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Abstract

Pierson's highly-regarded book, *Dismantling the Welfare State? Reagan, Thatcher, and the Politics of Retrenchment* suffers from a serious methodological drawback. The author draws his conclusions about welfare state resilience by scrutinizing what happened to social policy structure during and at the end of the two governments selected, ending up by falling into the well-known 'post hoc ergo propter hoc' fallacy. The present paper sets out to replicate Pierson's analysis in a counterfactual framework of causal inference. Adopting the synthetic control method, the trajectories of several UK and US welfare-state measures, observed in the presence of Thatcher and Reagan's administration, were contrasted with corresponding trajectories reconstructed in the absence of neo-conservative governments. This exercise confirmed Pierson's substantive conclusion: the neo-conservative revolution of the 1980s did not significantly alter the UK or USA welfare state.

1. Introduction

In the last few decades studying welfare state retrenchment has become a widespread practice among comparative political economists (for an overview, see van Kersbergen 2000; Starke 2006). This tendency has been profoundly shaped by Pierson's rightly celebrated book, *Dismantling the Welfare State? Reagan, Thatcher, and the Politics of Retrenchment*.

Several facts prove the importance of this book. In the year of its publication, 1994, it won the American Political Science Association's Kammerer Prize for the best work on American national politics. To date, it has been cited 4,870 times according to Google-Scholar.

On Pierson's view, each of the main theories of welfare state expansion – arguments about economic development, arguments about institutions, and above all arguments about the power of the left – have been loosely appropriated for discussions of the contemporary welfare state. This is essentially because "retrenchment is a distinctive process, and the assumption that it will follow the rules of development that operated during the long phase of welfare state expansion is likely to be misplaced. There are two fundamental problems with an assertion that policy change in an era of retrenchment will mirror processes of expansion. First, the political goals of policymakers have changed. There is an essential difference between a government seeking to extend benefits to large numbers of people and one seeking to take those benefits away. Second, the political context has changed. The most important such change is the development of the welfare state itself. Large public social programs are now central features of the political landscape, and with them have come dense networks of interest groups and strong popular attachments to particular policies. The structure of these programs shapes the prospects for reform (Pierson 1994: 7). On the basis of this reasoning, Pierson claims that any attempt to understand the politics of welfare state retrenchment must start from a recognition that social policy remains the most resilient component of the postwar order.

This general hypothesis is tested in Pierson's book by analyzing the social policy retrenchment implemented by Reagan and Thatcher's administration. According to the author, these administrations constitute a crucial test of the welfare state's status in the "post-Keynesian" era. In fact, they represent two paradigmatic examples of unabashedly neo-liberal/conservative governments with extensive plans to roll back the welfare state. Hence, since at the end of 1980s, when Thatcher and Reagan left their seats of power, the UK and US welfare states substantially remained unaltered in their main apparatuses, the author concluded that his argument about the 'new politics of the welfare state' is appropriate, while the ideological nature of government – as well as the other traditional factors invoked to understand welfare development – proves irrelevant.

Pierson's findings caused an intense discussion. Some scholars reached similar conclusions (e.g. Stephens, Huber, and Ray 1999). On the other hand, others came out in favour of the partisanship thesis for explaining cross-national variations in cutbacks and provided evidence that the Thatcher and Reagan reforms constituted a much larger pullback from state protection than Pierson's work suggested (Allan and Scruggs 2004; Clayton and Pontusson 1998).

Nevertheless, Pierson's opponents, and *in primis* his book, do suffer from an important methodological shortcoming: no attention has been paid to analysing welfare state retrenchment by means of a counterfactual framework of causal inference (for an overview, see for example Morgan and Winship 2007). In particular, Pierson reached his conclusions about welfare state resilience by performing a detailed scrutiny of policy-making under numerous social programs. In so doing, he showed what happened to the two welfare states during and at the end of the two governments, but ended up by falling into the well-known 'post hoc ergo propter hoc' fallacy. In other words, grounding his conclusion on a mere order of events, i.e. the Thatcher and Reagan administrations and welfare state persistence, he may have drawn

inappropriate conclusions. In fact, his conclusion regarding the failure of the neo-conservative resurgence of the 1980s is grounded on a mere confrontation between committed reform by Reagan and Thatcher and the resilience of well-established social programs, without considering what would have happened in the absence of those political attacks. The same methodological mistake was committed by his opponents. For instance, Allan and Scruggs (2004) stressed the comparatively large reduction of the pension and unemployment net replacement rate under the Thatcher and Reagan administrations, without providing any estimate of the reduction under another government.

In view of that, the present paper performs a replication of Pierson's analysis in a counterfactual framework of causal inference. Specifically, borrowing from the impact evaluation literature, it assumes that the UK and USA were exposed to a political treatment during the Thatcher and Reagan administrations, i.e. the neo-conservative resurgence; and then compares this with what would have happened in the absence of that political treatment. This was possible thanks to the econometric techniques now available. In particular, the paper employs the synthetic control method, developed by Abadie and Gardeazabal (2003) and Abadie et al. (2010; 2015) to estimate the effects of prolonged political processes, such as terrorist conflicts, or large-scale policy interventions, as following the 1990 German reunification. This allows one to contrast the trajectories of several UK and USA welfare-state measures, observed in the presence of a neo-conservative administration, with corresponding trajectories reconstructed in the absence of such political treatment. In this way it became possible to test the impact of the neo-conservative resurgence in a more rigorous empirical strategy than that employed by Pierson – and at the same time by his opponents.

However, our exercise confirmed Pierson's substantive conclusion: the neo-conservative revolution of the 1980s did not substantially alter the UK or USA welfare state.

The rest of the paper is structured as follows. Section 2 addresses the problem of retrenchment measurement in order to identify appropriate outcome variables and illustrate Pierson's main conclusions. Section 3 presents data and an analysis strategy, while section 4 discusses the corresponding results. Finally, section 5 draws some conclusions.

2. Retrenchment measurement and Pierson's conclusions

In order to replicate Pierson's analysis in a counterfactual framework, one must, as said, compare several welfare state measures in the presence and absence of the political treatment under scrutiny, and then contrast the results with Pierson's conclusions. To do so, two important features of Pierson's book must be considered: the classification of welfare state retrenchments and the corresponding findings obtained for the UK and US cases. These two features in turn enable us to (1) marshal Pierson's findings for scrutiny and (2) select specific outcome variables for our empirical analysis.

Regarding Pierson's classification, retrenchments can be divided into programmatic and strategic. Programmatic retrenchment results from spending cuts or a reshaping of welfare state programs, while an alteration of the broader political economy and consequent change of welfare state politics represents a strategic retrenchment. In relation to these kinds of retrenchments, Pierson reached three main conclusions. On p. 4-7 he wrote:

