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Sergio Beraldo

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THE CONTRACTUAL APPROACH TO WELFARE STATE REFORM

Sergio Beraldo

UNIVERSITY OF NAPOLI "FEDERICO II" & IREF

Abstract. In the last three decades, the mainstream perspective to welfare policy design has emphasized the role of personal responsibility. The stress on personal responsibility has materialized through an obligation 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, and since the OECD Jobs study (1994), behavioural requirements and sanctions have become the standard tool to enforce responsibility of claimants.

In this paper, I examine two issues. First, I try to identify country specific factors that might have played a role in stressing the role of personal responsibility. Second, I investigate whether the mainstream perspective based on personal responsibility has wiped off traditional differences between welfare models.

By resorting to a dataset built from different sources, I use regression and cluster analyses to address these issues. The results suggest that path dependency has governed the adaptation of national welfare systems to changes in the social and economic conditions in the last three decades. However, the traditional models continue to prevail. Moreover, the evidence suggests that the emphasis on personal responsibility was mainly driven by public-finance conditions, rather than by a deliberate attempt to design welfare policies in accord with a responsibility framework.

Keywords: Activation, Responsibility, Unemployment.
JEL Classification: J08, J65, J68.

THE CONTRACTUAL APPROACH TO WELFARE STATE REFORM

1. Introduction

«*From now on our nation's answer to this great social challenge will no longer be a never-ending cycle of welfare: it will be the dignity, the power, and the ethic of work. Today we are taking an historic chance to make welfare what it was meant to be: a second chance, not a way of life…The new bill restores America's basic bargain of providing opportunity and demanding in return responsibility*».

These words were pronounced by American President Bill Clinton when signing, on August 22, 1996, the *Personal responsibility and work opportunity reconciliation act*. They followed Clinton's campaign promise to «end welfare as we know it», and marked the transition to a new concept of welfare assistance, requiring responsibility as a necessary condition for public support. Something echoing one year later in Tony Blair's New Labour Manifesto - «*…Rights and responsibilities must go hand in hand, without a…option of life on full benefit*» - and consistent with the perspective the OECD put forward in its Jobs Study (1994) and the new approach in academia. In other words, social protection systems were to stop discouraging work and risk taking, and become tools for temporary protection, instrumental to the reintegration of the needy into the labor market.

The area in which the principle of responsibility has found the widest application is the protection against the risk of unemployment. Starting from the mid '90s, a commitment to activation became a necessary condition for support in many OECD countries, which drastically reduced the access, duration and size of the benefits, and established stricter sanctions (suspension or suppression of benefits) for non-compliance. This duty was formally established in a contract (individual or job action plan, *insertion* contract) and underscored a fundamental mutual obligation: claimants must be active, while the government provides what it takes to improve people's chances of finding and keeping a job.

The contractual approach to welfare policy design raises two fundamental questions. The first concerns its efficacy in taking people from unemployment or inactivity to work (e.g. Knox, 2020; Card et al., 2010; Kluve, 2010; Martin, 1998). The second relates to whether a new, widely shared welfare state model has actually emerged.

In this paper, I will be mainly concerned with the latter question, i.e. on whether a contractual model focused on individual responsibility has led to a convergence in national welfare states. The alternative, of course, is that efforts in this direction have been ephemeral: path dependency has prevailed and only marginal changes have been made.

I use regression and cluster methods to address these issues, with reference to 36 OECD countries, observed over the period 1985-2018. The (unbalanced) panel integrates data from different sources (Hasselpflug, 2005; Venn, 2012; Langenbucher, 2015; Immervol and Knotz, 2018; Knotz and Nelson, 2019) and allows to identify the countries' specific conditions that might have played a role in emphasising personal responsibility in national welfare policies.

Overall, my analysis suggests that governments have not consistently constrained welfare claimants to follow an idealized active framework, as requested by the OECD in 1994 (and two years later by the European Union). Rather, the introduction of behavioral restrictions and sanctions has generally followed national short run considerations. In other words, the emphasis on responsibility has been evolving with the economic circumstances, and has been particularly responsive to labour market conditions and the dynamics of public finances, sometimes in unexpected ways. Indeed, such emphasis was eventually downplayed in the past ten years as macroeconomic conditions turned bad and unemployment rose. For example, the data show that governments have generally responded to an increase in unemployment by softening sanctions for the individuals who do not respect their duties. At the same time, better public-finance conditions have led governments to reduce the requested degree of activation, thus moving away from attempts to implement an active welfare state model.

The cluster analysis also confirms that the contractual approach to welfare state reform has failed to produce much convergence among national welfare regimes. Overall, path dependency is what appears to have governed the adaptation of national welfare to changes in the social and economic conditions in the last three decades. Traditional models persist.

The cluster analysis carried on in this paper is original in two respects. First, it allows to assess whether the types of welfare regimes identified in the literature (Social-democratic, Conservative, Liberal and Mediterranean) are still a useful way of framing national welfare policies. Second, and in contrast with the welfare state literature that has recently engaged in cluster analysis (e.g. Kammer et al. 2012 , Ferragina et al. 2015) I do not focus on the outcomes of the redistributive processes. Rather, I follow Esping-Andersen (1990), who distinguishes welfare state arrangements by means of their eligibility rules, the level of income replacement and the range of entitlements.

Two caveats are in order, though. First, although my study focuses on unemployment insurance systems only, much of the discussion also applies to other areas of welfare policy (disability benefits, lone parents support and so on). Second, I shall necessarily refer to behavioural restrictions and sanctions as they are defined by statutory rules, and neglect how these restrictions and sanctions are enforced in practice. In fact, enforcement can vary even across countries with similar rules. For example, there is evidence that public officials in charge of providing sanctions use their discretion following the general economic situation (e.g. OECD, 2000; Dahl et al. 2002).

The paper is organized as follows. Section 2 describes the characteristics of what I have called the contractual approach to welfare policy design. Section 3 summarizes the perspective taken by the OECD

Jobs study (1994), which gave a crucial contribution to shaping the characteristics of the responsibility turn in welfare policy design. Section 4 illustrates some key characteristics of the unemployment insurance systems. Section 5 describes the data and provides a preliminary analysis. Sections 6 and 7 are devoted to regression and cluster analyses, respectively, the results of which are discussed in Section 8. Section 9 concludes.

2. The Contractual Approach to Welfare Policy Design

The contractual approach to welfare policy design is based on a number of assumptions presented in the OECD Jobs Study (1994) and echoed in the *European Employment Strategy* (1997). In brief, market regulation and legislation are the key determinants of high unemployment, which is basically a supply-side problem, the roots of which are to a great extent grounded in norms that provide adverse incentives to workers. A typical case is the provision of benefits to the unemployed, which discourage efforts to search for a regular job[1]. The length of unemployment negatively affects the human capital of the unemployed: the longer one is unemployed, the more one fails to maintain and update his skills (Blanchard and Summers, 1986). Thus, the increase in the average time of unemployment reduces the number of employable workers and discourages some unemployed, who are then more likely to become inactive. Furthermore, as the number of individuals on the welfare rolls increases, social norms prescribing active behaviour lose their strength. Welfare support thus qualifies as a pathway to inactivity.

Put differently, these processes reduce the number of readily employable individuals, and prevent wages from dropping to the extent required to absorb all the unemployed. On one hand, the reduction of readily employable workers makes it difficult for firms to fill their vacancies when aggregate demand increases. This leads to inflationary pressures (e.g. Layard, 1997; Boeri et al., 2000). On the other hand, as activity rates decrease, firms and trade unions tend to set wages at a level inconsistent with the real conditions of the labour market (e.g. Blanchard-Wolfers, 2000). Thus, institutions that discourage workers' effective participation in the labour market cause a reduction of readily employable individuals. In turn, this makes macroeconomic (demand-based) policies ineffective[2].

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[1] The attention placed by theoretical and empirical works on the adverse effects produced by unemployment insurance characterises a wide-ranging set of institutions, and explain the high and persistent unemployment observed since the sixties in industrialized countries (e.g. Nickell et al., 2005).

[2] As Boeri et al. (2000) pointed out in an influential report to the Italian and the British Prime Ministers: "In a particular year the level of unemployment is determined by the level of aggregate demand for the goods and services which a country produces. If demand is higher, this reduces unemployment. So the demand-side approach to unemployment is to expand demand through higher budget deficits and lower interest rates. But 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" (Boeri et al., 2000, p. 8; see also Layard, 1997 and Layard, et al. 1991).

Within this contest, a contractual approach to welfare policy design may be attractive. By signing the contract, each individual is committed not to leave the labour market, otherwise he would lose access to welfare support. Furthermore, by requiring additional obligations, usually in the form of participation in active programmes (e.g. training), the contract aims at increasing the pool of readily employable workers. Third, the required obligations make being on welfare rolls less desirable, especially when participation in active programmes is particularly burdensome. 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 welfare support must go hand in hand with personal responsibility (Lindbeck, 1997; Lindbeck et al. 1993, 1999).

2.1. A matter of personal responsibility

The notion of personal responsibility has inspired political discourse and academic debate in the last thirty years. Rarely mentioned in traditional welfare economics (Fleuerbay, 1995), this concept has been subjected to a renewed scrutiny (e.g. Arneson, 1990; Cohen, 1990; Dworkin, 1981; Roemer, 1995; Sen, 1990, 1999), prior to its wide political acceptance.

Indeed, the emphasis on individual responsibility was instrumental to save egalitarianism, in agreement with what has become in recent years the mainstream perspective on egalitarian matters (e.g. Arneson, 2015). This explains why this principle was forcefully put forward by political leaders with a left-wing political orientation. In particular, the key idea of the new egalitarianism is that justice requires levelling the playing field by making everyone's opportunities equal. Individuals would then make their own choices, and bear the consequences. The key distinction is therefore between accidental circumstances and individual choices. Since it is considered inappropriate to hold individuals responsible for anything that falls in the category of accidents, the new egalitarians consider that disadvantages due to circumstances require compensation by the society. By contrast, disadvantages due to lack of *effort* would require no compensation.

A practical problem is, of course, determining to what extent individuals should be held responsible for their condition, that is, to what extent their condition depends on their (past and present) choices. The answer given to this question has characterized three different line of welfare-state reform, depending on the assignment of responsibility.

According to the fist view, sanctions are introduced to discourage dependency. In these cases, obligations strive to restore work ethic. Workfare Programmes, such as those implemented in the US since the mid-nineties of the past century, belong to this category: needy individuals are encouraged to try harder to overcome their condition (e.g. Mink and O'Connor, 2004). The second approach considers that obligations are a means to favour training and place individuals back in the job market. Activation policies such as those implemented (since the 1950s) in Denmark, Finland and Sweden share this aim, with the UK being half way between the US and the Scandinavian countries. Put differently, the required obligations are regarded as an

opportunity for those in need and individual responsibility is assessed with caution[3]. Finally, there are cases in which individuals are required to fulfil a set of obligations with the only aim of fighting social exclusion (this is what has been done in France with the so called *Insertion*). Under these circumstances, unemployment is considered a jointly failure of the individual, the family and the State (Beraldo and Patalano, 2006).

3. The OECD Jobs Strategy and the rationales for reforming the Unemployment Benefit Systems

The OECD Jobs Strategy was launched in 1994 in response to the high and persistent unemployment in its member countries. Unevenly spread across the labour force - with specific groups (e.g. the young, the disabled,…) facing a much higher risk than male white adults – at the time unemployment was perceived as the main policy challenge facing governments in the industrialized countries.

Triggered by the publication of a report commissioned by the OECD two years earlier, the 1994 Jobs Strategy set up precise recommendations to OECD member states. In particular, governments were encouraged to *reform employment security provisions, strengthen the emphasis on active labour market policies*, *make wage and labour costs more flexible*. Recommendations also included suggestions to overhaul unemployment and related benefit systems, so that societies could maintain equity goals without jeopardizing the efficiency of the labour markets.

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[4]. Although it was not denied that unemployment benefits constitute an important safety net in case of job loss and possibly an automatic stabiliser over the business cycle, it was also recognised that more generous unemployment benefits might lead to higher aggregate unemployment, and to a greater share of long-term unemployment (e.g. OECD, 2006). Restrictions would offset these effects. For example, benefit claimants are required to actively look for work or take part in active labour market programmes (ALMPs) [5].

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[3] The introduction of some requirements that welfare claimants have to satisfy resembles the Samaritan's dilemma sketched by James Buchanan (1975). The idea is that a benevolent social planner, whose satisfaction depends upon the utility of the citizens, cannot credibly threat that in the future no other transfers will benefit them were the first-period transfers not adequately used. As the citizens anticipate that the higher is the skill they acquire, the less will be the future transfer, they have a clear incentive not to acquire such skills. Setting a constraint on the transfer, either because participation in active measure is compulsory, or because a share of the transfer is in-kind (provision of education is a typical example) is a way of coping with the problem.

[4] At the time, some influential economists (e.g. Atkinson – Micklewright, 1991) though that this view was a dangerous oversimplification. From a theoretical standpoint, considering unemployment benefits as the *wage of the unemployed*, does not take into fully into account the relevant features of actual unemployment benefit systems. These may play an important role in encouraging marginal worker's participation in the labour market.

[5] As Atkinson (1995) suggests: "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 in all the cases in which individuals voluntarily leave their job or are fired for misconduct.

Many unemployment benefit systems also specify the type of job offers that recipients need to accept and ask them to report on their job-search efforts (beside enforcing participation in ALMP). These requirements are often strengthened by the fact that benefits could be reduced or suppressed if the recipients fail to meet them.

Beside strengthening the incentives to look for work and accept job offers, behavioural restrictions such as job search requirements and monitoring aim at making money transfer less desirable for those who are actually able to find a suitable job. By doing so, public authorities aim at targeting income and re-employment support more effectively. This is the screening argument, which has a long tradition in economics, especially in the asymmetric-information literature (Mirrlees, 1971). Within such a paradigm, governments are expected to redistribute resources (from the youngest to the elderly, from the employed to the unemployed, from the healthy to the sick and so on), in a situation in which information about individual's productivity is private and the agents may misreport it. As far as unemployment benefit systems are concerned, therefore, governments can offer to each self- declared low-skilled individual (and thus unable to find a suitable job) a contract. The contract would be designed in a way that reveals *ex-post* the information hidden *ex ante*. In other words, only the low-productivity individuals would find it attractive. This is what the introduction of additional obligations (job search requirements and monitoring, for example) try to achieve. High productivity individuals would prefer a regular job in the market rather than a money transfer coupled with burdensome obligations. Much theoretical work has indeed shown that redistributive goals can be achieved more efficiently if money transfers are coupled with additional obligations, such as, for example, mandatory participation in active programmes (Besley, Coate, 1992, 1995; Blackorby, 1990; Brett, 1998; Cuff, 2000; Nichols, Zeckhauser, 1982).

The screening argument, along with a productivity argument stressing the improvements in the human capital stock due to participation in ALMPs, provide the rationale for the so-called eligibility conditions for unemployment benefits. These relate to the obligations the recipients have to fulfil while unemployed, e.g. efforts to look for a job and willingness to accept a job offer or ALMP placement[6].

Eligibility criteria fall under three broad headings: *availability requirements, job search conditions, sanctions*. *Availability requirements* relate to whether claimants are required to accept a given job offer. This involves defining what a suitable job offer is, the occupational or geographical mobility features required, the acceptable reasons (if any) for rejecting a job offer (ethical or religious beliefs, for example). *Job search*

Moreover, there is evidence that the probability with which a job offer is accepted is much higher than that assumed by the job search paradigm (Devine and Kiefer, 1991).

[6] Entitlement conditions refer instead to the requirements to initially gain access to benefits. A key distinction is between Unemployment Insurance (UI) and Unemployment Assistance (UA). Entitlement criteria typically require claimants to have a minimum employment or contribution record. For example, they may require that a worker contributed to the insurance fund for a minimum number of months in the years preceding the state of unemployment. Short or discontinuous employment history are thus typically not covered by unemployment insurance, although in some countries, in case of reiterated unemployment, shorter contribution records may be required, as well as participation in active labour market programmes can generate new rights to unemployment insurance. By contrast, unemployment assistance is addressed to those who do not qualify for insurance benefits and, as a lower-level safety net, is generally subject to means-testing. Overall, entitlement criteria restrict initial access to unemployment benefits, whereas eligibility criteria affect on-going eligibility for unemployment benefits, once the initial entitlement has been met.

conditions refer to assessing job search effort. They are a question of monitoring and reporting requirements. These often include a binding agreement between the unemployed and the employment service, and are usually called "action plans". *Sanctions* are sanctions. They are applied when the unemployed refuses a job offer or because he/she did not comply with some specific requirements (failure to attend an interview/meeting at the employment office, or failure to provide sufficient evidence of recent job-search activities). Sanctions can also be also applied if the unemployed declines enrolment in public employment service programmes, avoids active labour market placement or, more generally, shows a clear propensity for voluntary unemployment.

