**Does Regional Authority Improve Legitimacy? Evidence from Ireland Using a Synthetic Control Model**

Soren Snyder

SPA-480: SPA Honors Capstone

Dr. Ryan Moore

Dr. Kimberly Cowell-Meyers

April 24, 2025

**Abstract**

The purpose of this study was to explore the effects increased regional authority has on a state's perceived legitimacy. Using a synthetic control model, I examined Ireland as it implemented their Local Government Reform Act in 2014, and the test created a synthetic Ireland as if it never implemented the reforms. Consistent with the hypothesis in the paper, the study found an increase in legitimacy after Ireland gave more authority to its regional governments. The difference between the treated Ireland and synthetic Ireland indicate a causal, positive relationship between the two variables. The study provides support for the idea that states should give up more authority to their regional governments in order to increase their perceived legitimacy.

**Introduction**

As new governments are beginning to form and established states are seeking to appease their citizens, the question of legitimacy takes center stage. Legitimacy is constantly sought by those in power to justify their exercise of authority (Barker 1990a). At its core, legitimacy is what rulers seek to earn from those they govern in order to maintain their continued rule, which is why it is crucial when examining power and authority in the world to also look at legitimacy.

Most research surrounding legitimacy is theory-based, non-empirical research. The goal of this paper is to add more to the conversation around legitimacy by providing an empirical basis for the level of legitimacy experienced in different countries. Our research question is, why are some states considered more legitimate than others? To answer this question, I will examine periods of change in regional authority using a synthetic control model to determine a causal relationship between regional authority and legitimacy.

I argue that increasing regional authority explains the differences in legitimacy in different states because decentralization brings politics into closer relation with the population base, promoting an increase in legitimacy levels. My project will expand upon the empirical research done in assessing legitimacy and decentralization in different countries by using a synthetic control model to determine a causal relationship. This test will give a better understanding of whether decentralizing actually produces more legitimacy. Using this model also gives us a chance to account for new, possible control variables such as homogeneity, external threats, and age of the system of government.

**Literature Review**

*What is legitimacy and how do we define it?*

Legitimacy is a complex concept that has various definitions, but there are a few concepts that are uniquely key to understanding how legitimacy is viewed in any given state. Legitimacy is ultimately the perception of a government but determining the legitimacy of a state and how a state becomes legitimate is more difficult. One reason for that is the unique historical context of any given place needs to be considered (Beetham 1991c).

First, legitimacy is entirely based on the perception of the subjects of any given authority. There are slightly nuanced differences between subjects and citizens (Barker 1990a), but most definitions of legitimacy require that there be an audience as legitimacy relies on the perception of people of a government or other object (Schoon 2022). Additionally, legitimacy is conferred to a social object by the audience; the government is evaluated by its citizens (Schoon 2022). Legitimacy is, at its core, the summary of how subordinates feel about those in power (Beetham 1991c). Beetham views legitimacy as how well the state or government conforms to an established set of rules dictated by the historical context (Beetham 1991c).

When looking at the political theory of legitimization, a key factor that emerges is the source of legitimate power. The state is usually not a source of legitimacy for itself. The state cannot cultivate legitimacy because legitimacy relies on economic and social ties between the subjects (Barker 1990b). All states can try to do is increase a sense of legitimacy by strengthening those ties (Barker 1990b). For many years, people have determined the source of legitimacy power to be external to the actual state (Beetham 1991b). One major example is the religious, divine right to rule (Beetham 1991b). The external factors are often accompanied by a strong sense of identity among the nation (Barker 1990a), which the state attempts to promote to foster legitimacy. Revolutions or ethnicity are examples of external sources that can be expressed by the state.

States then promote legitimacy using rituals, propaganda, and education to increase their own legitimacy using external factors (Barker 1990b). These promotional techniques rely on strengthening the social and economical connections between subjects, which, in turn, strengthens the view of the state and its legitimacy.

For the purposes of this paper, legitimacy will be defined as the extent in which a state’s subjects accept the state government and institutions ability to assert their authority. This definition, importantly, takes into account the subjects’ perception of the state and the states need to justify its power.

*Why and how was decentralization applied in different countries?*

Legitimacy is based on the uniqueness of a historical context, and the ties created by economic and social relations. Because decentralization and the structures of regional authority can affect those ties, these forces can be important to how legitimate a state is. Decentralization, especially with the optimism surrounding democracy after the collapse of the Soviet Union, was theorized to foster an increased sense of legitimacy because decentralization would mean the public would be more engaged in the political process (Siegel 2022). Decentralization, in theory, brings the political process and the ability to impact institutions closer to each citizen, and promotes a greater sense of legitimacy in those institutions. Allowing citizens to have greater participation in the democratic process can close the ‘satisfaction-gap’ between electoral winners and losers (Leemann and Stadelmann-Steffen 2022). So, if decentralization causes the population to be more politically involved, the satisfaction-gap will close, theoretically resulting in greater legitimacy to the state as the social ties grow stronger.

