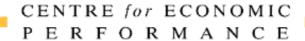
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# CEP Discussion Paper No 759 November 2006

# The CEP-OECD Institutions Data Set (1960-2004)

William Nickell







#### **Abstract**

This dataset contains information about the evolution of labour market institutions in twenty OECD countries from 1960 to 2004.

The countries in the sample are:

| Australia | Finland | Japan       | Spain          |
|-----------|---------|-------------|----------------|
| Austria   | France  | Netherlands | Sweden         |
| Belgium   | Germany | Norway      | Switzerland    |
| Canada    | Ireland | New Zealand | United Kingdom |
| Denmark   | Italy   | Portugal    | United States  |

Where possible the data refers to West Germany throughout. Note that the temporal coverage of these data differs from series to series and country to country. The accompanying data files can be found at the following link: <a href="http://cep.lse.ac.uk/pubs/download/data0730.zip">http://cep.lse.ac.uk/pubs/download/data0730.zip</a>

#### Acknowledgements

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1 The Data: Definitions and Sources

**Employment Protection** 

ep: Blanchard and Wolfers (2000) provide an employment protection time varying

variable from 1960 to 1995, each observation taken every 5 years. This series was

built chaining OECD data with data from Lazear (1990). Notice that the OECD data,

used from 1985 onwards, is constructed on the basis of a more extensive collection of

employment protection dimensions, compared with data used by Lazear. This dataset

includes an interpolation of the Blanchard and Wolfers series, readjusted in mean.

Range is  $\{0,2\}$  increasing with strictness of employment protection.

epl: Employment protection legislation data from the OECD labour market statistics

database using version 1 of the indicator: the strictness of employment protection

legislation. This series is extended back as a constant equal to the earliest available

observation as long as the above ep index is constant (blue) then extended such that

the percentage change in ep and epl is the same (green).

epl Allard: Employment protection legislation series taken from Allard (2005a). This

series uses the OECD methodology generating an index increasing on the range  $\{0,5\}$ .

**Union Density and Coverage** 

udnet (%): Union density is Union membership/Employment and was calculated

using administrative and survey data from the OECD labour market statistics

database. Survey data appears in red.

udnet vis (%): This series takes udnet and extends it by splicing in data from Visser

(2006).

uc\_Ochel (%): Union coverage refers to the number of workers covered by collective agreements normalised on employment. In this case the data were collected by Wolfgang Ochel. Further details may be found in Ochel (2001).

uc\_oecd (%): Union coverage data taken from OECD (2004), Table 3.3. Where + appears next to a figure, 3 was added.

uc (%): This series was constructed as an interpolation of both the uc\_Ochel and theuc\_oecd data and represents the longest series available.

# **Bargaining Coordination and Centralization**

**co:** This is an index with range {1,3} constructed as an interpolation of OECD data on bargaining coordination. It is increasing in the degree of coordination in the bargaining process on the employers' as well as the unions' side. The resulting series were matched with the data provided by Belot and Van Ours (2000).

**co\_oecd:** This is an index of bargaining coordination with range {1,5} taken from OECD (2004), Table 3.5. It is increasing in the degree of coordination in the bargaining process on the employers' as well as the unions' side.

- 1 = Fragmented company/plant bargaining, little or no coordination by upper-level associates.
- 2 = Fragmented industry and company level bargaining, with little or no patternsetting.
- 3 = Industry level bargaining with irregular pattern-setting and moderate coordination among major bargaining actors.
- 4 = a) Informal coordination of industry and firm-level bargaining by peak associations;
- b) Coordinated bargaining by peak confederations, including governmentsponsored negotiations or government imposition of wage schedules;

- c) Regular pattern-setting coupled with high union concentration and/or bargaining coordination by large firms;
  - d) Government wage arbitration.
- 5 = a) Informal coordination of industry-level bargaining by an encompassing union confederation;
- b) Coordinated bargaining by peak confederations or government imposition of a wage schedule/freeze, with a peace obligation.

**co\_oecd (int):** As above but interpolated taking the figure given in the table as the middle number of the five year period.

**cow:** This is an index of bargaining coordination with a range {1,3}taken from Ochel (2000).

1 = Uncoordinated

1.5, 2, 2.5

3 =Strong coordination

Based on data reported in OECD (1994), (1997), Traxler and Kittel (1999), Wallerstein (1999), Windmuller *et al* (1987) and Bamber and Lansbury (1998).

**cow (int):** As above but interpolated.

**ce\_oecd:** This is an index of bargaining centralization with range {1,5} taken from OECD (2004), Table 3.5. It is increasing in the degree of centralization.

