

Europe and the US: The Welfare State

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Size and Structure of the Welfare State: EU vs. US

Table 1. Composition of General Government Expenditure, 1999^a

Percent of GDP

Country	Total	Consumption		Subsidies	Transfers and other social benefits ^b	Gross investment
		Goods and services	Wages and salaries			
United States	35.1	5.1	9.2	0.3	10.7	3.4
European Union ^c	47.9	8.4	12.0	1.5	18.1	2.8
France	51.0	10.0	13.7	1.3	20.1	3.0
Germany	47.4	10.7	8.3	1.7	20.5	1.8
Sweden	60.2	10.3	16.7	2.0	21.1	2.5
United Kingdom	38.3	11.0	7.4	0.6	15.7	1.0

Source: Authors' calculations based on data from OECD Economic Outlook database, no. 68, 2000 (see appendix B for details).

a. Details may not sum to totals because of excluded categories.

b. Includes social security.

c. Simple average for fourteen EU countries (excludes Luxembourg).

Size and Structure of the Welfare State: EU vs. US

Graph I-1 Tax to GDP ratio in EU countries, the US, Japan, and Norway
1995, and 2005, in % (ranked by 2005 level)



Size and Structure of the Welfare State: EU vs. US

Table 2. Government Expenditure on Social Programs, 1995

Percent of GDP

<i>Country</i>	<i>Total</i>	<i>Old-age, disability, and survivors' benefits</i>	<i>Family benefits</i>	<i>Unemployment and labor market programs</i>	<i>Health benefits^a</i>	<i>Other^b</i>
United States	15.8	7.3	0.6	0.6	6.3	1.0
European Union ^c	25.4	12.4	2.1	3.2	5.9	1.8
France	30.1	14.1	2.6	3.1	8.0	2.3
Germany	28.0	12.5	2.0	3.7	8.1	1.6
Sweden	33.0	14.8	3.9	4.7	5.9	3.8
United Kingdom	22.5	10.6	2.4	1.3	5.7	2.5

Source: Authors' calculations based on data from OECD Social Expenditure database, 1999.

a. Also includes inpatient care, ambulatory medical services, and pharmaceutical goods.

b. Includes expenditure on occupational injury and disease benefits, sickness benefits, housing benefits, and benefits to low-income households.

c. Simple average for the fifteen EU countries.

Government Revenue: EU vs. US

Table 3. Composition of General Government Revenue, 1999

Percent of GDP

Country	Tax revenue							
	Total	Direct taxes			Social security contributions ^a	Property income	Goods and services	Nontax revenue ^b
		Total	Households	Businesses				
United States	31.0	15.1	12.4	2.8	7.1	1.0	7.7	7.2
European Union ^c	45.4	15.3	11.8	3.4	13.6	2.0	14.4	5.7
France	50.4	12.2	9.5	2.7	19.3	2.8	16.0	4.9
Germany	44.5	12.0	10.3	1.5	19.6	0.7	12.2	9.9
Sweden	57.9	22.4	19.0	3.3	14.7	3.8	17.0	8.1
United Kingdom	40.4	16.3	12.5	3.8	8.0	2.1	14.0	4.0

Source: Authors' calculations based on data from OECD Economic Outlook database, no. 68, 2000; and OECD, *Revenue Statistics 1965-1999*, 2000.

a. Includes other current transfers.

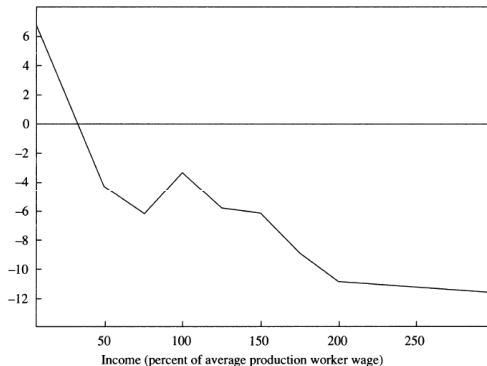
b. Data are for 1997.

c. Simple average for fourteen EU countries (excludes Luxembourg).

