The economic effects of political disintegration: Lessons from Serbia and Montenegro

Vassilis Monastiriotis[1] Ivan Zilic[2]

Is there an economic premium from state independence? We shed light on this question by analysing the unique historical case of the peaceful separation of Serbia and Montenegro in 2006 – the last fully recognised internationally state-disintegration on European soil. Using the synthetic control approach, we find that independence for the seceding country (Montenegro) had a sizeable but seemingly transitory positive effect, boosting GDP per capita in the period immediately following independence, but with gains slowly evaporating in the longer period – which we attribute partly to increased vulnerability of the newly independent state to fluctuations in the international economic environment. In contrast, for Serbia we find no evidence of an independence dividend. We postulate that, at least in part, this asymmetry of effects may be linked to divergences in economic sentiment between the seceding entity and the one 'left behind'.

Keywords: secession; independence; political disintegration; synthetic control; Western Balkans.

JEL classification: F15, O52, N14.

[1] **Corresponding author.** European Institute, London School of Economics and Political Science, Houghton Street, WC2A 2AE London, United Kingdom. E-mail: v.monastiriotis@lse.ac.uk
[2] London School of Economics and Political Science and Institute of Economics, Zagreb. E-mail: i.zilic@lse.ac.uk

The economic effects of political disintegration:

Lessons from Serbia and Montenegro

Abstract. Is there an economic premium from state independence? We shed light on this question by analysing the unique historical case of the peaceful separation of Serbia and Montenegro in 2006 – the last fully recognised internationally state-disintegration on European soil. Using the synthetic control approach, we find that independence for the seceding country (Montenegro) had a sizeable but seemingly transitory positive effect, boosting GDP per capita in the period immediately following independence, but with gains slowly evaporating in the longer period – which we attribute partly to increased vulnerability of the newly independent state to fluctuations in the international economic environment. In contrast, for Serbia we find no evidence of an independence dividend. We postulate that, at least in part, this asymmetry of effects may be linked to divergences in economic sentiment between the seceding entity and the one 'left behind'.

Keywords: secession; independence; political disintegration; synthetic control; Western Balkans.

JEL classification: F15, O52, N14.

I. Introduction

What is the economic dividend of state independence? Despite the recent surge in secessionist and pro-independence movements, the evidence concerning the economic impact of *political disintegration* (state independence and political autonomy) in the academic literature is surprisingly limited. In Europe, the independence referrenda in Scotland and Catalonia in recent years spurred a new body of research and policy analyses seeking to measure, and anticipate, the economic consequences of various separation scenarios (see, inter alia, Bell et al, 2014; Muñoz and Tormos, 2015). Unavoidably, however, such studies rely heavily on *a priory* assumptions about future developments in key policy and behavioural parameters or on structural models calibrated on past episodes of *integration*. Other cases of secession or new state formation – especially in relation to the dissolution of

Yugoslavia and the USSR – are also relatively under-studied, perhaps partly because of the complexity of the cases, complicated as they were by ethnic tensions and military hostilities.

In public finance theory and the literature on fiscal federalism, state independence – as an extreme form of fiscal decentralisation – is expected to have positive welfare effects. This is for a number of reasons. Independence allows the accommodation of heterogeneous preferences, resolving information and coordination problems that may exist at the central (federal) level and providing for a better match between local conditions and local policies (Salmon, 1987). It also enhances local voice and accountability, raising policy effectiveness through yardstick competition (Brennan et al., 1980; Besley and Smart, 2002); while it may have additional beneficial effects by raising confidence and creating new economic opportunities in the newly formed state entities (Brueckner, 2006; Rodriguez-Pose and Sandall, 2008). Inversely, in international economics it is economic and political *integration* which creates positive welfare effects, as it eliminates barriers to trade and to other economic flows (FDI, migration) and removes distortionary taxes and non-tariff barriers (e.g., via national standards).

In practice, of course, the materialisation of any such effects is heavily conditioned on the capacities of the 'devolved' administrations and the quality of government or of local institutions more generally – as well as on the appropriateness of policies pursued by the newly-independent authorities.[1] The positive effects of independence can further be annuled by the political instability and economic uncertainty which often accompanies historical episodes of new state formation (Rodriguez-Pose and Sterm, 2015).

In this paper we exploit the unique historical case of the separation between Serbia and Montenegro – the last fully recognised internationally state disintegration on European soil – to provide evidence on the causal effects of political disintegration (state independence). Despite the historical, political and geo-political specificity of the case, in our view there are useful insights that can be drawn from this analysis concerning the economic effects of independence, not only retrospectively for Montenegro and Serbia but also prospectively for contemporary cases of potential disintegration in Europe. This is for a number of reasons.[2] First, at the time of its declaration of independence in 2006 Montenegro had higher levels of development and significant natural resource advantages (be it, mainly in tourism) compared to its counterpart within the so-called State Union of Serbia and Montenegro. This is not dissimilar to cases such as those of Catalonia and Scotland. Second, unlike previous historical

[1] The role of institutional quality for the delivery of good policies is well understood in literatures looking at particular episodes of policy-change such as the process of EU accession (Borzel and Hullen, 2011) or the fiscal adjustment programmes during the Eurozone crisis (Monastiriotis, 2014). The argument can intuitively be extended to the case of secession and new state formation.

[2] Of course, important differences across cases remain. For example, differences in size and levels of development, institutional differences relating to the rule of law and quality of government, differences in the sophistication of the different economies and their technological and comparative advantages; and so forth. Thus, although potentially informative, the case of the Montenegro-Serbia separation cannot be claimed to be directly comparable to the contemporary cases of possible splits in Western Europe and elsewhere.

episodes of secession (e.g., Abkhazia and South Osetia, Kosovo, Crimea, etc), Montenegro's secession from the State Union of Serbia and Montenegro was remarkably peaceful and uneventful. This makes the case particularly suited for studying the economic effects of independence without the distortive effects of armed conflicts and political upheavals usually associated to unilateral declarations of independence, which are unlikely to apply to contemporary cases of potential splits in Western Europe. Third, Montenegro had already, well before its declaration of independence, significant policy autonomy in a large number of policy areas, including crucially in privatisation (and thus also in FDI-attraction policies) and monetary policy (Noutcheva and Huysseune, 2004). This ensured an unprecedented degree of policy continuity since independence.[3] This in turn allows the estimation of the economic effects of independence unsoiled by influences that may have to do with (sometimes paradigmatic) policy shifts or changes in administrative capacity and the quality of government. Fourth, Montenegro's independence was not driven by an isolationist strategy; instead, as we discuss in more detail in the next section, Montenegro saw its secession from the State Union of Serbia and Montenegro partly as a strategy to accelerate its economic and political integration with the European Union, while maintaining a high degree of economic integration (including relatively 'porous' borders) with its former union. Again, this is very similar to contemporary cases in Western Europe.[4] Last, like in the case of Serbia and Montenegro, cases such as Scotland or Catalonia represent potential separations of entities that share many cultural characteristics (common religion, mixed ethnicity, commonly spoken language, same popular culture, etc).

To analyse the economic effects of independence we apply a synthetic control approach, matching pre-independence outcomes in Serbia and in Montenegro (separately) with those in a set of comparable 'donor' countries and producing estimates of the post-independence divergence between actual and predicted ('synthetic') outcomes in the two countries. We find that independence produced a substantial boost in Montenegrin GDP, which was however shortlived: in our core results, the positive income effect of Montenegrin independence seems to had been fully eliminated by 2014. In contrast, for Serbia we find no evidence of an independence dividend. If anything, Serbian GDP seems to have grown more slowly than that of 'synthetic' Serbia (in the non-separation scenario), although this effect does not seem to carry much statistical confidence. This suggests that independence has asymmetric effects on the successor entities. Our further exploration shows that objective economic factors (e.g., changes in FDI flows or trade) cannot fully account for this asymmetry – leaving perhaps space

[3] Indeed, the Democratic Party of Montenegro, led by six-times Prime Minister and former President of Montenegro Mr Milo Djukanovic, has been in power uninterruptedly since the fall of communism.

[4] For example, the seperatists in Catalonia have openly declared that they want Catalonia to be granted automatic membership to the EU; while Scotland's calls for independence are today almost entirely framed in relation to securing membership to the EU post-Brexit. In both cases, there is no suggestion that a prospective secession will lead to the establishment of a hard border or significantly looser economies ties with the former partner territories.

for explanations that may have to do with differences in economic sentiment and trust in institutions, between the two entities, post-separation.

We explain the synthetic control method and our overall empirical approach in section III, after a brief overview of the historical context of the Serbia-Montenegro union and separation. Section IV presents our empirical results, separately for Serbia and Montenegro, as well as a number of robustness checks and additional explorations. Section V explores possible drivers for these results, looking in particular at the vulnearabilities that may have been created post-separation domestically as well as in relation to the external environment. The last section concludes.

II. Institutional setting and independence of Montenegro

While both Serbia and Montenegro gained their state independence at the Congress of Berlin in 1878, the two countries had – despite their geographical proximity – very different historical paths, as Serbia was under Ottoman rule for five centuries while the Province of Montenegro remained free of such formal dependencies. In fact, Serbia and Montenegro were not bordering unit 1912, when the Balkan Wars resulted in an expansion of both states, absorbing the region of Sandzak which was separating them.[5] After the First World War, the Kingdom of Serbs, Croats and Slovenes was created which tied Serbia and Montenegro in a single political entity – a connection that would last until the declaration of independence by Montenegro in 2006. After the Second World War, the Socialist Federal Republic of Yugoslavia (SFRY) was created, a federation of six republics (Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Serbia, and Slovenia) and two autonomous provinces within Serbia (Kosovo and Vojvodina), recognising both the Serbs and the Montenegrins, among others, as nations. Owing in part to emerging gaps in economic development across Republics, which gave rise to increasing political frictions between the federal and the state party elites and the emergence of nationalism (Uvalic, 1993) Yugoslavia broke-up in 1991. Amid armed conflicts and war, Slovenia, Croatia, Bosnia and Herzegovina and North Macedonia declared independence (in 1992). Montenegro was the only Republic which maintained strong ties and excellent relations with Serbia during this period, owing to the historical and cultural ties of the population of the two entities, including to a large degree a shared national identity. Thus, with the dissolution of Yugoslavia, Montenegro and Serbia formed the Federal Republic of Yugoslavia as the successor, although not internationally recognised, of SFRY.

Despite this, the following years saw Montenegro frustrated with the state of affairs in the new political entity. Problems with international relations and the economic sanctions due to the Milosevic regime, the conflict in Kosovo, as well more general issues such as the

[5] For a fuller history of Montenegro and of the Sandzak region see, inter alia, Stevenson (2018), Morrison (2008) and Morrison and Roberts (2012).

asymmetric size of the two parts[6] and differences in levels of economic development (see Figure 1) and in economic structure (Serbia has a historical tradition in industry compared to the largely services-based economy of Montenegro), generated a lot of discontent within Montenegro. Indeed, the late 1990s saw a surge in independentist sentiment in Montenegro (Hockenos and Winterhagen, 2007; Morrison, 2008; Vukicevic, 2017); while a range of policies became decentralised, from education policy to FDI attraction and eventrually even monetary policy. Indeed, quite symbolically, Montenegro established its own central bank in the late 1990s and adopted the German mark as its official currency in 1999 (and the euro in 2002).

