

UNICEF
Office of Research

Innocenti Report Card 11



Child well-being in rich countries

A comparative overview

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The *Report Card* series is designed to monitor and compare the performance of economically advanced countries in securing the rights of their children.

In 1988 the United Nations Children's Fund (UNICEF) established a research centre to support its advocacy for children worldwide and to identify and research current and future areas of UNICEF's work. The prime objectives of the Office of Research are to improve international understanding of issues relating to children's rights, to help facilitate full implementation of the Convention on the Rights of the Child supporting advocacy worldwide. The Office aims to set out a comprehensive framework for research and knowledge within the organization in support of its global programmes and policies. Through strengthening research partnerships with leading academic institutions and development networks in both the North and South, the Office seeks to leverage additional resources and influence in support of efforts towards policy reform in favour of children.

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Child well-being in rich countries

A comparative overview

PART ONE presents a league table of child well-being in 29 of the world's advanced economies.

PART TWO looks at what children say about their own well-being (including a league table of children's life satisfaction).

PART THREE examines changes in child well-being in advanced economies over the first decade of the 2000s, looking at each country's progress in educational achievement, teenage birth rates, childhood obesity levels, the prevalence of bullying, and the use of tobacco, alcohol and drugs.

PART 1

A LEAGUE TABLE OF CHILD WELL-BEING

The table below ranks 29 developed countries according to the overall well-being of their children. Each country's overall rank is based on its average ranking for the five dimensions of child well-being considered in this review.

A light blue background indicates a place in the top third of the table, mid blue denotes the middle third, and dark blue the bottom third.

		Overall well-being	Dimension 1	Dimension 2	Dimension 3	Dimension 4	Dimension 5
		Average rank (all 5 dimensions)	Material well-being	Health and safety	Education	Behaviours and risks	Housing and environment
			(rank)	(rank)	(rank)	(rank)	(rank)
1	Netherlands	2.4	1	5	1	1	4
2	Norway	4.6	3	7	6	4	3
3	Iceland	5	4	1	10	3	7
4	Finland	5.4	2	3	4	12	6
5	Sweden	6.2	5	2	11	5	8
6	Germany	9	11	12	3	6	13
7	Luxembourg	9.2	6	4	22	9	5
8	Switzerland	9.6	9	11	16	11	1
9	Belgium	11.2	13	13	2	14	14
10	Ireland	11.6	17	15	17	7	2
11	Denmark	11.8	12	23	7	2	15
12	Slovenia	12	8	6	5	21	20
13	France	12.8	10	10	15	13	16
14	Czech Republic	15.2	16	8	12	22	18
15	Portugal	15.6	21	14	18	8	17
16	United Kingdom	15.8	14	16	24	15	10
17	Canada	16.6	15	27	14	16	11
18	Austria	17	7	26	23	17	12
19	Spain	17.6	24	9	26	20	9
20	Hungary	18.4	18	20	8	24	22
21	Poland	18.8	22	18	9	19	26
22	Italy	19.2	23	17	25	10	21
23	Estonia	20.8	19	22	13	26	24
23	Slovakia	20.8	25	21	21	18	19
25	Greece	23.4	20	19	28	25	25
26	United States	24.8	26	25	27	23	23
27	Lithuania	25.2	27	24	19	29	27
28	Latvia	26.4	28	28	20	28	28
29	Romania	28.6	29	29	29	27	29

Lack of data on a number of indicators means that the following countries, although OECD and/or EU members, could not be included in the league table of child well-being: Australia, Bulgaria, Chile, Cyprus, Israel, Japan, Malta, Mexico, New Zealand, the Republic of Korea, and Turkey.

Introduction

The league table opposite presents the latest available overview of child well-being in 29 of the world's most advanced economies.

Five dimensions of children's lives have been considered: material well-being, health and safety, education, behaviours and risks, and housing and environment. In total, 26 internationally comparable indicators have been included in the overview (see Box 1).

The table updates and refines the first UNICEF overview of child well-being published in 2007 (*Report Card 7*).¹ Changes in child well-being over the first decade of the 2000s are examined in Part 3.

Key findings

- » The Netherlands retains its position as the clear leader and is the only country ranked among the top five countries in all dimensions of child well-being.
- » The Netherlands is also the clear leader when well-being is evaluated by children themselves – with 95% of its children rating their own lives above the mid-point of the *Life Satisfaction Scale* (see Part 2).
- » Four Nordic countries – Finland, Iceland, Norway and Sweden – sit just below the Netherlands at the top of the child well-being table.
- » Four southern European countries – Greece, Italy, Portugal and Spain – are placed in the bottom half of the table.

- » The bottom four places in the table are occupied by three of the poorest countries in the survey, Latvia, Lithuania and Romania, and by one of the richest, the United States.
- » Overall, there does not appear to be a strong relationship between per capita GDP and overall child well-being. The Czech Republic is ranked higher than Austria, Slovenia higher than Canada, and Portugal higher than the United States.
- » There are signs that the countries of Central and Eastern Europe are beginning to close the gap with the more established industrial economies (see Part 3).

Change over a decade

Although changes in methods and structure make it difficult to make comparisons between the first two issues of the UNICEF overview of child well-being (see Part 3) it is nonetheless clear that there have been some significant changes over the first decade of the 2000s.

- » Overall, the story of the first decade of the 2000s is one of widespread improvement in most, but not all, indicators of children's well-being. The 'low family affluence' rate, the infant mortality rate, and the percentage of young people who smoke cigarettes, for example, have fallen in every single country for which data are available.

Data sources and background papers

The data sources used for this report are set out in the three background papers detailed below and available at <http://www.unicef-irc.org>

Martorano, B., L. Natali, C. de Neubourg and J. Bradshaw (2013). 'Child Well-being in Advanced Economies in the Late 2000s', *Working Paper 2013-01*. UNICEF Office of Research, Florence.
http://www.unicef-irc.org/publications/pdf/iwp_2013_1.pdf

Martorano, B., L. Natali, C. de Neubourg and J. Bradshaw (2013). 'Child Well-being in Economically Rich Countries: Changes in the first decade of the 21st century', *Working Paper 2013-02*. UNICEF Office of Research, Florence.
http://www.unicef-irc.org/publications/pdf/iwp_2013_2.pdf

Bradshaw, J., B. Martorano, L. Natali and C. de Neubourg (2013). 'Children's Subjective Well-being in Rich Countries', *Working Paper 2013-03*. UNICEF Office of Research, Florence.
http://www.unicef-irc.org/publications/pdf/iwp_2013_3.pdf

- » Spain has slipped down the rankings – from 5th out of 21 countries in the early years of the decade to 19th out of 29 countries in 2009/2010.
- » The United Kingdom has risen up the rankings from bottom place (21st out of 21 countries) in 2000/2001 to a mid-table position today.

Part 3 of this report examines changes over the first decade of the 2000s in more detail.

Measuring progress for children

The league table of child well-being is designed to measure and compare progress for children across the developed world. Its purpose is to record the standards achieved by the most advanced nations and to contribute to debate in all countries about how such standards might be achieved.

As a moral imperative, the need to promote the well-being of children is widely accepted. As a pragmatic imperative, it is equally deserving of priority; failure to protect and promote the well-being of children is associated with increased risk across a wide range of later-life outcomes. Those outcomes range from impaired cognitive development to lower levels of school achievement, from reduced skills and expectations to lower productivity and earnings, from higher rates of unemployment to increased dependence on welfare, from the prevalence of antisocial behaviour to involvement in crime, from the greater likelihood of drug and alcohol abuse to higher levels of teenage births, and from increased health care costs to a higher incidence of mental illness.^{ii, iii}

The case for national commitment to child well-being is therefore compelling both in principle and in practice. And to fulfil that commitment, measuring progress in protecting and promoting the well-being of children is essential to policy-making, to advocacy, to the cost-effective allocation of limited resources, and to the processes of transparency and accountability.

International comparability

The measurement of child well-being, however, is a relatively new area of study and the overview presented here remains a work in progress. Chief among its limitations is the fact that internationally comparable data on children's lives are not sufficiently timely. Between the collection of data in a wide variety of different settings and their publication in quality-controlled, internationally comparable form the time-lag is typically two to three years. This means that most of the statistics on child well-being used in this report, though based on the latest available data, apply to the period 2009–2010. Such a delay would be frustrating at the best of times. But the last three years have been far from the best of times. Beginning in late 2008, economic downturn in many developed nations has seen rising unemployment and falls in government expenditures which cannot but affect the lives of many millions of children. Data from 2009 and 2010 capture only the beginning of this turbulence. Nonetheless, for the most part, the data used in this overview track long-term trends and reflect the results of long-term investments in children's lives. Average levels of

school achievement, or immunization rates, or the prevalence of risk behaviours, for example, are not likely to be significantly changed in the short term by the recessions of the last three years.

For the time being, it must be accepted that data-lag is part of the entry price for international comparisons of child well-being. And although national-level monitoring of children's lives is the more important task, UNICEF believes that international comparison can also play a part. It is international comparison that can show what is achievable in the real world, highlight strengths and weaknesses in individual countries, and demonstrate that child well-being is policy-susceptible. And it is international comparison that can say to politicians, press and public everywhere – *'This is how your performance in protecting children compares with the record of other nations at a similar level of development.'*

Finally, any single overview of a complex and multidimensional issue carries a risk of hiding more than it reveals. The following pages therefore set out to make this overview of child well-being as transparent as possible by examining each of its dimensions in turn.

Box 1 How child well-being is measured

The table below shows how the overview of child well-being has been constructed and sets out the full list of indicators used. The score for each dimension has been calculated by averaging the scores for each component. Similarly, component scores are arrived at by averaging the scores for each indicator.

Dimensions	Components	Indicators	Figure no.	
Dimension 1 Material well-being Figure 1.0	Monetary deprivation	Relative child poverty rate	1.1a	
		Relative child poverty gap	1.1b	
	Material deprivation	Child deprivation rate	1.2a	
		Low family affluence rate	1.2b	
Dimension 2 Health and safety Figure 2.0	Health at birth	Infant mortality rate	2.1a	
		Low birthweight rate	2.1b	
	Preventive health services	Overall immunization rate	2.2	
Dimension 3 Education Figure 3.0	Participation	Childhood mortality	2.3	
		Achievement	Participation rate: early childhood education	3.1a
			Participation rate: further education, age 15–19	3.1b
	NEET rate (% age 15–19 not in education, employment or training)		3.1c	
	Achievement	Average PISA scores in reading, maths and science	3.2	
Dimension 4 Behaviours and risks Figure 4.0	Health behaviours	Being overweight	4.1a	
		Eating breakfast	4.1b	
		Eating fruit	4.1c	
		Taking exercise	4.1d	
	Risk behaviours	Teenage fertility rate	4.2a	
		Smoking	4.2b	
		Alcohol	4.2c	
		Cannabis	4.2d	
	Exposure to violence	Fighting	4.3a	
		Being bullied	4.3b	
Dimension 5 Housing and environment Figure 5.0	Housing	Rooms per person	5.1a	
		Multiple housing problems	5.1b	
	Environmental safety	Homicide rate	5.2a	
		Air pollution	5.2b	

Dimension 1 Material well-being

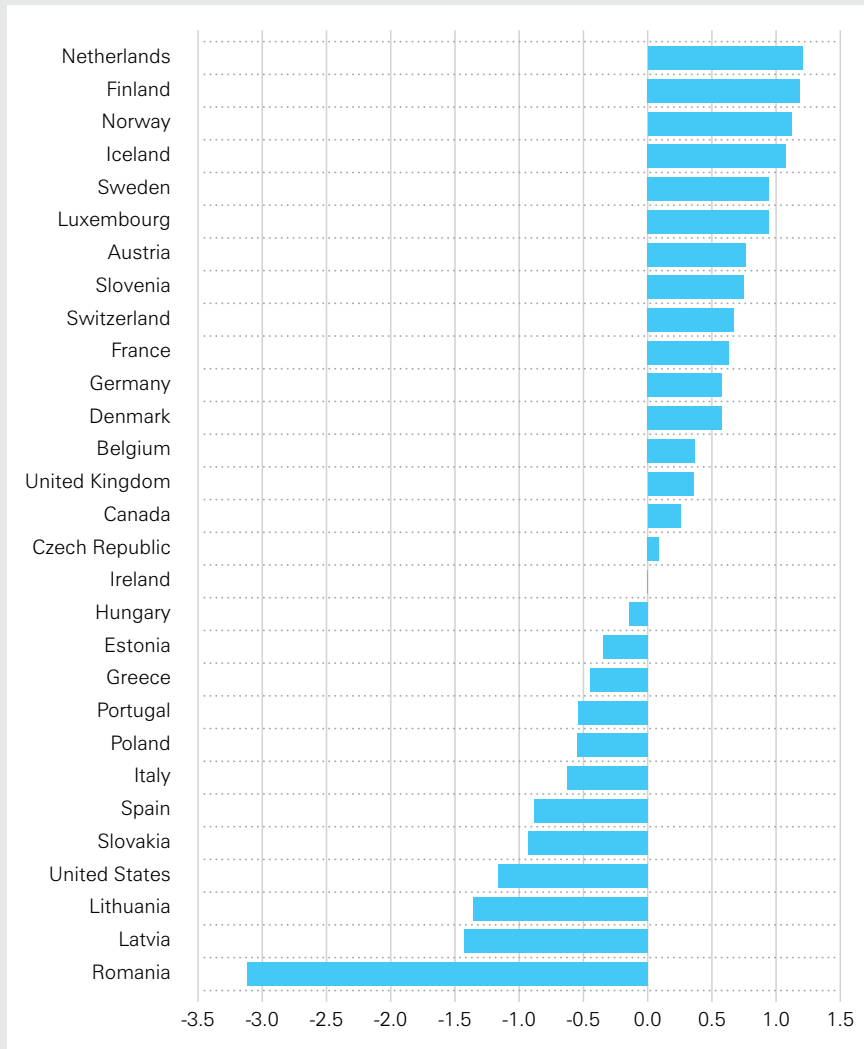


Figure 1.0 An overview of children's material well-being

The league table of children's material well-being shows each country's performance in relation to the average for the 29 developed countries under review. The table is scaled to show each country's distance above or below that average.

The length of each bar shows each country's distance above or below the average for the group as a whole. The unit of measurement is the 'standard deviation' – a measure of the spread of scores in relation to the average.

Assessing material well-being

COMPONENTS	INDICATORS
Monetary deprivation	Relative child poverty rate (% of children living in households with equivalent incomes below 50% of national median)
	Child poverty gap (distance between national poverty line and median incomes of households below poverty line)
Material deprivation	Index of child deprivation (% of children lacking specific items)
	Family affluence scale (% of children reporting low family affluence)

Children’s material well-being

The table opposite (Figure 1.0) presents an overview of children’s material well-being in developed countries. Overall, it suggests that material well-being is highest in the Netherlands and in the four Nordic countries and lowest in Latvia, Lithuania, Romania and the United States.

Two components of material well-being have been considered in arriving at this overview – relative income poverty and material deprivation. The strengths and weaknesses of both measures were discussed in detail in the previous report in this series (*Report Card 10*)^{iv} which argued that both measures are necessary to achieve a rounded view of children’s material well-being.

Relative poverty: child poverty rates

Two separate indicators have been used to measure monetary deprivation. They are the relative child poverty rate (Figure 1.1a) and the ‘child poverty gap’ (Figure 1.1b).