The evidence suggests that sanctions have *formally* become increasingly severe in recent years in OECD countries. Yet, in most countries very few recipients of unemployment benefit actually receive a sanction for breaching eligibility rules (Venn, 2012). In poorly-working labour markets, offices may be more willing to apply exemptions, and restrain from monitoring. In a sentence, stricter criteria do not necessarily have an impact.

4. The Empirical Analysis

4.1. Data

The empirical analysis is based on a broad dataset that integrate data from different sources. The data contained in *The Comparative Unemployment Benefit Conditions and Sanctions Dataset* (Knotz and Nelson, 1999), provide information on the strictness of job-availability and job-search requirements as well as sanction rules in 21 advanced democracies[7] between 1980 and 2012. The information on the strictness of the unemployment benefit eligibility conditions (availability requirements, job-search conditions and sanctions) across OECD countries are provided by the Danish Foreign Ministry (Ministry of Finance, 1998) and later enriched by several contributions (Hasselpflug, 2005; Venn, 2012; Langenbucher, 2015; Immervol and Knotz, 2018). Data on a number of control variables are available with the OECD.

A first indicator of the strictness of eligibility criteria was built up by the Danish Foreign Ministry (DFM, Ministry of Finance, 1998). The DFM indicator incorporates information on eight aspects of eligibility and sanctions[8]. 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 (Ministry of Finance, 1998).

[7] Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Korea, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

[8] 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

Venn (2012) presents information on the strictness of eligibility criteria for unemployment benefits for 36 OECD and/or EU member countries[9]. The revised indicator comprises nine items describing various aspects of eligibility criteria and sanctions. The items are then grouped into four *categories* by making use of equal weights. Each category reflects one aspect of eligibility policy (entitlement conditions; job-search and availability requirements; monitoring; sanctions). Finally, Langenbucher, (2015) and Immervol and Knotz (2018) extend the indices elaborated by Venn to consider two more years (2014, 2017). I will refer to these indices as the «Venn indices».

Besides the Venn indices, the empirical analysis includes indices that can be computed thanks to the information contained in the *Comparative Unemployment Benefit Conditions and Sanctions Dataset* (Knotz and Nelson, 1999), which considers a smaller number of countries (21). The advantage of this dataset is that it considers a very long time span, 1980-2012. The variables belong to four categories: constituent variables that measure `suitable employment'; component variables that measure the intensity of checks of job-search activities; component variables that measure the strictness of sanction rules; synthetic indicators constructed from the component variables. The synthetic indicators are three and overlap with the Venn indices: 1. *Overall Conditionality* ranges from 0 (most lenient) to 1 (most strict) and measures the overall conditionality of unemployment benefit systems; *Job search and Availability Conditions* ranges from 0 (most lenient) to 1 (most strict) and measures the overall strictness of job-search and availability conditions; *Sanctions* ranges from 0 (most lenient) to 1 (most strict) and measures the overall strictness of sanction rules.

5. Some preliminary evidence about benefit conditionality

Figures A1 and A2 in Appendix A show the correlation between the key variables of interest over the period 1985-2018. In particular, Figure A1 shows the correlation between the unemployment rate, the employment rate, the ratio between passive and active expenditures as a percentage of GDP (Ratio), a measure of employment protection regulation (EPR), and the Venn indices, i.e. Availability requirements, Job search requirements, Sanctions. Table 1 in the Appendix details all these variables.

Figure A2 includes fiscal imbalances (public deficit and debt), and shows that the employment rate is negatively correlated with the strictness of sanctions, whereas it is positively correlated with both Availability requirements and Job search requirements. All these correlations are statistically significant (see

[9] 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 should be exercised when dealing with these data, given the retrospective recoding of information.

Figure A2). By contrast, the rate of unemployment is positively and significantly associated with the strictness of sanctions, and negatively associated with Availability and Job search requirements.

There is no correlation between the composition of expenditure on labour market policies and the indexes concerning benefit conditionality. Instead, the variables related to fiscal imbalances (governments' deficits and debts) are generally negatively correlated with benefit conditionality.

Figure A3 shows the evolution of benefit conditionality and sanctions over the period 1985-2012 (Knox and Nelson dataset). On average, the indices display an increasing trend that flattens or is reversed in proximity of the beginning of the new century. It is remarkable that near 2005 the average strictness of the requirements associated with the individual action plans weaken, while the differences across countries intensify (Figure A4 b). Not surprisingly, a similar dynamics characterises the strictness of sanctions: after a period of convergence (until the beginning of 2000s), countries tend to diverge (Figure A4 b). Overall, it seems that some countries have backtracked from the initial enthusiasm for contract-based activation policies. The evolution of the Venn indices over the period 2004-2017 tells a similar story (see Figure A5).

6. Regression analysis

In contrast with previous contributions (e.g. Knox, 2020), this study does not focus on whether stricter eligibility conditions and sanctions affect outcomes in the labour market. Rather, it explores the circumstances (if any) that may have contributed to tighten both eligibility criteria and sanction rules. This analysis helps understand whether the new perspective has eliminated the traditional differences among the national welfare systems.

In accord with the theoretical discussion in Podestà (2006) and Beck and Katz (2008) concerning suitable ways to model dynamics in panel political economy data, in what follows I adopt a 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 x^j $(j = 1, \dots, J)$ are the covariates and α_i is a country specific dummy.

Regressions will be concerned with the identification of the country specific circumstances that might have played a role in stressing the role of personal responsibility. Therefore, the dependent variable is generated by changes in the *Overall benefit conditionality*, the *Strictness of Benefit Sanctions* and the *Strictness of Job search Requirements*, based on Knox and Nelson (2019)'s dataset. Explanatory variables include a measure of the business cycle is (Output gap), the degree of employment protection (EPR), the generosity of UI systems as given by the Net Replacement Rate (NRR). I also control for the ratio between active and passive labour market expenditures (Ratio), both measured as a percentage of GDP. In addition to the variables just mentioned, I include two indexes of fiscal imbalances: the General government financial balance and the

stock of public debt (both as a percentage of GDP). I also consider the interactions between these indexes of fiscal imbalance and long-term unemployment.

6.1. Results.

I initially consider the change in the strictness of sanction rules as the dependent variable (Table B1). The results suggest that the interaction between long-term unemployment and both the level and the variation of outstanding government debt have played a role in the evolution of sanctions. In particular, consider the interaction variables (Δ LRU × Δ DEBT) and (LRU (t-1) × DEBT (t-1)). Both have a persistent positive and statistically significant effect upon the strictness of sanction rules. This suggests that higher level of long-run unemployment affects policymaking, particularly in the presence of high or rising public debt. Under such circumstances, governments tighten sanctions as a means to keep the debt under control. Quite surprisingly, however, a rise in unemployment leads to weaker sanctions.

In other words, it seems that the dynamics of sanctions depends on the structure of unemployment. Short-run changes in the unemployment rate induce governments to loosen sanctions. When the economic cycle deteriorates, governments do not hold people responsible for their unemployed status and do not tighten the sanction system. Long-run unemployment seems to induce a response of different sign in presence of high government debt burdens. However, governments tend to relax sanctions when the fiscal balance improves.

All this suggests that changes in sanctions are not driven by a deliberate attempt to adapt national welfare policies to an idealized active framework. Rather, it seems that government action is driven by short-term considerations concerning the evolution of public finances, along with the evolution of long-term unemployment (for the effects that this may have on public finances). Interestingly, improvements in governments' fiscal balances have generally weakened the degree of activation requested to the unemployed.

Table B2 compares the effects of the covariates on the strictness of Sanctions, the Job search requirements and the Overall benefit conditionality. Public debt and its interaction with Long term unemployment help explain the tightening of sanctions, but sheds om light on the strictness of both job search availability and overall benefit conditionality. However, the strength of the requirements characterising job search availability and monitoring is responsive to the governments' fiscal balance. Better public finance leads to softer requirements and conditionality. In other words, when the fiscal balance improves, governments tend to slack the constraints on unemployment benefits. Overall conditionality goes down. This result is consistent with the one showing a negative relationship between unemployment rates and the strictness of sanctions (see Appendix D) and can be interpreted in light of the fact that strengthening sanctions when unemployment rises during an economic downturn may push people to inactivity.

7. Cluster analysis

In a recent paper, Ferragina et al. (2015) cluster European welfare states at a precise point in time (2012) by focusing on their outcomes and on how they deal with old (e.g. unemployment) and new (e.g. single-parent families vulnerability) social risks. Their analysis focuses on European countries only. Indeed, Europe has been more heavily influenced by the three cultural streams – Liberalism, Christian democracy and Social democracy – which can be considered as the ideological basis of the three worlds of welfare capitalism (Esping Andersen, 1990). The paper by Ferragina and co-authors cluster countries in line with the previous institutionalist literature (e.g. Ferrera, 1996). In particular, they consider and distinguish between Conservative (Belgium, Ireland, France, Austria), Liberal (Germany and United Kingdom), Mediterranean (Greece, Spain, Italy and Portugal) and Social-democratic (Denmark, Finland, Sweden and Netherlands) regimes. This taxonomy is close to the one proposed by Kammer et al. (2012), whose paper also focuses on actual economic outcomes, although the proposed distribution of countries across regimes is partially different, with Belgium and the Netherlands emerging as hybrid cases lying between the social-democratic and the conservative models.

In what follows, I will cluster countries by referring to the risk of unemployment. This is an old social risk, according to the terminology employed by Ferragina and co-authors. However, I claim that my analysis is original for two respects. First, the way governments have dealt with the risk of unemployment in the last three decades has been paradigmatic of a new approach to welfare policy design. This raises the question of whether the traditional categories are still useful to frame national welfare policies. Second, and differently from the empirical literature that has resorted to cluster analysis, I neglect redistribution and follow Esping-Andersen (1990) by concentrating on eligibility rules, the level of income replacement and entitlements.

7.1 Results.

I use data from the OECD (see Appendix A) and Venn (2012)'s dataset. My strategy consists in grouping/clustering countries according to eligibility conditions and sanctions only, i.e. *Availability requirements*, *Sanctions* and *Overall Strictness of Eligibility Requirements*. Then I add the *ratio between passive and public expenditure* as a percentage of GDP, the OECD index measuring the strictness of the *employment protection legislation*, and the generosity of benefits as proxied by the *net replacement rate*. Finally, I focus on the role of activation by looking at the *inactivity rate*.

I first examine year 2011, to make my results more easily comparable with those of Ferragina et al. (2015) whose analysis regards 2012. Figure C2 shows that even if one just considers eligibility rules and sanctions, countries show a tendency to cluster along an expected path. Both the Nordic European regime - including Germany, Sweden, Denmark and the Netherlands - and the South European or Mediterranean regime - Greece, Italy and Spain - are recognizable. Portugal has different features. These results are surprisingly stable and do not change significantly if additional variables are introduced.

The strictness of the legislation on employment protection and the generosity of the UI systems (Figure C2c), and then the inactivity rate (Figure C2d) do not change the picture much, either.

Actually, and consistent with previous analyses, the difference between a liberal and a conservative regime seems small. 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 in 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, the present analysis would assign Finland to the conservative/liberal side. This is not surprising if one considers the important reforms that this country has implemented since the mid-1990s to tackle high and persistent unemployment (e.g. Nordlund, 2000; Beraldo and Patalano, 2006). Beside making eligibility conditions much stricter, these reforms reduced regulation in the labour market.

Although the picture does not change much if one focuses on 2014, some differences emerge from the 2017 data, which are not fully reliable. Table C1 present the average values regarding eligibility rules, sanctions, income replacement and employment protection. Nordic countries present the lowest ratio between passive and active public expenditure, while the opposite is true for the group of the Mediterranean countries plus Belgium. The group of countries commonly labelled as social-democratic (including Germany) is characterized by a mix of soft sanctions and stricter availability requirements. The opposite is true for the Southern countries. Both groups are characterized by high employment protection. Instead, low employment protection characterizes countries closer to the liberal /conservative tradition.

To sum up, the analysis shows that the contractual approach to welfare state reform, and its emphasis on the activation of unemployed, does not seem to have produced much convergence across national welfare state models. With the exception of Finland, well-characterized regimes still persist.

8. Discussion

Leaving aside equity and efficiency, the idea that individuals must be held responsible for their own choices sounds attractive from a politician's perspective. In periods characterized by shortages of public resources, reducing or suppressing benefits only for the less deserving (because less responsible) is in fact much easier than reducing benefits for all[10]. As illustrated above, however, the use of sanctions has mainly followed short-term considerations due to increasing fiscal deficits and debt sustainability, rather than precise welfare policies strategies. In fact, in each country the proactive approach to welfare state reform has been strongly conditioned by path-dependency: national welfare states have followed trajectories coherent with consolidated paths, so that their long-standing affiliation with traditional welfare regimes is still in place.

[10] Apart from this, Atkinson (1999) points out two further reasons: The first is that the political discourse since the '70 has influenced voters' preferences. Yet, one must explain why this happened. Atkinson also pointed out that starting from the dramatic increase in unemployment levels since the '70, every individual has become able to correctly assess his/her risk of being unemployed. Thus, as most individuals learnt that the risk was relatively low, support for the UI systems dropped.

Research has been emphasizing that the contract-based approach works well only in the first stages of unemployment (Martin, 1998), when intensive personal help and advice to workers is provided. Since the British New Deal, this has been known as the *gateway period*. Although restrictions and sanctions may work in discouraging reliance on welfare systems, however, this does not necessarily mean that individuals are led to a regular job. In many cases, the contractual approach is unable to deliver what promised, and inactivity remains a realistic outcome.

These results are confirmed by Knox (2020), who studies the effect of behavioural restrictions and sanctions in aggregate: sanctions do not produce appreciable effects on employment, whereas benefit conditionality does. In Appendix D, I extend Knox (2020)'s analysis to consider the effects of behavioural restrictions and sanctions on unemployment and inactivity rates. The results suggest that benefit conditionality contributes to reducing inactivity, while sanctions make inactivity more likely. This does not imply that sanctions are bad, not that their use should be avoided. Rather, it means that the contractual approach does not seem to achieve the primary goal of activating the unemployed. These programmes are not effective in tackling large-scale unemployment, and sanctions are rarely applied (they are hardly popular, especially during a crisis).

In regard to the question of whether the contractual approach effectively contributes to enhancing the level of human capital (i.e., employability), strong doubts persist. To be effective, active programmes should target small numbers of individuals; they require trained and motivated advisors, and a redefinition of administrative procedures concerning payments to (and monitoring of) the unemployed. This makes active programmes very expensive. Governments are commonly unwilling to allocate the necessary resources to this aim. For example, in the last decade, public expenditure on public employment services and training as a percentage of GDP fell dramatically in OECD countries (Figure A5).

Certainly, those programmes can be useful, when suitably designed and financed. Young, short-term jobless-employable individuals are the primary beneficiaries. Such programmes, however, can play only a marginal role when they expand. This explains why countries that devote a relatively large share of resources to fund active programmes are also the very countries that fund passive programmes relatively more generously (Figure A6).

The upshot is that one cannot rely on a proactive approach alone to solve labour market problems, while meeting financial sustainability. General macroeconomic conditions matter (Martin, 1998). It is not surprising that despite of the alleged success of the Jobs strategy, in 2003 the OECD Labour and Employment Ministers concluded that it was time to reflect on whether the previous policy recommendations had proved effective and how they might possibly be revised to respond to new challenges. The OECD reassessment came in 2006: "Experience shows that there is no single golden road to better labour market performance".

