Institute for Research in Economic and Fiscal issues

IREF Working Paper Series

The Contractual Approach to Welfare State Reform: An Empty Promise?

Sergio Beraldo

Enrico Colombatto

IREF Working Paper No. 202105

July 2021

Institute for Research in Economic and Fiscal issues

THE CONTRACTUAL APPROACH TO WELFARE STATE REFORM: AN EMPTY PROMISE?

Sergio Beraldo[1] *and Enrico Colombatto*[2]

June 2021

Abstract. In the last three decades, the mainstream perspective to welfare policy design has emphasised the role of personal responsibility, and justified obligations to stay active in the labour market. Benefit claimants are entitled to support only if they register for job action plans or provide evidence that they are actively looking for a job. Since publication of the OECD Jobs Study (1994), behavioural requirements and sanctions have become the standard tool to enforce claimants' responsibility. Within this context, this paper considers whether the mainstream perspective based on personal responsibility eliminated traditional differences in welfare regimes; and whether country specific elements played a role in shaping policies affecting unemployment protection and labour market performance. By resorting to regression and cluster analyses, we show that inertia has prevailed. The emphasis on personal responsibility followed public-finance and labour market conditions, rather than a deliberate attempt to design welfare policies in accord with a responsibility framework.

Keywords: Activation, Responsibility, Unemployment.

JEL Classification: J08, J65, J68.

[1] IREF and University of Napoli "Federico II".
[2] IREF and University of Torino.

THE CONTRACTUAL APPROACH TO WELFARE STATE REFORM: AN EMPTY PROMISE?

1. Introduction

During the Nineties, policy-makers and international agencies started reconsidering some features of the prevailing welfare-state systems (OECD 1994; European Council 1997) with a view to discouraging opportunistic behaviour and avoiding that easy access to unemployment subsidies became an incentive to engage in voluntary, long-term unemployment. As a result, several OECD countries introduced new criteria to qualify for unemployment benefit programmes. The authorities made access to those programmes more difficult, reduced the size and duration of the benefits, and imposed stricter sanctions for non-compliance. The new approach – we call it the "contractual approach" -- included a mutual obligation: while claimants were expected to be active and responsible, the government provided what it takes to improve their chances of finding a job.

Some 25 years after its inception, we take stock by examining whether the new approach has really created a new welfare state model shared by a significant number of OECD economies. If the answer is in the negative, one must conclude that efforts in this direction have been ephemeral and inertia has prevailed. In order to answer this question, we use regression and cluster methods to analyse 36 OECD countries over the 1985-2018 period. The panel integrates

data from different sources and allows us to test whether the contractual approach has been successful and whether it has led to normative convergence across countries.

The regression and cluster analyses presented in this article show that the traditional national welfare state models have hardly been affected, that inertia and expediency have prevailed, and that the contractual approach to welfare state reform has failed to produce much convergence among national welfare regimes. Put differently, and despite much drumbeating, the evidence suggests that governments have not followed the OECD and EU guidelines consistently, showing instead a tendency to adapt their welfare systems to local urges and short-run issues. The emphasis on personal responsibility was timid and all but forgotten when macroeconomic conditions took a bad turn and unemployment rose. For example, the data show that governments generally responded to an increase in long-run unemployment by softening sanctions against those who violated the contract. Rather surprisingly, weak enforcement prevailed also under easier public-finance conditions. Our regression analysis is close to the one by Knotz (2019), who uses the unemployment rate and the government's budget balance as main predictors for the strictness of sanction rules. Differently from his analysis, however, we do not control for the features of the political system, which are found to have no appreciable effect on the strictness of sanction rules. Rather we focus on other economic variables that can play a role in shaping the relevant features of the unemployment benefit system, in particular the long-term unemployment and the public debt.

The paper is organized as follows. Sections 2 to 4 describe the main features of the contractual approach to welfare policy design and the founding document (OECD 1994). Sections 5 and 6 illustrate the data. Section 7 and 8 are devoted to regression and cluster analyses, respectively. Section 9 examines the results and Section 10 concludes.

2. The Contractual Approach to Welfare Policy Design

The contractual approach to welfare policy design is based on a set of assumptions and recommendations presented in OECD (1994) and echoed in the Presidency Conclusions of the Extraordinary European Council Meeting on Employment (European Council, 1997). Both documents claim that high unemployment originates from norms and benefits that discourage workers from keeping or seeking a job. Moreover, the longer they are unemployed, the more they lose -- or fail to update -- their skills, and the more their human capital deteriorates (Blanchard and Summers, 1986). Thus, the increase in the average time of unemployment diminishes the number of employable workers and encourages some of them to drop out of the labour force and become inactive. Finally, as the number of individuals on welfare increases, the social stigma weakens: staying inactive and being on the dole becomes less objectionable.

These phenomena have consequences. When the number of readily employable individuals drops, firms find it difficult to fill their vacancies when they have opportunities to expand, and wages do not fall to the extent one would observe in the absence of welfare programmes (e.g. Blanchard and Wolfers 2000). Bottlenecks and inflationary pressures may follow (e.g. Layard 1997; Boeri et al. 2000). Put differently, institutions that discourage workers from making significant efforts to keep their job or look for one produce a reduction of readily employable individuals (e.g. Nickell et al. 2005). When that happens, governmental efforts to sustain production and employment become useless, if not counterproductive. As Boeri et al. (2000, p.8) have emphasized: “Unemployment cannot be reduced indefinitely by expanding demand. For eventually the economy will run into bottlenecks and labour shortage. At that point employers will increasingly raise wages to attract labour, and there will also be increased union demands for higher wages. So demand will have to stop rising – either of its own or through policy action” (see also Layard 1997; Layard et al. 1991).

Within this contest, a contractual approach to welfare policy design sounds attractive. By signing the contract, each individual commits himself to staying in the labour market, lest he loses access to welfare support. Moreover, by requiring that the unemployed take part in – say -- training programmes, the contract ensures that the pool of readily employable workers increases. Third, complying with the prescribed duties makes being on welfare rolls less desirable, especially when participation in active programmes is particularly heavy. Finally, the contract establishes a link between welfare support and individual choices: denying the opportunity of a free lunch strengthens the belief that active behaviour is a duty, and that welfare support must go hand in hand with personal responsibility (Lindbeck 1997; Lindbeck et al. 1993, 1999).

3. A matter of personal responsibility

The notion of personal responsibility plays a key role in the contractual approach. Of course, it is not a new idea. Although it is seldom mentioned in traditional welfare economics (Fleurbaey 1995), this notion has been studied in depth by reputed scholars (e.g. Arneson 1990; Cohen 1990; Dworkin 1981; Roemer 1995; Sen 1990, 1999), and become popular in political circles since the ’90 of the past century, also among leaders with left-wing views (e.g. the discussion in Sandel, 2020). Indeed, the emphasis on individual responsibility has been instrumental in promoting today’s mainstream perspective on egalitarian matters, according to which justice requires levelling the playing field by making everyone's opportunities equal in an appropriate sense, where appropriateness is differently specified in different conceptions of equality of opportunity (e.g. Arneson 2015). Individuals would then make their own choices, and bear the consequences. In other words, modern egalitarianism suggests that individuals have a right to compensation when they fall victim to accidents. By contrast, hardship due to the lack of effort belongs to the realm of personal responsibility and entitles to no compensation.

Applying personal responsibility to policy-making follows two routes. One line of reasoning emphasises work ethic (e.g. Mink and O'Connor 2004) and leads to the creation of the so-called "Workfare Programmes" like those implemented in the US during the past thirty years: needy individuals are encouraged to overcome their condition by conditioning benefits to harsh conditions. A second view focuses on training and job seeking. These are known as "Activation Policies", i.e. policies based on active labour market measures, such as those implemented in Denmark, Finland and Sweden since the 1950s. The UK is half way between the US and the Scandinavian countries. With respect to US, in the British case the unemployed is more expected to take advantage of opportunities rather than comply with sets of obligations. Recourse to individual responsibility is more limited.

Finally, there are cases in which the individual, the family and the state are jointly considered responsible for individual hardship (Beraldo and Patalano, 2006). Under these circumstances, welfare programmes include obligations aiming at fighting social exclusion. This is the essence of the French *Revenu Minimum d'Insertion*.

4. The Jobs Strategy and the rationale behind the reform of the Unemployment Benefit Systems

The OECD Jobs Strategy was launched in 1994 in response to the high and persistent unemployment in the member countries. The central idea of what became the 'new orthodoxy' was that labour market institutions, and unemployment benefit systems in particular, were responsible for high and persistent unemployment. Although some influential economists had doubts – for example, Atkinson and Micklewright (1991) emphasized that considering unemployment benefits as the *wage of the unemployed* is a "dangerous oversimplification" -- the report encouraged governments to *reform employment security provisions, strengthen the emphasis on active labour market policies, make wage and labour costs more flexible* (OECD

1994, Part 3b). Recommendations also included broader suggestions to maintain equalitarianism while preserving the efficiency of the labour markets.

Although the OECD acknowledged that unemployment benefits are an important safety net in case of job loss and possibly an automatic stabiliser over the business cycle, it also recognised that more generous unemployment benefits could lead to higher unemployment and a greater share of long-term unemployment (OECD 2006). Thus, it was believed that benefits should come with strings attached. For example, benefit claimants should be required to actively look for work or take part in active labour market programmes (ALMPs). Indeed, as Atkinson (1995) emphasized: "the same level of social transfers may have quite different economic implications depending on the form of the transfer programs…the standard job-search model, for example, assumes that workers can reject job offer less than a specified wage. Such a reservation wage strategy may, however, lead to their being disqualified from benefit…This institutional feature needs to be incorporated and may change the predicted impact". Similar considerations apply to all the cases in which individuals voluntarily leave their jobs or are fired for misconduct.

Nowadays, many unemployment benefit systems include ALMP clauses, specify the type of job offers that recipients need to accept, and require that they report on their job-search efforts. Failure to comply leads to the reduction or the elimination of the benefits.

Behavioural restrictions such as job search requirements and monitoring also aim at making money transfers less desirable to those who are actually able to find a suitable job. This is the so-called "screening argument", which has a long tradition in economics, especially in the asymmetric-information literature (Mirrlees 1971). Within this framework, governments are regarded as institutions that redistribute resources when information about individual productivity is private and the agents may misreport it. As far as unemployment benefit systems are concerned, therefore, governments can offer a contract to each self-declared, low-skilled individual who is unable to find a suitable job. However, the screening approach ensures that

only low-productivity individuals accept the welfare contract. High productivity individuals would prefer a regular job rather than money transfers coupled with burdensome obligations.

The screening argument and the emphasis on the new skills acquired through ALMPs justify the introduction of constraints. These are known as eligibility criteria, and fall under three broad headings: availability requirements, job-search conditions, sanctions. Availability means that claimants are required to accept a suitable job offer. It defines what a suitable job offer is and possible exemptions, for example because of the recipient's religious beliefs. Job-search conditions regard the assessment of the job search effort (monitoring and reporting). These conditions are usually specified in what are known as "job action plans", i.e. binding agreements between the unemployed and the employment agency. Finally, sanctions guarantee contract enforcement. The evidence suggests that in recent years, sanctions have become increasingly severe in OECD countries. Yet, this is true only on paper. In fact, in most countries the authorities have seldom penalised those who breached the existing eligibility rules (OECD 2000; Dahl et al. 2002; Venn 2012). Indeed, in poorly working labour markets, officers have tended to be soft on monitoring and more than willing to apply exemptions. In a sentence, stricter criteria are not necessarily applied.