However, decentralization in developing countries caused significantly different results in different countries (Siegel 2022). In Turkey, decentralization did not produce the expected results of democratizing the country (Alkan 2011). Siegel’s (2022) case study in post-Soviet Kyrgyzstan was slightly different in that the most meaningful democratic changes occurred at the local level (Siegel 2022). However, Siegel also noted that as trust in the local governments grew, distrust in the central government grew as well (Siegel 2022). In looking at countries in Europe with more established democracies, studies found that when citizens feel more politically incorporated at the local level, they have a greater sense of legitimacy in higher levels of government (Vetter 2002). Ultimately, Siegel’s (2022) research supports some of the original theories that an increase in citizen participation would lead to an increase in political legitimacy and democratization.

Additional research done in Switzerland, Austria, Denmark, and Ireland saw decentralization compel different actors to vary service delay and enhance efficiency (Biela, Hennl, and Kaiser 2012). Blöchliger (2013) saw that decentralization has had positive effects on economic outcomes such as Gross Domestic Product (GDP), productivity, and school performance. Since legitimacy is often tied to the social and economic relationships among citizens, an increase in economic development caused by decentralization suggests that regional authority can provide a way to enhance state legitimacy.

Research done by Bastianen and Keuffer (2024) in 57 countries in Europe and elsewhere shows the relationship between regional autonomy and legitimacy. Bastianen and Keurffer find that the normative claims to promote decentralization are positive, but local autonomy does not impact all of the legitimacy indicators. Their research is similar to what this project does, however, I implement a synthetic control as well as new predictors, which I believe will be a better indicator of a causal relationship.

*Other factors that could impact legitimacy*

It would be foolish to assume that decentralization acts in isolation on legitimacy. Apart from decentralization, there are a few key understandings of what can affect legitimacy.

The first is the idea that legitimacy is based on the established norms of a given society (Beetham 1991c). Thus, taking the age of the system of government in the state would be a good way to account for legitimacy being established by the established set of rules. An established democracy, for example, experiences different results in legitimacy than a non-democratic country (Kriesi 2013). Older countries experience greater legitimacy than newer countries due to the established norms. Kriesi found that there is a significant difference in the trend of legitimacy in established democracies where the level fluctuates over an equilibrium than in newly democratizing states (Kriesi 2013). The differences in new and established states will need to be controlled for in our analysis.

Since power has a need to be legitimized (Beetham 1991a), states will try to promote legitimacy by strengthening the economic and social ties between subjects (Barker 1990a). The three promotional techniques (rituals, propaganda, and education), are often put into full effect when there is an external threat to the population (Barker 1990a). Legitimacy changes as the population reacts to their norms being threatened. For example, legitimacy often improves when there is a clear external threat, but the idea of threats can, and often are, used to discredit and delegitimize political opposition (Barker 1990b). A state can use these threats of violence or fear on a population to gain more authority because people are more willing to justify the state’s power if they feel threatened. The use of external threats to assert legitimization by a state is something that can occur, and I will ensure that I will control for external threats when running analysis.

I will also control for homogeneity within a state. The literature mentions that one factor for forming legitimacy can be an ethnic, religious, or shared heritage among a group of people. A state with a homogenous population may have a stronger connection to the state and see it as more legitimate. Thus, I will control for the homogeneity of the states in our research.

Another important variable to control for is economic growth. Countries with a larger GDP per capita are likely to have a more favorable view of the state and view it as more legitimate (Bastianen and Keuffer 2024), so it is important to control for that.

*What will this research tell us about legitimacy?*

This research will try to explain the differences we see in legitimacy across various states. Much of the current research has a gap in looking at regional autonomy and legitimacy in context with other potential explanatory factors. This project empirically tests the theories of legitimacy. Our hypothesis is that in comparing countries, those having greater regional authority will be more likely to have higher levels of legitimacy than those having lower levels of regional authority.

**Study Design**

*Theory and Expectations*

Based on what we know about legitimacy, authority is a main factor in determining the legitimacy of a state (Beetham 1991; Barker 1990a). The ability for a state to be able to grant the needs of the subjects is crucial for gaining legitimacy. In order to do this the state needs to be able to have a certain level of authority. However, how that authority is used is critical. I expect our dependent variable, legitimacy, to be impacted by the level of authority able to be exerted on a state’s citizens, and that the authority is most effectively used to gain legitimacy by influencing economic and social ties (Barker 1990b). Furthermore, with the increase in authority at the regional level, I expect the power of the national government to be viewed as more legitimate because the power is exerted from a closer authority (Beetham 1991).

Scholars have studied regional parliamentary assemblies in Africa and found that those without the institutional frameworks to impact social, economic, and political development had less legitimacy (Ogbonnaya and Ogujiuba 2015). Ogbonnaya and Ogujiuba recommend empowering regional legislatures to have authority to affect areas of importance such as control over the regional budget and oversight over regional economic communities. This study shows that regional entities with more authority will have increased legitimacy than those with less.

The expectation of our hypothesis is that there will be more citizen participation when the level of regional authority is increased. Research studies have shown that when citizens participate in governance and feel they have more effect over their government, they perceive the government as more legitimate (Siegel 2022; Vetter 2002). Thus, when authority is decentralized, and there is a regional government capable of impacting citizens at a level closer to them than the national government, I expect the citizens’ perception of national government legitimacy to increase.