INSERT FIGURE 1 AROUND HERE

As the Milosevic regime went down in 2000, and following the dramatic events that led to the Kosovo War in 1998 and the NATO intervention in 1999, the European Union decided to have a more active role in the mediation of the legal status of SFRY (Friis, 2007; Dzankic, 2014). Under the auspices of the EU, in March 2002 Montenegro and Serbia signed the so-called Belgrade agreement which tied them in a loose union with a common market, with the EU serving as an administrator of the agreement. The February 2003 Constitutional Charter of the State Union clarified the legal status of the union as well as the relationship between the Republics. Policies on foreign affairs, defence, foreign trade and human and minority rights were in the hand of the federal authorities, while all other policy areas – including monetary policy, taxation and customs – were at the exclusive right of the member states. Therefore, a great degree of federal autonomy was incorporated into the State Union of Serbia and Montenegro, including also an opt-out to independence via referendum (Uvalic, 2010).

Montenegro did seek independence via a referendum on 21 May 2006 and decided to leave the State Union of Serbia and Montenegro.[7] On June 3 2006 Montenegro declared its independence. Serbia followed with its own declaration two days later. While the referendum margin was quite small – only around 2,000 votes – and Montenegro did have a sizable Serbian minority (30%), the separation of Serbia and Montenegro went down peacefully (Darmanovic, 2007), and the two countries – after a century of being part of the same political entity – established a working relationship, now as independent states. Their trade relations were soon to be normalised further, as on 19 December 2006 both countries signed their accession to CEFTA, a regional free trade area, with free trade rules established fully by the end of 2010 (Begovic, 2011). Since, political relations between the two countries have been very friendly and economic ties remain very close. Politically, the two countries participate

[6] At the time of separation, the population of Serbia (without Kosovo) was 7.5 million compared to 670 thousand people in Montenegro.

[7] The referendum result was 55.5% in favour of independence. Prior to the referendum, the EU had set a required minimum majority of 55% for independence to be recognised.

jointly in a number of multilateral processes, such as CEFTA, the EU's Stabilisation and Association process, the SEE2020 Strategy overseen by the Regional Cooperation Council, and others. Economically, Serbia constitutes the main trade partner of Montenegro, accounting in 2017 for 13% of the latter's exports and 25% of its imports.[8]

As this brief review demonstrates, the process of separation between Montenegro and Serbia has been a long process, starting already sometime in the mid- to late-1990s and culminating into the official separation in the summer of 2006. Quite clearly, already at the second half of the 1990s, economic and other policy preference in the two entities started diverging (Darmanovic, 2003). The differences were perhaps strongest in the realm of international relations (especially with regard to Kosovo) and particularly with regard to the EU orientation of the two entities. Indeed, for Montenegro independence has always been a means for developing stronger ties with the West, including with NATO, and accelerating its accession to the EU. The realisation of immediate economic benefits was much less of a consideration at the time of the split, as the Montenegrin economy seemed to be more dynamic and the policy autonomy it enjoyed allowed it to capitalise on its comparative advantages (especially in the realm of tourism and real estate) without much policy constraints.[9] As noted earlier, ethnic and political considerations were also not particularly prevalent (Vukicevic, 2017). Rather, independence was understood – and framed – as a longer-term consideration about the geo-political orientation of the country and the long-run economic gains that were expected to accrue from it.

It should be emphasised, however, that despite this divergence in policy preferences and aspirations, economic and political relations between the two entities were never too disturbed and the two countries continued to have close economic ties and to participate in common political fora throughout the period. In this sense, the declaration of independence in 2006 represents a somewhat marginal event – and by implication, our measurement of its economic impact represents likely a lower-bound estimate of the potential effects of independence in the general case. On the other hand, the smooth nature of this separation also implies that our estimates of the economic impact of independence – as already mentioned in the Introduction – are generally unaffected by significant policy changes or political upheavals which are often present in cases of new state formation through unilateral declarations of independence. In that sense, the effect of independence that we can estimate for the case of the Serbia-Montenegro separation may have to do more with softer factors – e.g., changed perceptions about the quality of institutions in the two countries and differences in economic sentiment – than with an effect associated to policy delivery *per se*.[10]

[8] Source: https://atlas.media.mit.edu/en/profile/country/mne/.

[9] This is not to say that short-term economic and organisational considerations were not in place. For example, independence was belived to facilitate more effective law-making (and decision-making more generally), partly due to the simplification of public administration procedures which, under the State Union of Serbia and Montenegro was more difficult to coordinate between the federal and domestic tiers.

[10] It is tempting to assert here that, by implication, the estimated effect of independence may be a „lower bound" estimate for other cases of secessions where less policy autonomy was afforded pre-separation. We remain

In what follows we examine exactly the effect of independence under this prism. As we show, there is a significant – but, it seems, transitory – effect arising from secession, but not from autonomy per se, as the effect is only observed in Montenergro (the country seceding, or 'leaving') but not in Serbia (the country obtaining autonomy, or being 'left behind').

III. Approach, data and method

To explore the economic effects of Montenegro's (and Serbia's) independence we focus on GDP per capita as the key economic outcome and apply the synthetic control method developed by Abadie and Gardeazabal (2003) and Abadie et al. (2010). The method is widely used in the literature to examine the causal effects of policy changes or interventions more generally.[11] Similar to the difference-in-difference (DiD) approach, it compares pre- and post-treatment outcomes between a treated group (usually, a single case) and a control group. Unlike the DiD approach, however, it does not rely on a pre-selected control group for which the parallel trends assumption must hold. Instead, it constructs a counterfactual ('synthetic') outcome for the treated that should hold in the absence of the treatment, by means of a linear combination of outcomes from a set of 'donors' drawn from a larger 'donor pool', with weights estimated from a pre-selected set of covariates which match, in the pre-treatment period, the outcomes observed for the treated. Given recent criticisms about the computational method for the derivation of weights of the Abadie approach, suggesting that this may overestimate the true effect (Becker and Klößner, 2017; Becker and Klößner, 2018a), we also use an alternative computational method and compare the results.[12]

In the particular case at hand, the synthetic control approach allows us to construct Serbia's and Montenegro's economic trajectories – in terms of GDP per capita – had the two countries not separated in 2006. We first obtain a linear combination of non-treated countries (i.e., ones which did not experience sovereignty changes) which successfully predicts Serbia's and Montenegro's GDP per capita pre-independence; and then use this to construct the 'synthetic' GDP per capita values for Serbia and Montenegro post-independence. These synthetic values – representing a prediction of the unobserved counterfactual trajectories in GDP per capita in the two countries had they not separated – are then contrasted to the observed values of GDP per capita. Under the assumption of stability in the relationships predicting GDP per capita for the two countries, the difference between observed and counterfactual values can be interpreted as the causal effect of the treatment, in our case the official separation of the two countries.

agnostic on this claim, noting that a greater scope for policy change could potentially lead to both greater and smaller positive effects, depending on the direction of policy change and the quality of policy delivery post-independence.

[11] See, inter alia, Miguel and Roland (2011), Billmeier and Nannicini (2013) and Pinotti (2015).

[12] Using the R package MSCMT developed in Becker and Klößner (2018b). For the Abadie and Gardeazabal (2003) method we use the Synth package developed in Abadie et al. (2011).

Implementation of the synthetic control method requires a choice on two key components: the set of covariates (i.e., the variables on which to match the donors and the treated pre-treatment) and the donor pool (i.e., the set of countries which can potentially give weights to the synthetic outcome). Our analysis uses a large set of covariates that are relevant in explaining country and temporal variations in GDP per capita. Following Campos et al (2018), this includes the investment share to GDP, population growth, income per capita, labour productivity and the employment-to-population ratio (from the Penn World Tables), as well as the value-added and employment shares of agriculture and industry and the shares of imports and exports to GDP (from the World Bank Indicators). This set of covariates is motivated by the drivers to GDP growth identified in the broader growth literature (Barro, 1991; Levine and Renelt, 1992) and has been used in a wide range of studies applying the synthetic control method for the analysis of GDP trajectories, both for advanced countries and for countries in similar levels of development to Serbia or Montenegro (Billmeier and Nannicini, 2013; Grier and Maynard, 2016; Bilgel and Karahasan, 2019). Although data coverage, separately for Montenegro and Serbia, starts from 1990, we discard observations before 1995 due to the political instabilities and violent conflicts in the ex-Yugoslavia in the beginning of 1990s. The data used are presented in Table A.1 in the Appendix.

Using this set of variables, we have in total 65 potential countries which can be in the donor pool. Consistent with applications elsewhere in the literature (Fernández and García-Perea, 2015; Hope, 2016; Campos et al, 2018), for our analysis we select in the first instance a sub-set of these countries which fulfill the selection criteria identified in the literature.[13] Specifically, we select 15 countries from Central Eastern Europe, the Western Balkans and the EU's Eastern Neighbourhood, which share a similar history of post-communism transition and EU association and thus are deemed as broadly comparable to Montenegro and Serbia also in terms of geo-political context.[14] We present the results from this core analysis in the usual fashion, reporting the trajectories of synthetic and actual Montenegro/Serbia before and after independence as well as the country weights that load into the synthetic outcomes. In order to provide some inferential base for the estimated gap, we implement the standard placebo testing found in the literature (following Abadie and Gardeazabal, 2003), replicating the analysis for the non-treated countries in our donor pool and comparing the Montenegro and Serbia results with those of the placebo tests. If the observed gaps found for Serbia and Montenegro are smaller to those found for other countries in the placebo exercise, we cannot discard the possibility that the estimated effects for our cases are driven by some unobserved confounding factor or underlying process.

[13] These are: similarity in observable characteristics (to avoid interpolation bias); absence of structural shocks in the donor countries; similarity of the structural processes driving outcomes in the treated and donor countries; and absence of spillover effects from the treatment to the donor countries (Abadie et al, 2015).

[14] Albania, Bulgaria, Cyprus, Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia and Ukraine.

Concerning the issue of counfoundedness, we extend our analysis in two ways. First, by removing from our donor pool the country which is an immediate neighbour of Serbia and Montenegro (Albania, which incidentally comes up as the main contributor in the synthetic control exercise) and repeating our analysis for the remaining countries in the donor pool. This allows us to avoid a donor-dependency in the results arising from the fact that one of the contributors in the donor pool may have also been treated (i.e., affected directly by the separation of Serbia and Montenegro). Second, by examining openly the possibility that economic developments post-independence in the two countries – and in particular in Montenegro – may have been related more to changes in FDI flows than to independence per se. To this purpose, we replicate our analysis including FDI in our set of covariates. Additionally, we implement a synthetic control exercise for FDI and the exports and imports series of Montenegro, in order to test if there is a shift in variables relating to the external environment at the point of independence, which may explain any shift in GDP per capita found post-independence.

For further robustness, we also implement an extended donor resampling exercise, following Campos et al. (2018), to examine the extend of donor dependency in our core results. From the full set of 65 countries for which we have data we randomly select a donor pool with the same cardinality as our original donor pool (15 countries) and re-estimate the impact of independence for our cases from this alternative donor pool. We replicate this 1,000 times, thus deriving a distribution of estimates for the effect of Montenegro's (and Serbia's) independence. We then present two visual checks. The first shows the range of effects estimated with alternative donor pools, providing pseudo-confidence intervals and allowing us to test whether the result deriving from the donor pool of our choice, in the core analysis, represents an outlier. The second allows us to examine more directly the issue of donor-dependency: it plots the weights assigned to each of the 65 countries, in each of the 1,000 replications, against the range of estimated effects (gaps in actual and synthetic GDP per capita series). If the patterns depicted in this plot appear random, this can be taken as confirmatory evidence suggesting no donor-dependency in the obtained results.