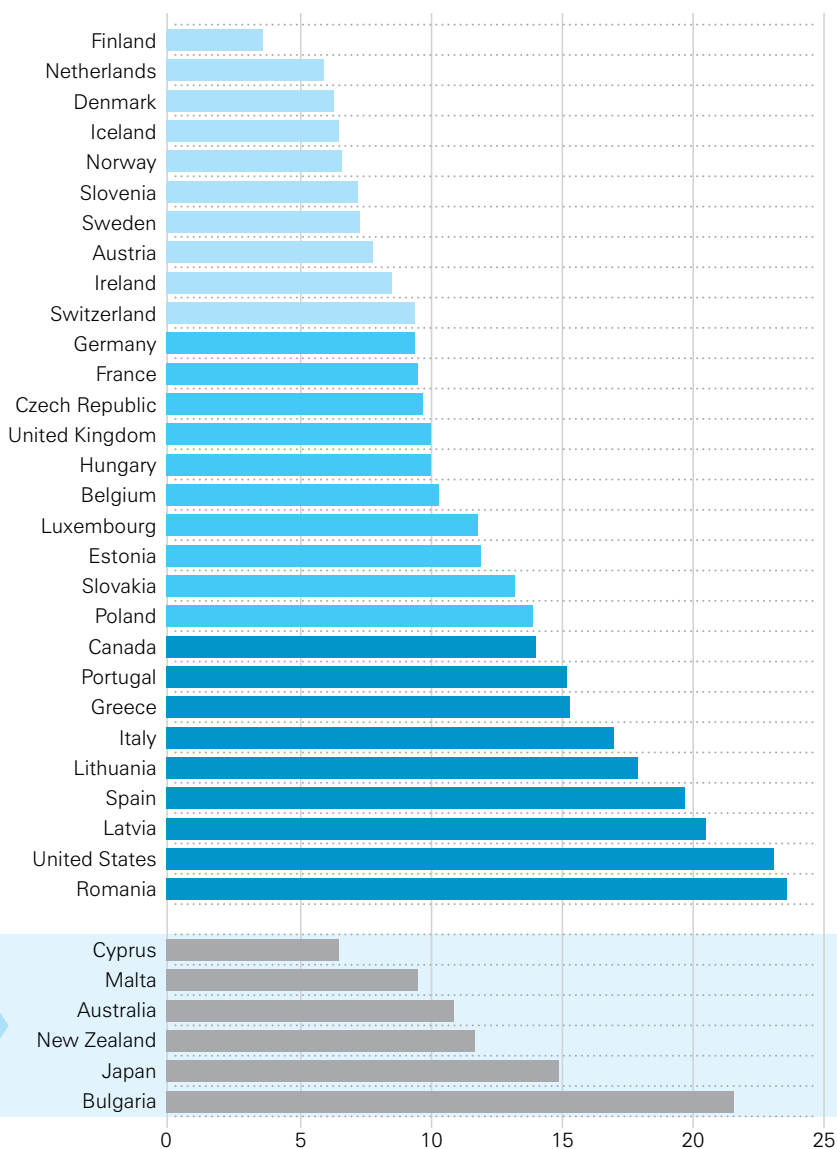
The relative child poverty rate shows the proportion of each nation’s

Countries with grey bars have not been included in the ranking tables, or in the overall league table of child well-being, as they have data for fewer than 75% of the total number of indicators used.

children living in households where disposable income is less than 50% of the national median (after taking taxes and benefits into account and adjusting for family size and composition). This is the definition of child poverty used by the majority of the world’s developed economies. Broadly speaking, it shows the proportion of children who are to some significant extent

Figure 1.1a Relative child poverty rates

% of children aged 0–17 living in households with equivalent incomes below 50% of national median

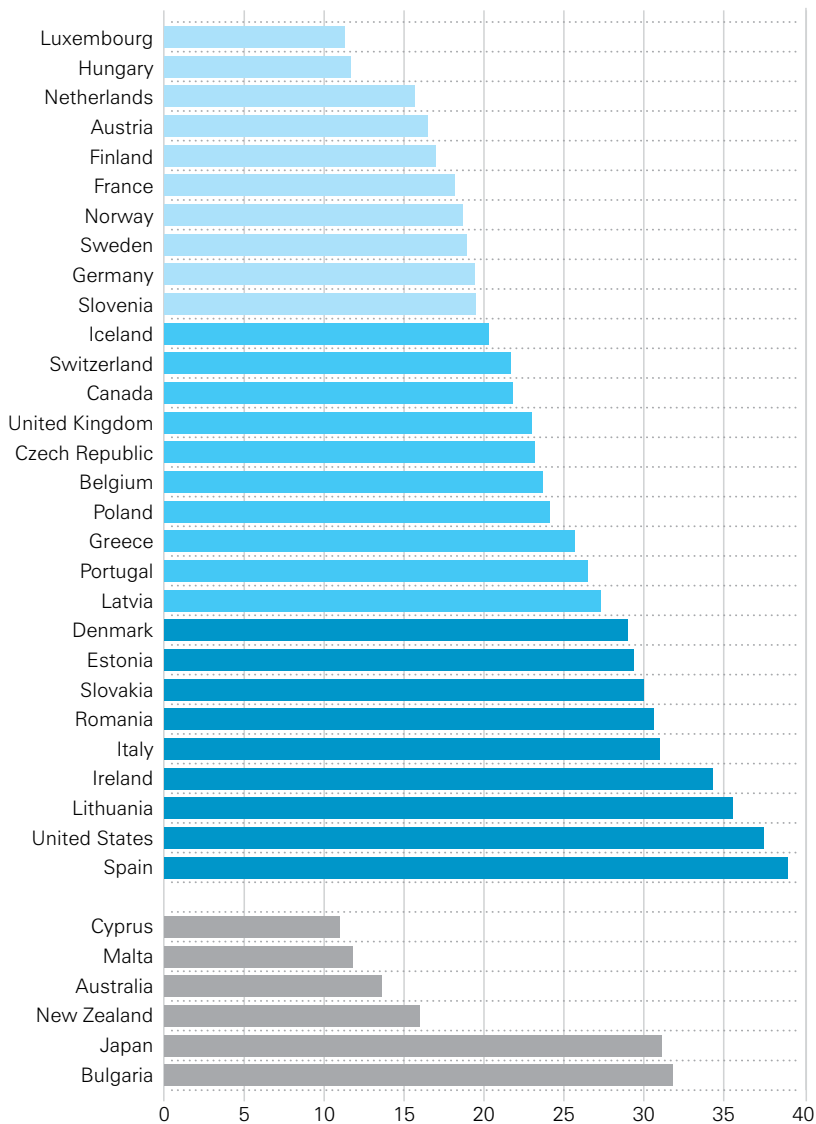


Findings

- » Finland is the only country with a relative child poverty rate of less than 5% and heads the league table by a clear margin of more than two percentage points.
- » The countries in the top half of the league table all have relative child poverty rates of less than 10%.
- » Four southern European countries – Greece, Italy, Portugal and Spain – have child poverty rates higher than 15% (along with Latvia, Lithuania, Romania and the United States).

Figure 1.1b Child poverty gaps

Gap between the poverty line and the median income of those below the poverty line – as % of the poverty line



Findings

- » Hungary and Luxembourg have the smallest child poverty gaps.
- » Denmark is an exception among Nordic countries in having a high child poverty gap (almost 30%). Only a small proportion of Danish children (6.3%) fall below the country's relative poverty line; but those who do, fall further below than in most other countries.
- » Several countries have allowed the child poverty gap to widen to more than 30%. They are Bulgaria, Ireland, Italy, Japan, Lithuania, Romania, Slovakia, Spain and the United States.

excluded from the advantages and opportunities which most children in that particular society would consider normal.

Relative poverty: the poverty gap

The relative child poverty rates in Figure 1.1a show what percentage of children live below each nation's relative poverty line. But they reveal nothing about how far below that line those children are being allowed to fall. To gauge the *depth* of relative child poverty, it is also necessary to look at the 'child poverty gap' – the distance between the poverty line and the median incomes of those below the line.

Figure 1.1b shows this 'child poverty gap' for each country.

Considering 'rate' and 'gap' together shows six countries in the bottom third of both tables. They are Italy, Latvia, Lithuania, Romania, Spain and the United States. By contrast, there are also six countries that feature in the top third of both tables – Austria, Finland, Netherlands, Norway, Slovenia and Sweden.

What this means for the children of Spain or the United States, for example, is that 20% or more fall below the relative poverty line and that, on average, they fall almost 40% below that line. In the Netherlands or Austria, on the other hand, 6% to 8% of children fall below the relative poverty line and, on average, they fall approximately 16% below.

Taken together, these two child poverty indicators – the rate and the gap – make up the relative income component of children's material well-being.

**Material deprivation:
the *Child Deprivation Index***

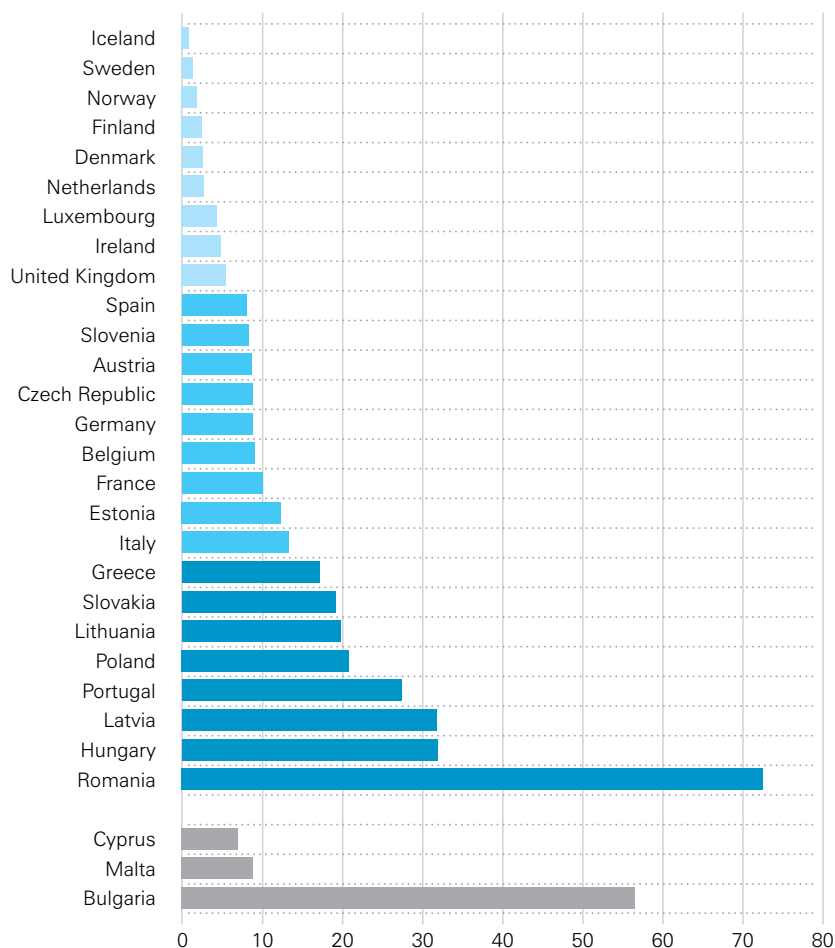
Relative income measures, however, have little to say about the actual living conditions of children in different countries. The fact that a higher percentage of children live in relative income poverty in Canada than in the Czech Republic, for

example, does not mean that children’s actual living standards are lower in Canada (only that a greater proportion of Canadian children live in households where disposable income is 50% of the median). In order to arrive at a more complete picture of child poverty, a measure of actual material deprivation has therefore also been included.

Again, two indicators have been used. The first is the UNICEF *Child Deprivation Rate* (introduced in *Report Card 10*)^v which shows what percentage of children in each nation lack two or more of the following 14 items:

1. Three meals a day
2. At least one meal a day with meat, chicken or fish (or vegetarian equivalent)
3. Fresh fruit and vegetables every day
4. Books suitable for the child’s age and knowledge level (not including schoolbooks)
5. Outdoor leisure equipment (bicycle, roller-skates, etc.)
6. Regular leisure activities (swimming, playing an instrument, participating in youth organizations, etc.)
7. Indoor games (at least one per child, including educational baby toys, building blocks, board games, computer games, etc.)
8. Money to participate in school trips and events
9. A quiet place with enough room and light to do homework
10. An Internet connection
11. Some new clothes (i.e. not all second-hand)
12. Two pairs of properly fitting shoes
13. The opportunity, from time to time, to invite friends home to play and eat
14. The opportunity to celebrate special occasions such as birthdays, name days, religious events, etc.

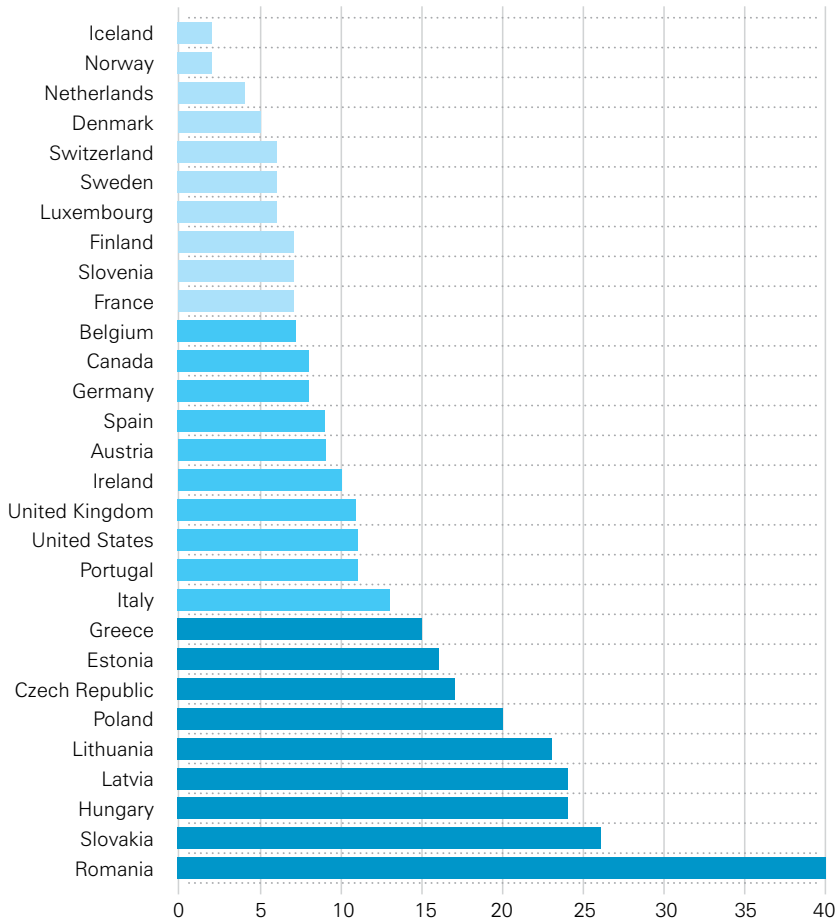
Figure 1.2a Child deprivation rates
% of children lacking two or more specific items – see text



Findings

- » The five Nordic countries and the Netherlands claim the top six places.
- » Luxembourg and Ireland are the only other countries with child deprivation rates below 5% (although the United Kingdom comes close at 5.5%).
- » France and Italy have child deprivation rates higher than 10%.
- » Four countries have child deprivation rates of more than 25% – Hungary, Latvia, Portugal and Romania.

Figure 1.2a presents the child deprivation rate for 26 countries (no comparable data are available for Canada, Switzerland or the United States).

Figure 1.2b Percentage of children reporting low family affluence

Findings

- » The Netherlands and the Nordic countries, along with Luxembourg and Switzerland, have the smallest percentage of children reporting low family affluence.
- » Low family affluence rates are highest in eight Central and Eastern European countries – the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia.

Material deprivation: low family affluence

The second indicator used to measure material deprivation is based on written questionnaires completed by representative samples of children aged 11, 13, and 15 in each country.^{vi}

The relevant part of the questionnaire asks:

- » Does your family own a car, van or truck?
- » During the past 12 months, how many times did you travel away on holiday with your family?
- » How many computers does your family own?
- » Do you have your own bedroom for yourself?

The results are computed into the *Family Affluence Scale* used in Figure 1.2b to show the percentage of children in each country living in 'low affluence' families.

As might be expected, the child deprivation rate and the low family affluence rate produce broadly similar league table rankings. They are, however, different in that one focuses on the child and the other on the family. Taken together, they provide a more secure overview of children's material deprivation.

Real and relative

The differences between the two components of children's material well-being – relative poverty and material deprivation – are often misunderstood. It is not the case that one is a relative measure and the other absolute. Both are relative measures. Deprivation rates may appear to measure absolute poverty because they are based on a specific list of possessions rather than the median income of each nation. But those possessions are chosen to represent what most people consider normal for a child growing up in any wealthy country in the early 21st century. They are therefore relative to both time and place. The true difference between the two approaches is that one measures poverty in relation to an income norm that varies from country to country (the national median income) whereas the other measures poverty by a common standard for all of the countries under review.

Dimension 2 Health and safety

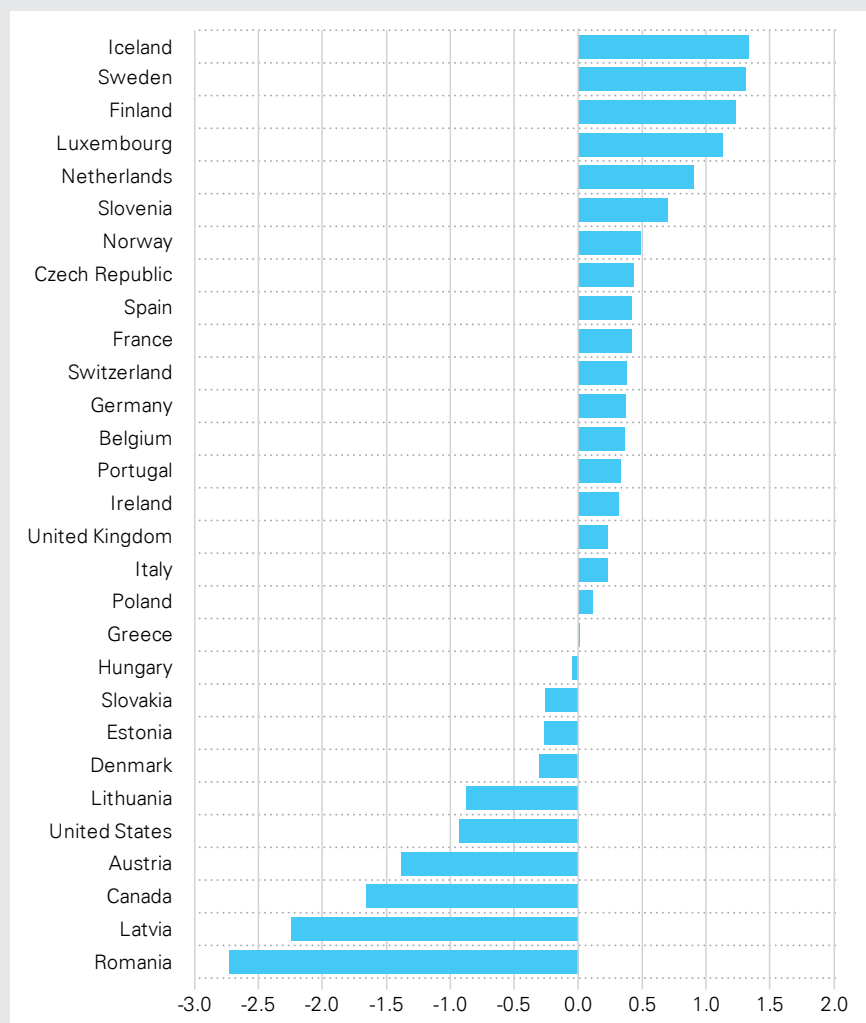


Figure 2.0 An overview of child health and safety

The league table of children’s health and safety shows each country’s performance in relation to the average for the 29 developed countries under review. The table is scaled to show each country’s distance above or below that average.