What I saw from the literature was that an increased regional authority led to positive results in the economy, political satisfaction, and efficiency (Blöchliger 2013; Biela, Hennl, and Kaiser 2012). One example of this is Bastianen and Keuffer’s (2024) paper on local authority and legitimacy, which found that increased regional autonomy produced a greater sense of legitimacy. Thus, given the conclusions of much of the literature, I infer that our hypothesis will stand true.

*Research Design*

To test my hypothesis, I will use a synthetic control test to examine the causal relationship between regional authority and legitimacy (Abadie 2021). I will select control countries based on key indicators and let the model create a synthetic country to best match the trends. This will allow us to evaluate the impact of a drastic change in regional authority at a moment in time and examine what would have happened to the legitimacy without the change.

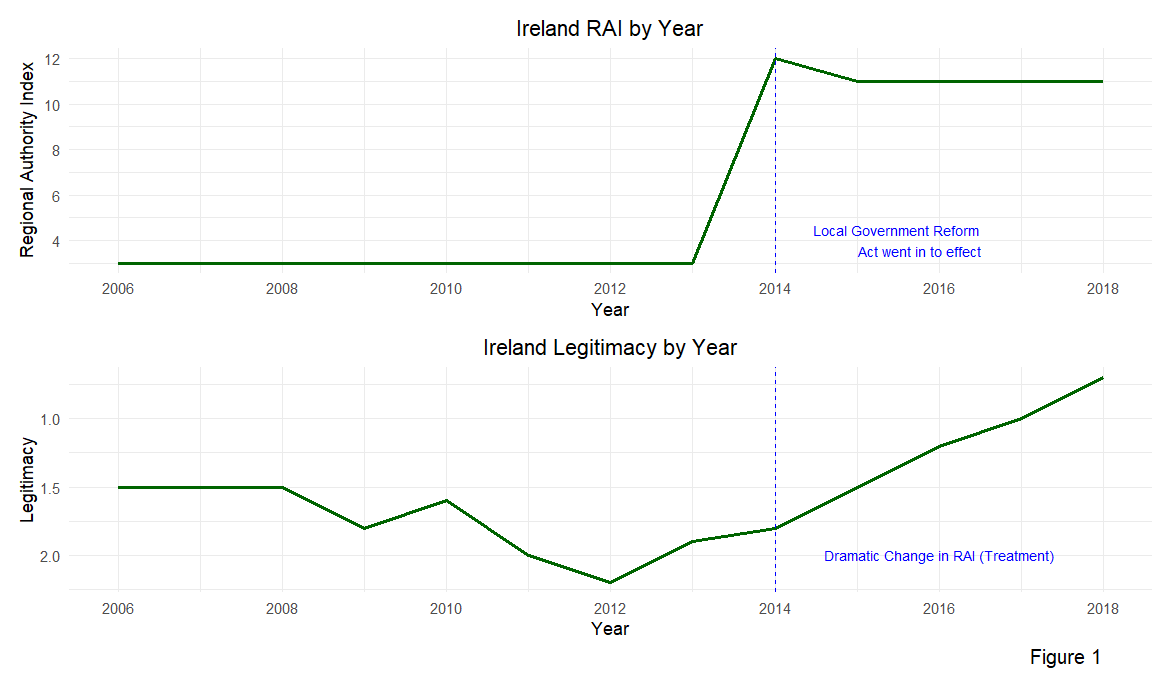
Our data on regional authority comes from the Regional Authority Index (RAI) (Shair-Rosenfield et al. 2021; Hooghe 2016). It includes annual scoring of regional governments in self-rule and shared-rule, which combined make up the regional authority index score. The data includes 91 countries from the years 1950 to 2018.

I gathered our data on legitimacy from The Fund for Peace’s Fragile States Index (FSI), which is an annual ranking of state fragility of 178 countries (“Fragile States Index,” n.d.). One of the indicators used in this ranking is state legitimacy, which is what I will be using as our dependent variable. In keeping with this paper’s earlier definition of legitimacy, the FSI takes into account the perception of the people’s confidence in their state.

For our control on homogeneity, I will use a data set on ethnic diversity in different countries (Drazanova 2020). It looks at 162 countries between 1945-2013. Additionally, I will use the Political Regime Characteristics Database (Marshall 2024), which covers changes in regime in countries with a population above 500,000 between 1776 and 2020. I also use Gross Domestic Product (GDP) data from the World Bank, which includes the GDP per capita of countries from 1960-2023 (“GDP per Capita (Current US$),” n.d.). To look at the threats faced by a country, I will use the Global Terrorism Database, which looks at terrorist events from 1970 to 2020 from around the world (LaFree, Dugan, and Miller, n.d.).

I chose to examine Ireland for this test because of its drastic change in regional authority in 2014. What was happening in Ireland at the time was an effort to reform their local municipalities. Ireland’s Department of the Environment, Community and Local Government released a report in October of 2012 outlining their vision for “putting people first” (“Putting People First: Action Programme for Effective Local Government” 2012). Then in 2014, the Local Government Reform Act took effect implementing changes to work toward the goal of an increase in local government power.