8.1 The new (revisited) OECD jobs strategy

In January 2016, the OECD Employment and Labour Ministers called for yet a new Jobs Strategy (the final report was published two years later, on December 4th 2018). This renewed Jobs Strategy focused on digital transformation, globalization and population ageing, and emphasised the role of a number of phenomena. It drew attention to a decreasing trend in labour productivity growth in OECD countries, mainly as a consequence of the reduction in the capital per worker ratio. This trend, in conjunction with population ageing, is likely to negatively affect living standards in industrialized countries in the medium / long run. It also emphasised job polarization caused by the shift of employment from manufacturing to services: the number of middle-pay, middle-skill jobs has declined relative to the number of high-skilled and, to a lesser extent, to the low-skilled. Digitalization and automation further contribute to destroy routine jobs, and fail to create enough non-routine opportunities.

In other words, rapid technological progress, globalization and population ageing put a premium on continuous skill development in the labour market, and the skills acquired in youth are no more sufficient and/or become quickly obsolete. Within this framework, the main challenge for the policy maker is one of enhancing productivity gains, making sure that people's living standards improve, and that income inequalities are contained.

The 1994 Jobs Study singled market regulation and legislation as the key determinants of high unemployment. The proposed remedies were labour-market liberalization and deregulation. This would have favoured the financial (and political) sustainability of the national welfare states in a context of increasing international competition and limited public expenditure. Unemployment was indeed considered as a supply-side problem generated by institutions that provide adverse incentives to workers. Since the emphasis was on the link between unemployment benefits and the effort to look for jobs, the solution was *activation*. This was a little simplistic, however. Although activation is clearly important, its importance was overemphasized. No sensible economist would have ever believed *activation* would be enough to integrate millions of people into the labour market, especially in a context of stagnant economic growth.

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». One wonders, however, whether the promotion of quality employment and greater inclusion are in themselves factors capable of triggering greater economic growth, or if greater economic growth is indeed necessary to pursue these goals. If more productivity growth is the key, what will governments do to promote productivity-enhancing investments by firms? On these issues, OECD recommendation for inclusive growth is not very helpful.

9. Conclusions.

The *contractual approach* to welfare policy design has raised many doubts. Some relate to whether the requirements embedded in the contract actually encourage unemployed workers to seek and find jobs. Other regard the ability of governments to keep their promises.

In this paper, I have tried to identify whether it is possible to single out country specific factors that might have played a role in stressing the role of personal responsibility. I have also explored whether this new perspective has enhanced convergence among the OECD welfare models.

Overall, the present analysis suggests that governments have not required welfare claimants to comply with the active framework recommended by the OECD in 1994 (and by the European Union a couple of years later). Rather, governments were heavily influenced by current events and short run considerations, and changed their approaches and attitudes on responsibility according to the circumstances. In the end, the contractual approach to welfare state reform does not seem to have produced much convergence between national systems of social protection. Overall, path dependency appears to have driven the working of the national welfare states in the last three decades.

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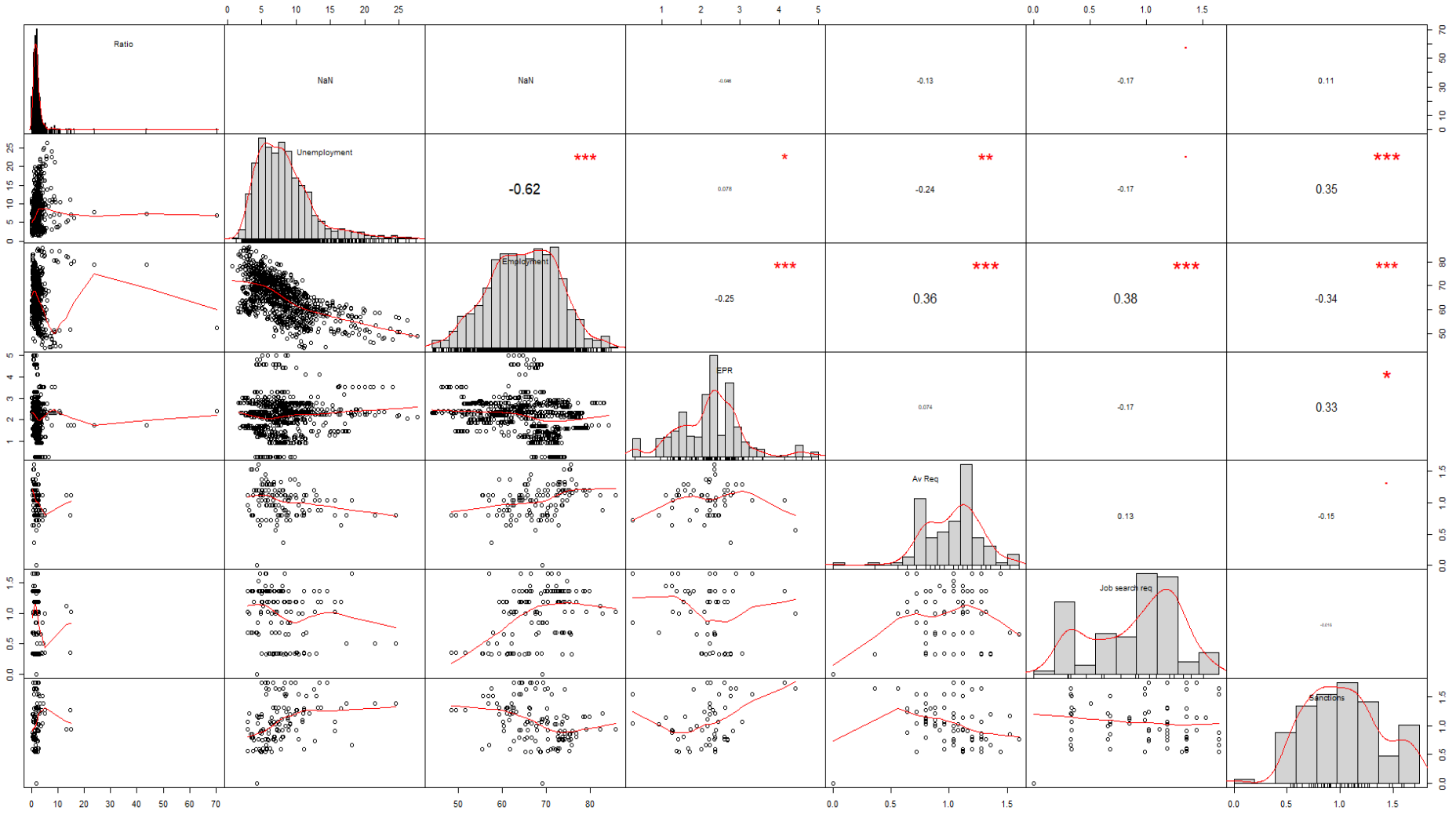
APPENDIX A

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 ((employed+unemployed=active population)+inactive).	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 expressed as 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)	Net 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, all persons	7,86	4,16	0,63	27,69	OECD (2020), Unemployment rate (indicator). doi: 10.1787/997c8750-en
KNOX 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	0,47	0,17	0,04	0,83	Knox and Nelson (2019)

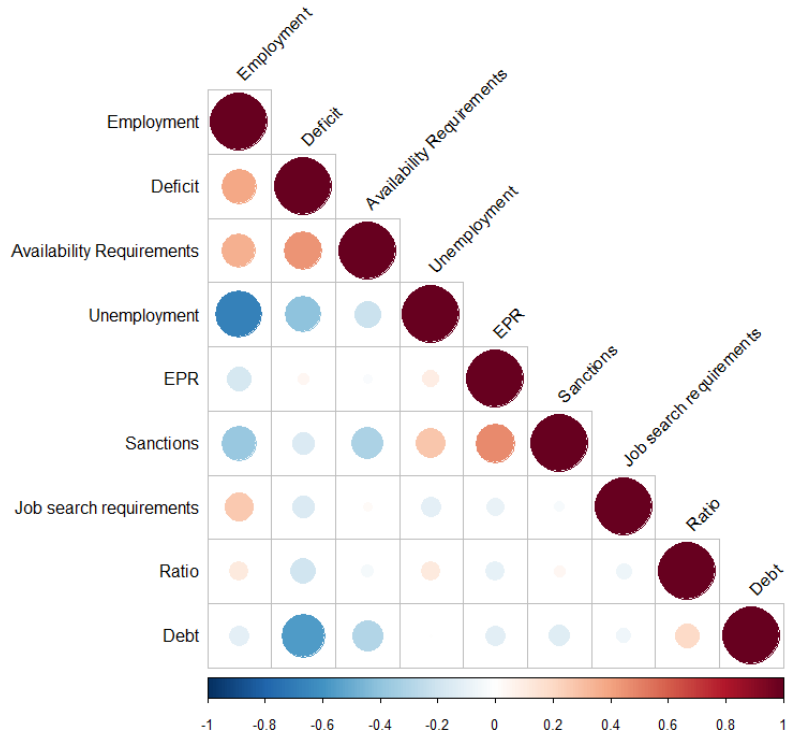
	conditions.					
Overall Conditionality	An index allowed to range from 0 (most lenient) to 1 (most strict), measures the overall conditionality of the unemployment benefit systems	0,48	0,11	0,15	0,79	Knox and Nelson (2019)
Sanctions	An index allowed to range from 0 (most lenient) to 1 (most strict), measures the overall strictness of sanction rules.	0,53	0,17	0,16	1	Knox 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; Immervol 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; Immervol 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; Immervol 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; Immervol and Knotz, 2018

Fig A1. Correlogram 1.

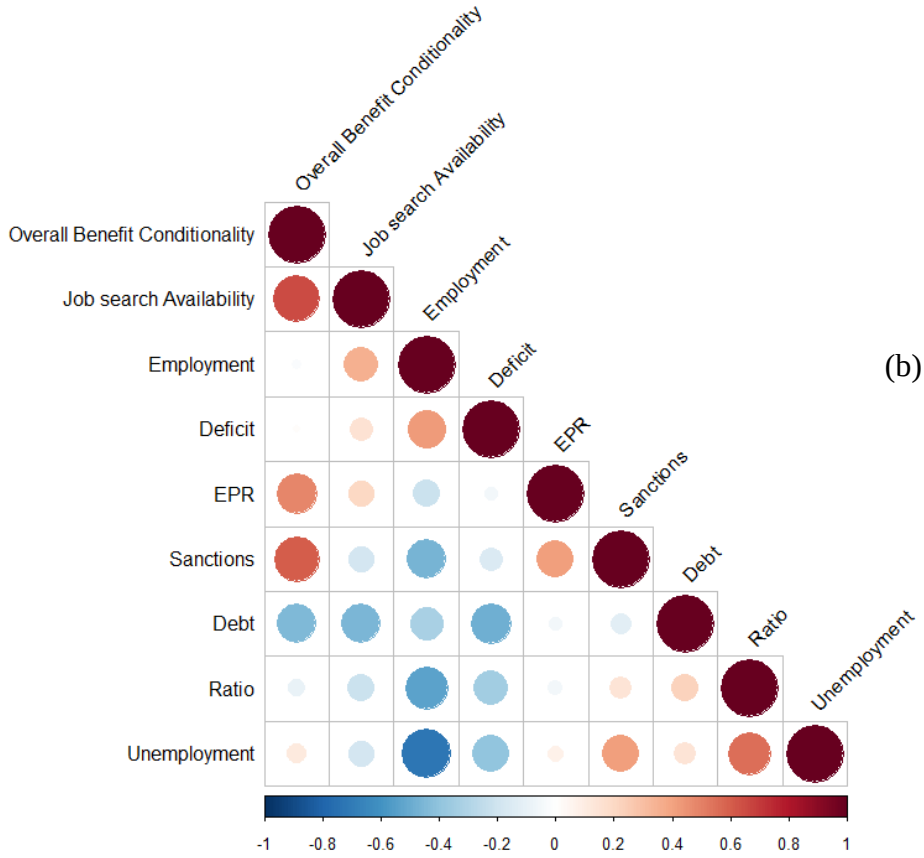


Notes: The figure shows the correlation between the unemployment rate, the employment rate, the ratio between passive and active expenditures as a percentage of GDP, the employment protection regulation (permanent contract), and three of the indexes built up by Venn (2012), i.e. Availability requirements,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

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

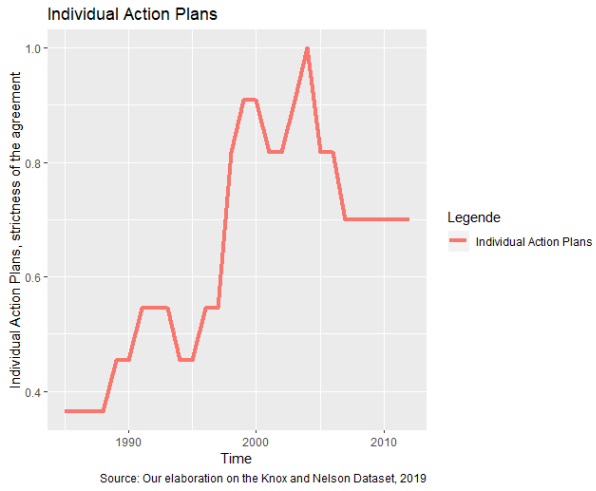


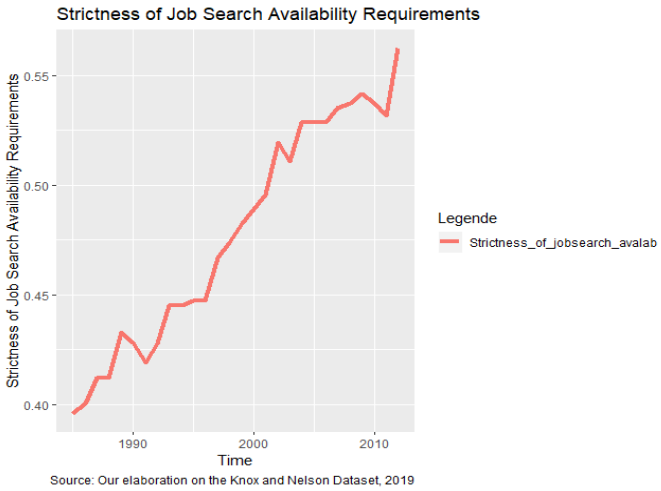
(a)

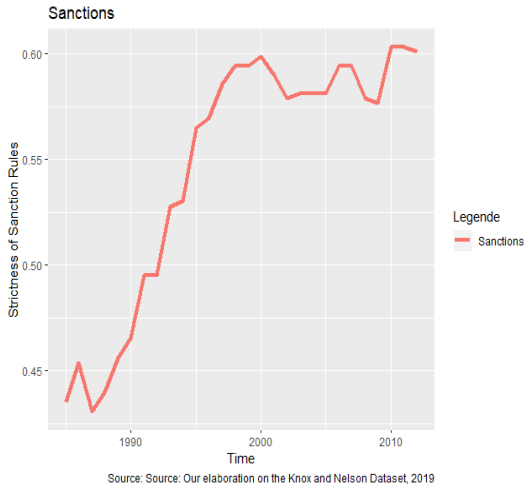


(b)

Fig A3. Benefit Conditionality and Sanctions.







