

GEN - Governance and Economics research Network

GEN Working Paper A 2014 – 8

<http://webs.uvigo.es/infogen>

**THE ECONOMICS OF SECESSION.**

**ANALYSING THE ECONOMIC IMPACT OF THE COLLAPSE**

**OF THE FORMER YUGOSLAVIA**

Andrés Rodríguez-Pose\*§  
Marko Stermšek \*\*

*\*Dept. of Geography and Environment - London School of Economics and GEN*

*§Corresponding author*

*\*\*Dept. of Geography and Environment - London School of Economics*



# **The Economics of Secession.**

**Analysing the economic impact of the collapse of the former  
Yugoslavia**

by

**Andrés Rodríguez-Pose<sup>\*§</sup> and Marko Stermšek<sup>\*</sup>**

\* Department of Geography and Environment  
London School of Economics  
Houghton St  
London WC2A 2AE, UK  
e-mails: [a.rodriquez-pose@lse.ac.uk](mailto:a.rodriquez-pose@lse.ac.uk); [m.stermsek@gmail.com](mailto:m.stermsek@gmail.com)

§Corresponding author

# **The Economics of Secession.**

## **Analysing the economic impact of the collapse of the former Yugoslavia**

**ABSTRACT:** This paper looks at the economic impact of secession through the lens of the disintegration of the former Yugoslavia. It uses an econometric analysis covering the period between 1956 and 2011 – including a series of factors linked to the independence process, socioeconomic and structural controls, and the level of development – in order to assess whether a) breaking away from the former Yugoslavia delivered an ‘independence dividend’ to the newly independent countries and whether b) independence had a more favourable impact in richer, rather than poorer territories. The results of the analysis underline that there has been no favourable economic impact of secession and that how secession was achieved is key in understanding the subsequent economic performance of the newly independent countries. In cases of secession without conflict, independence did not have a noticeable impact on ensuing economic performance. Secession achieved by conflict, by contrast, seriously dented growth prospects.

**Keywords:** secession, independence, economic growth, conflict, Yugoslavia, Europe.

## 1. Introduction

Secession is in fashion. After decades during the cold war of strict enforcement of the principle of territorial integrity, the independence of Slovenia from the former Yugoslavia, the collapse of the Soviet Union, the division of the former Czechoslovakia, and the separation of Eritrea from Ethiopia opened the floodgates. Today secessionist tensions are more and more evident, with flashpoints from Aceh in Indonesia to Québec in Canada, including separatist tensions as far afield as China, India, Iraq, Myanmar, Pakistan, or Sri Lanka in Asia; Angola, Congo, the Comoros, Ethiopia, Libya, Nigeria, Sudan, or Tanzania in Africa; and Belgium, Bosnia-Herzegovina, France, Moldova, Russia, Spain, Turkey, the Ukraine, or the United Kingdom in Europe, just to mention the most important movements. Official and unofficial independence referenda in 2014 in Scotland, Catalonia, or the Crimea have put secession firmly under the spotlight.

Traditionally, the reasons for achieving greater autonomy and/or seceding were firmly rooted in identity demands. Separatist movements wanted to preserve and promote the historical, cultural, linguistic, and/or religious identity of a territory in light of what were perceived as homogenising tendencies from the state. Nevertheless, a quick look at the arguments of secessionist movements across the world and at the debates leading to the recent referenda in Europe suggests that this is no longer the case. While there is certainly no shortage of identity-linked arguments in those debates, the case for secession tends to be increasingly embedded in the economic realm (Rodríguez-Pose and Sandall, 2008). This has been the dominant argument, for example, of the campaign for the Scottish referendum. The Fiscal Commission Working Group – at the request of the Scottish government – highlighted what it considers to be the benefits of an independent Scotland (Fiscal Commission Working Group, 2013). In this document, it argues that an independent Scotland would perform better from an economic perspective because “many countries of a comparable size and structure have used the full spectrum of policy levers to perform more successfully across a range of social and economic indicators in the long run” (Fiscal Commission Working Group, 2013, p. 37). This incapacity to fulfil its economic potential in relationship to comparable countries – e.g. Austria, Denmark, Finland, Ireland, Luxembourg, Portugal, and Sweden – is perceived to be the consequence of existing ties with the UK (ibid, p. 66) and, hence, “independence is the key to fully unlocking Scotland’s potential and escaping the limitations of the current constitutional framework” (ibid, p. 37). In Catalonia, the Advisory Council for National Transition – the equivalent of the Fiscal Commission Working Group in Scotland – has outlined in several documents the potential economic benefits of a Catalan independent state. According to these, independence for Catalonia would not have any particular negative implications for economic growth. After all, “the great secession between Czech Republic and Slovakia in 1993 did not generate any special problems [...] and their respective economies did not suffer any significant setback and continued to grow on their own path”. In addition, a Catalan state would immediately increase its revenues, as “after three centuries of being taxed by the Spanish state, Catalans perceive that their economic effort has a direct influence on the improvement of the quality of life of the people who live and work in Catalonia” (Advisory Council for National Transition, 2013a, p. 12), and that if “public resources are managed in a more transparent and responsible way, it is possible that the voluntary contributions [to the state] would increase considerably” (Advisory Council for National Transition, 2013b, p. 27). From this perspective, secession is expected to lead to an ‘independence dividend’, characterised by higher growth and prosperity in newly independent territories.

However, as evidenced by the cases of Scotland in Catalonia, claims by secessionist to leave behind lower growth and bureaucratic dysfunction through independence tend to be prospective and based on limited past empirical evidence. There is still relatively little research which has delved into the economic implications of secession and our knowledge about how independence processes have affected the economic trajectory of newly independent countries is still highly imperfect. Much of the existing work has concentrated on issues such as country size (e.g. Alesina and Wacziarg, 1998; Alesina, 2003; Alesina and Spolaore, 2003; Armstrong and Read, 2004; Price, 2011) or, when dealing directly with secession, has focused on demographic, political, or fiscal issues (e.g. Berkowitz, 1997; Lustick et al., 2004; Hosoe, 2011). Hence, whether or not secession generates an ‘independence dividend’ remains to a large extent underexplored. Where relevant theories exist, authors remain divided on the possible gains or losses in growth and welfare, represented by achieving independence from an established state. In particular, there is limited empirical work around the issue, which conceivably stems from a lack of sound historical cases offering robust data for analysis.

The present paper aims to fill precisely this gap by analysing the economic impact of successive secessions in the case of the former Yugoslavia. All six of the former republics of Yugoslavia and one of the provinces of Serbia have become independent states since 1991. Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Serbia, and Slovenia are fully recognised as independent states by the international community, while Kosovo – one of two autonomous provinces (along with Vojvodina) in Serbia – has been recognised by 108 UN members and 23 member states of the EU. By means of a fixed-effects panel data analysis, this paper traces the economic performance of the eight constituent territorial units of the former Yugoslavia between 1956 and 2011 – first as part of a federal whole, then as separate nations – whilst controlling for other variables, in order to assess to what extent secession has had a positive, negative, or neutral impact on the economic trajectory of the republics that emerged from the disintegration of Yugoslavia. We also assess whether secession has had, if at all, a more favourable impact in richer, rather than poorer parts of the former Yugoslavia. By evaluating the impact of fragmentation *ex post* rather than *ex ante*, it provides some altogether novel evidence to that of the majority of existing studies on the economics of secession.

The rest of the paper is structured as follows. Section 2 looks at the economics of secession in the scholarly literature. Section 3 makes the link between the theory and the empirics of secession, while the case of the former Yugoslavia is presented in section 4. Section 5 introduces the model, the data, and the results of the analysis, before presenting the conclusions and policy implications in section 6.

## 2. The economics of secession

### 2.1. Economic gain as a driver of secession

According to Michael Hechter's (1992, p. 267) *'The Dynamics of Secession'*:

“Secessionism is a demand for formal withdrawal from a central political authority by a member unit or units on the basis of a claim to independent sovereign status [...] Secession is successful when this withdrawal is accorded recognition by the host state and by others in the international community.”

This definition of secessionism and secession will be used throughout the rest of the paper. Hechter's model underlines the presence of four consecutive stages in any secessionist movement, each representing a key obstacle to be overcome: (1) the problem of regional group identification; (2) the problem of regional collective action; (3) the determinants of secessionist support; and (4) the response of the host state.

At each stage of the process economic considerations play a fundamental role in determining whether secessionist ambitions can go ahead. In the early stages, when regional group identification is required, the presence of abundant natural resources or adequate labour skills often props up the necessary awareness of a common vested interest among people to enable a shared identity to form. Increasing perception in peripheral areas “that they benefit less than they anticipate from the expectations which diffuse from the core” (Williams, 1980, p. 145) is likely to further promote group identification. Only then, Hechter (1992) argues, can producer and consumer interests crystallise and additional cultural or historical factors converge into a spirit of unity. Similar economic considerations also affect the incentives to participate in regional collective action.

Support for secession in the crucial third stage is also deeply embedded in economic arguments. Secessionist support has traditionally always come primarily from amongst the middle and professional classes, as well as private and service sector workers (Hechter, 1992). The common thread that binds these groups together is, according to Hechter, that their personal welfare does not depend directly on ties with the central government, nor with other parts of the country. Consequently, they tend to consider “their incorporation into a multi-national state as being inherently contrary to nature, and a severe impediment to the full realization of their own group development” (Williams, 1980, p. 145). In contrast, industrial and agricultural workers have been less receptive to secessionist ventures as their jobs have more frequently relied on integrated national markets and economies of scale and, in some cases, may have received direct support from the state. Hence, according to Hechter (1992), what predominantly drives a particular group to promote and/or support secession is its own self-interest. This key point implies that an overall preference for secession can come about irrespective of any absolute conditions:

“The [model is] based on the assumption that people will desire secession only if they expect to profit personally from this state of affairs. Note that this idea carries the

implication that support for secession is independent of the level of regional economic development or exploitation. Nationalist demands surrounding separatist claims following the discovery of oil in Biafra and Scotland are best understood in this light.” (Hechter, 1992, p. 276).