"The examination of retrenchment outcomes offered in this book supports three broad conclusions. First, the success of direct attacks on social programs (what I will call "programmatic retrenchment") generally has been limited. Despite fluctuations that have largely echoed the business cycle, social expenditure has roughly maintained its share of economic output in both countries. These figures provide only very partial evidence, but they are nonetheless suggestive. My efforts to scrutinize policy reforms to identify long-term implications confirm the basic conclusion that although the welfare state has been battered, its main components remain intact. […] By a number of measures, however, claims of a neo-conservative revolution in social policy are suspect. Compared with reforms engineered in other arenas (e.g., macroeconomic policy, industrial relations, or regulatory and industrial policy) the welfare state stands out as an island of relative stability. […] My second major conclusion is that the results of programmatic-retrenchment efforts have varied significantly, both within and across policy arenas. Although overall change has been limited, some programs have proven far more vulnerable than others. Housing programs and unemployment-insurance benefits have undergone extensive retrenchment in both countries. In Britain, the state pensions system has also been radically reformed. Retrenchment has been less extensive in other income-transfer programs and in health care. […] Understanding the politics of retrenchment requires that we make sense of the differing success of neo-conservative reformers in reference to distinct programs. […] The third general conclusion concerns those policy changes that may increase the prospect for future cutbacks (what I will call "systemic retrenchment"). If the Reagan and Thatcher administrations had limited success in fashioning direct reforms of the welfare state, perhaps they were more successful in pursuing indirect strategies whose consequences will be felt only in the long term. Examples would include institutional reforms that strengthen the hands of budget cutters, policies that weaken the government's revenue base, and efforts to undermine the position of pro-welfare state interest groups. For the most part, neither the Reagan nor the Thatcher government appears to have been particularly effective in engineering such reforms. Institutional changes have been limited, and where there has been change, the implications for the welfare state have often been ambiguous. Organized labor - an important contributor to welfare state expansion - has been weakened in both countries; yet other social bases of political support remain strong, and one of the main findings of this study concerns the declining importance of the labor movement for the political status of the welfare state. The most important example of successful systemic retrenchment has been the Reagan administration's partial "defunding" of the American welfare state".

These three conclusions about the programmatic and strategic retrenchments lead to the second feature for consideration: the measurement of welfare-state retrenchments. On this issue Pierson (1994: 13-17) wrote:

"These three points establish some basic ground rules for the study of retrenchment: 1) Examine long-term as well as short-term spending cuts. This ground rule is the most straightforward. Governments interested in curtailing social programs may enact policies that cut spending immediately; they may also enact changes to be phased in over time, the full effects of which may not be felt for many years. […] 2) Examine program structure as well as program spending. Long-term expenditure trends still provide an insufficient basis for evaluating welfare state change. […] A study of welfare state change must focus on structure as well as size. To discuss retrenchment rather than cuts is to analyze political conflicts over the character of the welfare state. As Esping-Andersen has put it, "It is difficult to imagine that anyone struggled for spending per se." Just as organized labor and left-of-center parties once pushed not just for higher spending but also for more extensive modifications of market outcomes, conservatives work to encourage market-oriented reforms as well as lower spending. Retrenchment

should be seen as a process of shifting social provision in a more residualist direction, not just as a matter of budget cuts. […] 3) Study systemic retrenchment as well as programmatic retrenchment. Programmatic retrenchment results from spending cuts or a reshaping of welfare state programs. However, policy changes that alter the broader political economy and consequently alter welfare state politics may also promote retrenchment. Welfare state programs do not exist in a vacuum. Their shape is determined by the complex interplay of such factors as budgetary pressures, the structure of political institutions, and the strength and priorities of interest groups. Policy changes that alter the context for future spending decisions – what can be termed systemic retrenchment – may be as important for the welfare state as changes in spending or program structure "within" the welfare state itself. Systemic retrenchment can take four forms. First, a government can attempt to defund the welfare state by constraining the flow of revenues to future administrations. […] A second type of systemic retrenchment would be a policy-induced change in public opinion, weakening popular attachments to public social provision. […] Systemic retrenchment might also take the form of modifications in political institutions, changing the way decision making about the welfare state is carried out, and thus potentially changing policy outcomes. […] The fourth type of systemic retrenchment would be a weakening of pro-welfare state interest groups. The impact of an administration dedicated to retrenchment is likely to depend in part on the political strength of welfare state supporters. Groups offering such support include organizations of beneficiaries, producer interests with a stake in either the provision of specific services (e.g., housing or education) or in a pattern of public intervention in the marketplace (such as labor unions), and advocacy organizations dedicated to advancing programs for the underprivileged and underrepresented".

As said, these arguments concerning the measurement of welfare-state retrenchment allowed us to select specific outcome variables so as to perform synthetic control analyses consistent with Pierson's book. Clearly, since a synthetic control method must be implemented in a time-series-cross-sectional framework (see section 3), the outcomes selection was also driven by data availability. In other words, an outcome can be analyzed via the synthetic control method, if quite long time series exist for a sufficient number of territorial units.

The first outcome variable is represented by a social spending indicator. In particular, social security transfers (SSTRAN) were employed in levels[1]. Analyzing the dynamics of this variable over several years allows one to capture short-term (i.e. immediate effect) as well as long-term (i.e. deferred effect) spending cuts. Nevertheless, unlike Pierson, social spending was not expressed as a percentage of GDP, but in per capita figures. This was in order to ensure a higher smooth degree. In fact, when a variable trends irregularly over time, constructing a suitable counterfactual via the synthetic control method is a difficult task (see Section 3).

Furthermore, since Pierson suggests examining program structure as well as program spending, our second outcome variable is represented by the well-known welfare state generosity Index (TOTGEN), developed by Scruggs (2004) and refined by Scruggs et al., 2014. This allows one to capture institutional adjustments to social insurance programs. Specifically, as with Pierson's claim (see above), that index has been developed in accordance with Esping-Andersen's (1990) argument as to the need to go beyond spending measurement and account for the generosity and universalism of welfare programs. Hence, TOTGEN combines the benefit generosity scores computed for three social insurance programs: unemployment, sickness, and pensions (Scruggs 2007; Scruggs and Allan 2006).

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[1] OECD, Historical Statistics provides figures on social security transfers as a percentage of GDP. To convert this into per capita figures, the following sources were used: IMF, International Financial Statistics; OECD, National Accounts Statistics; and OECD, Employment and Labour Force Statistics (database).

Clearly, these two outcome variables (SSTRAN and TOTGEN) were adopted as indicators of the overall welfare state retrenchments of the UK and USA. Consequently, the corresponding synthetic control analyses were used to evaluate the Pierson's first main conclusion, namely that the welfare state remained substantially intact.

Because Pierson's second major conclusion asserts that the results of programmatic-retrenchment efforts varied significantly, both within and across policy arenas, such as housing programs, unemployment-insurance benefits, state pensions system, health care, and sickness and disability benefits, some indicators of certain social programs were used as outcome variables. In particular, the third and the fourth outcome variables were represented by two sub-components of TOTGEN, namely the unemployment generosity index (UEGEN) and the pension generosity index (PGEN). UEGEN conjointly captures a) net replacement rates; b) the weeks of insurance needed to qualify for benefit; c) the weeks of benefit entitlement after becoming unemployed; and d) the percentage of the labor force insured for unemployment risk. Conversely, PGEN considers net replacement rates for a) the standard career public pension, and b) the minimal old age pension; c) the years of work/contribution years needed to qualify for a standard pension in a); d) the employee's share of pension financing from wages; and e) the average male and female life expectancy at age 65 (Scruggs et al. 2014). Obviously, UEGEN was employed to capture retrenchments on unemployment-insurance benefits, while PGEN was adopted to capture cutbacks on the state pensions system.

On the other hand, no synthetic control analysis was performed on the third component of TOTGEN, i.e. the sickness generosity index. This was because the countries under examination here denote trajectories that are de facto irreproducible: the UK trend is extremely erratic, while all values of the US time series are zero. This is because sickness generosity is measured via sick pay (i.e. wage replacement during illness) and the USA has no program to pay such benefits by law. Likewise, no analysis was carried out on housing programs. In this case, the available time series are too short. For instance, the OECD Social Expenditure Statistics Database only provides information about public expenditure on housing benefits (as a percentage of GDP) for the 1980-2010 period.