- 1 = Company and plant level predominant.
- 2 = Combination of industry and company/plant level, with an important share of employees covered by company bargains.
- 3 = Industry level predominant.
- 4 = Predominantly industrial bargaining, but also recurrent central-level agreements.
- 5 = Central-level agreements of overriding importance.

**ce oecd (int):** As above but interpolated.

cew: This is an index of bargaining centralization with a range {1,3} taken from Ochel

(2000).

1 = Company/plant level

2 = Sectoral level

3 = Central level

**cew (int):** As above but interpolated.

**Replacement Rates** 

brr1 (%): Gross benefit replacement rates data are provided by OECD with one

observation every two years for each country. In this case the data refer to the first

year of unemployment benefits, averaged over three family situations and two

earnings levels. The benefits are a percentage of average earnings before tax.

brr23 (%): Gross benefit replacement rates data are provided by OECD with one

observation every two years for each country. In this case the data refer to the second

and third years of unemployment benefits, averaged over three family situations and

two earnings levels. The benefits are a percentage of average earnings before tax.

brr45 (%): Gross benefit replacement rates data are provided by OECD with one

observation every two years for each country. In this case the data refer to the fourth

and fifth years of unemployment benefits, averaged over three family situations and

two earnings levels. The benefits are a percentage of average earnings before tax.

**bd:** Benefit duration index. This index is constructed as bd = 0.6\*brr23/brr1 +

0.4\*brr45/brr1. This captures the level of benefits available in the later years of a spell

relative to those available in the first year.

brrl (%): This index is constructed as brrl = bd\*brrl and captures the benefit

replacement rate in later years.

brr oecd (%): These are the original benefit replacement rates data published by the

OECD. It is defined as the average across the first five years of unemployment for

three family situations and levels taken from two money

www.oecd.org/els/social/workincentives and interpolated.

**nrw** (%): Alternative series describing unemployment benefits by Gayle Allard. The

author develops a new indicator for unemployment benefits which combines the

amount of the subsidy with their tax treatment, their duration and the conditions that

must be met in order to collect them. See Allard (2005b) for further details.

**Wages and Earnings Dispersion** 

minw med (%): This is the minimum wage as a percentage of the median wage,

taken from OECD labour market statistics database.

ed90/50: This is the ratio of the 90<sup>th</sup> percentile of earnings to the median. Data taken

from OECD labour market statistics database.

ed50/10: This is the ratio of the median of earnings to the 10<sup>th</sup> percentile. Data taken

from OECD labour market statistics database.

**Education** 

educ: This is the educational attainment of the total population aged 15 and over

expressed as average years of schooling. It is taken from a dataset collected by R.

Barro and J. W. Lee, which covers successive five year periods (see Barro and Lee,

2000).

**educ (int):** As above but interpolated.

### **Working Hours**

**hpy:** Average actual annual hours worked per person in employment taken from OECD labour market statistics database. The data refer to full year equivalent workers.

#### Vacancies and Inflows

vac: The vacancy rate is the ratio of Vacancies to Total Employment. Data taken from Nickell and Nunziata (2001) and extended with data from OECD Main Economic Indicators (2006), (2003).

**inf:** The inflow rate is the ratio of Inflow into Unemployment to Total Employment. Data taken from Nickell and Nunziata (2001).

# **Housing and Related**

**ho (%):** Housing owner occupation rate based on data provided by Andrew Oswald. For further information, see Oswald (1996).

**ho\_oecd** (%): Housing owner occupation rate based on data for 1980 and 2002/3 (2001 for Norway, New Zealand and Portugal) provided by OECD in Employment Outlook 2005.

**ho\_comb** (%): This series was created by extending the **ho** dataset using the 2002/3 data point from **ho\_oecd** and interpolating.

**urban** (%): This is given as the percentage of the population living in urban areas and is taken from the World Development Indicators (WDI) published by the World Bank.

# **Employment, Unemployment and Inactivity**

**strunem (%):** The structural rate of unemployment is the OECD's estimate of the non-accelerating inflation rate of unemployment (NAIRU), which is estimated using a Kalman-filtering approach that embodies a reduced-form Phillips curve.

Data for 1991 and 2001 are from OECD (2003), Table 1.3.

Data for 1980, '85, '90, '95 and '99 are from Turner *et al* (2001/2)

**UR (%):** Unemployment rate from Nickell and Nunziata (2001). These are based on OECD standardised rates and are an extension of those used in Layard *et al* (1991).

**UNEM (%):** Total unemployment rate (Unemployment/Labour Force) calculated using data taken from OECD labour market statistics database.

