Chapter 10. Structural reforms in Europe: Lessons from early experiences[1]

Orkun Saka, Nauro Campos, Paul De Grauwe, Michael Ganslmeier, Yuemei Ji, Angelo Martelli

1. Introduction

This chapter focuses on a set of major reform episodes that occurred across both financial and labour markets in four European countries in the 1980s and 1990s. The countries under analysis are Denmark, France, Greece and Portugal. This series of case studies was carefully chosen because they certainly represent among the most intense reform efforts in the two domains we have focused on and because they are distant enough from major crises and spillover effects from interconnected countries. Because of the methodology we are implementing, Synthetic Control Method, the analysis of this early reform experiences allows us to have pre- and post-treatment periods which are long enough to investigate the effects on our outcomes of interest: growth and inequality for both domains, while bank deposit per capita and employment to population ratio for financial and labour market reforms respectively. The results are very mixed in nature, showing that the relationship between structural reforms and several macro measures, also in the long run, may not yield the intended results and an institutional embedding to explain differences in performance is necessary.

Billmeier and Nannicini (2013) started to use the synthetic control method in the reform-growth literature by estimating the effect of trade liberalization on real GDP per capita. Hereby, they have estimated all liberalization episodes between 1965 and 2005 for countries in the Middle East, Asia, Africa and Latin America. Overall, their results indicate a positive impact of trade liberalization although the effect varies across countries. It seems that

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the reform effects of countries that liberalized at a later state – e.g. African countries in the 1990s – do not reach conventional significance levels.

In line with these results, Terzi and Marrazzo (2017) investigated the effect of real and financial structural reforms on economic growth. Conducting synthetic controls for 22 countries between 1961 and 2000, they found that the overall impact of liberalizing the national economy is positive, although heterogeneous treatment effects exist between advanced and emerging economies. To be more specific, advanced economies seem to materialise the benefits earlier but to a smaller extent compared to emerging countries.

Duval et al. (2018) used the synthetic approach to identify the effect of labour and product market regulation on economic performance. Hereby, reforms in four out of six countries turned out to have a positive impact. Interestingly, the labour market reforms in Denmark and New Zealand in the early 1990s seem to have no positive impact on economic growth.

In contrast to these studies, a positive impact of flat tax reforms could be documented by Adhikari and Alm (2016), who found that the adoption of flat tax systems spurs economic growth in eight Eastern and Central European countries between 1994 and 2005. Seven of these cases reach conventional significance levels. The average treatment effect of all eight countries estimates that the adoption of flat tax systems increases average GDP per capita by 18.2%.

2 Methodology

2.1 Synthetic Control Method (SCM)

First proposed by **Abadie and Gardeazabal (2003)** and later developed by **Abadie, Diamond & Hainmueller (2010; 2015)**, SCM is a program evaluation tool that estimates the

effect of a treatment (in this paper, a structural reform) on a given unit (e.g. country) at a certain point in time. This data-driven case study approach comes along with two major advantages: first, the data-driven selection of comparison groups can be considered as a more objective way of choosing adequate control units. Second, SCM estimates the trajectory of a counterfactual scenario for the treated unit by producing a weighted average of the outcomes of the untreated units in the control group. Unit-specific non-negative weights are determined by employing an optimization method that aims to minimize the pre-treatment distance between the outcome of the treated unit and the weighted average outcome of the control units. Thus, these optimal weights are projected over the post-treatment period in order to synthetically create a counterfactual outcome and determine the magnitude of the treatment effect for the treated unit.

The SCM has often been used in empirical studies in the field of structural reforms.[2] The overall goal in this literature is to determine the effect of a reform in a given country by estimating the difference between "what has happened with the reform" (i.e., observed growth experience of the reforming country) and "what would have happened without the reform" (i.e., growth experience of a synthetic counterfactual composed of non-reforming countries) in the time period following the reform introduction. Structural reforms in areas such as trade and labour market policies have been typical examples in recent empirical SCM studies (**Nannicini and Billmeier, 2013; Terzi and Marrazzo, 2017**). The present analysis aims to build on these studies by estimating the impact of financial market and labour market reforms in selected European countries.

2.2 Model specification

In all our estimations, we define several model parameters: First, in each of our case-studies, the year in which a specific type of reform was introduced is represented by T_0 and the pre-

[2] SCM has been used extensively in the empirical literature. See **Ferman (2018)** for a review.

treatment period covers the 20 years between T_{-20} and T_{-1}. As **Abadie et al. (2015)** have argued, a sufficiently long pre-treatment period is crucial for identification as it ensures that the unobservable time-varying shocks would be captured by the synthetic counterfactual.[3] Ending the optimization period at T_{-1} has the advantage that the immediate effects of the treatment do not influence the donor composition.[4] Second, the post-treatment period lasts from T_0 until T_9, meaning that not only can we estimate the instantaneous effect but we can also plot the dynamic effects of reforms over time.

In order to pick which reform episodes to focus on, we need a consistent dataset of reforms over countries and time. Arguably, the financial reform dataset first coined by **Abiad et al. (2010)** and then partly extended by **Denk & Gomes (2017)** is the most prominent and comprehensive dataset in that respect. Thus, we combine these two datasets and compute the largest yearly changes in the aggregate financial liberalization index for the countries in the European Union from 1973 to 2015. Focusing on the positive changes, we select the four largest financial liberalization episodes in the history of the EU, namely France 1984, Denmark 1988, Portugal 1992 and Greece 1993. Although Italy adopted major financial liberalization policies in 1993, we do not take the country into account because of the ERM crisis.[5] On the labour market side, we select the same treated countries as in the financial side in order to draw direct comparisons between the effects of financial and labour market reforms on the same set of countries. According to the IZA dataset, the countries mentioned above undertook structural labour market reforms in the following years: France 1986, Denmark 1995, Portugal 1996 and Greece 1990.

[3] Due to data availability however, the pre-treatment period we employ could not be extended further.

[4] In the SCM literature, donors are simply the control units that are assigned positive weights in determining the synthetic outcome. Control units can only be assigned a non-negative weight, including zero.

[5] In this case, it is methodologically impossible to isolate the effect of the reform from the coinciding ERM crisis.

We are especially interested in how financial liberalization affects (1) log GDP per capita, (2) labour share of GDP and (3) bank deposit per capita for financial reforms and employment level for labour reforms. The first indicator will tell us about the economic growth rate of the country and the second is a proxy for the level of economic inequality while the last one is a measure of development in the related sector.