Structure of income taxation: EU vs. US

Figure 1. Difference between U.S. and EU Marginal Income Tax Rates, 1999–2000*

Percentage points



Source: Authors' calculations based on data from OECD, *Taxing Wages, 1999–2000*, 2001.

a. Years are fiscal years. U.S. marginal income tax rate minus a simple average of rates for fourteen EU countries (excludes Denmark) at each income level.

Government expenditure over time: EU vs. US

Table 4. Government Expenditure on Subsidies and Transfers, 1870–1998^a

Percent of GDP

<i>Country</i>	<i>1870</i>	<i>1937</i>	<i>1960</i>	<i>1970</i>	<i>1980</i>	<i>1998</i>
United States	0.3	2.1	5.0	7.5	10.4	11.0
European Union ^b	0.9	6.8	10.7	13.2	17.9	19.0
France	1.1	7.2	14.1	14.9	18.4	21.5
Germany	0.5	7.0	13.7	15.4	20.4	22.1
Sweden	0.7	...	8.1	12.1	21.1	23.8
United Kingdom	...	10.3	9.2	16.4
Memorandum:						
Difference, EU–U.S.	0.6	4.7	5.7	5.6	7.6	7.8

Source: Authors' calculations based on data from Tanzi and Schuknecht (2000) and OECD Economic Outlook database, no. 68, 2000.

a. Or the closest year for which data are available.

b. Simple average of Austria, Belgium, France, Germany, Greece, Ireland, Italy, the Netherlands, Spain, and the United Kingdom.

Why is the welfare state different? Theory

- There exists several theoretical papers on the reason for different welfare systems, Picketty (1995) or Benabou and Ok (2001)
- Alesina et al. (2001) develop a simple theoretical model that is based on these studies.

Theoretical reasons for more redistribution

- Altruism
 - Poor have strong political power
 - Veto rights of non-democratic institutions against redistribution:
Supreme Court
 - Racial heterogeneity reduces altruism
- Median voter against redistribution
 - Cost of taxation is high
 - Future expected income is high
 - Income mobility is high

Empirical evidence: Political explanation

Table 8. Cross-Country Regressions Explaining Transfers with Political Variables*

<i>Independent variable</i>	<i>8-1</i>	<i>8-2</i>	<i>8-3</i>	<i>8-4</i>
Proportionality ^b	2.150** (0.656)	1.809* (0.728)	1.021* (0.421)	
GDP per capita	5.151 (3.571)	5.035 (3.558)	1.823 (1.519)	-0.876 (0.980)
Openness ^c		0.043 (0.040)	0.032 (0.027)	0.009 (0.010)
Percent of population over 65	0.753 (0.478)	0.678 (0.481)	1.096** (0.298)	1.315** (0.217)
Percent of population aged 15–64				0.140 (0.138)
Majoritarian regime dummy ^d				-1.526 (0.994)
Presidential regime dummy				-0.207 (1.227)
Asia dummy				2.047 (2.691)
Caribbean dummy				-0.095 (2.164)
Latin America dummy			-0.791 (3.102)	1.042 (1.776)
<i>Summary statistic</i>				
No. of observations	20	20	38	60
R ²	0.58	0.61	0.84	0.82

Source: Authors' calculations using data from Milesi-Ferretti, Perotti, and Rostagno (forthcoming); Persson and Tabellini (2000); and Perotti (1996).

a. Regressions 8-1 through 8-3 use transfers as a share of GDP as the dependent variable and data for 1991–94 from Milesi-Ferretti, Perotti, and Rostagno (forthcoming). Regression 8-4 uses social spending as a share of GDP as the dependent variable and data for 1960–98 from Persson and Tabellini (2000). All specifications include a constant (not reported). *t* statistics are reported in parentheses. * denotes significance at the 5 percent level, ** at the 1 percent level.