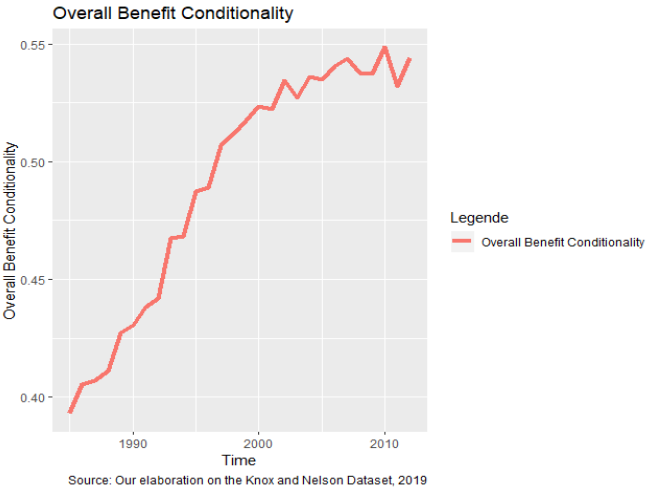
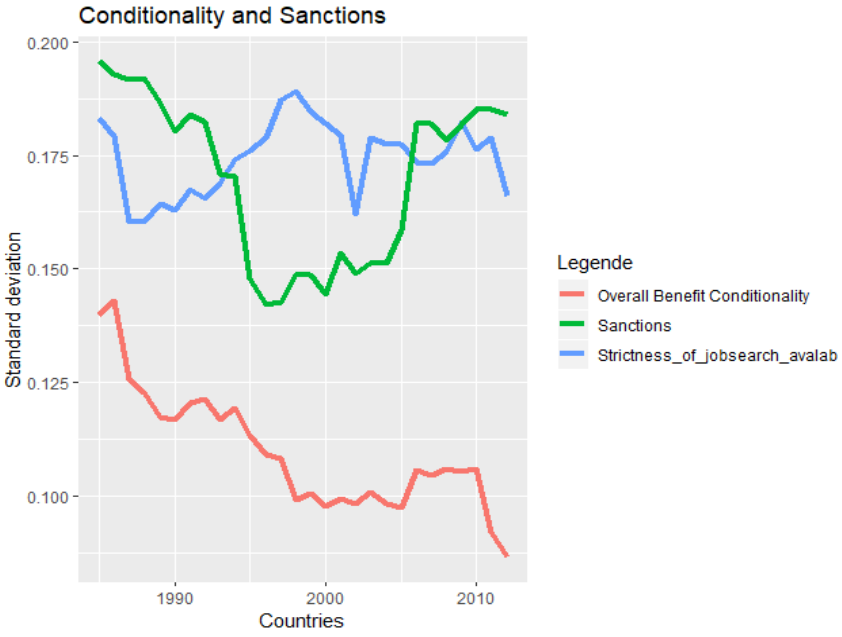


Fig A4. Standard deviation of Conditionality and Sanctions (a) and Individual Action Plans (b) across countries and over time.



a)

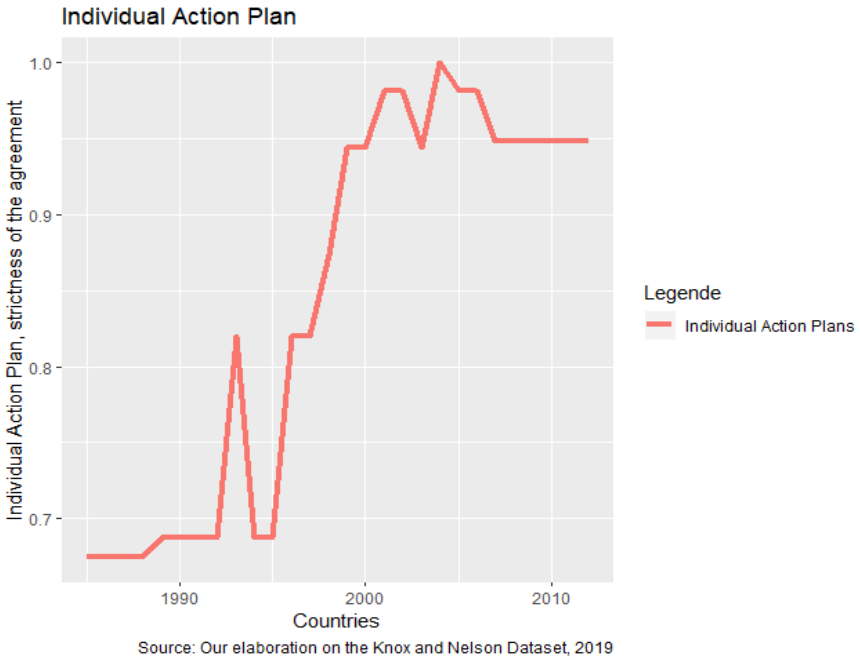
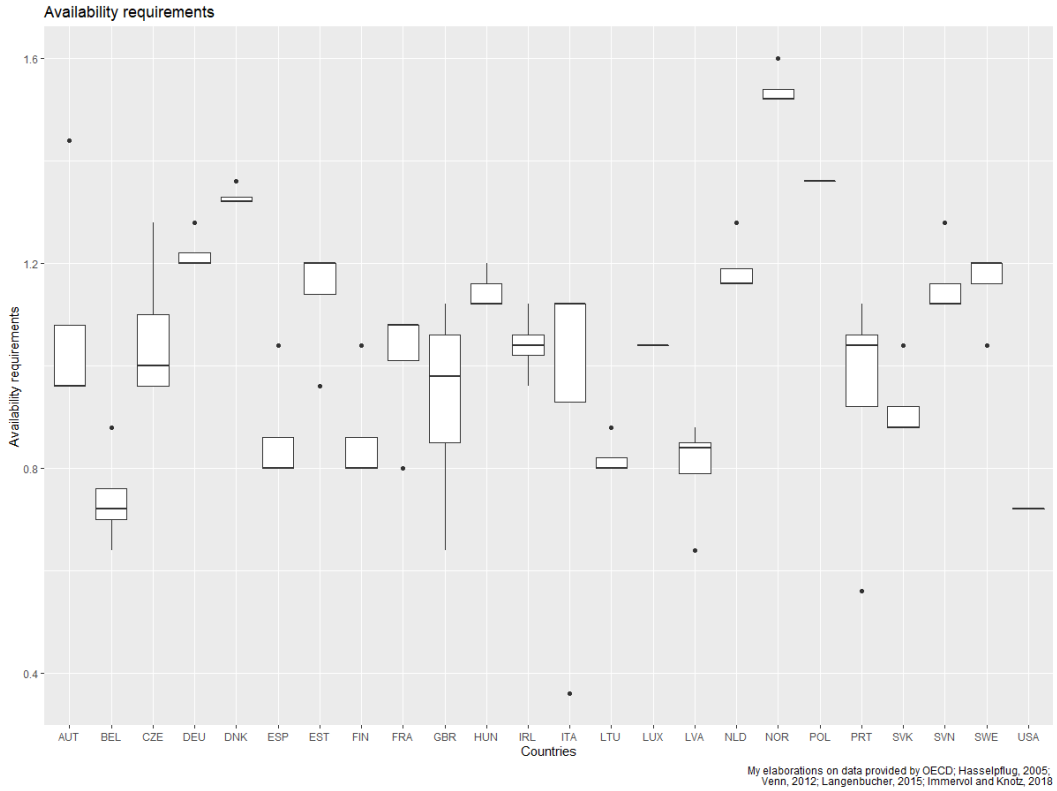
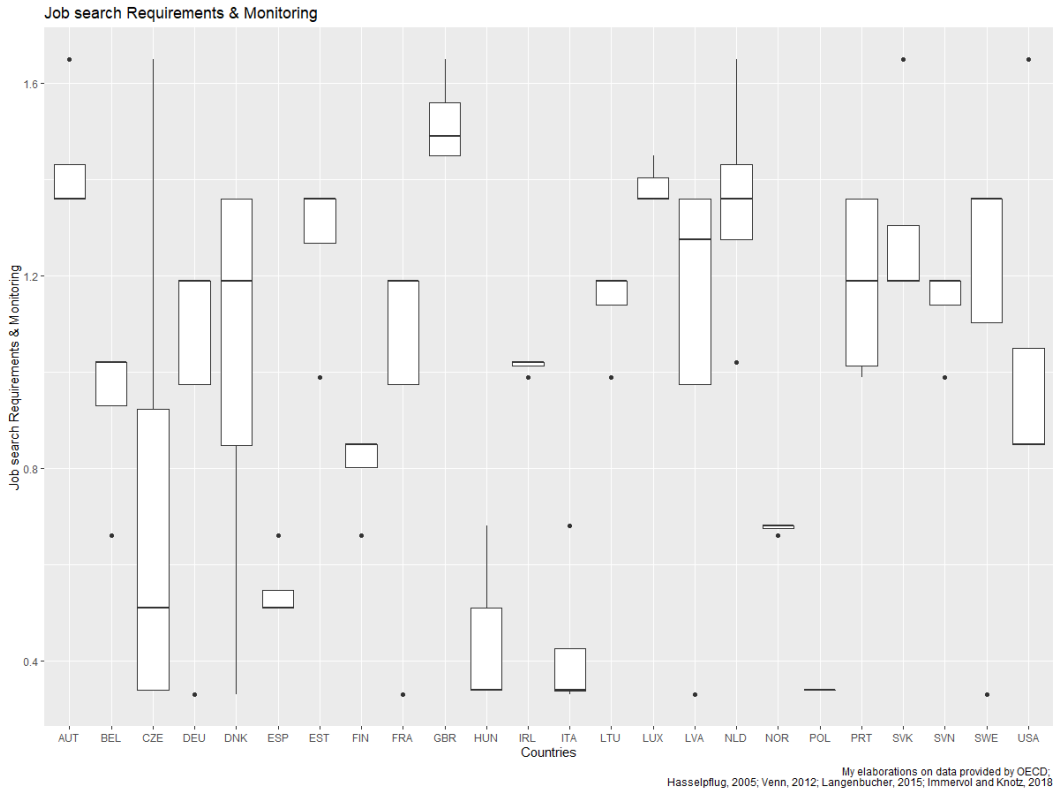


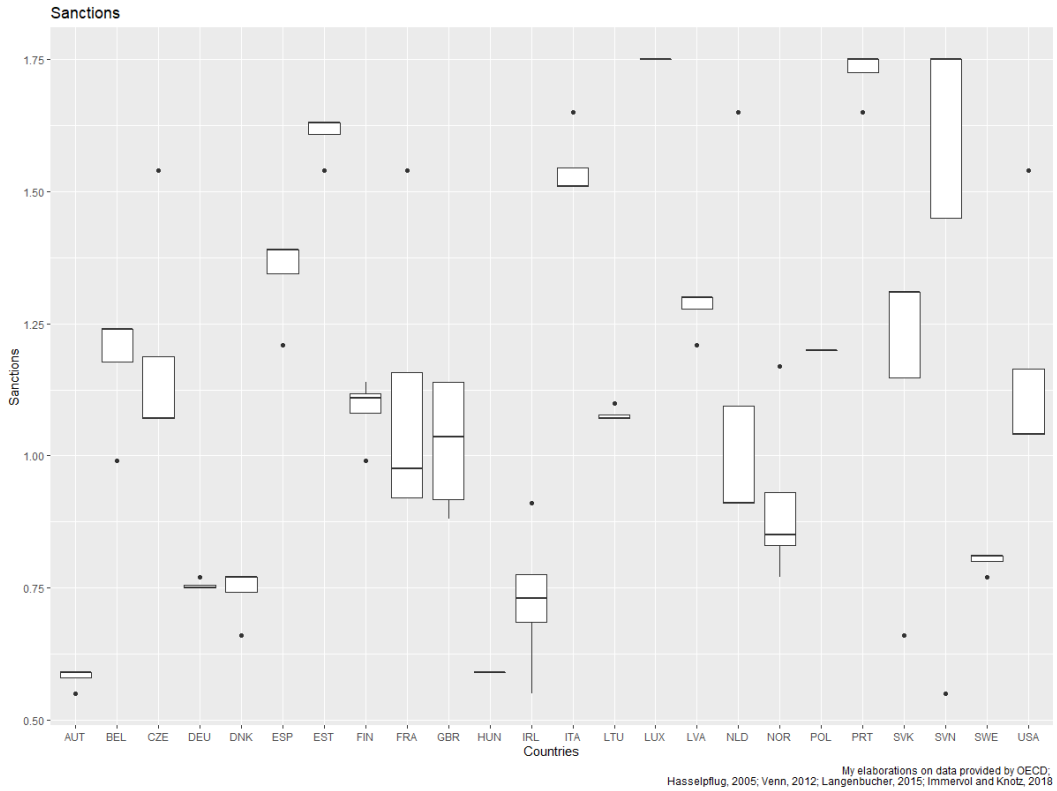
Fig. A5. Strictness of Eligibility requirements and Sanctions at the country level over the period 2004-2017: (a) Availability requirements (*a*), Job search Requirements (*b*) and Sanctions (*c*).



a

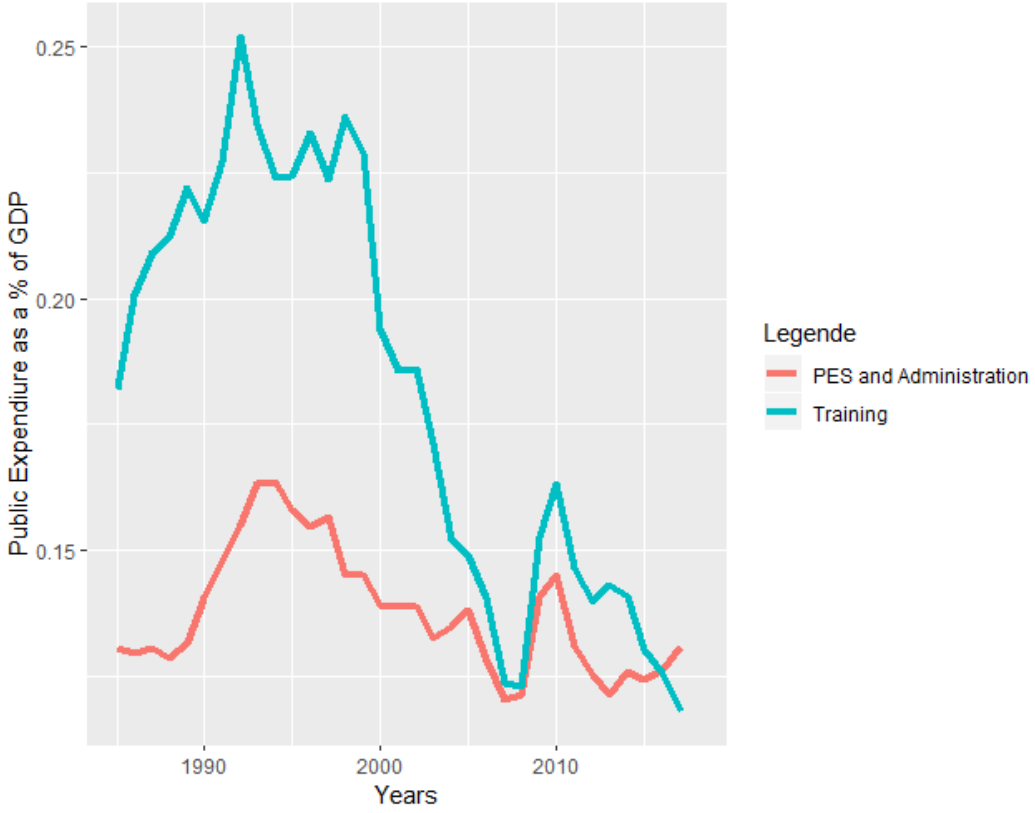


b


Sanctions
1.75
1.50
1.25
1.00
0.75
0.50
Sanctions
AUT
BEL
CZE
DEU
DNK
ESP
EST
FIN
FRA
GBR
HUN
IRL
ITA
LTU
LUX
LVA
NLD
NOR
POL
PRT
SVK
SVN
SWE
USA
Countries
My elaborations on data provided by OECD;
Hasselpflug, 2005; Venn, 2012; Langenbucher, 2015; Immervol and Knotz, 2018

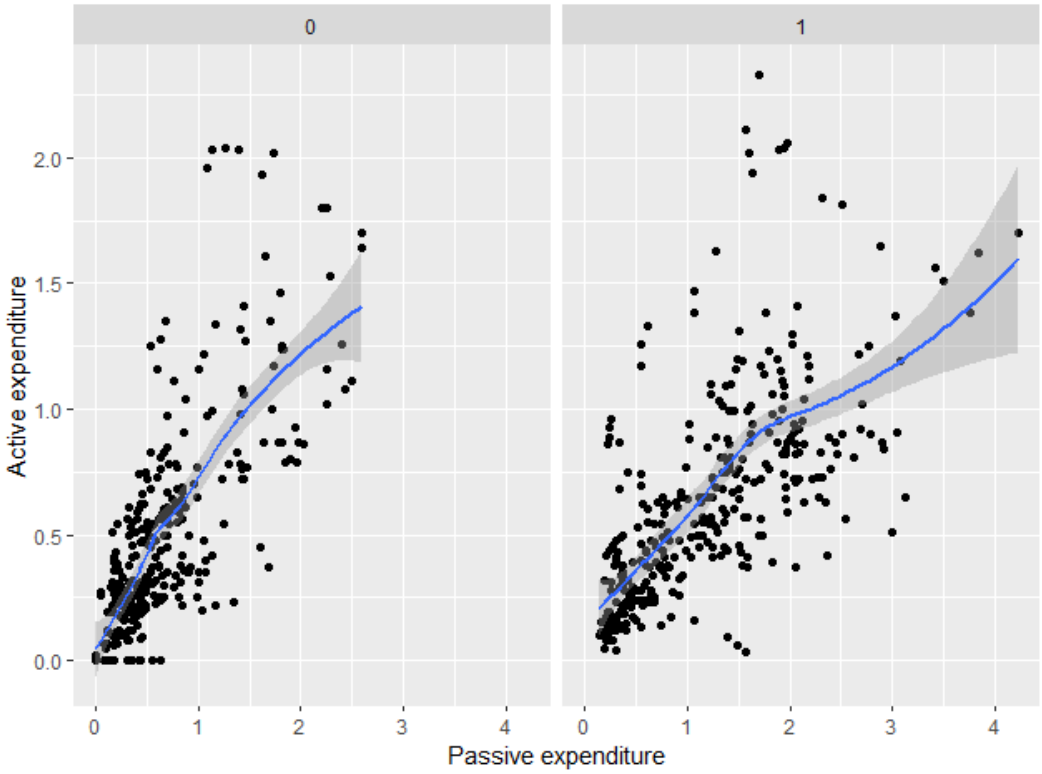
c

Fig. A5. PES and Administration, Training. Public Expenditure as a percentage of GDP.