Finally, since Pierson recommended studying systemic in addition to programmatic retrenchment, two outcome variables were selected to re-analyze two of the four features mentioned in the book, i.e. public opinion, welfare state funding, political institutions, and interest groups. Public opinion and political institutions were not considered because of data restriction and the operationalization problem. On the other hand, to re-analyze defunding the welfare state, that is, a curtailment of the flow of revenues on which social programs rely (Pierson 1994: 150-151), total general government revenue (as a percentage of GDP) (GOVREV) was employed as the fifth outcome variable[2].

Conversely, in order to re-analyze efforts to undermine the position of pro-welfare state interest groups, union density (UNDEN), defined as gross union membership as a percentage of the population aged 15 and older, was adopted as the sixth outcome variable[3].

3. Data and synthetic control implementation

In a counterfactual framework, assessing Pierson's conclusions entails comparing the welfare-state trends in the presence of a neo-conservative administration with the corresponding figures in the absence of one. For this purpose, two variables have to be defined for each of

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[2] OECD, National Accounts Statistics provides figures on total general government revenue as a percentage of GDP. To convert this into per capita figures, the following sources were used: IMF, International Financial Statistics; and OECD, Employment and Labour Force Statistics (database).

[3] Data are from Huber et al. (2004), original source: Visser (1996).

the six outcome indicators mentioned in the previous section: Y1, referring to the outcome in the presence of the political treatment under investigation, and Y0, denoting the same outcome in a period where such intervention is absent. Since the treatment periods clearly coincide with those covered by the Thatcher and Reagan administrations (see below), the yearly gap between Y1 and Y0 corresponds to the impact of the neo-conservative revolution on each outcome indicator. Clearly, if the yearly gap is systematically negative (i.e., Y1>Y0), one may state that the neo-conservative administration caused a retrenchment effect.

Nevertheless, since Y0 is not obviously observable for all six outcomes, the counterfactual of welfare state trajectories must be reproduced in the absence of a neo-conservative administration. As anticipated, the synthetic control method was adopted for this purpose. It was implemented by performing the following steps.

The first one was to assemble a time-series-cross-section dataset composed of 17 OECD countries (Australia, Austria, Belgium, Canada, Denmark, Germany, Finland, France, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, Switzerland, UK, and USA), annually observed for the 1960-1990 period. Data restriction confined the analysis of some outcomes (i.e. TOTGEN, PGEN, UEGEN and UNDEN) to the 1970/1-1990 period.

As a consequence of this setting, the USA and UK were the countries which experienced the treatment period. Given the duration of the Thatcher and Reagan administrations, the UK treatment period lasted from 1980 to 1990, while the US one lasted from 1981 to 1988[4]. On the other hand, the years before to the arrival of these administrations comprised the pre-treatment period. By contrast, the 15 remaining countries in the dataset formed the donor pool, i.e. the set of potential comparisons.

This being said, it must be clarified why the UK and USA were considered as the only countries exposed to the treatment period under scrutiny, while all the other nations in the dataset were counted as untreated units. This may in fact prove too strong an assumption, since the existing literature on welfare state retrenchment shows that, after the long and increasing expansion of the twentieth century, all affluent democracies progressively embraced cutback politics. Pierson's own works subsequent to the book in question (1996; 2001) made it clear that retrenchment planning was not peculiar to the UK and US[5]. According to Pierson's works, however, this strictly depends on the period one considers. In the 1980s in particular, the Thatcher and Reagan administrations constituted a sort of political revolution. In this respect, in *Dismantling Welfare State?*, he wrote (1994: 4):

"For the first time since before World War II, political executives in Britain and the United States were now openly critical of central features of social policy. For Reagan and Thatcher, the welfare state was not simply a victim of poor economic performance but one of its principal causes. Significant reform of the welfare state was unquestionably a high priority for both administrations. […] These administrations' experiences thus constitute a crucial test of the welfare state's status in the "post-Keynesian" era. The confrontation between committed reform administrations and well-established social programs also sheds light on the nature and limits of the conservative resurgence of the 1980s".

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[4] Since we have employed annual data, two cuts concerning fractional years were necessary in the two treatment periods. Thus, since Margaret Thatcher moved into 10 Downing Street on 4 May 1979, 1979 was excluded from the UK treatment period. On the other hand, 1989 was excluded from the US treatment period because the Reagan administration covered less than one month of that year: he concluded his mandate on January 20, 1989.

[5] Pierson (1996) explores the dynamics of retrenchment in four cases: Great Britain, the United States, Germany, and Sweden.

Thus, in line with this argument, one can reasonably assume that the Thatcher and Reagan administrations in the UK and US were the only national cases exposed to the conservative revolution of the 1980s.

However, given that Allan and Scruggs (2004: 509) observed that since the early 1980s right-wing parties have been more likely to cut benefits, not just raise them less, or cut them more than non-right parties, additional synthetic control analyses were performed for the UK and USA considering other governments composed of right-wing parties as treated units. Consequently, Canada, Denmark, Japan and New Zealand were discarded from the donor pool[6]. This is because in these countries the share of seats in parliament held by (secular) right-wing parties was higher than 50% of all seats held by the government for at least five years in the 1980-1990 period – whereas under Thatcher and Reagan's administrations, the UK and USA share was in both cases constantly equal to 100[7]. The results of these additional analyses are reported in the Appendix as robustness tests. In almost all cases, the effects estimated are quite similar to those obtained using the full donor pool and discussed in Section 4.

The second step of the analysis comprised construction of two synthetic units, one for the UK and one for the US, with respect to each outcome variable mentioned in the previous section. These synthetic units were assembled so that they best reproduced the most relevant characteristics of the two nations prior to the treatment period. To this end, the following statistics were employed.

(1) A set of observed covariates for each nation to use as predictors of each variable outcome.

(2) Some linear combinations of pre-intervention outcome to control for unobserved common factors whose effects vary over time.

(3) A set of weights for each treated country chosen to be positive and sum to one. Each particular value of vector W represented a potential synthetic control; that is, a particular weighted average of control countries. Consequently, the resulting synthetic nations coincided with the weighted average of those units selected from the corresponding donor pool because they were associated with positive weights. So, for instance, the synthetic UK corresponded to weighted averages of available control units that best reproduced the most relevant characteristics of that country prior to 1980.

Mathematically, the weights W* were chosen such that the resulting synthetic units best approximated the units exposed to the political treatment with respect to the outcome predictors and linear combinations of pre-intervention outcomes, namely points (1) and (2). More precisely, if X1 is defined as a vector of pre-treatment variables for the treated units, and X0 is defined as the corresponding matrix of these variables for the possible control units, the weight matrix W is chosen to minimize

$$\sqrt{(X1 - X0W)' V (X1 - X0W)}$$

where V is a diagonal matrix introduced to allow different weights for the variables in X0 and X1 depending on their predictive power over the outcome (for more details, see Abadie and Gardeazabal, 2003; Abadie et al. 2010; 2015).

While the weights utilized to construct the synthetic UK and US are presented in the next section, some further details must here be provided about points (1) and (2).

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[6] For a similar discarding strategy, see Abadie et al. (2010).

[7] Data are from Brady et al. (2014).

Regarding point (1), the set of predictors employed for each of the above outcome variables must obviously be mentioned. For what concerns SSTRAN, TOTGEN, PGEN, UEGEN and GOVREV, they were selected from the literature on welfare state evolution (e.g. Huber and Stephens 2001; Garrett 1998; Iversen and Cusack 2000; Garrett and Mitchel 2001; Swank 1998; Swank and Steinmo 2002)[8]. They are the following:
1) Population aged 65 and older (%) (P65);
2) Unemployment rate (UNEM);
3) Trade openness, defined as the sum of exports and imports as a percentage of GDP (OPEN);
4) Gross domestic product per capita (GDPPC);
5) The neo-corporatism scale (NEOCORP) developed by Kenworthy (2003).

