

# Research on child poverty and child well-being

#### **Jonathan Bradshaw**

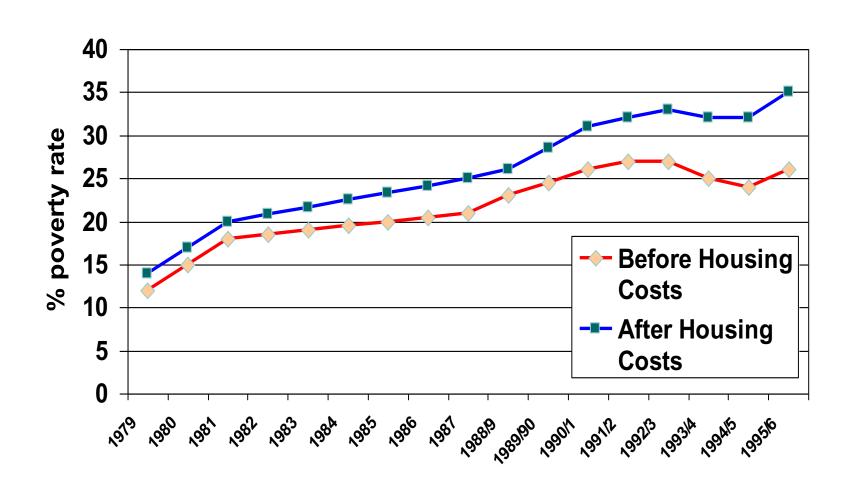
The Queen's University
Belfast
9 April 2008

#### **Outline:**

- Tour of my research on the subject over the last decade
- It has moved from
  - UK research on child income poverty
  - To comparative research on child income poverty
  - To UK research on overlaps more than one indicator
  - To comparative research on overlaps
  - To UK research on child wellbeing and spatial
  - To comparative research on child well-being
- Northern Ireland

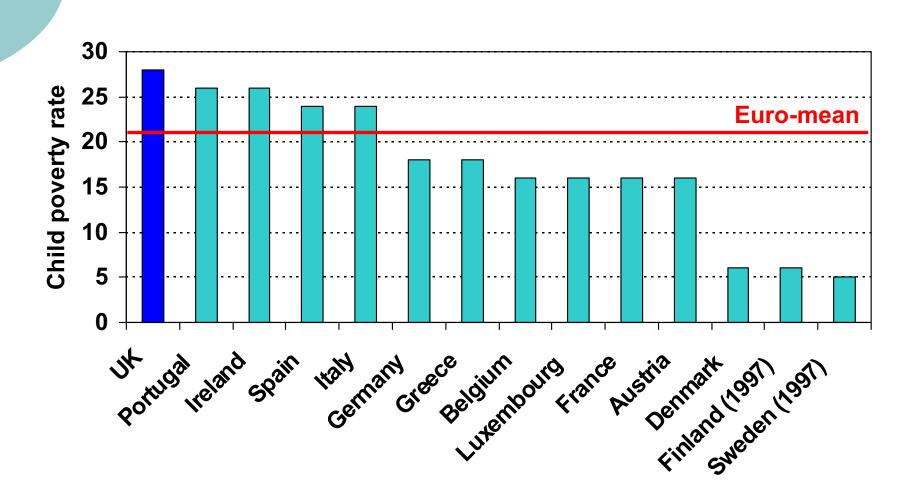
## **Child poverty: 1979-1995/6**

60 per cent equivalent household income



## **Child poverty rates 1995**

60% of the national equivalised median income.

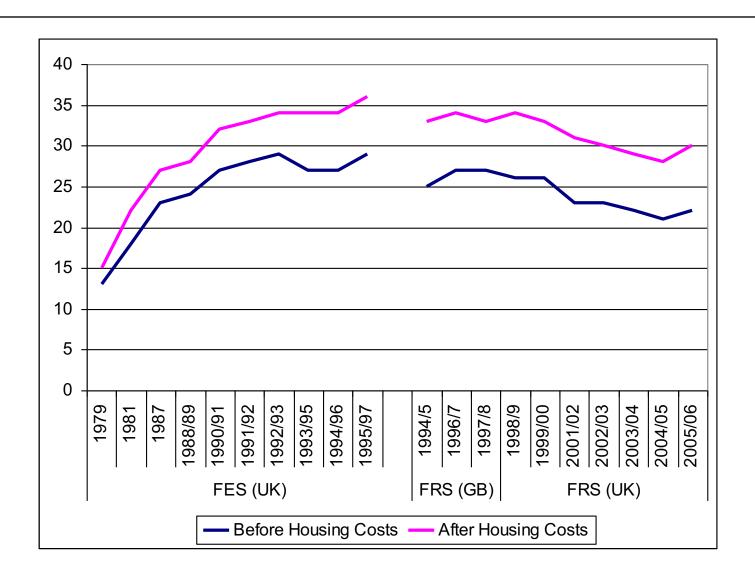


## **End of child poverty**

Prime Minister's pledge:

"Our historic aim, that ours is the first generation to end child poverty forever....It's a 20 year mission but I believe it can be done"