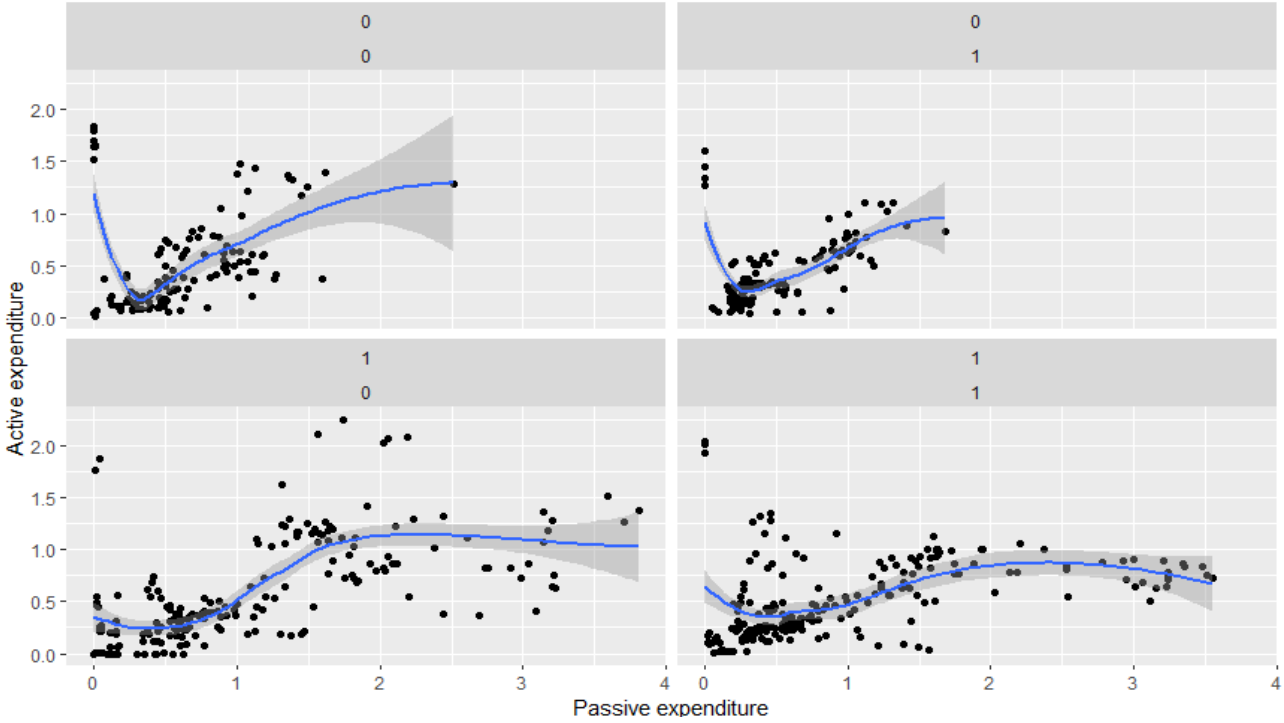
OECD countries. Source: Our elaboration on data provided by OECD

Fig. A6. Active and passive expenditure as a % of GDP.



Note: OECD countries observed over the period 1995-2018. Zero (0) indicates countries with a public debt lower than 60% of GDP. Source: my elaborations on data provided by the OECD.

Fig. A7. Active and passive expenditure as a % of GDP.



Note: OECD countries observed over the period 1995-2018. Upper Zero (0) indicates countries with a public debt lower than 60% of GDP; lower zero indicates country with an unemployment rate below 6%. Source: my elaborations on data provided by the OECD.

APPENDIX B

Table B1. Dependent variable: Δ Strictness of benefit sanctions

	(1)	(2)	(5)	(6)	(7)	(9)	(11)
const	0,1708	0,1369**	0,1106**	0,08500**	0,09779**	0,1056**	0,1039**
	(0,1111)	(0,03624)	(0,02518)	(0,01998)	(0,02048)	(0,02555)	(0,02533)
Sanctions (t-1)	-0,3180***	-0,3175***	-0,3040***	-0,2824***	-0,2792***	-0,2275***	-0,2268***
	(0,06383)	(0,06174)	(0,05516)	(0,05313)	(0,05433)	(0,04146)	(0,04107)
Unemp (t-1)	0,0005004	0,0007128					
	(0,001767)	(0,001674)					
Emp (t-1)	-0,0002138						
	(0,001825)						
LRU (t-1)	-0,0008131	-0,0007946					
	(0,001144)	(0,0009686)					
EPT (t-1)	-0,006769						
	(0,03132)						
NRR (t-1)	0,0004802	0,0005090	0,0005431**	0,0004518**	0,0002779		
	(0,0004561)	(0,0003428)	(0,0002181)	(0,0001839)	(0,0001644)		
Budget (t-1)	0,001591	0,001632					
	(0,001617)	(0,001542)					
Debt (t-1)	-0,0005972	-0,0005996	-0,0005911				
	(0,0004654)	(0,0004523)	(0,0003567)				
Output gap (t-1)	-0,002336	-0,002309					
	(0,002315)	(0,002051)					
Ratio (t-1)	0,01025*	0,009854*	0,01170**	0,01122**	0,01149**	0,006273**	0,006049**
	(0,005500)	(0,005406)	(0,004468)	(0,004320)	(0,004372)	(0,002341)	(0,002551)
Δ Unemployment	-0,008460**	-0,008159**	-0,008137**	-0,007713**	-0,009921**	-0,004125	
	(0,003973)	(0,003776)	(0,003428)	(0,003127)	(0,002922)	(0,003870)	
Δ Employment	-0,004597	-0,004498	-0,006291**	-0,004625*	-0,004758*	-0,002506	
	(0,003714)	(0,003561)	(0,002813)	(0,002339)	(0,002350)	(0,003515)	
Δ LRU	0,0002729	0,0002893					
	(0,0009690)	(0,001013)					
Δ EPR	0,02952**	0,03226**	0,02810*	0,02614			
	(0,01190)	(0,01477)	(0,01513)	(0,01521)			
Δ Budget	-0,001713	-0,001717	-0,002746**	-0,002989**	-0,002579**	-0,001562*	-0,001366*
	(0,001231)	(0,001261)	(0,0004769)	(0,0004866)	(0,0005913)	(0,0007679)	(0,0006896)
Δ DEBT	-0,0008927*	-0,0009140*	-0,0008422	-0,0008455			
	(0,0004895)	(0,0004793)	(0,0005236)	(0,0005262)			
Δ Output GAP	-0,002414	-0,002379					
	(0,001756)	(0,001697)					
Δ Ratio	-0,003436	-0,003929					
	(0,007214)	(0,005891)					
Δ NRR	8,559e-05	8,419e-05					
	(0,0003114)	(0,0002631)					
Δ LRU × Δ DEBT	0,0004716***	0,0004717***	0,0004343***	0,0004072***	0,0003884***	0,0004293***	0,0004308***
	(5,019e-05)	(5,901e-05)	(4,990e-05)	(5,115e-05)	(5,226e-05)	(5,068e-05)	(5,062e-05)
LRU (t-1) × DEBT (t-1)	2,251e-05*	2,271e-05*	1,849e-05**	9,513e-06**	8,510e-06*	5,616e-06**	6,088e-06**
	(1,249e-05)	(1,218e-05)	(7,750e-06)	(3,954e-06)	(4,429e-06)	(2,667e-06)	(2,612e-06)
Δ LRU × DEBT (t-1)	-7,853e-07						
	(1,878e-05)						
LRU (t-1) × Δ DEBT	-6,352e-06	-6,048e-06					
	(1,161e-05)	(1,221e-05)					
n	192	192	193	193	193	294	294
ADJ R^2	0,5247	0,5246	0,5065	0,4990	0,4836	0,3880	0,3838

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).

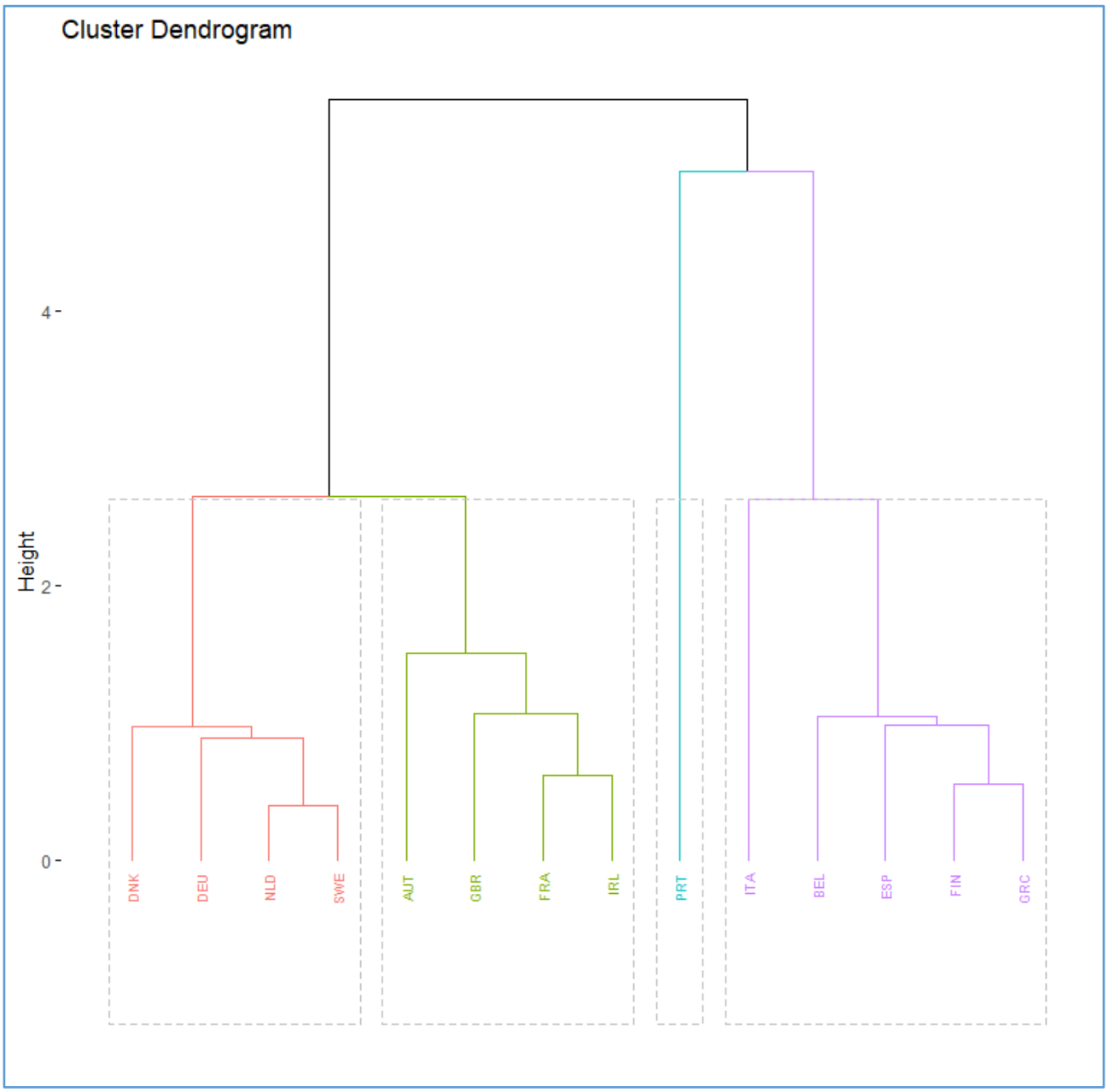
I		II		III	
CONST	0,1037*	CONST	0,3836**	CONST	0,3042**
	(0,05031)		(0,1152)		(0,1269)
STRICTNESS OF BENEFIT SANCTIONS (t-1)	-0,2686**	STRICTNESS OF JOB SEARCH AVAILABILITY (t-1)	-0,4601***	OVERALL BENEFIT CONDITIONALITY (t-1)	-0,5779**
	(0,06410)		(0,1537)		(0,2061)
UNEMPLOYMENT RATE (T-1)	0,002425		0,002056		0,004292
	(0,001864)		(0,005343)		(0,004605)
LRU (T-1)	-0,0008560		-0,0004288		-0,001175
	(0,001218)		(0,002111)		(0,001411)
NRR (T-1)	0,0006528		-0,001531**		0,0002344
	(0,0003956)		(0,0006842)		(0,0005949)
OUTPUT GAP (T-1)	0,0007222		0,001925		0,002219
	(0,001455)		(0,001879)		(0,001565)
BUDGET BALANCE (T-1)	-0,002445		-0,001962*		-0,001900*
	(0,001454)		(0,001078)		(0,001033)
DEBT (T-1)	-0,0004576		-0,0007362		-0,001023
	(0,0005577)		(0,0006339)		(0,0006375)
ΔUNEMPLOYMENT RATE	-0,006069*		0,001469		-0,001514
	(0,002893)		(0,003632)		(0,002076)
Δ LRU	0,001049		-0,0005605		-0,0002523
	(0,001426)		(0,001431)		(0,0007356)
ΔNRR	-0,0001530		-0,0007643		-0,0001999
	(0,0003702)		(0,0004771)		(0,0001583)
ΔOUTPUT GAP	-0,0008908		0,001600		0,0003232
	(0,001169)		(0,001519)		(0,0008379)
ΔBUDGET BALANCE	-0,004901***		-0,001819		-0,002403***
	(0,001313)		(0,001346)		(0,0007932)
ΔDEBT	-0,001140*		5,508e-05		-0,0007874
	(0,0006230)		(0,0006815)		(0,0004847)
Δ LRU × Δ DEBT	0,0002997***		-8,584e-05		8,355e-05
	(7,097e-05)		(5,980e-05)		(4,825e-05)
LRU (T-1) × DEBT (T-1)	1,647e-05		1,140e-05		2,478e-05
	(1,328e-05)		(1,264e-05)		(1,495e-05)
Δ LRU × DEBT (T-1)	-1,558e-05		7,752e-06		1,873e-06
	(1,629e-05)		(1,596e-05)		(1,255e-05)
LRU (T-1) × Δ DEBT	-9,370e-06		1,581e-05		7,699e-06
	(1,490e-05)		(1,312e-05)		(9,244e-06)
N	204		199		199
R^2	0,5008		0,3110		0,4092