The predictors for UNDEN are very similar to the previous ones and were chosen from the literature on trade union evolution (e.g. Ebbinghaus and Visser 1999; Lange and Scruggs 2002). They are 1) UNEM, 2) OPEN, 3) GDPPC, 4) NEOCORP, and the percentage of industrial employment (INDEMP)[9].

Clearly, using such predictors does not make it possible to control for unobserved confounders, such as certain shocks which may have impacted on all or some welfare state indicators. These, if not controlled for, may certainly have biased the estimation. However, using a linear factor model – as prescribed by point (2) – this problem can be adequately overcome. In fact, by matching with pre-intervention outcomes (i.e. the pre-intervention counterparts of Y0 and Y1), one may control for unobserved factors and for the heterogeneity of the effect of observed and unobserved factors on the outcome in question. In other words, if units are alike in both observed and unobserved determinants of the outcome variable as well as in the effect of those determinants on the outcome variable, they will produce similar trajectories of the outcome variable over extended periods of time (Abadie et al. 2010; 2015). To this end, specific values for the outcome variables in the pre-intervention period were used as predictors.

They refer to the following years:
(1) 1962, 1968, 1974, and 1979, for SSTRAN;
(2) 1971, 1972, 1973, 1974, 1975, 1976, 1976, 1977, 1978, and 1979, for TOTGEN, PGEN and UEGEN;
(3) 1962, 1968, 1974 and 1979, for GOVREV;
(4) 1972, 1974, 1976, 1978 and 1979, for UNDEN.

Utilization of all pre-intervention period values for TOTGEN, PGEN and UEGEN was necessary because these outcomes denote quite irregular temporal dynamics which are thus hard to reproduce (for the same empirical strategy, see Billmeier and Nannicini 2013; Cavallo et al. 2013; Stearns 2015)[10].

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[8] Since the synthetic units had to best reproduce the characteristics of the UK and USA prior to the neo-conservative revolution, considering the predictors stressed by the literature on welfare state development is not inconsistent with Pierson's argument regarding the 'new politics of welfare state'.

[9] The sources used for these predictors are as follows : OECD, Employment and Labour Force Statistics (database), for P65; UNEM and INDEMP; OECD, Health Statistics (database) for GDPPC; and Penn World Tabel for OPEN.

[10] The differences in the years employed for the different outcomes were also due to the length of the time series utilized. For instance, the time series for TOTGEN, PGEN and UEGEN began in 1971.

The third step of our empirical strategy was results evaluation via placebo techniques. According to Abadie and Gardeazabal (2003) and Abadie et al. (2010; 2015), placebo techniques must be employed under the assumption of the principle of permutation inference. This implies that the synthetic control procedure is iteratively applied to every potential control unit. Specifically, in each iteration the political treatment here examined was reassigned to one of the units included in the donor pool. Then, the effect associated with each placebo was computed in order to construct a distribution of estimated impacts for the untreated countries. In this way, the yearly gap, respectively estimated for the USA and UK, could be contrasted with that estimated for a nation chosen at random. Hence, if the placebo results showed effects larger than those estimated for the two nations under scrutiny, no significant effect can be noticed. However, one has to take into account that a large yearly post-intervention gap is not indicative of a large effect by the intervention if the synthetic control does not closely reproduce the outcome in question prior to the intervention. To obviate this problem, the difference between the synthetic unit and the actual one (i.e. the yearly gap) in the pre- and post-intervention period was expressed via root mean squared prediction errors (RMSPEs). Hence, the post-/pre-1980 ratios of the RMSPE for UK, USA and all the countries in the donor pool were computed and the corresponding distribution was taken into account. This, under the assumption that, if the ratio computed for the UK and USA is larger than that computed for all (or nearly all) placebos, the effect can be considered significant (for more detail, see Abadie et al. 2010; 2015).

4. Results

Table 1 shows the weights of all countries included in the donor pool obtained to construct the synthetic UK and USA for each of the six outcome variables here examined. For instance, the synthetic UK constructed for SSTRAN is a combination of Australia, Italy and Japan with weights decreasing in that order. On the other hand, the countries chosen to construct the synthetic USA for PGEN are France, Canada and Italy.

Given that the weights reported in Table 1 were chosen to construct synthetic units so as to best reproduce UK and USA for all outcome variables with respect to the predictors mentioned in the previous section during the pre-intervention period, the performances of that reproduction must be evaluated. To this end, Table 2 reports the pre-1980 figures for these predictors for the treated units and the synthetic units constructed for each outcome variable. In line with Abadie et al. (2010; 2015), the Table also provides a population-weighted average computed on all the countries contained in the donor pool. For both nations, the distance between the values observed in the treated units for P65, UNEM, OPEN, GDPPC, NEOCORP, INDEMP and those computed in synthetic units for the same variables is in several cases bigger than the equivalent distance between the values observed for the treated cases and those computed as a population-weighted average of the countries in the donor pool. This means that in some cases the synthetic approximations to the pre-1980 treated units' characteristics are worse than those obtainable via a simple average of all potential control units. Nevertheless, if one uses only the population-weighted average, s/he will obtain a single artificial unit to approximate the two real nations under examination. Moreover and more importantly, s/he will not be able to suitably reproduce the values of outcome variables in the pre-intervention period. In fact, if one considers those values, the distance between synthetic figures and treated ones is almost systematically much lower than that computable between population-weighted averages and treated values (see Table 2). Moreover, as observed in the previous section, employing more outcome values as predictors helps to ensure that a synthetic control unit tracks the treated unit's outcomes appropriately over an extended period of time prior to the treatment. This is what Graphs 1-4 (Figure 1) 7-10 (Figure 2) 13-16 (Figure 3) show for the pre-intervention period.

When the time series are smoothed (see in particular Graphs 1 and 2 for SSTRAN and Graphs 12 and 13 for GOVREV), the synthetic line almost overlaps the trajectory of the treated line in the pre-1980 period[11]. On the other hand, when the trends are more erratic (see for example Graphs 8-10 for PGEN and UEGEN), the two segments do not systematically overlap, but they do follow very similar paths. On the other hand, the fit appears less satisfactory when the trends are strongly irregular (see in particular Graphs 3 and 4 for TOTGEN). Consequently, the results for this variable must be taken with caution.

Apart from this, given that almost identical or at least very similar trajectories of an outcome variable over extended periods of time can exclusively belong to units that are equal or at least comparable in both observed and unobserved determinants of that variable (see the previous section), the procedure here employed allowed us to construct synthetic units for the UK and USA which adequately mimic the characters of the two real nations prior to the political treatment under scrutiny.

Correspondingly, these synthetic units provide realistic approximations to the welfare state developments that would have been experienced by these two countries in the 1980-1990 period in the absence of neo-conservative governments. Hence, the distance between the treated and synthetic line during that period can reasonably be used as a consistent estimation of the effect produced by these governments on the respective welfare states.

