

A Rising Workfare State? Unemployment Benefit Conditionality in 21 OECD Countries, 1980–2012

Supplementary Materials

1 Measurement and coding schemes

The average degree of wage protection

Countries often specify that claimants have to accept successively lower wages the longer they are unemployed and receive benefits. For example, claimants may be allowed to restrict their availability to jobs that pay at least 90 percent of the previous wage for the first 4 months, then to jobs that pay at least 70 percent of the previous wage for the following 4 months, and then to jobs that pay at least the current benefit for the remaining period. In such cases, the scores are calculated using the following equation:

$$W = \sum_{i=1}^I \frac{P_i \times R_i}{D}$$

where W is the overall degree of wage protection, P_i is the length of any defined period i (e.g. 4 months), R_i is the minimum ratio of offered wage to the previous wage or the current benefit during period i , and D is the maximum duration of

benefit payments (as measured by Scruggs et al. 2014). In the case R is defined as the ratio of offered to previous wage, the calculation is straightforward. R may also be defined as the offered wage to the current benefit. Since the current benefit is generally related to the previous wage, the minimum ratio becomes the ratio of the offered wage to the current benefit times the average replacement rate. I use the average of the net replacement rates for couples with children and for singles as included in the CWED 2 dataset (Scruggs et al. 2014).

The design of the coding scheme

The information contained in the legal provisions on benefit conditions and sanctions is typically of a truncated-continuous nature. Occupational mobility requirements, for instance, are can be expressed as a defined ‘protected period’ of a certain number of weeks during which jobs in other areas can be refused, rendering the underlying information continuous (“X weeks”). They can, however, also be expressed in nominal form, either as “no protection/jobs in other occupations are suitable from the start” or “full protection/jobs in other occupations can be refused indefinitely”. In other cases, the information can be considered ordinal. Individual action plans are an example, here as they can be a) absent, b) compulsory for some claimants, or c) compulsory for all claimants. The challenge is to get all this information on one common scale level in order to make it comparable.

The Ministry of Finance Denmark (1998) has been first to develop a coding scheme that solves this issue. This coding scheme transforms all the underlying information on eligibility rules into ordinal form by rating the strictness of important parameters on a common scale from 1 (lenient) to 5 (strict). Subsequent studies by the Danish Ministry of Finance (Hasselpflug 2005) and then by the OECD (Langenbucher 2015; Venn 2012) have retained this approach, smaller modifications to the coding scheme notwithstanding.

The same is done here. The basic logic of ranking the strictness of key provisions on ordinal scales is retained, yet some modifications are made. These are the following. First, the lowest category was changed from 1 to 0. This is only a minor modification as the numerical codes in an ordinal variable, technically speaking, convey no substantive information. Nonetheless, using 0 as the lowest category

better illustrates the fact that there is in theory a point at which eligibility to unemployment benefits would be essentially unconditional (cf. Goertz 2006, 30–35). Second, and more importantly, the number of categories was increased from 5 used by the OECD and the Danish Ministry of Finance to 7 (0–6). The reason for this was that the data used here, due to their both cross-sectional and time-series nature, exhibit greater variation, more of which is picked up by a finer-grained coding scheme. Third, since the number of categories was increased, the cut-off points between the categories needed to be revised as well. New cut-off points were chosen based on a visual inspection of the underlying data, taking particular care to avoid a “bulking” of the data at the extremes, which may suggest that the coding scheme would leave out a part of the true range of the data (Goertz 2008).

The coding scheme considers the following types of conditions:

- the degree to which claimants can limit their availability to their own occupation (occupational protection),
- the degree to which claimants’ earnings are protected (wage protection; see also above),
- the number of other valid reasons for refusing job offers,
- job-search requirements, including whether claimants have to sign jobseeker agreements or individual action plans,

as well as the following types of sanctions:

- sanctions for self-induced/voluntary unemployment,
- sanctions for the first refusal of an offer of employment,

- sanctions for repeated refusals of employment, and
- sanctions for failures to comply with job-search requirements.

. Differences between the parameters considered here and those considered in earlier studies reflect differences in data availability. Geographical mobility requirements, which are included in the OECD and Ministry of Finance indicators, in particular, turned out to be often not or only very vaguely defined (see also Grubb 2000, 160–161), preventing the inclusion of this parameter. Other aspects such as individual action plans or specific sanctions for failing to comply with job-search requirements, however, turned out to form important parts of eligibility rules and also exhibit considerable variation over time (as also shown in the main text). The exact coding instructions are shown in more detail below (see tables A-I and A-II).

1.1 Computing aggregate indicators

I construct the indicators as follows. As described above, the strictness of each parameter is ranked on a common scale ranging from 0 to 6. The overall indicator is then computed as follows: the scores assigned to each of the four types of conditions listed above (denoted c) are summed up to yield an overall score of the strictness of conditions:

$$C = \sum c \tag{1}$$

The same applies to the scores assigned to each of the types of sanctions (s):

$$S = \sum s \tag{2}$$

Summing the scores reflects that countries can combine various types of conditions in different ways Goertz (2006, Chapter 2). Some may choose to put strict requirements on occupational mobility while others allow for few other limitations on availability. Each aspect contributes by itself to the overall strictness of conditions, a relationship that is best reflected by summation. The logic is similar to a linear specification of a regression model, where each parameter makes its own independent contribution to the overall outcome.

Both these scores are then multiplied. Multiplication is chosen here since it reflects the conditional relationship between the strictness of conditions and sanctions (again Goertz 2006, Chapter 2). Intuitively, strict conditions are of little consequence where sanctions are very lenient and therefore failures to comply have few consequences. Similarly, strict sanctions matter less where conditions are lenient and there are few reasons claimants could get sanctioned for. In both cases, the overall conditionality of benefits is low, even though one set of rules is strict. Only where both conditions and sanctions are strict is the conditionality of benefits high. The logic here is similar to an interaction effect in a regression model, where the effect of one parameter is made to depend on the level of another parameter.