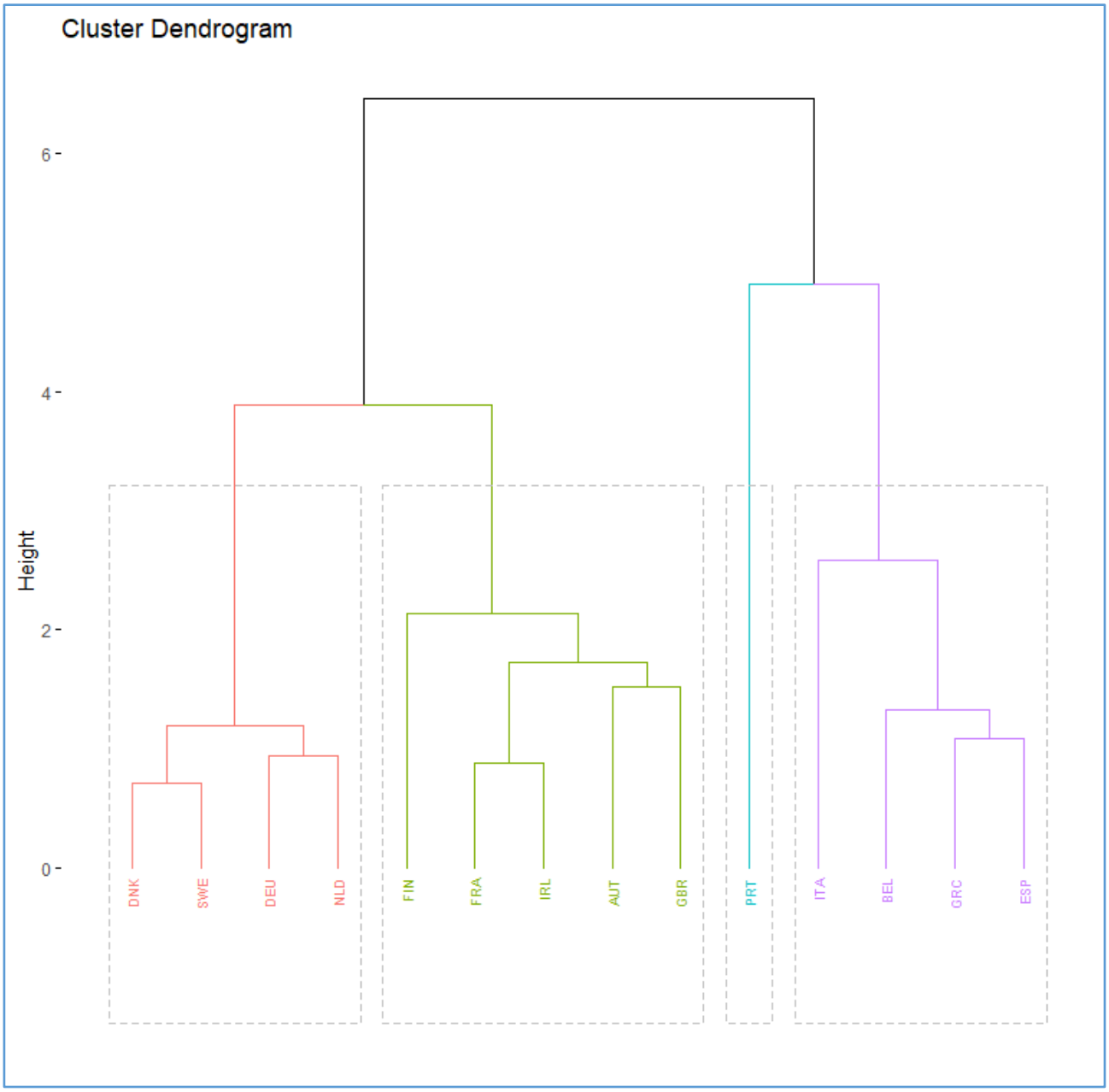
Notes: Country Fixed Effects. Robust standard errors (HAC) in parenthesis.
Statistical significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Appendix C

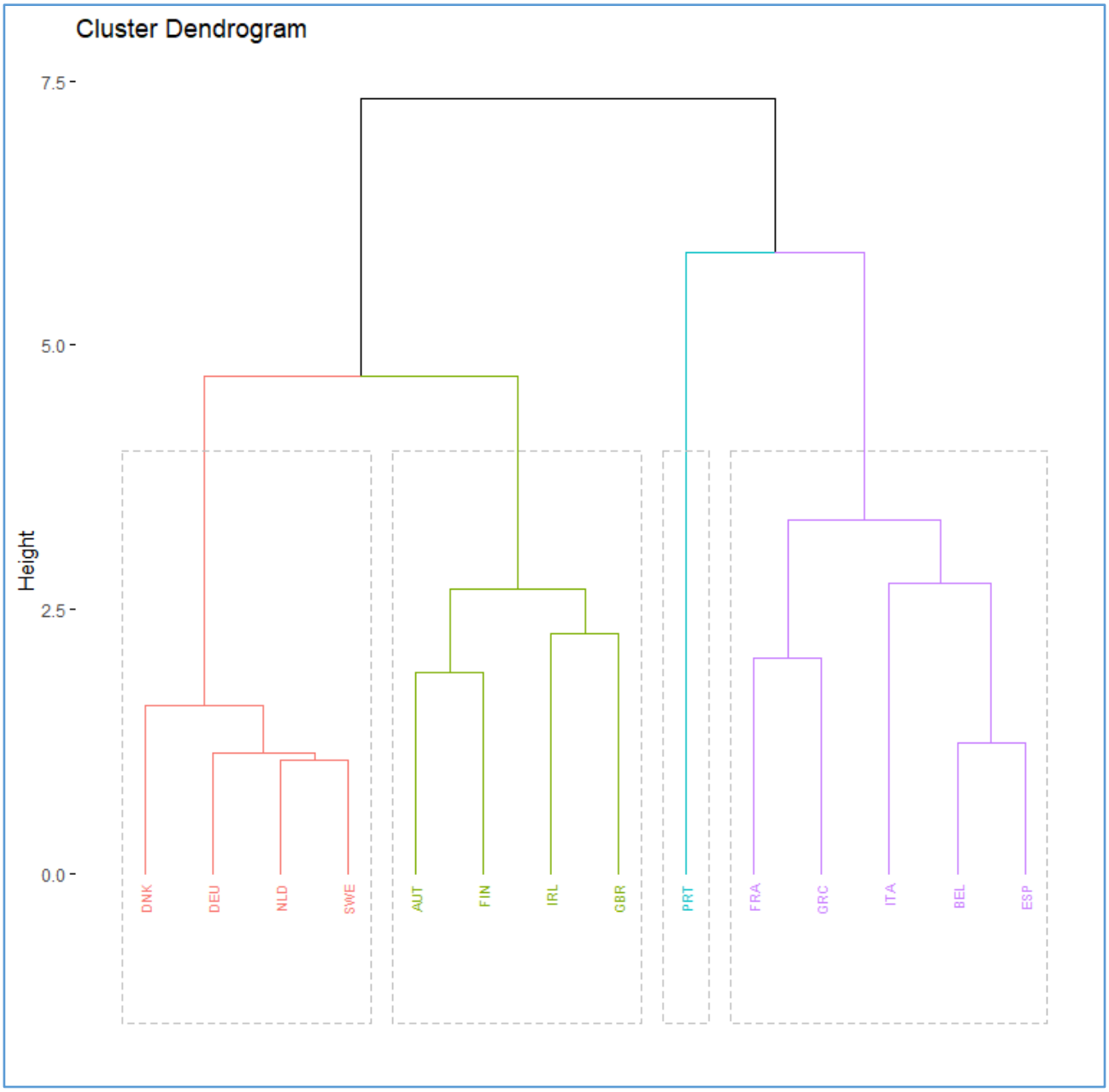
Fig C1. Cluster Dendrograms, EU countries (2011). Clustering based on: a) Availability requirements, Sanctions, Overall Strictness of Eligibility Requirements; b) variables sub a) plus the ratio between passive and public expenditure as a percentage of GDP; c) variables sub b) plus Employment protection legislation and Net Replacement Rate; d) variables sub c) plus Inactivity rate.

a)

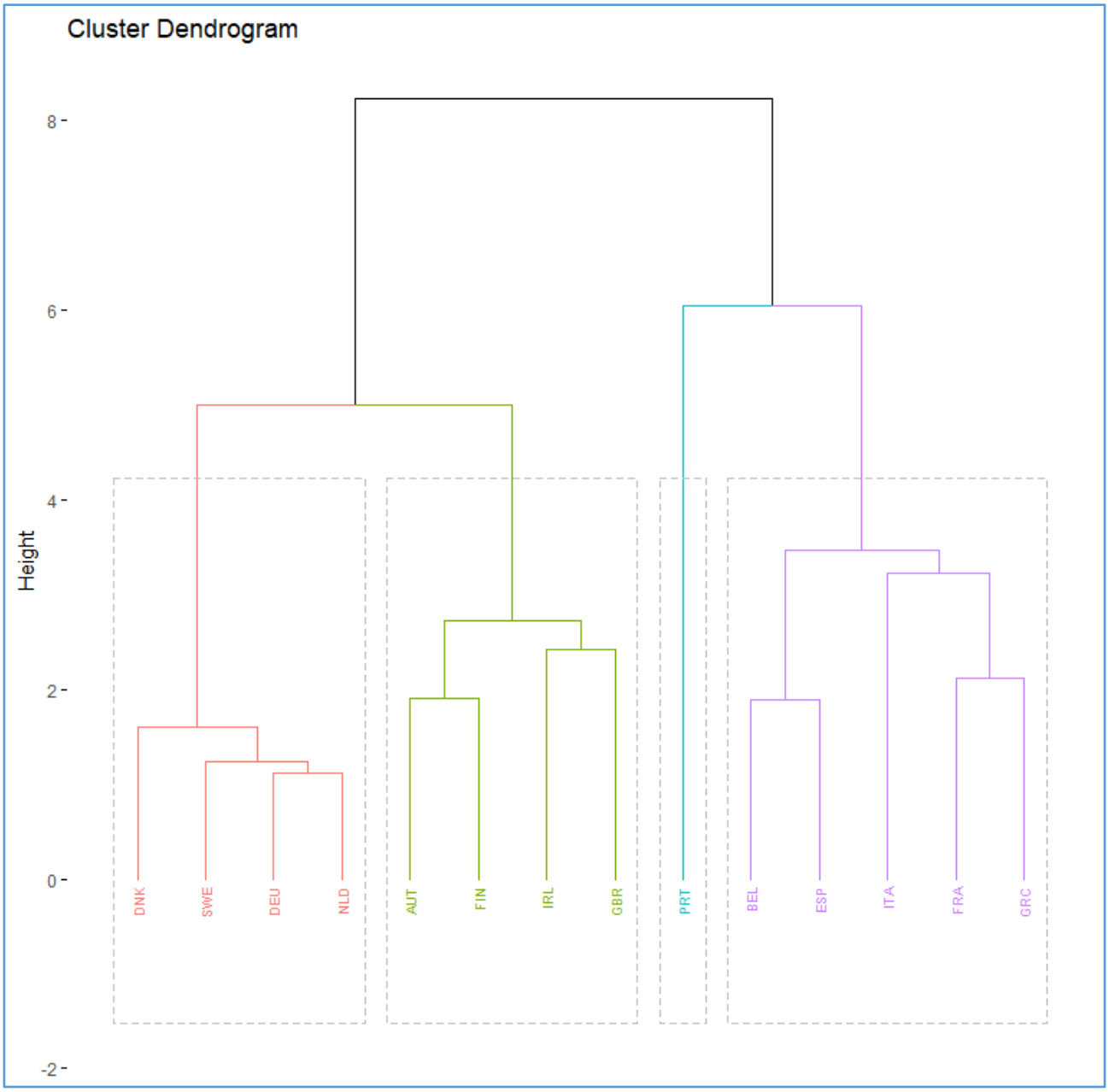



Cluster Dendrogram
Height
6
4
2
0
DNK
SWE
DEU
NLD
FIN
FRA
IRL
AUT
GBR
PRT
ITA
BEL
GRC
ESP

***b*)**


Cluster Dendrogram
Height
7.5
5.0
2.5
0.0
DNK
DEU
NLD
SWE
AUT
FIN
IRL
GBR
PRT
FRA
GRC
ITA
BEL
ESP

c)

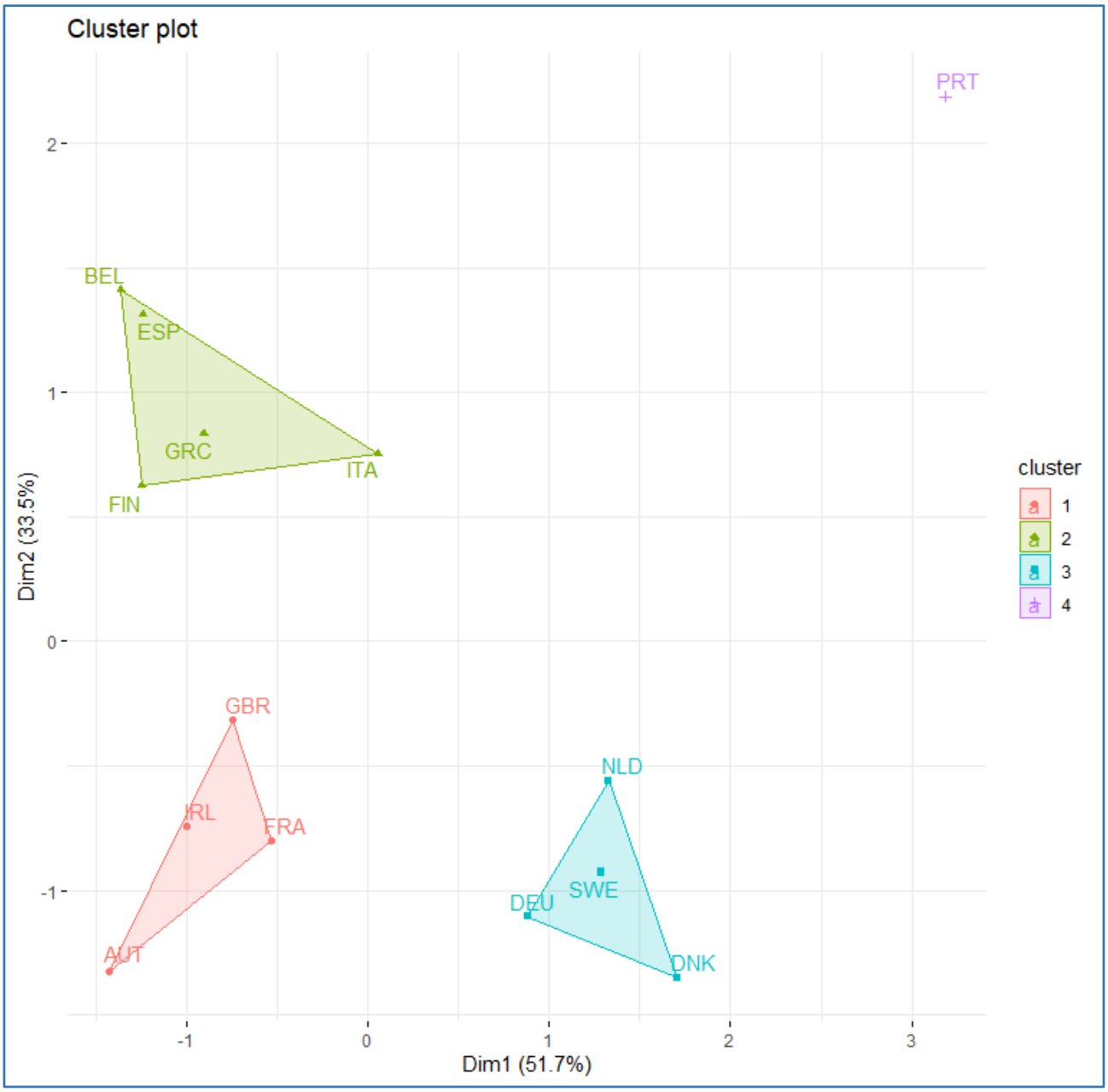


d)

