

The Impact of Alternative Measures of Social Spending on Poverty Rates in OECD Countries



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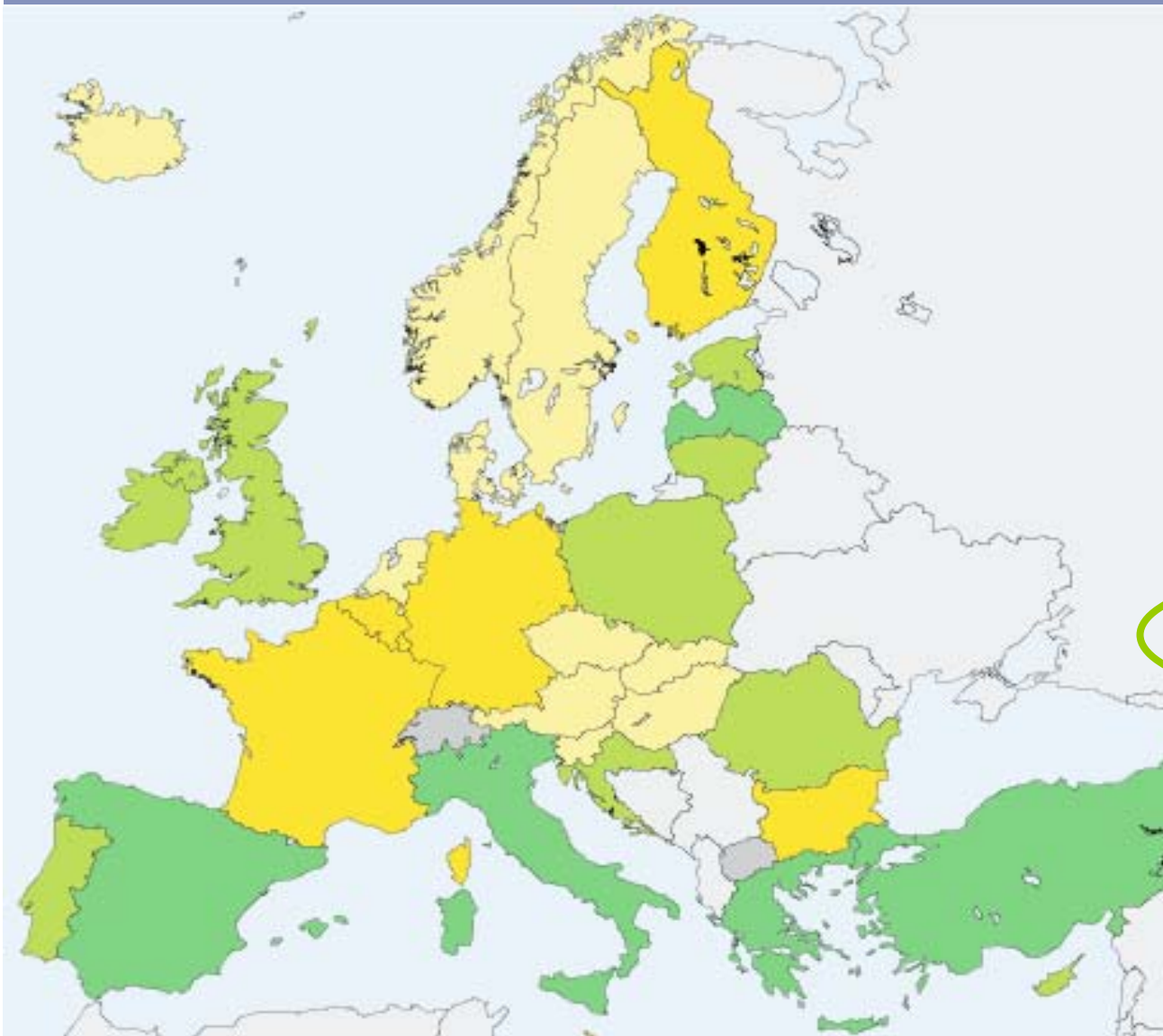
Seminar HSZ
November 4th 2011
Leiden

Universiteit Leiden. University to discover.