IV. Results

IV.a. Montenegro

We start our analysis for the case of Montenegro, the main case of interest, as it was Montenegro's declaration of independence which triggered the dissolution of the State Union of Serbia and Montenegro. Figure 2 presents the results from our core analysis, using the Abadie and Gardeazabal (2003) synthetic control method and our core donor pool of 15 New Member States and EU-associated countries. As can be seen, the trajectories for the observed and synthetic Montenegrin GDP per capita indicate a sizeable positive effect from independence, which was however shortlived – starting to decline post-2008 and eventually

converging to near zero by 2014. In the fitting period (1995-2005) the synthetic series follows closely Montenegro's observed GDP per capita, showing that the selected donor pool fits particularly well the case at hand. Soon after the declaration of independence by Montenegro, however, i.e., already by the end of 2006, observed Montenegro records higher levels of GDP per capita. The gap peaks in 2008 at a value of 3,114 2011 US dollars, almost 25% above the synthetic outcome. From then on, the gap starts to shrink, a bit abruptly in 2009 and then more steadily until the end of the period covered by our data. On the basis of this, the first conclusion to be drawn is that independence seems to have had a sizeable but only temporary effect for Montenegro.

INSERT FIGURE 2 AROUND HERE

Figure 3 shows the country weights underpinning the results of Figure 2. As already noted, neighbouring Albania contributes the most in the weights for the construction of synthetic Montenegro (60.6%). Poland and Lithuania each contribute with one sixth, while Malta takes up 5%. To examine whether the obtained results are driven by the case of Albania, which may also had been directly affected by the dissolution of the State Union of Serbia and Montenegro as a direct neighbour, we replicate this analysis excluding this time Albania from the donor pool. The results from this exercise are particularly reassuring (see Figures A.1 and A.2 in the Appendix). Synthetic Montenegro comprises now of Georgia (55.2%), Poland (35.3%) and Malta (9.5%). The fit in the fitting period is equally good and the estimated effect remains the same: the predicted gap rises already from 2006, peaks in 2008 (at 3,234 2011 US dollars this time) and declines subsequently, getting completely eliminated by the end of the period (a difference of -7 2011 US dollars in 2014). Similarly reassuring are the results from the exercise replicating this analysis using this time the alternative computational method proposed by Becker and Klößner (2018a) (see Figures A.3 and A.4 in the Appendix). This produces identical results to those obtained from the Abadie and Gardeazabal (2003) method when Albania is excluded, both with regard to the country weights and with regard to the size and evolution of the gap.

INSERT FIGURE 3 AROUND HERE

While these tests increase our confidence about the accuracy of the obtained results, it is important to examine further whether the observed effect of independence for Montenegro could have been produced in a probabilistically random way. A first step for this is the implementation of the placebo testing proposed by Abadie and Gardeazabal (2003). To implement this, we assign treatment status to each of the countries in our baseline donor

pool, re-run the estimation, and report the gaps of the observed and synthetic outcomes for all 15 replications. The results from this exercise are presented in Figure 4a. As can be seen, for the period immediately following independence (2006-2008), Montenegro's gap is above those observed for all other countries, indicating that this is not merely a random realisation. The only two cases approximating the Montenegrin gap are those of Slovenia and Romania (with the trend, in both cases, starting on the year of their respective accession to the EU – consistent with the results reported in Campos et al., 2018).[15] Post-2008, the gap for Montenegro is becoming relatively small compared to the other gaps and by 2014 the gap stands very close to zero and below the mean value of the placebo gaps. This result corroborates clearly the interpretation given earlier, that independence produced a positive but shortlived (temporary) effect for Montenegro.

A second way of making a probabilistic inference for the validity of this result is by means of the donor-pool dependency test as demonstrated in Campos et al. (2018). Figure 4b presents the results from this analysis, involving 1,000 donor resampling replications with constant-size donor pools (15 countries), drawn from the full set of 65 countries in our data. Our original estimate (black line) and the 5th and 95th percentile of the resampling results (darker gray lines) are highlighted for ease of inference. As can be seen, our preferred estimate (based on the baseline donor pool) belongs clearly to the lower bound of results. At the extreme (95th percentile), we get estimated gaps reaching 4,775 2011 US dollars in 2008; while our lower-bound estimate (5th percentile) for the same year is at 2,774 2011 US dollars. In all cases, we find an unambiguous positive income effect for Montenegro following independence.

Post-2008, the predictions of the gap seem to diverge. For the most extreme estimates (near or above the 95th percentile), the positive gap persists, surviving a small reduction in 2009-2010 (presumably associated with the effects of the Global Financial Crisis – see Section V) and reaching 2014 at values similar to those observed in 2008. However, for the vast majority of the obtained estimates, the gap does not recover post-2010 or, even more, continues to decline. At the median, the gap in 2014 is about 57% of that found in 2008, while more than 7% of the realisations indicate a negative gap. As the zero-gap in 2014 lies within the 5% (pseudo-)confidence interval, we are forced to conclude that the hypothesis of a temporary-only positive effect of independence for Montenegro cannot be rejected. This, despite the fact that the main thrust of results shows a subsided but still positive effect even 7 years past independence.[16]

[15] Malta, Hungary and Poland appear to have experienced a negative shock compared to their synthetic counterfactuals.

[16] It is of course possible that the dampening over time of the observed positive independence premium may be associated to the impact of the global financial crisis. Specifically, as Montenegro is a small economy, independence may have increased the country's exposure to, and vulnerabilities associated with, the global economic environment. We address this issue in Section V.

INSERT FIGURE 4 (4a and 4b) AROUND HERE

We take this analysis one step further and in Figure 5 we present a novel depiction of the results underpinning Figure 4b, allowing us to examine whether the size of the estimated gap (across the 1,000 realisations) is driven by any particular countries.[17] This is important not only as a question of curiosity but also in order to inform our inference about which range of results may seem more plausible given the specific geographical, political, historical etc. context of the case at hand. As can be seen, the distribution of weights across the different values of the estimated gap appears reasonably random. The countries appearing as the main contributors in the derivation of the weights seem to share one of two key characteristics with Montenegro: either a recent history of post-communist adjustment and EU association (Poland, Georgia, Lithuania, etc.) or a geomorphology related to marine and tourist activities (island or sea-shore economies – El Salvador, Tunisia, Cabo Verde, etc.).[18] Among the main donors, Poland and Lithuania appear to produce smaller (and sometimes negative) estimated gaps; while Georgia and Cabo Verde are generally associated with larger gaps. Besides these observations, however, it is difficult to decipher any particular geography or other pattern in the data. This provides further reassurance for the overall validity of our obtained result.

INSERT FIGURE 5 AROUND HERE

IV.b. Serbia

The case of Serbia allows us to test whether the effects of independence are 'symmetric', i.e. if they apply equally and in the same manner to the seceding entity and the one 'left behind'. Formally, Serbia also declared its independence – only two days after Montenegro – and in this sense also obtained increased policy autonomy and state sovereignty. If the effect of independence is uniform irrespective of context, we would expect to find a similar – positive but transitory – effect for Serbia's independence. If, inversely, the effect of independence is mediated through case-specific channels (e.g., a sense of 'liberation' versus a sense of 'loss'; or enhanced 'visibility' and economic optimism about expected policy changes in the seceding country,), then the effect for Serbia could be much different.

[17] An R routine for the implementation of this analysis is currently under development and can be made available from the authors.

[18] Inversely, the list of countries offering consistently the lowest weights includes countries with very different political economies and economic histories, such as South Korea, Japan, Russia, Switzerland etc. Notably, however, it also includes some countries with perceivably similar histories (Slovenia, the Czech Republic, Bulgaria, Ukraine, Estonia, Hungary and Slovakia).

We examine this in Figure 6. For reasons of brevity, we do not include the full set of visual depictions, but only present the graph concerning the donor resampling exercise (analogous to Figure 4b), which captures the effect in detail. The results indicate that Serbia's independence produced a qualitatively very different effect compared to Montenegro. In the years following immediately the dissolution of the State Union of Serbia and Montenegro, the gap between observed and synthetic GDP per capita for Serbia was fluctuating around zero for most of the donor pools. On the whole, while our baseline specification (black line) indicates a negative effect on Serbia's output[19], falling below -2,500 2011 US dollars in 2014, the estimated effects falling within the 5th and 95th percentiles of effects include both negative and positive estimates throughout the period. Thus, and although by 2014 only around 20% of donor pools yield a positive effect of independence for Serbia, the range of the obtained results means that we cannot unambiguously claim any sign for the effect of independence, as the implied null of a zero-effect lies well within our (pseudo-)confidence interval.[20]

Descriptively, however, we can make some further observations. In all resampling realisations, the year following Serbia's independence (2007) has been a year of relative decline (relative to the other countries forming 'synthetic Serbia' – observationally, in 2007 Serbia was still registering fast GDP growth at 5.9%); while 2008 and 2009 were years of relative over-performance (again, relative to 'synthetic Serbia' – in absolute terms, in 2009 Serbia experienced a negative growth rate at -3.1%). From there on, our estimates diverge. For the majority of realisations, Serbia follows a downward trend compared to its synthetic counterfactual (as fitted in the pre-independence period), losing ground uninterruptedly between 2010 and 2014. But for a small subset of realisations Serbia over-performs its synthetic counterfactual at least since 2011.[21] In all cases, the trajectories depicted suggest a minimal – if at all present – role of independence for the subsequent evolution of Serbia's GDP per capita. Compared to the changes observed following the eruption of the Global Financial Crisis, the changes in 2006-2007 are rather miniscule. It is thus reasonable to conclude that for Serbia independence had no substantive economic effect – at least not until the eruption of the crisis.

INSERT FIGURE 6 AROUND HERE

[19] Using the baseline donor pool, synthetic Serbia comprises 55.2% Albania, 37.1% Lithuania, 7.2% Georgia and 0.2% Poland and Ukraine, each.

[20] We obtain very similar results, corroborating this conclusion, from the remainder of tests that we performed (placebo testing, estimation of weights via the Becker and Klößner, 2018a, method), which are available upon request.

[21] From results not shown, analogous to Figure 6, it appears that Serbia over-performed its synthetic donors who were heavily affected by the crisis but lagged significantly behind synthetic donors who were relatively unaffected.

V. Further analysis: crisis and the role of external vulnerabilities

This last observation – together with the transitory nature of the effect observed for Montenegro – raises an important question. Is the deterioration of economic performance observed for the two countries, with the advent of the Global Financial Crisis, related to an increased vulnerability for the two countries to shifts in the international economic environment following their separation? Inversely, for the case of Montenegro, could the observed positive effect for the 2006-2008 period be driven by an underlying confounding factor, not directly or exclusively related to independence? Although we cannot provide definitive answers to either of the two questions, in this subsection we attempt a tentative exploration of the issue, by looking at the role played by a number of external and internal factors. Our emphasis is on the role of international capital flows, in the form of foreign direct investments (FDI), and on trade (changes in the volume, composition and destination of exports). Additionally, we discuss the possible role played by a variety of other factors, including the sectoral specialisations and structure of the two economies, the monetary policy regime (especially for Montenegro which was unilaterally euroised) and others – factors that may account for the enhanced vulnerability of the two economies post-separation and in the context of the Global Financial and Eurozone crises.

Concerning FDI, it should be noted that this has been historically very low in the two countries, representing in the State Union of Serbia and Montenegro values below or well below 1% of GDP until the turn of the century. The situation changed with the political stabilisation in the region after 2002 and FDI started increasing steadily in both countries since 2004 – reaching, according to UNCDAT data, values around or above 20% of GDP in Montenegro and near or below 10% of GDP in Serbia by 2006. In both countries, this fast rise in FDI was interrupted with the Global Financial Crisis (Bartlett and Prica, 2012; Radenkovic et al., 2015), as is also depicted in Figure 7.