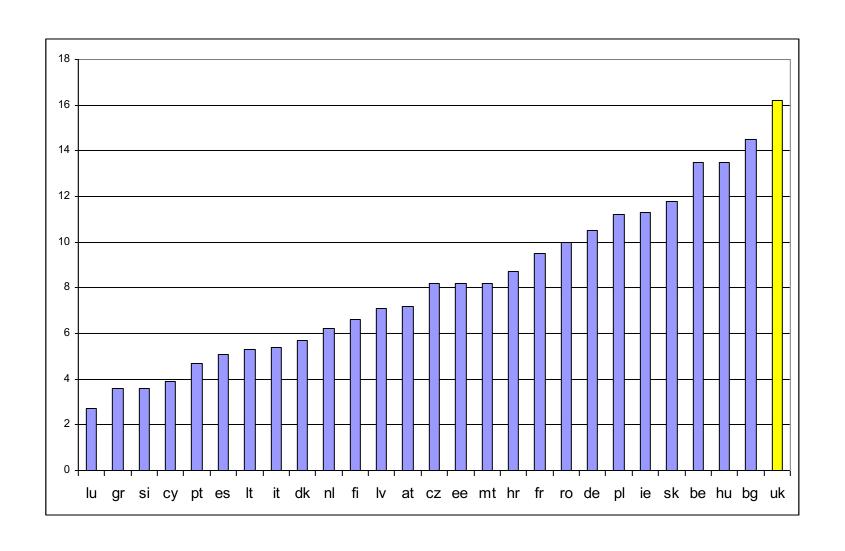
#### Child poverty rates 1979-2005/6



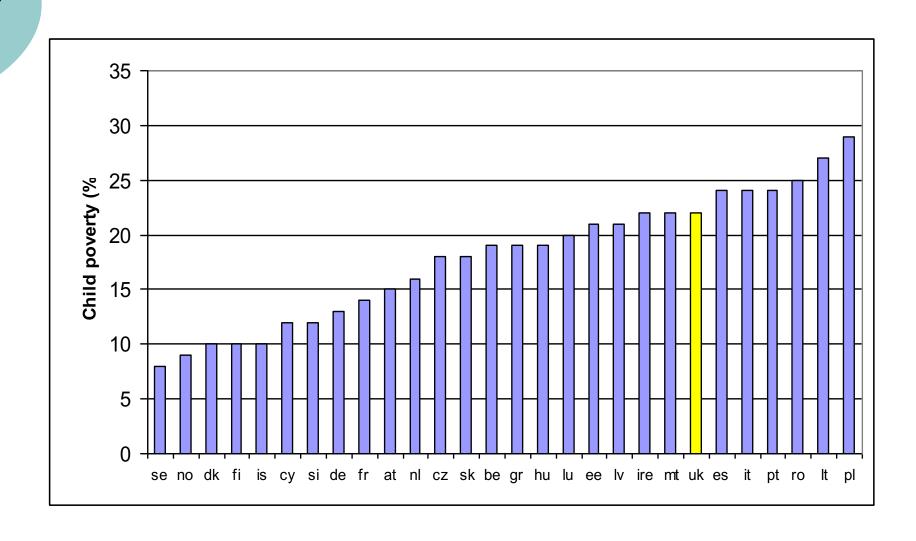
## Comparative background:

- ◆ The child has been absent from EU lack of "competence" under Treaties
- Lisbon summit introduces social inclusion –
   and enables the child to come in
- Social inclusion strategy monitored by "Laeken" indicators – only two on children
  - % children living in workless families
  - Relative child poverty rates

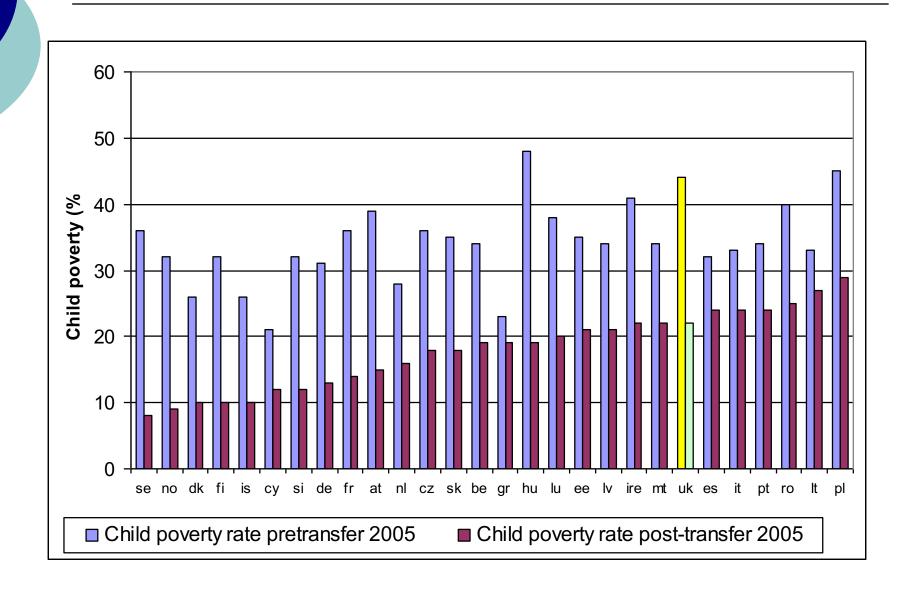
## % children 0-17 living in workless households 2006. (Eurostat 2007)



## Child poverty rate (less than 60 per cent of the median 2005 (Eurostat)



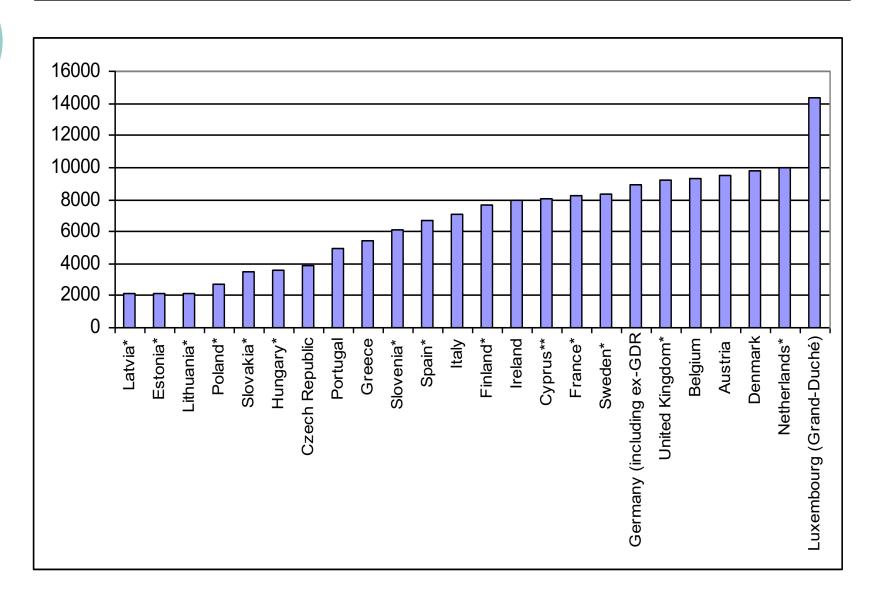
## Child poverty before and after cash benefits 2005