Related poverty papers - final

1. Social income transfers and poverty: a cross country analysis for OECD countries', *International Journal of Social Welfare*, 2011, forthcoming.
2. Differences in Anti-Poverty Approaches Between Europe and The United States: A Cross-Atlantic Descriptive Policy Analysis', *Poverty & Public Policy*, 2011.
3. Welfare Reform in the United States. A Cross-Atlantic Descriptive Policy Analysis', *Poverty & Public Policy*, 2011.
4. How well is social expenditure targeted to the poor?', in: P. Saunders and R. Sainsbury (eds.), *Social Security, Poverty and Social Exclusion in Rich and Poorer Countries*, Intersentia, Mortsel, Belgium, 2010.
5. Patterns of Welfare State Indicators in the EU: Is there Convergence?', *Journal of Common Market Studies*, 2010.
6. The redistributive effect of public and private social programs: a cross-country empirical analysis', *International Social Security Review*, 2010.
7. Effectiveness of Poverty Reduction in the EU15. A Descriptive Analysis.', *Poverty & Public Policy*, 2009.

At-risk-of-poverty rate after social transfers (PL 60)



10-12 12-15 15-19 19-26

Poverty rate EU15:
PL 40 = 5
PL 50 = 10
PL 60 = 17

PL 60 → EU25 = 16
PL EU60 = 22.5

Poverty line:
PL EU = 60
PL USA = 30

Poverty rate USA
2004 (LIS / OECD):
PL 40 = 11
PL 50 = 17
PL 60 = 24



Welfare state effort and poverty

EU Millennium Goals – Lisbon Agenda (2000):

- (1) Economic Performance
- (2) Social Inclusion

- Social Inclusion - Set of agreed Social Indicators
- Among them: Poverty (breakdown age / gender)
- Formal protocol measuring poverty
- Benchmarking – best practices - mutual learning
- OMC (soft law) is used to achieve convergence and improvements
- However, poverty rates have risen since 2000

Effectiveness of income transfer policies in alleviating poverty

- Vast literature claims “strong negative relationship at country level between the level of social spending and the incidence of poverty” – “arguably one of the most robust findings in comparative poverty research”
- Behrendt (2002), European Commission (2009), Smeeding (2005 and 2006), Nolan and Marx (2009), Kenworthy (1999), Kangas and Palme (2000), Kim (2000), Sainsbury and Morissens (2002), Cantillon et al (2003), Förster and Pearson (2002), Brady (2004), Scruggs and Allen (2005), Förster and Mira d’Ercole (2005), Pestieau (2006).

Research design (1)

- Cross-country analysis (EU15, OECD28)
- Measuring poverty incidence, around 2004
 - OECD: 40%, 50%, and 60% threshold
 - LIS: 40%, 50%, and 60% threshold
- Measuring social effort / expenditure, 2007
 - Gross public social expenditures
 - Capturing of private social arrangements
 - Capturing for social expenditures excl. health
 - Capturing for the tax system

Research design (2)

- Linkages social protection $\leftarrow \rightarrow$ poverty
- Focus on social expenditure
 - Familiar claim: higher social expenditures goes along with lower poverty levels and higher antipoverty effects across countries
- Data Sources: OECD / LIS
- Remarks
 - Controversial debate: absolute or relative poverty?
 - Comparative analyses are rather sensitivity for data source, income concepts, equivalence scales, poverty lines (thresholds), etc
 - Literature study / References

Our focus: impact of social expenditures on poverty

Policy strategies to combat poverty

- Education
- Job opportunities
- Labor force participation
- Health care
- **Income transfers (policy)**
- Et cetera