Visual inspection of the trends depicted in Figure 7 suggests that FDI does not seem to have been a part of the story concerning the causal effects of independence, at least in the short-run. In both countries, FDI started to increase well before the 2006 declarations of independence and – if anything – in Serbia FDI inflows stabilised immediately after independence; while in Montenegro FDI inflows continued to growth at the same pace as before. In both cases there is a collapse of FDI coinciding with the Global Financial Crisis, even if the fall in Serbia pre-dates that of Montenegro by a couple of years. Since 2012 FDI inflows for Serbia seem to have been on a recovering path, whereas for Montenegro FDI inflows seem to have stabilised completely. On the basis of these trends, it is difficult to decipher any direct relationship between FDI (as a measure of exposure to vulnerabilities associated with the crisis) and the GDP per capita gaps derived from the synthetic control analysis, at least for the case of Serbia: Serbia's deteriorating gap since 2010 doers not seem to square either with the sudden fall in FDI (in 2008/09) or with the upward trajectory that FDI has followed since 2012.

INSEERT FIGURE 7 AROUND HERE

The case of Montenegro is slightly less straightforward. Montenegro's FDI acceleration happened well-before the GDP per capita acceleration observed in the synthetic control analysis; nevertheless, the gradual elimination of the positive gap does coincide temporally with the decline in FDI flows after 2008. It appears that this case warrants some further exploration. We do this by implementing two further pieces of analysis. First, we re-run our baseline analysis for Montenegro, this time including FDI in our list of covariates. If FDI had been an important driver for the economic acceleration seen in Montenegro since independence (while not being causally driven by the latter), inclusion of this variable in the analysis should produce a much toned-down post-independence effect. In contrast to this expectation, the results obtained in this analysis are almost identical to the core results presented earlier (see Figures A.5 and A.6 in Appendix): the sizeable positive gap peaking in 2008 remains and the gap starts declining thereafter, practically disappearing by 2014. On the basis of this result, it would appear that the subsiding of the estimated independence premium for Montenegro since 2010 is not directly related to the crisis (at last as far as FDI flows are concerned).

INSERT FIGURE 8 AROUND HERE

Our second test concerns the potential role that independence may have had for FDI inflows. To examine this we implement a synthetic control analysis, similarly to the one implemented for the case of GDP per capita, this time treating FDI as our outcome variable of interest (Figure 8). Data availability in this case restricts us to a shorter fitting period (2002-2005). Despite this, the fit between observed and synthetic FDI appears broadly satisfactory. Importantly, the synthetic series follows very closely the actual FDI flows until 2008 but fails to mirror the substantial drop in FDI experienced by Montenegro since 2009.[22] We can draw two inferences from this evidence. First, and consistent also with the descriptive evidence in Figure 7, we observe no change in FDI trends around the year of Montenegrin independence. In other words, FDI does not appear to have been the vehicle via which the positive effects from independence materialised in Montenegro. Second, and inversely, we do observe a significant break with the underlying FDI trend (as captured by the synthetic series) since 2010, i.e., as the Eurozone crisis started to unfold following the Global Financial Crisis. This experience is unique for Montenegro (compared to its donor pool) and may well explain the subsiding of the positive GDP per capita gap in the same period (and against the same baseline

[22] The result is marginally insignificant at the 5% level using our pseudo-significance criterion (95th percentile from 1,000 resampling realisations) but in economic terms it is very sizeable.

donor pool). If this is a valid link, the implication is that independence brought with it vulnerabilities which may have annulled the positive effects of independence when global financial turbulence ensued. In contrast, in the case of Serbia (results not shown but available upon request) we observe no substantive gap between synthetic and actual FDI since the eruption of the crisis – indicating that Serbia's worsening economic performance via-a-vis the synthetic benchmark (in terms of GDP per capita) is not related to an increased vulnerability with regard to changes in international capital flows associated to the crisis.

To see how these conclusions generalise for the case of other indicators of international economic activity, we can extend this analysis for the case of trade data. Figure 9 reports the results for this, separately for exports and imports (both as a share to GDP). As can be seen, the results suggest no post-independence effect for imports (but a reduction of imports relative to the synthetic counterfactual since the eruption of the crisis), but return a rather counter-intuitive effect for exports, which starts immediately with Montenegro's independence. Specifically, exports decline quite significantly with independence, before stabilising at much lower levels than historically with the eruption of the Eurozone crisis. In contrast, the counterfactual export series continues to grow, suggesting that independence brought uniquely a detrminetal effect on Montenegrin exports.

INSERT FIGURE 9 (9a and 9b) AROUND HERE

Quite clearly, these results go in the opposite direction of those found for FDI. To explore this further, we can look at the trade data more closely and examine how patterns of trade changed with indpependence. Drawing on data from the World Integrated Trade Solution (WITS) database produced by the World Bank (see Figure A.7 in Appendix), the decline in Montenegrin exports since independence does not appear to be linked significantly to any immediate shifts in export destinations (trade diversion). By 2010, Montenegrin exports to the EU had declined sizeably – presumably as the crisis reduced demand for imports in the main EU markets – but the EU remained by far the main export destination for Montenegro (followed by Serbia, which was – and remains – the main destination as a single country). Instead, evidence of trade diversion appears more plentiful in the subsequent period (2010-2014), with trade being diverted away from the EU and Serbia, in the direction of the rest of the Western Balkans and the rest of the world.

These patterns cannot explain the observed effects found for Montenegro: neither the independence premium (exports did not increase and FDI did not accelerate) nor its subsiding with the crisis (only in part, for the case of FDI, not at all for the case of exports, which start declining earlier and stabilise completely at the time when the independence premium for Montenegro appears to dissipate). Still, there are reasons to believe that the short longevity

of the estimated effect may have something to do with the increased vulnerability of Montenegro post-independence, which may have played a detrimental role during the crisis. As a final attempt to understand this better, we have considered the role that sectoral specialisations may have played in this regard, as well as for the disparate effects found between the two countries (Serbia and Montenegro). Starting with information on export specialisations, we note that although the main product categories for Montenegrin (and Serbian) exports change over time, there is no evidence to suggest substantial shifts in the composition of exports overall, that would explain the effect we find for Montenegro.[23] Concerning sectoral specialisations at large, it appears that – despite the known difference in economic structures between the two economies – at the aggregate level at which relevant data are available differences in sectoral shares between Serbia and Montenegro are not very large, perhaps with the exception of industry in Serbia and of tourism/hospitality in Montenegro. Moreover, the relative importance of the different sectors has not changed dramatically in the two economies either post-separation or with the crisis.[24] In this regard, differences (or changes) in economic structure do not appear to explain the patterns regarding the impact of independence on the two countries' GDP.

We are left with two other sets of explanations, for which however we have no relevant data on which to perform detailed analysis and thus we can only speculate. One concerns the degrees of freedom of monetary policy in the two countries. In Serbia, monetary policy was able to adjust to the crisis partly through currency devaluation. In contrast, Montenegro's unilateral euroisation may have rendered the Montenegrin economy far more vulnerable to external shocks, as no shock-absorption could be made through currency adjustments. This may also had impacts on domestic credit expansion, as the crisis was transmitted more strongly to Montenegro than to Serbia, with the current account deficit sky-rocketing in the latter case alredy since 2008 (Bartlett and Prica, 2012).[25] The second concerns the size of the two economies. Montenegro's smaller size may have direct implications for the resilience of its economy to external shocks. This can be due, for example, to the small size of domestic demand, implying greater exposure to fluctuations in external demand; or due to a pure scale effect, as the relatively smaller scale of production may create vulnerabilities for firms, hindering their ability to adjust to external shocks.

An alternative explanation for the observed effects may be that independence created asymmetric sentiments in the two countries, which would in turn impact on economic performance. Although data on economic sentiment for the two countries are not available for the period around their separation, data from the World Bank Enterprise Surveys of 2005 and 2009 show indeed an improvement in business perceptions in Montenegro on a series of

[23] We use data from the Observatory for Economic Complexity. Results available upon request.

[24] We use Eurostat data on sectoral GVA. Results for the post-separation (2006-2010) and post-crisis periods (2010-2014) are available upon request.

[25] Devaluation in the case of Serbia may also explain why remittances appeared to be more resilient in this case than in Montenegro.

institutional indicators (corruption, efficiency of courts, crime/disorder, tax administration and business licensing) but no similar improvements in perceptions for the case of Serbia (see Figure A.8 in Appendix). Interestingly, more objective measures of institutional quality do not corroborate these improved perceptions in Montenegro. For example, the Economist Intelligence Unit Democracy Index shows a continuous deterioration in institutional quality between 2006 and 2010 both for Montenegro and for Serbia; while a similar deterioration is reported for Montenegro (but not for Serbia) between 2005 and 2009 in the World Bank Government Effectiveness Index.[26] It can thus be concluded that the observed improvement in perceptions of institutional quality in Montenegro in the period 2005-2009 represents more improvements in sentiment, or confidence, than an effect that is driven directly by material improvements in institutional quality. This is intuitive. For Montenegro, independence created undoubtedly positive sentiments, giving more optimism about the country's EU trajectory and future prospects, even if this optimism dissipated subsequently, as the global financial crisis exposed the vulnerabilities of the Montenegrin economy (high current account deficits, no independent monetary policy, small scale of production, etc); while for Serbia the sentiment was more negative – with separation from Montenegro signalling more a deceleration of the country's trajectory towards the EU and continuing loss of economic and political weight.

VI. Conclusions

The last ten years or so have seen a shift of policy preferences towards more national autonomy, against the tide of economic and political integration seen in previous decades. Despite this, empirical evidence concerning the economic dividends, or penalties, of enhanced national autonomy and political disintegration remains thin in the academic literature. Unlike historical cases of secession and new state formation, the recent dynamic towards political disintegration concerns mainly peaceful separations, of entities which have been enjoying already a great degree of policy autonomy and which have typically higher levels of development than the unions to which they belong – ensuring much policy continuity post-secession, limited disruption from military conflicts and, presumably, limited scope for gains from acquiring additional policy autonomy.

Motivated by these observations, in this paper we exploited the unique case of the dissolution of the State Union of Serbia and Montenegro in 2006 which, uncommonly for the region, shares many of the features described above. Our analysis relied on state-of-the-art techniques which are particularly suited to the study of the causal impacts of unique historical events. By applying the synthetic control method, we were able to construct a counterfactual for the economic trajectories that may had been followed by Serbia and Montenegro had they not separated. Comparing the observed trajectories against the 'synthetic'

[26] Data available from https://info.worldbank.org/governance/wgi/.

counterfactuals, we were able to measure the economic impact that independence had for the two countries.

Our findings are particularly informative. We find that independence for the seceding country (Montenegro) had a sizeable but seemingly transitory positive effect, boosting GDP per capita in the period immediately following independence, but with gains that seem to have slowly evaporated in the longer period – according to our more confident estimates. Exploring this effect further, we unveiled suggestive evidence indicating that part of the explanation for the transitory nature of this effect lies perhaps with an increased vulnerability of the newly independent state to fluctuations and uncertainty in the international economic environment. Instead, the immediate economic gains do not seem to be much related to such fluctuations (e.g., as proxided by the evolution of exports or FDI flows), nor to actual improvements in institutional quality – suggesting in turn that such gains may be related more to positive sentiments (economic optimism and rising confidence in political institutions) linked to independence. For the entity 'left behind' (Serbia), the effects are markedly different. We find no evidence of an independence dividend, neither in the immediate aftermath of separation nor in the longer run. In fact, Serbia's economic performance (measured in terms of GDP per capita) continued to deteriorate gradually against the synthetic benchmark throughout the post-separation period, even if the scale of this effect does not seem to carry much statistical confidence. In contrast to the case of Montenegro, this trajectory for Serbia seems unrelated to the country's record with FDI inflows post-independence and, by implication, to any increased vulnerability that one could associate with the international economic environment. Rather, Serbia's relative economic underperformance (against the counterfactual) may be linked to a loss of dynamism associated with the loss of scale in its internal market, as well as with perceived delays in the country's road to the EU.