In order to improve the matching between the donor and the treated countries and thus enhance the reliability of the estimated counterfactual, we control for the following covariates: population, population growth, investment share of real GDP per capita, openness ((export+import)/GDP), percentage of secondary schooling completed, percentage of tertiary schooling completed and financial (or labour) reform index. Although some covariates may receive more loadings than others, they are generally useful to assign donor weightings to countries that are similar to the treated unit along key country characteristics. However, controlling for further covariates does not guarantee the creation of a suitable counterfactual because of the following two reasons: first, the estimated synthetic country (for example, Italy) should not be a linear combination of donor countries only located at the minimum and maximum of the dependent variable and/or covariates (for example, Sweden and Ghana). Second, donor countries that have experienced major economic turmoil and/or undertaken structural reforms themselves would bias the treatment effect. In order to limit such concerns, it is conventional to manually exclude some units from the potential donor pool beforehand. In our case, we drop countries which either (1) experienced one or more financial crises between T_{-5} and T_4, or (2) adopted major (financial or labour) reforms in the 1970s, 1980s and 1990s, or (3) has a population at T_0 < 1mio, or (4) belong to the 25% poorest countries among all donor pool countries (based on GDP per capita).

In addition to these exclusions, the SCM algorithm requires a fairly good data coverage. Thus, countries that have no data for at least one of the predictors for the entire pre-

treatment period have to be dropped. In addition, countries with any missing values for the dependent variable between T_{-20} and T_9 are removed as well.

3. Results

3.1 Financial Reforms

3.1.1 *French Banking Act in 1984*

The French banking system entered the 1980s with a heavy regulatory hangover. There was a credit-ceiling arrangement, called *encadrement du crédit*, which forced limits on the amount of lending that banks could provide to the private sector. The policy was adopted in order to limit the money growth, which had led to multiple devaluations of the domestic currency between 1974 and 1976. In addition, the government had many subsidized schemes which were granted exemptions from these restrictive credit-ceiling rules. Hence, subsidized lending started dominating the credit markets and there were as many as 250 different subsidy programmes by 1984.

The socialist government in power undertook further bank nationalisations in 1982 despite having already had a significant presence in the banking sector, increasing its share to more than fifty percent. Interest rates were also regulated by the central bank to such an extent that some observers claim that they played a minimal role in capital allocation (**Naouri, 1986**).

Given this background, the Banking Act of 1984 came as a major reform shock for the French financial system. In essence, it eliminated entry barriers in the banking industry, simplified the framework for commercial banking activities and modernized the prudential rules that levelled the playing field across different types of banks. Immediately after the Act, the subsidized loans were eliminated and the previous credit-ceiling arrangements were

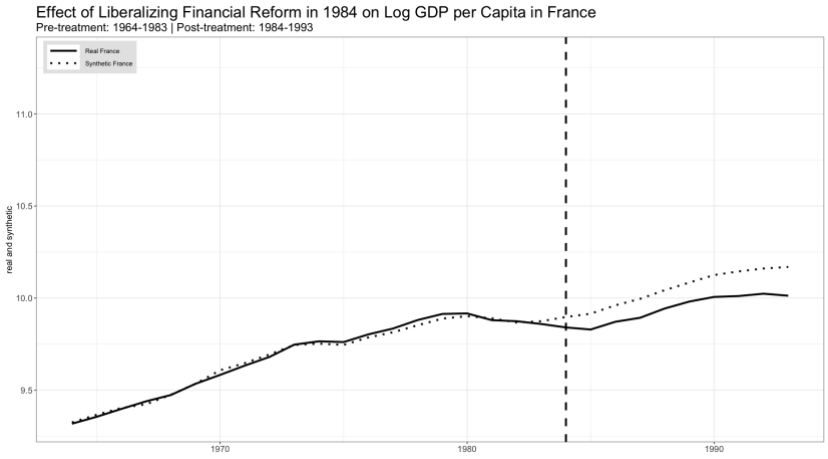
abolished. These developments are also captured by the dataset we employ (**Abiad et al., 2010**) and major positive (liberalizing) changes are reported in the interest rate, entry barriers and banking supervision aspects of the aggregate financial reform index.

The literature studying this specific reform episode generally focused on the efficiency gains that these reforms brought along. For instance, an early survey showed that reforms triggered efficiency concerns among bank managers in France, especially in terms of reducing costs and better monitoring for the credit performance (**Rémy & Sergent, 1986**). Discussing the positive externalities of these banking reforms on capital markets development in France, **Melitz (1990)** concluded that they decreased the historical bank-dependence of the real sector and changed the financial profile of the country more towards an Anglo-Saxon model. At the micro-level, **Bertrand, Schoar & Thesmar (2007)** provided empirical evidence that bank lending started flowing to more productive firms following these reforms.

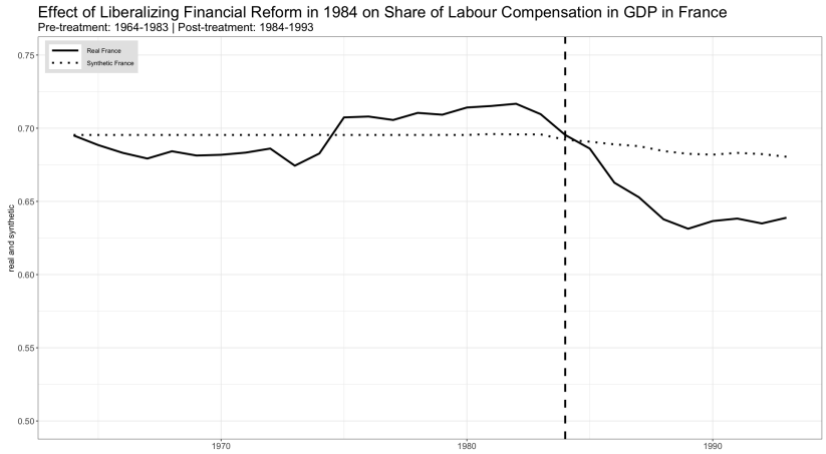
From the literature cited above, one could optimistically expect to see a positive effect of this reform package on macro outcomes such as the growth rate of the country. Our results, reported in **Figure 1**, shed a different light however. **Panel (a)** illustrates that the growth rate of the GDP per capita in France was not able to keep up with its synthetic counterpart after the reforms were introduced, suggesting a negative causal impact of reforms on economic growth. In line with this underperformance, **Panel (b)** shows that the post-reform share of labour in the economy decreased, suggesting a substantial uptick in economic inequality involving a redistribution from labour to capital. Finally, it seems from **Panel (c)** that banking reforms were not able to improve the deposit conditions at French banks, at least not as much as the level of its counterparts represented by the synthetic trend.