The length of each bar shows each country’s distance above or below the average for the group as a whole. The unit of measurement is the ‘standard deviation’ – a measure of the spread of scores in relation to the average.

Findings

- » Nordic countries again head the table, with Iceland, Sweden and Finland claiming the top three places.
- » Austria, Canada and Denmark are to be found towards the foot of the league table along with the United States. (In all of these cases the low ranking is partly attributable to low immunization rates.)

Assessing health and safety

COMPONENTS	INDICATORS
Health at birth	Infant mortality rate (deaths under 12 months old per 1,000 live births)
	Low birthweight rate (% babies born below 2,500 grammes)
Preventive health services	National immunization rate (average coverage for measles, polio and DPT3 for children age 12 to 23 months)
Child and youth mortality	Overall child and youth mortality rate (deaths per 100,000 aged 1 to 19)

Health and safety

The health dimension of children's well-being is based on three components for which internationally comparable data are available. The components are:

- health at birth – as measured by the infant mortality rate and the percentage of babies born with low birthweight (below 2,500 grammes).
- the availability of children's preventive health services – as measured by national immunization levels for measles, polio and DPT3.
- child health and safety – as measured by the death rate of children and young people (aged 1 to 19) from all causes.

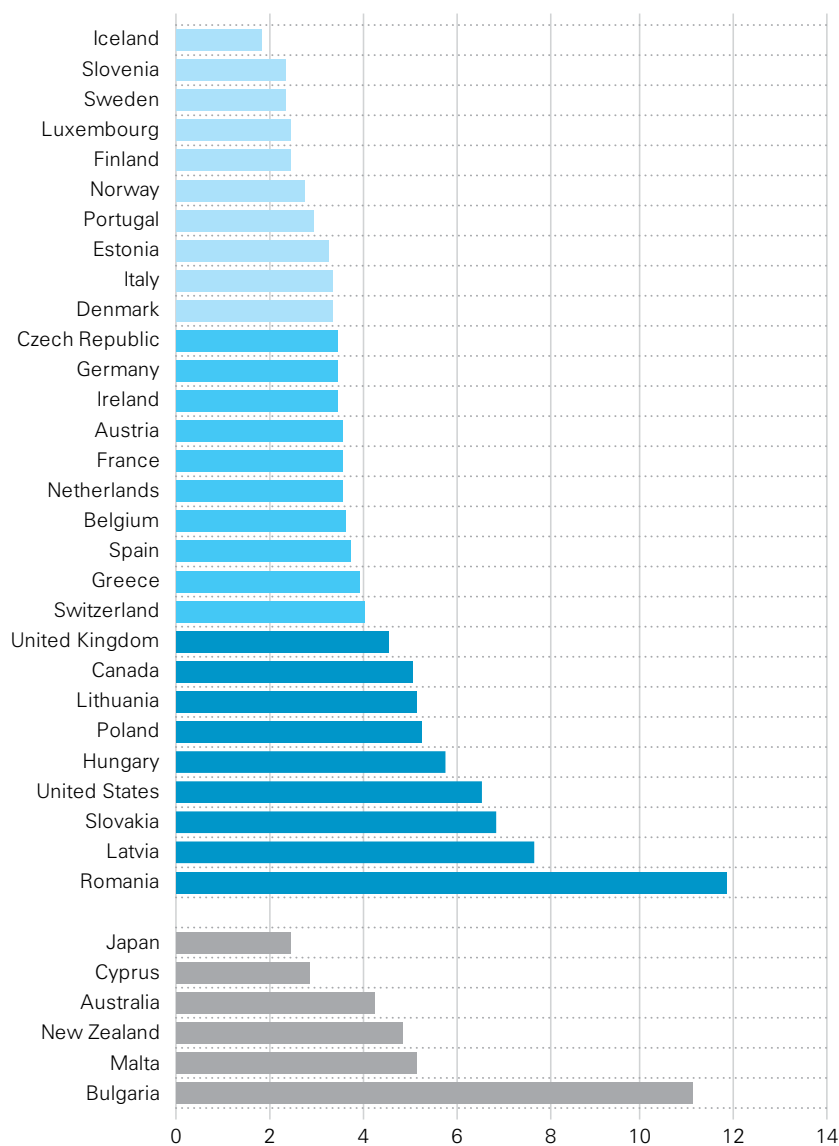
The chart on the previous page (Figure 2.0) combines these three components into a league table of child health for the 29 developed countries under review.

Health at birth: infant mortality

In all developed countries, infant mortality rates (IMRs) have been reduced to fewer than 10 infant deaths per thousand live births. The relatively small differences between countries therefore reflect not variations in the fundamentals of public health such as safe water and sanitation but variations in the commitment and the capacity to deliver whatever services are necessary to protect every mother-to-be, every birth, and every infant in the earliest days and weeks of life. The IMRs set out in Figure 2.1a may therefore be read as a measure of commitment to maternal and child health for all – including the mothers and children of the poorest and most marginalized families.

Figure 2.1a Infant mortality rates

Deaths under 12 months old per 1,000 live births



Findings

- » Three Nordic countries – Finland, Iceland and Sweden – plus Luxembourg and Slovenia – head the table with infant mortality rates of fewer than 2.5 deaths per 1,000 births.
- » 26 of the 35 countries have reduced infant mortality to 5 or fewer per 1,000 births.
- » The only countries with infant mortality rates higher than 6 per 1,000 births are Latvia, Romania, Slovakia and the United States.
- » Three of the richest nations in the developed world – Canada, the United Kingdom and the United States – are placed in the bottom third of the infant mortality league table.

It is possible that the low ranking of the United States in the league table of infant mortality is not justified: there is an as yet unresolved debate about whether infant mortality rates in the United States might include the deaths of extremely premature and/or low birthweight babies who are kept alive for a time by advanced neo-natal care but who, in other countries, might not be classified as 'live births'.

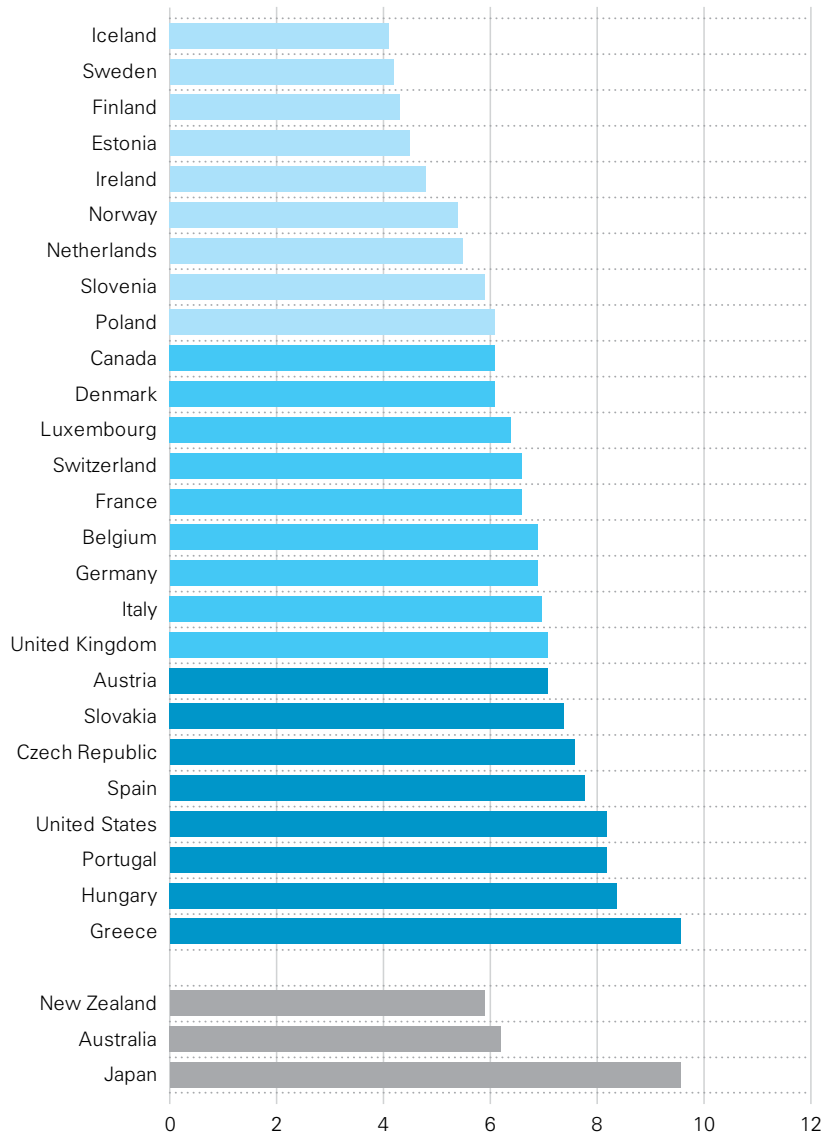
Health at birth: low birthweight

The second indicator used to measure health at the beginning of life is the proportion of babies who are born with low birthweights (below 2,500 grammes).

According to the United States Centers for Disease Control and Prevention, *"The birthweight of an infant is the single most important determinant of its chances of survival and healthy growth."*^{vii} It is also a guide to the general health, and health behaviours, of pregnant women and mothers, both of which are important to every other dimension of child well-being. Low birthweight is also known to be associated with increased risk across a range of health problems in childhood and on into adult life.

Figure 2.1b shows the percentage of babies born with low birthweight in each of the 29 countries for which data are available.

Figure 2.1b Low birthweight
% babies born below 2,500 grammes

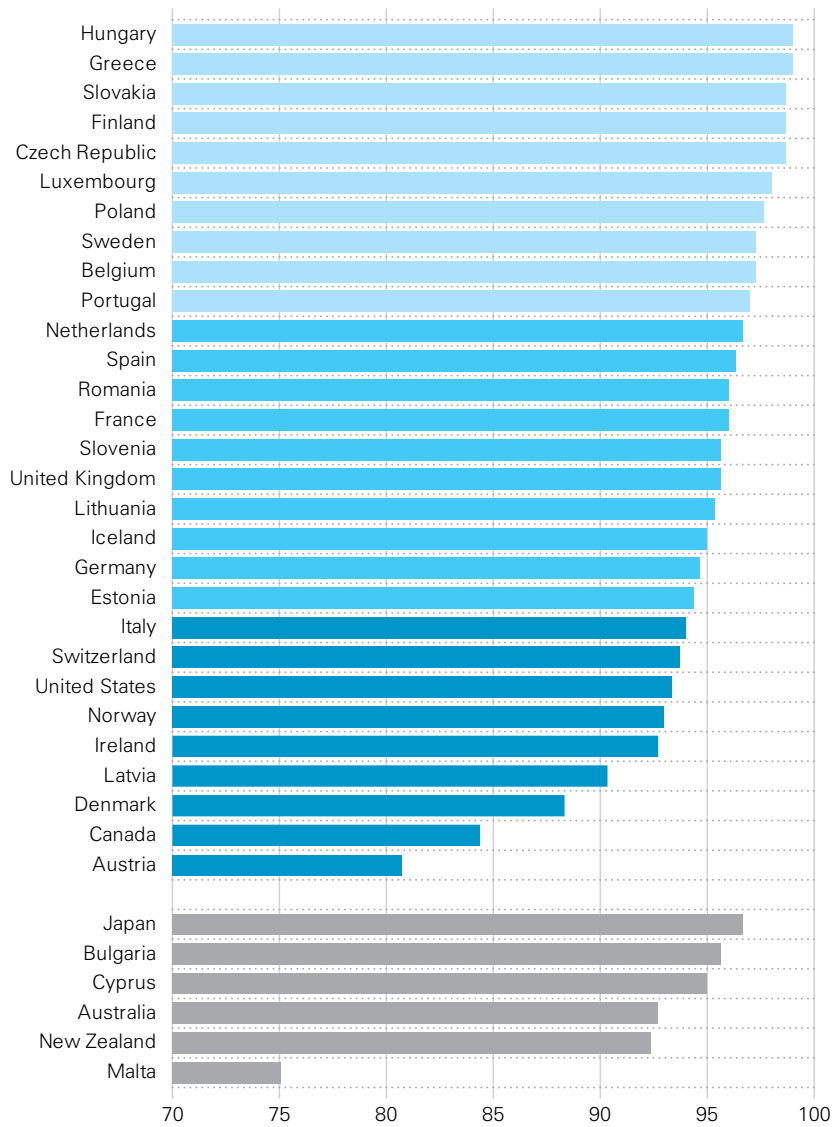


Findings

- » Five European countries – Estonia, Finland, Iceland, Ireland and Sweden – have succeeded in reducing the incidence of low birthweight below 5%.
- » Only in Greece, Hungary, Portugal and the United States does the low birthweight rate exceed 8%.

Figure 2.2 Immunization rates

Average coverage for measles, polio and DPT3 for children aged 12 to 23 months



Findings

- » Greece and Hungary head the table with 99% immunization coverage.
- » Three of the richest countries in the OECD – Austria, Canada and Denmark – are the only countries in which the immunization rate falls below 90%.

Preventive health services: immunization

The second component chosen to evaluate child health is the availability and effectiveness of each country’s preventive child health services. This has been measured by each country’s immunization rate (average vaccination coverage for measles, polio and DPT3).

Routine immunization rates in the developed nations are generally maintained at high levels, averaging close to 95%. As with infant mortality rates, the relatively small differences between countries can therefore be said to mirror commitment to the ideal of reaching out to every single child, including the most marginalized, with an essential preventive health service to which all children have a right.

Figure 2.2 presents an immunization league table for 29 countries.

It might be suspected that low immunization rates in countries such as Austria, Canada and Denmark have been affected by rumours, based on discredited research, linking the triple MMR vaccine (measles, mumps and rubella) with autism. This would not really be an ‘excuse’ for low coverage rates, as running a first-class immunization programme means making sure that the public is well informed and that false information is not allowed to put children at risk. But in fact the MMR scare would not appear to be the major cause of low immunization rates in Austria, Canada and Denmark – all of which have low rates even when measles vaccination is excluded from the calculations (in Canada, the measles

immunization rate is higher than for DPT3 or polio).

**Child health:
the 1 to 19 death rate**

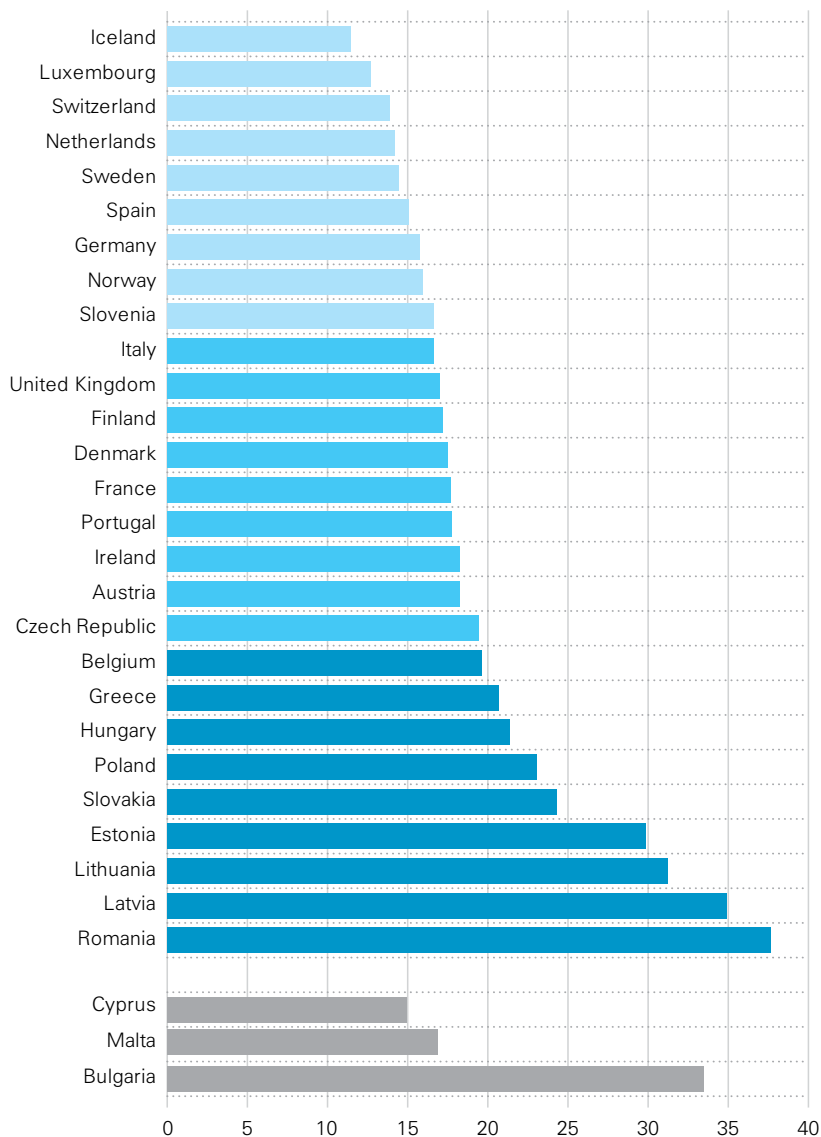
The third component used to build an overall picture of child health is the death rate among children and young people between the ages of 1 and 19.

Deaths in this age group are rare in advanced economies and the causes go beyond disease and the efficacy of health services to include deaths from suicide, murder, traffic injuries, drownings, falls and fires. Differences between countries in the death rate for children and young people in this age group may therefore be said to reflect overall levels of health and safety throughout childhood and adolescence.

Figure 2.3 presents the 1- to 19-year-old death rate for each country. In absolute numbers, the differences between countries are clearly small. But it is worth noting that if all European countries had the same child death rate as Iceland or Luxembourg then over 8,000 child deaths a year could be prevented – each one representing unimaginable anguish for the family concerned.