Table 1 and 2 around here

In relation to the argument provided in Section 2, the first effects to consider concern the two indicators of overall welfare state retrenchment: SSTRAN and TOTGEN. Concerning SSTRAN, the synthetic line runs very close to the treated one in both cases. To be more precise, the synthetic values are barely smaller than the treated ones over a large part of the period (see Graphs 1 and 2 in Figure 1). Thus one could argue that, if neither the UK nor the USA had experienced a neo-conservative resurgence, their social security transfers per capita would have been even lower than those actually observed. In other words, Thatcher and Reagan would have not produced a retrenchment effect on welfare spending, but a slight acceleration of its growth. On the other hand, in the absence of that resurgence, welfare state generosity would have been higher in both cases. As Graphs 3 and 4 in Figure 1 show, the synthetic line progressively diverges from the treated one denoting an increasing retrenchment effect. This is particularly evident for the UK: at the end of the period examined, TOTGEN was 26.2 for the actual UK, and 31.5 for its synthetic counterpart. These results may appear contradictory: the neo-conservative administration seems to have provoked a positive effect on SSTRAN dynamics and a negative impact on TOTGEN. From a methodological viewpoint, such an inconsistency can be explained in relation to the fact that different countries were employed to construct the synthetic units pertinent to the two outcomes. For instance, the synthetic UK assembled for SSTRAN is a weighted average of Australia, Italy and Japan; whereas Austria, Canada, Norway and Japan are the countries utilized to construct the synthetic UK when examining TOTGEN. Clearly, this kind of explanation does not eliminate the substantive contradiction. However, it vanishes if one refers to the relevant results of placebo tests. In this connection, Graphs 5 and 6 in Figure 2 report the distribution of the post-/pre-1980 RMSPE ratios for the UK, USA and all the countries

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[11] For instance, if one does not use the values of specific years of SSTTRAN as predictors to construct the relevant synthetic UK (see Section 3), the fit for the other predictors will increase. But, the synthetic line and the treated one will be more distant in the pre-intervention period. There is de facto a sort of trade-off in approximating the predictors and the outcome trajectory. As Kaul et al. (2015) observe, the more outcome lags are used as predictors, the more irrelevant all other covariates become.

in the donor pool, respectively computed for SSTRAN and TOTGEN[12]. As one can see, neither the UK nor the USA were at the top of the two lists, denoting a ratio significantly lower than many placebos. This means that the exercise presented here does not provide evidence of any significant effect by neo-conservative governments on the measures relating to the overall welfare state in the UK and USA. Thus, Pierson's first conclusion proves to be corroborated: the success of the "programmatic retrenchment" has generally been limited and the two welfare states remain unaltered.

Figures 1 and 2 around here

As argued, Pierson's second conclusion – regarding the differing success of programmatic retrenchments within and across policy arenas – was tested by analyzing PGEN and UEGEN. Concerning PGEN, Graphs 7 and 8 of Figure 3 indicate a negative effect in both nations. After a few years, the two lines progressively diverge noticeably, especially for the UK. While the two synthetic lines denote a moderate increase, the treated lines exhibit a progressive reduction. The same goes for the effects estimated for UEGEN. Graphs 9 and 10 in Figure 3 indicate that if the UK and USA had not undergone a neo-conservative revolution, their unemployment generosity would have been higher than what was actually observed. Nevertheless, none of these effects can be considered significant. According to the placebo tests, only the effect estimated for the UK PGEN proves large relative to the distribution of the effects estimated for the nations in the donor pool. As Graph 11 of Figure 4 shows, the UK is placed near the top (second position) of the ranking-list compiled for PGEN in relation to the post-/pre-1980 RMSPE ratios. On the other hand, the UK is placed at the bottom of the corresponding list arranged for UEGEN (see Graph 12 in Figure 4). The USA does not reach the top of either ranking-list.
One may thus reasonably assert that Pierson's second conclusion is partly confirmed. On the one hand, as Pierson concluded, one may conclude that some programs have proven far more vulnerable than others. On the other, the results presented here do not systematically confirm Pierson's conclusion concerning the retrenchments implemented on the single programs. The UK public pensions system was actually radically reformed. By contrast, unemployment-insurance benefits in both countries appeared to undergo no significant alterations.

Figure 3 and 4 around here

The two last outcome variables here examined are GOVREV and UNDEN – as mentioned, both employed to measure systemic retrenchments. Synthetic control analyses performed for GOVREV indicate a small negative effect for the UK and an almost null effect for the USA. In the first case, the synthetic line runs above the treated one over a large part of the period examined (see Graph 13 in Figure 5). In the second case, the two lines interweave various times over the intervention period (see Graph 14 in Figure 5). Turning to UNDEN, one may observe a different pattern. With reference to the USA, a modest negative effect appears and then dissolves as a result of the bind between the two lines (see Graph 15 in Figure 5). In relation to the UK, a large negative effect arises. Immediately after the appointment of

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[12] In all placebo tests, the treatment period for the placebos lasted from 1980 to 1990 as for the UK, although the USA treatment period actually began in 1981 (see above).

the Thatcher government, the two lines begin to diverge markedly. On the one hand, UNDEN in the synthetic UK remains almost constant throughout the treatment period. On the other, it denotes a severe reduction in the real UK (see Graph 16 in Figure 5).

The magnitude of the effects visualized in the Graphs of Figure 5 is confirmed by the placebo tests. Specifically, the only effect which proves significantly larger than those computed for the countries unexposed to the neo-conservative revolution is that estimated for UNDEN for the UK. As Graphs 17 and 18 in Figure 6 indicate, the USA has a post-/pre-1980 RMSPE ratio that is lower than several placebos, while the UK attains second position only in the ranking-list drawn up concerning the placebo test for UNDEN.

On the basis of these results, Pierson's third conclusion again appears partially confirmed. In general, one may assert that the attempts at implementing systemic retrenchments in the UK and USA were not effective in most cases. Nevertheless, the analyses presented here provide evidence contrasting with what Pierson offered on the individual systemic retrenchments. Organized labor was not weakened in both countries, but only in the UK. Furthermore, the Reagan administration was not successful in defunding the American welfare state.

Figures 5 and 6 around here

5. Conclusion

Referring to Fearon's (1991) recommendation, Esping-Andersen (2007) argued that the smaller the sample size – such as that of macro-comparisons –, the greater the need to make counterfactuals explicit. In order to make this argument clear, he observed that the explicit aim of the 'politics matter' literature is to demonstrate that leftist power (x) matters for welfare state development (y), conditional on a vector (z) of other plausible factors (such as economic growth). For instance, we observe Italy's welfare state size, and that Italy was ruled by Christian Democrats throughout the post-war era. The obvious counterfactual is that its welfare state would have been 'bigger' or 'better' had it been ruled by social democrats. In other words, we need to observe another Italy, i.e. a country that matches Italy on all relevant z values but differs on x. (Esping-Andersen 2007: 336).

The issue stressed by Esping-Andersen is very similar to what this paper has emphasized by replicating the Pierson analysis. In his seminal book, Pierson argued against the 'politics matter' argument for understanding welfare state retrenchment. Nevertheless, he did not bother about making counterfactuals explicit. He observed the evolution of the UK and USA welfare state during and at the end of the Thatcher and Reagan administrations, but did not consider what would have happened to the two welfare states if the two nations had not experienced the neo-conservative revolution of the 1980s. Pierson's omission is thus made good, using a well-known technique to reproduce the counterfactual in comparative case studies, namely the synthetic control method. Controlling for potential confounding factors, the development of the two welfare states can be reconstructed in the absence of neo-liberal administration and then compared with the real pattern.

Although Pierson was wrong from a methodological point of view, these comparisons have demonstrated that he was basically right: the UK and USA welfare states proved to be resilient to the attacks by these governments. Although the analyses presented in the course of the paper do contradict some of Pierson's conclusions regarding specific programmatic and strategic retrenchments, they actually confirm his main conclusion: even though the conservative resurgence caused some occasional, albeit significant, variations in specific components of the welfare state, this last persisted substantially unaltered.