Public social expenditure, % GDP, 2007



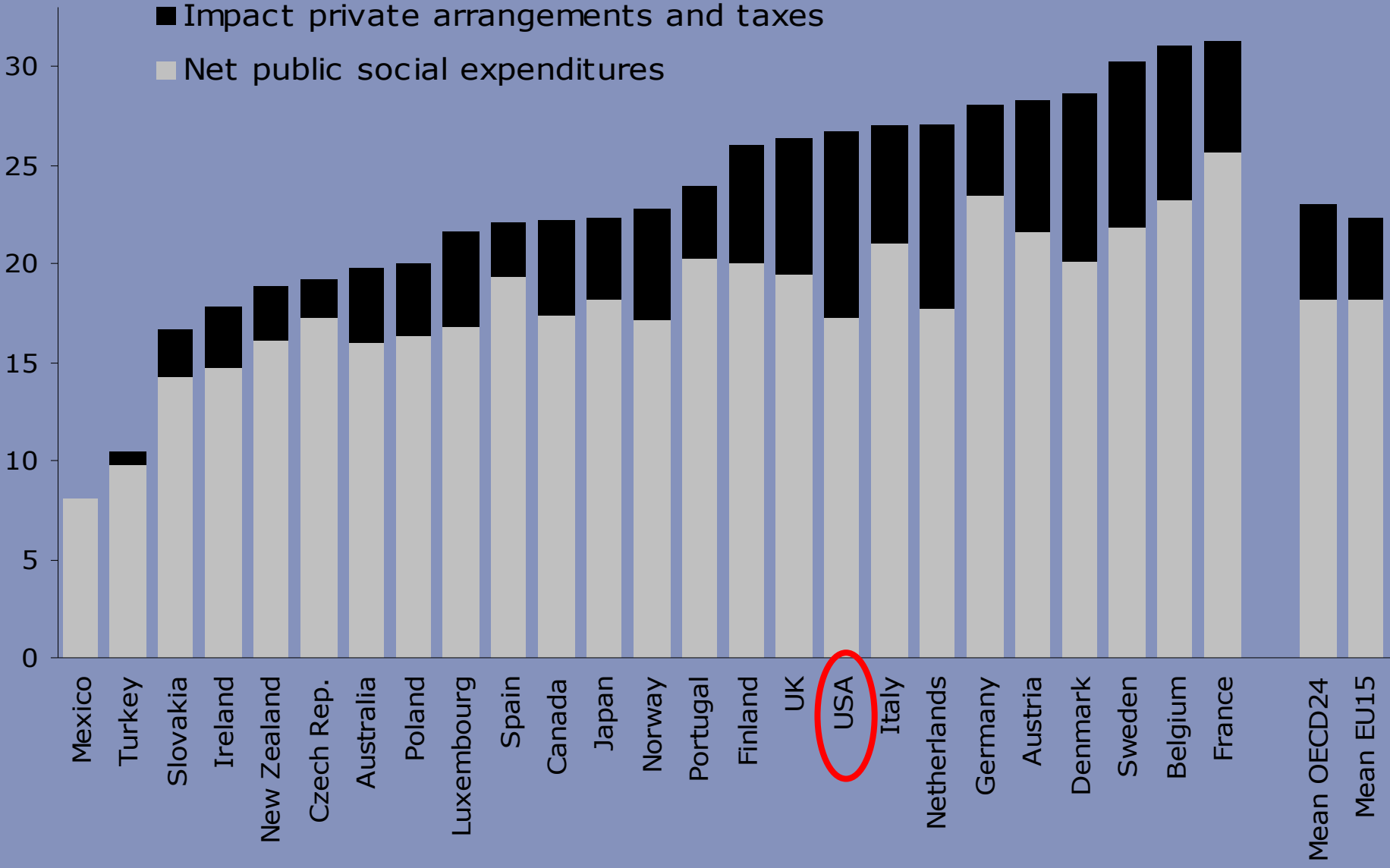
Private social expenditures

- Supplementary employment-based pension plans (mandatory contributions, tax advantaged)
- Private health insurance, but with legal stipulations
- Supplementary disability benefits (agreed upon in collective negotiations)
- Obligations for employers to provide sickness benefits
- Shifts from public to private → policy objectives to alleviate public budgets, or to strengthen incentives in the system **Super (2008)**