Taken together, the three components set out above provide an approximate guide to the health dimension of children’s well-being. Ideally, such an overview would also have included some indicator of children’s mental and emotional health, and of the prevalence of child abuse and neglect. But such issues are difficult to define and measure even within an individual country; internationally, no comparable data are available.

Figure 2.3 Child and youth mortality rates
Deaths per 100,000 aged 1 to 19



Findings

- » Iceland, Luxembourg, the Netherlands, Spain, Sweden and Switzerland head the table with child death rates below 15 per 100,000.
- » Central and Eastern European countries occupy the bottom third of the table – along with Belgium and Greece.

Dimension 3 Educational well-being

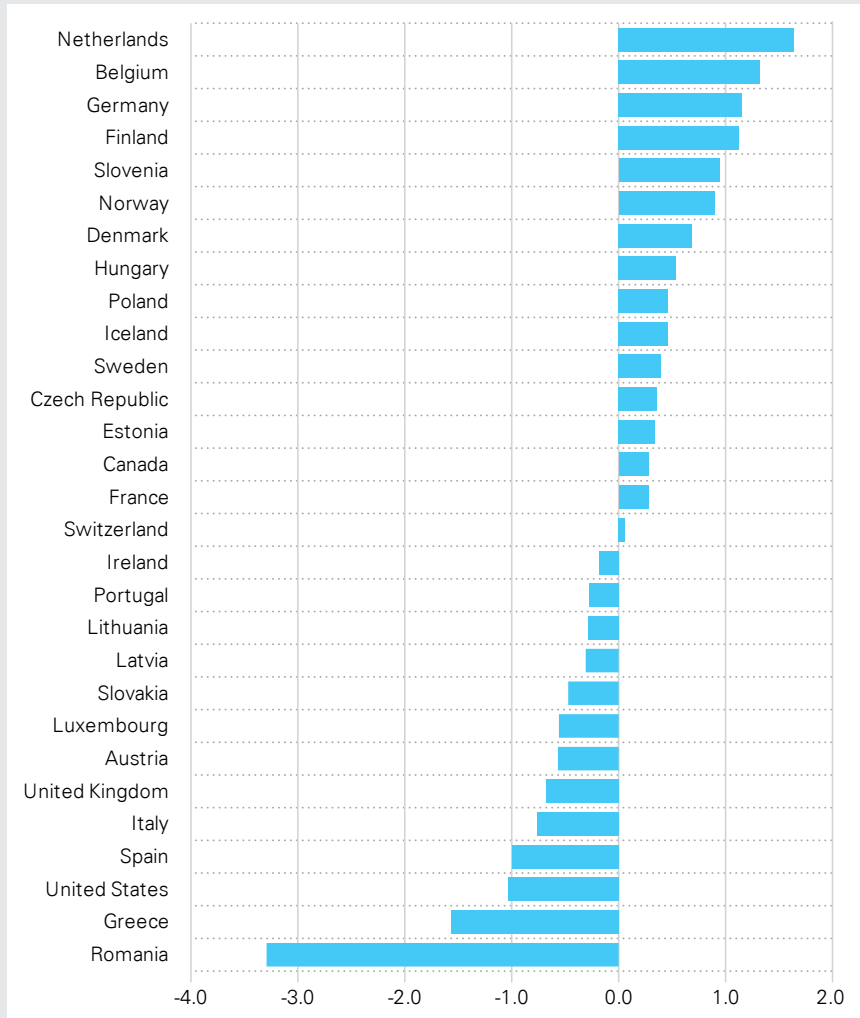


Figure 3.0 An overview of children's educational well-being

The league table of children's educational well-being shows each country's performance in relation to the average for the 29 developed countries under review. The table is scaled to show each country's distance above or below that average.

The length of each bar shows each country's distance above or below the average for the group as a whole. The unit of measurement is the 'standard deviation' – a measure of the spread of scores in relation to the average.

Findings

- » Educational well-being is seen to be highest in Belgium, Finland, Germany and the Netherlands – each of which achieves an overall score significantly above average for the 29 countries.
- » Greece, Romania, Spain and the United States show the lowest levels of educational well-being.

Assessing educational well-being

COMPONENTS	INDICATORS
Participation	Preschool participation rate (% of those aged between 4 years and the start of compulsory education who are enrolled in preschool)
	Further education participation rate (% of those aged 15 to 19 enrolled in further education)
	NEET rate (% aged 15 to 19 not in education, employment or training)
Achievement	Average score in PISA tests of reading, maths and science literacy

Educational well-being

In gauging educational well-being, two main components have been considered – participation rates and achievement levels. Taken together they provide an approximate guide to both quantity and quality of education. Figure 3.0 (opposite) combines the two into a single overview of children’s educational well-being for 29 developed countries.

Participation: early childhood education

The first component – participation – has been assessed by three indicators:

- a) participation in early childhood education
- b) participation in further education
- c) the proportion of young people, aged 15 to 19, who are not participating in education, training or employment.

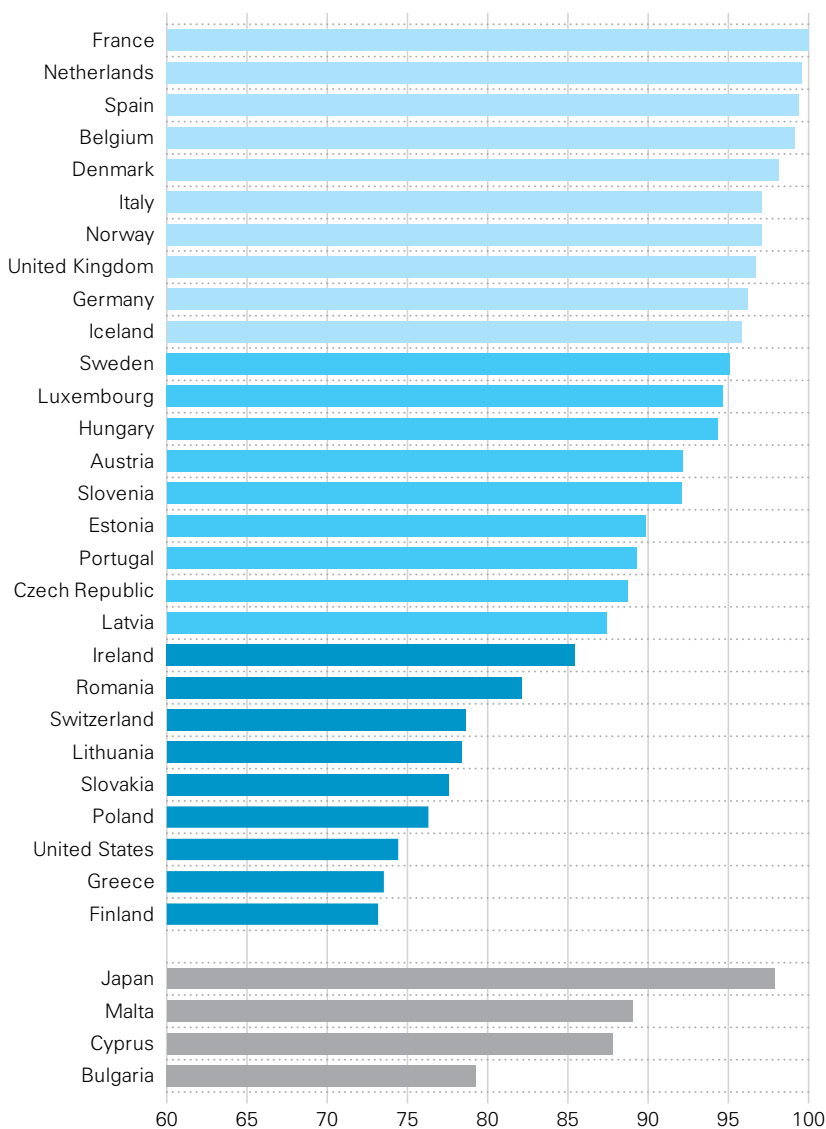
In recent times it has been widely acknowledged that the foundations of educational success are laid down before formal education begins.^{viii} In response to this and other pressures, all governments in developed countries have invested to a greater or lesser degree in free or subsidized preschool education.

The quality and quantity of that early years education is difficult to measure on an internationally comparable basis – a difficulty highlighted in *Report Card 7* (2007) which noted that the lack of any indicator of participation in early childhood education is a “glaring omission” from the attempt to build an overall picture of children’s well-being.^{ix}

The present report begins to make good that omission by including the preschool participation rate for 32 developed countries (Figure 3.1a).

Figure 3.1a Preschool enrolment rates

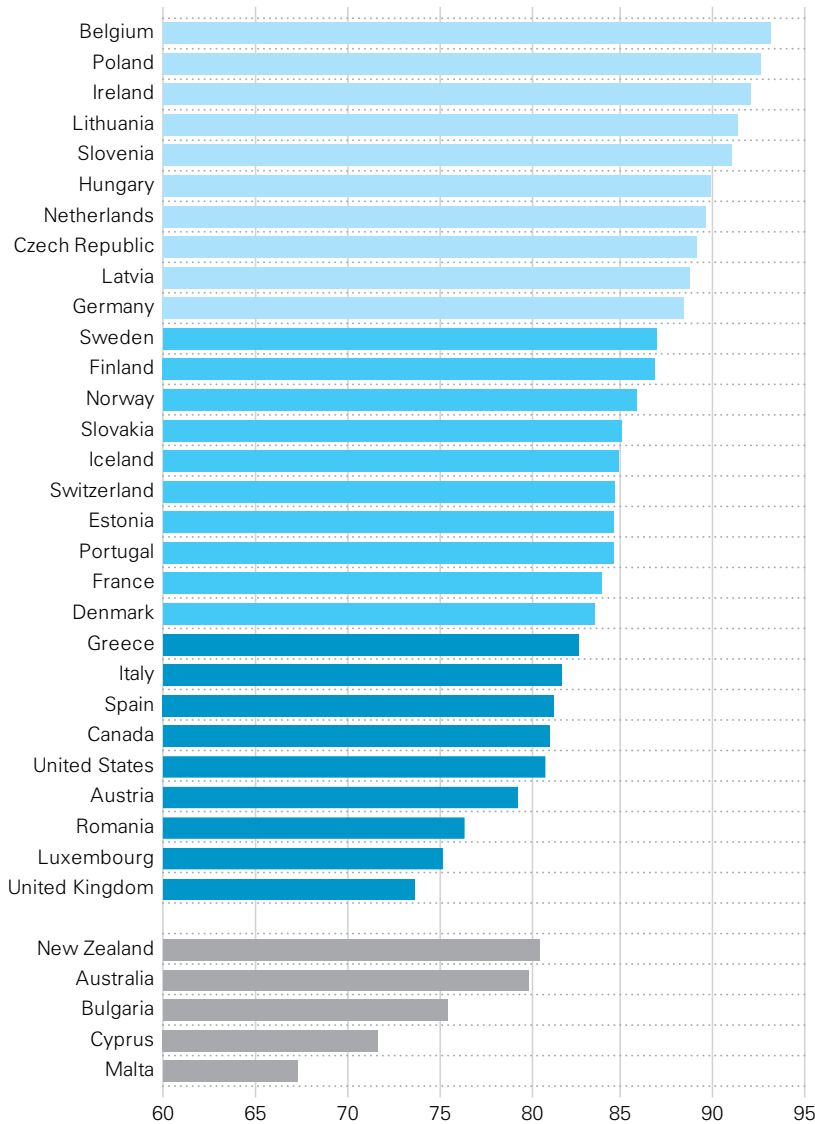
% of children aged between 4 years and the start of compulsory education who are enrolled in preschool



Findings

- » Early childhood education is virtually universal in Belgium, France, the Netherlands and Spain.
- » Preschool enrolment rates exceed 90% in half of the 32 countries listed.
- » In only eight countries do participation rates in early childhood education fall below 80% – Bulgaria, Finland (but see Box 2), Greece, Lithuania, Poland, Slovakia, Switzerland and the United States.

Figure 3.1b Participation in further education
% of children aged 15 to 19 in education



Note: It is possible that some countries with very small populations, for example Luxembourg and Malta, may show low rates of participation in further education because a proportion of the relevant age group are continuing their studies outside their own countries.

The age at which compulsory education begins varies between 4 and 7. The preschool participation rate is here defined as the percentage of children between the age of 4 and the beginning of compulsory education who are enrolled in preschools.

Further education

At the other end of the educational ladder is the further education participation rate (Figure 3.1b) which shows the percentage of young people aged 15 to 19 who are enrolled in schools and

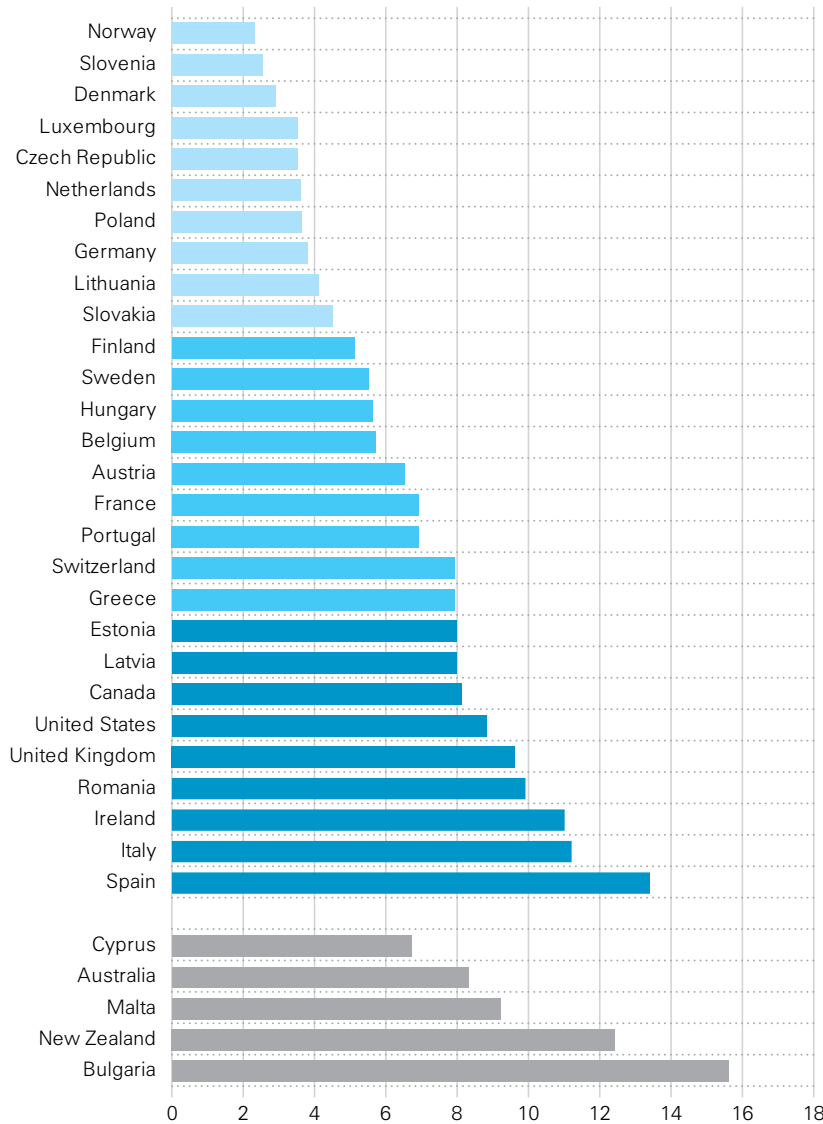
Findings

- » Five countries enrol 90% or more of their young people in further education – Belgium, Ireland, Lithuania, Poland and Slovenia.
- » Seven of the wealthiest OECD countries fall into the bottom third of the further education league table – Austria, Canada, Italy, Luxembourg, Spain, the United Kingdom and the United States.
- » The further education enrolment rate exceeds 80% in all of the more populous developed countries except the United Kingdom. The United Kingdom is the only developed country in which the further education participation rate falls below 75%; this may be the result of an emphasis on academic qualifications combined with a diverse system of vocational qualifications which have not yet succeeded in achieving either ‘parity of esteem’ or an established value in employment markets.

colleges. Participation in further education reflects ‘educational well-being’ in as much as it indicates successful passage through the years of compulsory schooling. It is also, of course, associated with a wider range of opportunities at the beginning of adult life.

Figure 3.1c NEET rate

% of children aged 15 to 19 not in education, employment or training



NEET rate

The third indicator of educational well-being looks at participation from a different perspective – the percentage of young people (aged 15 to 19) who are not participating in either education, employment or training (the so-called ‘NEET’ rate).

In all countries, NEET rates are affected by economic conditions

and employment opportunities as well as by the effectiveness of education systems in preparing young people for the transition to work. Equally obviously, a high NEET rate represents a threat to the present and future well-being of young adults, a disincentive to those still in the education system, and a waste of educational investment and human resources.

Findings

- » At the top of the table, Denmark, Norway and Slovenia have NEET rates below 3%.
- » At the foot of the table, Ireland, Italy and Spain have NEET rates of more than 10%.