On the whole, our results seem to suggest a trade-off between positive economic gains and enhanced economic vulnerability for the seceding entity; and a loss of economic dynamism for the country 'left behind'. It is of course unknown to what extent these findings may apply to future cases of similar secessions, i.e., ones that would entail policy continuity and maintained economic and political ties post-separation. We defer this exploration to future research.

References

Abadie, A. and Gardeazabal, J. (2003). The economic costs of conflict: A case study of the Basque country. *American Economic Review*, 93(1):113–132.

Abadie, A., Diamond, A., and Hainmueller, J. (2010). Synthetic control methods for comparative case studies: Estimating the effect of California's tobacco control program. *Journal of the American Statistical Association*, 105(490):493–505.

Abadie, A., Diamond, A., and Hainmueller, J. (2011). Synth: An R package for synthetic control methods in comparative case studies. *Journal of Statistical Software*, 42(13):1–17.

Abadie, A., Diamond, A., and Hainmueller, J. (2015). Comparative politics and the synthetic control method. *American Journal of Political Science*, *59*(2), 495-510.

Barro, R. J. (1991). Economic growth in a cross section of countries. *The Quarterly Journal of Economics*, *106*(2), 407-443.

Bartlett, W. and Prica, I. (2012). The variable impact of the global economic crisis in South East Europe. *LSEE-Research on South Eastern Europe*.

Becker, M. and Klößner, S. (2017). Estimating the economic costs of organized crime by synthetic control methods. *Journal of Applied Econometrics*, 32(7):1367–1369.

Becker, M. and Klößner, S. (2018a). Fast and reliable computation of generalized synthetic controls. *Econometrics and Statistics*, 5:1–19.

Becker, M. and Klößner, S. (2018b). *MSCMT: Multivariate Synthetic Control Method Using Time Series*. R package version 1.3.3.

Begović, S. (2011). The effect of free trade agreements on bilateral trade flows: The case of Cefta. *Zagreb International Review of Economics & Business*, 14(2):51–69.

Bell, D. N. F., Eiser, D., & Beckmann, K. (Eds.). (2014). The Economic Consequences of Scottish Independence. Helmut Schmidt Universität.

Besley, T. and Smart, M. (2002). Does tax competition raise voter welfare?

Bilgel, F. and Karahasan, B.C. (2019). Thirty Years of Conflict and Economic Growth in Turkey: A Synthetic Control Approach. *Defence and Peace Economics*, *30*(5), pp.609-631.

Billmeier, A. and Nannicini, T. (2013). Assessing economic liberalization episodes: A synthetic control approach. *Review of Economics and Statistics*, 95(3):983–1001.

Blöchliger, H. and Égert, B. (2013). Decentralisation and economic growth-part 2: The impact on economic activity, productivity and investment.

Börzel, T. A. and Hüllen, V. v. (2011). Good governance and bad neighbors? The limits of the transformative power of Europe.

Brennan, G., Buchanan, J. M., et al. (1980). *The power to tax: Analytic foundations of a fiscal constitution*. Cambridge University Press.

Brueckner, J. K. (2006). Fiscal federalism and economic growth. *Journal of Public Economics*, 90(10-11):2107–2120.

Campos, N. F., Coricelli, F., and Moretti, L. (2018). Institutional integration and economic growth in Europe. *Journal of Monetary Economics*, forthcoming.

Darmanovic, S. (2003). Montenegro: The dilemmas of a small republic. *Journal of Democracy*, *14*(1), 145-153.

Darmanovic, S. (2007). Montenegro: A miracle in the Balkans? *Journal of Democracy*, 18(2):152–159.

Džankić, J. (2014). The role of the EU in the statehood and democratization of Montenegro. In *The EU and Member State Building* (pp. 83-101). Routledge.

Feenstra, R. C., Inklaar, R., and Timmer, M. P. (2015). The next generation of the Penn World Table. *American Economic Review*, 105(10):3150–82.

Fernández C. and García Perea P. (2015). The impact of the euro on euroarea GDP per capita. Working Paper No1530, Bank of Spain.

Friis, K. (2007). The Referendum in Montenegro: The EU? s? Postmodern Diplomacy?. *European Foreign Affairs Review*, *12*(1), 67-88.

Grier, K., & Maynard, N. (2016). The economic consequences of Hugo Chavez: A synthetic control analysis. *Journal of Economic Behavior & Organization*, *125*, 1-21.

Hockenos, P. and Winterhagen, J. (2007). A Balkan divorce that works? Montenegro's hopeful first year. *World Policy Journal*, 24(2):39–44.

Hope, D. (2016). Estimating the effect of the EMU on current account balances: A synthetic control approach. *European Journal of Political Economy*, *44*, 20-40.

Levine, R., & Renelt, D. (1992). A sensitivity analysis of cross-country growth regressions. *The American Economic Review*, 942-963.

Miguel, E. and Roland, G. (2011). The long-run impact of bombing Vietnam. *Journal of Development Economics*, 96(1):1–15.

Monastiriotis, V. (2014). (When) does austerity work? on the conditional link between fiscal austerity and debt sustainability. *Cyprus Economic Policy Review*, 8(1):71–92.

Morrison, K. (2008). *Montenegro: a modern history*. IB Tauris.

Morrison, K. and Roberts, E. (2012). *The Sandžak: a history*. Oxford University Press.

Muñoz, J., & Tormos, R. (2015). Economic expectations and support for secession in Catalonia: between causality and rationalization. European Political Science Review, 7(2), 315-341.

Noutcheva, G. and Huysseune, M. (2004). Serbia and Montenegro. *JEMIE*, page 1.

Pinotti, P. (2015). The economic costs of organised crime: Evidence from Southern Italy. *The Economic Journal*, 125(586):F203–F232.

Radenkovic, D. et al. (2015). Role of direct foreign investment in development of Balkan countries (the case of Serbia). *South-Eastern Europe Journal of Economics*, 2(2).

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.

Rodríguez-Pose, A. and Stermšek, M. (2015). The economics of secession: analysing the economic impact of the collapse of the former Yugoslavia. *Territory, Politics, Governance*, 3(1):73–96.

Salmon, P. (1987). Decentralisation as an incentive scheme. *Oxford Review of Economic Policy*, 3(2):24–43.

Stevenson, F. S. (2018). *A History of Montenegro*. Charles River Editors via PublishDrive.

Uvalic, M. (1993). The disintegration of Yugoslavia: Its costs and benefits. *Communist Economies and Economic Transformation*, *5*(3), 273-293.

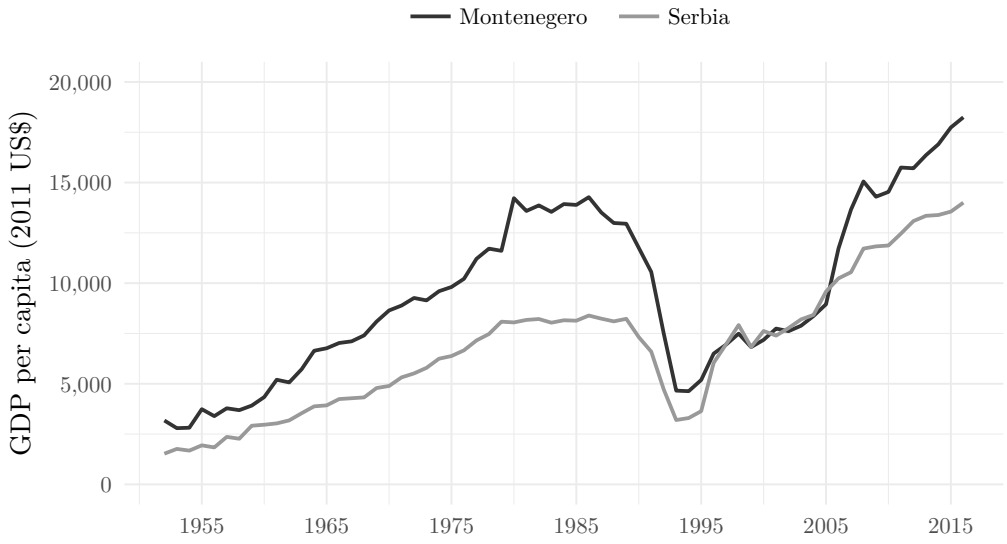
Uvalic, M. (2010). *Serbia's transition, Towards a Better Future*. Palgrave Macmillan.

Vidaurreta, C. F., & Perea, P. G. (2015). The impact of the euro on euro area GDP per capita. *Documentos de trabajo del Banco de España*, (30), 1-33.

Vukicevic, B. (2017). Foreign relations of post-independence Montenegro: A change of direction. *Lithuanian Foreign Policy Review*, 36(1):107–135.