Trend Private Social Expenditure, 1985-2007

	<u>1985</u>	<u>1995</u>	<u>2007</u>		<u>1985</u>	<u>1995</u>	<u>2007</u>
Hungary			0.2	Italy	0.9	4.1	2.1
Mexico		0.1	0.2	Denmark	1.3	2.4	2.6
Czech Rep		0.1	0.4	Germany	2.8	3.1	2.9
New Zealand	0.1	0.5	0.4	Sweden	1.1	2.4	2.9
Spain	0.2	0.3	0.5	France	0.7	2.3	2.9
Luxembourg	0.0	0.0	0.9	Japan	0.4	0.5	3.6
Slovak Rep		0.7	1.0	Australia	0.7	3.6	3.8
Finland	1.0	1.3	1.1	Belgium	0.8	2.1	4.7
Ireland	1.6	1.7	1.5	Canada	2.3	4.4	5.3
Greece	0.0	1.9	1.5	UK	4.6	6.6	5.8
Austria	2.3	2.1	1.8	Netherlands	4.9	6.7	6.9
Portugal	0.8	1.1	1.9	Switzerland	3.0	7.6	8.3
Norway	0.8	1.7	2.0	USA	6.3	8.3	10.5

Net public *and* private social expenditure, % GDP, 2007



Simple correlation tests across countries

- Coefficient estimated using a linear OLS regression model of cross-sectional data
- Form: $Y_{i,t} = A + \beta X_{i,t} + u_i$

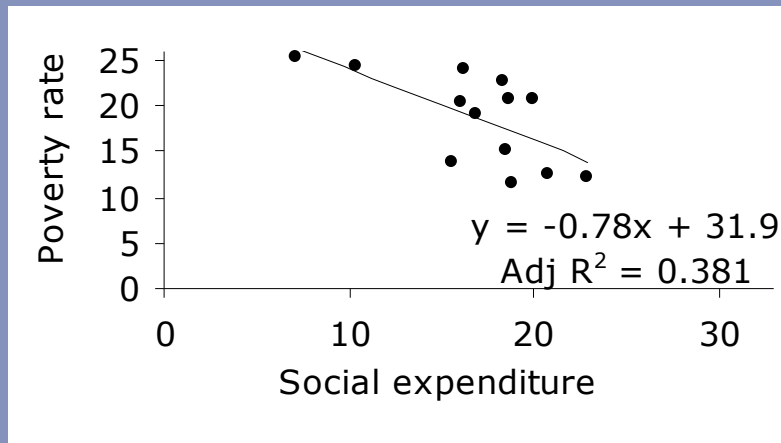
$Y_{i,t}$ = level poverty indicator of country i at time-period t

$X_{i,t}$ = level of social expenditure as percentage of GDP in country i at period t

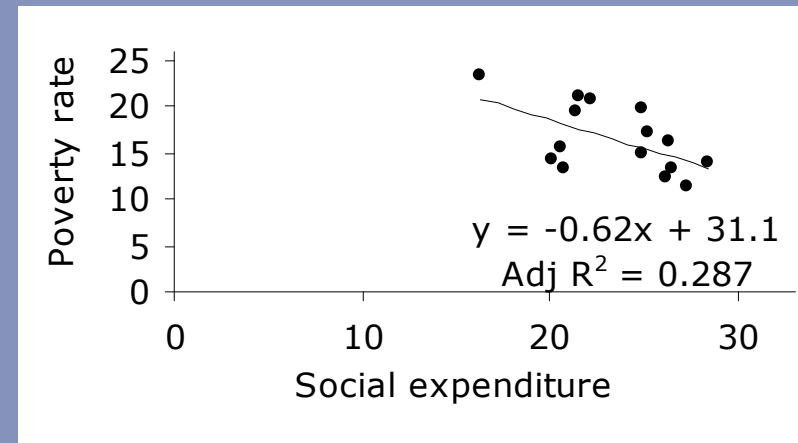
u_i = disturbance term

Linkage **gross public** social expenditure and OECD poverty rates (PL 60), 2003-2007