In contrast with eligibility, entitlements criteria regard the requirements to access the benefits. Thus, while eligibility criteria affect ongoing fruition, entitlement criteria restrict initial access to the unemployment benefits.

5. **The Data**

From the next Section we shall assess whether a generalised commitment to the new approach based on personal responsibility has led to significant results; whether this perspective has eliminated or reduced the traditional differences on how to fight unemployment and promote

employment; and whether country specific factors have played a role in shaping policies in regard to unemployment protection and labour market performance.

Our analysis is based on a broad data set that integrates data from different sources. The major source is *The Comparative Unemployment Benefit Conditions and Sanctions Dataset* (Knotz and Nelson, 2019), which provides information on the strictness of job-availability, job-search requirements and sanctions in 21 advanced democracies between 1980 and 2012 (see Table 1 in the Appendix and the note therein). This dataset considers a very long time span, 1980-2012. The variables it includes belong to four categories: constituent variables that measure `suitable employment'; component variables that measure both the intensity of checks of job-search activities and the strictness of sanction rules; synthetic indicators constructed from the component variables.

We integrate data from the Knotz and Nelson (1999) data set with information concerning the strictness of the eligibility conditions (availability requirements, job-search conditions and sanctions) in the OECD countries. Information about eligibility within the OECD area was first provided by the Danish Ministry of Finance (Ministry of Finance, 1998) and later enriched by other researchers (Hasselpflug 2005; Venn 2012; Langenbucher 2015; Immervoll and Knotz 2018). The Ministry of Finance (1998) index incorporates information on eight aspects of eligibility and sanctions. Each component is given a score between 1 (least strict) and 5 (most strict) and the overall indicator is generated by an equal-weight average of the individual components. We use a revised version of such index, which was developed by Venn (2012) and presents information on the strictness of the eligibility criteria for unemployment benefits for 36 OECD and/or EU member countries. The revised indicator comprises nine items describing various aspects of the eligibility criteria and sanctions. The items are then grouped into four categories, within which each item carries the same weight. Each category reflects one aspect of eligibility policy: entitlement conditions, job-search and availability requirements, monitoring, sanctions. We will refer to these sub-indices as the «Venn indices». When necessary, we shall

also make use of the updated information provided by Langenbucher (2015) and Immervoll and Knotz (2018), whose work focused on the years 2014 and 2017, respectively.

The information contained in (Knotz and Nelson 1999) allows the construction of three synthetic indicators that overlap with the Venn indices: *Overall Conditionality* of the unemployment benefits, *Job search and Availability Conditions, Sanctions*. All these indicators range from 0 (least strict), to 1 (strictest).

6. Some descriptive statistics

Table 1 in the Appendix details all the variables included in the analysis. Some exploratory analysis shows that:

- the rate of employment is negatively correlated with the strictness of sanctions, and positively correlated with the severity of Availability conditions and Job Search requirements. The same is true, with opposite signs, for the rate of unemployment (fig. A1 and A2): the simple correlation between the unemployment rate and the strictness of sanction rules ($\rho = 0.35$) is indeed positive and significant;
- benefit conditionality is not generally correlated with the composition of public expenditure in labour market policies (Ratio), whereas it is possible to observe a mild correlation between measures of fiscal imbalance (governments' deficits and debts) and the variable Ratio (fig. A2a, b): higher spending in passive (over active) measures tends to be associated with higher public debt and worse budget balance;
- the rise in benefit conditionality and sanctions has slowed down since the beginning of this century (fig. A3), a tendency consistent with a softening of the rules governing the agreement between the public employment services and the unemployed (job action plans);

- near 2005, the average strictness of the action-plan requirements weakened; differences across countries – as measured by the standard deviation of the Individual action plan index - intensified in late ’90 (Fig. A4b), in conjunction with an increased dispersion in the strictness of sanction rules: after a period of convergence (until the early Nineties), countries have diverged (Fig. A4a). Put differently, it seems that some countries have backtracked from the initial enthusiasm for contract-based activation policies.

7. Regression analysis

As mentioned earlier, this paper focuses on the circumstances (if any) that may have contributed to tighten the eligibility criteria and sanctions. As in Knotz (2019), this perspective differs from those aiming at assessing whether stricter eligibility conditions and sanctions have affected labour market outcomes. In other words, our paper tries to identify whether the contractual approach to labour market policy has evolved in strict accordance with the OECD and EU guidelines or, rather, whether it has consisted in local adaptation of the national welfare models to contingent urges and short-run issues. If the OECD recommendations had been followed rigorously, one would have observed some convergence of the national welfare systems. Otherwise, path dependency and persistency of traditional welfare models – with clearly identifiable clusters reflecting traditional grouping – would have prevailed.

One way of exploring these issues makes use of regression analysis. Thus, given the nature of our dataset, we follow the mainstream methodological literature and rely on time series, cross-section model specifications. In recent years, several pooled time series, cross-section models have been estimated in order to explore how the welfare state developed (e.g. Podestà 2006). Although the appropriate modelling specification is of course crucial, it is now widely agreed that specifications in levels are econometrically unfounded because most of the variables

typically used are not stationary. Moreover, the widely used first difference model seems unable to test the long-term relationships underlying welfare state dynamics.

Another issue of interest, one which is relevant here, concerns the fact that relevant variables may interact over time. The use of multiplicative interaction terms requires prudence. In particular, in our analysis, conditional relationships will be used to test the impact of long-run unemployment rates on eligibility conditions and sanctions, given the levels of the public debt.

In accord with Podestà (2006) and Beck and Katz (2008), we adopt a general dynamic model specification of the following kind,

$$\Delta y_{it} = \beta_1 y_{it-1} + \sum_j \beta^j \Delta x_{it}^j + \sum_j \phi^j x_{it-1}^j + \alpha_i + e_{it}$$

where y is the dependent variable; x^j $(j = 1, \dots, J)$ are the covariates; subscripts i and t indicate country and time period, respectively; α_i is a country specific dummy. As usual, y_{it-1} and x_{it-1}^j stand for the first lags of the dependent and independent variables, respectively. The inclusion and significance of the interaction term draws on Warner (2019), who estimates a general model by allowing a covariate interaction to unfold freely across time according to the following specification, where variables *l* and *f* interact:

$$\Delta y_{it} = \beta_1 y_{it-1} + \sum_j \beta^j \Delta x_{it}^j + \sum_j \phi^j x_{it-1}^j + (\theta_0 x_{it-1}^l x_{it-1}^f + \theta_1 \Delta x_{it}^l x_{it-1}^f + \theta_2 x_{it-1}^l \Delta x_{it}^f + \theta_3 \Delta x_{it}^l \Delta x_{it}^f) + \alpha_i + e_{it}$$

An excellent discussion of these kind of models is also provided by Knotz (2020).

Since we intend to assess what determined the role attributed to individual responsibility across countries, we carry out three sets of regressions. Each of them corresponds to a dependent variable that reflects commitment to enforce individual responsibility: *Strictness of Sanctions,*

Strictness of Job Search Requirements, Overall Benefit Conditionality. The data for these variables are taken from Knotz and Nelson (2019).

Following Knotz (2019) we consider as our main predictors the unemployment rate and the budget balance. Differently from his analysis, however, we do not control for the features of the political system, which are found to have no appreciable effect on the strictness of sanction rules. Rather we focus on other economic variables that can play a role in shaping the relevant features of the unemployment benefit system. In particular, we consider: the percentage of long term unemployed (LRU), the level of the public debt as a percentage of GDP (Debt), the interaction between long term unemployment and the public debt. Considering public debt is important, for the decision to tighten sanctions for benefit claimants might be driven by the necessity of limiting public expenditures in presence of high and persistent public debt. Analogously, we conjecture that it is the long term component of unemployment that may force governments to modify the unemployment benefit system according to the responsibility framework. It has long been emphasized that European unemployment is mainly a problem of long-term unemployment (e.g. European Council 1997, Boeri et al. 2000).

As employment protection legislation and sanctions are likely to interact with active labour market measures in determining long-term unemployment (Benda et al. 2020), we also control for the strictness of employment protection legislation (EMP), the ratio between public expenditure in passive and active labour market policy (Ratio), the generosity of the unemployment benefit system, i.e. the net replacement rate (NRR).

In a separate regression, not reported, we also tested for the effect of the business cycle (Output gap), taking into account that this variable – as suggested by the well-known Okun's law – is highly correlated with the unemployment rate. Results are of no particular interest, however.

Table B1 reports the results concerning the strictness of sanctions. Although - as in Knotz (2019) - the short-term effect of unemployment is not statistically significant, the lagged

unemployment rate is. The total long-term effect of a one-point increase in the unemployment rate on the index capturing the strictness of sanction rules, is, depending on the specification, in the range 2,7- 4,2. The sign of the coefficient is positive, what indicates that the long term effect of an increase in the unemployment rate is to tighten sanctions. In the case of budget balance, a similar long-run impact is coupled with a short-run effect. Once controlling for the public debt, the effect of changes in the budget balance on the strictness of sanction rules is always significant.

According with our estimations, sanctions rules are also driven by the magnitude of long term unemployment. The long-run effect of long-term unemployment is to soften sanctions. A one-point increase in the share of long–term unemployment has an estimated impact over the index in the range 0,67-0,81, whereas a simultaneous increase of public debt and long-term unemployment tends to tighten sanctions.

It is noteworthy that the magnitude of the estimated coefficients are rather stable as well as their sign.

All of this suggests that the dynamics of sanctions depends on the type of unemployment. Our estimates indeed suggest that unemployment induces policy maker to sharpen sanctions; this effect is however at least partially counterbalanced by increases in the long-term component of unemployment. Short-run increases in such component in presence of short-run increases in the incidence of public debt, tends instead to tighten sanctions. When the public-finance situation deteriorates steps are taken to enforce responsibility.

Interestingly, sanctions also tend to be affected by the composition of labour market expenditures. Our estimates suggest that a relative increase of labour market policies with passive features leads to stricter sanctions. The explanation could be related with the screening argument mentioned above: absent an obligation to be active, it is necessary to enforce stricter sanctions in order to keep expenditure in check.

Overall, our estimates suggest that changes in sanctions are not driven by a deliberate attempt to adapt national welfare policies to an idealized responsibility framework, but rather by short-term considerations concerning the evolution of the public-finance situation and of long-term unemployment (possibly for the effects that unemployment may have on the budget). In particular, improvements in governments' fiscal balances generally weaken the degree of activation required.

Table B2 compares the roles of the explanatory variables in regard to three measures of the commitment to the contractual approach to welfare-state reform: *Sanctions*, *Job Search Requirements* and *Overall Benefit Conditionality*. As observed earlier, public debt and its interaction with long-term unemployment do affect sanctions. In particular, joint short-term variations of long term unemployment and public debt lead to stricter sanction and higher benefit conditionality. As expected, the index capturing strictness of job search availability is negatively affected by higher ratios between passive and active measures

Notice instead that the budget balance does not seem to have neither a short nor a long-term effect on both job search availability and overall benefit conditionality, although overall benefit conditionality is affected by changes in public debt and long-run unemployment in a way that resembles the effect of these variables on the strictness of sanction rules is.