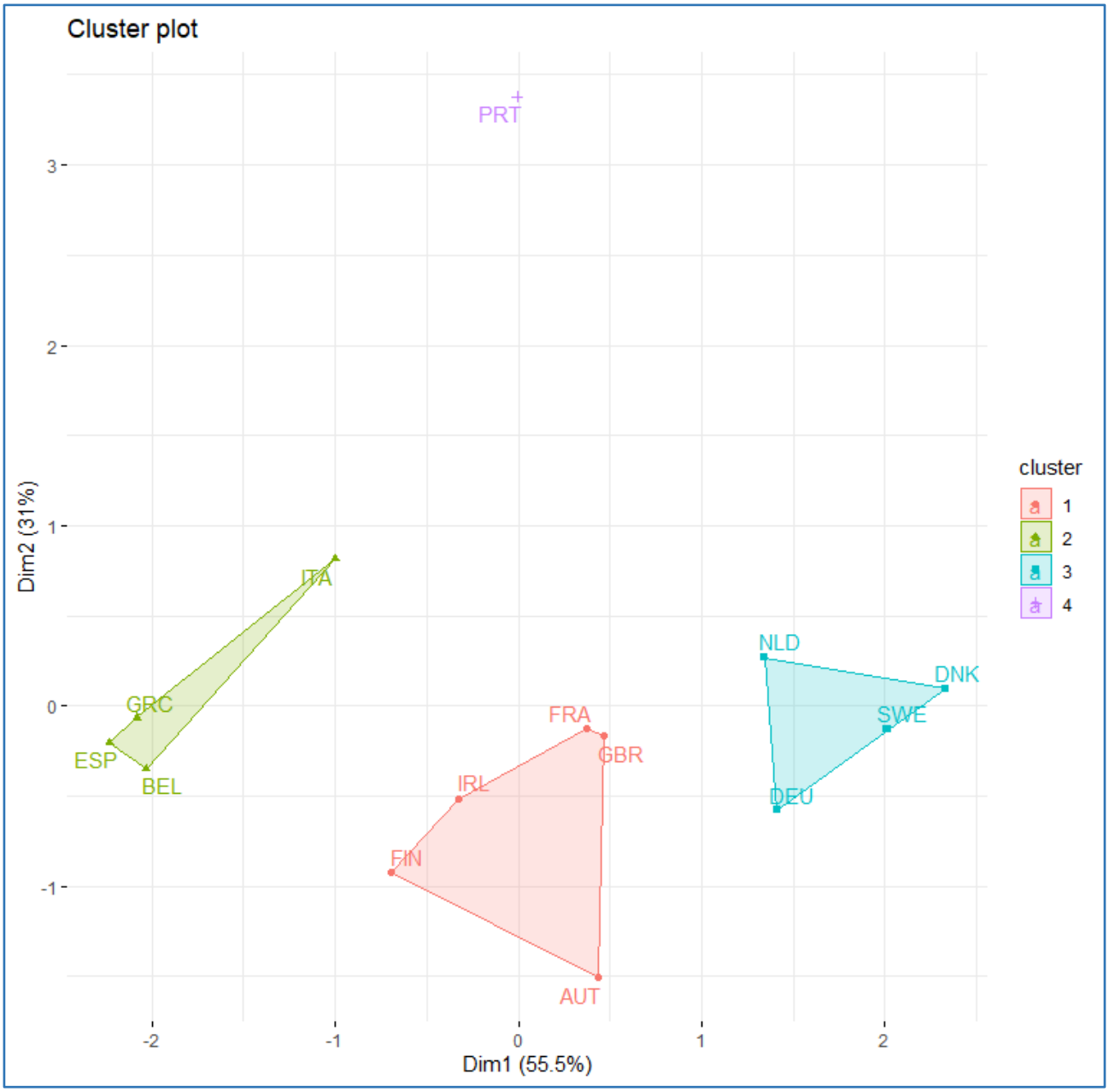
Note: My elaborations on data from OECD (different sources) and the Venn (2012)'s dataset.

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.

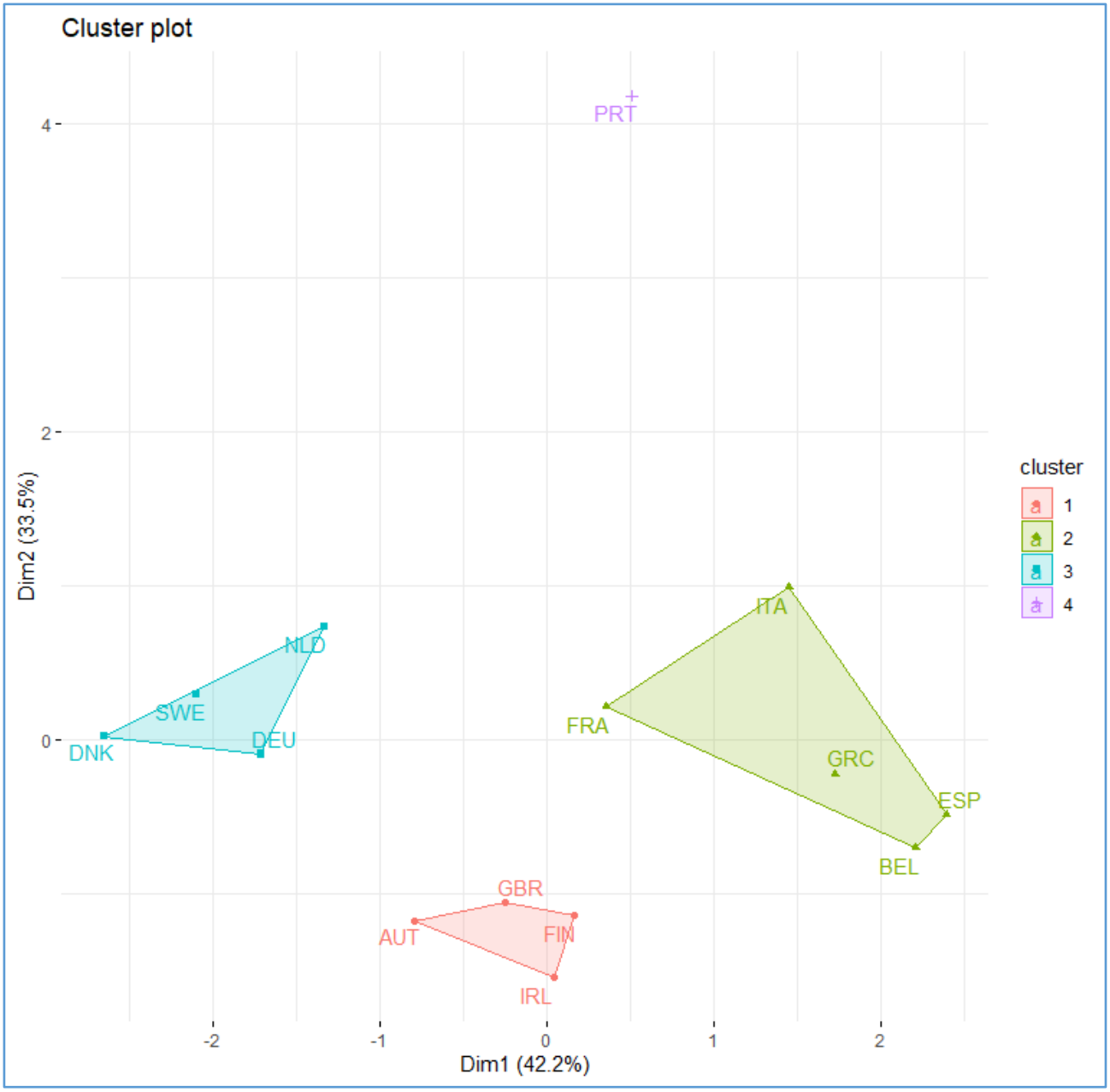
a)



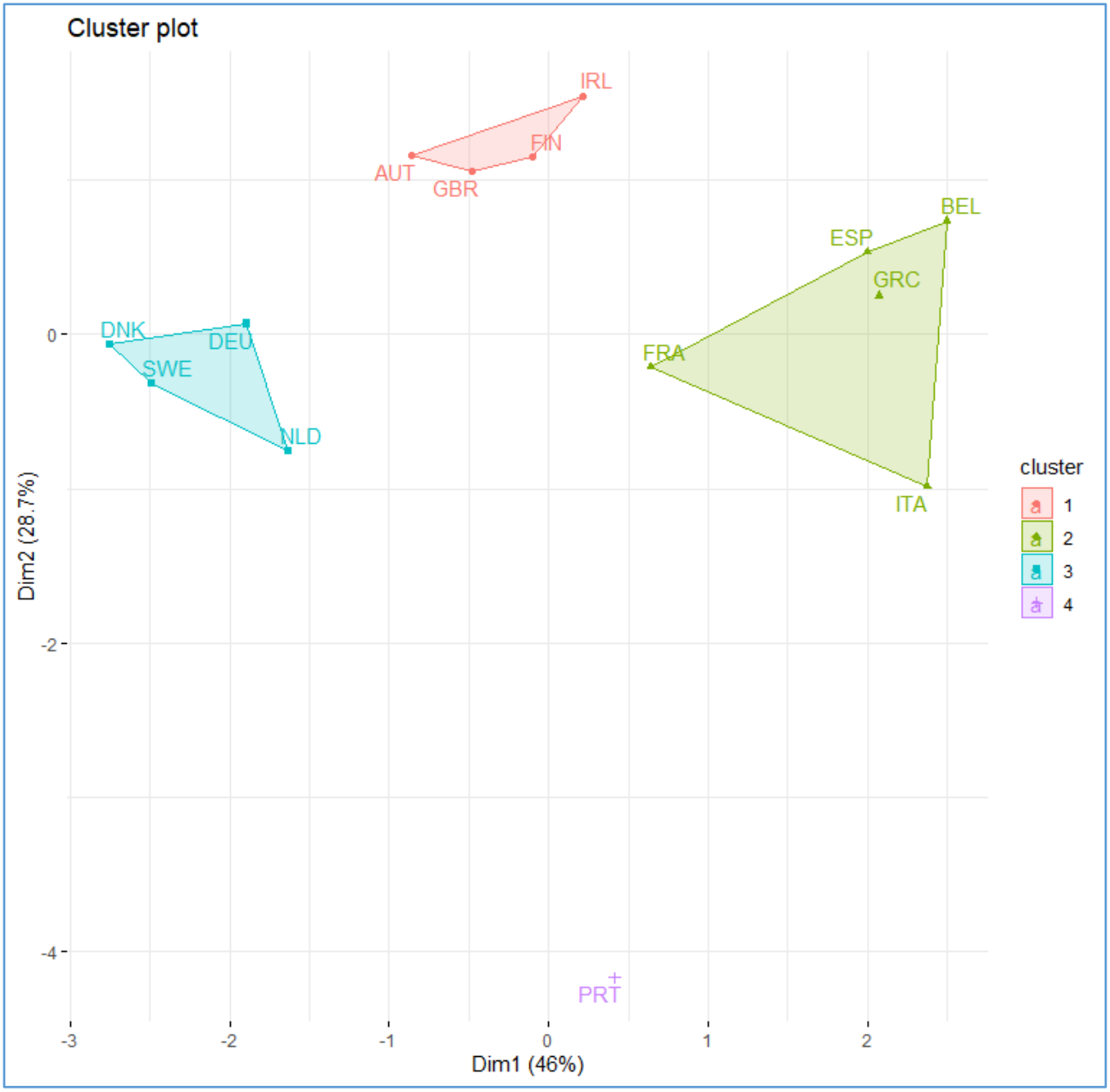
b)


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)

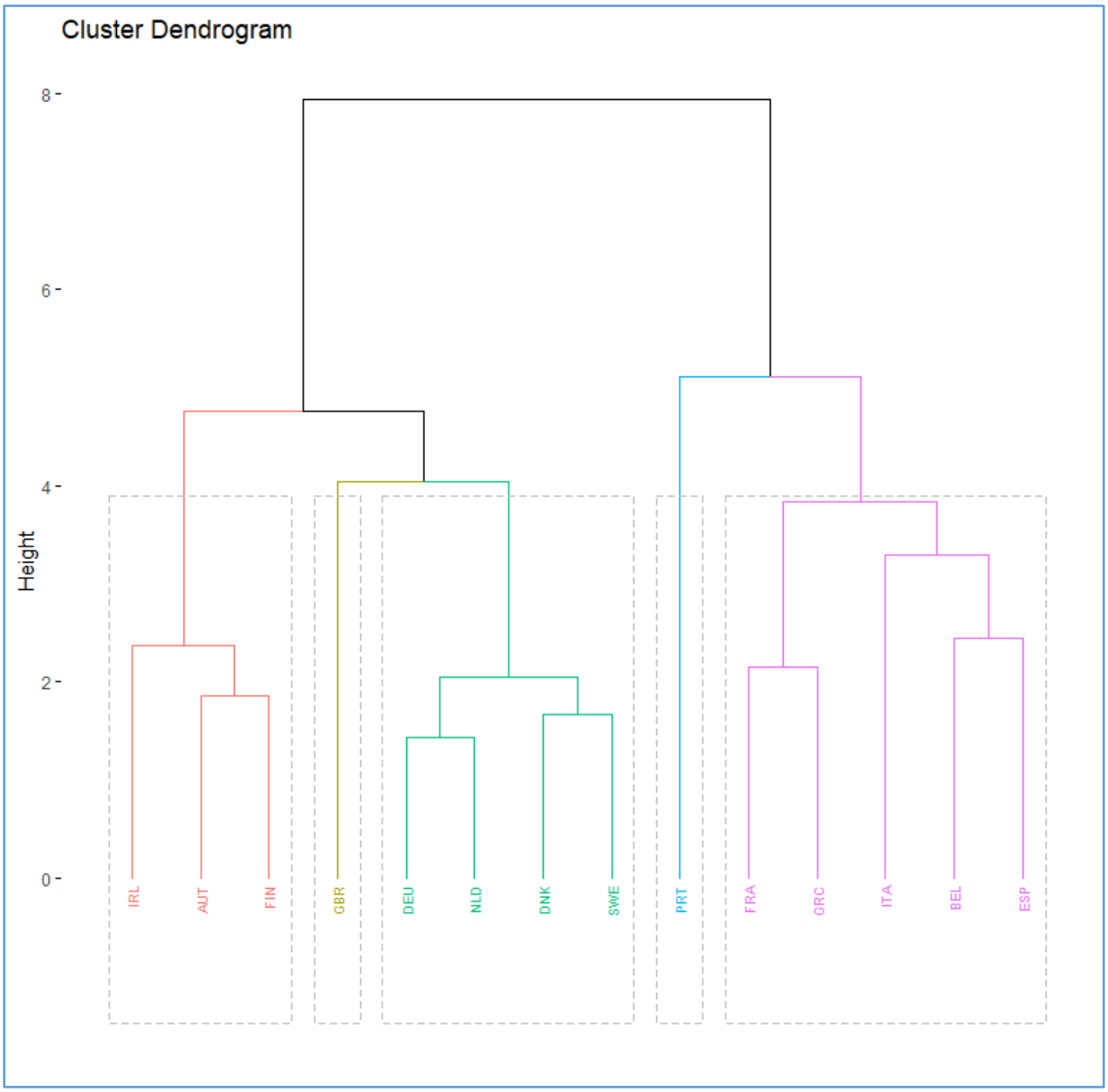

Cluster plot
PRT
ITA
NLD
SWE
FRA
DEU
DNK
GRC
ESP
BEL
GBR
AUT
FIN
IRL
cluster
1
2
3
4
Dim2 (33.5%)
Dim1 (42.2%)
4
2
0
-2
-1
0
1
2

d)



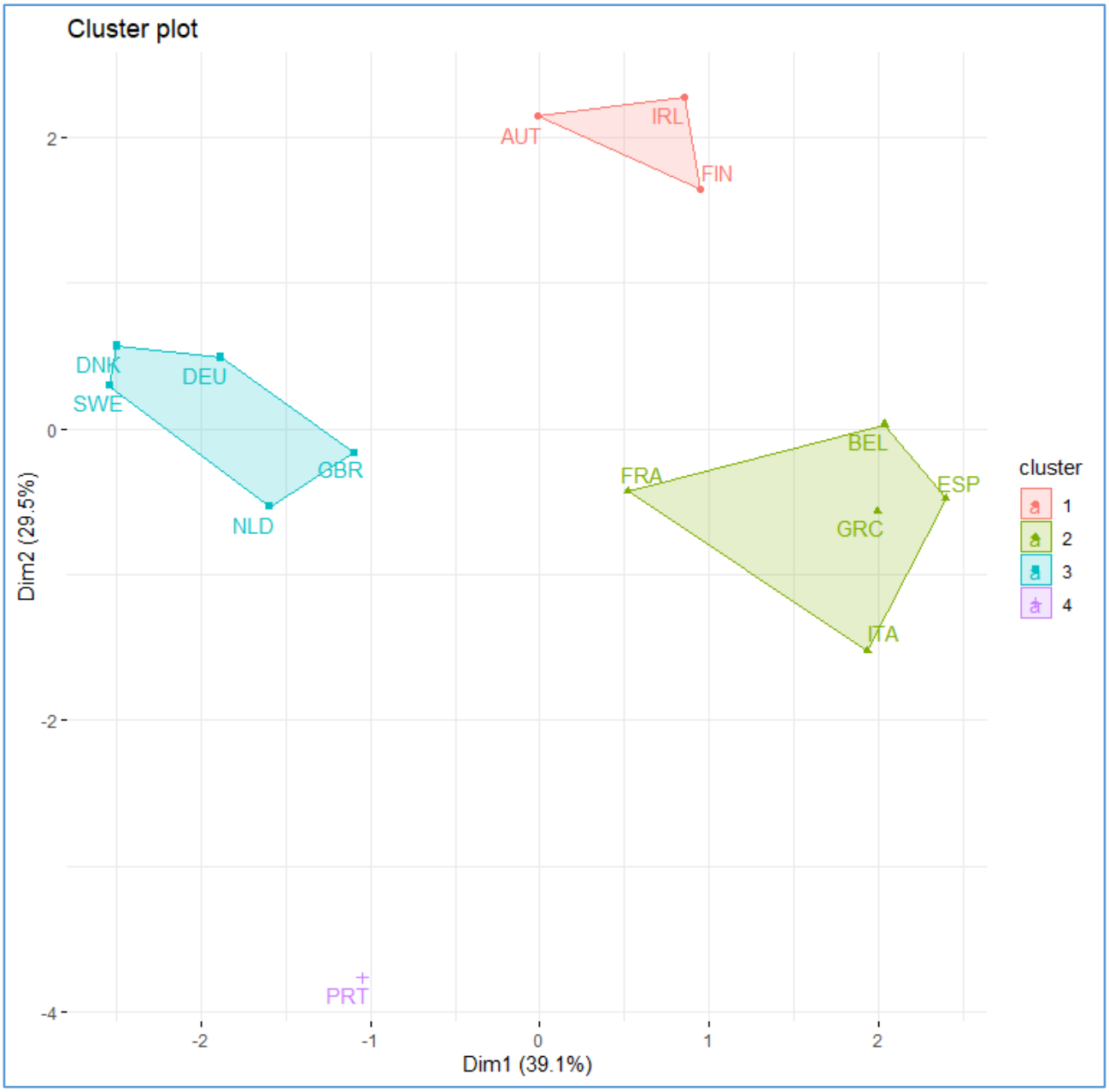
Note: My elaborations on data from OECD (different sources) and the Venn (2012)'s dataset.