The structural reforms of the Local Government Reform Act completely overhauled the Irish local government system, including lowering the number of local authorities from 114 to 31, reducing the number of elected members, and dissolving town councils, establishing 95 municipal districts and replacing the 8 regional authorities and 2 regional assemblies with 3 regional assemblies (“Local Government Reform” 2020). While at the same time, the Local Government Reform Act gave stronger policy making powers and more economic control to the local regions (“Local Government Reform” 2020). A central point was to promote civic engagement, and one way was through Local Community Development Committees which were created in each administrative area (O’Connor, Rylands, and Power 2015). This overhaul of the system, giving greater authority over policy and economics in a short period of time makes Ireland ideal for this synthetic control test.

Ireland went from a Regional Authority Index of 3 in 2013 to 12 in 2014 once the law took effect. In looking at Ireland's legitimacy and regional authority scores over time (figure 1), it is apparent that there is a possible relationship between Ireland's regional authority and legitimacy rating. Ireland is perceived as more legitimate after the Local Government Reform Act was put in place. The test will determine if that is due to the increase in regional authority by creating a synthetic Ireland that does not experience the change. Looking at the difference between the two will allow us to infer causality.

*Operationalization and Measurement of Concepts*

For our definition of legitimacy, I will define it as the confidence citizens have in the state to conduct basic functions, which is the definition set by the FSI data set. The legitimacy indicator is scored between 1 and 10, where 10 is more likely to make the state fragile and the state is viewed as less legitimate. I expect to see a decrease in this indicator when the RAI increases, indicating a less fragile, more legitimate state.

RAI will give us a normalized measure of regional authority that a sub-national unit of government has. It takes both self-rule, the amount of authority exerted on people living within its region, and shared rule, meaning the amount of authority exerted over the whole country. I define regional authority as the level of authority a regional government has over its citizens.

Each regional government is scored on ten variables. The first five make up the self-rule metric: Institutional depth, policy autonomy, fiscal autonomy, borrowing autonomy, and independent representation. The latter five make up the shared rule measure: Law making, executive control, fiscal control, borrowing control, and determining constitutional change. RAI is then the sum of the self-rule and shared rule metrics. Self-rule is scored on a scale from 0-18, as a sum of the five metrics, and shared-rule is scored from 0-12 as a sum of its five metrics. RAI is then scored from 0-30 as a sum of self-rule and shared-rule to account for all the different metrics in self-rule and shared-rule measures. A large RAI value indicates an increased regional authority that the government exerts.

For our control variables, I define the age of the regime as the length of time the regime has been in power. The more recent the regime, the more fragile it is, as an older regime would have had more time to develop more norms behind it. A greater length of time would then theoretically translate to an increase in legitimacy.

Homogeneity is measured by fractionalization, or the likelihood that two people within a given area are from the same ethnic group. The data measures an estimate between zero, which means that all people are from the same ethnic group, and one, meaning that all people are from unique groups (Drazanova 2020). For our research, I expect that a population with a greater shared identity would see a government as more legitimate because homogenous values of the population will be expressed by the government in order to justify its authority.

I operationalize the economy of a country through GDP per capita. A larger GDP per capita will mean more economic success in a country. I would assume that a state that promotes economic growth and has economic success would be seen as more legitimate, so a larger GDP per capita would indicate a greater sense of legitimacy.

For external threats, it is difficult to accurately measure, so I will use the definition of terrorist attacks on a given country. While not all terrorist attacks come from abroad, these events are one of the reasons a population can feel unsafe. With the expectation that a state protects them in such a case, a large number or a high level of severity would theoretically impact the legitimacy of a state. So, I can expect that an increase in terrorist attacks results in lower levels of legitimacy.

**Methodology**

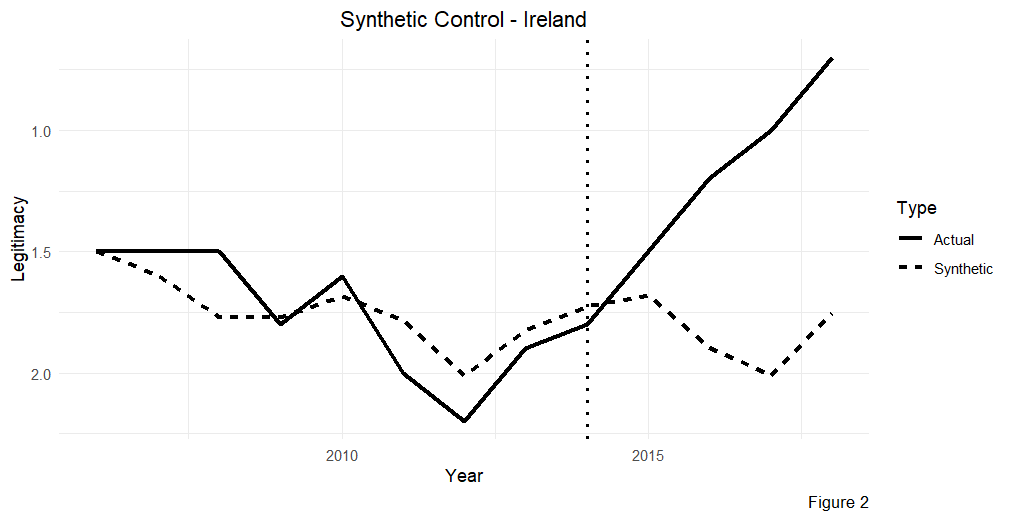
I started by cleaning each individual data set for the independent, dependent, and control variables, and then I joined them together by the country and year. With this full data set, I recoded variables and removed countries and years that had insufficient data from consideration while testing. What was left was 76 countries with data from the years 2006 to 2018, with little NA values, except for homogeneity and external threats because the data was not recorded for the full period of time.