These results lead us to conclude that, although it may have fixed certain failures in credit markets, the French Banking Act of 1984 was not particularly successful at the macro

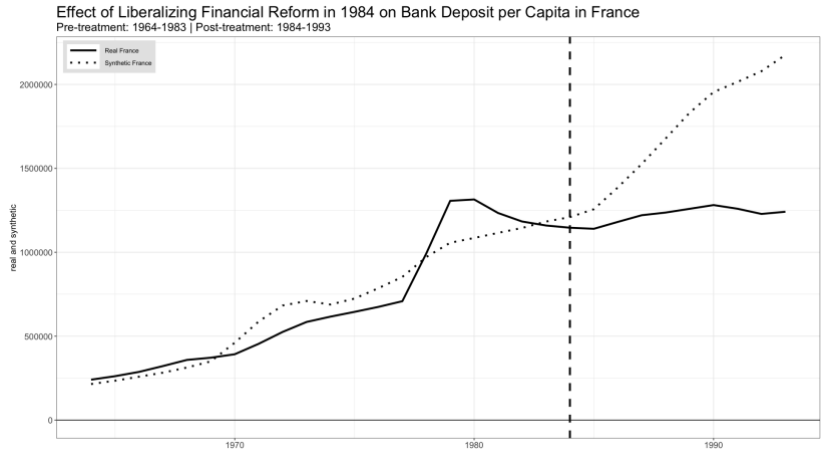
level. This in itself constitutes an interesting finding where micro and macro outcomes do not seem to have tended towards the same direction. What was crucially different regarding the French Banking Act was the big-bang nature of the reforms, which introduced different dimensions of financial liberalisation



(a) Log GDP per capita



(b) Labour share of GDP



(c) Bank deposit per capita

Figure 1. **The effects of 1984 financial reforms in France.** The figure shows the realized (solid line) and synthetic (dotted line) outcomes in France from 1964 to 1993. The dashed line indicates the reform year in 1984.

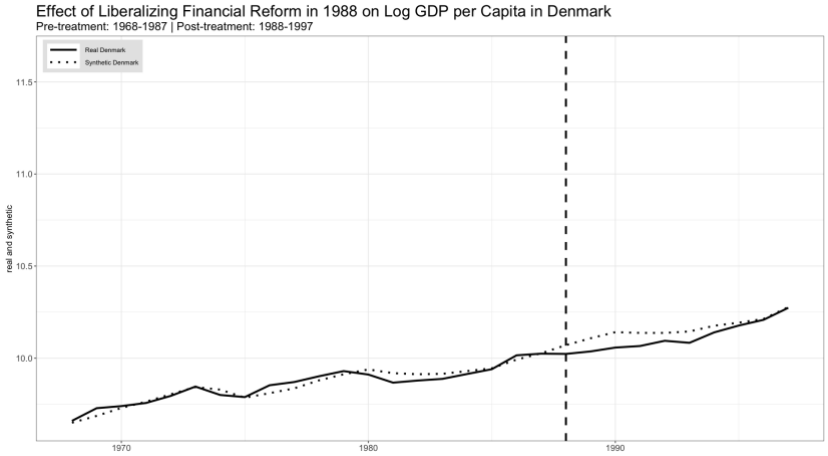
3.1.2 *Danish financial liberalization wave in 1988*

The financial system in Denmark was already well integrated with the rest of the world starting from late 1950s onwards and most of the internal liberalisation had already taken place in the early 1980s (**Jonung, 2008**). Hence, 1988, the year during which our dataset indicates a large reform was introduced, cannot be considered categorically the same as the 1984 period in France that was discussed in the previous section. In 1984, France was at low levels of liberalisation in most dimensions and tried to liberalise its financial system all at once with a big-bang-like reform effort. In contrast, Denmark was already at a more liberalised level and was taking gradual steps for further reforms in the beginning of 1980s so that 1988 was not a substantially different year than others in terms of the magnitude of reform it brought.

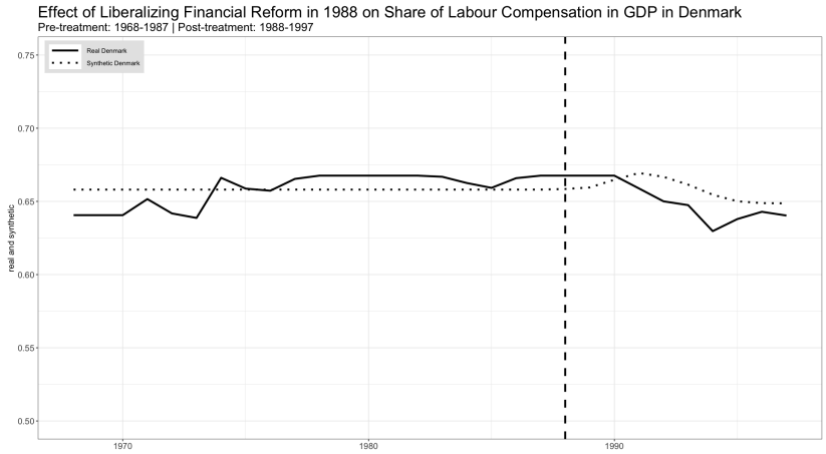
Our dataset shows that the main areas of reform in Denmark during this period was not about interest rates or credit controls, which were almost fully liberalised by that point; but they were about international capital flows and entry barriers in the banking sector. This reform push led Denmark to open up to foreign banks and also to hot money flows that were vastly feared a decade ago. Alongside foreign bank entry, the country modernised its regulatory framework and updated its banking supervision laws.

Figure 2 shows us how these changes affected the key macro outcomes in Denmark. First, GDP per capita seems to have underperformed in the short-term; however later caught up in the longer term, after which the effect becomes invisible. Similar to what happened in

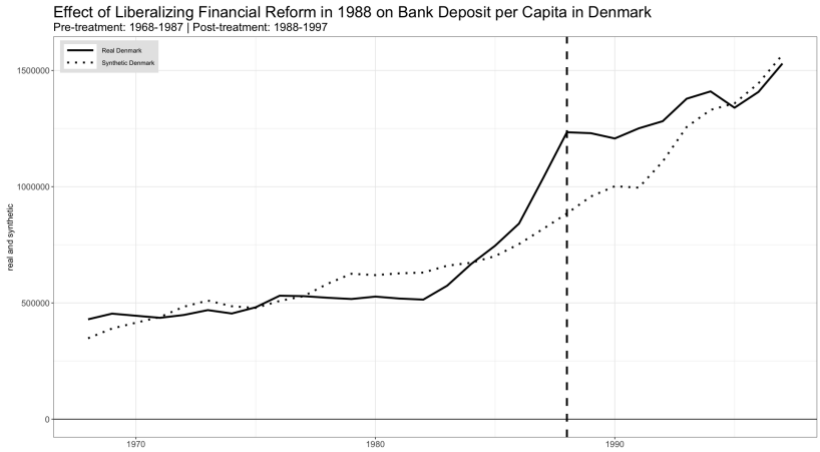
France in 1984, the labour share of the Danish GDP follows a downward trend after the reforms and -even though the counterfactual trend is also in the negative direction- the difference between the real and synthetic series gets larger, indicating increasing inequality after the reform introduction (an increasing redistribution from labour to capital). Finally, it is harder to interpret the results for the bank deposit per capita trend since the matching between the real and synthetic series is not great during the pre-reform period, leading us to doubt the identification of the treatment effect. All in all, the Danish liberalisation wave does not seem to have triggered a major positive change in any of the macroeconomic indicators that we investigate.