# What is wrong with income poverty?

- Income
  - Is not easy to measure
  - Is not a good measure of command over resources – ignores dissaving, borrowing and domestic consumption
- Relative thresholds very different in different countries (including NI)

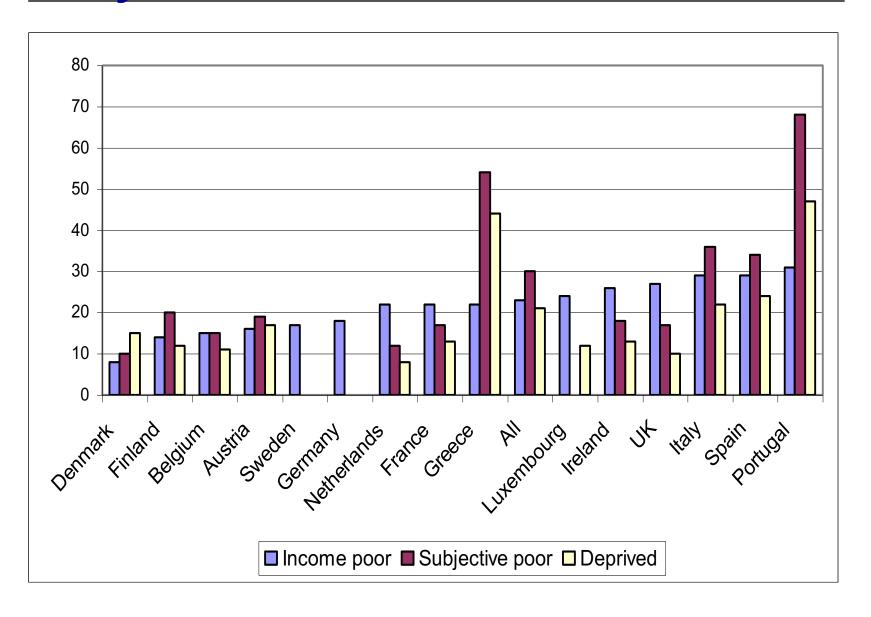
# 60% of median poverty threshold 2001, 2002\*, 2003\*\* Euros



## What is wrong with income poverty?

- Income not easy to measure
- Not a good measure of command over resources
- Relative threshold very different in different countries
- 60 per cent of median arbitrary
- Modified OECD equivalence scale has no basis in science
- Poverty rates hide poverty gaps and poverty persistence

## Child poverty rates by dimension. Own analysis of ECHP 2001



#### Overlaps analysis

- Began in Ireland
- Now in FRS
- Coming in EU SILC

- Have used it in
  - MCS
  - BHPS
  - SASAS
  - Bulgaria
  - Georgia

## Monitoring child well-being in the UK

- Poverty the outcomes for children (FPSC 2001)
- Child well-being in the UK, Save the Children (2002)
- Child well-being in the UK, Save the Children (2005)

## **Chapters**

- Child demography
- Child poverty and deprivation
- Child health
- Child lifestyles
- Mental health and wellbeing
- Child's time and space
- Child maltreatment

- In and leaving care
- Childcare
- Crime and illegal drug use
- Education
- Housing and neighbourhoods

NORTHERN IRELAND

#### **Every Child Matters: Outcomes framework**

- Economic well-being: having sufficient income and material comfort to be able to take advantage of opportunities.
- Being healthy: enjoying good physical and mental health and living a healthy lifestyle.
- Staying safe: being protected from harm and neglect and growing up able to look after themselves.
- Enjoying and achieving: getting the most out of life and developing broad skills for adulthood.
- Making a positive contribution: developing the skills and attitudes to contribute to the society in which they live.
- Input orientated not operationalised

### More background:

- At Luxembourg Presidency of EU: Atkinson Report recommends "child mainstreaming" and development of child well-being indicators
- EUROSTAT cautious and reluctant
- Suggestion that one extra indicator on educational attainment might be added to Laeken set
- So for UK Presidency we develop of an index of child well-being based on existing comparative data sources
- (Bradshaw, J., Hoelscher, P. and Richardson, D. (2007) An index of child well-being in the European Union 25, *Journal of Social Indicators Research*, 80, 133-177.)
- Later produce others for
  - OECD for UNICEF
  - CEE/CIS for UNICEF

## Conceptualisation of child well-being

- Multi-dimensional approach
- Based on children's rights as outlined in the UN CRC
- Ideology
  - Child the unit of analysis
  - What children think and feel is important
  - Well-being more important than well-becoming
  - Outcomes rather than inputs
  - Direct measures rather than indirect measures

## **Data Sources I: Surveys**

- Health Behaviour of School Aged Children (HBSC) 36 countries at 2001
- Programme for International Student Assessment (PISA) 32 countries at 2000, 41 at 2003
- Citizenship and Education Survey (CIVED) 28 countries at 1999 and EUYOUPART (2005)
- European School Survey Project on Alcohol and other Drugs (ESPAD) 26 countries at 2003
- European Quality of Life Survey (EQLS) 28 countries at 2003

#### **Data Sources II: Series**

- WHO mortality data base 1993-1999, all countries except DK & CY
- World Bank World Development Indicators 2003, all countries
- OECD (2004) Education at a Glance, 2002 data
- Eurostat (2003) Population and Social Conditions
- Eurostat (2004) Labour Force Survey
- World Bank (2002) Health, Nutrition and Population Data