Beyond this, the additional determinants of secessionist support include the presence of regional political parties, often some degree of decentralisation, and some perception of the weakness of the host state (that might come about through conflict, weak leadership, or an economic crisis).

Finally, the response of the host state to secessionist demands depends on the perceived economic implications of a possible secession of one part of the state, to which it can react in several ways. It may well go for the extremes, by completely opposing secession or, in contrast, by facilitating access to independence. Between these two extremes, the host state may offer to implement more favourable policies or alter the level of fiscal or political autonomy, with the frequent aim of trying to win over secessionist leaders and/or voters by incentives. Failing this, the state can also exercise force though this too comes at a cost. The final outcome will depend on the relative costs of maintaining unity to those of losing the secessionist region.

Hechter’s dynamic model presents a number of salient points for the analysis of the political economy of secession. Perhaps chief amongst these is the idea that regional identities are formed, above all else, around common economic interests and that the outcomes of secessionist movements are both driven and determined by economic interests (see also Collier and Hoeffler, 2006; Rodríguez-Pose and Sandall, 2008). Economic self-interest (including the prospect or promise of future gains) thus becomes the single strongest, most legitimate basis for any territory to promote independence. “Secessionist political communities invent themselves when part of the population perceives secession to be economically advantageous” (Collier and Hoeffler, 2006, p. 3). Pro-independence legitimacy is thus generally built around a series of economic drivers, such as a region’s share of national income, its absolute level of development, its trade with the rest of its country, its net capital flows with other regions, and its fiscal autonomy (Bookman, 1993). High combinations of any of these drivers would determine the likelihood of the emergence and the chances of success of a nationalist and/or secessionist movement. By contrast, cultural, historical and ethnic ties (the so-called ‘romantic nationalism’) are never sufficient for genuine secessionist movements to gain ground without an underlying economic impetus.

Given this, it comes as no surprise that the prevalence of the economic over the romantic nationalism discourse has become a norm in recent secessionist and pro-independence movements (Rodríguez-Pose and Sandall, 2008), such as those of Catalonia or Scotland, already mentioned in the introduction. In particular, the Scottish Nationalist Party (SNP), which attracted only 11% of the Scottish vote in 1970, saw its local support soar when, after the quadruplication of the oil price following the Yom-Kippur War in 1973, the British government passed laws allowing it directly to appropriate 90% of the additional profits from oil reserves located off the Scottish shore. Under the slogan ‘It’s Scottish Oil’, the SNP gained over 30% of the Scottish vote in the 1974 election (Collier and Hoeffler, 2006). A similar shift in electoral support was evidenced in the case of the Northern League in Italy. A political movement which

had languished at the bottom of the electoral preferences with a ‘romantic nationalist’ discourse based on an aim to revive a supposed ‘Padanian’ state took off as soon as its leadership, under Umberto Bossi, switched to an economic discourse aimed at ‘repatriating’ taxes to those regions where they were paid (Gold, 2003). Similar fiscal arguments – symbolised by the popular slogan ‘Espanya ens roba’ (‘Spain steals from us’) – permeate the current Catalanian pro-independence discourse (e.g. Advisory Council for National Transition, 2013b).

Bookman (1993) provides further evidence to support the salience of economic aspirations behind secessionist movements. In her empirical study of 37 secessionist movements from across the world, she identified that in all of them an economic impetus lay as the main source of legitimacy around which cultural, linguistic, or other ‘romantic’ arguments could rally. Roesler (2010) identifies a similar set of economic ‘grievances’ at the base of the dissolutions in Yugoslavia, Czechoslovakia and the Soviet Union.

However, it has to be borne of mind that support for secession based on ‘economic self-interest’ may not just depend on the prospects for short-term tangible gains, such as North Sea oil or a share of national tax revenues, but on the aim to remove real or perceived legal or political barriers to prosperity. Such an impetus often arises during an economic or political crisis, where views on restructuring an economy may lead to considerable discord and urgency.

## **2.2. Economic models of secession**

Taking into account the importance of economic gain as a driver of secession, modelling the potential benefits of secession has become increasingly popular. Since the 1980s, a considerable body of theoretical literature has attempted to model the drivers, as well as to project the outcomes and consequences of achieving greater autonomy or independence (Rodríguez-Pose and Gill, 2003; 2005). Some of the early work by Buchanan and Faith (1987) focused on the ‘internal exit’ for a peripheral region within a host country. In their theoretical model, a region could vote to leave the country but forfeit any internal transfers and public goods it had access to. The outcome of the model was that richer regions would be better off than poorer ones in the case of secession, consequently making a threat to secede – and fundamentally to reduce its tax burden – more credible coming from a rich than from a poor region. The outcome was that, whether the rich region eventually seceded or whether taxes were lowered for all, the country’s poorer regions would end up on the losing side. This framework later became the starting point for a number of additional models, which provided new variations on the economic implications of secession (e.g. Berkowitz, 1997; Bolton and Roland, 1997; Le Breton and Weber, 2003; Lustick et al., 2004; Haimanko et al., 2005; Pech, 2006; Haimanko et al., 2007; Morelli and Rohnert, 2010; Hosoe, 2011; Anesi and De Donder, 2011; Liscow, 2012).



### 3. From theory to the empirics: the economic implications of secession

#### 3.1. Country-size and economic performance

Despite the salience of the topic and the abundance of theoretical approaches, relatively limited empirical analysis of how secession affects the economic performance of newly independent countries exists. Much of the literature has tended to focus on related issues, such as the role of country size. Whether smaller countries perform better than larger ones has been a hotly debated issue in recent years. Broadly speaking, the relevant theories within the literature on country size attempt to pinpoint the benefits and costs of large or small countries that bring about an equilibrium that maximises governments' net potential revenues (Friedman, 1977).

The basic dichotomy is very old and well expressed in Montesquieu (1748, Book IX, p. 131):

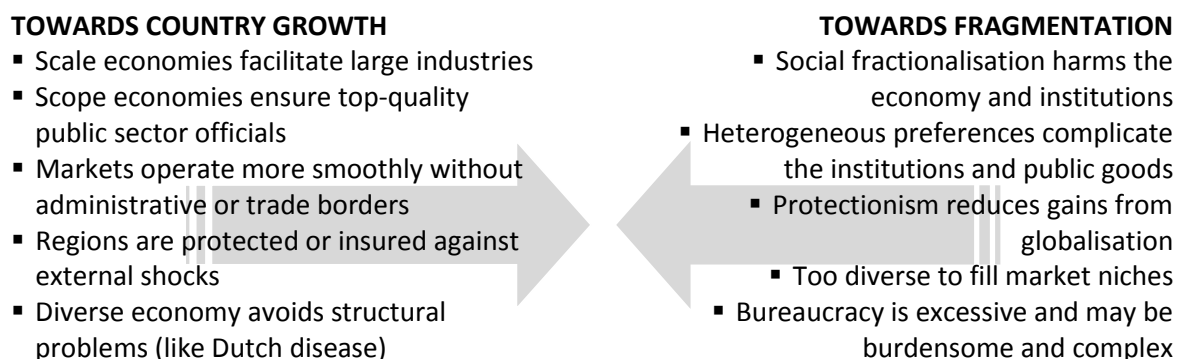
“If a republic be small, it is destroyed by a foreign force; if it be large, it is ruined by an internal imperfection. To this twofold inconvenience democracies and aristocracies are equally liable, whether they be good or bad. The evil is in the very thing itself, and no form can redress it.”

Arguments in favour of large countries tend to emphasise their capacity to be more dynamic, proactive, and resilient to external shocks. This is a consequence of benefiting from greater economies of scale and scope, which lower the cost of public goods *per capita*, facilitate the emergence of specialised, competitive sectors, and ensure high standards in civil service (Alesina and Wacziarg, 1998; Price, 2011). Large countries are also considered to be better protected against economic turmoil, given their larger reserves (Jalan, 1982; Alesina and Spolaore, 2003; Armstrong and Read, 2004). Arguments in favour of larger countries also include their tendency to be more risk-averse (Castello and Ozawa, 1999; Atkins et al., 2001), better at planning ahead (Easterly and Kraay, 2001), and large and diverse enough to limit the incidence of structural problems, like the Dutch disease (Hogenbirk and Narula, 2001; Armstrong and Read, 2004).

Conversely, larger countries are also frequently regarded to generate additional costs, linked to the presence of larger and more complex administrations. Such costs may overshadow the potential benefits linked to size insofar as large populations tend to be more heterogeneous ethnically, linguistically and in terms of their preferences (Alesina et al., 2003; Ruta, 2005). Large countries may also face greater problems in terms of institution-building, collective action, and public goods provision (Yarborough and Yarborough, 1998; Alesina and Spolaore, 2003; Fitoussi and Laurent, 2008). Hence, supporters of smaller countries tend to laud them as more responsive, cohesive, innovative, and easier to govern than their larger counterparts. In general, small countries are more open to trade (Wittman, 1991; Spolaore and Wacziarg, 2005; Panahi, 2010) and possibly better at identifying and filling specialist market niches (Becker, 1994). Finally, small countries require smaller bureaucracies, without the need for “whole extra departments devoted to serving the organisation itself” (Jacobs, 1980, p. 71), lowering their internal administrative costs (Wittman, 1991).