(a) Log GDP per capita



(b) Labour share of GDP



(c) Bank deposit per capita

Figure 2. **The effects of 1988 financial reforms in Denmark.** The figure shows the realized (solid line) and synthetic (dotted line) outcomes in Denmark from 1968 to 1997. The dashed line indicates the reform year in 1988.

3.1.3 *Bank privatizations in Portugal in 1992*

After the revolution in 1974 and the subsequent heavy state involvement in almost all parts of the economy, Portugal experienced the 1980s with restrictive financial regulations and a large part of its banking system being under government-control. Restrictions on the amount of credit and on interest rates were common during this period. Furthermore, commercial and investment banks had different regulatory treatments and were legally separated. The range of activities that commercial banks could engage in was also restricted, leading to low levels of competition, innovation and efficiency (**Lagoa, Leão, Mamede & Barradas, 2013**).

In the late 1980s and early 1990s, Portugal changed its track in economic management. After the country became a member of the European Economic Community in 1986, there was a need to integrate its economy into the European Common Market. Therefore, the country started relaxing its banking regulatory framework, opening up its

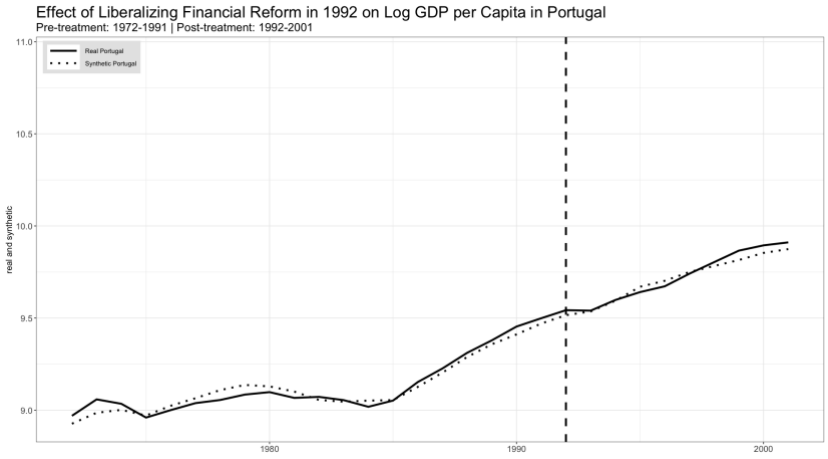
borders for private capital and allowing foreign banks to come and operate in the country. Between 1990 and 1994, the number of banks in the country almost doubled.

Specifically, in 1992, there were several aspects of financial liberalization that were initiated. During this year, our dataset indicates that the last set of controls on the interest rates and banking entry barriers were eliminated while the financial supervision was improved. But most importantly, the first phase of the banking privatisations was put into practice within this year. This was a crucial point since it was the first push to curb the direct state influence on financial institutions which had been there since the 1974 revolution that had irreversibly nationalised the banking sector by writing it down in the country's constitution.

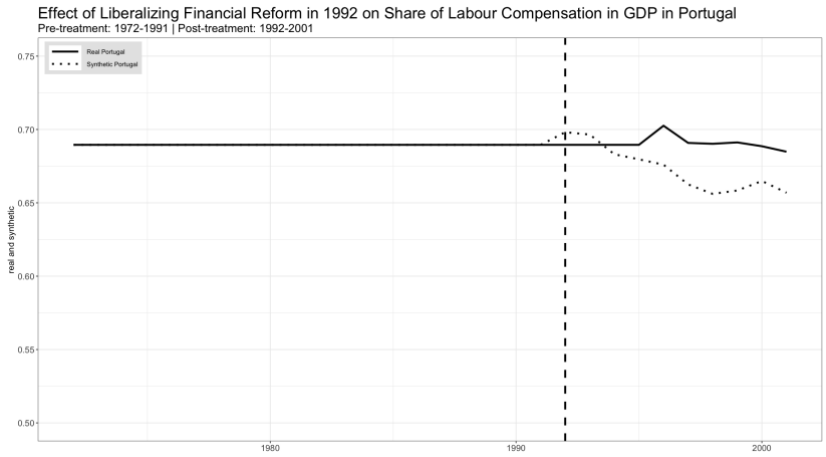
Figure 3 illustrates the net effect of this reform episode. In the short-term, it is hard to say there was an effect on economic growth, however it seems that Portugal positively differentiated itself from its counterfactual in the longer horizon, albeit not substantially (**Panel (a)**). There is also a positive change in terms of economic inequality as illustrated by the stable trend for Portugal and the downward trend for its counterfactual. Finally, bank deposits also show an increasingly positive differentiation between Portugal and its synthetic and mainly point to the faster development of the financial system after the reform efforts.

Overall, compared to the past two cases in France and Denmark, the 1992 reform in Portugal sheds a more positive light on the costs and benefits of financial liberalization. The most important differentiating aspect of this period was the long-waited privatization of the banking system, which is likely to be the main reason lying behind the more positive patterns in **Figure 3**. Such large-scale privatizations did not occur in the previous cases. Although the interaction of different financial reforms, complementarity among them and their sequence must be important, Portugal illustrates a scenario where cutting off the ownership links between the state and the banking sector may indeed be fruitful for the country's

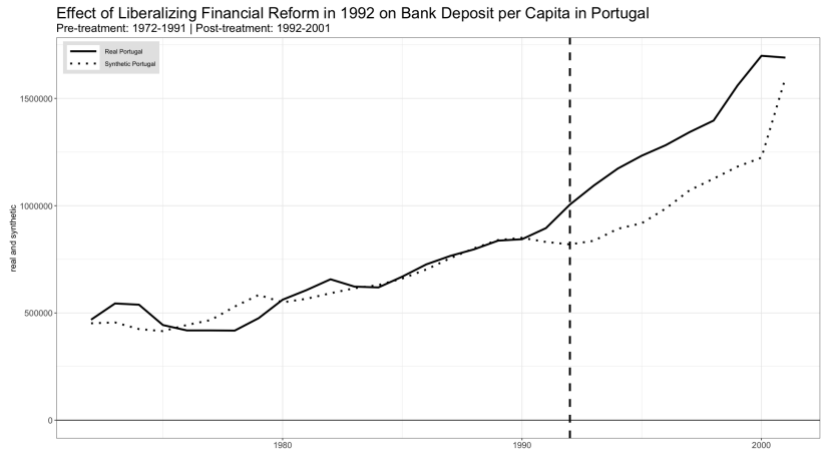
macroeconomic performance in the long-run. It is worth noting that in contrast to France and Denmark, Portugal did not experience a redistribution from labour to capital.