Research in different countries has also shown associations between NEET status and mental health problems, drug abuse, involvement in crime, and long-term unemployment and welfare dependence.^x

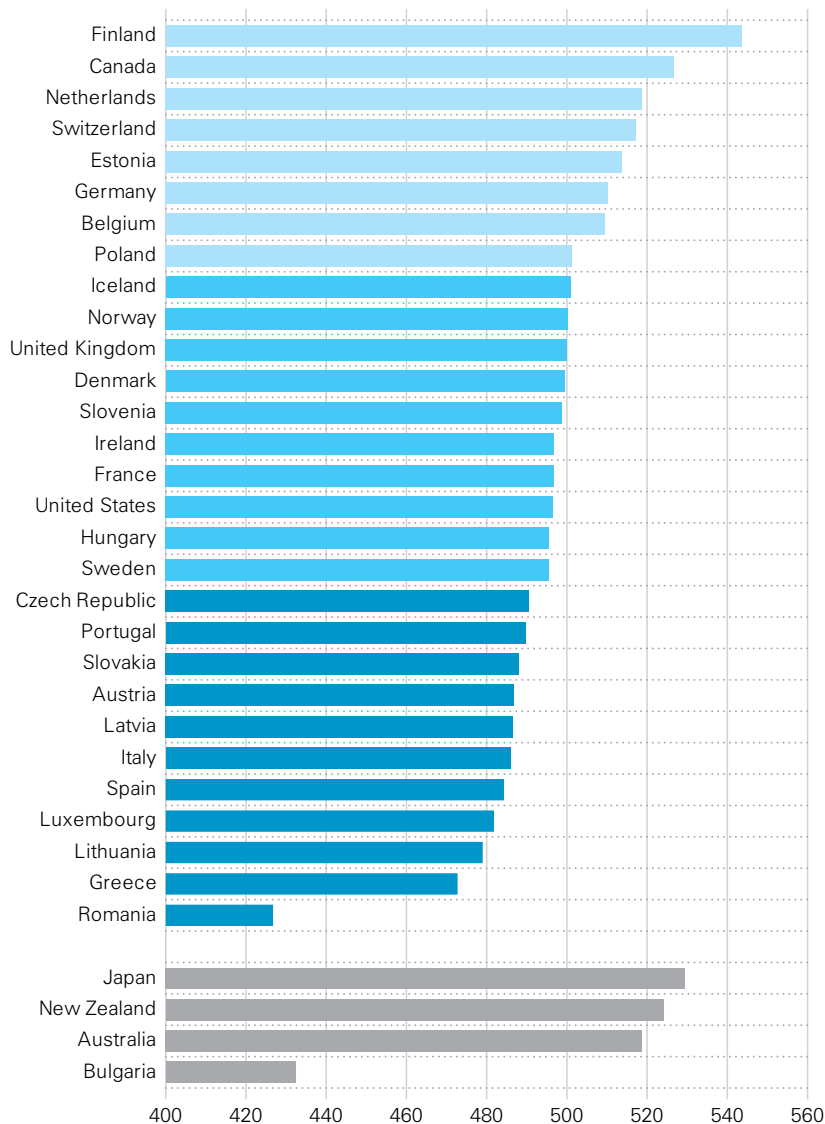
Figure 3.1c records the NEET rate for 33 advanced economies.

To make international comparisons fair, the data must refer to a similar period of time. Unfortunately, the latest available common year for NEET rates is 2009–2010. Figure 3.1c may therefore not reflect the current situation. It does however reflect the major impact of the current economic downturn on youth unemployment rates (which reached a peak of 18.3% in November 2009 and were slightly below that level in 2012). In total, more than 23 million young people in OECD countries now fall into the NEET category and more than half of this total are reported to have given up looking for work.^{xi}

Commenting on the impact of economic crisis on the transition from school to work, the OECD noted in 2011 that *“High general unemployment rates make this transition substantially more difficult, as those with more work experience are favoured over new entrants into the labour force.”*^{xii}

Figure 3.2 Educational achievement by age 15

Average score in PISA tests of reading, maths and science literacy

**Educational achievement**

The second component of educational well-being is the quality of the education received.

This key element of child well-being is of course difficult to define and measure on an internationally comparable basis. Ideally, the concept of 'quality' in education would embrace a broad range of

factors such as the development of social understanding and value formation (including education for citizenship) as well as the opportunity to develop the diverse abilities and potentials of young people. But this lies in the future. At present, the only practical measure of quality in education is provided by the OECD's *Programme of International Student Assessment*

Findings

- » Finland is a remarkable outlier – registering a score almost 20 points clear of the second placed country (see Box 2).
- » Canada and the Netherlands take second and third places.
- » Three of Europe's wealthiest countries, Austria, Luxembourg and Sweden, find themselves in the bottom half of the educational achievement table, as do all four countries of southern Europe.
- » Romania is also an outlier, registering a score more than 40 points below the next lowest country in the table.
- » Australia, Japan and New Zealand would all have been placed in the top five places had it been possible to include them in the main league table (see note page 7).

(PISA) which measures pupils' abilities in three basic competences – reading, maths and science. Repeated every three years, the tests are administered to representative samples of 15-year-olds and are intended to measure knowledge and skills in relation to the demands of managing lives and careers in the modern world. In total, 34 member countries of the OECD, plus non-member partner countries, participate in this evaluation of educational achievement.

Figure 3.2 presents an overview of the results of the latest PISA survey for the countries under review. In each case, the scores shown are an average of results in reading, maths and science. All scores have been re-presented on a common scale based on an unweighted average

score for all participating countries (re-set to 500 to make interpretation easier).

Disadvantage

The indicators used here to measure children's overall educational well-being broadly reflect each nation's commitment to fulfilling every child's right to be adequately prepared for the demands of the world in which he or she will live. Managing and negotiating that world – making decisions about jobs and careers, families and homes, finances and pensions, citizenship and community participation – demands a highly developed ability to acquire and analyse new information and to adapt to changing circumstances. In such a society, the educationally disadvantaged are likely to be very much more disadvantaged than in the past. They are also likely to find it ever more difficult to benefit from, and contribute to, the complex societies in which they live.¹ As with the other dimensions of child well-being considered in this report, educational well-being is therefore a critical measure both for children today and for their societies tomorrow.

¹ Report Card 9 in this series focused on this issue, showing that different countries do much more than others for their lowest-achieving pupils (i.e. have a much smaller 'educational achievement gap' between the lowest-achieving 10% and the national average).

Box 2 The Finland paradox

The fact that Finland has the lowest rate of preschool enrolment (Figure 3.1a) and the highest level of educational achievement (Figure 3.2) might seem to contradict the idea that preschool education is important to success at school. But it is perhaps better interpreted as a warning of the care needed in making cross-national comparisons.

First, compulsory schooling in Finland does not begin until a child is seven years old, which means that the age group on which the preschool enrolment rate is based is the child population between the ages of four and seven (in many other countries it is the child population between the ages of four and five). If the preschool enrolment rate were to be re-defined as '*the percentage of children enrolled in preschool education in the year before compulsory schooling begins*' then Finland would rank near the top of the table with an enrolment rate approaching 100%.

Second, preschool enrolment rates say nothing about the *quality* of the education received. If it were possible to measure quality, then it is likely that Finland would again be found towards the top of the table. This prediction is based on the fact that Finland spends considerably more than the OECD average on early years care and education, has exceptionally high minimum qualification requirements for preschool teaching staff, and the highest standards of staff-to-child ratios of any advanced economy (1:4 for children under three years old, and 1:7 for children between 4 and 6).

Most commentators on Finland's outstanding record of educational achievement cite the quality of the country's early years education.

Sources:

Miho Taguma, Ineke Litjens, Kelly Makowiecki, *Quality Matters in Early Childhood Education and Care: Finland*, OECD, 2012.
Starting Strong II, Early Childhood Education and Care, OECD, 2006.

Dimension 4 Behaviours and risks

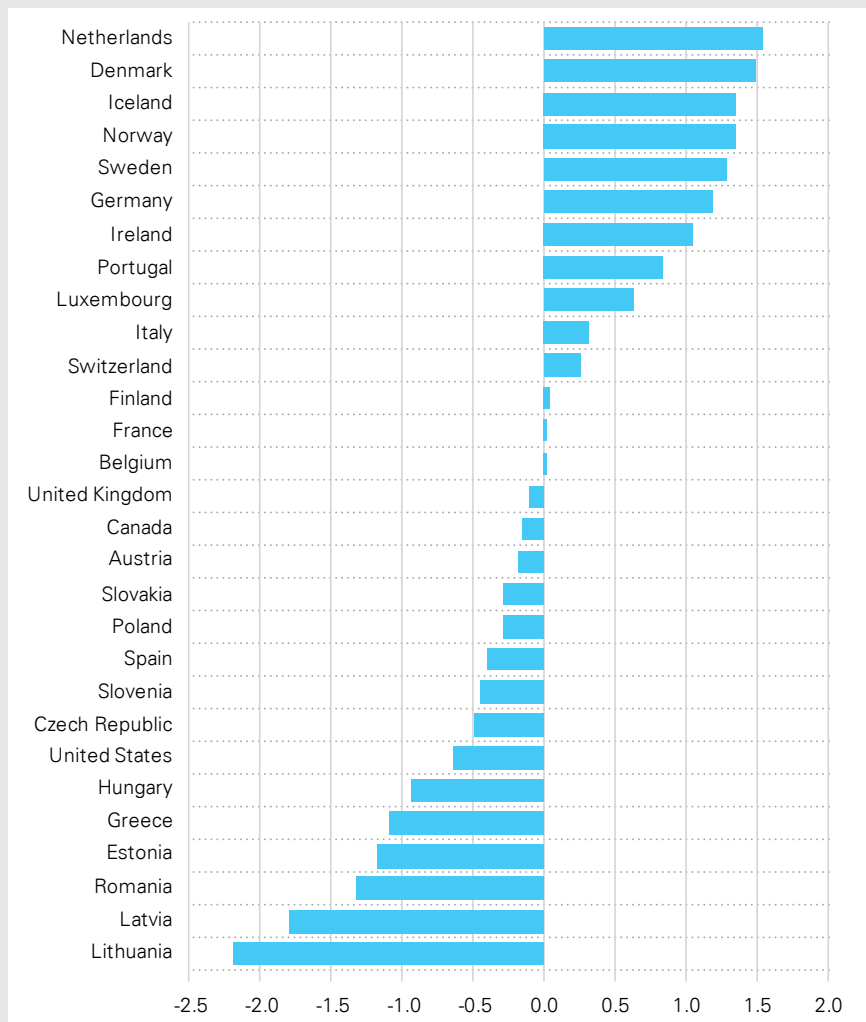


Figure 4.0 An overview of behaviours and risks

The league table of children’s behaviours and risks shows each country’s record in relation to the average for the countries under review. The table is scaled to show each country’s distance above or below that average.

The length of each bar shows each country’s distance above or below the average for the group as a whole. The unit of measurement is the ‘standard deviation’ – a measure of the spread of scores in relation to the average.

Assessing behaviours and risks

COMPONENTS	INDICATORS
Eating and exercise	% overweight
	% eating breakfast daily
	% eating fruit daily
	% exercising
Risk behaviours	Teenage fertility rate
	Smoking
	Alcohol
	Cannabis
Exposure to violence	Fighting
	Being bullied

Behaviours and risks

The fourth dimension of child well-being incorporated into the overall league table of child well-being is more difficult to pin down than material well-being or health or education. Yet the dimension here labelled 'behaviours and risks' includes a range of habits and behaviours critical to the present and future well-being of children.

Three separate components are included. The first is the extent to which children in each country are forming healthy, well-informed habits of eating and exercise. This has been measured by four individual indicators:

- a) the percentage who are overweight (as measured by body mass index computed from self-reported height and weight)
- b) the percentage of children in each country who report eating breakfast every day
- c) the percentage who report eating fruit every day
- d) the percentage who report engaging in physical exercise for at least an hour every day.

All of these indicators, though of varying significance, are associated with long-term health and well-being. Regular exercise, for example, is linked not only to physical and mental health but to the prevention and/or treatment of such specific problems as asthma, obesity, anxiety and depression. Unhealthy eating patterns in the early years have also been shown to increase the risk of later-life health problems including diabetes, heart disease and cancer.^{xiii}

Figures 4.1a to 4.1d show country rankings for each of the chosen indicators. In all cases, data are

drawn from questionnaires completed by young people themselves.

Risk behaviours

The second component considered under 'behaviours and risks' is the prevalence of a second set of behaviours that represent immediate dangers to children as well as serious threats to longer-term well-being. Within the limitations of the available data, four such risk indicators have been chosen:

- a) the teenage fertility rate (annual number of births per 1,000 girls aged 15 to 19)
- b) the cigarette smoking rate (percentage of children aged 11, 13 and 15 who smoke cigarettes at least once a week)
- c) the alcohol abuse rate (percentage of children aged 11, 13 and 15 who report having been drunk at least twice)
- d) the cannabis use rate (percentage of children aged 11, 13 and 15 who report having used cannabis in the last 12 months).

Giving birth at too young an age puts at risk the well-being of both mother and child. The mother is at greater risk of dropping out of school, of unemployment, of poverty, and welfare dependence – so helping to perpetuate disadvantage from one generation to the next. The child is also at greater risk – of poverty, of poor health, and of underachievement at school. The direction of causality in these relationships is not necessarily clear cut. Teenage mothers tend to come from poorer backgrounds, to be doing less well at school, and to have narrower

career prospects; having a baby may make all these problems worse, but not having a baby will not make them go away. Nonetheless, having a baby at too young an age is an indicator of much that may have gone wrong in the life of a teenager before she became pregnant. And it is for this reason that teenage birth rates are widely regarded as a particularly revealing indicator of many aspects of child well-being that are otherwise difficult to capture.

The threats posed to physical and mental health by tobacco, alcohol and cannabis are well established. Figures 4.2a to 4.2d record the performance of each country under each indicator.

Violence

The final component of the 'behaviours and risks' dimension of child well-being is the degree to which children and young people experience violence in their lives.

Given the known dangers of growing up in a violent environment – from immediate suffering and injury to longer-term problems of anxiety, depression, behavioural problems, and propensity to use violence^{xiv} – it is unfortunate that few data are available to compare children's exposure to violence either as victims or as witnesses. However, the *Health Behaviour in School-aged Children* survey^{xv} does provide data on children's experiences of both fighting (Figure 4.3a) and being bullied (Figure 4.3b).

Figure 4.1a Overweight

% of children aged 11, 13 and 15 who are overweight by BMI

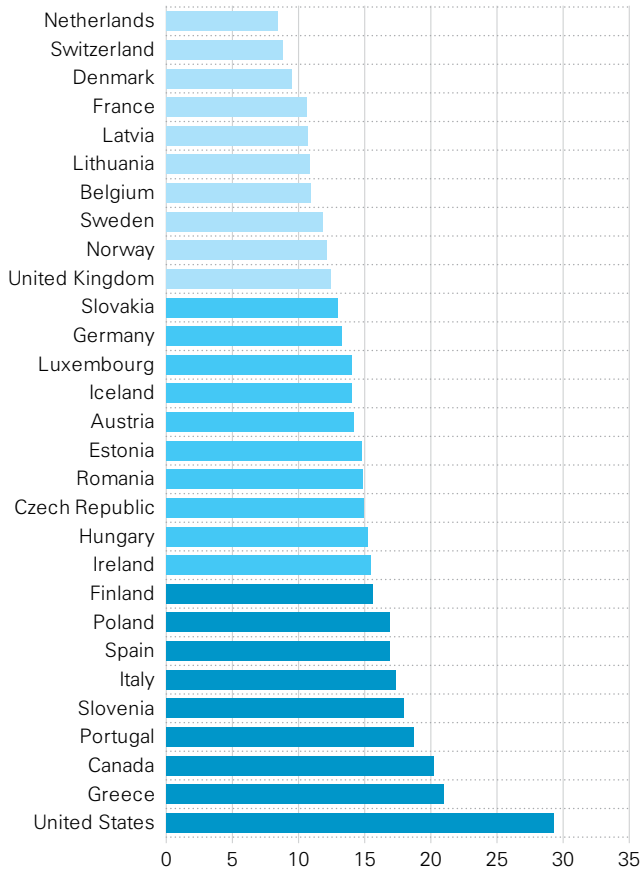


Figure 4.1b Eating breakfast

% of children aged 11, 13 and 15 who eat breakfast every day

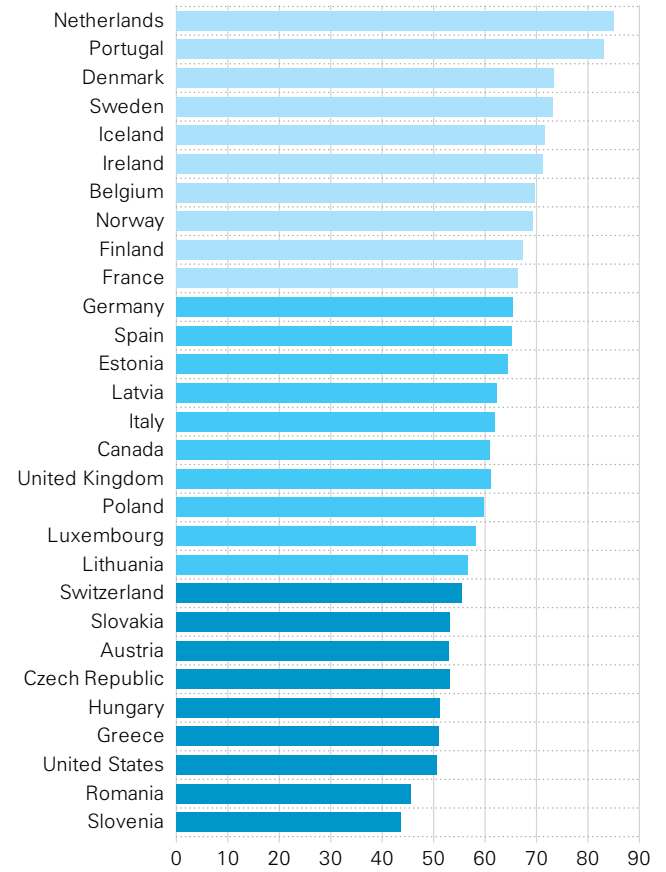


Figure 4.1c Eating fruit

% of children aged 11, 13 and 15 who eat fruit daily

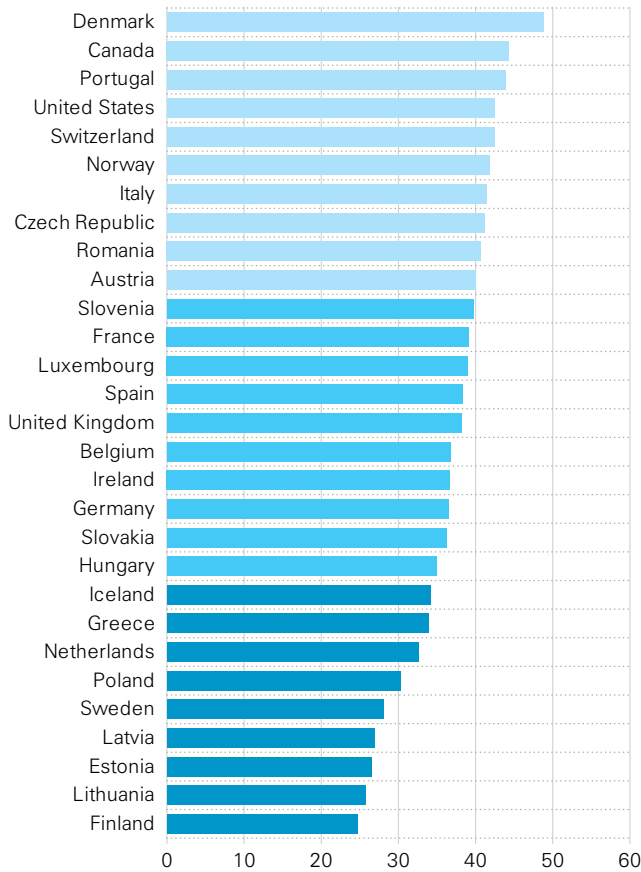


Figure 4.1d Exercise

% of children aged 11, 13, 15 who report at least one hour of moderate-to-vigorous physical activity daily