8. Cluster analysis

We resort to cluster analysis in order to complete our investigation and possibly confirm the results described in the previous paragraphs. In a recent paper, Ferragina et al. (2015) consider the European welfare states in 2012. They examine what these programmes achieved, with emphasis on how they dealt with old and new social issues: unemployment and single-parent families are well-known examples, respectively. Their analysis follows an institutional approach (e.g. Ferrera 1996) and draws attention to the role of three cultural components that have

characterised the European welfare state. In particular, Ferragina et al. (2015) use the observed redistribution in each country and identifies four groups, which the authors define as the Conservative (Belgium, Ireland, France, Austria), the Liberal (Germany and United Kingdom), the Mediterranean (Greece, Spain, Italy and Portugal) and the Social-democratic (Denmark, Finland, Sweden and Netherlands). In contrast with Ferragina and his co-authors, however, we follow Esping-Andersen (1990) and focus on unemployment and labour-market policies to aggregate countries, with an emphasis on eligibility rules, the level of income replacement (i.e., net replacement rates) and entitlements.

By using OECD data (the sources are listed in the Appendix, Table A1) and Venn (2012), we group/cluster the countries according to the following variables:

- Availability Requirements, Sanctions, Overall Strictness of Eligibility Requirements;
- The ratio between passive and public expenditure as percentages of GDP;
- The OECD index measuring the strictness of the employment protection legislation;
- The generosity of benefits (proxied by the net replacement rate);
- The efficacy of activation (proxied by the inactivity rate).

We start from 2011, to make our results more easily comparable with those presented by Ferragina et al. (2015). It appears that if one just considers eligibility rules and sanctions (Fig. C2a), countries present a well-known pattern. The presence of the Nordic European group - Germany, Sweden, Denmark and the Netherlands - and the Mediterranean cluster - Greece, Italy and Spain – is evident. These results do not change significantly if one adds the ratio between passive and public expenditure as a percentage of GDP (Fig C2b), the strictness of the legislation on employment protection and the generosity of the benefits (Fig C2c), and the inactivity rate (Fig C2d). In all cases, however, Portugal is an outlier.

The cluster analysis also shows that the difference between a liberal and a conservative regime is relatively small. This result is consistent with previous studies. For example, according to

Ferragina and co-authors, Austria, United Kingdom and Germany are liberal, while Ireland is assigned to the conservative camp. Kammer et al. (2012) classify Germany as a typical conservative case, whereas our analysis suggests that with regard to unemployment regulation, Germany is closer to the Nordic countries.

The case of Finland is of particular interest. The Finnish welfare state is usually considered a typical product of the social-democratic tradition. Yet, our analysis would assign Finland to the conservative/liberal camp. This is not surprising, though. Since the mid-1990s, Finland has implemented important reforms to tackle high and persistent unemployment (e.g. Nordlund 2000; Beraldo and Patalano 2006): eligibility conditions became stricter, and regulation lighter.

We have carried out the same exercise for 2014 and obtained very similar results (Fig. C3). By contrast, some differences emerge from the 2017 data, which, however, are not fully comparable (Fig. C4).

Table C1 presents the average group values of the indices for eligibility rules, sanctions, income replacement and employment protection in 2011 and 2014. Nordic countries present a relatively low ratio between passive and active public expenditure, while the opposite is true for the group of the Mediterranean countries and Belgium. The countries commonly labelled as social-democratic (to which Germany is affiliated) are characterized by a mix of soft sanctions and stricter availability requirements. The opposite applies to the Mediterranean bloc. Both groups are characterized by high employment protection. Instead, low protection characterizes countries closer to the liberal/conservative tradition.

To sum up, the cluster analysis suggests that two decades of reforms inspired by a contractual approach to welfare policy design have not changed much the traditional picture. This seems to confirm our previous regression analysis: moves towards a more coherent contractual approach to welfare policy design might have followed public-finance conditions and other short-run issues, rather than a deliberate attempt to design policies in accord with a responsibility

framework. Leaving aside some marginal changes – the case of Finland is the most prominent – the traditional, well characterized regimes are still in place. The emergence of a European unified welfare state model is still far away.

9. Discussion

It seems plausible that individuals should be held responsible for their own choices, especially when public funds are scarce. Cutting or eliminating transfers to the least deserving (because less responsible) is much easier than reducing benefits for all. Yet, our results suggest that the use of sanctions has mainly been the reaction to accidental public-finance crises, and has not resulted from a clear effort to design new welfare policies. In fact, in all countries the welfare state has followed consolidated trajectories, with little or no structural changes.

This is not the only way of reading the data, though. Rather than arguing that the contractual approach has failed because governments were not really committed to implementing new rules of the game, one could also claim that the new rules did not bite. For example, Martin (1998) pointed out that the contract-based approach works well only in the first stages of unemployment, the so-called "gateway period", or whenever policy measures address young, short-term jobless, employable individuals. More generally, although restrictions and sanctions may discourage reliance on welfare systems, individuals do not necessarily end up with a regular job, and inactivity may follow. These insights are confirmed by Knotz (2020). Indeed, apart from not producing significant effects on employment, sanctions adversely affect the inactivity rate (see Table SM1 in the supplementary material, where we have replicated the analysis by Knotz (2020) on inactivity). Instead, benefit conditionality seems to favour employment.

The upshot is that the effectiveness of the contractual approach is questionable. As OECD (2006) puts it, "Experience shows that there is no single golden road to better labour market performance". In fact, vague commitments won't do. In order to be useful, active labour market

programmes require trained and motivated advisors and better administrative procedures concerning payments to (and monitoring of) the unemployed. This makes these programmes very expensive. Governments are commonly unwilling to allocate the necessary resources to this aim, as witnessed by the drastic fall of expenditure on public employment services and training as a percentage of GDP (Fig. SM1, supplementary material). Overall, rather than showing a clear choice between active and passive labour market expenditures, the available evidence reveals that the countries that devote a relatively large share of resources to funding active programmes are also the very countries that fund passive programmes more generously (Fig. SM2-SM4, supplementary material).

Perhaps this also contributes to explaining why in January 2016, the OECD Employment and Labour Ministers called for yet a new Jobs Strategy. The final report focused on digital transformation, globalization and population ageing (OECD, 2018), and also drew attention to a decreasing trend in labour productivity growth in the member countries, mainly as a consequence of the reduction in the amount of capital per worker. According to the report, low productivity growth and population ageing are likely to negatively affect living standards in industrialized countries in the medium/long run. Moreover, the OECD claimed that the current shift of employment from manufacturing to services reduces the number of middle-pay, middle-skill jobs relative to that of the high-skilled and, to a lesser extent, of the low-skilled, while digitalization and automation contribute to destroying routine jobs, and fail to create enough non-routine opportunities.

According to the 1994 document, market regulation and legislation were the key explanations of high unemployment. Hence, liberalization and deregulation were the obvious remedies. It was believed that these measures would favour the financial (and political) sustainability of the national welfare states in a context of increasing international competition and limited public resources. In other words, bad institutions were considered the main cause of unemployment. The emphasis was on the presence of unemployment benefits, which would discourage

unemployed workers from looking for regular jobs. The solution was “activation”, i.e. making sure that the unemployed would seek and accept a job offer. Yet, slogans are not enough, especially in a context of stagnant economic growth and given the policymakers’ priorities. In this light, the new Jobs strategy does not disavow its earlier views, but draws attention to stagnation as the future threat to political stability (OECD 2018).

10. Conclusions

Leaving aside the alleged merits of the recipe put forward in OECD (1994), activation has not been followed consistently. Of course, it is hard to deny that «countries with policies and institutions that promote job quality, job quantity and greater inclusiveness perform better than countries where the policy focus is exclusively on enhancing market flexibility». Yet, this paper has shown that governments have not followed the OECD and EU guidelines with the necessary coherence, that they have generally adapted to local urges and short-run issues, and changed their approaches and attitudes on responsibility according to the circumstances. Although the jury on the contractual approach is still out, the OECD has changed tack and now claims that the answer to unemployment is more productivity and faster growth. In light of the crisis triggered by the current pandemic outbreak, one wonders whether the OECD should stick to its old guns, or will look for something really new.

References

Arneson R (1990) Liberalism, Distributive Subjectivism, and Equal Opportunity for Welfare. *Philosophy and Public Affairs* 19: 159-194.

Arneson R (2015) Equality of Opportunity. In Zalta E N (ed.), *The Stanford Encyclopaedia of Philosophy*. Available at https://plato.stanford.edu/archives/sum2015/entries/equal-opportunity/.

Atkinson A B (1995) The Welfare State and Economic Performance. *National Tax Journal* 48 (2): 171-198.

Atkinson A B, Micklewright J (1991) Unemployment Compensation and Labor Market Transitions: A Critical Review. *Journal of Economic Literature* XXIX (December): 1679-1727.

Beck N J, Katz N (2011) Modeling Dynamics in Time-Series–Cross-Section Political Economy Data. *The Annual Review of Political Science* 14: 331-352.

Benda L, Koster F and Van Der Veen R (2020) Activation is not a panacea: active labour market policy, long-term unemployment and institutional complementarity. Journal of Social Policy 49(3): 483-506.

Beraldo S, Patalano R (2006) Le politiche di Activation in Danimarca, Finlandia e Svezia. *Economia & Lavoro* 3: 27-61.

Blanchard OJ, Summers LH (1986) Hysteresis and the European unemployment problem. In: Fischer S (ed.) NBER Macroeconomics Annual. Cambridge: MIT Press, pp. 65-71.

Blanchard OJ, Wolfers J (2000) The Role of Shocks and Institutions in the Rise of European Unemployment: the Aggregate Evidence. *Economic Journal* 110: C1-C33.

Boeri T, Layard R, Nickell S (2000) Welfare-to-Work and the Fight against Long-Term Unemployment. Report to the Prime Ministers Blair and D'Alema. Available at www.frdb.org/be/file/_scheda/files/copy_0_blair_dalema_report.pdf.

Card D, Kluve J, Weber A (2010) Active Labour Market Policy Evaluations: A Meta-Analysis. *The Economic Journal* 120: F452-F477.

Cohen GA (1990) Equality of What? On Welfare, Goods and Capabilities. *Recherches Économiques de Louvain* 56: 357-382.

Dahl MD, Boesby D, Ploug N (2002) *Welfare Systems and the Management of the Economic Risk of Unemployment: Denmark*. The Danish National Institute of Social Research. Comparative Welfare State Research working paper no 08.

Dworkin R (1981) What is Equality? Part 1: Equality of Welfare. *Philosophy and Public Affairs* 10: 185-246.

Esping-Andersen G (1990) *The Three Worlds of Welfare Capitalism*. Cambridge: Polity Press in association with Blackwell Publishers Ltd.

European Council (1997) Extraordinary European Council Meeting on Employment. Report, Luxembourg, 20-21 November.

Ferragina E, Seeleib-Kaiser M, Spreckelsen T (2015) The Four Worlds of 'Welfare Reality' – Social Risks and Outcomes in Europe. *Social Policy and Society* 14(2): 287-307.

Ferrera M (1996) The 'Southern Model' of Welfare in Social Europe. *Journal of European Social Policy* 6(1): 17–37.

Fleurbaey M, (1995) Equality and Responsibility. *European Economic Review* 39: 683-689.

Hasselpflug S (2005) Availability Criteria in 25 Countries. *Danish Ministry of Finance Working Paper* No. 12, Copenhagen.

Kammer A, Niehues J, Peichl A (2012) Welfare regimes and welfare state outcomes in Europe. *Journal of European Social Policy*, 22(5): 455–471.

Kluve J (2010) The Effectiveness of European Active Labour Market Programs. *Labour Economics* 17: 904–918.

Knotz C, Nelson M (2019) The Comparative Unemployment Benefit Conditions and Sanctions Dataset. Department of Political Science, Lund University.

Knotz C (2019) Why Countries 'Get Tough on the Work Shy': The Role of Adverse Economic Conditions. *Journal of Social Poli*cy 48(3), 615-634.