Clearly, such a conclusion also resolves the dispute between Pierson and his detractors concerning the role of partisanship. The fact that the two welfare states remained almost intact demonstrates that the neo-conservative revolution of the 1980s did not ultimately matter.

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Table 1 - Country weights in the synthetic UK and USA for the six outcome variables examined.

Country	SSTRAN		TOTGEN		PGEN		UEGEN		GOVREV		UNDEN	
	UK	USA	UK	USA	UK	USA	UK	USA	UK	USA	UK	USA
AU	0.552	0	0	0.835	0.095	0	0	0	0	0	0	0
AT	0	0	0.574	0	0	0	0	0.023	0	0	0.47	0
BE	0	0	0	0	0	0	0.537	0.247	0	0	0	0
CA	0	0.63	0.189	0.165	0.042	0.355	0	0	0.145	0.859	0	0
DK	0	0	0	0	0	0	0	0	0	0	0.135	0
DE	0	0	0	0	0	0	0	0	0	0	0.141	0
FI	0	0	0	0	0.635	0	0.279	0.346	0	0	0	0
FR	0	0.23	0	0	0.229	0.575	0	0.326	0.091	0.022	0	0.524
IT	0.245	0	0	0	0	0.07	0	0	0.763	0.119	0	0
JP	0.203	0	0.088	0	0	0	0	0	0	0	0	0.476
NL	0	0	0	0	0	0	0	0	0	0	0	0
NZ	0	0	0	0	0	0	0	0	-	-	0	0
NO	0	0.122	0.15	0	0	0	0	0	0	0	0.254	0

SE	0	0.017	0	0	0	0	0	0	0	0	0	0
CH	0	0	0	0	0	0	0.183	0.057	0	0	0	0

Table 2 – Predictor means in the pre-treatement period.

SSTRAN	UK			USA		TOTGEN	UK			USA	
	Treated unit	Synthetic unit	Population average	Treated unit	Synthetic unit		Treated unit	Synthetic unit	Population average	Treated unit	Synthetic unit
P65	13.0	8.9	10.4	10.0	9.9	P65	13.9	12.8	11.2	10.5	8.8
UNEM	2.6	3.2	2.7	5.6	4.5	UNEM	3.6	2.5	3.3	6.3	4.4
OPENK	33.4	19.6	26.7	11.1	35.4	OPENK	37.6	45.2	30.7	12.5	25.0
GDPPC	2873.5	3680.8	3783	5945.6	4996.7	GDPPC	4017.6	5730.1	5729.9	8018.6	7116.3
NEOCORP	0.2	0.4	0.4	0.1	0.4	NEOCORP	0.2	0.8	0.4	0.1	0.3
SSTRAN (1962)	109.4	91.0	122.2	173.8	168.7	TOTGEN (1971)	25.9	26.1	25.8	16.1	17.1
SSTRAN (1968)	163.3	145.7	232	287.6	295.5	TOTGEN (1972)	27.8	27.9	26.6	19.1	19.4
SSTRAN (1974)	337.5	373.1	596.3	662.9	655.3	TOTGEN (1973)	27.7	27.9	26.9	19.5	20.7
SSTRAN (1979)	846.2	799.7	1381.5	1118.3	1119.6	TOTGEN (1974)	27.4	27.8	27.4	19.3	20.3
						TOTGEN (1975)	27.7	28.8	27.9	20.0	21.3
						TOTGEN (1976)	27.5	29.4	28.5	19.8	21.9
						TOTGEN (1977)	31.2	30.1	28.7	19.7	21.8
						TOTGEN (1978)	32.1	30.7	28.8	20.5	21.8
						TOTGEN (1979)	32.4	31.3	29.2	21.0	21.8

PGEN	UK			USA		UEGEN	UK			USA	
	Treated unit	Synthetic unit	Population average	Treated unit	Synthetic unit		Treated unit	Synthetic unit	Population average	Treated unit	Synthetic unit
p65	13.9	10.9	11.2	10.5	11.6	P65	13.9	12.6	11.2	10.5	12.5
UNEM	3.6	3.7	3.3	6.3	5.0	UNEM	3.6	3.4	3.3	6.3	3.7
OPENK	37.6	37.8	30.7	12.5	32.3	OPENK	37.6	70.1	30.7	12.5	51.2
GDPPC	4017.6	5755.8	5729.9	8018.6	6760.2	GDPPC	4017.6	6425.5	5729.9	8018.6	6588.4
NEOCORP	0.2	0.7	0.3	0.1	0.4	NEOCORP	0.2	0.8	0.4	0.1	0.7
PGEN (1971)	9.5	9.5	8.7	7.9	8.6	UEGEN (1971)	5.6	6.6	7.7	8.1	8.2
PGEN (1972)	9.7	9.7	8.9	9.9	9.0	UEGEN (1972)	9.9	7.6	7.8	9.2	8.9
PGEN (1973)	9.8	10.0	9.1	10.4	9.5	UEGEN (1973)	9.8	8.3	7.9	9.2	9.1
PGEN (1974)	10.2	10.1	9.6	10.4	9.9	UEGEN 1974)	9.4	8.8	8	8.9	9.2
PGEN (1975)	10.6	10.3	9.8	10.6	10.1	UEGEN (1975)	9.3	9.3	8	9.4	9.3
PGEN (1976)	10.6	10.6	10.3	10.5	10.6	UEGEN (1976)	9.2	10.3	8.1	9.4	9.6
PGEN (1977)	10.5	10.6	10.6	10.3	10.4	UEGEN (1977)	11.3	11.2	8.1	9.3	10.0
PGEN (1978)	10.7	10.8	10.7	10.3	10.5	UEGEN (1978)	11.7	11.3	8.2	10.2	10.1
PGEN (1979)	10.9	11.0	10.9	10.6	10.9	UEGEN (1979)	11.8	11.4	8.2	10.4	10.3

NOTES:

Table 2 (continues)

GOVREV	UK			USA	
	Treated unit	Synthetic unit	Population average	Treated unit	Synthetic unit
P65	13.0	10.7	10.4	10.0	8.6
UNEM	2.6	5.5	2.7	5.6	5.9
OPENK	33.4	25.5	26.7	11.1	33.6
GDPPC	2873.5	2954.7	3787.2	5945.6	4783.2
NEOCORP	0.2	0.4	0.4	0.1	0.2
GOVREV (1962)	457.5	344.4	386.8	802.5	553.3
GOVREV (1968)	658.4	612.1	685.4	1249.6	1000.8
GOVREV (1974)	1251.3	1279.1	1816.2	2218.4	2421.1
GOVREV (1979)	2605.7	2487.0	3761.8	3562.2	3421.1

UNDEN	UK			USA	
	Treated unit	Synthetic unit	Population average	Treated unit	Synthetic unit
INDEMP	41.3	41.3	38.3	31.9	32.4
UNEM	3.6	2.0	3.3	6.3	2.7
OPENK	37.6	49.5	30.7	12.5	20.9
GDPPC	4017.6	6236.9	5729.9	8018.6	6044.4
NEOCORP	0.2	0.9	0.4	0.1	0.6
UNDEN (1972)	26.6	26.5	16.9	12.7	12.4
UNDEN (1974)	27.4	27.3	17.8	12.7	12.7
UNDEN (1976)	28.0	28.4	18.3	11.9	12.5
UNDEN (1978)	29.8	29.5	18.4	12.2	12.1
UNDEN (1979)	29.9	29.9	18.3	11.6	11.6