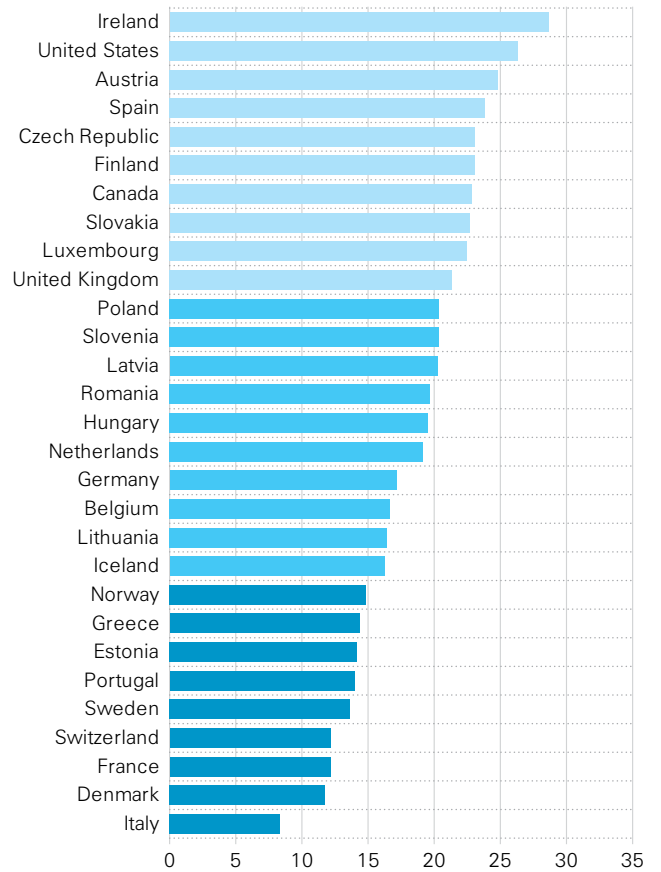


Fig 4.2a Teenage fertility rate

Births per 1,000 girls aged 15 to 19

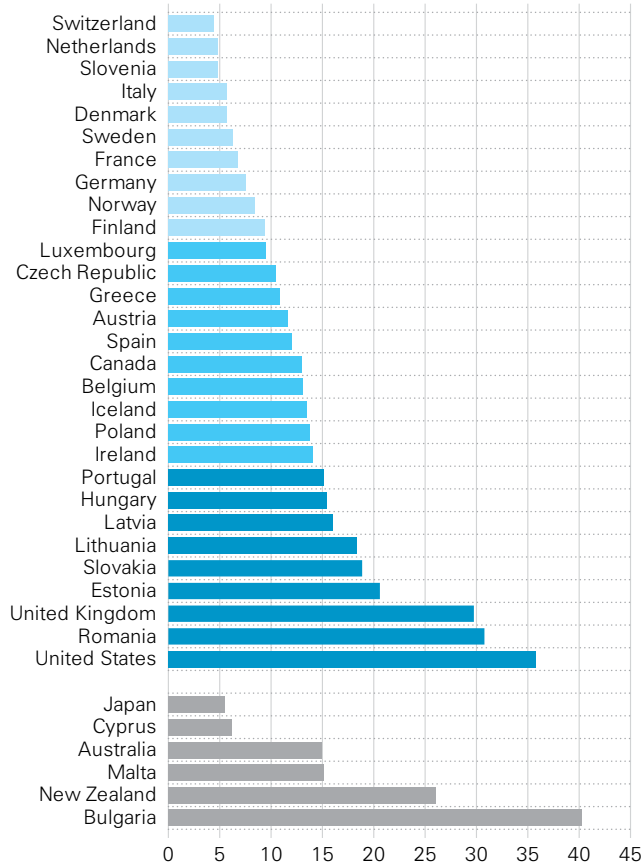


Figure 4.2b Smoking

% of children aged 11, 13 and 15 who smoke cigarettes at least once a week

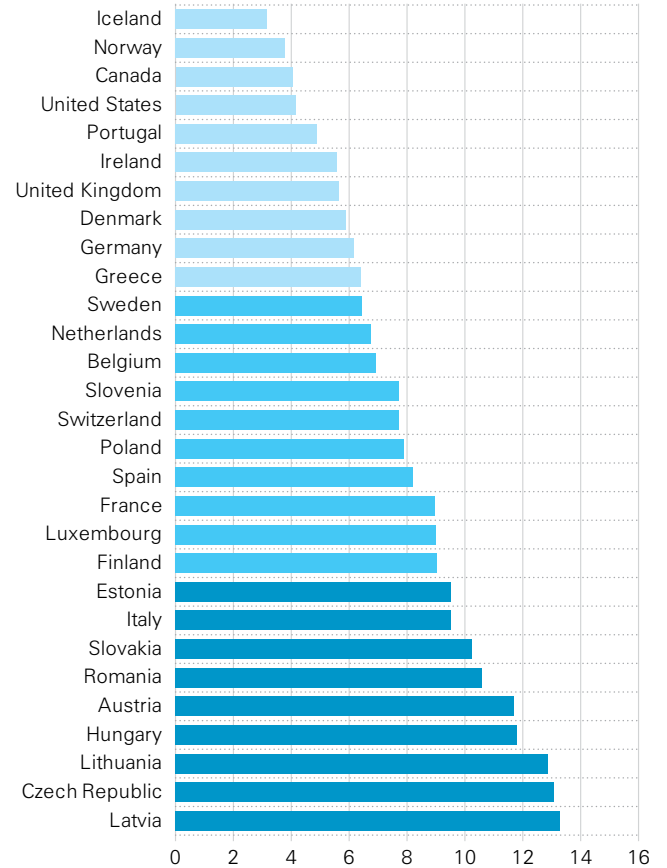


Figure 4.2c Alcohol

% of children aged 11, 13 and 15 who report having been drunk at least twice

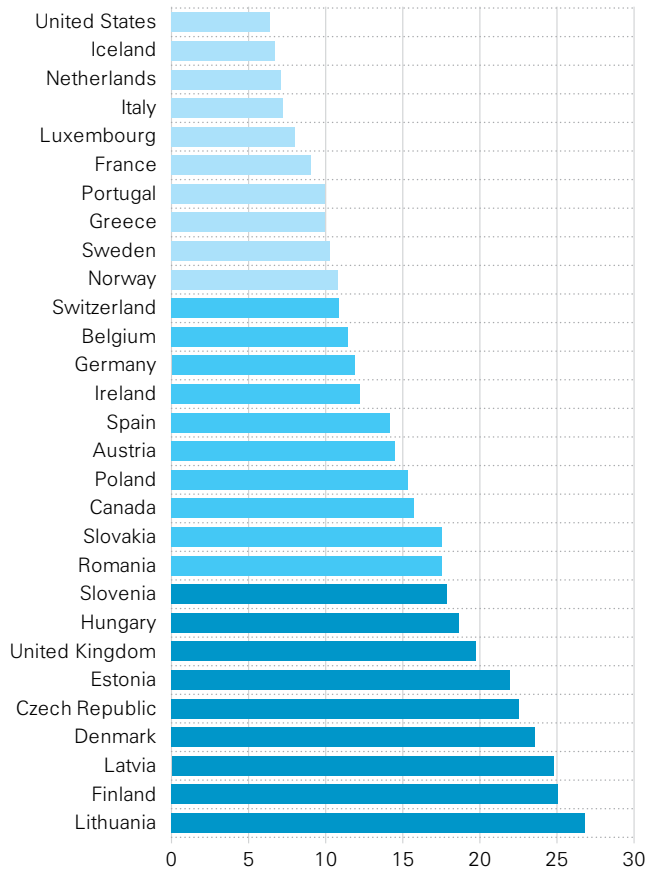
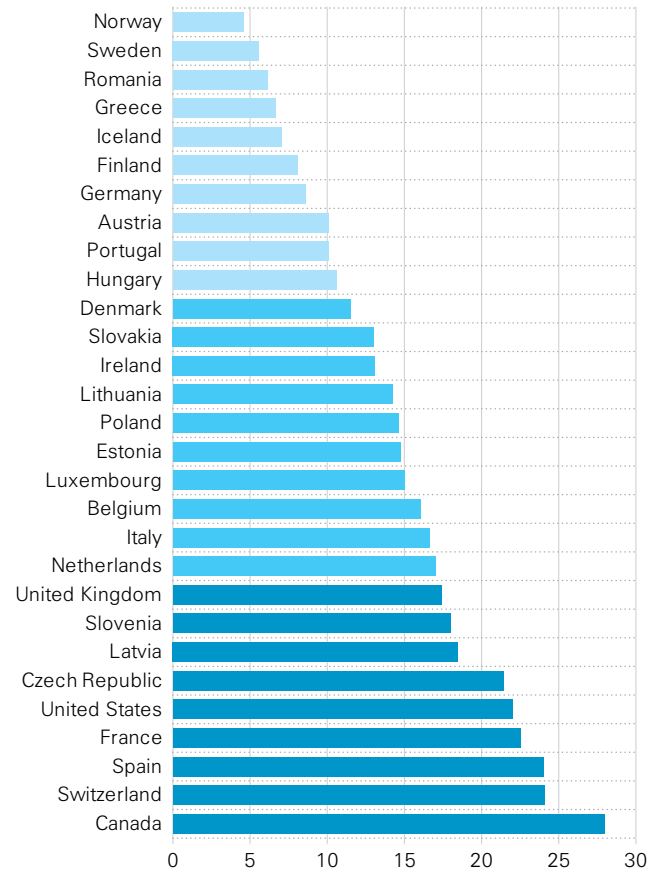


Figure 4.2d Cannabis

% of children aged 11, 13 and 15 who report having used cannabis in the last 12 months



Findings

Obesity

- » Childhood obesity levels are running at more than 10% in all countries except Denmark, the Netherlands and Switzerland.
- » Only Canada, Greece and the United States have childhood obesity levels higher than 20%.

Eating fruit

- » The only countries in which fewer than 30% of children eat fruit every day are Finland and Sweden – plus the three Baltic countries, Estonia, Latvia and Lithuania.

Eating breakfast

- » More than 50% of children eat breakfast every day in all 29 countries except Romania and Slovenia. Only in the Netherlands and Portugal does the percentage of children who eat breakfast every day exceed 80%.

Exercise

- » Ireland and the United States are the only countries in which more than 25% of children report exercising for at least an hour a day.²
- » Italy is the only country in which fewer than 10% of children report exercising for an hour a day.

Teenage births

- » The Netherlands, Slovenia and Switzerland have the lowest rates of teenage births (below 5 per 1,000).
- » Romania, the United Kingdom and the United States have the highest rates of teenage births (above 29 per 1,000).

Smoking

- » Canada, Iceland, Norway, Portugal and the United States are the only countries in which the smoking rate for young people is below 5%.
- » The highest smoking rates (more than 10% of young people report smoking cigarettes at least once a week) are found in Austria, the Czech Republic, Hungary, Latvia, Lithuania, Romania and Slovakia.

Alcohol

- » Alcohol abuse by young people is lowest in the United States.
- » Alcohol abuse by young people is 10% or less in only eight countries – France, Greece, Iceland, Italy, Luxembourg, the Netherlands, Portugal and the United States.
- » In the Czech Republic, Denmark, Estonia, Finland, Latvia and Lithuania, more than 20% of young people report having been drunk on at least two occasions.

Cannabis

- » Only in Norway does the rate of cannabis use by young people fall below 5%.
- » Canada's children and young people have the highest rate of cannabis use (28%).
- » The young people of six countries record cannabis use rates of 20% or more. They are Canada, the Czech Republic, France, Spain, Switzerland and the United States.

Fighting and being bullied

- » Germany is a clear leader in having the lowest percentage of children who report being involved in fighting.
- » Three Nordic countries – Denmark, Iceland and Sweden – have low levels of both bullying and fighting.
- » Only in Spain does the proportion of young people involved in fighting exceed 50% (with Greece close behind at 49%).
- » Only in Lithuania does the proportion of young people who report being bullied exceed 50%.

² The 'one hour a day' criterion used here follows the recommendations of the World Health Organization.

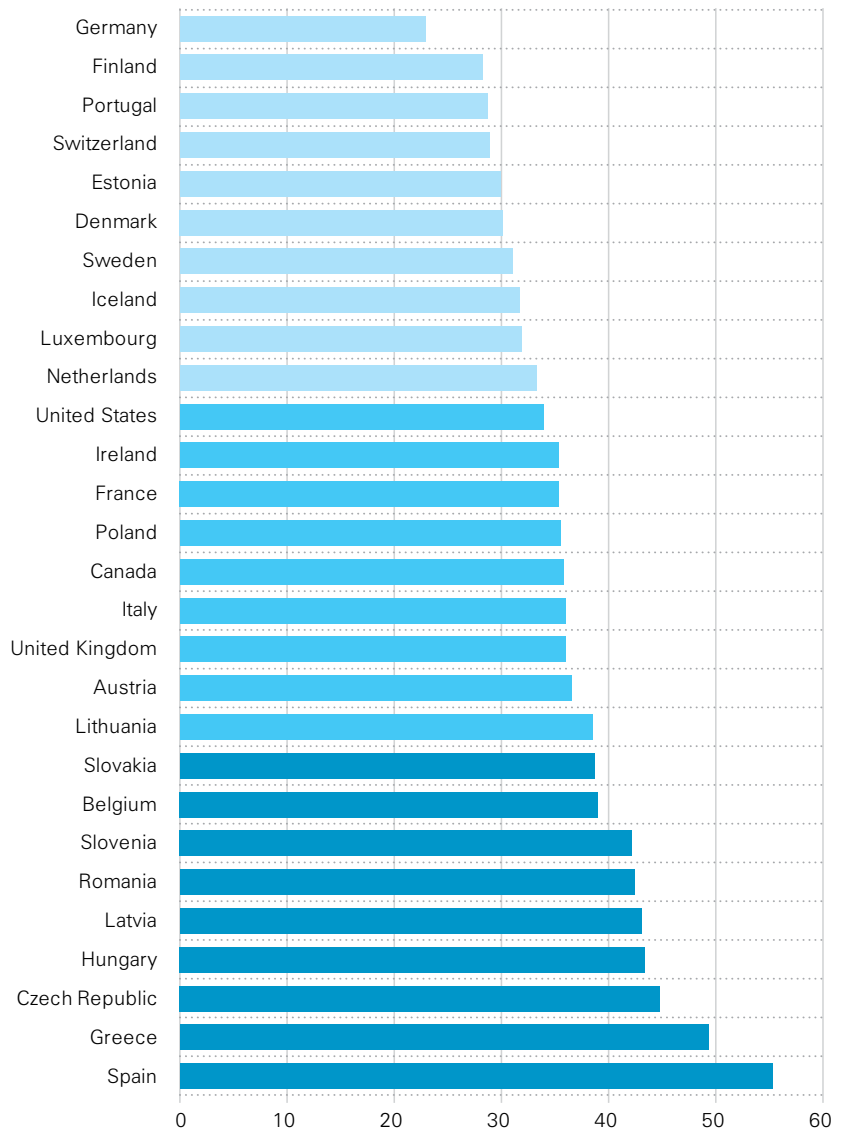
Figure 4.3a shows what percentage of 11-, 13- and 15-year-olds report being “involved in a physical fight at least once in the past 12 months.” Figure 4.3b shows the percentage who report being “bullied at school at least once in the past couple of months.”

Being bullied can make a misery of a child’s life for weeks, months or even years. It can also contribute to emotional and behavioural problems, including anxiety and depression, impaired school performance, and increased absenteeism and truancy.^{xvi} But the monitoring of bullying in children’s lives is made more difficult by the fact that bullying is difficult to define. In order to make measurement and comparison as meaningful as possible, the children who took part in the survey were also given the following definition of bullying.

“We say a student is being bullied when another student, or a group of students, say or do nasty and unpleasant things to him or her. It is also bullying when a student is teased repeatedly in a way he or she does not like or when he or she is deliberately left out of things. But it is not bullying when two students of about the same strength or power argue or fight. It is also not bullying when a student is teased in a friendly and playful way.”