### **Structure**

	EU	OECD	CEE/CIS		
Indicators	51	40	52		
Components	23	18	24		
Dimensions	8	6	7		
Names of the	1. Material situation	1. Material well-being	1. Material situation		
dimensions	2. Housing and	2. Health and safety	2. Housing		
	environment	3. Educational well-	3. Health		
	3. Health	being	4. Education		
	4. Subjective well-	4. Family and peer	5. Personal and social		
	being	relationships	well-being		
	5. Education	5. Behaviours and risks	6. Family forms and		
	6. Children's	and	care		
	relationships	6. Subjective well-	7. Risk and safety		
	7. Civic participation	being			
	and				
	8. Risk and safety				

## **EU**

	Ave rage rank	Health	Subjective Well-being	Children's Relationships	Material Situation	Risk & Safety	Education	Civic and political participation	Housing
Cyprus	46	5			1	2		1	14
Netherlands	49	2	1	5	10	5	6		5
Swe den	59	1	6	15	2	3	2	14	4
Denmark	64	3	9	10	6	15	м	4	1
Spain	B7	13	3	9	8	1	15		12
Finland	98	7	12	17	3	7	4	18	10
Germany	99	10	7	12	12	12	9	10	7
Belgium	20.4	20	15	6	18	16	1	5	2
Slovenia	20.7	15	8	4	4	18		13	13
Ireland	12.1	18	5	8	19	20	7		8
Italy	12.3	16	11	2	15	6	19	11	18
Luxembourg	124	11	20	19	5	9	20		3
Greece	12.5	25	4	11	17	8	16	2	17
Austria	12.6	21	2	16	7	19	17		6
Portugal	12.9	9	16	3	13	17	18	7	20
France	<b>1</b> 80	14	13	14	11	10	14		15
Poland	<b>3</b> 0	6	19	13	23	11	5	6	21
Hungary	<b>B</b> 0	22	10	7	14	14	12	3	22
Malta	<b>1</b> 85	24	17	1	24	4			11
Czech Republic	141	4	14	22	9	21	10	17	16
Slovak Republic	<b>1</b> 6.6	17	22		25	13	11	9	19
United Kingdom	17.0	23	18	23	20	22	13	8	9
Latvia	17.6	19	21	18	16	23	8	12	24
Estonia	19.9	12	23	21	21	24		15	23
Lithuania	20.0	8	24	20	22	25		16	25

## **OECD**

	Average rank	Material Situation	Health and Safety	Education	Children relationship	Subjective Well-being	Behaviours and risk
Netherlands	4.2	10	2	6	3	1	3
Sweden	5.0	1	1	5	15	7	1
Finland	73	m	3	4	17	11	6
Spain	8.0	12	5	16	8	2	5
Switzerland	8.0	5	9	14	4	6	10
Denmark	8.2	4	4	8	9	12	12
Norway	83	2	8	9	10	8	13
Belgium	10.0	7	12	1	5	16	19
Italy	10.0	14	6	20	1	10	9
Ireland	10.2	19	19	7	7	5	4
Germany	11.2	13	11	10	13	9	11
Greece	11.8	15	18	17	11	m	7
Canada	12.0	6	14	2	18	15	17
France	12.5	9	7	15	12	18	14
Poland	12.5	21	16	m	14	19	2
Czech Republic	12.7	11	10	11	19	17	8
Austria	<b>137</b>	8	20	19	16	4	15
Portugal	14.0	16	15	21	2	14	16
Hungary	14.5	20	17	13	6	13	18
United States	18.0	17	21	12	20		20
United Kingdom	185	18	13	18	21	20	21

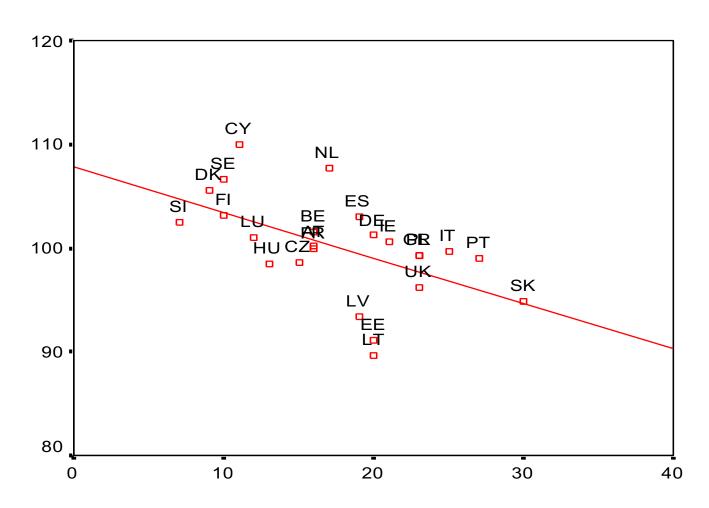
#### **Lines** Ros Asquith



#### **CEE/CIS**

	Average rank	Material	Housing	Health	Education	Personal and Social	Family forms and Care	Risk and Safety
Croatia	3.4	1	1	1	4	1	7	9
Bosnia Herzegovina	4.8	6	æ	13	-	2	1	1
FYR Macedonia	63	00	10	m	6	3	4	10
Serbia	6.6	5	6	9	11	7	3	5
Uzbe kistan	75	14	2	6	-	13	8	2
Turkmenistan	7.6	-	9	15	-	4	6	4
Belarus	B.3	6	5	4	2	11	14	16
Montenegro	B.6	7	11	00	13	7	2	12
Bulgaria	10.6	2	7	14	5	16	12	18
Ukraine	10.6	4	13	7	8	9	19	14
Kazakhstan	11.1	15	12	10	1	12	17	11
Russia	11.3	3	15	5	в	17	16	20
Kyrgyzstan	117	16	17	11	18	5	9	6
Romania	12.0	10	19	16	7	14	5	13
Armenia	12.1	17	8	19	12	15	11	3
Georgia	13.6	18	4	17	15	6	18	17
Turkey	140	13	-	12	17	-	-	-
Azerbaija n	141	11	16	20	16	19	10	7
Al bania	144	12	14	18	9	20	13	15
Tajikistan	144	19	18	21	10	10	15	8
Moldova	161	20	20	2	14	18	20	19