Figures

FIGURE 1 — GDP per capita in Serbia and Montenegro



Source: Maddison project

FIGURE 2 — GDP per capita: observed and synthetic Montenegro

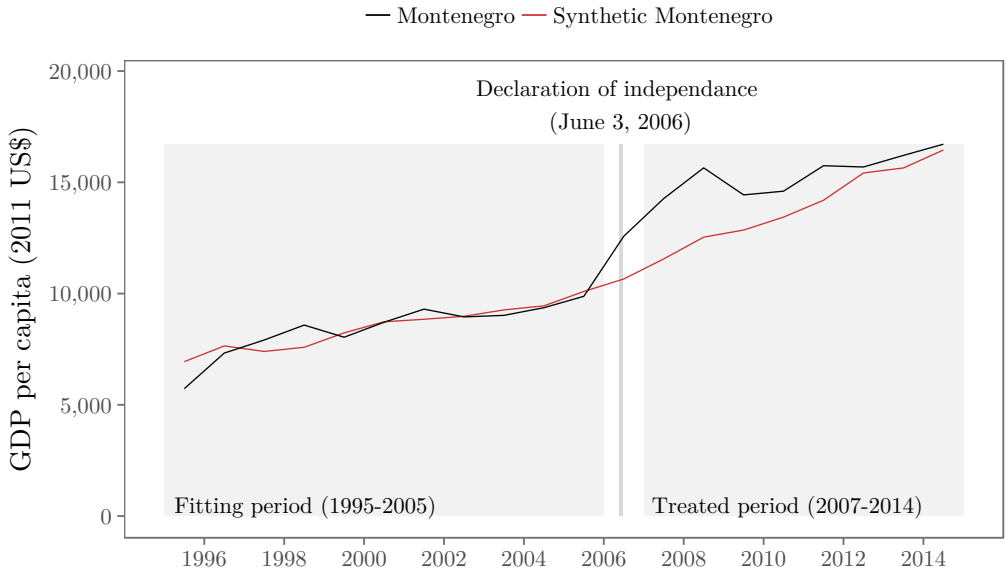


FIGURE 3 — Weights to construct synthetic Montenegro

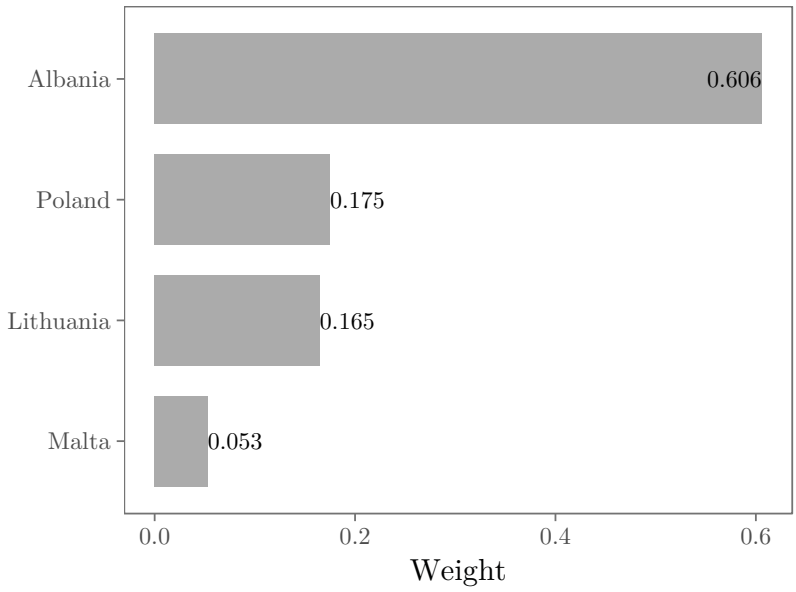
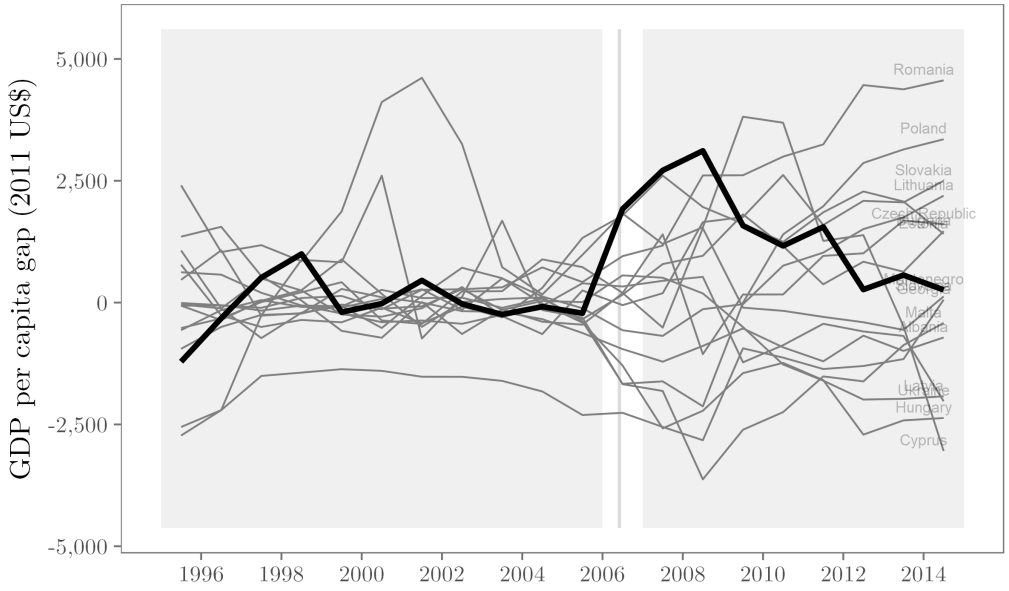


FIGURE 4 — Placebo testing and random donor resampling

(A) Placebo testing



(B) Donor resampling

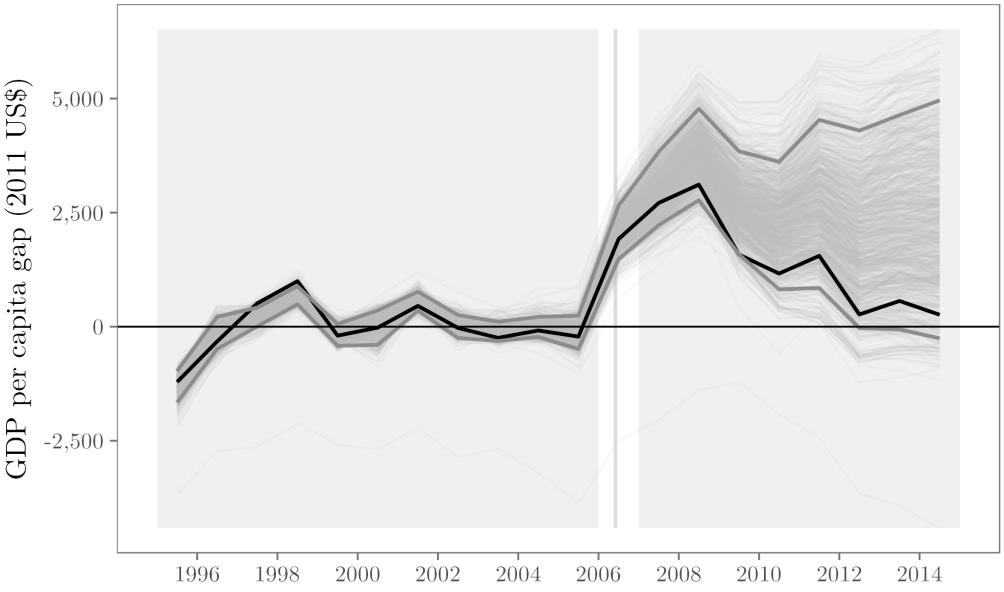


FIGURE 5 — Donor resampling exercise: donor composition (most important donors on top)

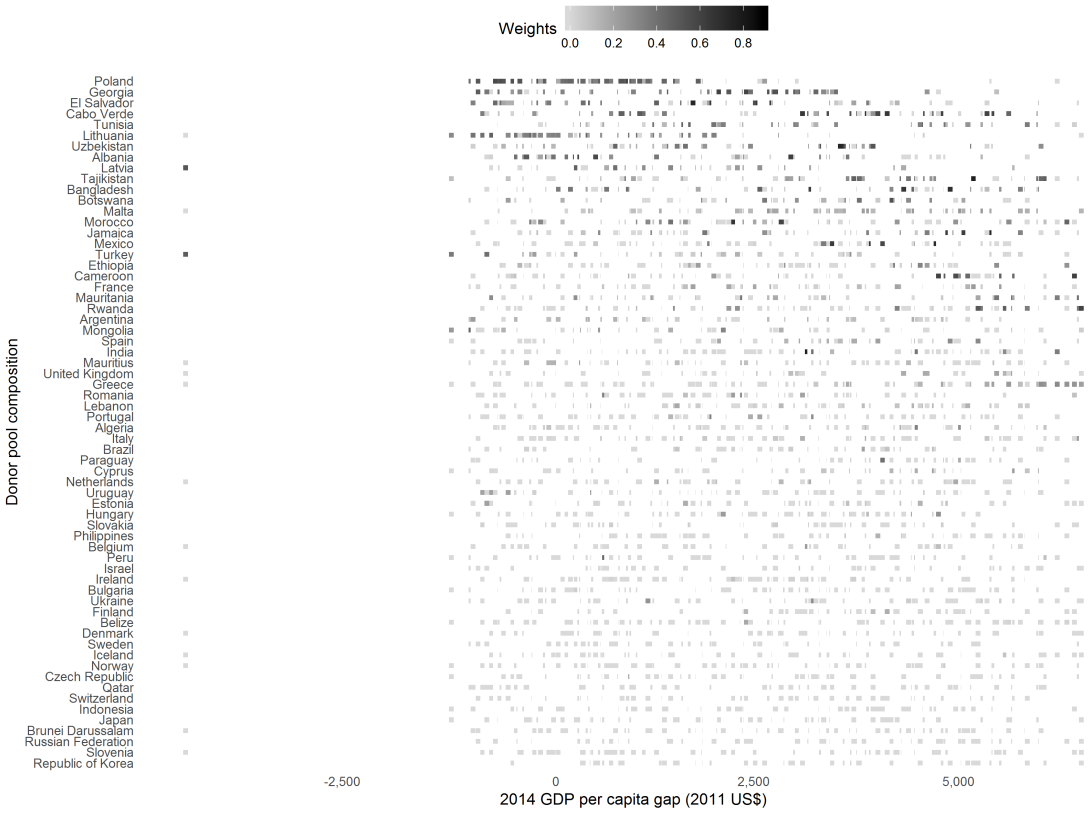


FIGURE 6 — GDP per capita: observed and synthetic Serbia (donor resampling)

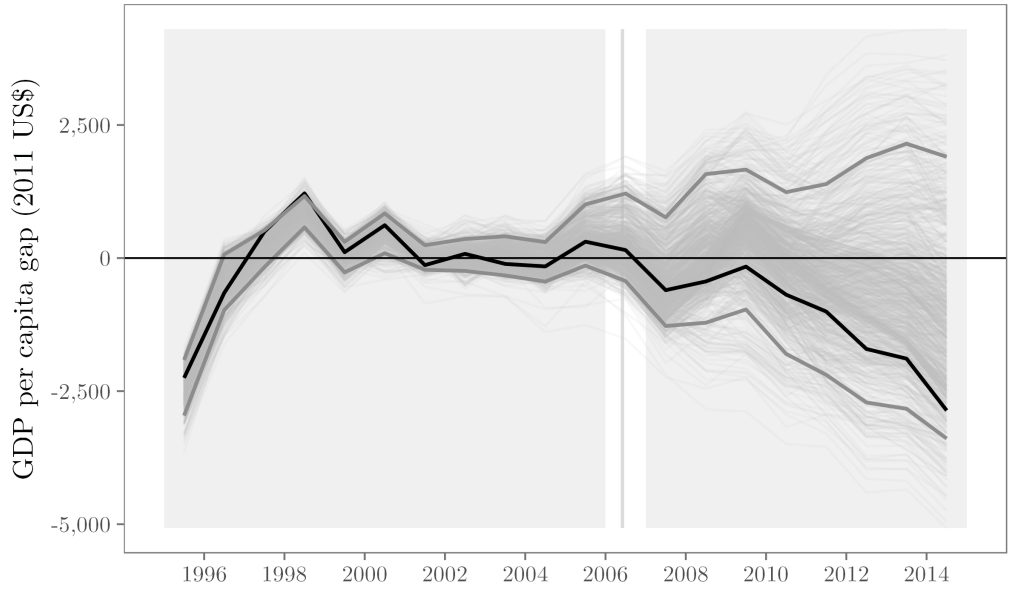
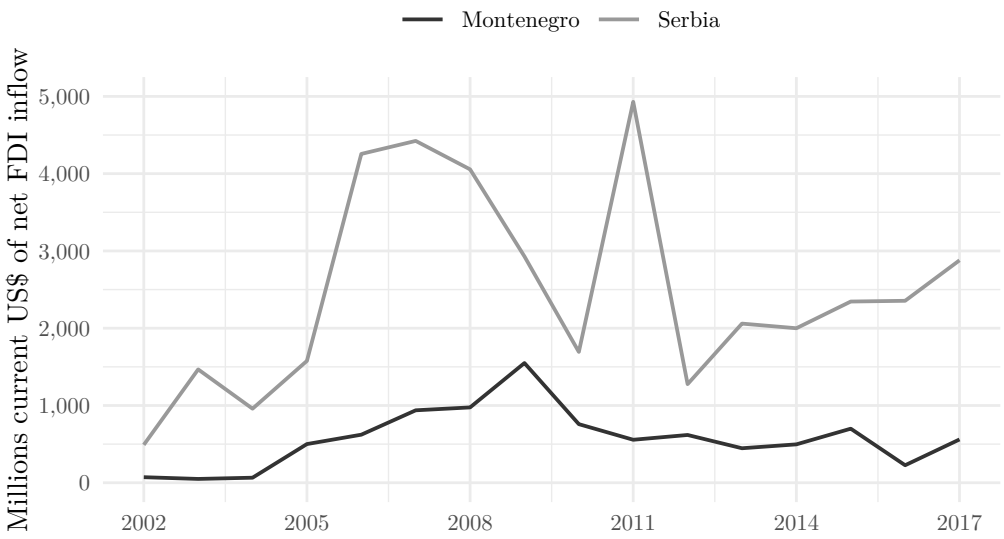