Knotz C (2020) Does Demanding Activation Work? A Comparative Analysis of the Effects of Unemployment Benefit Conditionality on Employment in 21 Advanced Economies, 1980–2012. *European Sociological Review* 36(1): 121-135.

Immervoll H, Knotz C (2018) How demanding are activation requirements for jobseekers. *OECD Social, Employment and Migration Working Papers*, No. 215. Paris: OECD Publishing.

Langenbucher K (2015) How demanding are eligibility criteria for unemployment benefits, quantitative indicators for OECD and EU countries. *OECD Social, Employment and Migration Working Papers*, No. 166. Paris: OECD Publishing.

Layard R (1997) Preventing Long-term Unemployment. In Philpott J (ed) *Working for full employment*. London, Routledge: 197-212.

Layard R, Nickell SJ, Jackman JR (1991) *Unemployment: Macroeconomic Performance and the Labour Market.* Oxford: Oxford University Press.

Lindbeck A (1997) Incentives and Social Norms in Household Behaviour. *American Economic Review Papers and Proceedings* 87: 370-377.

Lindbeck A, Molander P, Persson T, Peterson O, Sandmo A, Swedenborg B, Thygesen N (1993) Options for Economic and Political Reform in Sweden. *Economic Policy* 17: 219-64.

Lindbeck A, Nyberg S, Weibull JW (1999) Social Norms and Economic Incentives in the Welfare State. *Quarterly Journal of Economics* CXIV: 1-35.

Martin JP (1998) What Works among Active Labour Market Policies: Evidence from OECD Countries' Experiences. OECD, *Labour Market and Social Policy Occasional Paper*, No 35.

Ministry of Finance (1998) Availability Criteria in Selected OECD-Countries. Danish Ministry of Finance, Working Paper No. 6, Copenhagen.

Mink G, O'Connor A (2004) *Poverty in the United States. An Encyclopaedia of History, Politics, and Policy*. Santa Barbara: ABC-CLIO.

Mirrlees J (1971) An Exploration in the Theory of Optimum Income Taxation. *Review of Economics Studies* 38: 175-208.

Nickell S, Nunziata L, Ochel W (2005) Unemployment in the OECD since the 1960s: What do we know? *The Economic Journal* 115: 1-27.

Nordlund A (2000) Social policy in harsh times. Social security development in Denmark, Finland, Norway and Sweden during the 1980s and 1990s. *International Journal of Social Welfare* 9: 31-42.

OECD (1994) *The OECD Jobs Strategy*. Paris: OECD Publishing.

OECD (2000) Eligibility Criteria for Unemployment Benefits. In *OECD Employment Outlook*, Paris: OECD Publishing, pp 129-152.

OECD (2006) *Employment Outlook*. Paris: OECD Publishing.

OECD (2018) *Good Jobs for All in a Changing World of Work: The OECD Jobs Strategy*. Paris: OECD Publishing.

Podestà F (2006) Comparing time series cross-section model specifications: the case of welfare state development. *Quality and Quantity,* 40: 539-559.

Roemer JE (1995) Equality and Responsibility. *Boston Review*, 20: 3-16.

Sandel MJ (2020) The Tyranny of Merit. London: Penguin Books Ltd.

Sen AK (1990) Welfare, Freedom and Social Choice: A Reply. *Recherches Économiques de Louvain*, 56 : 451-485.

Sen AK (1999) Merit and Justice. In Arrow K, Bowles S, Durlauf S (eds) *Meritocracy and Economic Inequality*. Princeton: Princeton University Press, pp 5-15.

Venn D (2012) Eligibility Criteria for Unemployment Benefits: Quantitative Indicators for OECD and EU Countries. *OECD Social, Employment and Migration Working Papers*, no. 131, OECD Publishing, Paris.

APPENDIX

Table A1. Descriptive statistics.

Variable	Description	Mean	St Dev	Min	Max	Source
Active Expenditure	Public expenditure in active measures as a percentage of GDP.	0,54	0,44	0,00	2,70	OECD.Stat
Budget Balance (Budget)	General government net lending as a percentage of GDP.	-2,19	4,20	-32,06	18,63	Economic Outlook No 106 - November 2019
Debt	Gross debt of the general government as a percentage of GDP.	69,29	39,97	6,70	238,20	OECD (2020), General government debt (indicator). doi: 10.1787/a0528cc2-en
Employment Protection Regular Contracts (EPR)	Synthetic index of the strictness of employment protection-individual dismissals (Regular contract).	2,18	0,82	0,25	5,00	OECD Indicators of Employment Protection, OECD.org
Employment Protection Temporary Contracts (EPT)	Synthetic index of the strictness of employment protection-individual dismissals (Temporary contract).	1,71	1,24	0,25	4,87	OECD Indicators of Employment Protection, OECD.org
Inactivity rate	Inactive population/working age population.	27,92	6,22	10,65	51	OECD (2020), Labour force participation rate (indicator). doi: 10.1787/8a801325-en
Long run unemployment (LRU)	Incidence of unemployment by duration, Duration: 1 year and over, all persons, data are in percentages.	32,52	17,68	0,22	76,16	OECD (2020), Long-term unemployment rate (indicator). doi: 10.1787/76471ad5-en
Net Replacement Rate (NRR)	Ratio of net household income during a selected month of the unemployment spell to the net household income before the job loss. Replacement Rate in Unemployment- Couple with two children- parents is out of works.	78,93	14,00	46,00	147,00	OECD.Stat
Output gap	Deviations of actual GDP from potential GDP as % of potential GDP.	-0,69	3,18	-16,46	12,59	Economic outlook No 106 - November 2019
Ratio	Public expenditure in Passive Measures as a percentage of GDP/ Public expenditure in Active Measures as a percentage of GDP.	2,20	3,14	0,00	70,42	OECD.Stat
Unemployment rate (Unemployment)	Unemployment rate, aged 15-64	7,86	4,16	0,63	27,69	OECD (2020), Unemployment rate (indicator). doi: 10.1787/997c8750-en

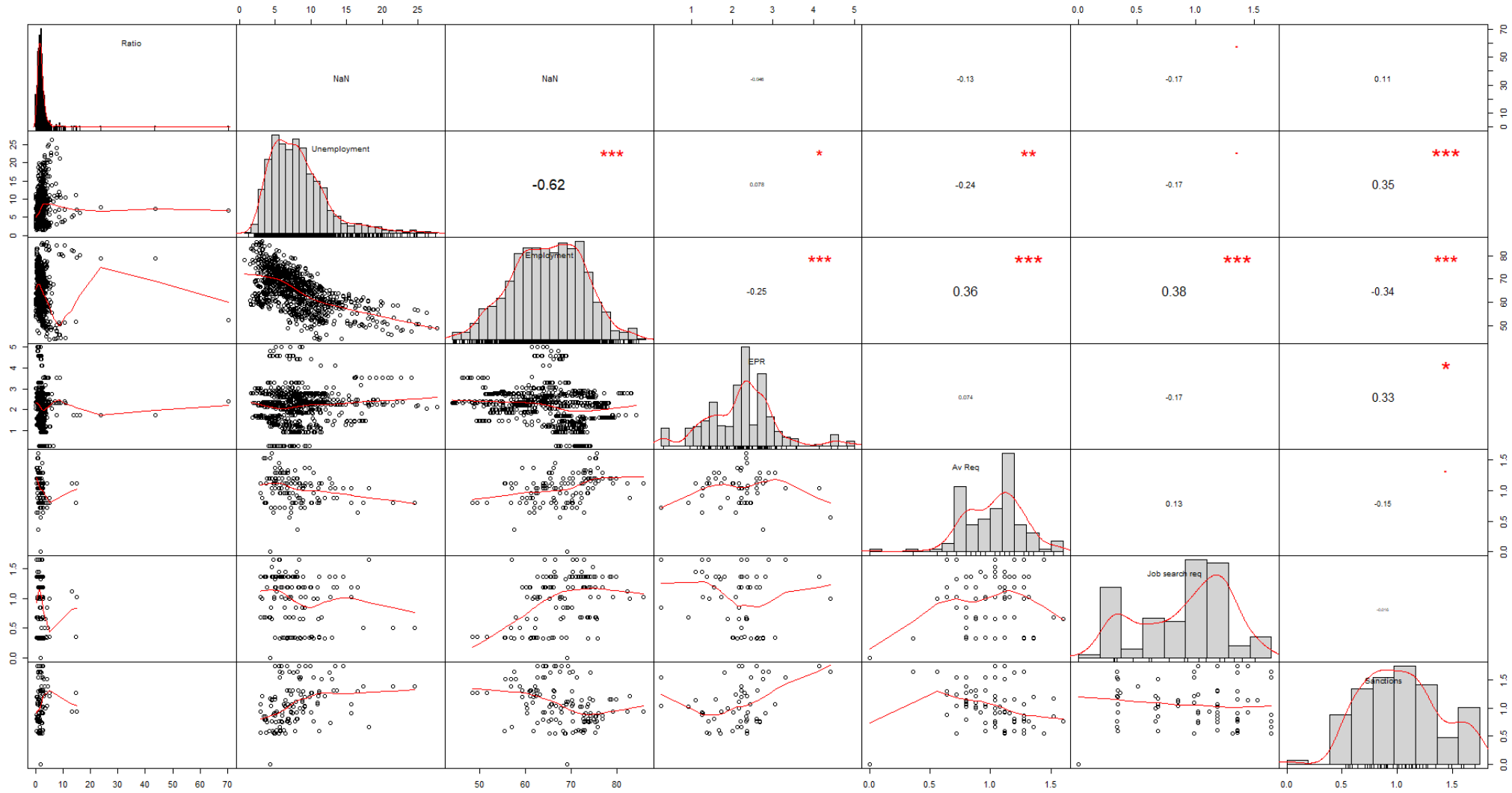
KNOTZ AND NELSON (2019) INDICES	Description	Mean	St Dev	Min	Max	Source
Job search and Availability Conditions	An index allowed to range from 0 (most lenient) to 1 (most strict): measures the overall strictness of job-search and availability conditions.	0,47	0,17	0,04	0,83	Knotz and Nelson (2019)
Overall Conditionality	An index allowed to range from 0 (most lenient) to 1 (most strict), measures the overall conditionality of the unemployment benefit systems	0,48	0,11	0,15	0,79	Knotz and Nelson (2019)
Sanctions	An index allowed to range from 0 (most lenient) to 1 (most strict), measures the overall strictness of sanction rules.	0,53	0,17	0,16	1	Knotz and Nelson (2019)

VENN INDICES	Description	Mean	St Dev	Min	Max	Source
Availability criteria	Determine, under which circumstances claimants can restrict their availability for work without losing their right to benefits	1,03	0,24	0	1,60	Hasselpflug, 2005; Venn, 2012; Langenbucher, 2015; Immervoll and Knotz, 2018
Job Search Requirements & Monitoring	Monitoring of independent job-search efforts	0,99	0,41	0	1,65	Hasselpflug, 2005; Venn, 2012; Langenbucher, 2015; Immervoll and Knotz, 2018
Overall Strictness of Eligibility Requirements	An index aggregating partial indices on availability requirements, job-search requirements and sanctions	3,09	0,59	0	4,58	Hasselpflug, 2005; Venn, 2012; Langenbucher, 2015; Immervoll and Knotz, 2018
Sanctions	Severity of sanction provisions for different types of infractions	1,06	0,36	0	1,75	Hasselpflug, 2005; Venn, 2012; Langenbucher, 2015; Immervoll and Knotz, 2018