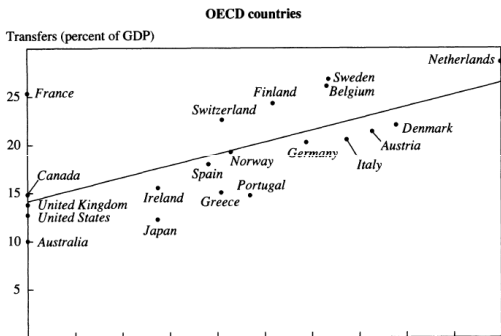
b. Measure of the percentage of a district's vote needed to capture a seat, expressed in natural logarithms. From Perotti (1996).

c. Exports plus imports as a share of GDP.

d. Equals one in a regime where all seats in a district are awarded to the party that wins the district.

Relation between transfers and proportional representation

Figure 3. Relationship between Transfers and the Degree of Proportional Representation



Empirical evidence: Racial heterogeneity

Table 9. Cross-Country Regressions Explaining Transfers with Ethnolinguistic and Racial Fractionalization^a

<i>Independent variable</i>	<i>9-1</i>	<i>9-2</i>
Ethnolinguistic fractionalization ^b	-1.864 (2.863)	
Racial fractionalization ^c		-7.538* (3.378)
GDP per capita	0.402 (1.351)	1.918 (1.289)
Percent of population aged 15–64	0.628** (0.210)	0.327 (0.184)
Majoritarian regime dummy ^d	-1.381 (1.502)	-2.305 (1.302)
Asia dummy	-1.770 (3.273)	-0.092 (4.221)
Caribbean dummy	-4.508 (2.653)	-2.981 (2.548)
Latin America dummy	-2.733 (1.812)	-2.416 (1.847)
<i>Summary statistic</i>		
No. of observations	56	55
R^2	0.69	0.69

Source: Authors' calculations using data for 1960–98 from Persson and Tabellini (2000).

a. The dependent variable for each specification is social spending as a share of GDP. All specifications include a constant (not reported). *t* statistics are reported in parentheses. * denotes significance at the 5 percent level, ** at the 1 percent level.

b. Probability that two randomly selected individuals from a population speak different languages.

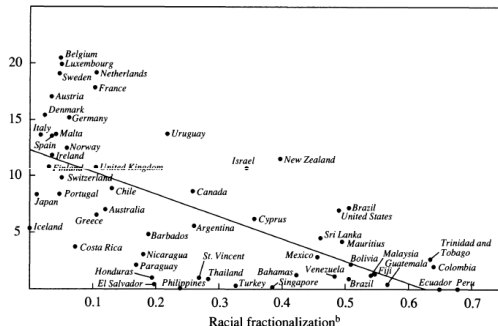
c. Probability that two randomly selected individuals from a population are of different races.

d. Equals one in a regime where all seats in a district are awarded to the party that wins the district.

Relation between transfers and racial fractionalization

Figure 4. Relationship between Social Spending and Racial Fractionalization

Social spending (percent of GDP)^a



Source: Authors' calculations based on data from Persson and Tabellini (2000).

a. Average for 1960-98.

b. Probability that two randomly selected individuals from a population are of different races. Measured over 1990-98.