(a) Log GDP per capita



(b) Labour share of GDP



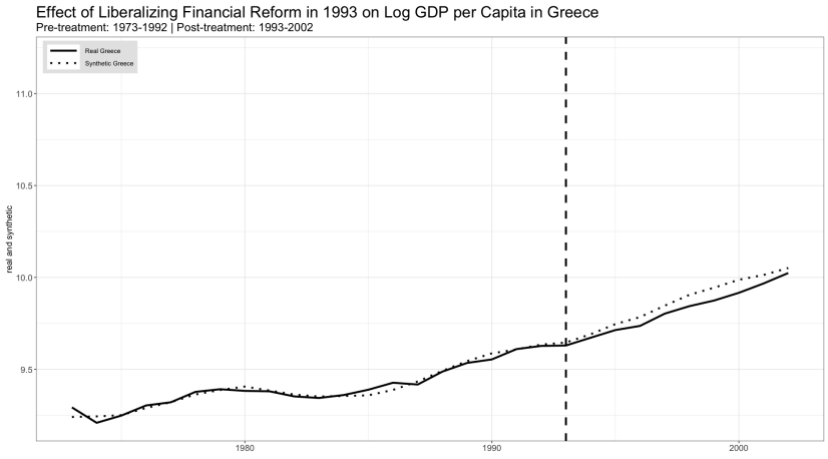
(c) Bank deposit per capita

Figure 3. **The effects of 1992 financial reforms in Portugal.** The figure shows the realized (solid line) and synthetic (dotted line) outcomes in Portugal from 1972 to 2001. The dashed line indicates the reform year in 1992.

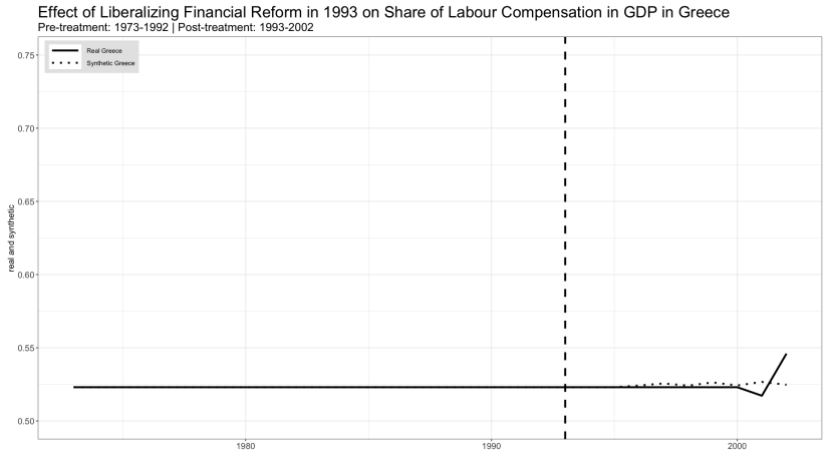
3.1.4 *EC Directives in Greece in 1993*

In order to adopt several EC directives in August 1992, the Greek government passed a Banking Law, which brought several changes to the country's financial system starting from 1993. First of all, the adopted directives had many aspects that related to the liberalization of the securities market. They aimed to increase the scale and variety of the instruments in the capital markets as well as better governance of the stock markets. Within the same year, the minimum rate requirement on deposits (determined by the Bank of Greece) was abolished. Lastly, the compulsory investment requirement of commercial banks in government paper was lifted. This meant banks could freely buy government paper, thus demanding higher yields in times of higher risk and providing better incentives for the government to be fiscally prudent.

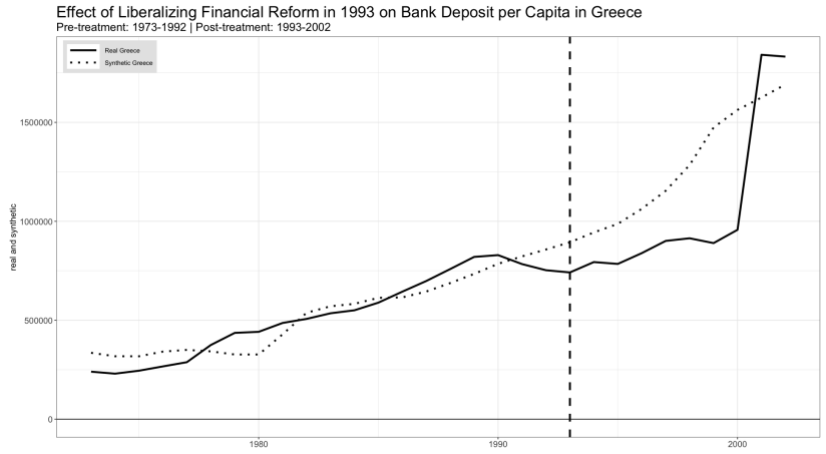
Figure 4 shows the macro effects of these reforms. There seems to be a bit of an underperformance in Greek economic growth (compared to its synthetic counterfactual) though the size of the effect seems to be marginal. For labour share, it is hard to say if there is an effect whatsoever. And for the financial development, it seems that bank deposits grew more slowly in Greece; however it is difficult to be conclusive since the pre-reform matching between the synthetic and the real series does not seem to be at the ideal level.



(a) Log GDP per capita



(b) Labour share of GDP



(c) Bank deposit per capita

Figure 4. **The effects of 1993 financial reforms in Greece.** The figure shows the realized (solid line) and synthetic (dotted line) outcomes in Greece from 1973 to 2002. The dashed line indicates the reform year in 1993.