Note: The Knotz and Nelson database provide information for the following countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Korea, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom. An indicator of the strictness of eligibility criteria was first built up by the Danish Ministry of Finance (DFM, Ministry of Finance, 1998). The DFM indicator incorporates information on eight aspects of eligibility and sanctions. These are: (i) proof of job-search activity; (ii) requirements to be available for work during participation in ALMPs; (iii) demands on occupational mobility; (iv) demands on geographical mobility; (v) other valid reasons for refusing job offers; (vi) sanctions in case of resignation from previous job; (vii) sanctions for refusing a job offer or refusing to participate in an ALMP; and (viii) sanctions for repeated refusal of job offers or ALMP participation. Each component is given a score between 1 (least strict) and 5 (most strict) and the overall indicator is the weighted average of the individual components, where each component is given equal weight. Venn (2012) presents information on the strictness of eligibility criteria for unemployment benefits for 36 OECD and/or EU member countries. Data reflecting most aspects of eligibility criteria in place in 2011 were collected through a questionnaire sent to delegates to the OECD Employment, Labour and Social Affairs Committee and/or the Indicator Sub-Group of the European Commission's Social Protection Committee. Data for 1997 and 2003/04 were constructed using the descriptions from Ministry of Finance (1998) and Hasselpflug (2005). Using information from Ministry of Finance (1998), Hasselpflug (2005) and the OECD Benefits and Wages database, it has been possible to reconstruct the indicator and sub-indicators for several countries for 1997 and 2003/04, so to get insights into how the

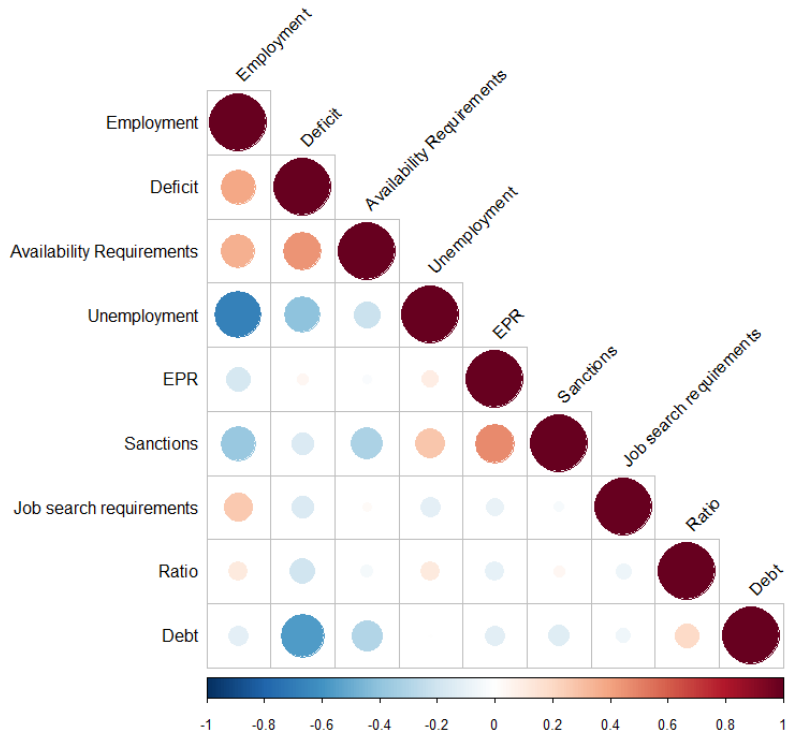
strictness of eligibility criteria have changed over time. Clearly, some caution is required when dealing with these data, given the retrospective recoding of the information.

Fig A1. Correlogram 1.

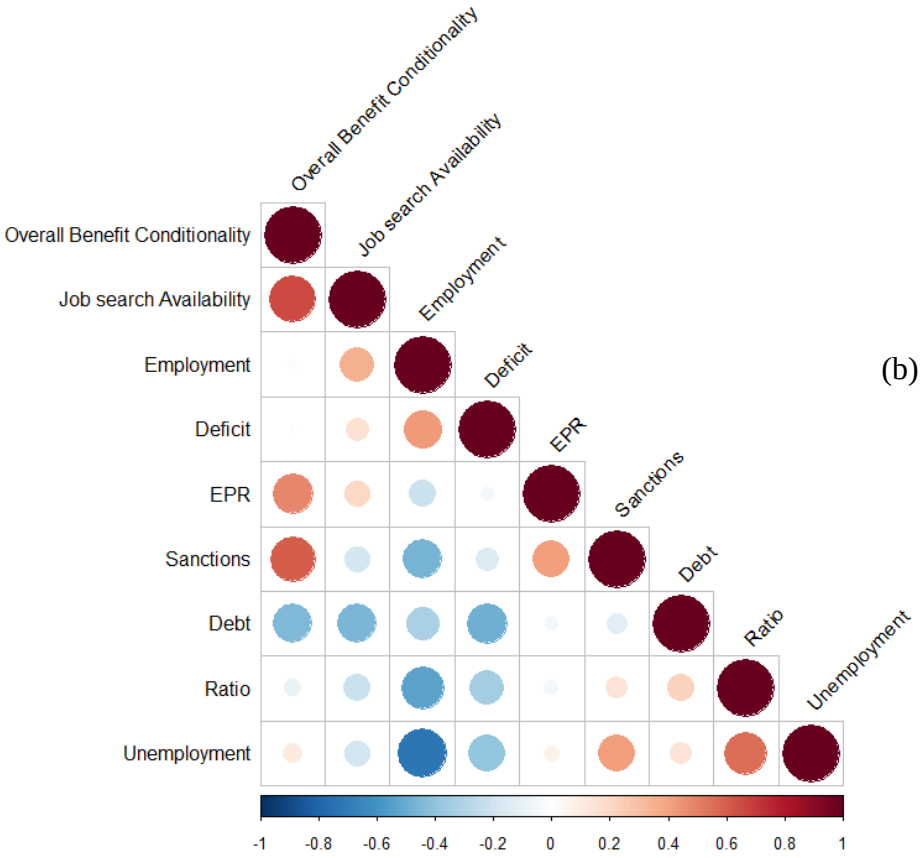


Notes: The figure shows the correlation between the unemployment rate, the employment rate, the ratio between passive and active expenditures as a percentage of GDP, the employment protection regulation (permanent contract), and three of the indexes built up by Venn (2012), i.e. Availability requirements, Job search requirements, Sanctions.

Fig A2. Correlogram: a) Using the indices as in Venn (2012); b) Using the indices elaborated by Knotz and Nelson (2019).



(a)



(b)

Fig A3. Benefit Conditionality and Sanctions.

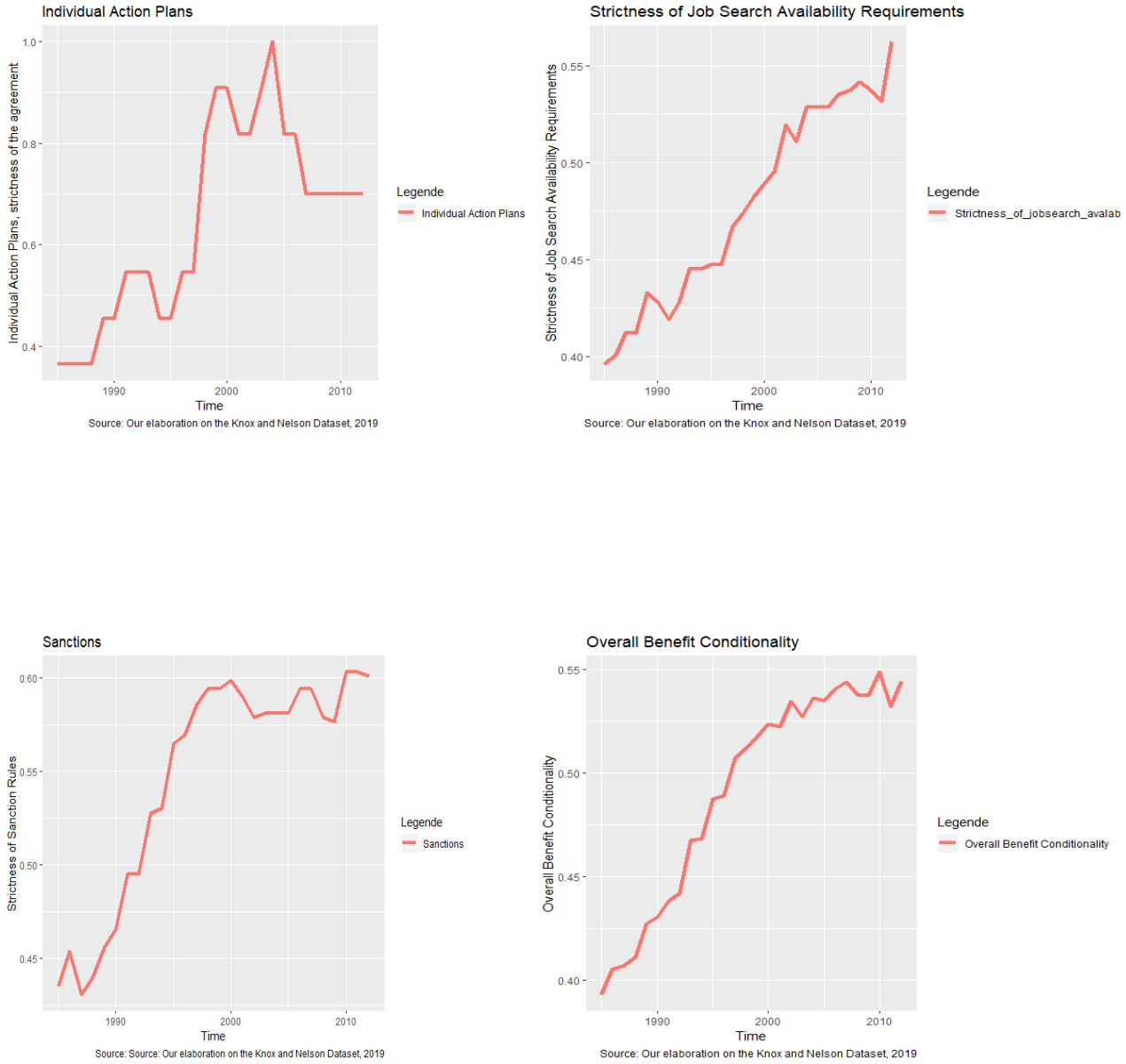
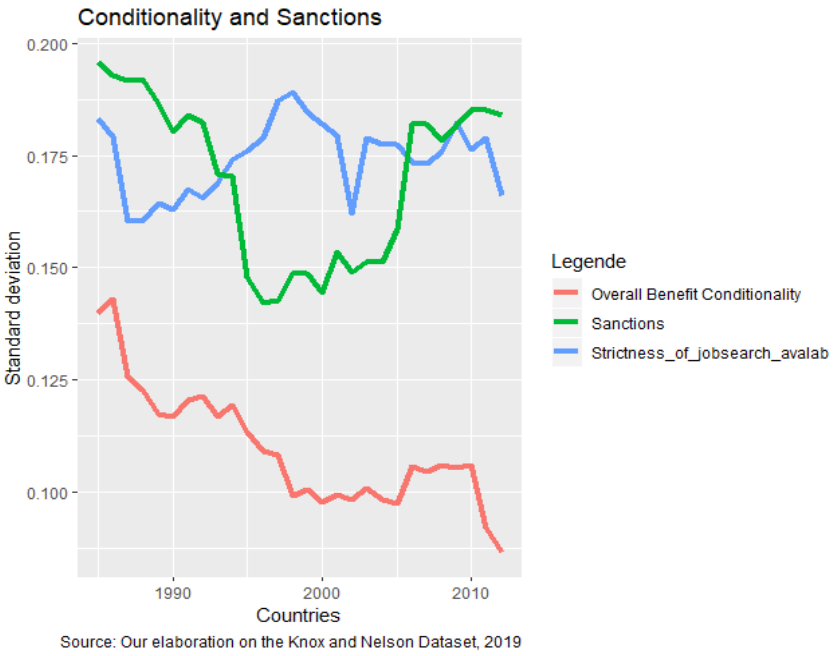


Fig A4. Standard deviation of Conditionality and Sanctions (a) and Individual Action Plans (b) across countries and over time.