#### Child well-being by child poverty



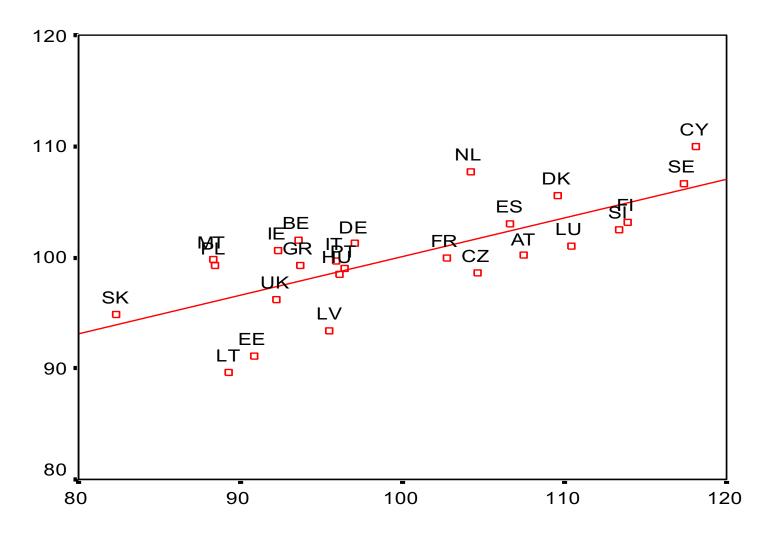
R = -0.55

At risk of poverty rate (60% of median equivalised income afte

#### **Material situation**

- Relative child income poverty
  - Child poverty rate
  - Child poverty gaps
- Child deprivation
  - Lacking car, own bedroom, holidays last year, a computer
  - Lacking a desk, quiet for study, a computer, calculator, dictionary, text books
  - Less than ten books in the home
- Parental worklessness

#### Overall well-being and material well-being



Material situation cluster score

#### **Subjective Well-being**

#### Personal well-being

- Young people with scores above the middle of a life satisfaction scale 11, 13 and 15 years (%) - HBSC 2001/02
- Students who agree or strongly agree to 'I feel like an outsider (or left out of things)', 15 years (%) - PISA 2003
- Students who agree or strongly agree to 'I feel awkward and out of place', 15 years (%) - PISA 2003
- Students who agree or strongly agree to 'I feel lonely', 15 years (%) PISA 2003

#### Well-being at school

- Young people feeling pressured by schoolwork 11, 13 and 15 years (%) - HBSC 2001/02
- Young people liking school a lot 11, 13 and 15 years (%) -HBSC 2001/02

#### Self defined health

 Young people rating their health as fair or poor 11, 13 and 15 years (%) - HBSC 2001/02

#### Children's relationships

#### Quality of family relations

- Students whose parents eat the main meal with them around a table several times a week, 15 years (%) - PISA 2000
- Students whose parents spend time just talking to them several times a week, 15 years (%) - PISA 2000

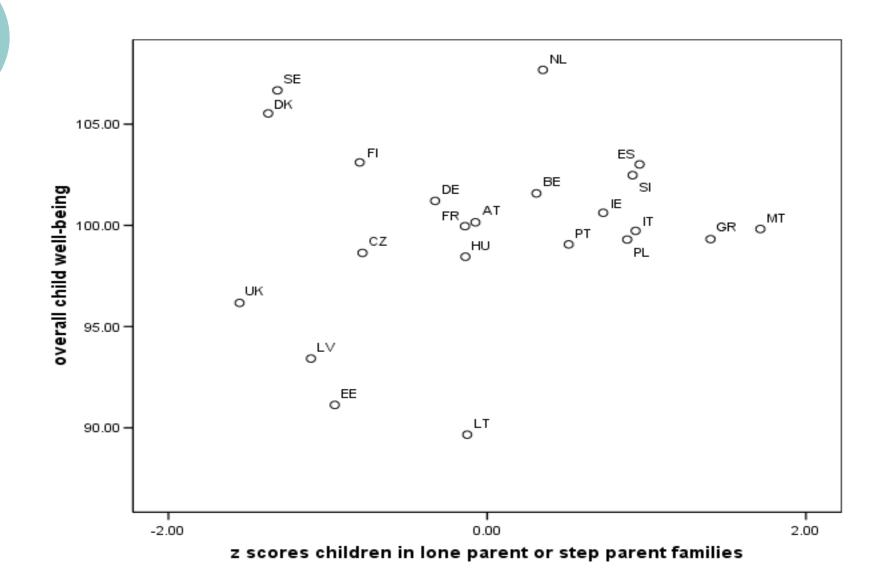
#### Family structure

- ◆ Young people living in 'single parent' family structures 11, 13 and 15 years (%) - HBSC 2001/02
- ◆ Young people living in 'Stepfamily' family structures 11, 13 and 15 years (%) - HBSC 2001/02

#### Peer relationships

 Young people finding their peers kind and helpful 11, 13 and 15 years (%) - HBSC 2001/02

## Overall child well-being and % of young people saying they lived in a lone parent or step parent family r=0.13(ns)



#### **Health**

#### Health at birth

- Infant mortality rates (WDI 2003)
- Low birth weight (OECD Health Data)

#### Immunisation

- Measles WDI (2003)
- DPT3 WDI HNP (2002)
- Pol3 WDI HNP (2002)

#### Health behaviour

- Brushing teeth (HBSC)
- Eating fruit every day (HBSC)
- Eating breakfast before school (HBSC)
- Physical activity (HBSC)
- Obesity and pre obesity (HBSC)

#### Risk and Safety

#### Risk & Safety

- Young people who were involved in physical fighting at least once in the previous 12 months 11, 13 and 15 years (%) - HBSC 2001/02
- Young people who were bullied at least once in the previous couple of months 11, 13 and 15 years (%) - HBSC 2001/02