The key points in favour of bigger or smaller territorial units are summarised below (Figure 1).

**Figure 1.** *Summary of the basic equilibrium forces that determine country size.*



*Source:* Based on the literature outlined above.

According to the theories on country size, the opposing forces described above produce an equilibrium set of international borders within which the economic benefits of scale and scope are offset by the costs of inner fractionalisation and bureaucracy (Alesina and Spolaore, 2003). One set of forces drives centralisation and national expansion, whilst generating wealth and efficiency gains; the other promotes devolution and secession through heterogeneous preferences and a burdening administration. The basic forces are, once more, nurtured by economic self-interest.

The empirical work on optimal country size produces a number of mixed conclusions to draw on. Some of the literature fails to identify any significant difference between large and small countries' economies (e.g. Rose, 2006). Using a panel of 200 countries over 40 years, Rose (2006) discovers no empirical link between country-size differences and economic performance, with the exception of trade openness, where smaller countries do better. In terms of secession, this would imply that newly independent (smaller) states can expect few changes in their growth and economic performance, undermining the argument that they would be better off by going it alone.

Other studies, by contrast, indicate that country size does matter for economic performance (e.g.: Bhaduri et al., 1982; Damijan, 2001; Easterly and Kraay, 2001; Salvatore, 2001; Armstrong and Read, 2004; Alouni and Hubert, 2010). There is, however, no agreement on the direction and dimension of this effect, implying that the relationship between country size and economic output is both complex and (as of yet) unclear.

### **3.2. Secession and economic performance**

Direct analyses of the actual implications of potential secession in specific countries are even fewer and most of the analyses focus on hypothetical and/prospective, rather than real or retrospective situations. One such attempt was conducted by Brosio and Revelli (2003), who evaluate the impact of potential secession from the Italian state of 19 of its constituent regions. The authors compute the potential economic losses or gains for a median voter in each region over three time periods. Although Brosio and Revelli (2003) are unclear about the overall net effect for Italy of secession, their analysis predicts that, in the event of a potential dissolution of the Italian state, the wealthy regions in the North of the country would largely benefit from secession. Poorer regions in the south, by contrast, would most likely lose out. Similarly, Price and Levinger (2011) model the economic implications of an independent 'Welsh Republic and derive a positive impact of secession, with Wales being 39% richer in 2011 if it had gained independence in 1989, despite its relative poverty compared with the rest of the UK at the start of the period.

Spolaore and Wacziarg (2005) model the economic outcome of merging neighbouring pairs of countries, either through a 'size merger' – where two countries combine their markets but continue exporting to one another – or through 'full integration' – where they fully coalesce into an integrated whole. Using a large sample of countries, they conclude that an average pair might gain an additional 0.12% of annual growth under a 'size merger', but conversely stand to lose 0.11% by 'full integration'. Collier and Venables (2008) posit that excessive country fragmentation in Sub-Saharan Africa is harming growth by diminishing opportunities for large-scale industrialisation, which fixes the region on a path of low value-added specialisation in the absence of significant scale economies.

Finally, secession is hardly ever achieved without some degree of conflict, deriving, in some cases, in civil war (Fearon and Laitin, 2004). Civil strife leads to a sizeable destruction of wealth and is generally associated with lower levels of growth (Miguel et al., 2004; Kang and Meernik, 2005; Bodea and Elbadawi, 2008). The intensity, duration, and timing of the conflict determines the size of the economic impact (Murdoch and Sandler, 2004).

In brief, the literature on secession is, first, dominated by theoretical modelling and the modelling of hypothetical cases of either independence or unification and, second, offers highly mixed conclusions about the likely net economic impact of secession.

#### **4. Measuring the implications of secession in the former Yugoslavia**

The contribution of our study is to analyse the economic implications of secession taking into account what has happened to a country that disintegrated in the years following the collapse of the Iron Curtain – the former Yugoslavia – and to try to extract lessons that could be applied to current secessionist processes in Catalonia, Scotland, and elsewhere.

The Socialist Federal Republic of Yugoslavia was formed in 1943. It was the heir to the old Kingdom of Serbs, Croats and Slovenes – renamed the Kingdom of Yugoslavia in 1929 – which was created at the end of World War I through the merger of the Kingdom Serbia, with that of Montenegro and lands of the former Austro-Hungarian and Turkish Empires. It encompassed six large south Slavic groups – Serbs, Croats, Slovenes, Bosniaks, Macedonians, and Montenegrins – together with sizeable Albanian, Hungarian, Italian, and German minorities, as well as three main religions (Orthodox, Catholic, and Muslim). In many parts of the country – and especially in Bosnia and Herzegovina and in Vojvodina – different ethnic groups lived in close vicinity to one another. Such fragmentation was already considered a potential seed for conflict at the time of the formation of the Republic, as acknowledged by Franklin Roosevelt in a letter to Winston Churchill: “*Personally I would rather have a Yugoslavia, but three separate States with separate Governments in a Balkan confederation might solve many problems.*” (Franklin D. Roosevelt, 1944, published in Omrčanin, 1976, p. 99).

The country was divided into six constituent republics (Croatia, Bosnia and Herzegovina,<sup>1</sup>Montenegro, Macedonia, Slovenia and Serbia), with the largest republic, Serbia, containing two autonomous provinces, splitting it onto Kosovo, Vojvodina and Serbia Proper (see Figure 2, below).

**Figure 2.** Political map of the former Yugoslavia, 2014.



Source: Own elaboration.

During the Cold War, Yugoslavia's political non-alignment and its geographical position between the Soviet and Western powers made it a useful friend of both sides. Political equidistance to the two main powers brought about international support and some relative economic prosperity. During the 1950s and 1960s, the country depended on supplies of foreign aid. In the 1970s, with aid drying out, it relied on extensive borrowing (Omrčanin, 1976; Cviić and Sanfey, 2010). Although this situation did not lead to rapid growth, its relatively rising living standards and industrial development were the envy of the Communist bloc (Bateman, 2000). Nevertheless, as Hechter stressed, "sometimes international support helps sustain an otherwise untenable state." (1992, p. 278).

In spite of Yugoslavia's relative outward success, regional inequality between the northern and southern republics presented a mounting problem. The ratio of the GDP *per capita* between Slovenia, the richest republic, and Kosovo, the poorest region, rose from 5:1 to 8:1 between 1950 and the late 1980s (Uvalić, 1992).<sup>2</sup> Yugoslavia's attempts at achieving greater territorial cohesion through a 'Federal Fund' were ineffective (Kaiser, 1990), as not always the poorest parts of the country benefited from the fund: Slovenia contributed 25% of the Federal Fund during the 1980s, but received some 39% of the federal grants over the same period (Roesler, 2010).

Following student protests and street demonstrations that began in 1968, a new Constitution was proclaimed in 1974. This cemented a set of reforms passed in 1971 to devolve a range of economic powers to the republics and substantively raise the status of Kosovo and Vojvodina. While the central government in Belgrade maintained management over macroeconomic issues (including monetary policy), from the early 1970s onwards the republics could decide most aspects of their fiscal and microeconomic policies.

Yugoslavia began to unravel around 1980 with the death of its charismatic leader Tito. As foreign loans dried up, the country sank deeper into debt and economic decline, ending the decade in hyperinflation. In 1989, a package of free market reforms was proposed that would abolish the Socialist self-management system, squeeze credit, liberalise trade, and restore the independence of regional central banks. However, the measures came far too late and were never fully implemented given swift opposition from Serbia's loss-making enterprises that had all to gain from continued federal funding (Cviić and Sanfey, 2010).

In the midst of this financial crisis, the fall of the Berlin Wall brought further division to the country's politics, as non-communist governments gained power in Croatia, Slovenia, Bosnia, and Macedonia. As Serbia strove to maintain its power as Yugoslavia's biggest and most influential republic, the wealthier republics sought greater autonomy in order to stabilise their economies. Devoid of a foreseeable consensus under Yugoslavia's joint presidency, the republics began ignoring legal and constitutional procedures, boycotting federal institutions (including taxes), issuing illegal loans under the Constitution, and erecting trade barriers within the country itself. "By the end of 1990, laws had been adopted by practically all republics which were not in conformity with federal legislation" (Uvalić, 1992: 4). In March 1991, Serbia failed to vote through a state of emergency and twice rejected Croat-Slovene proposals for a looser confederation of republics (Cviić and Sanfey, 2010). Under the prevailing atmosphere, Croatia and Slovenia hosted referenda and each declared their independence in June 1991.

Almost immediately, a military conflict ensued, encompassing Slovenia for around ten days and Croatia until 1995 over the Serb-occupied Krajina region. In late 1991, Macedonia followed suit with its own declaration of independence, but escaped armed conflict. Bosnia also seceded in early 1992, which prompted the fighting to escalate and spread in the most ethnically diverse Republic.

These early wars ended in late 1995 with the signing of the Dayton Peace Agreement. Slovenia, Croatia, and Macedonia kept their territories in line with the old federal borders, while Bosnia became its own federation of two new entities: the ethnically Serb-dominated Republika Srpska and the Federation of Bosnia and Herzegovina (Figure 2).