3.2 Labour Reforms

3.2.1 *France 1986*

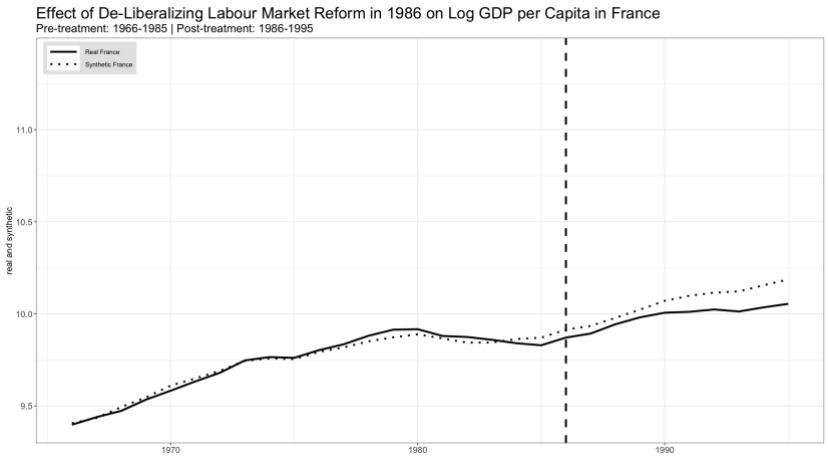
The labour market reform of 1986 in France was deliberalizing in nature according to the fRDB-IZA Social Reforms Database. On the one hand there was an increase in unemployment benefits, on the other hand the reform tackled the use of fixed-term contracts (Contrats à durée determinée - CDDs) which had been introduced in 1979 and that had already seen a first reduction in their scope in 1982. With the 1986 reform the 12 conditions under which firms could use CDDs were replaced by a general rule prohibiting firms from using them to fill a permanent position. According to Blanchard and Landier (2002) which considered data for young workers since the early 1980s the measures above increased turnover, without a substantial reduction in unemployment duration; moreover, the effect on welfare for this cohorts seems to have been negative.

Looking at our synthetic results in **Figure 5** and starting from the effect the 1986 reform had on log GDP per capita, we see that France performed consistently worse compared to the synthetic group in the post-treatment period. The gap between the two is actually widening in the later years, implying that the increase in benefits led to negative income effects. This result is in line with the literature presented above where the authors show that the welfare effects of these measures appear to have been negative.

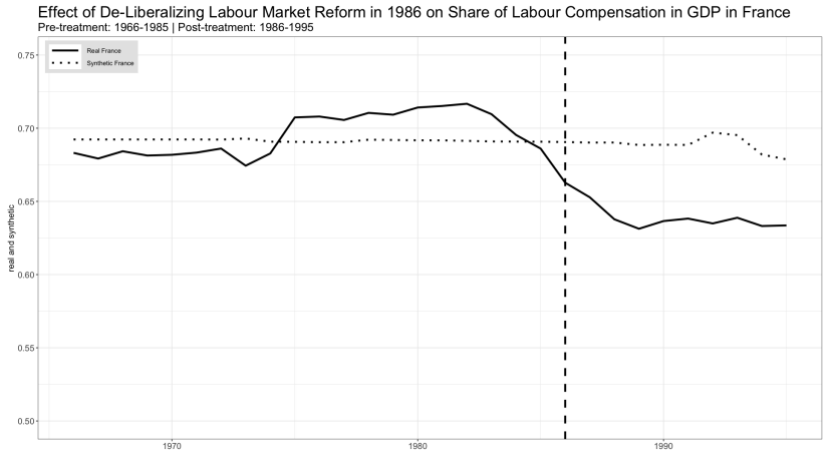
Moving to the effect the reform had on inequality, here proxied by the share of labour compensation in GDP, we discover that the deliberalization led to a substantial decrease in the share of labour compensation of roughly 5% from 0.69 to 0.64. This is quite surprising as many of these reforms introduced by the French socialist government explicitly aimed at forcing a redistribution from capital to labour. However, we have to note that the quality of

the pre-treatment matching for this particular measure is particularly poor thus we need to interpret results with caution.

Finally, when we look at the effect of the reform on the employment-population ratio the results, which in this case display a very good pre-matching performance, show that the reform measures led to an inferior performance for France compared to the synthetic counterfactual. This indicator, which does not suffer from short-term fluctuations or seasonal variations, is likely to be directly affected by the increase in unemployment benefits and changes in the use of fixed term contracts. We have a very slight increase in the ratio for France in the years following the reform, but this trend is inverted for the later years with the number of people employed divided by the total number of people of working age falling after 1990 and a gap between real and synthetic of roughly 4%.



(a) Log GDP per capita



(b) Labour share of GDP

(c) Employment level

Figure 5. **The effects of 1986 labour reforms in France.** The figure shows the realized (solid line) and synthetic (dotted line) outcomes in France from 1973 to 2002. The dashed line indicates the reform year in 1993.

3.2.2 *Denmark 1995*

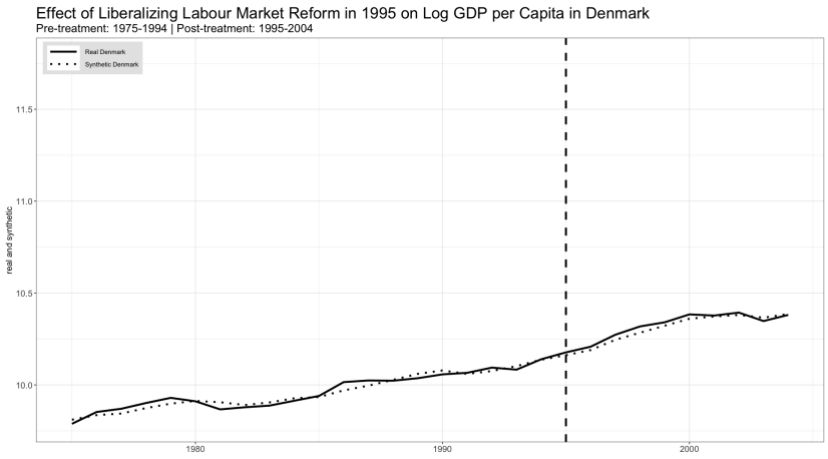
When we look at the main changes in labour market policy over 1994-1995 in Demark, a number of measures were adopted to tackle in particular the shortages of skilled labour experienced in those years (EU Commission, Employment & Social Affairs, Labour Market Studies Denmark, 1996). The main liberalizing drive was motivated by two complementary objectives: to reduce both structural unemployment and registered unemployment. The labour market policy involved among other things a reduction of the benefit period, a doubling of

the period required to acquire unemployment entitlements, earlier activation schemes, introduction of a right and duty to training or education for unskilled unemployed persons below 25 years of age after 6 months of unemployment.

Analysing the effects the reform had on GDP per capita, in **Figure 6**, we observe that the pre-treatment has a very good matching. After the threshold Denmark performed slightly better than the synthetic counterfactual up to 2000 after which the gap disappears. The difference between Denmark and its synthetic counterfactual is so small as to be insignificant.