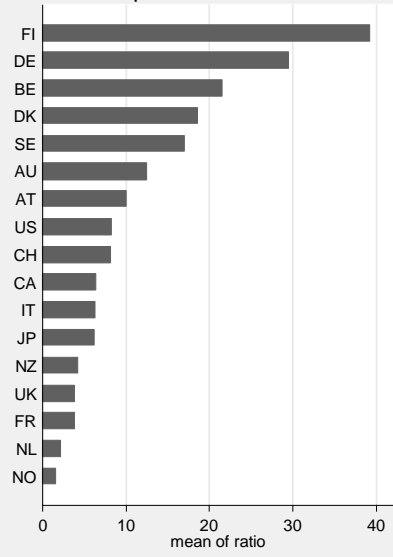Figure 1 - Trends in SSTRAN and TOTGEN for USA and UK: the treated unit vs. the synthetic unit.
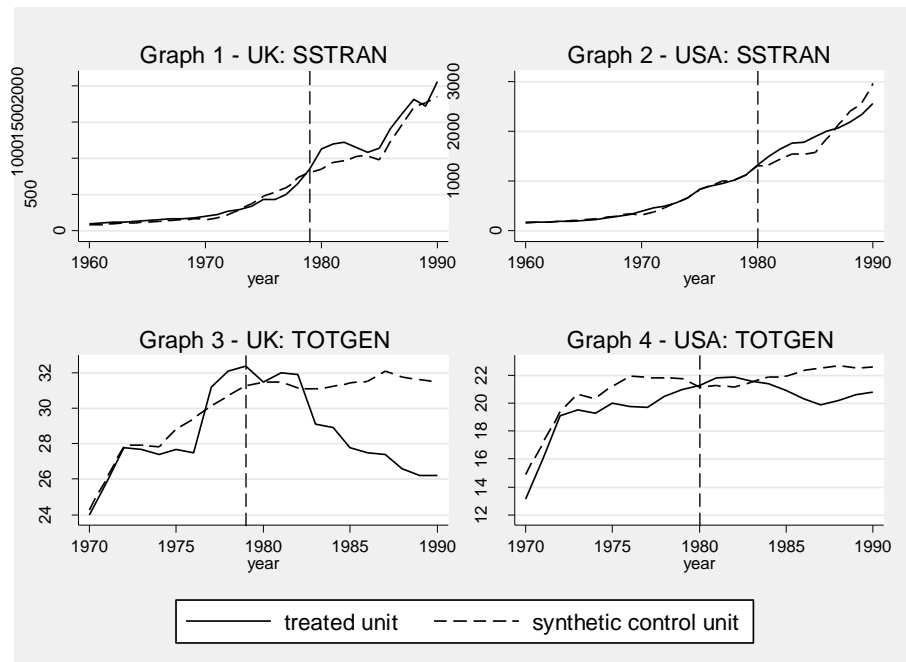
Figure 2. Placebo tests for SSTRAN and TOTGEN.
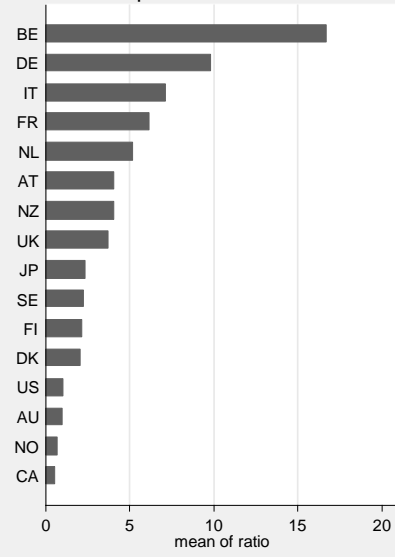
Graph 5 - SSTRAN ratio

Graph 6 - TOTGEN ratio

Figure 3 - Trends in PGEN and UEGEN for USA and UK: the treated unit vs. the synthetic unit.
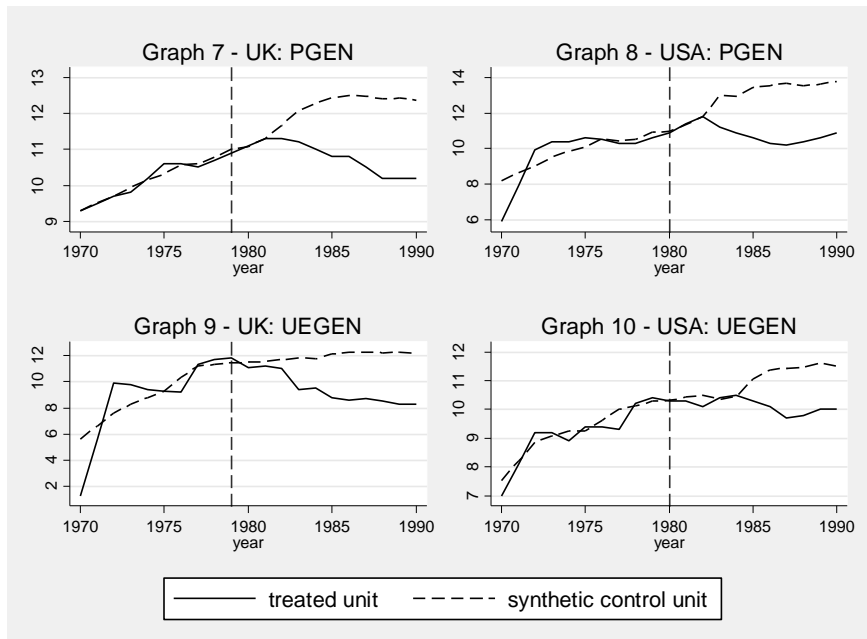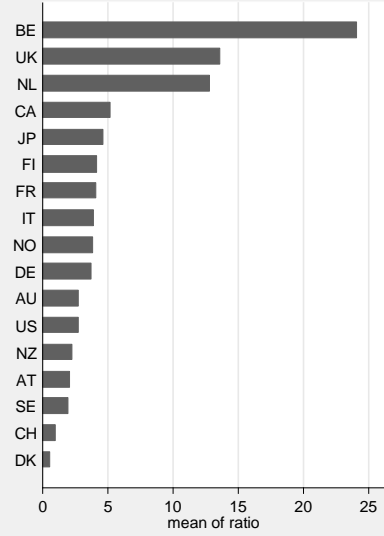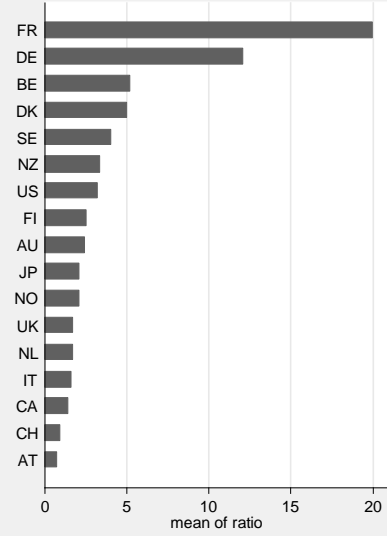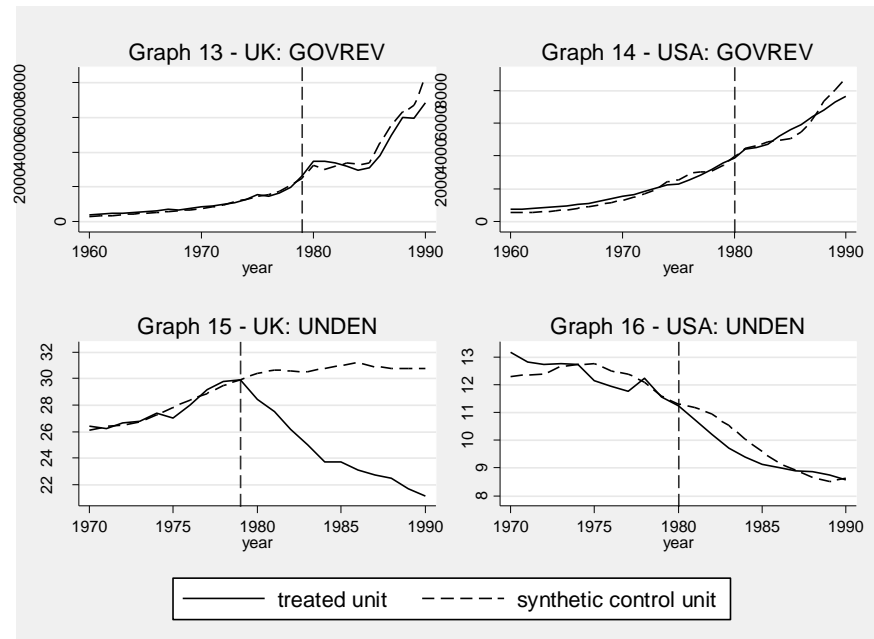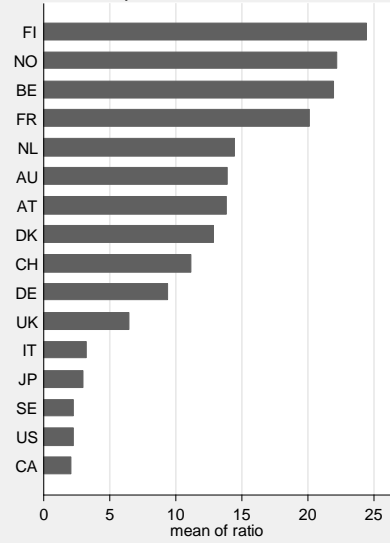