Empirical evidence for the US: Racial heterogeneity

Table 10. Explaining Support for Welfare in the United States with Racial Variables^a

<i>Independent variable</i>	<i>10-1</i>	<i>10-2</i>	<i>10-3</i>	<i>10-4</i>
Black	0.232** (28.55)			
Income	-0.020** (19.78)	-0.019** (17.19)	-0.022** (5.36)	-0.018** (13.54)
Female	0.007 (1.35)	0.009 (1.67)	0.032 (1.94)	0.010 (1.39)
Married	-0.033** (5.82)	-0.038** (6.19)	-0.016 (0.91)	-0.036** (4.58)
No. of children	0.006** (3.96)	0.006** (3.38)	0.010 (1.77)	0.007** (3.04)
High school education or less	0.042** (5.84)	0.042** (5.56)	-0.010 (0.38)	0.048** (5.08)
Some college education	-0.002 (0.28)	-0.002 (0.28)	-0.005 (0.21)	0.003 (0.26)
College graduate	0.031** (3.62)	0.030** (3.40)	0.029 (1.16)	0.025* (2.22)
Beyond college	0.106** (8.76)	0.107** (8.65)	0.080* (2.47)	0.133** (8.20)
Population of home city, in logarithms	0.010** (7.77)	0.010** (7.21)	0.011** (2.61)	0.010** (5.90)
Ratio of blacks to total state population		-0.044 (1.14)		
Believe that blacks are lazy ^b			-0.030** (4.27)	
Had a black person over for dinner recently				0.043** (5.38)
<i>Summary statistic</i>				
No. of observations	20,848	18,157	1,921	11,048
R ²	0.10	0.04	0.04	0.05

Source: Authors' calculations using data for 1972-98 from the General Social Survey (see appendix B).

a. The dependent variable for each specification is respondents' opinions on the current level of welfare spending in their state; possible responses were "too much" (scored as 1), "about right" (scored as 5), or "too little" (scored as 0). Regressions 10-2 through 10-4 use data from white respondents only. All specifications include a constant (not reported). t statistics are reported in parentheses. * denotes significance at the 5 percent level, ** at the 1 percent level.

b. Measured on a scale from 0 to 7, where 7 indicates strongest belief.

Explanation of Welfare State: Preventing Market Failures (Estevez-Abe et al.)

- If there is a distortion in the market or a market failure:
 - first best is to remove the distortion
 - second best is to add another distortion that reduces the effect of the first
- Social protection aids the market by helping economic actors to overcome market failures in skill formation

Market failures in skill formation

- General skill formation
 - Firms don't want to invest in general skill formation
- Firm specific skill formation
 - Employees don't want to invest in firm specific skill formation
- Social protection
 - Job protection as commitment to encourage workers to invest in firm specific human capital
- Causality Social protection on skill formation?

Interplay of Protection and Skill Acquisition

		Employment protection	
		Low	High
Unemployment protection	High	Industry-specific skills Example: Denmark	Industry-specific, firm-specific skill mix Example: Germany
	Low	General skills Example: United States	Firm-specific skills Example: Japan

FIG. 4.1 Social protection and predicted skill profiles

Source: Estevez-Abe, Iversen, and Soskice (2001)

Employment Protection in OECD

TABLE 4.1 Employment protection in eighteen OECD countries

	(1) Employment protection legislation (EPL) ^a	(2) Collective dismissals protection ^b	(3) Company-based protection ^c	(4) Index of employment protection ^d
Sweden	2.8	4.5	3	0.94
Germany	2.8	3.1	3	0.86
Austria	2.6	3.3	3	0.84
Italy	2.8	4.1	2	0.81
The Netherlands	3.1	2.8	2	0.80
Japan	2.7	1.5	3	0.76
Norway	2.4	2.8	2	0.66
Finland	2.4	2.4	2	0.64
France	2.3	2.1	2	0.61
Belgium	1.5	4.1	2	0.56
Denmark	1.6	3.1	2	0.53
Switzerland	1.2	3.9	2	0.49
Ireland	1.6	2.1	1	0.36
Canada	0.9	3.4	1	0.30
New Zealand	1.7	0.4	1	0.29
Australia	1.0	2.6	1	0.27
United Kingdom	0.8	2.9	1	0.25
United States	0.2	2.9	1	0.14