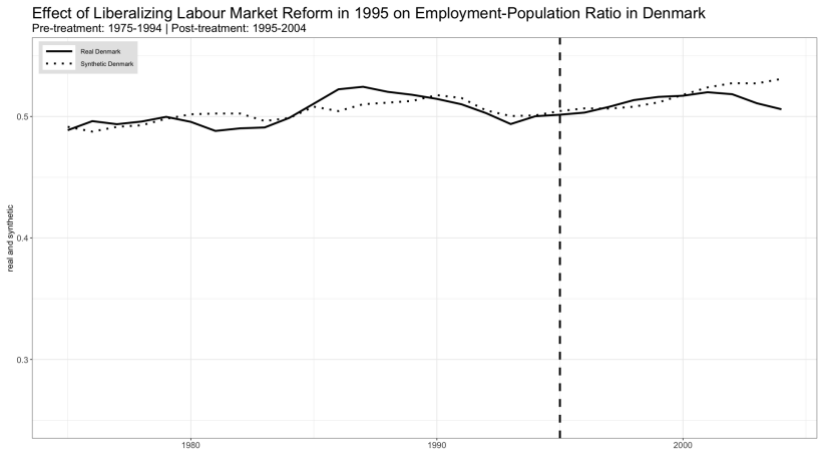
Moving to assess the performance in terms of employment to population ratio we see that again Denmark improves very slightly up to 2000 but then there is a major reversal compared to the synthetic after this year with a significant deterioration in this indicator. The liberalization measures thus were not long-lasting with the opposite effect than the intended one observed after 2000.

Finally when looking at our measure of inequality, we have that the reform actually led to an improvement in the indicator when comparing Denmark to the synthetic counterfactual, highlighting that the measures reversed the drop experienced by the country from 1990. It seems therefore that while the liberalization applied stringer conditions to access benefits and reduced their duration, the boost in activation and upskilling led to an a redistribution favouring labour.



(a) Log GDP per capita

(b) Labour share of GDP



(c) Employment level

Figure 6. **The effects of 1995 labour reforms in Denmark.** The figure shows the realized (solid line) and synthetic (dotted line) outcomes in Denmark from 1973 to 2002. The dashed line indicates the reform year in 1993.

3.2.3 *Portugal 1996*

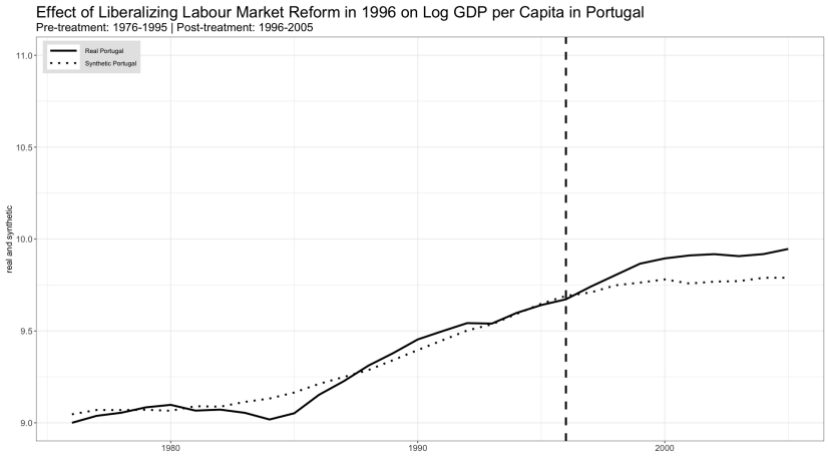
In 1996 as part of the "Short-term Social Pact" Portugal introduced a set of liberalizing measures for a more flexible organization of working time. In particular, the reform involved a great use of temporary work agency employment and focused on reducing job demarcation

(Duval et al 2018). This was a major change in the patterns of industrial relations in Portugal, therefore we expect the effects on our indicators to be substantial.

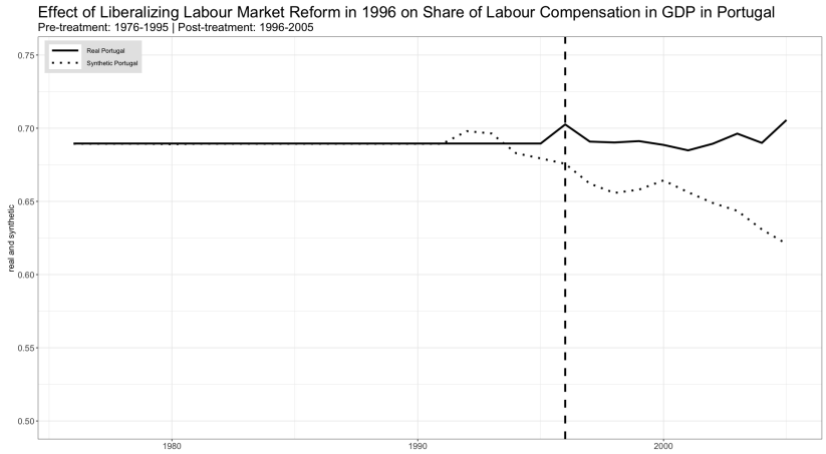
Starting from the effect on GDP per capita in **Figure 7** we observe that the liberalization led to much higher performance for the country compared to the synthetic counterfactual. The gap between the two increased significantly in the three years after 1996, roughly a 15% rise, and remained stable after that, marking almost a permanent upward shift in the standards of living for the country. The positive effect of the reform with an upheaval of the organization of labour is therefore quite remarkable.

When looking at the measure for inequality, despite some problems with the matching for the pre-treatment period, we can highlight that also in this case the difference is very large. While Portugal's share of labour compensation remained very high, also compared to the other countries we analysed, we see a major decline in the synthetic counterfactual. This provides empirical evidence that despite the liberalization drive which increased extensively flexibility Portugal managed to redistribute from capital to labour.

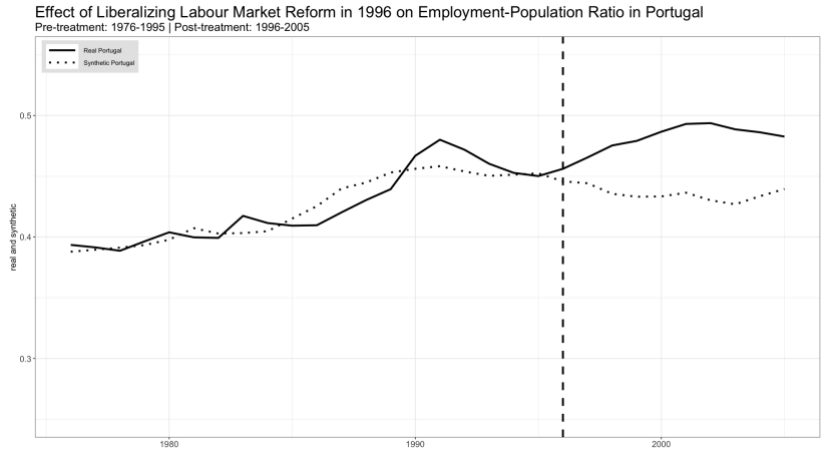
Lastly when we look at the employment to population ratio, we note that despite the noise in the pre-treatment period, the introduction of the reform measures led to a marked increase in our indicator. The liberalization thus impacted employment positively, which was one of the desired objectives of the reform efforts. The gap is actually increasing for a prolonged period, up to 2002 roughly when the trend changes direction.