Fig C3. Cluster Dendrogram (a) and Cluster plot (b), EU countries, Year = 2014.



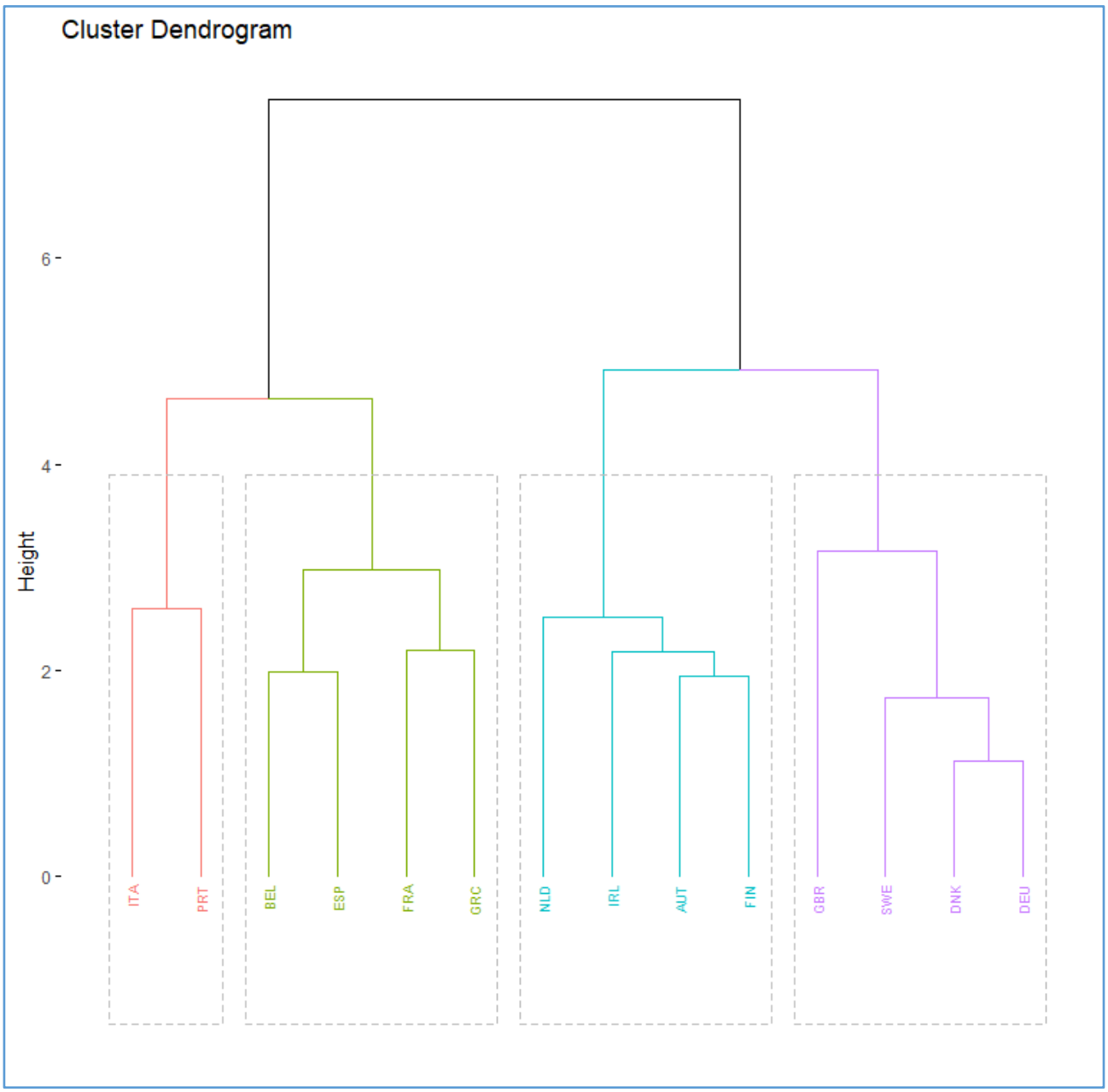
a)

b)



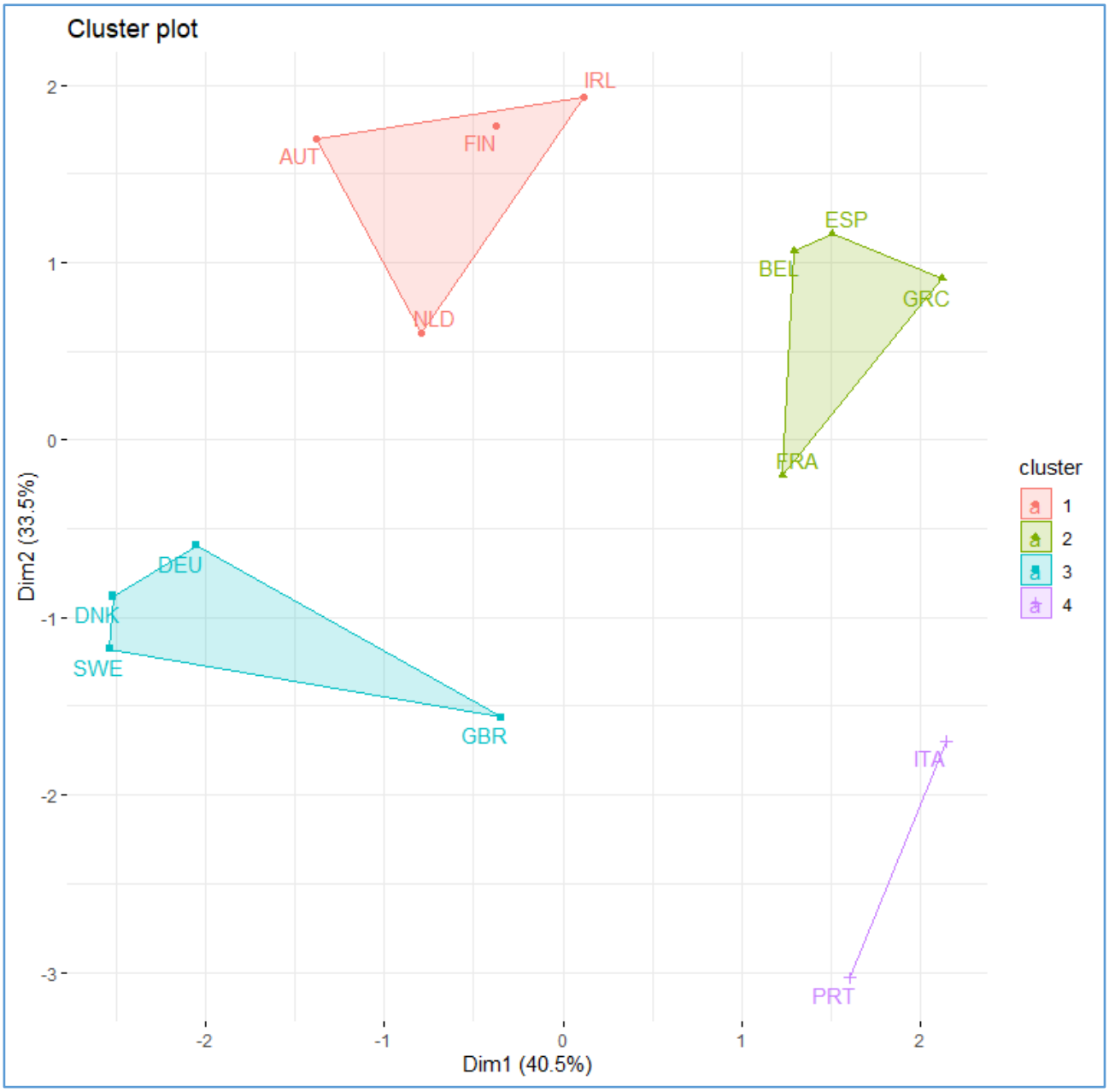
Note: My elaborations on data from OECD (different sources) and the Venn (2012)'s dataset. Variables used: a) Availability requirements, Sanctions, Overall Strictness of Eligibility Requirements, ratio between passive and public expenditure as a percentage of GDP, Employment protection legislation, Net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

Fig C4. Cluster Dendrogram (a) and Cluster plot (b), EU countries, Year = 2017.



a)

b)



Note: My elaborations on data from OECD (different sources) and the Venn (2012)'s dataset. Variables used: Availability requirements, Sanctions, Overall Strictness of Eligibility Requirements, ratio between passive and public expenditure as a percentage of GDP, 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

c) 2017

	Unemployment rate	Employment protection	Net replacement rate
AUT, FIN, IRL,NLD	23,61	-	86,25
BEL, FRA, GRC, ESP	29,58	-	68,75
DNK, DEU, GBR, SWE	20,93	-	86,75
ITA, PRT	29,94	-	76,50

	Availability requirements	Sanctions	Overall Strictness Eligibility	Passive/ Active Expenditures
AUT, FIN, IRL,NLD	0,97	0,84	2,88	1,97
BEL, FRA, GRC, ESP	0,85	1,21	2,98	1,95
DNK, DEU, GBR, SWE	1,19	0,87	3,33	0,87
ITA, PRT	1,12	1,63	3,60	2,53

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

APPENDIX D: The effects of behavioural restrictions and sanctions upon inactivity and unemployment rates

In his analysis, Knox (2020) basically finds a positive effect of stricter eligibility conditions on employment and no effect as far as the strictness of sanction rules is concerned. In this Appendix I extend his analysis in such a way as to consider also the effects on unemployment and inactivity rates,

The first set of regressions are reported in Table D1 and D2. In particular, Table D1 considers the effect of Job Search, Availability Requirements and Sanctions on the unemployment rate. As far as the corresponding variables are concerned, no effect is found. Changes in the unemployment rates are mainly seen as due to the dynamics of the economic cycle (the output gap variable), with a seemingly mechanical effect of the employment protection legislation. Different results are found if one consider the inactivity rate as the dependent variable (see Table D2). In this case, the variable that catches the strictness of sanction rules adversely impact the outcome variable. These results suggest that tightening sanctions may have the effect of driving people from unemployment to inactivity, given the negligible effect of sanctions on employment rates. Interestingly, tightening job search and availability requirements seem to have instead a positive long-run effect in reducing the inactivity rates. According to the estimates reported in Table D2, an increase in the strictness of these conditions by 10 points (on a 0-100 scale) would result in a reduction in the inactivity rate by one percentage point.

Table D1. Dependent variable: Δ Unemployment rate

	(1)	(2)	(3)
const	6,975**	4,912**	4,830**
	(3,001)	(2,218)	(1,899)
Unemployment rate (t-1)	-0,1688**	-0,1722**	-0,1966**
	(0,04666)	(0,04734)	(0,05741)
Overall benefit conditionality (t-1)	-3,806		
	(2,272)		
Δ Overall benefit conditionality	-0,5318		
	(1,957)		
Strictness of benefit sanctions (t-1)		-1,466	
		(1,283)	
Δ Strictness of benefit sanctions		-0,6857	
		(1,059)	
Strictness of jobsearch req (t-1)			-0,5626
			(0,9810)
Δ Strictness of jobsearch req			1,155
			(1,027)
Employment protection RegC (t-1)	-1,311	-1,487*	-1,072
	(0,8665)	(0,7822)	(0,7339)
Employment protection TempC (t-1)	0,1147	0,09317	0,1488
	(0,4655)	(0,4553)	(0,4894)
Net replacement rate (t-1)	-0,01343	0,003388	-0,01257
	(0,01382)	(0,007836)	(0,01370)
Output GAP (t-1)	-0,2553**	-0,2585**	-0,2647**
	(0,03669)	(0,03727)	(0,03875)
Δ Employment protection RegC	-1,243**	-1,484**	-1,243**
	(0,5006)	(0,3651)	(0,5242)
Δ Employment protection TempC	0,06937	0,07820	0,2130
	(0,3855)	(0,3140)	(0,3840)
Δ Net replacement rate	0,007662	0,006779	0,007088
	(0,004783)	(0,004708)	(0,005278)
Δ Output GAP	-0,3564**	-0,3596**	-0,3581**
	(0,04966)	(0,04733)	(0,05131)
Country Fixed Effects	YES	YES	YES
n	213	218	213
R^2	0,6370	0,6451	0,6326
F(11, 19)	13,70	45,68	23,27

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

Table D2. Dependent variable: Δ Inactivity rate

	(1)	(2)	(3)
const	0,8289	0,1703	2,242
	(2,270)	(1,482)	(2,160)
Inactivity rate (t-1)	-0,1314**	-0,1408**	-0,1371**
	(0,02658)	(0,03982)	(0,02828)
Overall benefit conditionality (t-1)	0,04383		
	(1,585)		
Δ Overall benefit conditionality	2,880		
	(2,226)		
Strictness of benefit sanctions (t-1)		1,268	
		(0,8267)	
Δ Strictness of benefit sanctions		2,471**	
		(0,9244)	
Strictness of jobsearch req (t-1)			-1,394*
			(0,7217)
Δ Strictness of jobsearch req			0,4242
			(1,750)
Employment protection RegC (t-1)	0,8241	0,9617*	0,6536
	(0,4989)	(0,4944)	(0,4865)
Employment protection TempC (t-1)	0,1172	0,2387	0,1680
	(0,4092)	(0,3657)	(0,3103)
Net replacement rate (t-1)	0,005639	0,002292	0,003047
	(0,008973)	(0,004302)	(0,009463)
Output GAP (t-1)	-0,09446**	-0,07935**	-0,09795**
	(0,02585)	(0,02230)	(0,02566)
Δ Employment protection RegC	0,3940	0,3958*	0,5501
	(0,3315)	(0,1931)	(0,3770)
Δ Employment protection TempC	0,1993	0,1713	0,09819
	(0,3105)	(0,2782)	(0,2503)
Δ Net replacement rate	0,002745	0,0008705	0,001986
	(0,006348)	(0,003498)	(0,006027)
Δ Output GAP	-0,1113**	-0,1012**	-0,1101**
	(0,03286)	(0,03266)	(0,03242)
n	203	208	203
R^2	0,4445	0,4237	0,4436
F(11, 19)	33,77	45,68	23,27

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