Data for West Germany appears in red for all unemployment rate series (Data for West Germany go up to 1998, Germany thereafter). Data for Spain include some changes in definition in the late 1990s which generated significant reductions in the unemployment numbers.

**EM** (%): Total employment rate (Employment/Population) calculated using data taken from OECD labour market statistics database.

Data for West Germany appears in red for all employment rate series (Data for West Germany go up to 1998, Germany thereafter).

**INACT (%):** The inactivity rate = (1 - participation rate) which is equal to (1 - (labour force/population)). It is calculated using data taken from OECD labour market statistics.

Data for West Germany appears in red for all inactivity rate series (Data for West Germany go up to 1998, Germany thereafter).

**UNEM m (%):** Unemployment rate for men of all ages.

EM m (%): Employment rate for men of all ages.

**INACT\_m** (%): Inactivity rate for men of all ages.

**UNEM** w (%): Unemployment rate for women of all ages.

**EM\_w** (%): Employment rate for women of all ages.

**INACT** w (%): Inactivity rate for women of all ages.

**UNEM 1524 (%):** Unemployment rate for 15 to 24 year olds.

EM\_1524 (%): Employment rate for 15 to 24 year olds.

INACT\_1524 (%): Inactivity rate for 15 to 24 year olds.

UNEM 1524m (%): Unemployment rate for men aged 15 to 24.

EM 1524m (%): Employment rate for men aged 15 to 24.

**INACT 1524m (%):** Inactivity rate for men aged 15 to 24.

**UNEM 1524w (%):** Unemployment rate for women aged 15 to 24.

EM 1524w (%): Employment rate for women aged 15 to 24.

INACT\_1524w (%): Inactivity rate for women aged 15 to 24.

UNEM 2554 (%): Unemployment rate for 25 to 54 year olds.

EM 2554 (%): Employment rate for 25 to 54 year olds.

**INACT 2554 (%):** Inactivity rate for 25 to 54 year olds.

UNEM 2554m (%): Unemployment rate for men aged 25 to 54.

EM\_2554m (%): Employment rate for men aged 25 to 54.

INACT 2554m (%): Inactivity rate for men aged 25 to 54.

UNEM 2554w (%): Unemployment rate for women aged 25 to 54.

EM 2554w (%): Employment rate for women aged 25 to 54.

**INACT 2554w (%):** Inactivity rate for women aged 25 to 54.

UNEM\_5564 (%): Unemployment rate for 55 to 64 year olds.

EM\_5564 (%): Employment rate for 55 to 64 year olds.

INACT\_5564 (%): Inactivity rate for 55 to 64 year olds.

UNEM 5564m (%): Unemployment rate for men aged 55 to 64.

EM 5564m (%): Employment rate for men aged 55 to 64.

**INACT** 5564m (%): Inactivity rate for men aged 55 to 64.

UNEM 5564w (%): Unemployment rate for women aged 55 to 64.

EM 5564w (%): Employment rate for women aged 55 to 64.

**INACT** 5564w (%): Inactivity rate for women aged 55 to 64.

**Active Labour Market Policies** 

almp (%): Expenditure on Active Labour Market Policies as a percentage of GDP.

Data for 1980, 1989, 1993 and 1998 taken from OECD (2001), Table 1.5 and

interpolated.

almp/unem: Expenditure on Active Labour Market Policies divided by the

Unemployment Rate. This can be rewritten as Expenditure on Active Labour Market

Policies per unemployed individual normalised on GDP per member of the labour

force.

Regulation

**regref:** The OECD indicators of regulatory reform summarise regulatory provisions

in seven non-manufacturing sectors: telecoms, electricity, gas, post, rail, air passenger

transport, and road freight. The regref indicators have been estimated over the period

1975 to 2003. The range of regulatory provisions covered by the regref indicators is

not as broad as that of the indicators of product market regulation (pmr). However,

the regref indicators cover sectors in which anti-competitive regulation tends to be

concentrated, given that manufacturing sectors are typically lightly regulated and open

to international competition in OECD countries. The range is {0,6} increasing in

regulation.

pmr: Overall Product Market Regulation indicator from Conway et al (2005), Table

24. The indicator summarises information on 139 economy-wide or industry specific

regulatory provisions and has a range  $\{0,4\}$ . This and the next two data series are only

available for 1998 and 2003 and are interpolated.

AdminR: Administrative Regulation indicator from Conway et al (2005), Table 24.