(a) Log GDP per capita



(b) Labour share of GDP



(c) Employment level

Figure 7. **The effects of 1996 labour reforms in Portugal.** The figure shows the realized (solid line) and synthetic (dotted line) outcomes in Greece from 1973 to 2002. The dashed line indicates the reform year in 1993.

3.2.4 *Greece 1990*

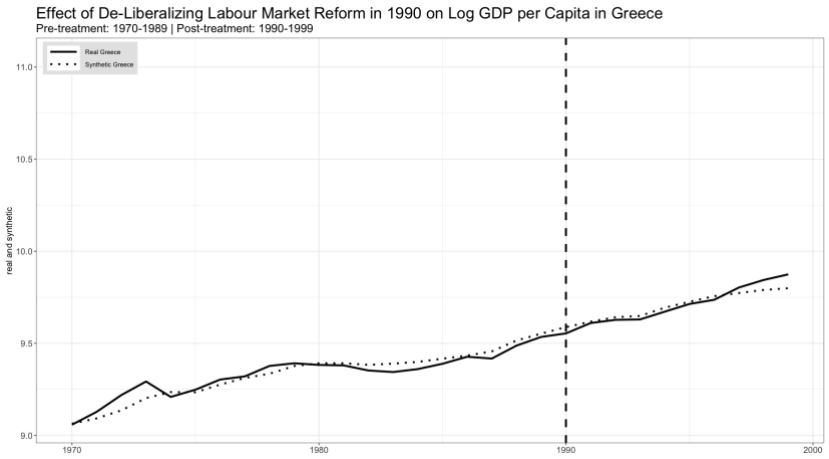
Another major labour market reform was undertaken in Greece in 1990, when the previous system of inflation indexation was abandoned and industrial relations saw the introduction of a new legislation which drastically reduced direct government influence in collective negotiations (EU Commission, Employment & Social Affairs, Labour Market Studies Greece, 1996). As for other European countries at the time, the pattern of misalignment between real wages and changes in productivity or unemployment was a common feature, with governments playing a major role in the wage formation process. The 1990 reform efforts on the one hand tried to eliminate this interventionism while at the same time changing the regulation on the duration of unemployment benefits, however this latter was viewed by experts as a move towards less flexibility.

When we analyse the effects on GDP per capita, in **Figure 8**, we observe that the Greek performance is slightly worse than the synthetic counterfactual, but with the difference between the two being almost unnoticeable. This trend seems to reverse in the second half of the 90s, with Greece seeing an increase in living standards compared to the synthetic.

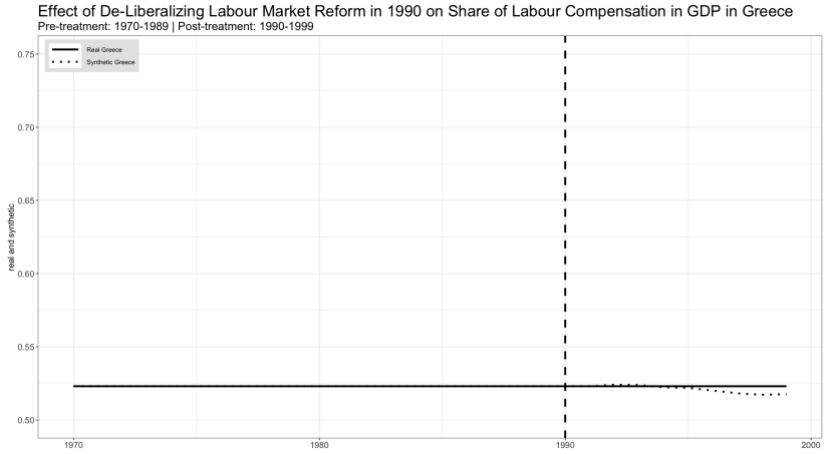
It is rather hard to make any inference from the graph for inequality since the performance of this measure is rather poor. What we observe however is a minor improvement in the late 1990s compared to the synthetic.

Finally when we look at the employment to population ratio. The reform seems to have had a more negative performance compared to the synthetic, with the gap increasing with time, especially when closer to the 2000. This might have to do with the extension of the unemployment benefits duration but it is hard to disentangle this effect from the

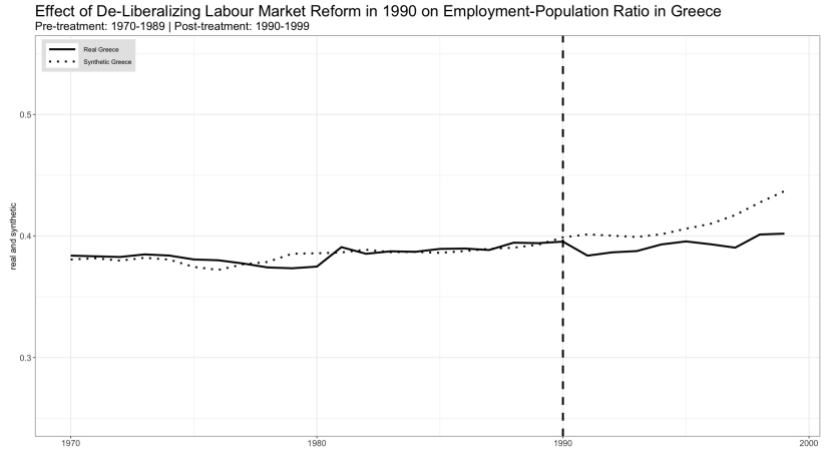
reorganization of the industrial relations with less state interventionism in the collective bargaining system.



(a) Log GDP per capita



(b) Labour share of GDP



(c) Employment level

Figure 8. **The effects of 1990 labour reforms in Greece.** The figure shows the realized (solid line) and synthetic (dotted line) outcomes in Greece from 1973 to 2002. The dashed line indicates the reform year in 1993.

4. Conclusions

The series of reform episodes we have explored in this chapter has delivered a mixed picture on the relationship between structural reforms in the financial and labour market realms and the set of outcomes under investigation, including growth and inequality. Using a Synthetic Control Approach we have selected four countries of interest (France, Denmark, Portugal and Greece) and picked reform efforts which occurred in the 1980s and 1990s which has given us ample opportunity to observe their effects over a long post-treatment period and avoiding potential interferences from major crises or spillovers. A number of interesting patterns emerge from the analysis. However, because of the mixed nature of the results and because the reforms were both liberalizing and de-liberalizing in their direction, it is difficult to draw a set of conclusions which can be valid across the four countries and for the two reform domains. Put differently, although we obtain a number of interesting results, it remains true that financial reforms and labour market reforms are generally not good predictors of subsequent development of economic growth and inequality.

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