War broke out again in 1998 between Serbia and Kosovo, which ultimately led to the de facto independence of Kosovo. Although, at first, Kosovo officially remained a Serbian province administered by the UN, riots in 2004 against both Serbia and the UN brought the Kosovo endgame back into focus. In 2007, Serbian authorities were prepared to grant more autonomy to Kosovo but opposed independence outright. They were undermined in February 2008, when Kosovo's parliament passed a vote for independence. Finally, Montenegro parted ways with Serbia after a referendum of independence in 2006 (Cviić and Sanfey, 2010). In addition, the disintegration of Yugoslavia contributed to trigger smaller conflicts in the Preševo valley in Serbia (1999-2001) and in Macedonia (2001).

Of the original eight territorial units of the former Yugoslavia, seven independent republics have emerged, and only Serbia and Vojvodina remain together in the Republic of Serbia. Two of these republics – Slovenia in 2004 and Croatia in 2013 – have become EU members. The current picture is one of increasing trade and integration, aided through the EU's Stability and Association Agreements (Bartlett, 2008) and the region's shared history and language (Judah, 2009).

## **5. Model and analysis**

The question we address in the paper is whether, as predicted by those proposing secession, an 'independence dividend' is evident in the case of the former Yugoslavia. That is, whether, controlling for a number of other factors which may have affected the economic performance of each of the republics individually, there is an economic impact of secession and whether this impact is positive or negative.

We assess this question by means of a multidimensional panel data econometric analysis applied to the former Yugoslavia for the period between 1956 and 2011. Yugoslavia represents an interesting and viable case study, not only because of its history of disintegration in the 1990s and 2000s, but also because its constituent territorial units maintained consistent borders during the period of analysis (which were not altered by independence), and because of consistent data availability by region. This leaves us with a panel of the eight former-Yugoslav republics and autonomous provinces as separate regions across 56 time periods (1956-2011). A fixed-effects robust panel data analysis is then applied to test the economic growth

performance of these regions and the impact of secession. This method is considered to be the most appropriate for capturing the *ceteris paribus* impacts of various variables in a long panel and eliminating the need for time-constant controls (Wooldridge, 2006).

## 5.1 Model, Data and Variables

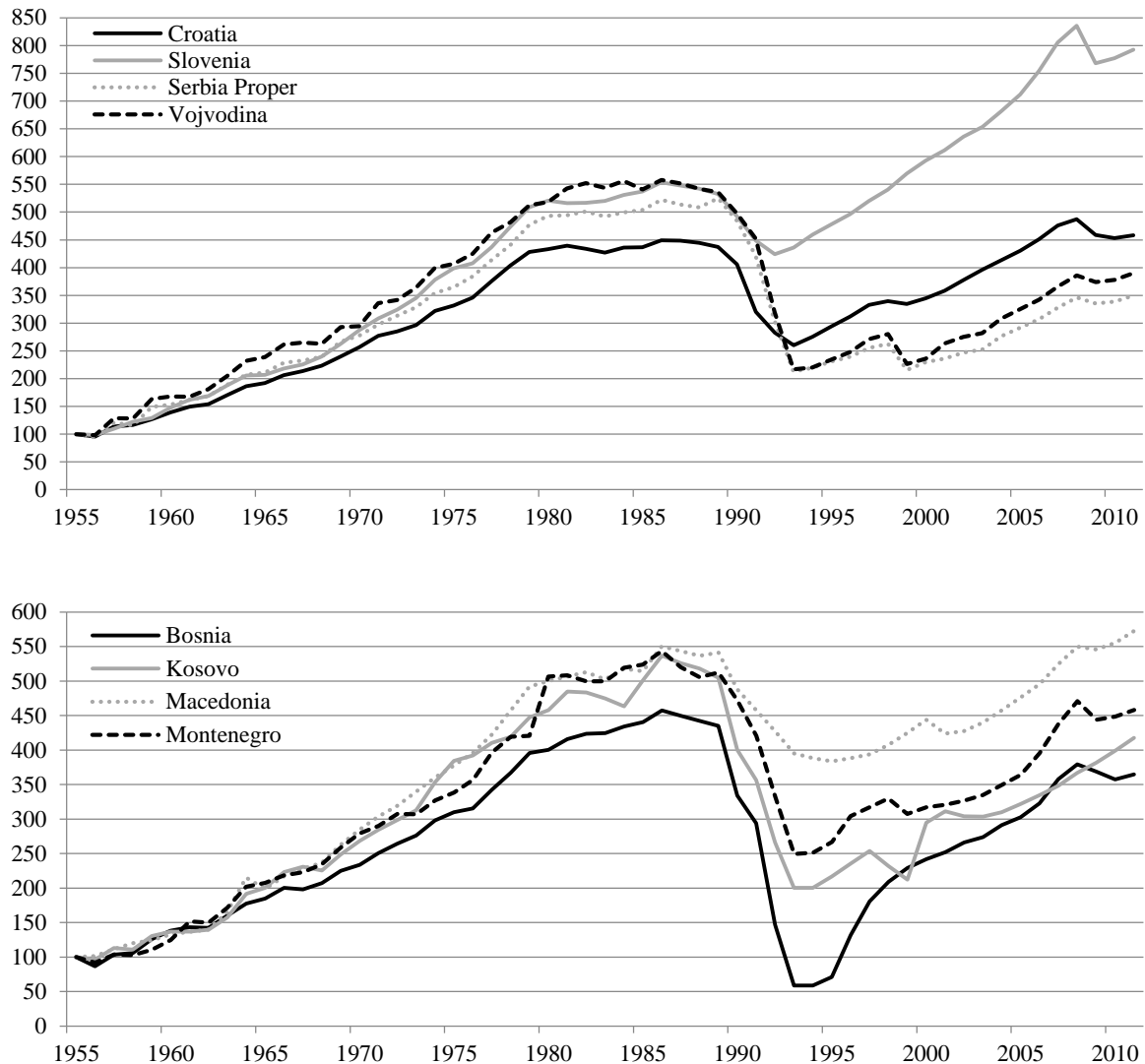
The model measures regional growth in real gross domestic product (GDP) for each region in the former Yugoslavia as the dependent variable and includes a number of independent variables which stem from the theoretical discussion. It also controls for a number of relevant structural factors which may have affected economic growth in the regions of Yugoslavia. The full model adopts the following form:

$$\Delta GDP_{it} = \alpha + \beta_1 \ln GDP_{i,t-1} + \beta_2 \ln Population_{it} + \beta_3 Independence_{it} + \beta_4 EU\ Membership_{it} + \beta_5 EU\ Candidate_{it} + \beta_6 War_{it} + \beta_7 Sanctions_{it} + \beta_8 Democracy_{it} + \beta_9 Agriculture_{it} + \beta_{10} Trade > 50_{it} + \beta_{11} Trade > 100_{it} + \beta_{12} Fractionalisation_{it} + \varepsilon \quad (1)$$

where the dependent variable ( $\Delta GDP_{it}$ ) is the year-on-year growth in real GDP for a region  $i$  of the former Yugoslavia in a given year  $t$ . Data for the different republics and autonomous provinces were extracted from national statistics (Yugoslavia, 1989) measuring real social product in Yugoslav Dinars (at 1972 constant prices) between 1955-1987. Although social product differs from domestic product, its year-on-year change is a valid proxy for growth in GDP (Grdjić, 1966; EBRD, 1995; Piatkowski, 2003; Jongen, 2004). The data from 1988 onwards were obtained from the European Bank for Reconstruction and Development (EBRD, 2010; EBRD, 2011) and from national sources where these were not available, as is the case for Kosovo (before 2000), Serbia Proper (before 2001) and Vojvodina (before 2001) (see Serbia, various years). This left only small gaps in the data that were filled for most countries by national statistics or otherwise estimated on the basis of the previous year's figure.

Figure 3 below displays the economic growth trajectory in each republic and autonomous province, indexed for 1955. The upper panel shows the four richest republics and the lower panel shows the poorest ones. The economic slowdown during the crisis of the 1980s is immediately visible here, as are the deep recessions coinciding with the collapse of the Iron Curtain, the disintegration of Yugoslavia, and the proclamations of independence of the early 1990s. Only Slovenia and Macedonia had in 2011 levels of wealth which clearly exceeded those of the early 1990s. Bosnia, Serbia and Vojvodina had the worst trajectories (Figure 3).

**Figure 3.** Economic trajectories for the republics and autonomous provinces of former Yugoslavia, 1955-2011 (1955=100).



Source: Own elaboration using the data, as described above.