(a)

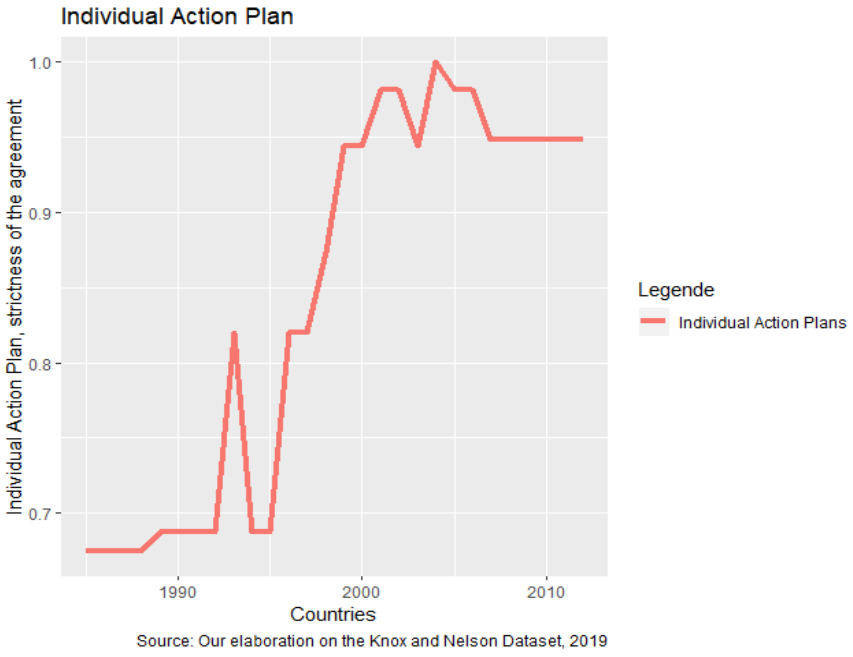


Table B1. Dependent variable: Δ Strictness of benefit sanctions

	(1)	(2)	(3)	(4)	(5)
const	0,03582***	0,05853***	0,1388**	0,2248***	0,2283***
	(0,01124)	(0,009309)	(0,02473)	(0,05512)	(0,05980)
Sanctions (lag)	-0,1029***	-0,1189***	-0,2259***	-0,2508***	-0,2577***
	(0,02182)	(0,01960)	(0,03971)	(0,03663)	(0,03842)
Unemployment rate (lag)	0,2794***	0,5084***	0,4252***	0,4093***	0,4189**
	(0,08492)	(0,1282)	(0,1260)	(0,1418)	(0,1509)
Unemployment rate (change)	-0,2398	-0,4437	-0,2836	-0,1797	-0,1570
	(0,2572)	(0,3104)	(0,3087)	(0,3746)	(0,3996)
Budget balance (lag)	-0,1224	-0,1301	-0,2362**	-0,09878*	-0,09307
	(0,1711)	(0,1479)	(0,1094)	(0,05391)	(0,05826)
Budget balance (change)	-0,3081	-0,3092	-0,3793**	-0,2227***	-0,2340**
	(0,2515)	(0,2334)	(0,1365)	(0,06791)	(0,07078)
LRU (lag)		-0,09787**	-0,1530**	-0,1835**	-0,1795**
		(0,04101)	(0,06812)	(0,07107)	(0,07079)
LRU (change)		-0,05678	0,06616	0,02484	0,02508
		(0,07476)	(0,1277)	(0,1305)	(0,1309)
Debt (lag)			-0,02746	-0,03586	-0,03634
			(0,02913)	(0,03285)	(0,02846)
Debt (change)			-0,09685**	-0,1022**	-0,09907**
			(0,03984)	(0,04339)	(0,04189)
LRU (change) × Debt (change)			3,122**	4,676**	4,762**
			(0,9394)	(0,5177)	(0,5410)
LRU (lag) × Debt (lag)			0,1169	0,1351	0,1285
			(0,07593)	(0,08917)	(0,08546)
LRU (change) × Debt (lag)			-0,2949	-0,3024	-0,2872
			(0,1719)	(0,1873)	(0,1872)
LRU (lag) × Debt (change)			-0,1636	-0,03477	-0,05642
			(0,1057)	(0,1263)	(0,1254)
EMP (lag)				-0,03164	-0,0372*
				(0,02159)	(0,0214)
EMP (change)				-0,0239	-0,0249
				(0,0199)	(0,0194)
Passive / Active ratio (lag)				0,5841*	0,5848*
				(0,3056)	(0,2992)
Passive / Active ratio (change)				-0,01792	-0,1558
				(0,5206)	(0,5261)
Net Replacement rate (lag)					0,0189
					(0,0262)
Net Replacement rate (change)					-0,0306
					(0,0205)
n	502	482	308	292	292
ADJ R^2	0,1131	0,1271	0,3818	0,4403	0,4437

Notes: Country Fixed Effects. Robust standard errors (HAC) in parenthesis.
Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

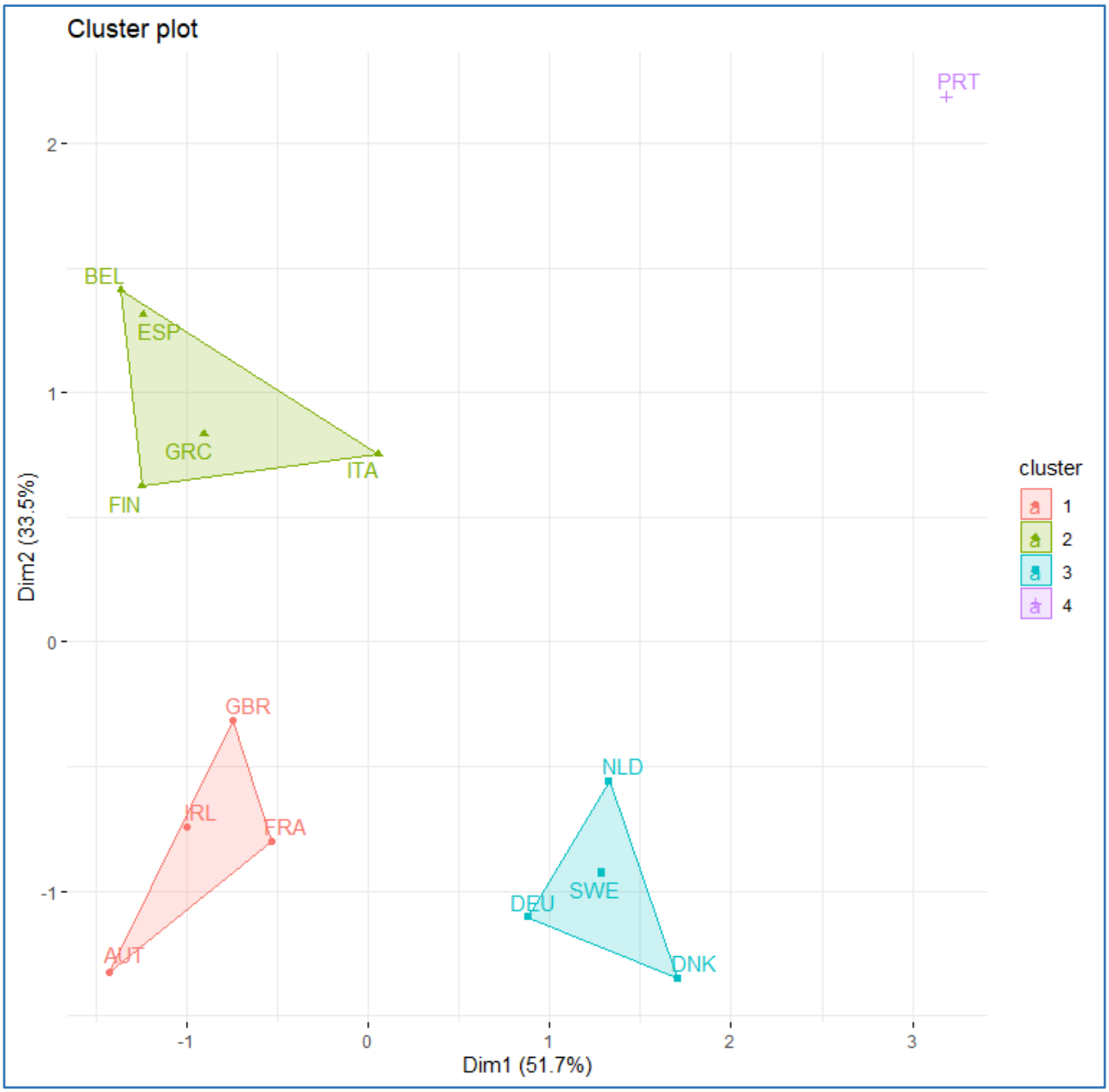
Table B2. Dependent Variable: Δ Strictness of Benefit Sanctions (I), Δ Strictness of Job Search Availability (II), Δ Overall Benefit Conditionality (III).

	(I)	(II)	(III)
Constant	0,2248*** (0,05512)	0,4792** (0,1915)	0,4353*** (0,1415)
Sanctions (I) - Job search availability (II) – Overall benefit conditionality (III) - (lag)	-0,2508*** (0,03663)	-0,335*** (0,07862)	-0,3911*** (0,09201)
Unemployment rate (lag)	0,4093*** (0,1418)	0,2108 (0,2727)	0,2808 (0,2288)
Unemployment rate (change)	-0,1797 (0,3746)	0,2980 (0,2740)	0,0938 (0,1987)
Budget balance (lag)	-0,0987* (0,05391)	0,0195 (0,09162)	-0,0165 (0,06424)
Budget balance (change)	-0,2227*** (0,06791)	0,0127 (0,09942)	-0,0356 (0,05711)
LRU (lag)	-0,1835** (0,07107)	-0,1173 (0,1102)	-0,1641* (0,08328)
LRU (change)	0,02484 (0,1305)	0,0017 (0,1211)	-0,0160 (0,07718)
Debt (lag) 4444	-0,0358 (0,03285)	-0,0437 (0,04302)	-0,0317 (0,02723)
Debt (change)	-0,1022** (0,04339)	-0,0373 (0,06651)	-0,0906* (0,05203)
LRU (change) × Debt (change)	4,676*** (0,5177)	-0,1209 (0,5381)	1,897*** (0,3897)
LRU (change) × Debt (lag)	-0,3024 (0,1873)	0,0009 (0,1162)	-0,1057 (0,09244)
LRU (lag) × Debt (lag)	0,1351 (0,08917)	0,0422 (0,09693)	0,0806 (0,06954)
LRU (lag) × Debt (change)	-0,0347 (0,1263)	0,0778 (0,2247)	0,0588 (0,1629)
EMP (lag)	-0,0316 (0,02159)	-0,1135 (0,07137)	-0,0887* (0,04330)
EMP (change)	-0,0239 (0,01991)	-0,0149 (0,01891)	-0,0282 (0,01991)
Passive / Active ratio (lag)	0,5841* (0,3056)	-0,8738* (0,4983)	-0,1318 (0,3104)
Passive / Active ratio (change)	-0,0179 (0,5206)	0,3815 (0,6073)	0,4349 (0,3529)
n **R^2**	292 0,47	289 0,22	287 0,31

