the impact of geographical and cultural proximity on the occurrence of spatial diffusion of civil rights?, (4) what are the clusters of de facto civil rights protection impacting post-socialist states?

We conclude that spatial interactions constitute a significant explanant of de facto civil rights protection. In the case of former USSR states, the institutional diffusion effect of physical integrity is weaker in comparison to the average effect for the global sample. What is more, we may observe a stronger effect of institutional diffusion of private civil liberties for former Yugoslavian states compared to the global sample. The obtained results suggest the existence of institutional diffusion with respect to civil rights protection. The occurrence of such diffusion may be related to mechanisms such as the spread of knowledge, persuasion, coercion, acculturation and socialisation. Furthermore, the model results suggest that countries interact with close neighbours not only in regards to geographical distance, but also in terms of cultural proximity. Based on the values of the Local Moran I statistic, we identify two significant clusters of civil rights protection relevant for post-socialist states—one comprised of countries of Central and Eastern Europe and of former Yugoslavia and the second including countries of the former Soviet Union. The countries within these groups follow similar civil liberties protection pattern.

The results have several policy implications. The relevance of spatial interactions between countries in explaining the level of de facto civil rights protection indicates that civil liberties are “contagious”, i.e. governments and societies observe the standards of rights protection in neighbouring states perceived as a reference group and adjust in order to follow the same pattern. Therefore, a drop in standards of civil rights protection in one country may result in a regional decrease, thus hindering regional social and economic development. On the whole, it is crucial for domestic and international regulators to be aware of this fact when creating and implementing human rights protection policies.
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