The independent variables can be classified into three groups:

- a) **Level of development of the region:** The level of development of Yugoslav republics and autonomous provinces has been proxied by the GDP per head of the region ( $GDP_{i,t-1}$ ). Whether a region is richer or poorer will have, according to different economic growth theories, important implications for future growth. In this case, and following the neoclassical growth theory, it is expected that poorer regions would have a greater capacity to grow than better-off ones.
- b) **Factors linked to the independence process:** As discussed in the theoretical section, the time and mode of independence may have important implications for subsequent



economic growth. Whether independence was achieved peacefully or through war, whether it led to greater democratic, social, political, and/or economic stability would have affected the dimension, if at all, of the supposed ‘independence dividend’. The variables in this section include:

1. *Independence<sub>it</sub>*, our independent variable of interest. It is a dummy variable which captures the years in which a former Yugoslav territory has been independent. It takes the form of a one in those years in which a republic has been independent, and a zero otherwise. Two additional dummy variables – ‘*Independence Rich<sub>it</sub>*’ and ‘*Independence Poor<sub>it</sub>*’ – are used to control for the level of development of the independent republics, as the theory predicts that independence would affect rich and poor areas of a country differently (Buchanan and Faith, 1987; Brosio and Revelli, 2003). In order to define Yugoslavia’s rich and poor republics we follow the traditional division (e.g. Milanović, 1987; Ding, 1989; Kaiser, 1990) where the poor republics are those which regularly received funding from Yugoslavia’s federal cohesion fund – Bosnia, Kosovo, Macedonia, and Montenegro – and the rich those which regularly contributed to the fund – Croatia, Serbia, Slovenia, and Vojvodina.
2. Independence in the case of the republics of the former Yugoslavia often brought about the prospect of EU membership. So far, this has been achieved by Slovenia in 2004 and Croatia in 2013. Membership of the EU, at least for former transition countries, equates to greater political and economic stability, democracy, and regional development funds. All these factors are likely to contribute to greater economic growth, at least in the initial period. We therefore include a number of dummy variables which control for the possible benefits of EU membership. *EU Membership<sub>it</sub>* represents the years in which a country has been part of the EU. *EU Candidate<sub>it</sub>* takes into account the years in which a republic has been granted the status of EU applicant country, implying a clear prospect of joining the EU. EU accession status also forces countries to undertake serious policy and the structural reforms which may further foster economic growth.
3. However, as indicated in the theoretical section, independence is rarely achieved without conflict. Yugoslavia was no exception and, as mentioned earlier, several bloody wars marked the disintegration of the country. Three variables control for the adverse economic effects of military conflict in Yugoslavia. *War<sub>it</sub>* is a dummy representing the years in which a country emerging from the former Yugoslavia was involved in a war for independence. The intensity of war is proxied by *War deaths<sub>it</sub>*, representing the soldiers and civilians killed in combat as sourced by the PRIO (2009) Battle Deaths Database 3.0.<sup>3</sup> Sanctions and multilateral trade embargos against a republic are controlled for by the variable *Sanctions<sub>it</sub>*.<sup>4</sup>
4. Independence may have heralded in the case of Yugoslavia a shift to greater democracy, although this was not always the case. Slovenia has certainly been democratic since independence, although the same cannot be said for Croatia or

Serbia, just to mention two examples. In order to capture the potential economic benefits of democracy, we introduce the variable  $Democracy_{it}$ , which takes the average of two-seven point scales for democratic rights and civil liberties (where low scores indicate higher freedom) published by Freedom House.

c) **Socioeconomic and structural controls:** The final group of independent variables includes a series of socioeconomic and structural controls which are deemed by theory to have a potential influence on economic performance. These variables include:

1.  $Population_{it}$ , which is aimed at capturing the effect of country-size and/or agglomeration on growth. It measures the population of a republic in millions. Data stem from 1960 from the World Databank (World Bank, 2011). The remaining figures are estimated using Yugoslavia (1989), assuming linear year-on-year growth in 1955-1959.
2. The sectoral structure in the different republics is proxied by the share of the agricultural sector in GDP ( $Agriculture_{it}$ ). Its source is Yugoslavia (1989) between 1955-1987 and World Bank (2011) thereafter.
3. As mentioned in the theoretical section, trade is of key importance for the economic viability of small countries. We therefore control for trade openness using the standard ratio of trade to output.<sup>5</sup> Due to problems of multicollinearity, the variable is transformed into two dummy variables.  $TRADE > 50_{it}$  for the years when trade exceeded 50% of GDP, and  $TRADE > 100_{it}$  when it exceeded 100%.
4. Ethnic fractionalisation has often been regarded as a detrimental factor for economic development (e.g. Annett, 2001; Alesina et al., 2003; Alesina and La Ferrara, 2005) and is likely to have played a role in a country with very heterogeneous territorial units, such as the former Yugoslavia. We calculate an ethnic fractionalisation index, defined as:

$$Fractionalisation_{it} = 1 - \sum_{j=1}^M (n_{ijt} / N_{it})^2, j = 1, \dots, M \quad (2)$$

where  $n_1, n_2, n_3 \dots n_M$ , are the populations of each ethnic group contained within a republic  $i$  at time  $t$  and  $N$  is the republic's total population.<sup>6</sup> The relevant data were obtained from Yugoslav Federal Censuses (1953, 1961, 1971, 1981, 1991); a national estimate for Bosnia (1992); UNHCR estimates for Bosnia (1996) and Kosovo<sup>7</sup> (1998); an official estimate for Kosovo from its Statistics Office (2006); and the censuses of Croatia (2001), Macedonia (1994, 2002), Montenegro (2002, 2011), Serbia (2002) and Slovenia (2002). The above index was thus calculated for the available years and estimated for the intervening years assuming a linear transition (where a newer score was not available, we used the last available score).

Finally,  $\varepsilon$  represents the error term. *GDP* and *Population* are transformed into logarithms, as we expect the association between regional wealth and agglomeration, on the one hand, and economic growth, on the other, to wane as they rise.

A summary of the independent variables and their respective sign in the analysis is presented in Table 1.

**Table 1.** Key variables and expected signs of the coefficients.

Variable	Expected Sign	Interpretation
$\ln GDP_{i,t-1}$	Negative	If we follow a neoclassical approach, constant or diminishing returns to scale would mean that the connection between GDP per head and economic performance will be negative.
$Population_{it}$	Positive	Agglomeration is regarded by the new economic geography as essential for economic performance. Larger, more agglomerated independent states from the former Yugoslavia will therefore be expected to grow more.
$Independence_{it}$	Positive/ Negative	Our independent variable of interest. According to proponents of independence, there will be an ‘independence dividend’, but this is far from certain.
$EU\ Membership_{it}$	Positive	Membership of the EU is likely to be connected to higher levels of growth, at least in the initial stages.
$EU\ Candidate_{it}$	Positive	Having an EU candidate country status sends powerful, positive economic signals.
$War_{it}$ (or $War\ deaths_{it}$ )	Negative	War and war death imply a major destruction of wealth and human capital.
$Sanctions_{it}$	Negative	Economic sanctions and being shut out from the rest of the world hurt economic development prospects.
$Democracy_{it}$	Negative, as the variable is inverted	In principle, democracy should be associated with greater political stability and longer-term growth prospects.
$Agriculture_{it}$	Negative	Large and traditional agriculture sectors in the former Yugoslavia may have affected growth prospects negatively.
$Trade>50_{it}$	Positive	Openness to trade is at the base of economic development.
$Trade>100_{it}$	Positive	Openness to trade is at the base of economic development.
$Fractionalisation_{it}$	Negative	According to the majority of the literature (e.g. Alesina et al. 2003; Alesina and La Ferrara 2005), ethnic fractionalisation represents a barrier for development.

## 5.2 Results of the analysis

The empirical analysis is conducted by means of an heteroscedasticity robust panel data estimation. The results are reported in two different tables. Table 2 presents the results of the analysis considering only *Independence* as the main variable of interest. Table 3 divides *Independence* into the independence of the rich areas of the former Yugoslavia and that of those that traditionally lagged behind, in order to check the hypothesis often highlighted in the literature that richer regions would perform better when achieving independence.

**Table 2.** Regression results: link between independence and the growth of real GDP

Dependent variable	(1)	(2)	(3)	(4)	(5)
Growth of GDP per head	GDP_Growth	GDP_Growth	GDP_Growth	GDP_Growth	GDP_Growth
<i>lnGDP</i>	-3.614** (1.678)	-4.461** (2.230)	-3.688** (1.704)	-4.429* (2.377)	-3.669** (1.784)
<i>lnPopulation</i>	2.944*** (0.858)	2.349** (0.993)	2.816** (1.267)	2.260** (1.131)	2.751* (1.410)
<i>Independence</i>	6.306*** (1.972)	2.952 (2.010)	2.939 (1.871)	2.909 (2.268)	2.898 (2.180)
<i>EU Membership</i>		3.364 (2.733)	1.875 (2.525)	3.056 (2.618)	1.672 (2.439)
<i>EU Candidate</i>		1.030 (1.015)	1.207 (1.216)	0.756 (0.875)	1.025 (1.048)
<i>War</i>		-15.62** (6.064)		-15.70** (6.152)	
<i>War deaths</i>			-0.00319*** (0.000157)		-0.00318*** (0.000165)
<i>Sanctions</i>		-8.721*** (1.355)	-10.54*** (1.119)	-8.612*** (1.211)	-10.47*** (0.970)
<i>Democracy</i>		-2.476 (2.132)	-3.267 (2.599)	-2.262 (2.054)	-3.102 (2.474)
<i>Agriculture</i>		-0.0404 (0.127)	0.0675 (0.0826)	-0.0183 (0.127)	0.0823 (0.0772)
<i>Trade&gt;50</i>		3.536** (1.775)	4.671* (2.666)	3.426* (1.798)	4.576* (2.663)
<i>Trade&gt;100</i>		1.733 (1.564)	4.507 (2.846)	2.039 (1.545)	4.706* (2.840)
<i>Fractionalisation</i>				-3.103 (3.554)	-2.125 (3.355)
Constant	7.431 (17.40)	22.37 (21.43)	8.486 (20.01)	23.83 (24.14)	9.552 (22.57)
Observations	448	448	448	448	448
Number of regions	8	8	8	8	8
R <sup>2</sup> within	0.168	0.277	0.379	0.277	0.381
R <sup>2</sup> between	0.00149	0.0249	0.00366	0.00778	0.0137
R <sup>2</sup> overall	0.0684	0.220	0.335	0.223	0.337

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

When overall independence is considered as the independent variable of interest and we only control for the wealth and size of regions, it may seem, at first, that achieving independence from the former Yugoslavia did bring about an economic dividend (Table 2, Regression 1). The coefficient for independence is positive and highly significant, implying that separating from the former Yugoslavia could have delivered significant economic benefits and that these benefits have been greater, the earlier the separation from the country (Table 2, Regression 1). Regression 1 also indicates that size matters – country size is associated with higher levels of growth – and that there is economic convergence. Overall, these results highlight that, if we only control by the wealth and size of the region, newly independent republics outperformed those that remained part of a larger whole, creating an ‘independence dividend’ for breakaway states.