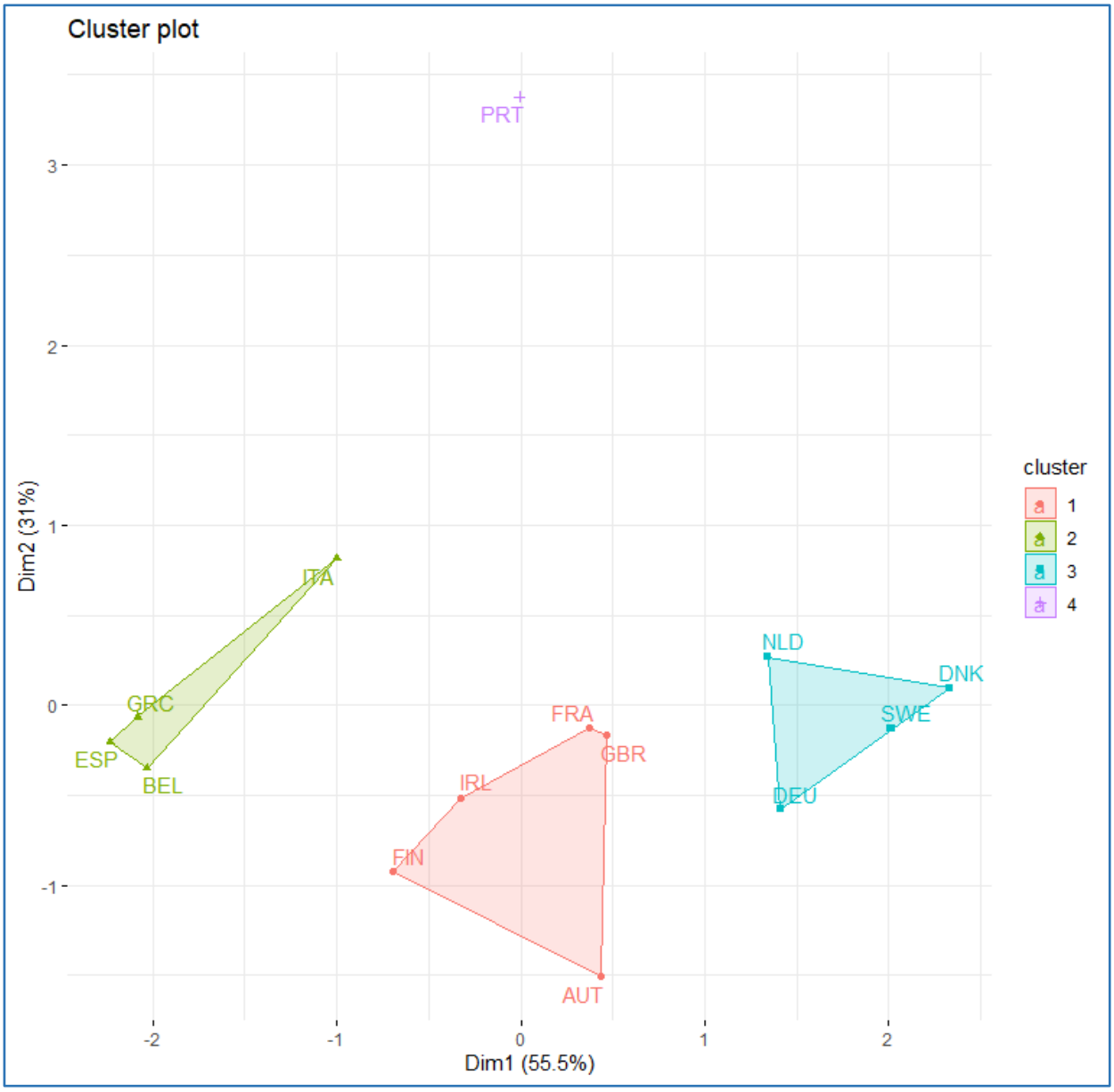
Notes: Country Fixed Effects. Robust standard errors (HAC) in parenthesis.
Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Fig C2. Cluster plot, EU countries, Year = 2011. Clustering based on: a) Availability requirements, Sanctions, Overall Strictness of Eligibility Requirements; b) variables sub a) plus the ratio between passive and public expenditure as a percentage of GDP; c) variables sub b) plus Employment protection legislation and Net Replacement Rate; d) variables sub c) plus Inactivity rate.

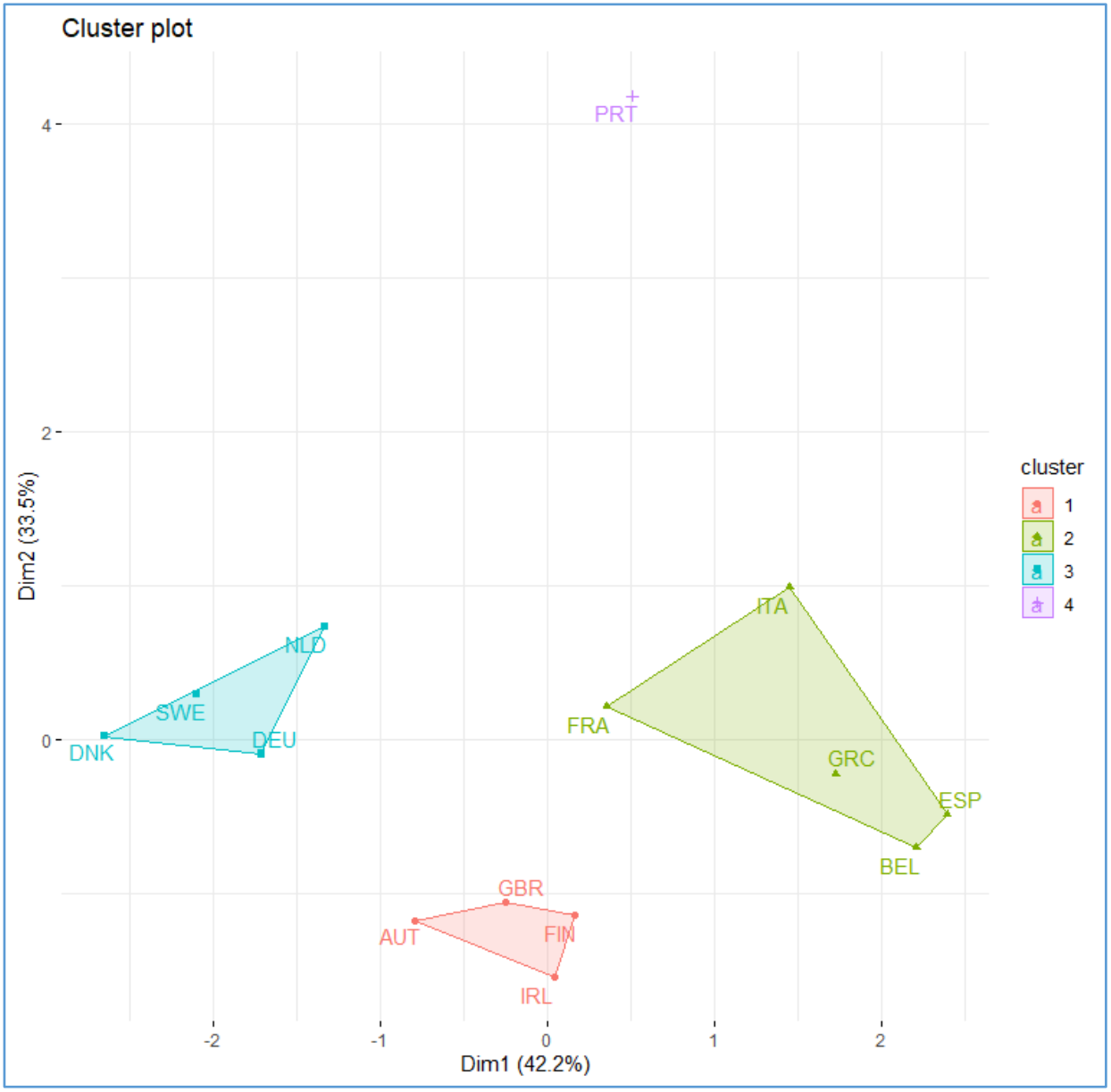
a)



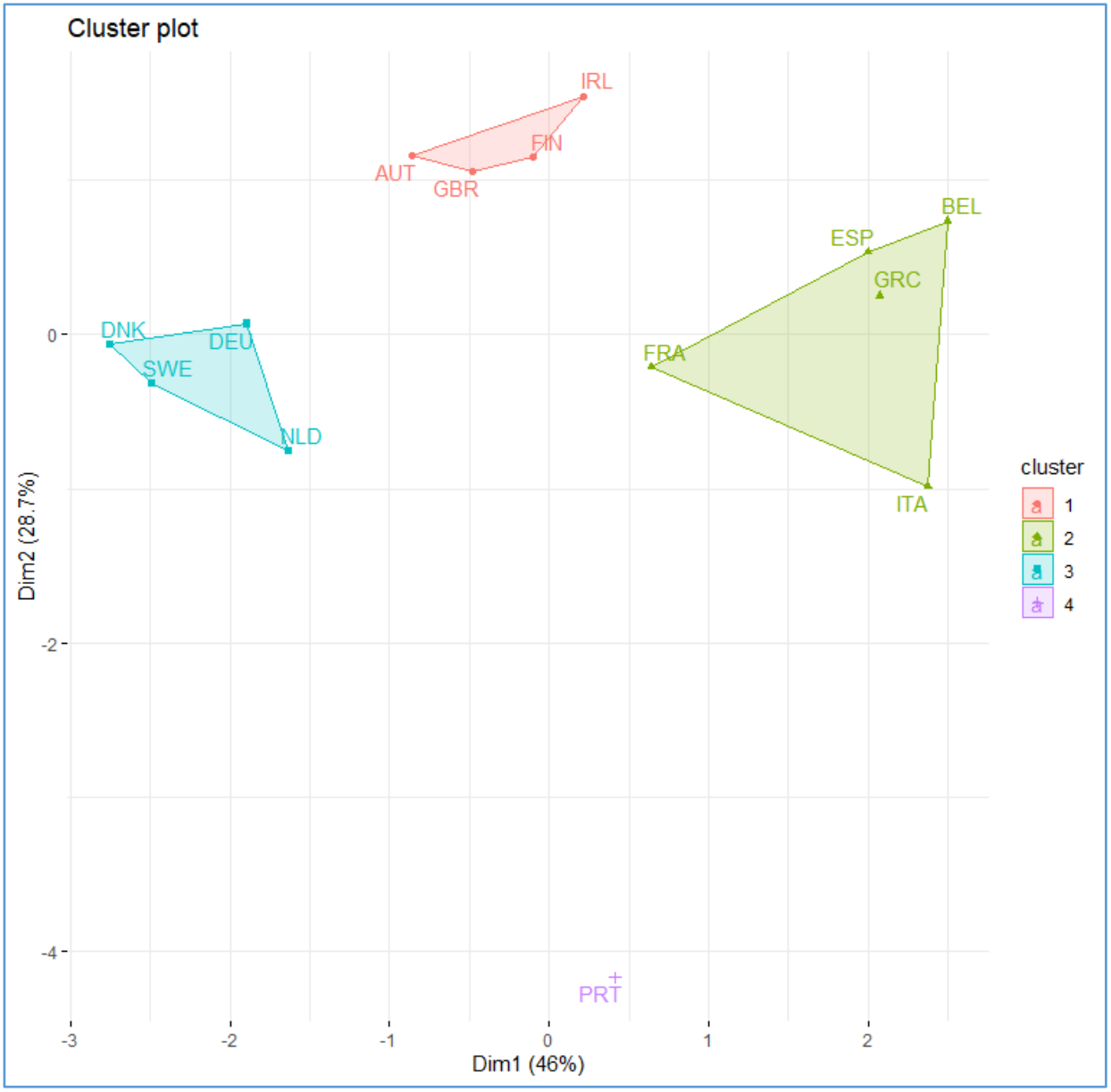
b)