Figure 4 – Placebo tests for PGEN and UEGEN

Graph 11 - PGEN ratio

Country	
BE	
UK	
NL	
CA	
JP	
FI	
FR	
IT	
NO	
DE	
AU	
US	
NZ	
AT	
SE	
CH	
DK	

mean of ratio

Graph 12 - UEGEN ratio

Country	
FR	
DE	
BE	
DK	
SE	
NZ	
US	
FI	
AU	
JP	
NO	
UK	
NL	
IT	
CA	
CH	
AT	

mean of ratio

Figure 5 - Trends in GOVREV and UNDEN for USA and UK: the treated unit vs. the synthetic unit.
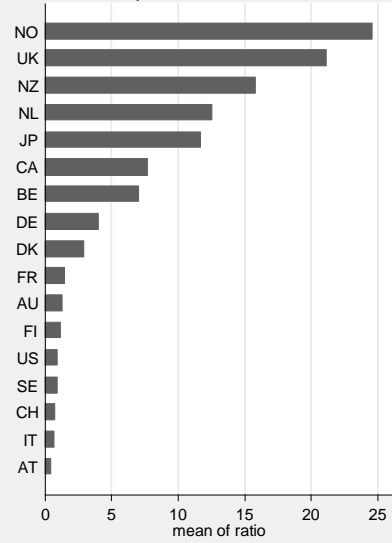

Figure 6 – Placebo tests for GOVREV and UNDEN

Graph 17 - GOVREV ratio

Graph 18 - UNDEN ratio

Appendix

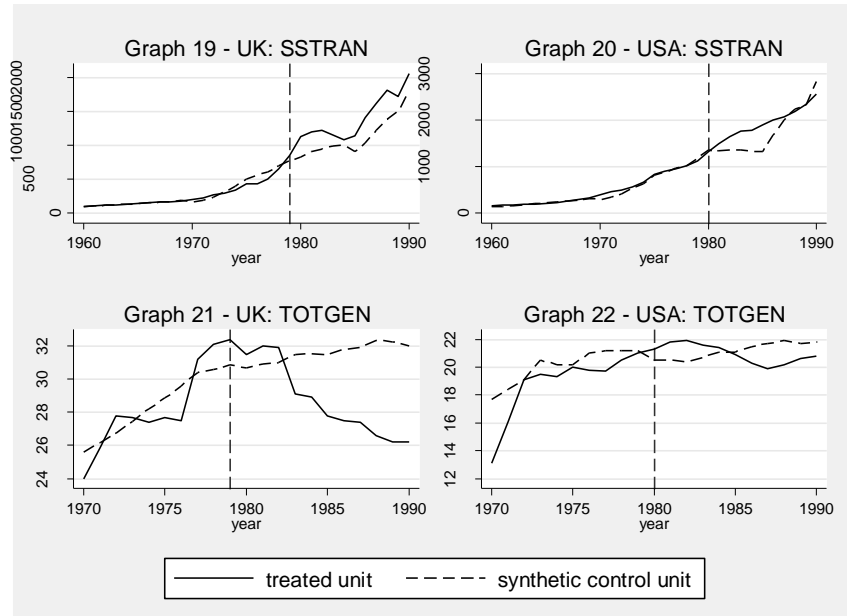Figure 7 - Trends in SSTRAN and TOTGEN for USA and UK: the treated unit vs. the synthetic unit.

Figure 8 - Trends in PGEN and UEGEN for USA and UK: the treated unit vs. the synthetic unit.
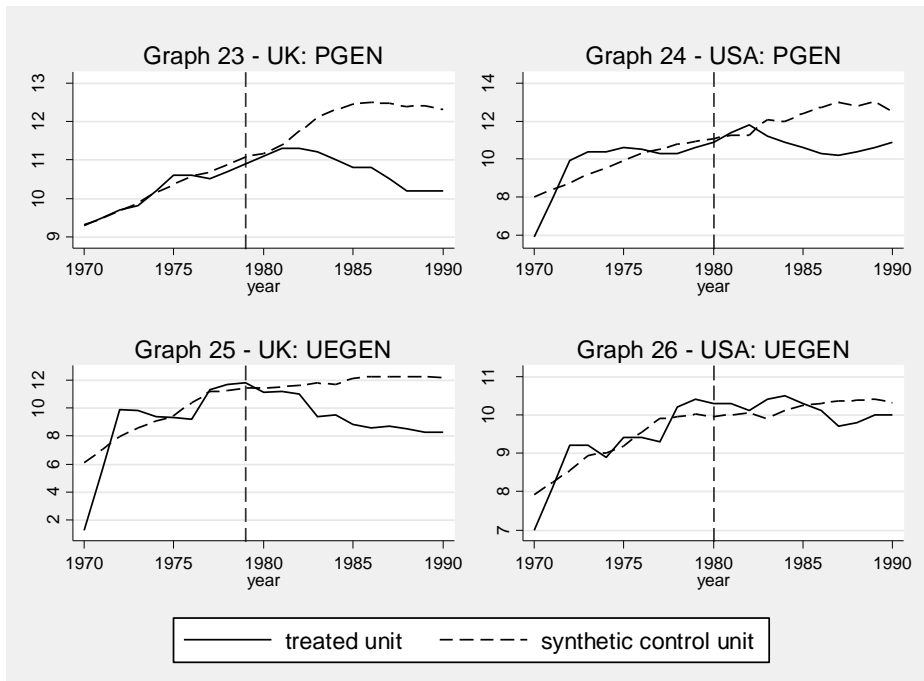
Figure 9 - Trends in GOVREV and UNDEN for USA and UK: the treated unit vs. the synthetic unit.