Non-EU15



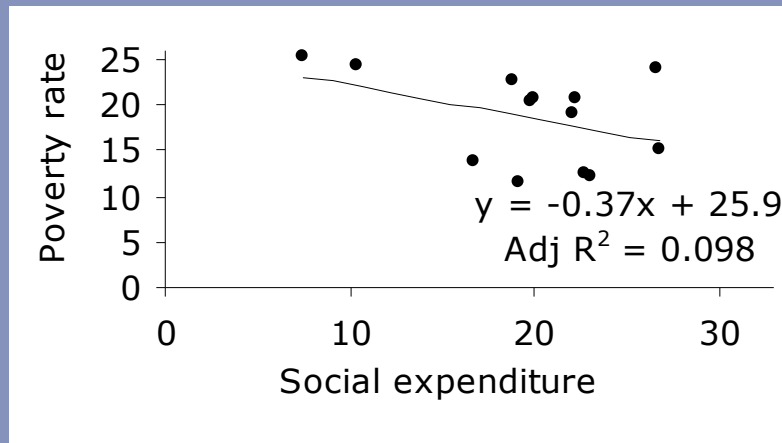
EU15



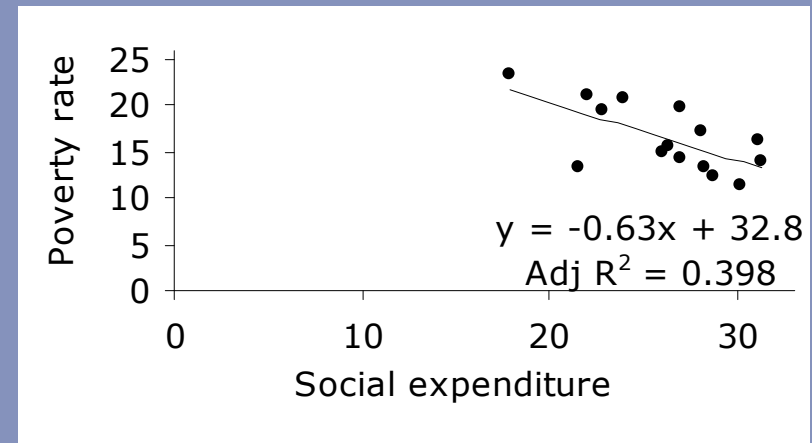
- All 28 countries: **
- PL 40 and PL 50: \approx same results
- LIS 24 countries: \approx similar results
- Mid-1980's and mid-1990's: same results

Linkage gross public **and private** social expenditure and OECD poverty rates (PL 60), 2003-07