Figure 4.3a Fighting

% of children aged 11, 13 and 15 who report “being involved in a physical fight at least once in the past 12 months”



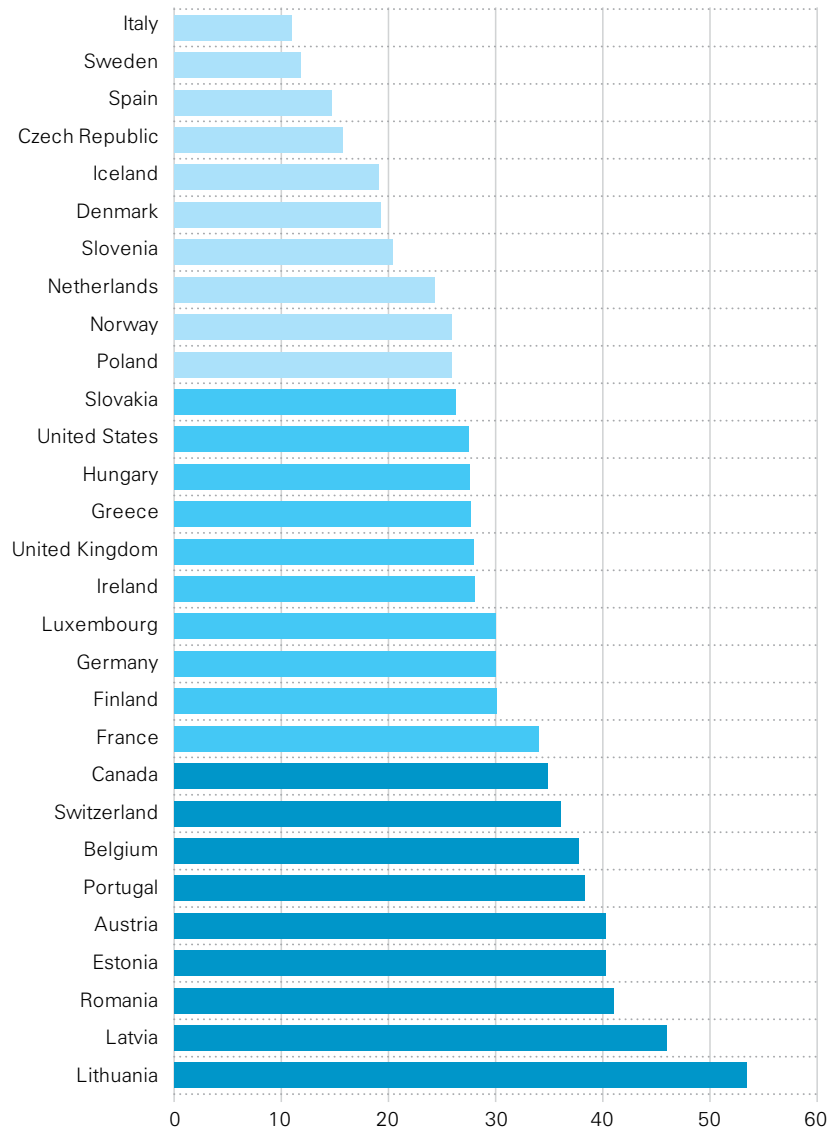
Good news

Reporting the ‘behaviours and risks’ dimension of child well-being inevitably focuses attention on the negative behaviours of young people. But in almost all cases such behaviours involve only a small minority. The same data may also be used to report that, among children and young people in the countries under review:

- » 99% of girls do not get pregnant while still a teenager
- » 92% do not smoke cigarettes
- » 85% are not overweight
- » 86% do not use cannabis
- » 85% do not get drunk
- » about two thirds are neither bullied nor involved in fighting.

Figure 4.3b Being bullied

% of children aged 11, 13 and 15 who report “being bullied at school at least once in the past couple of months”



Dimension 5 Housing and environment

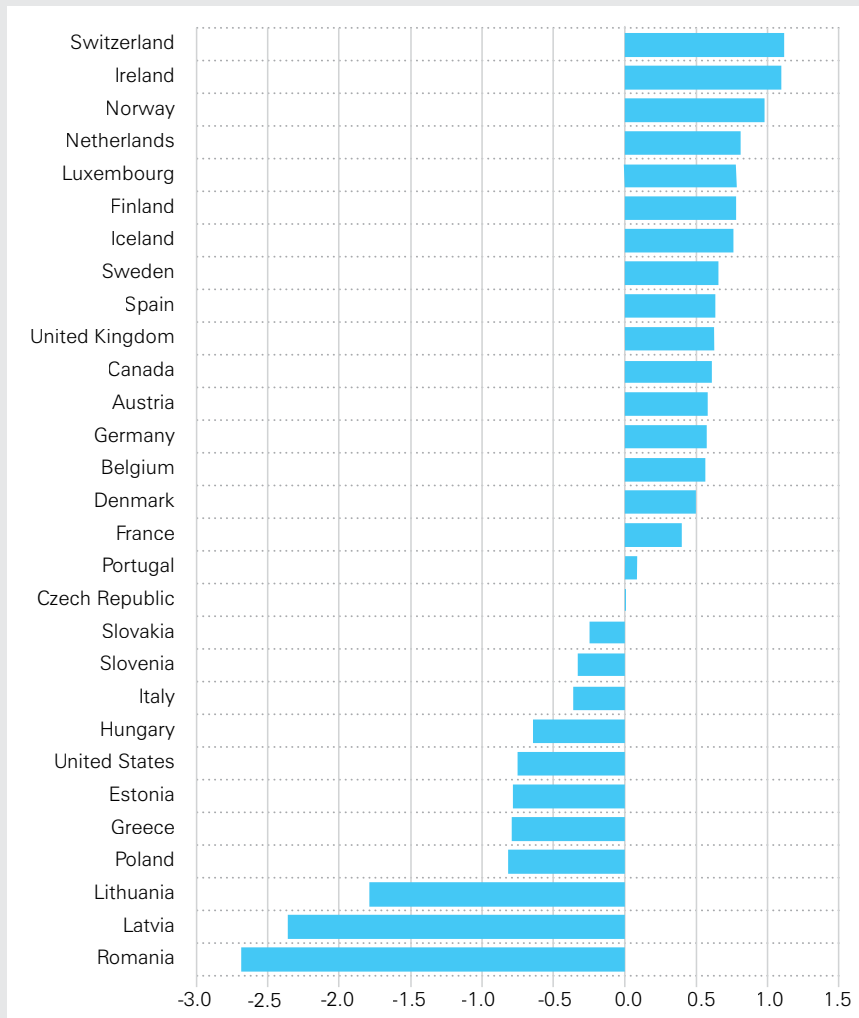


Figure 5.0 An overview of housing and environment

The league table of children’s housing and environment shows each country’s performance in relation to the average for the 29 developed countries under review. The table is scaled to show each country’s distance above or below that average.

The length of each bar shows each country’s distance above or below the average for the group as a whole. The unit of measurement is the ‘standard deviation’ – a measure of the spread of scores in relation to the average.

Assessing housing and environment

COMPONENTS	INDICATORS
Housing	Rooms per person
	% of households with children reporting more than one housing problem
Environmental safety	Homicide rate (annual number of homicides per 100,000)
	Air pollution (annual PM10 [$\mu\text{g}/\text{m}^3$])

Housing and environment

An acknowledged weakness of the first UNICEF overview of child well-being (*Report Card 7*) was the lack of any measure of children's environmental well-being. This has now begun to be remedied by drawing on recent data from the European Union^{xvii} and the World Health Organization. Two components have been considered:

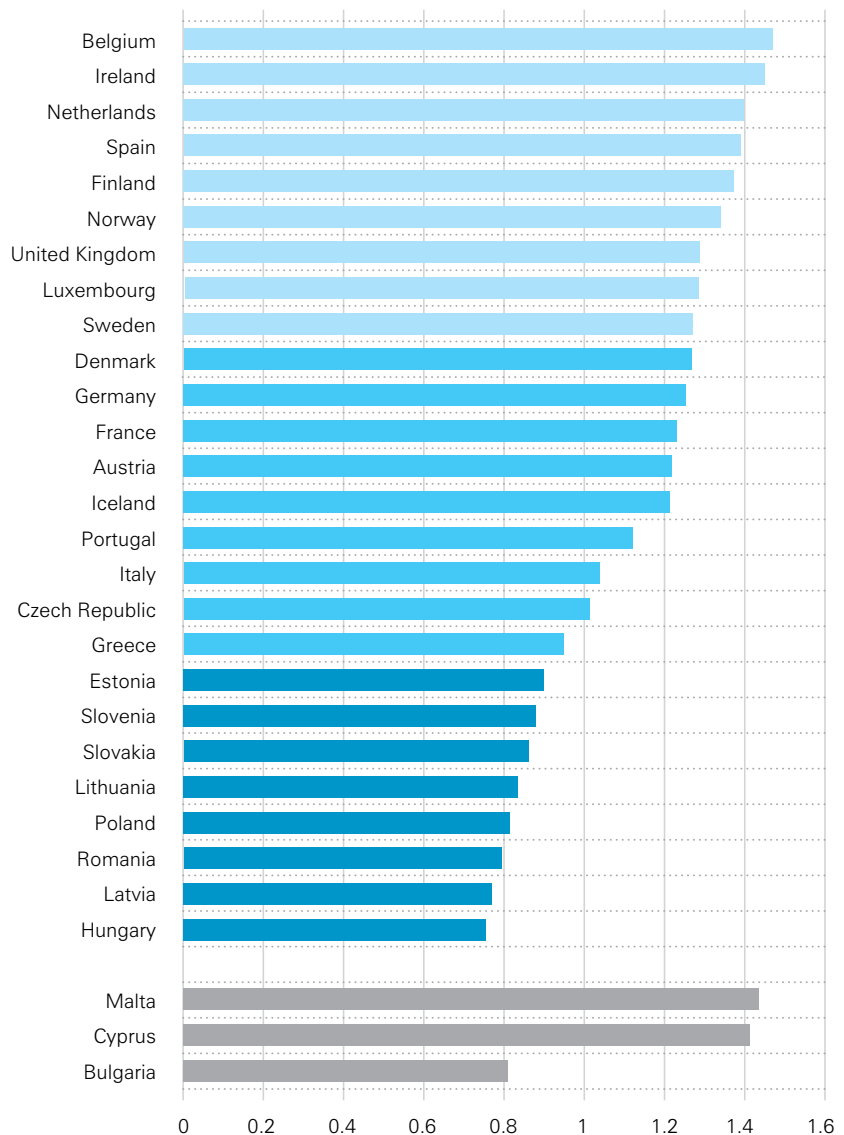
- a) housing – as measured by overcrowding and reported housing problems
- b) environmental safety – as measured by children's exposure to crime and pollution.

Overcrowding

In many families, the modern era has seen an emptying of children's lives and homes. Instead of having four or five siblings, today's child more commonly has one or none. At the same time, rising divorce and separation rates, changes in family structure, and the rise of out-of-home child care mean that many children live in homes that are significantly less crowded than in the past. Nonetheless, where overcrowding remains it is a significant factor in children's well-being. Apart from the loss of opportunity for privacy, and for quiet time and study, overcrowding has also been linked to adverse effects on parenting behaviours and on children's cognitive and emotional development, including increased risk of stress and behavioural difficulties.^{xviii}

Given the available data,^{xix} the most significant variable appears to be rooms-per-person and this is the measure used in Figure 5.1a.

Figure 5.1a Rooms per person



Findings

- » In 17 of 26 countries, the average home has more rooms than people.
- » Of the nine countries with fewer rooms than people, eight are in Central and Eastern Europe.

Multiple housing problems

Figure 5.1b complements the overcrowding indicator by attempting an assessment of the physical quality of children’s homes. Specifically, it shows what percentage of households with children report more than two of the following problems:

1. leaking roof, damp floors/walls/ foundations/rot in windows
2. dwelling too dark
3. no bath or shower
4. no indoor flushing toilet for the sole use of the household.

As with overcrowding, the table again shows the expected divide between the poorer countries of Eastern Europe and the wealthier North.

Crime and pollution

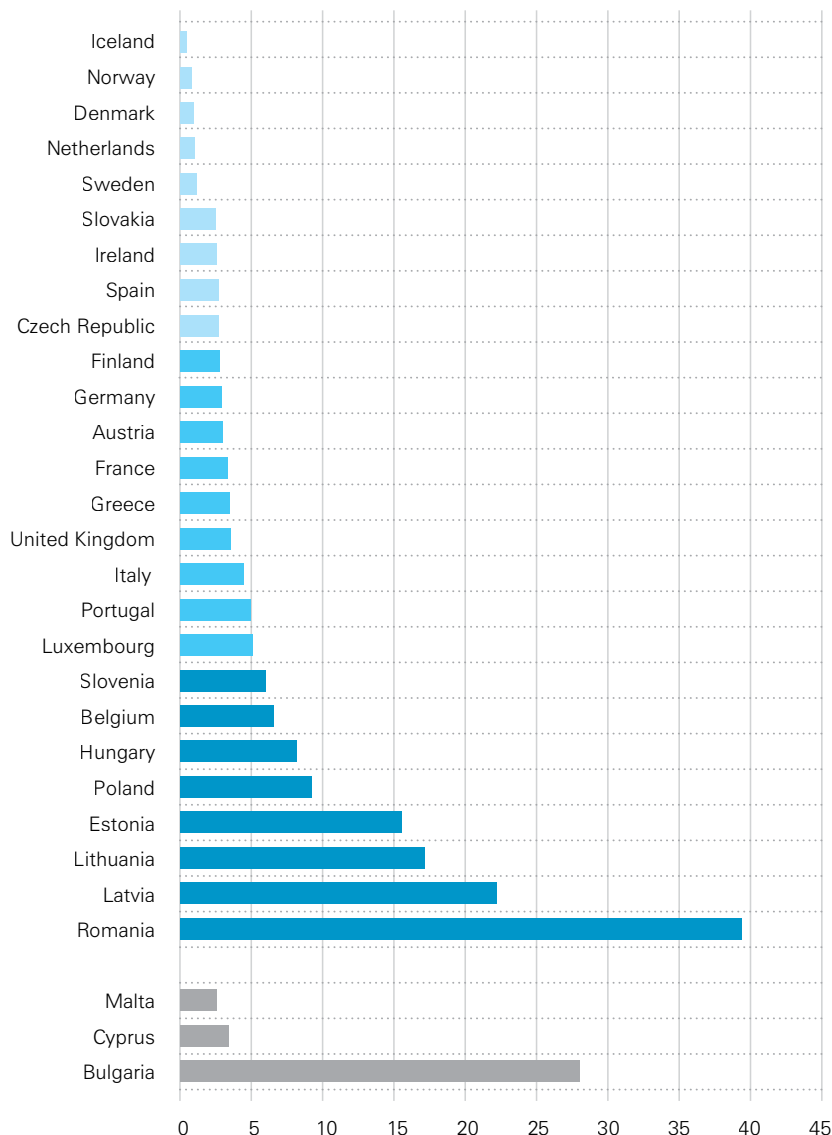
The second component of children’s environmental well-being is the safety of the environment as measured by two quite different indicators: the level of crime and the level of pollution.

Crime

Suffering violence, witnessing violence, or fearing violence should not be part of growing up. And although it seems that early exposure to violence affects some children more severely than others, the risk for all children is that an environment of violence may disrupt normal development and affect well-being in both short and long term. Consequences may include behavioural disorders such as aggression and an inability to relate to others, emotional disorders such as depression and anxiety, and

Figure 5.1b Multiple housing problems

% of households with children reporting more than one housing problem



Findings

- » Denmark, Iceland and Norway head the table with fewer than 1% of households reporting multiple housing problems.
- » The rate of multiple housing problems rises to more than 20% in Latvia and to almost 40% in Romania.
- » Belgium and Luxembourg are the only two countries in western Europe in which more than 5% of households with children report multiple housing problems.

health-related disorders such as sleep disruption and nightmares.^{xx} Exposure to violence, says the *Safe Start* initiative in the United States, “can interfere with a child’s ability to think and learn and can disrupt the course of healthy physical, emotional, and intellectual development.”^{xxi}

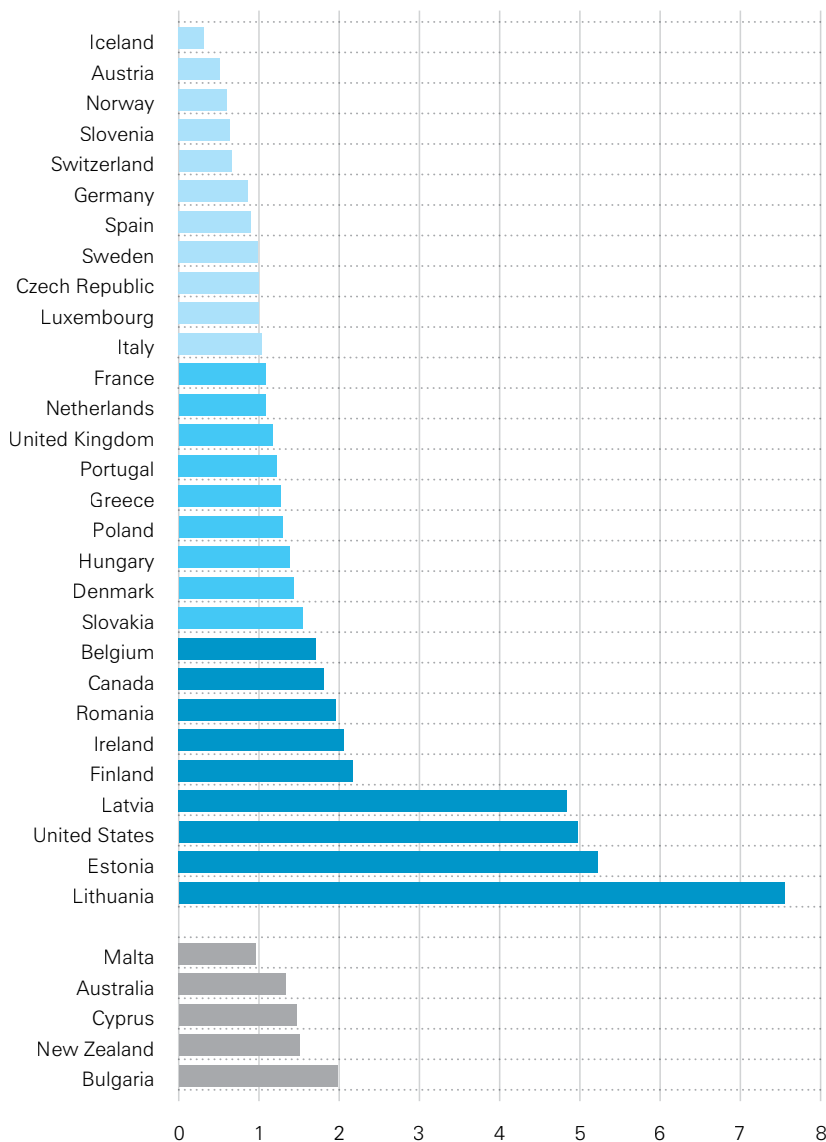
Measuring and comparing violence in the child’s environment is obviously problematical. Crime and victimization rates would be a possible measure, but variations in methods of defining and recording crimes in different legal systems make it impossible to make reliable cross-national comparisons. The one available indicator that eliminates most of the potential for bias is the homicide rate for each country. Rather than omit altogether the important issue of violence in the environment of the child, it was decided to accept the homicide rate as an approximate guide to the overall level of violence in the society (Figure 5.2a).