FIGURE 7 — Net FDI inflow in Serbia and Montenegro



Source: World Bank Indicators

FIGURE 8 — Net FDI inflow: observed and synthetic Montenegro

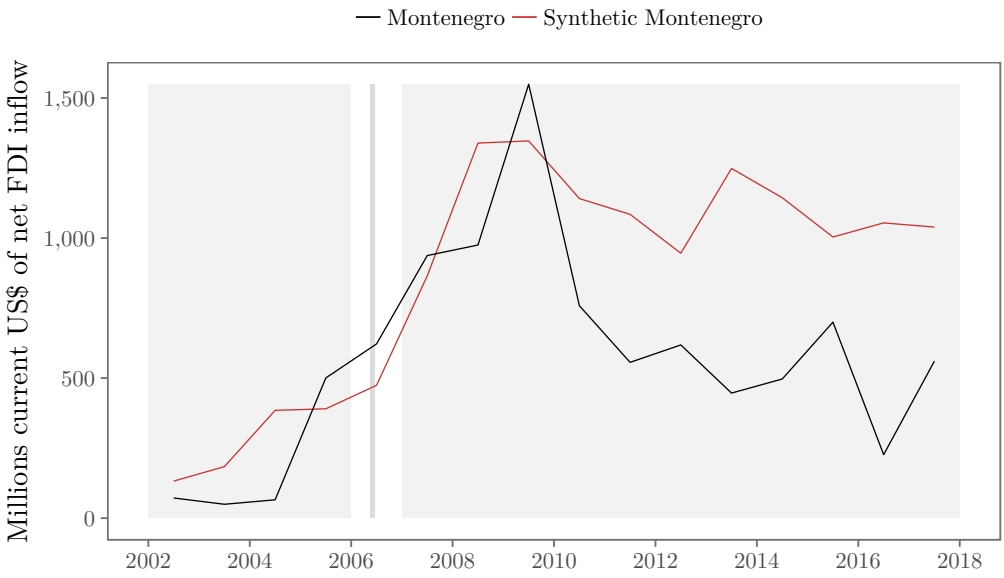
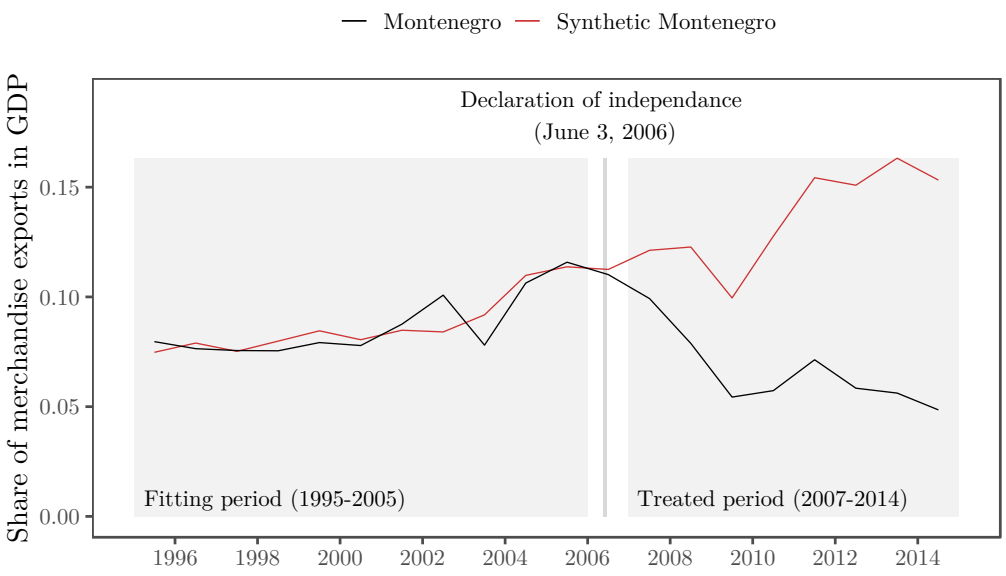
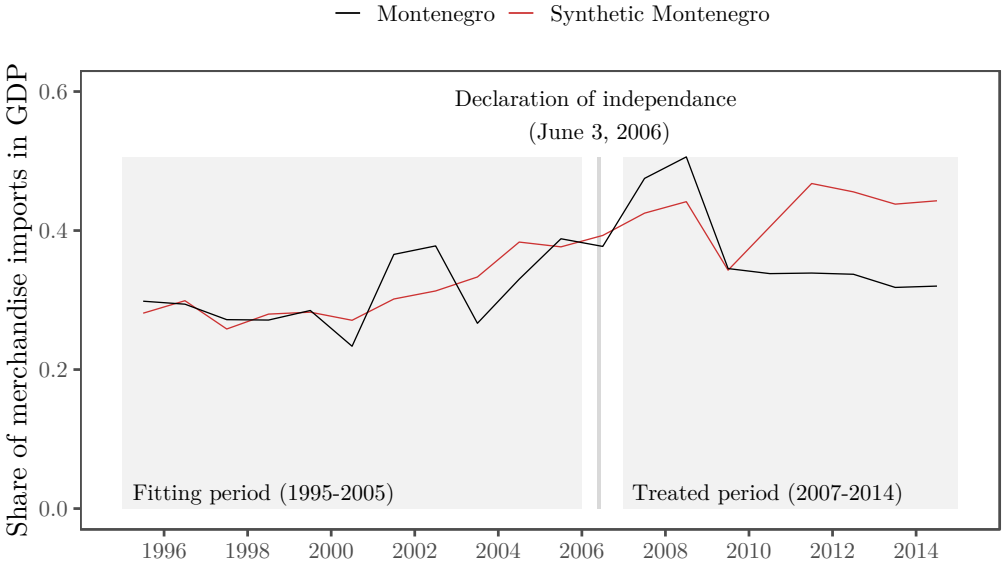


FIGURE 9 — Exports and imports in Montenegro

(A) Exports



(B) Imports



Appendix

TABLE A.1 — Descriptive statistics

Variable	Mean	Std. dev.	Time span	Source
GDP per capita	17,975.260	17,550.560	1995–2014	Penn WT
GDP per employee	40,837.190	31,867.290	1995–2014	Penn WT
Population growth	0.010	0.016	1995–2014	Penn WT
Share of gross capital formation at current PPPs	0.226	0.085	1995–2014	Penn WT
Share of merchandise imports at current PPPs	0.338	0.239	1995–2014	Penn WT
Share of merchandise exports at current PPPs	0.279	0.237	1995–2014	Penn WT
Employment in population share	0.409	0.082	1995–2014	WB Indicators
Agriculture employment percentage	22.100	22.661	1995–2014	Penn WT
Industry employment percentage	24.072	9.012	1995–2014	Penn WT
Agricultue value added percentage	8.863	8.998	2000–2005	WB Indicators
Industry value added percentage	29.427	21.024	2000–2005	WB Indicators
Secondary education percentage	88.293	24.811	2000–2003	WB Indicators
Tertiary education percentage	39.079	23.680	2000–2003	WB Indicators

Note: Mean and standard deviations represent respective statistics for all 65 countries in the denoted time frame.

Baseline results for Montenegro excluding Albania from the donor pool

FIGURE A.1 — Weights to construct synthetic Montenegro

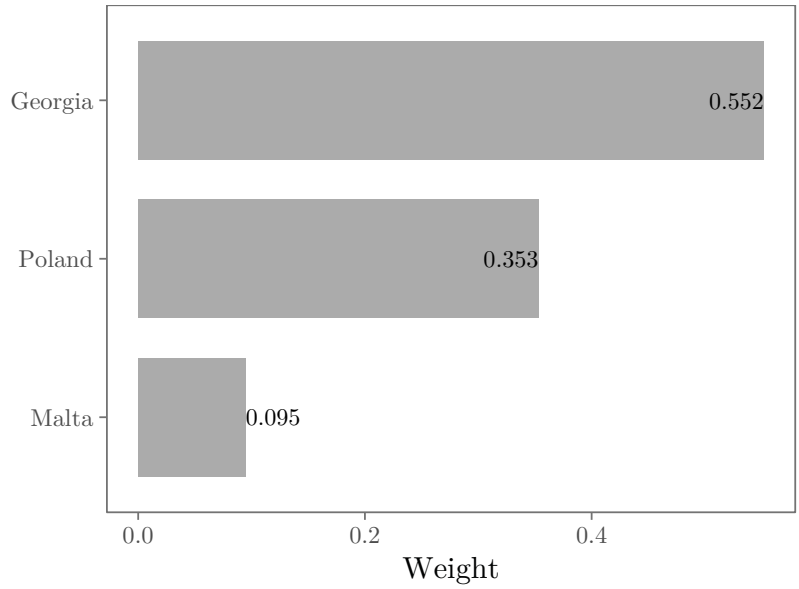
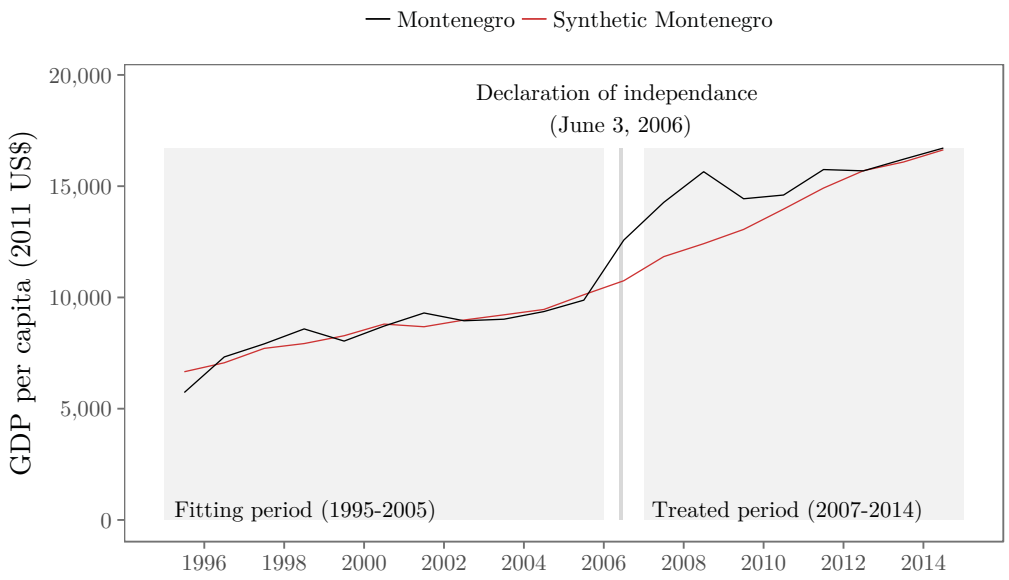