Non-EU15



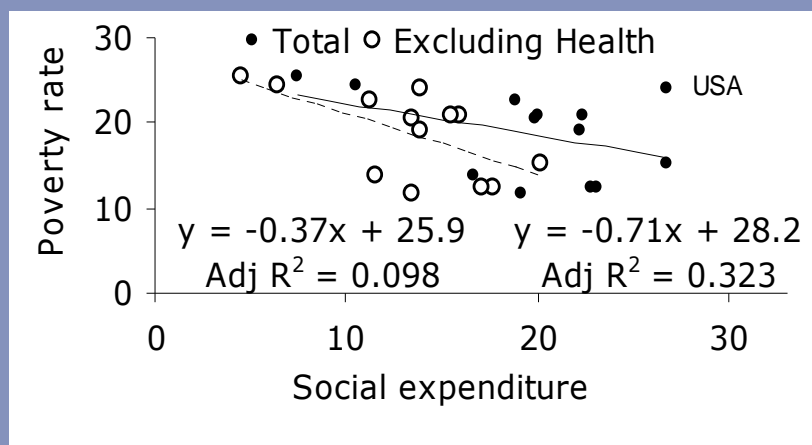
EU15



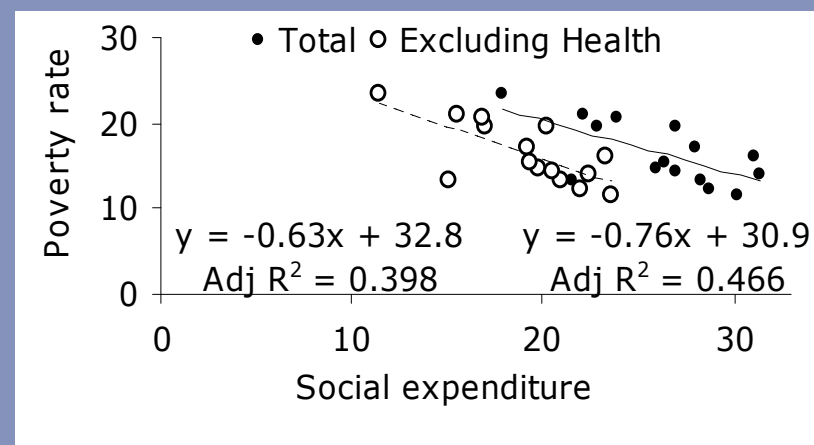
- All 28 countries: **
- PL 40 and PL 50: \approx same results
- LIS 24 countries: \approx same results
- Mid-1980's and mid-1990's: same results

Linkage gross social expenditure **other than Health** and OECD poverty rates (PL 60), 2003-05

Non-EU15



EU15



- All 28 countries: **
- PL 40 and PL 50: \approx same results
- LIS 24 countries: \approx same results
- Mid-1980's and mid-1990's: same results

Multiple tests across countries

- Caminada, Goudswaard and Koster (2011)
- Panel analysis: pooled time series cross-section analysis of 24 countries and five points in time ($N \times T = 103$), using Beck and Katz's method of ordinary least squares with panel-corrected standard errors (OLS-PCSE) and a first-order autocorrelation correction (AR1)
- Form: $Y_{i,t} = A + \beta X_{1i,t} + \dots + \epsilon X_{ni,t} + u_i$

$Y_{i,t}$ = poverty rate country i at time-period t

X_1 = gross social expenditure ratios (several)

X_2 = ratio of the elderly population

X_3 = unemployment rate of total labor force

X_4 = GDP per capita \$ (current prices and PPS)

Multiple tests across countries

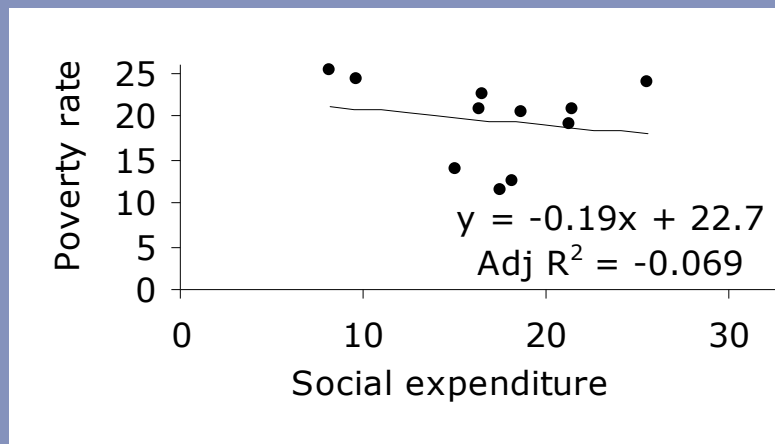
	Non-EU15	EU15	All 24
- Sampled data set model			
- gross public expenditure	**	**	**
- gross total expenditure	**	**	**
- idem, excluding Health	**	**	**
- 65+ (% population)	**	0	**
- unemployment rate	0	**	0
- GDP per capita	**	0	0