I then moved on to picking the donor countries for the model. This was the most significant part of the testing as without good donor countries, the model would be inaccurate in developing a ‘synthetic Ireland.’ First, I identified key moments for different countries where the Regional Authority Index (RAI) dropped by a significant amount. Based on the average change in RAI, I determined a change per year of 2 or greater to be of significance, so any country (outside of Ireland) that experienced a change of that magnitude or greater was omitted from consideration of being a donor country.

Then I individually identified the countries with similar legitimacy, regional authority, GDP, homogeneity, and external threats based on the remaining countries in the data set. While not the most efficient, I was deliberate in attempting to find the best matches to Ireland. I encountered some trouble in finding close matches in all key areas, but I gave favor to countries that were developed in similar Western values, such as Ireland, and had similar levels of legitimacy and regional authority. The donor countries I identified are Australia, Albania, Chile, Denmark, Finland, Lithuania, Singapore, and Slovenia because they were close to Ireland’s pre-treatment indicators.

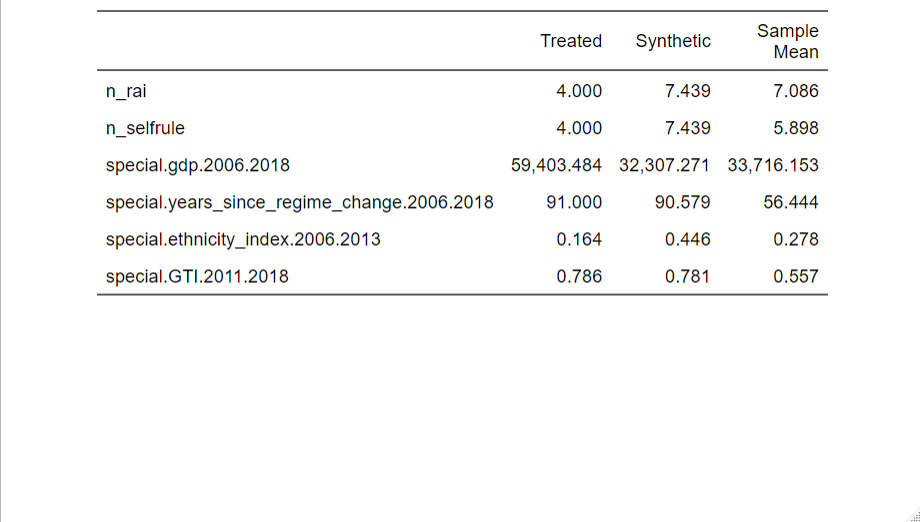
**Results**

Using those donor countries, I ran the synthetic control test; figure 2 is the result. The synthetic Ireland follows the pre-treatment Ireland fairly closely, although the variation shows that there is room for improvement in the prediction model. However, after the application of treatment in 2014, when the Local Government Reform Act took effect, the real Ireland increased sharply toward legitimacy. The synthetic Ireland does not, providing some evidence towards the original hypothesis, that without the drastic change in regional authority, Ireland would have remained at a constant legitimacy level, rather than see it increase.

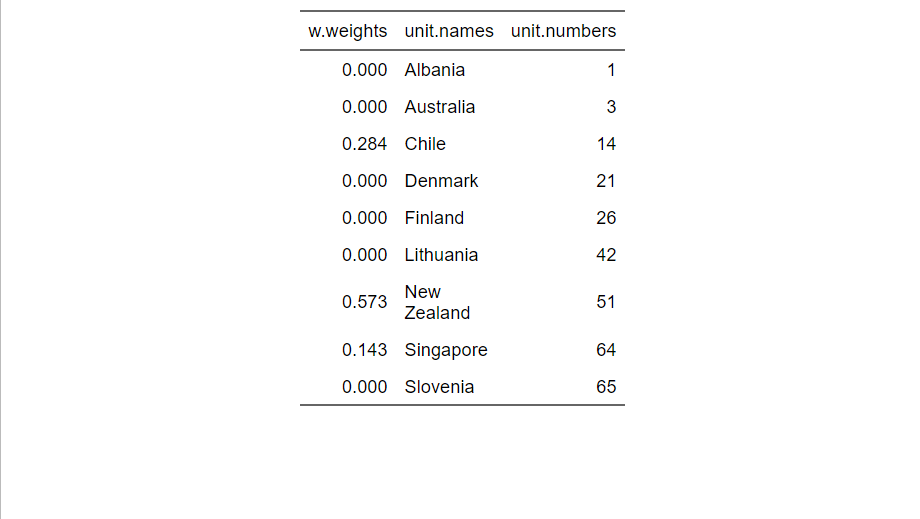


The model was shown to perform well, as the mean squared prediction error (MSPE) for the control units was low (loss w was 0.0055), indicating that the model was accurate in tracking the donor countries. However, the greater error in the predictors (loss v was 0.0205) indicates the model had a more difficult time matching the synthetic and treated predictor variables.