FIGURE A.2 — GDP per capita: observed and synthetic Montenegro



Baseline results for Montenegro using Becker and Klößner (2018a) methods

FIGURE A.3 — Weights to construct synthetic Montenegro

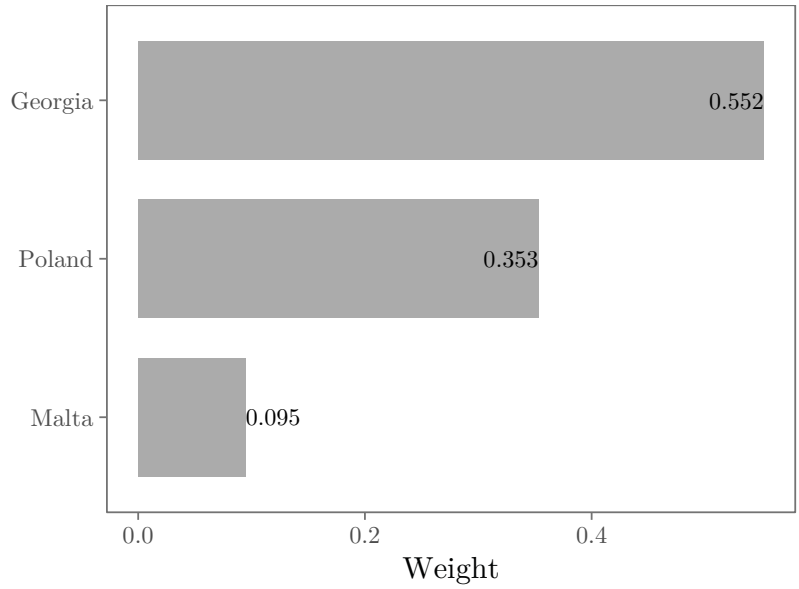
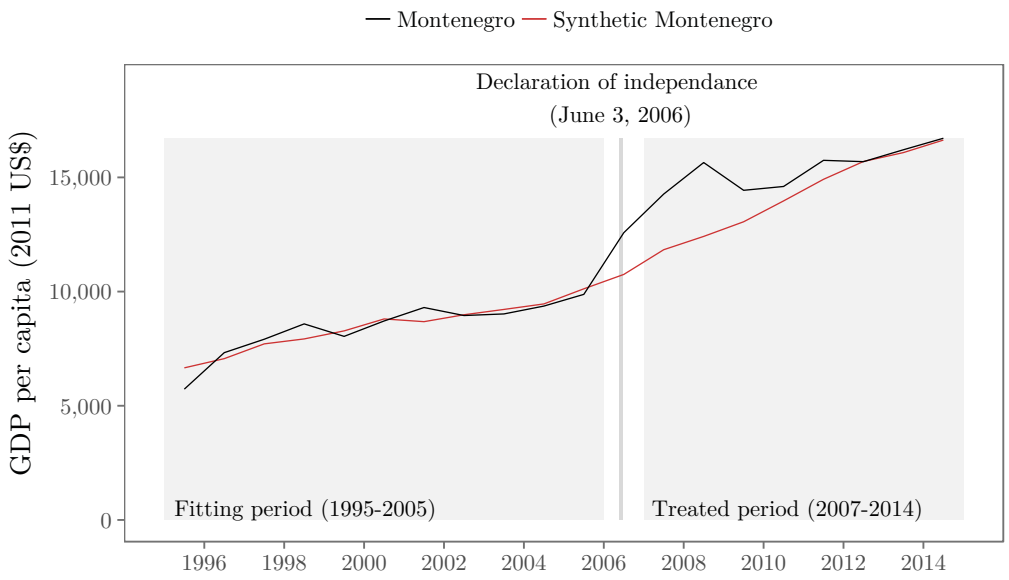


FIGURE A.4 — GDP per capita: observed and synthetic Montenegro



Baseline results for Montenegro including FDI as a control

FIGURE A.5 — Weights to construct synthetic Montenegro

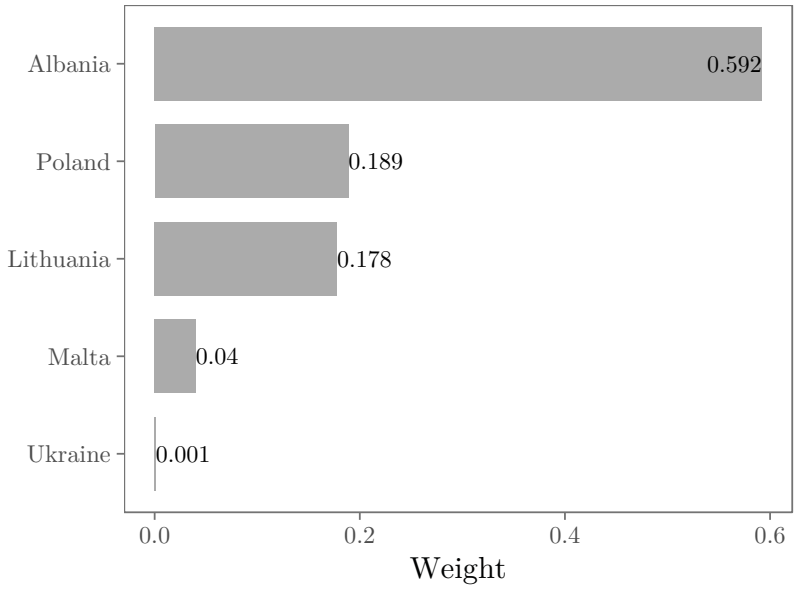


FIGURE A.6 — GDP per capita: observed and synthetic Montenegro

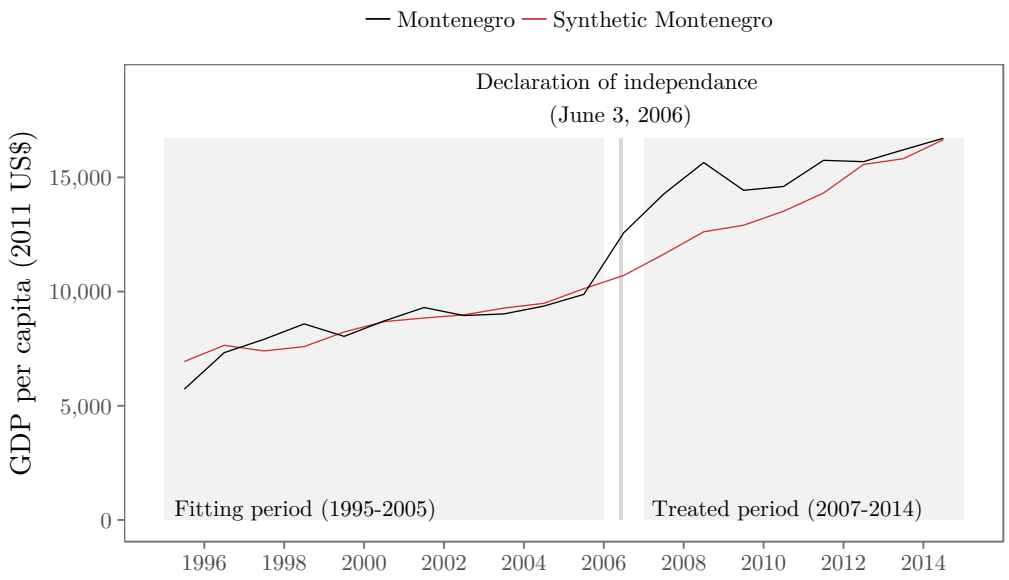
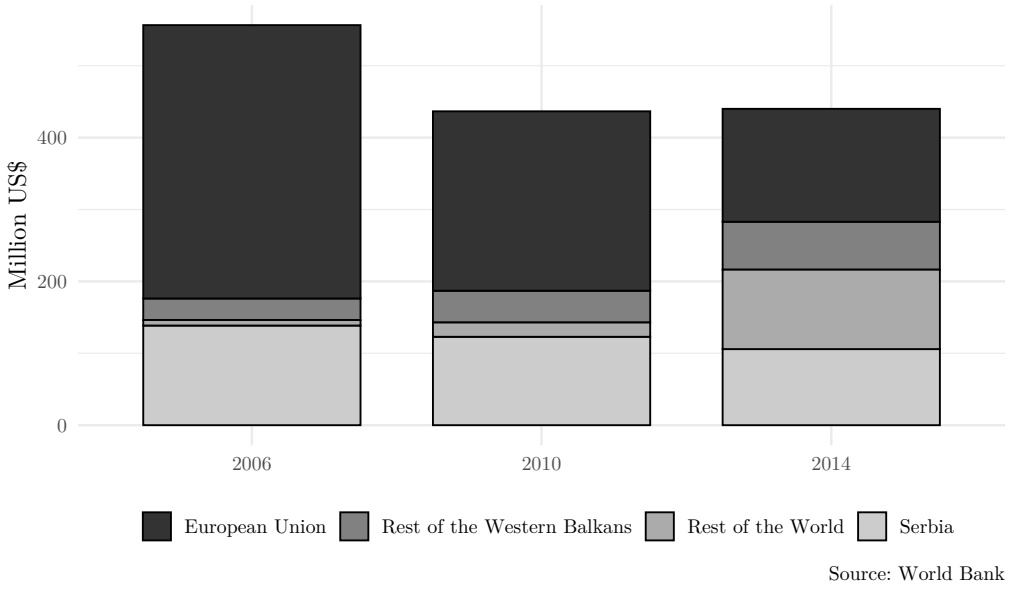
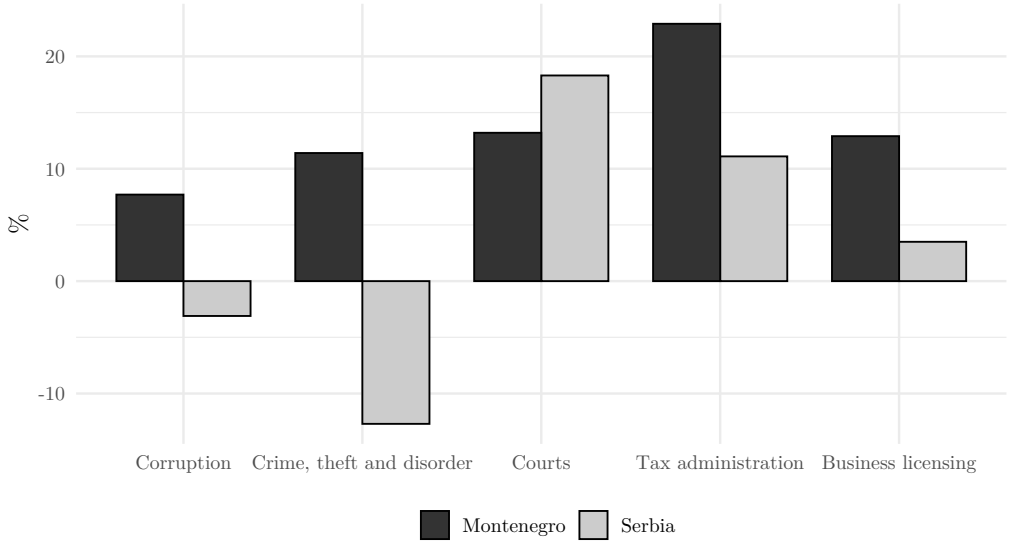


FIGURE A.7 — Montenegro exports



Source: World Bank

FIGURE A.8 — Changes in perceptions concerning obstacles for doing business



Source: Enterprise survey 2005 and 2009

Note: Absolute change in shares of respondents answering 'no obstacle' or 'minor obstacle' in each survey question, 2005-2009.