Since the resulting function, the product of two integers, is exponential, an increase in the strictness of conditions or sanctions in a given country has a larger effect the higher the country scored to begin with, which in turn magnifies the differences between stricter and more lenient countries. To correct for this, I take the square root. The result is then divided by the theoretical maximum to obtain an overall score of the conditionality of unemployment benefits of between 0 and 1 (note that this is not the same as averaging, where one divides by the number of

observations):

$$\kappa = \frac{\sqrt{C \times S}}{\sqrt{C_{max} \times S_{max}}} \quad (3)$$

Finally, I also construct similar scores for the strictness of conditions and sanctions separately:

$$C^* = \frac{\sum c}{C_{max}} \quad (4)$$

and

$$S^* = \frac{\sum s}{S_{max}} \quad (5)$$

Table A-I: Coding scheme – conditions-indicator (C)

Item	Coding
(1) Occupational protection	0: The unemployed can refuse jobs in other areas indefinitely 1: The unemployed can refuse jobs for a ‘reasonable’ period 2: The unemployed can restrict their availability for more than 36 weeks. 3: The unemployed can restrict their availability for between more than 20 and 36 weeks. 4: The unemployed can restrict their availability for between more than 10 and 20 weeks. 5: The unemployed can restrict their availability for up to 10 weeks. 6: The unemployed must accept all jobs they are capable of doing from the beginning of the unemployment spell on
(2) Wage protection	0: More than 80% of the claimants previous earnings are effectively protected. 1: The wage must correspond to the ‘usually’ paid wage <i>and</i> claimants can never be required to change their occupation. 2: More than 50% but less than 80% of the claimants previous earnings are effectively protected 3: Less than 50% (but more than 0%) of the claimants previous earnings are effectively protected 4: The wage needs to be consistent with both applicable collective agreements/the minimum wage and the ‘usually’ paid wage. 5: The wage needs to be consistent with either applicable collective agreements/the minimum wage, or the ‘usual’ wage 6: No earnings protection.
(3) Number of other valid reasons	0: > 10 1: > 8; ≤ 10 2: > 6; ≤ 8 3: > 4; ≤ 6 4: > 2; ≤ 4 5: > 0; ≤ 2 6: 0
(4) Checks of job-search activities	0: No checks of job-search activity 1: Activity checked less often than every 6 months, including checks in undefined intervals 2: Activity checked between every three and every six months 3: Activity checked between every three months and every month 4: Activity checked between every month or more frequently 5–6: +1 point if Jobseeker Agreement (JSA) voluntary or for selected groups, +2 points if JSA compulsory for all claimants

Note: based on Venn (2012, 11); see also Hasselpflug (2005) and Ministry of Finance Denmark (1998).

Table A-II: Coding scheme – sanctions indicator (S)

Item	Coding
(6) Voluntary unemployment	0: No sanction 1: less than 5 weeks 2: ≥ 5 ; < 9 weeks 3: ≥ 9 ; < 12 weeks 4: ≥ 12 ; < 26 weeks 5: ≥ 26 weeks 6: Loss of eligibility
(7) First refusal	0: No sanction 1: Undefined period: no payment until re-compliance 2: > 0 ; ≤ 4 weeks 3: > 4 ; ≤ 9 weeks 4: > 8 ; ≤ 13 weeks 5: > 13 weeks 6: Loss of eligibility
(8) Repeated refusals	0: Milder sanctions for subsequent refusals 1: No specific rules defined or same penalty as for first refusal 2: > 0 ; ≤ 2 additional weeks or disqualification until re-compliance 3: > 2 ; < 10 additional weeks 4: ≥ 10 ; < 18 additional weeks 5: ≥ 18 ; ≤ 169 additional weeks 6: Loss of eligibility
(8) Failure to report/conduct job-search	0: Not defined or no sanction 1: disqualification until re-compliance 2: > 0 ; < 42 weeks 3: ≥ 4 ; ≤ 6 weeks 4: > 6 ; ≤ 8 weeks 4: > 8 weeks 5: > 8 weeks 6: Loss of eligibility

Note: based on Venn (2012, 11); see also Hasselpflug (2005) and Ministry of Finance Denmark (1998).

References

- Goertz, G. (2006). *Social Science Concepts: A User's Guide*. Princeton: Princeton University Press.
- Goertz, G. (2008). Concepts, Theories, and Numbers: A Checklist for Constructing, Evaluating, and Using Concepts or Quantitative Measures. In J. M. Box-Steffensmeier, H. E. Brady, & D. Collier (Eds.), *The Oxford Handbook of Political Methodology*, (pp. 97–118). Oxford: Oxford University Press.
- Grubb, D. (2000). Eligibility Criteria for Unemployment Benefits. *OECD Economic Studies*, 31 (II), 147–84.
- Hasselpflug, S. (2005). Availability criteria in 25 countries. *Ministry of Finance Denmark Working Paper*, 12/2005.
- 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*, 166.
- Ministry of Finance Denmark (1998). Availability Criteria in selected OECD countries. *Ministry of Finance Denmark Working Paper*, 06/1998.
- Scruggs, L., Jahn, D., & Kuitto, K. (2014). *Comparative Welfare Entitlements Dataset 2. Version 2014-03*. Storrs & Greifswald: University of Connecticut & University of Greifswald.
- Venn, D. (2012). Eligibility Criteria for Unemployment Benefits: Quantitative Indicators for OECD and EU countries. *OECD Social, Employment and Migration Working Papers*, 131.