The weights the model uses when creating the synthetic control are automatically ascribed. As seen in table 1, the model was not able to match regional authority (n\_rai) or GDP well, but instead relied on external threats (special.GTI) and the number of years since a regime change in order to create synthetic Ireland.

Table 1

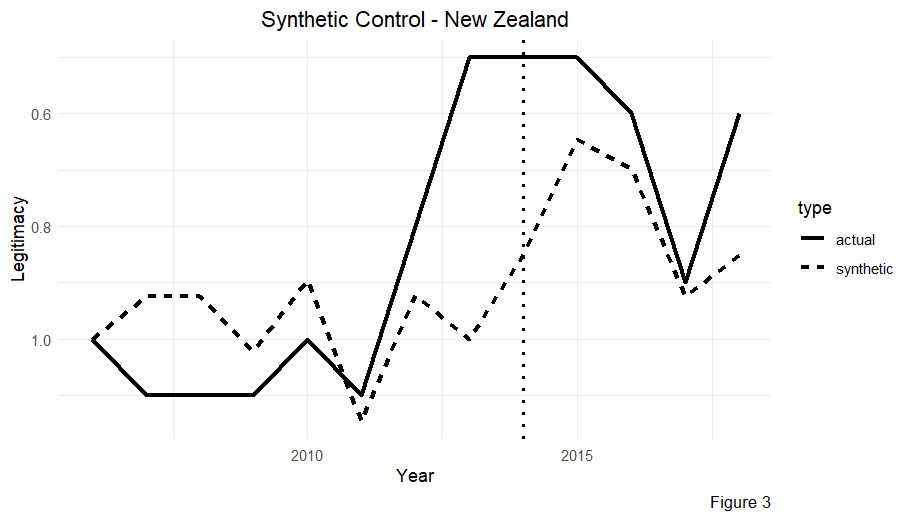
The donor countries that were used in creating synthetic Ireland should also be of note. The main three that were used to create were New Zealand, Singapore, and Chile, which makes sense as they were the closest to Ireland in legitimacy and RAI score. However, the other donor countries did not contribute much to the synthetic control, as shown in table 2.

Table 2

**Placebo Tests**

In order to make a better case towards causality and determine the significance of my findings, I also performed the same synthetic control test on the donor countries. Since these donor countries never experienced a treatment, if there is significance in these results, I expect Ireland to have the largest gap between the actual and synthetic legitimacy after the treatment period. This approach attempts to follow the inference approach in Abadie et al. (2010).

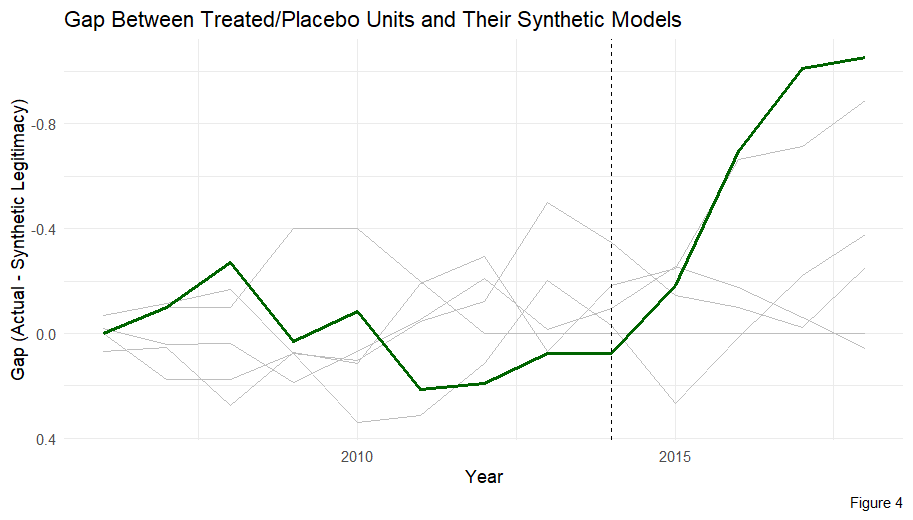
First, I conducted a placebo synth on New Zealand, the greatest contributor to Synthetic Ireland. The New Zealand Synth was not as great as the Ireland one as a predictive model, but the overall trend supports the idea of causality between regional authority and legitimacy. As seen in figure 3, the synthetic New Zealand follows the trend of the placebo treated unit, New Zealand, which would indicate that the difference we see in the synthetic and treated Ireland is due to the change in regional authority.