- Gross social spending is **THE** driving force as far as differences in poverty levels across countries concerned

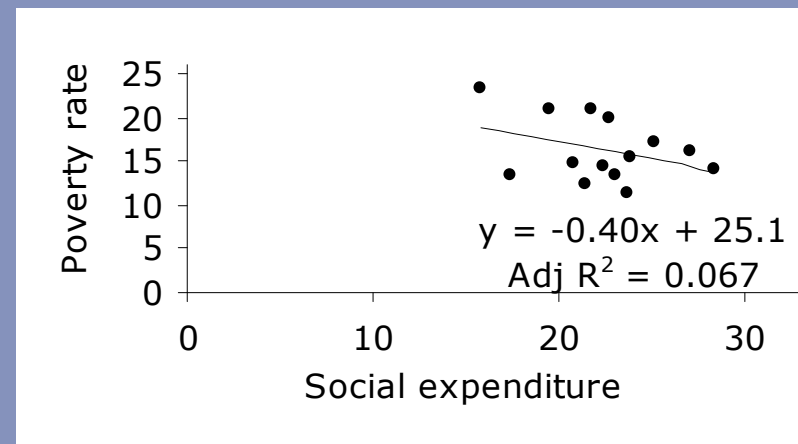
Caminada, Goudswaard and Koster,
International Journal of Social Welfare (forthcoming)

Linkage **net** total social expenditure and OECD poverty rates (PL 60), 2003-2007

Non-EU15



EU15



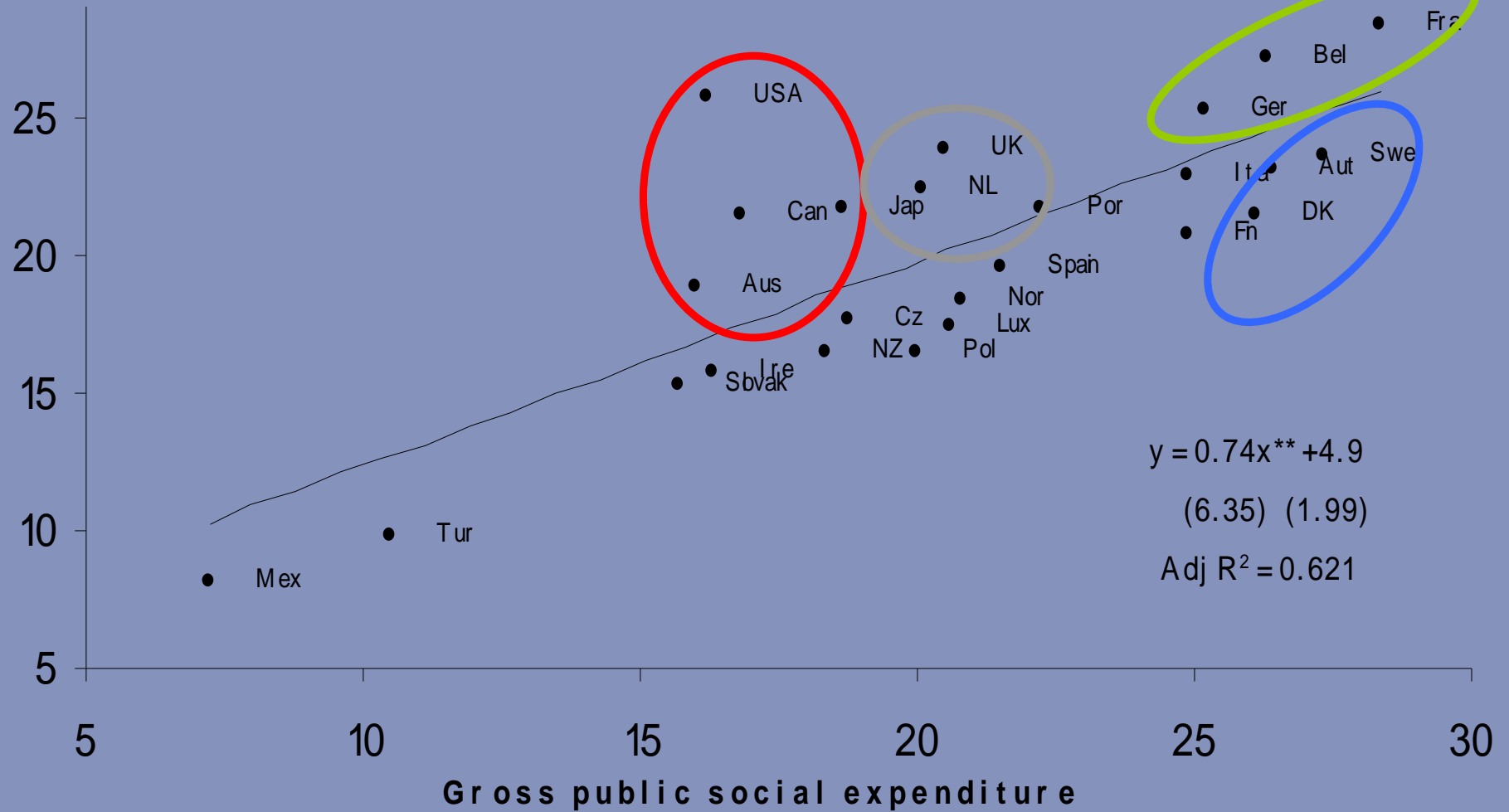
- All 28 countries: *
- LIS 24 countries: not significant in all cases
- SOCX 2005: not significant in all cases
- Mid-1980's and mid-1990's: lag of data