However, the positive connection between independence and economic growth does not survive the inclusion of further variables which may be related to the independence process and of additional control variables. In Table 2, Regressions 2 to 5 include all these additional control variables. Regressions 2 and 4 – in addition to EU Membership, EU Candidate status, Sanctions, Democracy, Agriculture, and Trade – contain the variable War, representing the number of years of war suffered by a particular republic of the former Yugoslavia. Regressions 3 and 5 replace War with the variable War deaths as a measure of the intensity of the war in any given republic. Regressions 4 and 5 consider the level of ethnic fractionalisation of a given former Yugoslav Republic.

The results of the analysis of the full model put in evidence in the weakness of a hypothetical economic dividend connected to secession. While the coefficients for regional wealth and country size are robust to the inclusion of the additional control variables in Table 2 (albeit at the expense of some marginal loss in significance in the population variable), this is not the case for the independence coefficient. When other factors – and, especially, war, war deaths, sanctions, and trade – are considered, there is no statistically significant connection between achieving independence from the former Yugoslavia and economic performance. War, war deaths, and sanctions, which were closely associated with the independence process in Yugoslavia, have caused serious dents in the economic performance of those parts of the country which had the longest participation in conflict, suffered the greatest casualties, and/or which were most affected by international sanctions. Indeed, war deaths as a proxy of the intensity of a war are, as could be expected, the most relevant indicator in the analysis and its inclusion in regressions 3 and 5 leads to a significant increase of the explanatory power of the model. Trade is also a key factor behind the differences in economic growth among the countries of the former Yugoslavia, although the effect is significantly stronger for those years with a moderate opening to trade (higher than 50% of GDP) than for those with a very high degree of openness (higher than 100% of GDP) (Table 2, Regressions 2 and 3). All other control variables have the expected sign, but are insignificant.

As highlighted by the theory, the economic implications of independence may vary according to the level of development of the regions of a country. Most analyses tend to point to the fact that achieving independence from any given country is likely to be more beneficial for richer than for poorer regions of the country (e.g. Buchanan and Faith, 1987; Brosio and Revelli, 2003). In Table 3 we assess whether that is the case by dividing the Independence variable into two sub-variables: one considering the impact of independence in the richer parts of the former

Yugoslavia, and the other in its poorer constituents. The remaining variables in Table 3 follow the structure presented for Table 2.

**Table 3.** Regression results: independence in richer and poorer areas.

Dependent variable	(1)	(2)	(3)	(4)	(5)
Growth of GDP per head	GDP_Growth	GDP_Growth	GDP_Growth	GDP_Growth	GDP_Growth
<i>lnGDP</i>	-3.883** (1.895)	-4.781* (2.490)	-3.605** (1.719)	-4.720* (2.540)	-3.513** (1.767)
<i>lnPopulation</i>	2.766*** (0.906)	1.161 (0.989)	3.103** (1.329)	1.264 (1.004)	3.254** (1.456)
<i>Independence Rich</i>	7.258** (3.317)	4.127 (2.923)	2.697* (1.637)	3.946 (3.092)	2.448 (1.951)
<i>Independence Poor</i>	5.100** (2.420)	-0.145 (2.052)	3.695 (3.055)	0.238 (1.990)	4.261 (3.200)
<i>EU Membership</i>		1.389 (1.430)	2.314 (2.347)	1.464 (1.426)	2.413 (2.350)
<i>EU Candidate</i>		-0.0645 (0.912)	1.445 (1.448)	-0.0854 (0.894)	1.407 (1.433)
<i>War</i>		-16.33*** (6.292)		-16.28** (6.322)	
<i>War deaths</i>			-0.00320*** (0.000176)		-0.00321*** (0.000179)
<i>Sanctions</i>		-9.380*** (1.384)	-10.36*** (1.189)	-9.227*** (1.191)	-10.12*** (0.845)
<i>Democracy</i>		-2.703 (2.141)	-3.270 (2.616)	-2.544 (2.030)	-3.059 (2.500)
<i>Agriculture</i>		-0.0427 (0.130)	0.0691 (0.0821)	-0.0290 (0.126)	0.0894 (0.0772)
<i>Trade&gt;50</i>		2.919* (1.580)	4.872* (2.536)	2.934* (1.599)	4.913** (2.488)
<i>Trade&gt;100</i>		2.228* (1.229)	4.423 (2.835)	2.348* (1.273)	4.609 (2.846)
<i>Fractionalisation</i>				-1.875 (3.597)	-2.728 (3.500)
Constant	11.61 (20.66)	37.10 (26.76)	4.854 (22.16)	36.04 (26.91)	3.255 (23.58)
Observations	448	448	448	448	448
Number of regions	8	8	8	8	8
R <sup>2</sup> within	0.162	0.279	0.380	0.280	0.382
R <sup>2</sup> between	0.00552	0.0145	0.00249	0.00667	0.0128
R <sup>2</sup> overall	0.0705	0.226	0.336	0.227	0.338

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The results of Table 3 are consistent with those reported in Table 2. The two newly introduced independence variables are significant only in Regression 1, which just controls for the size and wealth of the region. In this case, while both richer and poorer parts of Yugoslavia gained

from independence, the benefits accrued to richer areas were considerably larger than those in poorer ones. Yet, these results are ephemeral and do not withstand the introduction of other variables related to independence and of additional socioeconomic and structural controls. Once these are included (Table 3, Regressions 2 to 5), the two independence variables are not significant and give once again way to war deaths, years of war, sanctions, trade, regional wealth, and population size (in those regressions where war deaths are included) as the main determinants of economic growth in the territories of the former Yugoslavia. By contrast, very high levels of trade (Trade100) are significantly connected to higher levels of economic growth.

Overall, the results for the former Yugoslavia results suggest that the benefits of secession – and hence of dividing countries into smaller units – are nowhere to be seen. The emergence of small countries out of a bigger unit in the case of Yugoslavia did not lead to any sort of economic benefit for the emerging countries. As indicated by Figure 3, all former Yugoslav republics suffered a significant loss of wealth and the moment of independence. The severity of this loss and the speed of the subsequent recovery has been, to a large extent, determined by the process, more than by the mere fact of independence. War and the intensity of war represented a major blow to the economy of Bosnia and Kosovo. Sanctions and years of conflict have limited the economic prospects of Serbia, while strong disruption to trade following independence has been a serious barrier for economic growth everywhere in the former Yugoslavia. The relatively smooth transitions to independence in Slovenia, Montenegro, and Macedonia have contributed to these republics, despite their very different starting points, having the best post-independence performance.

## 6. Conclusion

This paper has examined the economic implications – proxied by regional economic growth – of secession by focusing on the case of the former Yugoslavia in the period between 1956 and 2011. The former Yugoslavia offers an interesting example to gauge different theoretical, empirical, and political claims about the potential economic benefits and/or drawbacks of breaking away from states where specific communities or national groups find themselves ill at ease. Yugoslavia represents a case of an artificial state in which its different national communities never managed to truly unite. It is also an example that could provide some guidance in view of the seemingly increasing processes of independence currently taking place.

Although “a small state should not be confused with a weak state” (Gligorov et al., 1999, p. ii), our analysis shows limited evidence of a direct ‘independence dividend’ to breakaway republics of the former Yugoslavia. Once a number of factors which may be related to the process of secession and independence and a series of socioeconomic and structural factors are controlled for, secession does not seem to have any bearing on the successive economic performance of the newly independent republics emerging from the former Yugoslavia. Independence has no connection to ensuing economic performance, which applies, as a principle, to both richer and poorer areas of the former Yugoslavia.

According to our analysis, Slovenia has not performed better than, say, Bosnia-Herzegovina or Kosovo because it separated from Yugoslavia earlier, but because it had the luck of fighting a ten day war which left 62 dead and caused little material destruction. Bosnia endured a three-year long war which caused, depending on sources, between 25,000 and 329,000 fatalities and massive material destruction, while the Kosovo war lasted officially almost one year and a half, left around 14,000 dead, and generated as well considerable destruction. Slovenia also performed better than Serbia, not because it achieved independence earlier, but because it fought in fewer wars and did not have to experience economic sanctions. Slovenia has finally performed better than most other former Yugoslav republics, because it has consistently been the most open country to trade and conflict did not suddenly alter its trade patterns with the rest of the world, as was the case for Bosnia or Croatia. In addition, being a stable democracy, a member of the EU since 2004, starting out with a smaller and more modern agricultural sector, and having a more homogeneous population may have somewhat further contributed to this outcome. Macedonia and Montenegro have also benefited from relatively smooth transitions to independence.

Overall our research highlights that an ‘independence dividend’ in the case of Yugoslavia was not achieved by the mere fact of seceding but by how the process of secession took place. In cases where secession happened without real conflict and without significant alteration of previous socioeconomic links to the rest of the world, secession has not had any noticeable impact on the resulting economic performance. When secession is achieved by conflict and disruption of pre-existing trade patterns, all those involved in the process suffer. This underlines that, at least in terms of economic impact, secession is not an event but a process. How the process takes place – and largely whether there is agreement between the host and the seceding country – determines the subsequent economic performance for both the host and the seceding nation. It also emphasises that the politics involved in any process of secession will almost certainly determine ensuing economic trajectories. Finally, the results also highlight that in the case of the former Yugoslavia there is no apparent benefit of ‘smallness’ relative to ‘largeness’. Indeed, once other factors are controlled for, the larger independent territorial units emerging from the former Yugoslavia have performed better than the smaller ones, sending a word of warning about the claims of secessionists and some academics who trumpet the benefits of smallness in an open world economy.