The average gap between the synthetic and actual legitimacy, in the Ireland synthetic control test before the treatment in 2014 is 0.0074, and for the New Zealand placebo test before its treated period it is -0.017. A difference between the actual treatment and placebo of only 0.024. Now comparing that to the average gap post treatment of Ireland, which is -0.5735, and New Zealand, which was -0.1736. Leading to a post treatment difference of -0.4 between the treatment and placebo. The large post-treatment difference compared with the small pre-treatment difference is the first indicator of a relationship that the results shown by the synthetic control are due to the change in regional authority.

I then repeated these placebo tests with the other donor countries, and the result is gaps between the actual and synthetic are plotted in figure 4. Importantly, not all donor countries have good pre-treatment fits. To account for this, I take an approach similar to Abadie et al. (2010), and any donor country that had a mean squared prediction error (MSPE) greater than five times the Ireland synthetic control model was excluded from the placebo tests. This approach makes sure that the pre-treatments fits are relatively similar, and removes potential noise from post-treatment results.

If our results are significant, I would expect the synthetic control test on the treated unit, Ireland, to have the greatest difference after the treatment period in 2014. Shown in green in figure 4, Ireland does have the greatest gap in legitimacy from the difference of the actual and synthetic models.



To assess the statistical significance of the treatment effect, the ratio of the post-treatment and pre-treatment MSPE of the Ireland test was compared to the ratio of the placebo tests. Ireland, as the treated unit, had a MSPE ratio of 23.731 showing a great change in the error before and after the treatment effect was applied. None of the tested placebo tests had an MSPE ratio at that level or greater, which suggests that the observed change is not due to random chance.

I used that to calculate a pseudo p-value of 0.167. While not conventionally significant, the results of the Ireland test are of greater magnitude than any of the placebo tests, providing a good indication that it did not happen randomly, showing a level of significance. Furthering the belief that the synthetic model shows causality between Ireland’s decentralization of authority and the increase in legitimacy it saw.

**Discussion**

Our original hypothesis is that increasing regional authority would lead to increased legitimacy. What I observed supports that hypothesis; when Ireland implemented an overhaul of their regional government structure, giving more power to the regions, there was an increased level of legitimacy.

Our results suggest that the local reforms that Ireland implemented focusing on increased civic participation led to increased levels of legitimacy. The reforms were heavily focused on increasing local, civic participation, and that has been shown to promote a perception of a legitimate government (Siegel 2022; Vetter 2002). Furthermore, the results of this study are consistent with literature that concludes local autonomy facilitates a more democratic and legitimate state (Bastianen and Keuffer 2024).

This research suggests that giving more authority to local governments can improve the perception of legitimacy. The results from Ireland show that radically changing the structure and power of regional governance is a viable way to improve legitimacy for a government.

There were several limitations that were present in our study. I was limited by the data available because some countries did not have all available data. Additionally, the model could be improved with better predictors and donor countries. With more data or an increased number of predictors the synthetic control would become even stronger and support the conclusion of this paper further. The weights of the model indicate that more precision could be had in the predictors of regional authority and gdp, which could have affected the results. Future research will hopefully take into account the limitations of this synthetic control model and improve upon the conclusions through additional testing of other countries or an improved model.

Works Cited

Abadie, Alberto. 2021. “Using Synthetic Controls: Feasibility, Data Requirements, and Methodological Aspects.” Journal of Economic Literature 59 (2): 391–425.<https://doi.org/10.1257/jel.20191450>.

Abadie, Alberto, Diamond, Alexis, and Jens and Hainmueller. 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. https://doi.org/10.1198/jasa.2009.ap08746.

Alkan, Ayten. 2011. “Strengthening Local Democracy or Neo-Liberal Conversions? New Local Governmental Legislation in Turkey.” Lex Localis - Journal of Local Self-Government 9 (1): 23–38. https://doi.org/10.4335/9.1.23-38(2011).

Barker, Rodney. 1990a. Political Legitimacy and the State. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780198274957.001.0001.

———. 1990b. “States as Cultivators of Legitimacy.” In *Political Legitimacy and the State*, edited by Rodney Barker, 0. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780198274957.003.0008.

Bastianen, Alexander, and Nicolas Keuffer. 2024. “Are the Normative Rationales of Local Autonomy Related to Democratic Legitimacy Justified? Evidence from 57 Countries in Europe and beyond (1990–2020).” *Local Government Studies*, July, 1–21. https://doi.org/10.1080/03003930.2024.2378128.

Beetham, David. 1991a. “Power and Its Need of Legitimation.” In *The Legitimation of Power*, edited by David Beetham, 42–63. London: Macmillan Education UK. https://doi.org/10.1007/978-1-349-21599-7\_2.

———. 1991b. “The Normative Structure of Legitimacy.” In *The Legitimation of Power*, edited by David Beetham, 64–99. London: Macmillan Education UK. https://doi.org/10.1007/978-1-349-21599-7\_3.

———. 1991c. “Towards a Social-Scientific Concept of Legitimacy.” In *The Legitimation of Power*, edited by David Beetham, 3–41. London: Macmillan Education UK. https://doi.org/10.1007/978-1-349-21599-7\_1.