#### Child deaths

 All child deaths: All under 19 deaths per 100,000 children, WHO mortality database, 3 year averages, MRD

#### Risk behaviour

- Teenage pregnancy (adolescent fertility rate), adolescent fertility rate, births per 1000 women 15-19 - WDI, 2003.
- Young people who have had sexual intercourse, 15 years (%) -HBSC 2001/02
- Young people who used a condom during their last sexual intercourse, 15-year-olds (%) - HBSC 2001/02
- Cigarette smoking: Lifetime use 40 times or more 16 years (%) -ESPAD, 2003
- Drunkenness: Lifetime 20 times or more 16 years (%) ESPAD, 2003
- Cannabis: Experience of use in Lifetime 16 years (%) ESPAD, 2003
- Inhalants: Experience of use in Lifetime 16 years (%) ESPAD, 2003

#### **Education**

#### Achievement

- Reading literacy achievement, 15 years PISA, 2003
- Mathematics literacy achievement, 15 years PISA, 2003.
- Science literacy achievement, 15 years PISA, 2003

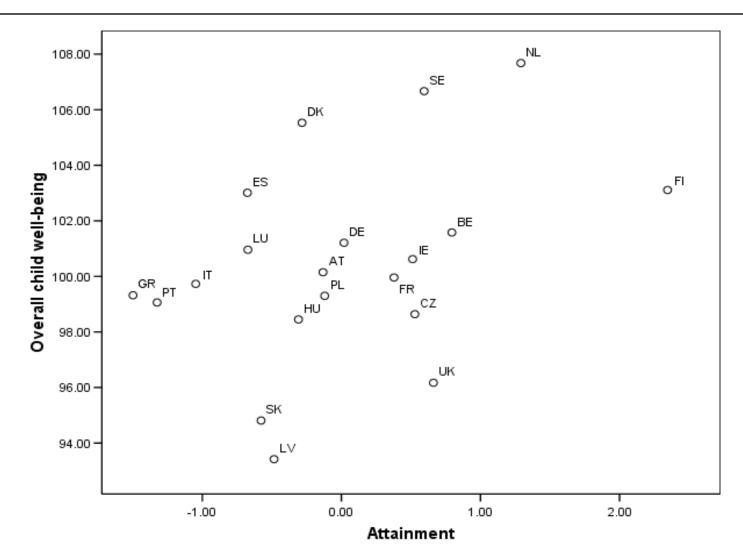
#### Participation

- Full-time and part-time students in public and private institutions, by age: 15-19 as a percentage of the population of 15 to 19-year-olds (2003) LU SK (2002)
- Early Years Participation children in registered childcare (% of children aged 0-2) - OECD, MRD

#### Aspirations

- Percentage of the youth population not in education, not in the labour force or unemployed - age 15-19 - OECD, 2003
- Proportion of pupils aspiring to low skill work, 15 years -PISA, 2000

## Child well-being and educational attainment



r = 0.39 (ns)

## Civic and political participation

- Civic participation
  - Participation rates: young people reporting involvement in two of five social participations 14 years (%) (Eng for UK, French BE) - CivEd. 1999
- Interest in politics
  - Political interest: young people reporting above the median involvement in political behaviours 14 years (%) (Eng for UK, French BE) - CivEd. 1999

## **Housing and environment**

## Overcrowding

 Rooms per person in households with children (under 16's) - EQLS, 2003

### Environment

- Households with children who think it is unsafe or very unsafe to walk around in their area at night (under 16's) - EQLS, 2003
- Households with children reporting many physical environment problems (under 16's) - EQLS, 2003

## Housing problems

 Households with children reporting at least two household problems (under 16's) - EQLS, 2003

# Search for a summary measure

- Material well-being is better than child poverty
- Different domains have varying relationship to child well-being

# Correlation between domains and overall well-being

Subjective	0.83
Risk and safety	0.79
Material situation	0.73
Housing and environment	0.65
Children's peers relations	0.47
Education	0.47
Civic participation	0.45
Health	0.40

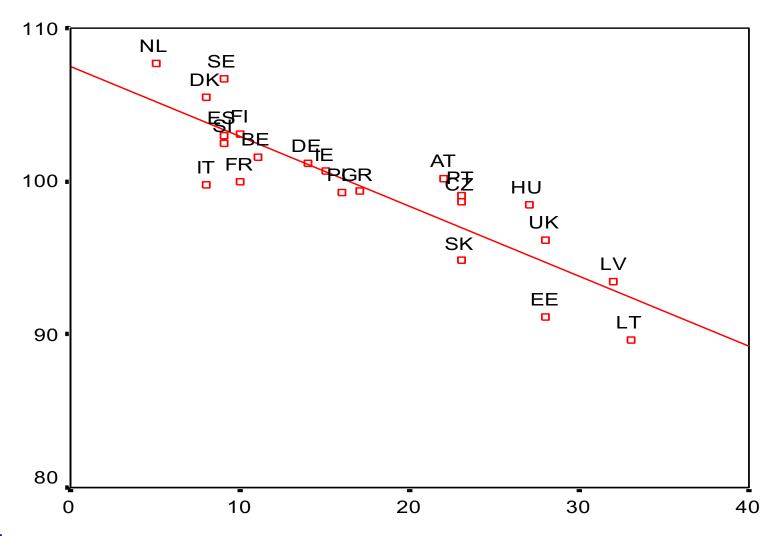
## Search for a summary measure

- Material well-being is better than child poverty
- Different domains have varying relationship to child well-being
- What about single indicators?