Hence, in the current atmosphere of secessionist movements in different parts of the world, such as Catalonia, Québec, or Scotland, more attention needs to be paid to how any potential divorce between countries can be achieved, rather than to the simple act of independence. An amicable divorce will, the case of the former Yugoslavia serving as an example, deliver no ‘independence dividend’, but likewise not significantly damage the future development prospects of all parties involved. A bitter divorce, by contrast, is likely to have long-lasting, negative economic consequences. Unfortunately, so far the focus has been mainly on the implications of secession, rather than on how any secessionist processes is managed.



## **Acknowledgements**

We are indebted to the anonymous reviewers and to the editor in charge, John Agnew, for their very incisive comments and suggestions to an earlier version of the article. The research behind the paper would have not been possible without the financial support of the European Research Council under the European Union's Seventh Framework Programme (FP7/2007-2013)/ERC grant agreement n° 269868.

## References

ADVISORY COUNCIL FOR NATIONAL TRANSITION (2013a) Les relacions de cooperació entre Catalunya i l'Estat espanyol. Rapport no. 3, 20 December 2013. Generalitat de Catalunya, Barcelona.

ADVISORY COUNCIL FOR NATIONAL TRANSITION (2013b) L'Administració tributària de Catalunya. Rapport no. 2, 20 December 2013. Generalitat de Catalunya, Barcelona.

ALESINA, A. (2003) The Size of Countries: Does it matter? *Journal of the European Economic Association* **1**(2-3), 301-316.

ALESINA, A., DEVLEESCHAUWER, A., EASTERLY, W., KURLAT, S. and WACZIARG, R. (2003) Fractionalisation, *Journal of Economic Growth* **8**, 155-194.

ALESINA, A. and LA FERRARA, E. (2005) Ethnic Diversity and Economic Performance, *Journal of Economic Literature* **43**, 762-800.

ALESINA, A. and SPOLAORE, E. (2003) *The Size of Nations*. MIT Press, Cambridge, MA.

ALESINA, A. and WACZIARG, R. (1998) Openness, Country Size and Government, *Journal of Public Economics* **69**, 305-321.

ALOUNI, O. and HUBERT, P. (2010) Country Size, Growth and Volatility. *Observatoire Français des Conjonctures Économiques*, document de travail, 2010-18, July.

ANESI V. and De DONDER, P. (2011) Voting Under the Threat of Secession: Accommodation vs. repression. *Document de treball de l'IEB* 2011/40. Institut d'Economia de Barcelona (IEB).

ANNETT, A. (2001) Social Fractionalisation, Political Instability and the Size of Government, *IMF Staff Papers* **48**(3), 561-592.

ARMSTRONG, H.W. and READ, R. (2004) Small States and Island States: Implications of size, location and isolation for prosperity, in POOT, J. (Ed) *On the Edge of the Global Economy*, pp.191-223. Edward Elgar, Cheltenham.

ATKINS, J.P., MAZZI, S. and EASTER, C.D. (2001) Small States: A Composite Vulnerability Index, in PERETZ, D., FARUQI, R. and KISANGA, E.J. (Eds) *Small States in the Global Economy*, pp.53-92. Commonwealth Secretariat, London.

BARTLETT, W. (2008) Regional Integration and Free-Trade Agreements in the Balkans: Opportunities, obstacles and policy issues, *Economic Change and Reconstruction* **42**, 25-46.

BATEMAN, M. (2000) Reconstructing the Balkans: Alternative policy approaches, *MOCT-Most* 2, 137-151.

BECKER, G.S. (1994) Why So Many Mice Are Roaring, *Businessweek* [online]. 7<sup>th</sup> November. Available at: [www.businessweek.com/archives/1994/b339721.arc.htm](http://www.businessweek.com/archives/1994/b339721.arc.htm)

BERKOWITZ, D. (1997) Regional Income and Secession: Centre-periphery relations in emerging market economies, *Regional Science and Urban Economics* 27(1), 17-45.

BODEA, C. and ELBADAWI, I.A. (2008) Political Violence and Economic Growth. World Bank, Washington, DC. World Bank.

<https://openknowledge.worldbank.org/handle/10986/6805> License: CC BY 3.0 Unported.

BOLTON, P. and ROLAND, G. (1997) The Breakup of Nations: a political economy analysis, *Quarterly Journal of Economics* 112(4), 1057-90.

BOOKMAN, M. (1993) *The Economics of Secession*. Macmillan Press, London.

BRETON, M. Le and WEBER, S. (2003) The Art of Making Everybody Happy: How to prevent a secession, *IMF Staff Papers* 50(3), 403-435.

BROSIO, G. and REVELLI, F. (2003) The Political Economy of Regional Opting Out: Distributive implications of a prospective Europe of regions, *Economics of Governance* 4, 127-142.

BRUNBORG, H. (2002) Report on the Size and Ethnic Composition of the Population of Kosovo. *International Criminal Tribunal for the Former Yugoslavia* [online]. Available at: [www.icty.org/x/file/About/OTP/War\\_Demographics/en/milosevic\\_kosovo\\_020814.pdf](http://www.icty.org/x/file/About/OTP/War_Demographics/en/milosevic_kosovo_020814.pdf)

BUCHANAN, J.M. and FAITH, R.L. (1987) Secession and the Limits of Taxation: toward a theory of internal exit, *American Economic Review* 77(5), 1023-1031.

CASTELLO, S.A. and OZAWA, T. (1999) *Globalisation of Small Economies as a Strategic Behaviour in International Business*. Garland Publishing, London.

CENTRAL BANK OF SERBIA (2011) *Indikatori Eksterne Pozicije Srbije*. [Indicators of Serbia's External Position]. National Bank of Serbia, Belgrade.

COLLIER, P. and HOFFFLER, A. (2006) The Political Economy of Secession, in HANNUM, H. and BABBITT, E.F. (Eds) *Negotiating Self-Determination*, pp.37-60. Lexington Books, Lanham, Maryland.

COLLIER, P. and VENABLES, A.J. (2008) Trade and Economic Performance: does African fragmentation matter? Available online:

[www.economics.ox.ac.uk/members/tvenables/images/stories/unpublishedpapers/tradepformance.pdf](http://www.economics.ox.ac.uk/members/tvenables/images/stories/unpublishedpapers/tradepformance.pdf)

CROATIA (Various years). *Statistički Godišnjak Republike Hrvatske*. [Statistical Yearbook of the Republic of Croatia]. Republički Zavod za Statistiku, Zagreb.

CVIIĆ, C. and SANFEY, P. (2010) *In Search of the Balkan Recovery: the political and economic reemergence of South-Eastern Europe*. Columbia University Press, New York.

DAMIJAN, J.P. (2001) Main Economic Characteristics of Small Countries: Some empirical evidence, in SALVATORE, D., SVETLIČIĆ, M. and DAMIJAN, J.P. (Eds) *Small Countries in a Global Economy: New challenges and opportunities*, pp.91-130. Palgrave, New York.

DING, W. (1991) Yugoslavia: Costs and benefits of union and interdependence of regional economies, *Comparative Economic Studies* **33**(4), 1-26.

EASTERLY, W. and KRAAY, A. (2001) Small States, Small Problems? Income, Growth and Volatility in Small States, in PERETZ, D., FARUQI, R. and KISANGA, E.J. (Eds) *Small States in the Global Economy*, pp.93-116, Commonwealth Secretariat, London.

EBRD (1995) Transition Report 1995. *EBRD Transition Reports*. European Bank for Reconstruction and Development, London.

EBRD (2010) *Macroeconomic Indicators* [Excel Datafile], October 2010. European Bank for Reconstruction and Development, London.

EBRD (2011) *Forecasts and Annual Indicators* [Excel Datafile], 13<sup>th</sup> July 2011. European Bank for Reconstruction and Development, London.

FEARON, J.D. (2003) Ethnic and Cultural Diversity by Country, *Journal of Economic Growth* **8**, 195-222.

FEARON, J. D. and LAITIN, D.D. (2003) Ethnicity, insurgency, and civil war, *American Political Science Review* **97**(1), 75-90.

FITOUSSI, J.P. and LAURENT, É. (2008) Haws and Handsaws: What can France learn from the 'Nordic Model'? *Centre for European Studies Working Paper Series*, #168.

FISCAL COMMISSION WORKING GROUP (2013) *First Report - Macroeconomic Framework*. The Scottish Government, Edinburgh.

FREEDOM HOUSE (Various years) *Freedom in the World: the annual survey of political rights and civil liberties*. Rowman and Littlefield, New York.

FRIEDMAN, D. (1977) A Theory of the Size and Shape of Nations, *Journal of Political Economy* **85**(1), 59-77.

GLIGOROV, V., KALDOR, M. and TSOUKALIS, L. (1999) *Balkan Reconstruction and European Integration*. London School of Economics, the European Institute, London.

GOLD, T.W. (2003) *The Lega Nord and Contemporary Politics in Italy*. Palgrave Macmillan, Basingstoke.

GRDJIC, G. (1966) Comparative Computations of Yugoslav National Income According to Material and Comprehensive Concepts of Production, *Review of Income and Wealth* **12**(2), 135-141.

HAIMANKO, O., Le BRETON, M. and WEBER, S. (2005) Transfers in a Polarized Country: Bridging the Gap between Efficiency and Stability, *Journal of Public Economics* **89**(7), 1277-1303.