**EconR:** Economic Regulation indicator from Conway *et al* (2005), Table 24.

**Taxes** 

T1: Employment Tax Rate (%)

The employment tax rate is

ESS/(IE-ESS)

With ESS equal to employers' social security contributions and IE equal to total compensation for employees. ESS is available from the OECD National Accounts detailed tables and IE from OECD Revenue Statistics.

T2: Direct Tax Rate (%)

The direct tax rate is

DT/HCR

With DT equal to income tax plus employees' social security contributions and HCR equal to household current receipts. Figures for income tax and employees' social security contributions were taken from OECD Revenue Statistics. HCR was taken from OECD National Accounts directly for pre-1990 and was calculated as the sum of compensation of employees, property income, social contributions and benefits and other current transfers for post-1990.

T3: Indirect Tax Rate (%)

The indirect tax rate is

(TX-SB)/CC

With TX equal to indirect taxes, SB equal to subsidies and CC household final expenditures. All three were taken from OECD National Accounts.

**TW** (%): The Tax Wedge is equal to the sum of the employment tax rate, the direct tax rate and the indirect tax rate.

The above four series contain some interpolation where the relevant data are unavailable.

**TW\_Nicol** (%): Average effective tax wedge. Ex-post wedge computed from national accounts taken from Nicoletti institutions data.

### **Marginal Tax Rates (%)**

Marginal tax rates have been computed by G. Faggio and K. Bentil between 1979-1995 using Excel macros provided by the OECD and were taken from OECD Taxing Wage Statistics for 1996 onwards. These are based on the tax rules for each country. Below are a variety of marginal rates which are computed by looking at the tax paid on an annual income of X and X+1 on the basis described.

**sing1a:** This is based on the total tax payment less cash transfers of the principal earner, a single person with no children earning 67% of the average wage.

**sing1b:** This is based on the total tax payment of the principal earner, a single person with no children earning 67% of the average wage.

**sing2a:** This is based on the total tax payment less cash transfers of the principal earner, a single person with no children earning the average wage.

**sing2b:** This is based on the total tax payment of the principal earner, a single person with no children earning the average wage.

**sing3a:** This is based on the total tax payment less cash transfers of the principal earner, a single person with no children earning 167% of the average wage.

**sing3b:** This is based on the total tax payment of the principal earner, a single person with no children earning 167% of the average wage.

**sing4a:** This is based on the total tax payment less cash transfers of the principal earner, a single person with two children earning 67% of the average wage.

**sing4b:** This is based on the total tax payment of the principal earner, a single person with two children earning 67% of the average wage.

**mp1a:** This is based on the total tax payment less cash transfers of the principal earner who is married with two children earning the average wage with a spouse earning 0% of the average wage.

**mp1b:** This is based on the total tax payment of the principal earner who is married with two children earning the average wage with a spouse earning 0% of the average wage.

**mp2a:** This is based on the total tax payment less cash transfers of the principal earner who is married with two children earning the average wage with a spouse earning 33% of the average wage.

**mp2b:** This is based on the total tax payment of the principal earner who is married with two children earning the average wage with a spouse earning 33% of the average wage.

**mp3a:** This is based on the total tax payment less cash transfers of the principal earner who is married with two children earning the average wage with a spouse earning 67% of the average wage.

**mp3b:** This is based on the total tax payment of the principal earner who is married with two children earning the average wage with a spouse earning 67% of the average wage.

**mp4a:** This is based on the total tax payment less cash transfers of the principal earner who is married with no children earning the average wage with a spouse earning 33% of the average wage.

**mp4b:** This is based on the total tax payment of the principal earner who is married with no children earning the average wage with a spouse earning 33% of the average wage.

**ms1a:** This is based on the total tax payment less cash transfers of the spouse who is married with two children earning 0% of the average wage with the principal earner earning the average wage.

**ms1b:** This is based on the total tax payment of the spouse who is married with two children earning 0% of the average wage with the principal earner earning the average wage.

ms2a: This is based on the total tax payment less cash transfers of the spouse who is married with two children earning 33% of the average wage with the principal earner earning the average wage.

ms2b: This is based on the total tax payment of the spouse who is married with two children earning 33% of the average wage with the principal earner earning the average wage.

**ms3a:** This is based on the total tax payment less cash transfers of the spouse who is married with two children earning 67% of the average wage with the principal earner earning the average wage.

ms3b: This is based on the total tax payment of the spouse who is married with two children earning 67% of the average wage with the principal earner earning the average wage.

**ms4a:** This is based on the total tax payment less cash transfers of the spouse who is married with no children earning 33% of the average wage with the principal earner earning the average wage.

**ms4b:** This is based on the total tax payment of the spouse who is married with no children earning 33% of the average wage with the principal earner earning the average wage.

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