# Best match between single indicators and overall wellbeing

Indicator	Correlation coefficient r
Teenage fertility rate	0.88***
Feeling unsafe in neighbourhood	0.82***
Life satisfaction score	0.81***
Low family affluence (deprivation)	0.78***
Infant mortality rate	0.74***
Under 19 mortality rate	0.67***
Bullied last month	0.67**
Self rated health	0.64**
At least two household problems	0.63**
Low educational possessions	0.60**
Peers kind and helpful	0.61**

### Child well-being and teenage fertility rate



R = 0.88\*\*\*

Teenage pregnancy (adolescent fertility rate), adolescent ferti

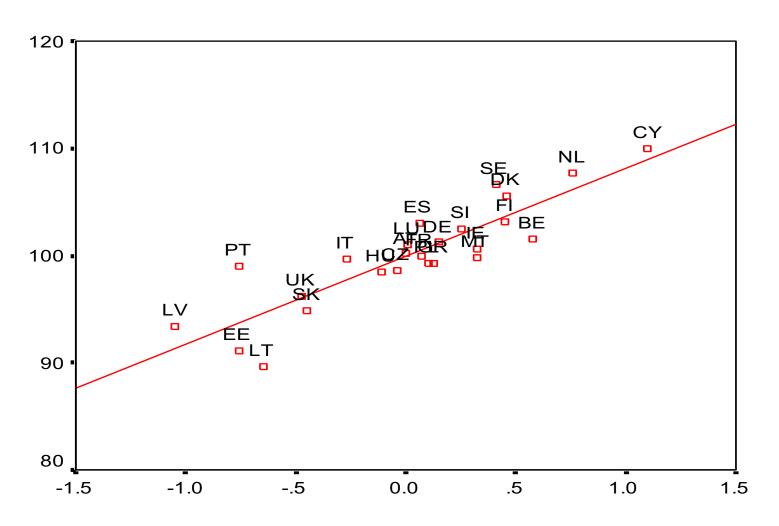
## Search for a summary measure

- Material well-being is better than child poverty
- Different domains have varying relationship to child well-being
- What about single indicators?
- What about selected indicators representing domains

# Single indicators with highest correlation with cluster score

Cluster	Indicator	r with cluster	r with overall well-being	
Health	Low Birth Weight	-0.58	0.06	
Subjective	Life satisfaction score	0.88	0.81	
Relationships	Single/step parents	-0.75	-0.25	
Material	Relative income poverty	-0.83	-0.55	
Risk&Safety	Under 19 deaths per 1000	-0.81	-0.67	
Education	Participation rates 15-19	0.73	0.35	
Civic	Political interest	0.86	0.24	
Housing	At least 2 housing problems	-0.89	-0.63	

### Child well-being by domain by selected indicators



Child well-being on select indicators

# Comparison of ranking by domain and selected indicators

Well-being by domain	Well-being by selected indicators
CY	CY
NL	NL
SE	BE
DK	DK
FI	FI
ES	SE
SI	IE
BE	MT
DE	SI
LU	DE
IE .	GR
AT	PL
FR	FR
MT	ES
IT	LU
GR	AT
PL	CZ
PT	HU
CZ	IT
HU	SK
UK	UK
SK	LT
LV	EE
EE	PT
LT	LV

### **Criticisms**

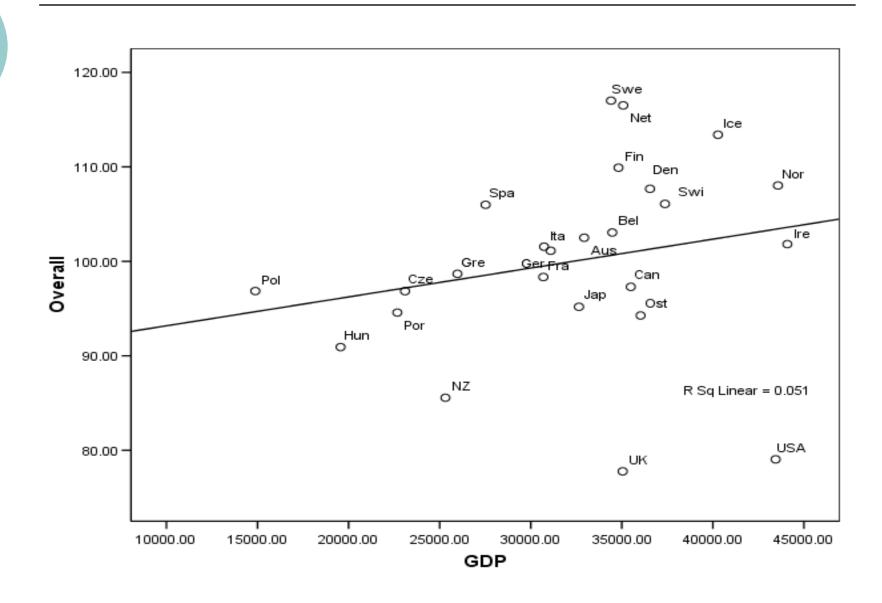
#### Data driven

- Countries without some or all indicators
- Some well-being domains not represented
- Focus on older children
- Out of date
- Summarising indicators
  - Z scores implied weights
  - No weights
  - Limited direct access to sample data
  - Cumulating % without regard to confidence intervals
  - No measures of dispersion
  - Validity and reliability

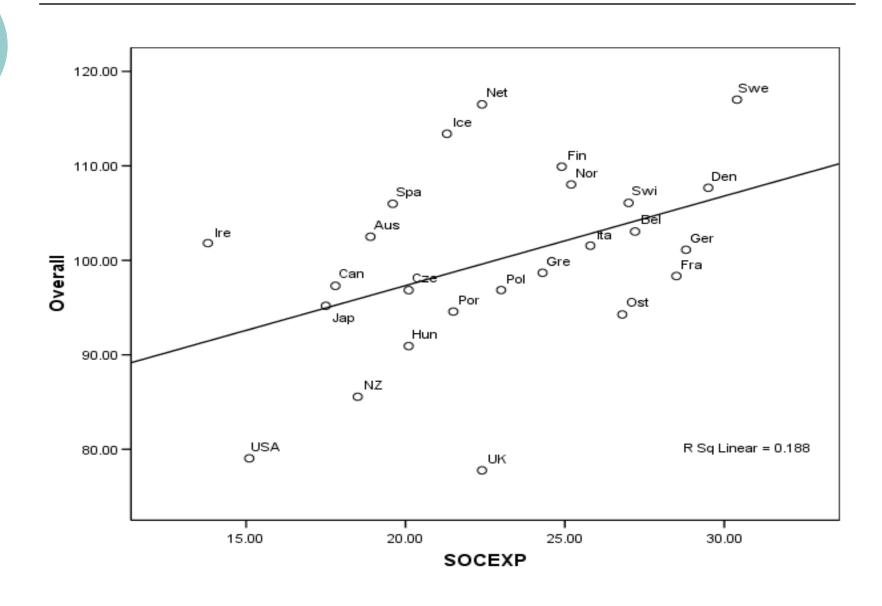
### **Discussion**

- Our index first attempt
- Academic probably too complex
- Explored scope for a simpler index
- Domains more important than overall ranking
- They get closer to why questions and thus policy