HAIMANKO, O., Le BRETON, M. and WEBER, S. (2007) The Stability Threshold and the Two Facets of Polarization, *Economic Theory* **30**, 415-430.

HECHTER, M. (1992) The Dynamics of Secession. *Acta Sociologica* **35**(4), 267-283.

HOSOE, M. (2011) Political Economics of Regional Integration-Secession and Representative Elections, *Journal of Economics, Kumamoto-Gakuen University* **18**(1/2), 17-37.

JACOBS, J. (1980) *The Question of Separatism: Quebec and the struggle over sovereignty*. Random House, New York.

JALAN, B. (Ed.) (1982) *Problems and Policies in Small Economies*. Croom Helm, London.

JONGEN, E.L.W. (2004) An Analysis of Past and Future GDP Growth in Slovenia. *Institute for Economic Research*, working paper #25(2004).

JUDAH, T. (2009) Yugoslavia is Dead Long Live the Yugosphere: Good news from the Western Balkans. *LSEE Papers on South Eastern Europe*.

KAISER, R.J. (1990) The Equalisation Dilemma in Yugoslavia, *Geoforum* **21**(2): 261-276.

KANG, S. and MEERNIK, J. (2005) Civil War Destruction and the Prospects for Economic Growth, *Journal of Politics* **67**, 88-109.

LISCOW, Z. (2012) Why Fight Secession? Evidence of Economic Motivations from the American Civil War, *Public Choice* **153**(1-2), 37-54

LUSTICK, I.S., MIODOWNIK, D. and EIDELSON, R.J. (2004) Secessionism in Multicultural States: Does Sharing Power Prevent or Encourage It? *American Political Science Review* **98**(2), 209-229.

MIGUEL, E., SATYANATH, S. and SERGENTI, E. (2004) Economic shocks and civil conflict: An instrumental variables approach *Journal of Political Economy* **112**(4), 725-753.

MILANOVIĆ, B. (1987) Patterns of Regional Growth in Yugoslavia, 1952-1983. *Journal of Development Economics* **25**, 1-19.

MONTESQUIEU (1784) Book IX: on the laws in their relation with defensive force, in COHLER, A.M., MILLER, B.C. and STONE, H.S. (Eds) (1989) *The Spirit of the Laws*, pp.131-137. Cambridge University Press, Cambridge.

MORELLI, M. and ROHNER, D. (2010) Natural Resource Distribution and Multiple Forms of Civil War. *Mimeo*, Columbia University, New York.

MURDOCH, J. C. and SANDLER, T. (2004) Civil Wars and Economic Growth: Spatial Dispersion, *American Journal of Political Science* **48**, 138–151.

OECD (2002) Federal Republic of Yugoslavia: Economic Assessment. *OECD Economic Surveys 2001-2002*. Organisation for Economic Cooperation and Development, Paris.

OMRČANIN, M.S. (1976) *Norway, Sweden, Croatia: a comparative study of state secession and formation*. Dorrance and Company, Philadelphia.

PANAHI, H. (2010) Size of a Country, Openness and the Economic Growth, *World Academy of Science, Engineering and Technology* **66**, 699-705.

PECH, G. (2006) Secession and Value, *Economics Letters* **92**(3), 306-10.

PRICE, A. (2011) Small is Cute, Sexy and Successful: Why independence for Wales and other countries makes economic sense, *Harvard Kennedy School Review* **11**, 132.

PRICE, A. and LEVINGER, B. (2011) The Flotilla Effect: Small economies through the eye of the storm. *Research Paper*. Greens/EFA Group, European Union, Brussels.

PRIO (2009) Battle Deaths Dataset Version 3.0. <http://www.prio.org/Data/Armed-Conflict/Battle-Deaths/>

RODRÍGUEZ-POSE, A. and GILL, N. (2003) The global trend towards devolution and its implications, *Environment and Planning A* **21**(3), 333-351.

RODRÍGUEZ-POSE, A. and GILL, N. (2005) On the ‘Economic Dividend’ of Devolution, *Regional Studies* **39**(4), 405-420.

- RODRÍGUEZ-POSE, A. and SANDALL, R. (2008) From identity to the economy: analysing the evolution of the decentralisation discourse, *Environment and Planning C: Government and Policy* **26**(1), 54-72.
- ROESLER, J. (2010) Nationalism and Economic Disparities Lessons from the Dissolution of Yugoslavia and Czechoslovakia and the Secession of the Baltic States, *Debate: Journal of Contemporary Central and Eastern Europe* **18**(3), 341-354.
- ROSE, A.K. (2006) Size Really Doesn't Matter: In search of a national scale effect, *Journal of the Japanese and International Economies* **20**, 482-507.
- RUTA, M. (2005) Economic Theories of Political (Dis)Integration, *Journal of Economic Surveys* **19**(1), 1-21.
- SALVATORE, D. (2001) The Economic Performance of Small Versus Large Nations, in SALVATORE, D., SVETLIČIĆ, M. and DAMIJAN, J.P. (Eds) *Small Countries in a Global Economy: New challenges and opportunities*, pp.71-90. Palgrave, New York.
- SERBIA (Various years) *Statistički Godišnjak Srbije i Crne Gore*. [Statistical Annals of Serbia and Montenegro]. Zavod za Statistiku, Belgrade.
- SLOVENIA (Various years) *Statistični Letopis*. [Statistical Yearbook]. Zavod za Statistiku, Ljubljana.
- SPOLAORE, E. and WACZIARG, R. (2005) Borders and Growth, *Journal of Economic Growth* **10**(4), 331-386.
- TABEAU, E. (2009) Casualties of the 1990s wars in the former Yugoslavia (1991–1999). Committee for Human Rights in Serbia, Helsinki.
- TABEAU, E. and BIJAK, J. (2005) War-related Deaths in the 1992–1995 Armed Conflicts in Bosnia and Herzegovina: A Critique of Previous Estimates and Recent Results, *European Journal of Population / Revue Européenne de Démographie* **21**(2-3), 187-215.
- UVALIĆ, M. (1992) Yugoslavia: the economic costs of disintegration. *European University Institute Working Papers*, European Policy Unit #92/17, EUI, Florence.
- WITTMAN, D. (1991) Nations and States: Mergers and acquisitions; dissolutions and divorce, *Economics and Conflict* **81**(2), 126-129.
- WOOLDRIDGE, J.M. (2006) *Introductory Econometrics: a Modern Approach* (3<sup>rd</sup> Edition). Thomson South Western, Mason, Ohio.

WORLD BANK (2011) *The World Databank* [Excel Datafile]. The World Bank Group, Washington D.C..

YARBOURGH B.V. and YARBOURGH, R.M. (1998) Unification and Secession: Group size and 'escape from lock-in', *Kyklos* **51**(2), 171-195.

YUGOSLAVIA (1989) *Jugoslavija 1918-1988, Statistički Godišnjak*. [Statistical Annals of Yugoslavia, 1918-1908]. Savezni Zavod za Statistiku, Belgrade.



## ENDNOTES

---

<sup>1</sup> From hereon just 'Bosnia'.

<sup>2</sup> For reference, the same ratio was close to 14:1 in 2009 (EBRD 2010).

<sup>3</sup> As in most wars, the number of casualties in the different wars of the former Yugoslavia is shrouded in controversy. Different sources – sometimes because of a political bias, others just as a result of the sheer difficulty of accurately measuring war deaths – provide very different numbers of casualties. Hence, in order to make sure that the results of including *War deaths<sub>it</sub>* are not affected by the war intensity variable chosen, we have created a second variable of war intensity. This alternative variable includes data stemming from a large number of written and online sources, led by Tabeau's (2009) report on "Casualties of the 1990s wars in the former Yugoslavia (1991–1999)". The differences between this variable and that sourced from the PRIO (2009) Battle Deaths Database variable is non-trivial: whereas the PRIO (2009) Battle Deaths Database records a total of 63,383 war deaths in the different wars, our alternative measure more than doubles that number, raising the toll to 135,031. Both estimates are, in any case, considerably lower than the majority of those reported in the former Yugoslavia and taking just the Bosnian war into account (see Tabeau and Bijak 2005 for a detailed analysis of this issue) However, the inclusion of the alternative war intensity variable in the model leaves the coefficients of the estimations virtually unchanged. These results can be provided upon request.

<sup>4</sup> Sanctions were imposed by the UN Security Council on Serbia and Montenegro in 1992-1996 (UN 1996) and again (but excluding Kosovo) by the EU and USA in 1999-2000. Other sanctions were seen as less important and discounted by the dummy. Although Serb controlled parts of Croatia and Bosnia were also technically sanctioned in 1992-1996, this covered only part of their territories and the dummy was not applied.

<sup>5</sup>  $TRADE_t = (M_t + E_t) / GDP_t$ , where  $M_t$  is the value of a country's imports at a given time  $t$ ;  $E_t$  is the equivalent value of its exports; and  $GDP_t$  is denoted in the same currency. Note that the scores are calculated for sovereign countries – i.e. not for individual republics – for two reasons: firstly, since it is not clear what would be meant by saying that one republic (as a subnational entity) is more 'open' than another, since foreign trade (by definition) occurs between countries; and secondly, since reliable disaggregated data on regional imports and exports were not available.

<sup>6</sup> Scores are interpreted as the probability that two individuals randomly picked from a population belong to different ethnic groups (Fearon 2003). Thus, low scores indicate ethnic homogeneity; high scores imply fractionalisation.

<sup>7</sup> A detailed discussion of the problems and reliability of different estimates in this field is provided by Brunborg (2002). Wherever possible, the present study uses UNHCR data.