Unemployment Protection in OECD

TABLE 4.2 Unemployment protection in eighteen OECD countries

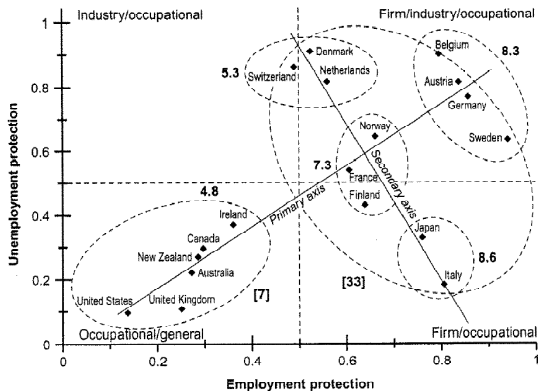
	(1) Net unemployment replacement rates ^a	(2) Generosity of benefits ^b	(3) Definition of 'suitable' job ^c	(4) Index of unemployment protection ^d
Denmark	60	76	3	0.91
The Netherlands	58	74	3	0.89
Switzerland	(40)	94	2	0.86
Belgium	57	99	2	0.82
Austria	43	78	3	0.81
Germany	43	66	3	0.77
Norway	40	40	3	0.64
Sweden	30	52	3	0.63
France	48	44	2	0.54
Finland	45	20	2	0.43
Ireland	(38)	59	1	0.37
Japan	10	48	2	0.33
Canada	32	49	2	0.30
New Zealand	31	44	1	0.27
Australia	32	30	1	0.22
Italy	5	18	2	0.18
United Kingdom	23	15	1	0.11
United States	14	26	1	0.10

Skill formation in OECD

TABLE 4.3 Skill profiles in eighteen OECD countries

	(1) Median length of tenure ^a	(2) Vocational training share ^b	(3) Vocational training system ^c	(4) Upper- secondary/ university education ^d	(5) Skill profile ^e
Austria	6.9	22	Dual apprenticeship	71 6	Firm/industry/ occupational
Germany	10.7	34	Dual apprenticeship	81 13	Firm/industry/ occupational
Sweden	7.8	36	Vocational colleges	74 13	Firm/industry/ occupational
Norway	(6.5)	37	Vocational colleges	82 16	Industry/ occupational
Belgium	8.4	53	Mixed	53 11	Industry/ occupational
Japan	8.3	16	Company- based	n.a. n.a.	Firm/ occupational
Finland	7.8	32	Vocational colleges	67 12	Industry/ occupational
Italy	8.0	35	Company- based	86 5	Firm/ occupational
France	7.7	28	Company- based	80 10	Firm/ occupational
Ireland	5.3	6	Weak	50 11	Occupational/ general
The Netherlands	5.5	43	Mixed	62 22	Industry/ occupational
Switzerland	6.0	23	Dual apprenticeship	80 10	Industry/ occupational
Denmark	4.4	31	Mixed	66 15	Industry/ occupational
Canada	5.9	5	Weak	76 17	Occupational/ general
Australia	3.4	9	Weak	57 15	Occupational/ general
New Zealand	n.a.	7	Weak	60 11	Occupational/ general
United Kingdom	3.6	11	Weak	76 13	Occupational/ general
United States	4.2	3	Weak	86 26	Occupational/ general

Protection and skill formation in OECD



Inequality skill formation in OECD

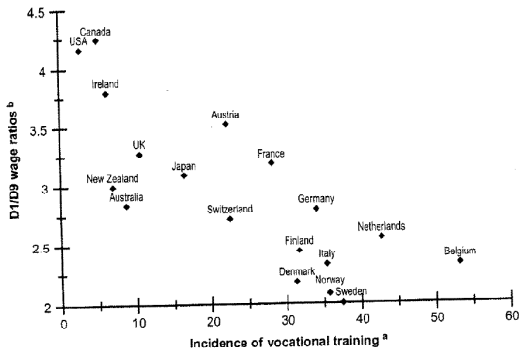


FIG. 4.3 Vocational training and wage inequality