Biela, Jan, Annika Hennl, and André Kaiser. 2012. “Combining Federalism and Decentralization: Comparative Case Studies on Regional Development Policies in Switzerland, Austria, Denmark, and Ireland.” Comparative Political Studies 45 (4): 447–76. https://doi.org/10.1177/0010414011421767.

Blöchliger, Hansjörg. 2013. “Decentralisation and Economic Growth - Part 1: How Fiscal Federalism Affects Long-Term Development.” OECD. June 2, 2013. https://www.oecd.org/en/publications/decentralisation-and-economic-growth-part-1-how-fiscal-federalism-affects-long-term-development\_5k4559gx1q8r-en.html.

Drazanova, Lenka. 2020. “Introducing the Historical Index of Ethnic Fractionalization (HIEF) Dataset: Accounting for Longitudinal Changes in Ethnic Diversity.” Journal of Open Humanities Data. https://doi.org/10.5334/johd.16.

“Fragile States Index.” n.d. The Fund for Peace. https://fragilestatesindex.org/.

“GDP per Capita (Current US$).” n.d. World Bank Group. https://data.worldbank.org/indicator/NY.GDP.PCAP.CD.

Hooghe, Liesbet. 2016. Measuring Regional Authority: A Postfunctionalist Theory of Governance, Volume I. Transformations in Governance Ser. Oxford: Oxford University Press USA - OSO.

Kriesi, Hanspeter. 2013. “Democratic Legitimacy: Is There a Legitimacy Crisis in Contemporary Politics?” Politische Vierteljahresschrift 54 (4): 609–38.

LaFree, Gary, Laura Dugan, and Erin Miller. n.d. “Global Terrorism Database (GTD).”

Leemann, Lucas, and Isabelle Stadelmann-Steffen. 2022. “Satisfaction With Democracy: When Government by the People Brings Electoral Losers and Winners Together.” Comparative Political Studies 55 (1): 93–121. <https://doi.org/10.1177/00104140211024302>.

[“Local Government Reform.” 2020. December 23, 2020.](https://www.zotero.org/google-docs/?broken=uQ6DA0) <https://www.gov.ie/en/organisation-information/2631c-local-government-reform/>[.](https://www.zotero.org/google-docs/?broken=tJ7EZa)

Marshall, Monty G. 2024. “Political Regime Characteristics Database.” Center for Systemic Peace and Societal-Systems Research Inc. https://prosperitydata360.worldbank.org/en/dataset/POLITY5+PRC.

[“Putting People First: Action Programme for Effective Local Government.” 2012. Dublin: Department of Environment, Community, and Local Government.](https://www.zotero.org/google-docs/?broken=gYXg31)

[O’Connor, Ray, Mark Rylands, and Carol Power. 2015. “Local Government Reform in Ireland: Implications for Rural and Community Engagement.” In .](https://www.zotero.org/google-docs/?broken=vl59Gw)

Ogbonnaya, Ufiem Maurice, and Kanayo Ogujiuba. 2015. “Regional Parliamentary Assemblies in Africa: Challenges of Legitimacy of Authority and Status of Operation.” The Journal of Legislative Studies 21 (4): 553–73. https://doi.org/10.1080/13572334.2015.1083753.

Schoon, Eric W. 2022. “Operationalizing Legitimacy.” American Sociological Review 87 (3): 478–503. https://doi.org/10.1177/00031224221081379.

Shair-Rosenfield, Sarah, Arjan H. Schakel, Sara Niedzwiecki, Gary Marks, Liesbet Hooghe, and Sandra Chapman-Osterkatz. 2021. “Language Difference and Regional Authority.” Regional & Federal Studies 31 (1): 73–97. https://doi.org/10.1080/13597566.2020.1831476.

Siegel, David. 2022. “Decentralization, Legitimacy, and Democracy in Post-Soviet Central Asia.” Journal of Eurasian Studies 13 (1): 66–81. https://doi.org/10.1177/18793665211068525.

Vetter, A. 2002. “Local Political Competence in Europe: A Resource of Legitimacy for Higher Levels of Government?” International Journal of Public Opinion Research 14 (1): 3–18. <https://doi.org/10.1093/ijpor/14.1.3>.

AI was used heavily in writing the R code. Almost all of it was for debugging, I would write the R code to prep the data and after receiving an error, I would provide the error into Chat GPT and get potential solutions. Additionally, I used it when forgetting exact function or package names. I also used it for helping to write a loop and function for running the synth, placebo tests as I find those tricky to write in R. For example, when creating graphs, I forgot how to move the title to the center. It was incredibly helpful in quickly giving that function instead of searching through the help file or websites. However, how helpful it was varied significantly based on the task, for the simple tasks of giving me function names and arguments, it was fantastic. For the more complex data prepping for the synthetic control model, it kinda sucked. After a few failed suggestions. I reverted to googling, and was able to find the error was due to something else entirely. While this process of searching took a little longer than using AI, it provided a much clearer solution.

R Code: I have a lot of R Code and files, so here is the public github repository where all of my code is stored: <https://github.com/ss6662a/SPA-480-Capstone.git>