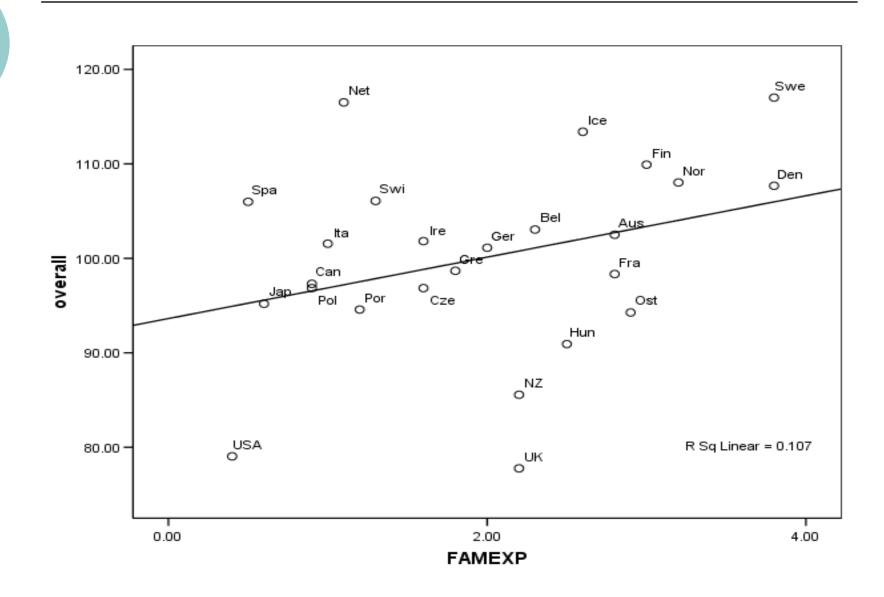
# Overall child well-being and GDP per capita complete countries



# Child well-being and expenditure on social protection benefits as % GDP 2003

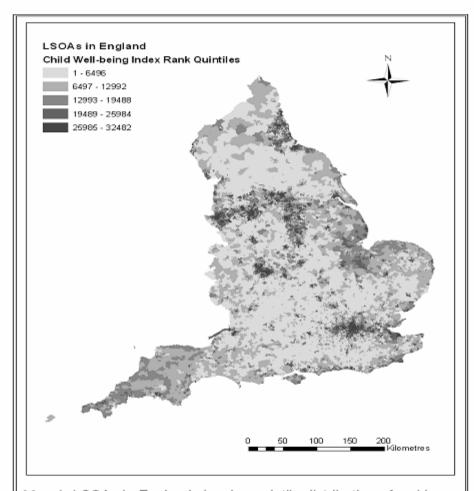


# Child well-being by expenditure on family benefits and services as % GDP all countries

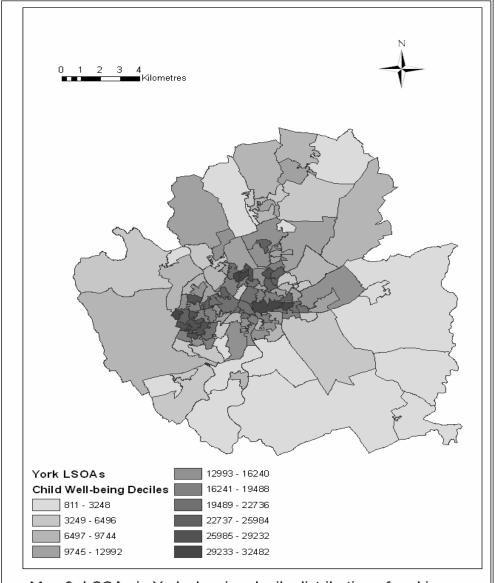


# Index at small area level: Oxford/York collaboration

- Domains
  - Material well-being
  - Health
  - Education
  - Crime
  - Housing
  - Environment
  - Children in need.
- Geography LLSOA



Map 1: LSOAs in England showing quintile distribution of rankings of the overall Child Well-being Index. Lighter shades indicate higher levels of well-being



Map 3: LSOAs in York showing decile distribution of rankings of the overall Child Well-being Index. Lighter shades indicate higher levels of well-being

### Rank order of LAs out of 355 Lower =Better

	Material	Education	Health	Environment	Crime	Housing	CiN	CWI
Oxford	266	324	174	44	214	285	301	259
York	140	141	220	122	190	207	150	167

#### **Next**

- Survey of child well-being in the UK
- Good Childhood Inquiry
- ◆ School based 15,000 aged 10,12 and 14
- Focus on well-being
- Repeated every two years

# EU now heavily engaged in the issue of child well-being

- NAPs' experts devoted to child well-being in 2007
- Portuguese Presidency priority
- Social Protection Group Indicators Sub committee report on child poverty and child well-being
- New element in SILC 2009 onwards

### **Northern Ireland**

- Major investment in child well-being research in Ireland
- ◆ HBSC not in NI but PISA is?
- BHPS enhanced sample (youth)
- FRS series child poverty and deprivation
- Quite a lot of series data with NI comparisons – devolution making it more difficult?
- Could replicate child index at LLSOA in NI