Summary: R² and significance

	Non-EU15 countries	EU15 countries	All countries
<i>Gross public</i>			
- PL40, OECD data	0.398 *	0.214 *	0.453 **
- PL50, OECD data	0.429 **	0.336 *	0.441 **
- PL60, OECD data	0.381 *	0.287 *	0.361 **
<i>Public and private</i>			
- PL40, OECD data	0.113 --	0.345 *	0.344 **
- PL50, OECD data	0.106 --	0.478 **	0.329 **
- PL60, OECD data	0.098 --	0.398 **	0.272 **
<i>Idem, excl. Health</i>			
- PL40, OECD data	0.309 *	0.407 **	0.474 **
- PL50, OECD data	0.287 *	0.566 **	0.457 **
- PL60, OECD data	0.323 *	0.466 **	0.407 **
<i>Net total</i>			
- PL40, OECD data	-0.058 --	0.046 --	0.184 *
- PL50, OECD data	-0.068 --	0.105 --	0.162 *
- PL60, OECD data	-0.069 --	0.067 --	0.130 *

Open to debate

Net public
and private



Differences EU15 - other OECD countries

Some tentative explanations

- Anti-poverty policies
- National preferences for social spending
- Policy coordination mechanisms to combat poverty
- Other

Caminada and Van Vliet (2011, FISS-paper)

Martin and Caminada (2011, published in PPP)

Open to debate

2. Robust over time? Yes!
3. Non-E15 versus EU15. Why? Instead separating rich countries from postsocialist and poor ones? → switching Aus, Can, Jap, NZ, Nor, Swi, and USA to the other group.
4. Mexico and Turkey: outliers?
5. Services / benefits in kinds and indirect taxes are not included in income ← → poverty rates
 - Remove benefits in kinds from social expenditures; restrict analysis to cash social transfers → troublesome
 - Remove the correction of indirect taxes in net social expenditures → same results

Summary of findings

- Correlation poverty and social spending

	Non-EU	EU	All
- Gross public	--	-	---
- Public and private	0	--	--
- Idem, excl. Health	--	---	---
- Net total	0	0	-/0

- Familiar claim (higher social expenditures goes along with lower poverty levels) must at least be toned down
- A shift from public to private social arrangements – as we've seen in some countries - implies less redistribution → Chen and Olaf

Research team
**Reforming
Social Security**



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