Cluster plot
PRT
ITA
GRC
ESP
BEL
FRA
GBR
IRL
FIN
AUT
NLD
DNK
SWE
DEU
cluster
1
2
3
4
Dim2 (31%)
Dim1 (55.5%)
3
2
1
0
-1
-2
-1
0
1
2

c)

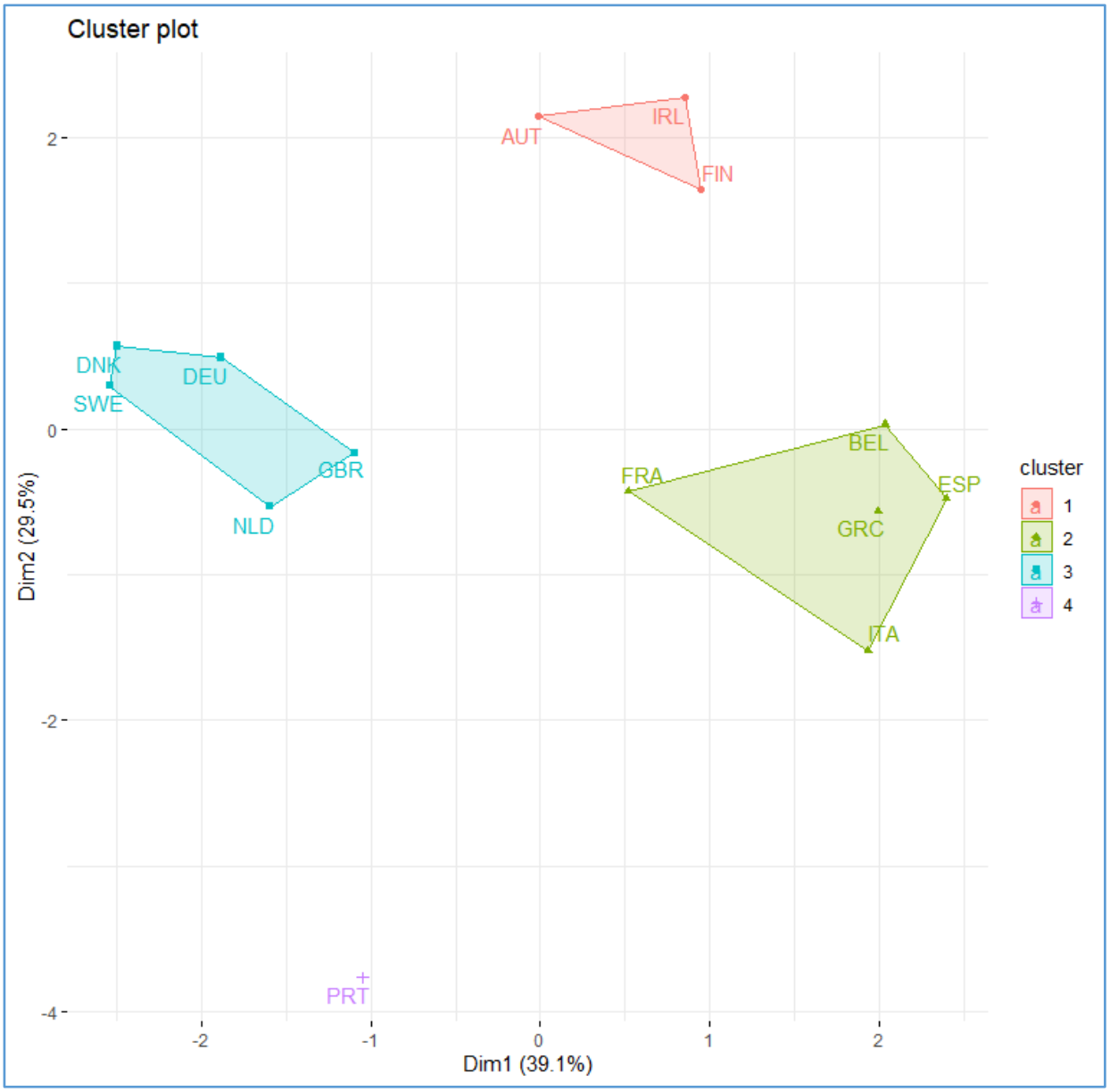

Cluster plot
PRT
ITA
NLD
SWE
FRA
DEU
DNK
GRC
ESP
BEL
GBR
AUT
FIN
IRL
cluster
1
2
3
4
Dim2 (33.5%)
Dim1 (42.2%)
4
2
0
-2
-1
0
1
2

d)



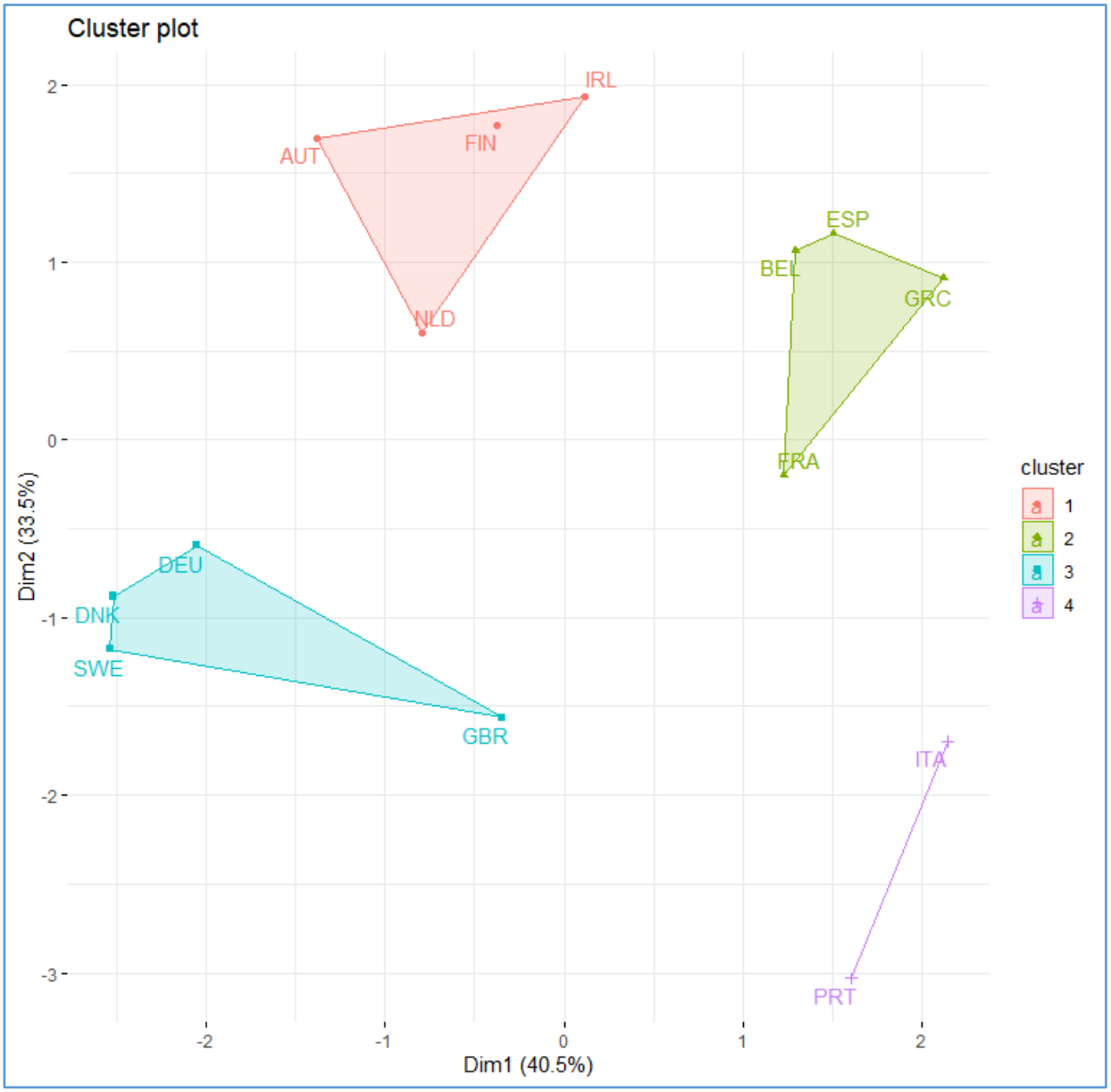
Note: Our elaborations on data from OECD (different sources) and the Venn (2012)'s dataset.

Fig C3. Cluster plot, EU countries, Year = 2014.



Note: Our elaborations on data from OECD (different sources) and the Venn (2012)'s dataset. Variables used: a) Availability requirements, Sanctions, Overall Strictness of Eligibility Requirements, ratio between passive and public expenditure as a percentage of GDP, Employment protection legislation, Net Replacement Rate, Inactivity rate.

Fig C4. Cluster plot, EU countries, Year = 2017.



Note: Our elaborations on data from OECD (different sources) and the Venn (2012)'s dataset. Variables used: a) Availability requirements, Sanctions, Overall Strictness of Eligibility Requirements, ratio between passive and public expenditure as a percentage of GDP, Employment protection legislation, Net Replacement Rate, Inactivity rate.

Table C1. Within clusters average value of the indices related with eligibility rules, sanctions and job market conditions, various years: a) 2011; b) 2014; c) 2017.

a) 2011

	Inactivity rate	Employment protection	Net replacement rate
AUT, FIN, IRL, GBR	25,94	1,77	87,75
BEL, ESP, FRA, GRC, ITA	32,00	2,32	69,40
DEU, DNK, NLD, SWE	21,73	2,58	89,50
PRT	26,38	4,13	77,00

	Availability requirements	Sanctions	Overall Strictness Eligibility	Passive/ Active Expenditures
AUT, FIN, IRL, GBR	0,93	0,89	2,99	1,82
BEL, ESP, FRA, GRC, ITA	0,89	1,25	2,94	2,61
DEU, DNK, NLD, SWE	1,22	0,81	3,35	0,98
PRT	1,04	1,75	4,15	2,36

b) 2014

	Inactivity rate	Employment protection	Net replacement rate
AUT, FIN, IRL	25,80	1,98	92,00
BEL, ESP, FRA, GRC, ITA	31,15	2,22	71,00
DEU, DNK, GBR, NLD, SWE	21,69	2,28	85,60
PRT	26,75	3,18	78,00

	Availability requirements	Sanctions	Overall Strictness Eligibility	Passive/ Active Expenditures
AUT, FIN, IRL	0,93	0,81	2,82	1,92
BEL, ESP, FRA, GRC, ITA	0,90	1,25	2,96	3,04
DEU, DNK, GBR, NLD, SWE	1,20	0,88	3,42	1,26
PRT	1,04	1,75	4,15	2,72