Pollution

The second component of children’s environmental well-being – the extent of environmental pollution – is also difficult to compare internationally. One common standard for which data are available is the level of outdoor air pollution and this has been used to construct the league table presented in Figure 5.2b.

Figure 5.2a Homicide rates

Annual number of homicides per 100,000

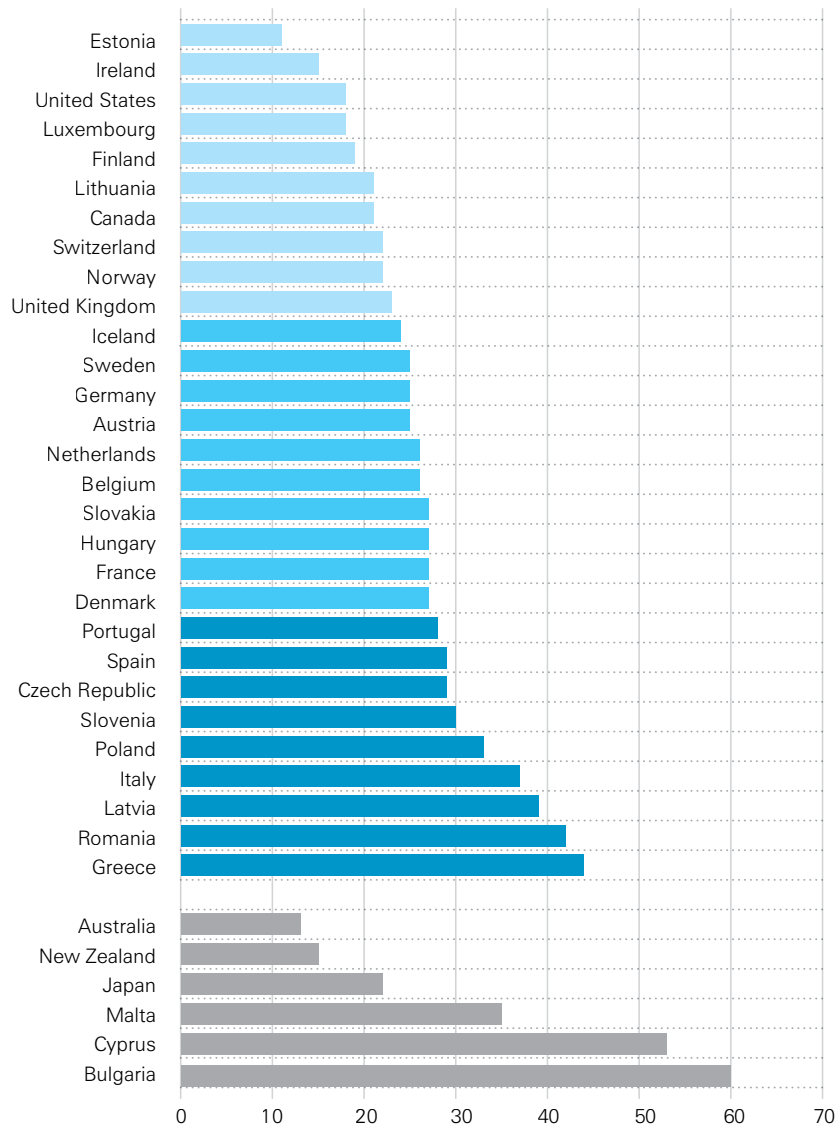


Findings

- » Estonia, Latvia, Lithuania and the United States are the only countries in which the homicide rate rises above 4 per 100,000. Almost all other countries fall into the range of 0 to 2.5 per 100,000.
- » Homicide rates are more than fifteen times higher in the worst performing country, Lithuania, than in the best performer, Iceland.

Figure 5.2b Air pollution

Average annual concentration of fine particulate matter in the atmosphere (annual PM10 [$\mu\text{g}/\text{m}^3$])



Findings

- » The lowest levels of air pollution are found in Estonia, Finland, Ireland, Luxembourg and the United States (all below 20 parts per million). The good result for the United States is influenced by legislation on air pollution (1997, revised in 2006) which enforced stricter limits than in most European countries.
- » The highest levels are found in Greece, Italy, Latvia, Poland and Romania (all higher than 30 parts per million).

Conclusion

The five dimensions of child well-being considered here – material well-being, health, education, behaviours and risks, and housing and environment – contribute equally to the league table of overall child well-being on page 2. But as will be obvious from the comments on each of the indicators used, the measurement and comparison of child well-being levels across different countries is an imperfect exercise with significant gaps and limitations. Ideally, it would also require better and more child-oriented data on such critical important indicators as:

- » the quality of parenting
- » the quality as opposed to quantity of early childhood education
- » children’s mental and emotional health
- » children’s exposure to violence in the home (both as victims and as witnesses)
- » the prevalence of child abuse and neglect
- » the quality and safety of children’s specific environments including the opportunity for safe, unsupervised play
- » the well-being of children being brought up in the care of the state
- » the commercialization and sexualization of childhood

- » the exposure to, and effect of, media of all kinds in children’s lives.

The earliest years

In addition to these gaps, there is one other weakness in almost all current attempts to monitor the well-being of children, whether internationally or within individual countries. That weakness is the lack of data about children’s developmental well-being in the earliest months and years of life.

It is perhaps no longer necessary to argue the case for the importance of the early years. Advances in both neuro-science and social science have repeatedly confirmed that it is at this time that genetic potential interacts in infinitely complex ways with early experience to construct the neural pathways and connections that quickly become both the foundations and the scaffolding for all later development. It is therefore at this time that the child’s well-being, health and development are most in need of society’s concern and protection.

Yet in practice most of the available data on children’s lives relate to older children and young teenagers. The two major international surveys on which this report draws, for example, are the *Health Behaviour in School-aged Children* survey (focusing on children aged 11 to 15) and the *Programme of International*

Student Assessment (examining the educational progress of pupils at age 15).

The almost total absence of nationwide data on the developmental progress of very young children may reflect the fact that the importance of early childhood development has only relatively recently been brought to public and political prominence. In part, also, it may reflect the traditional view that the collection of data on the lives of the very young is impractical, potentially intrusive, and of limited relevance to public policy. But in part, also, the problem has been the lack of any widely applicable means of measuring and monitoring children’s developmental progress in the earliest years of life. Without such a measure, policy is blind, expenditure difficult to justify, goals impossible to set, and progress incapable of being monitored.

This may now be beginning to change as two countries – Canada and Australia – become the first in the world to begin the regular monitoring of early years development for all children.

Box 3 tells the story of the measures now being used. In essence, the method deployed in both countries is a teacher-completed checklist for every child at about the age of five years (a few months after entry into formal schooling). The checklist includes

approximately 100 items covering five domains of early child development – physical health and well-being, social competence, emotional maturity, language and cognitive skills, and communication skills. *“We now have community-level information about early childhood development for all of Australia,”* says the foreword to the first issue of the Australian Early Development Index (AEDI). *“In the same way that the GDP is a measure of our economic status, the AEDI is a national measure of how well we are supporting our children’s development.”*

There is a long way to go before any nation can say that it has adequate information about the early years development of all its children. But a start has been made in Australia and Canada towards making known the proportion of the nation’s young children who are developmentally ‘on track’, ‘at risk’ or ‘vulnerable’. Capable of being aggregated and mapped for a specific geographic community, for an electoral ward or administrative district, for a State or Province or for the nation as a whole – such data are beginning to assist parents, communities, children’s organizations, the academic community, and government at all levels to become involved in knowing more and doing more in support of ensuring the best possible start in life for every child.

No one should claim that supporting child development in the early years is a simple proposition, or that all the answers are available if only the resources could be found. But it has become equally clear that properly directed investment in these years can have very substantial and sustained effects on the well-being of children today, on their lives tomorrow, and on the long-term well-being of their societies as a whole.^{xiii}

In the future, therefore, it is hoped that the UNICEF overview of child well-being will be able to also take into account data on child development in the critical early months and years of children’s lives.

Box 3 Canada and Australia: Measuring the early years

Canada and Australia have become the first countries to put in place systems for the regular monitoring of children's developmental progress in the years before schooling begins.

Most provinces in Canada are now using the country's *Early Development Instrument* (EDI) to monitor the developmental progress of all young children. In Australia an adapted version of the EDI, known as the *Australian Early Development Index* (AEDI), has been in use nationwide since 2009.

The EDI is essentially a checklist completed by teachers for every child at or around the mid-point of the first year of full-time schooling. Each assessment takes approximately 10 to 20 minutes to complete and covers five domains of early development – physical health and well-being, social competence, emotional maturity, cognitive development, and linguistic ability. The list includes approximately 100 questions such as:

- » How often has the child arrived at school too tired to do schoolwork?
- » How would you rate this child's ability to get along with peers?
- » Would you say that this child can sit still or is restless?
- » Would you say that this child is generally interested in books?
- » How would you rate this child's ability to communicate needs in an understandable way?

The end result is a measure showing what percentage of children in any given population group can be considered to be:

- » 'On track' (above the 25th percentile for the nation as a whole)
- » 'At risk' (between the 10th and 25th percentile)
- » 'Vulnerable' (below the 10th percentile).

Population measure

The EDI is not a 'pass or fail' development test for any individual child, nor is it used for screening purposes. It is a population measure intended to inform communities, politicians, children's organizations, local and national governments about the early years development of their children. And it is an approximate guide to whether the cumulative effects of children's early years experiences are enabling them to fulfil their potential and take full advantage of the years of education that are about to begin.

The results of the EDI are aggregated and made available in different ways to provide an overview of developmental progress for different population groups – by gender, by neighbourhood or city, by socio-economic quintile, by ethnic group, or by participation in particular kinds of early childhood education programmes. Eventually, the EDI may also make possible the setting of targets and the monitoring of progress towards reducing the proportion of children who are developmentally 'vulnerable' or 'at risk'.^{xxiii}

Origins in Canada

The EDI was developed in the 1990s at the Canadian Institute for Advanced Research and the Canadian Centre for the Study of Children at Risk (now the Offord Centre for Child Studies at McMaster University, Ontario).^{xxiv} Towards the end of the decade the Government of Canada made a major commitment to assessing "the readiness to learn of Canadian children so that we can assess our progress in providing children with the best possible start."^{xxv} Following a pilot implementation in North York, Toronto, the EDI was finalized in 2000. Ten years later, nationwide coverage has almost been achieved and 'early development maps' are now available on-line and in published form.

International beginnings

The EDI has been used to evaluate early years development in regional populations of Brazil, Chile, Estonia, Ireland, Jordan, Mexico, Peru, Scotland, Sweden and the United States. Pilot studies and evaluations have been conducted in Hong Kong, Indonesia, Jamaica, Kosovo, Moldova, Mozambique, the Netherlands, Pakistan, the Philippines and Vietnam.

In addition, Canadian and Australian experts have worked with the UNICEF Early Child Development Unit to create an Early Child Development Index for inclusion in the fourth round of the Multiple Indicator Cluster Surveys conducted by UNICEF in close to 50 low- and middle-income countries.

Overall, analysis of the nationwide results have shown that:

- » Approximately 25% of children experience some difficulties that prevent them from taking full advantage of the education offered by school.^{xxvi}
- » 30% of children in poor families are developmentally vulnerable – as opposed to 15% of children from better-off families.^{xxvii}
- » There is a pronounced tendency for boys to be more developmentally vulnerable than girls.^{xxviii}
- » Follow-up studies from earlier evaluations in specific communities have confirmed the relationship between 'school readiness to learn', as identified by the EDI, and school performance at Grade 3.^{xxix}

Adaptation by Australia

The EDI was used as a basis for an *Australian Early Development Index* (AEDI) which has been adopted by the Council of Australian Governments^{xxx} as a national progress measure for early childhood development. In 2009, the Federal Government made available Aus\$24.5 million to fund nationwide implementation,^{xxxi} including AEDI training for all teachers of school entry classes. Between May and July 2009, 15,522 teachers in 7,422 Australian schools conducted AEDI evaluations for 261,147 children (97.5% of all children in their first year of full-time school). The Government has now committed to national implementation of the AEDI every three years.

As in Canada, the results have been made available on-line to all communities^{xxxii} and in published form as a *Snapshot of Early Childhood Development in Australia*.^{xxxiii}

So far, the AEDI has been able to report that:

- » Approximately one quarter of Australian children are developmentally vulnerable on one or more dimensions at the time of entry into school (approximately the same proportion as in Canada).

- » Approximately 12% of children are vulnerable on two or more dimensions.
- » Between 20% and 30% of children are not regularly read to and/or encouraged to read.
- » Boys are almost twice as likely to be developmentally vulnerable on one or more domains as girls (30% as opposed to 17%).^{xxxiv}
- » Children living in economically disadvantaged areas are twice as likely to be developmentally vulnerable on one or more domains as children living in areas of higher socio-economic status (32% as opposed to 16%).
- » The proportion of Australia's indigenous children who are developmentally vulnerable is twice as high as the proportion of non-indigenous children (47% as opposed to 22%).

The years immediately ahead will tell whether the EDI in Canada and the AEDI in Australia will have a sustained impact. For the moment, they represent an important beginning in making available nationwide data on early years development. For local and national government, the results are a guide to policy and resource allocation. For the academic and research community, they provide data that can be linked to other social and economic variables in order to gain more understanding of the circumstances and determinants of early years development. Perhaps most important of all, they are a means of raising community awareness and mobilizing community resources in support of the early years development of all children.

Further information

Early Development Instrument (Canada):
Offord Centre for Child Studies, McMaster University,
Ontario, Canada, www.offordcentre.ca

Australian Early Development Index
www.rch.org.au/australianedi

PART 2

WHAT CHILDREN SAY

Despite data limitations, the overview of child well-being set out in Part 1 represents the best currently available statistical snapshot of children's lives across the developed world.

But it is not the only overview available. In recent years it has also become possible to monitor some aspects of what children themselves have to say about their own lives. Part 2 of this report therefore looks at the issue of children's subjective well-being and at some of the arguments that surround it.

Omission

Subjective well-being was included as one of six dimensions considered in the first UNICEF league table of child well-being published in 2007 (*Report Card 7*). Why then has it been omitted from the current overview?

Apart from the concerns about such measures touched on below, it is argued that subjective well-being overlaps with and transcends all other dimensions of child well-being and is therefore best considered as a separate measure in its own right rather than as one component of an index. The measures presented here should therefore be considered in conjunction with the overview of child well-being presented in Part 1.

Life satisfaction

Figure 6.0 provides an overview of children's subjective well-being in 29 developed countries. Based on the *Children's Life Satisfaction League Table*,³ the chart shows the proportion of children aged 11, 13 and 15 in each country who report a high level of life satisfaction. Specifically, it shows the proportion who answered '6 or more' when asked to rate their overall life satisfaction on a scale of 0 to 10 (where '0' represents 'the worst possible life for me' and '10' represents 'the best possible life for me').

Comparing subjective and objective

How does the league table of children's life satisfaction compare with the overview of child well-being set out in Part 1 of this report?

First of all, it should be noted that the 'objective' and 'subjective' measures of child well-being deployed in Parts 1 and 2 are measuring slightly different concepts. The overview presented in Part 1 measures many dimensions of well-being that might be better described as 'well-becoming' – i.e. dimensions that reflect the concerns of families and communities as they seek to promote both the present and future well-being of their children. The *Children's Life*

Satisfaction League Table shown opposite, on the other hand, is a measure of how children feel about their own lives according to their own priorities in the here and now.

Nonetheless, one might expect a reasonably close correlation between the results of the two measures, and this is in fact the case (Figure 6.1).

But there are also some striking contrasts:

Three southern European countries rise sharply in the rankings when well-being is assessed by children's self-reported life satisfaction:

- » Greece jumps from 25th place in the league table of child well-being to 5th place in the league table of children's life satisfaction.
- » Spain rises from 19th to 3rd.
- » Italy climbs from 22nd to 15th.

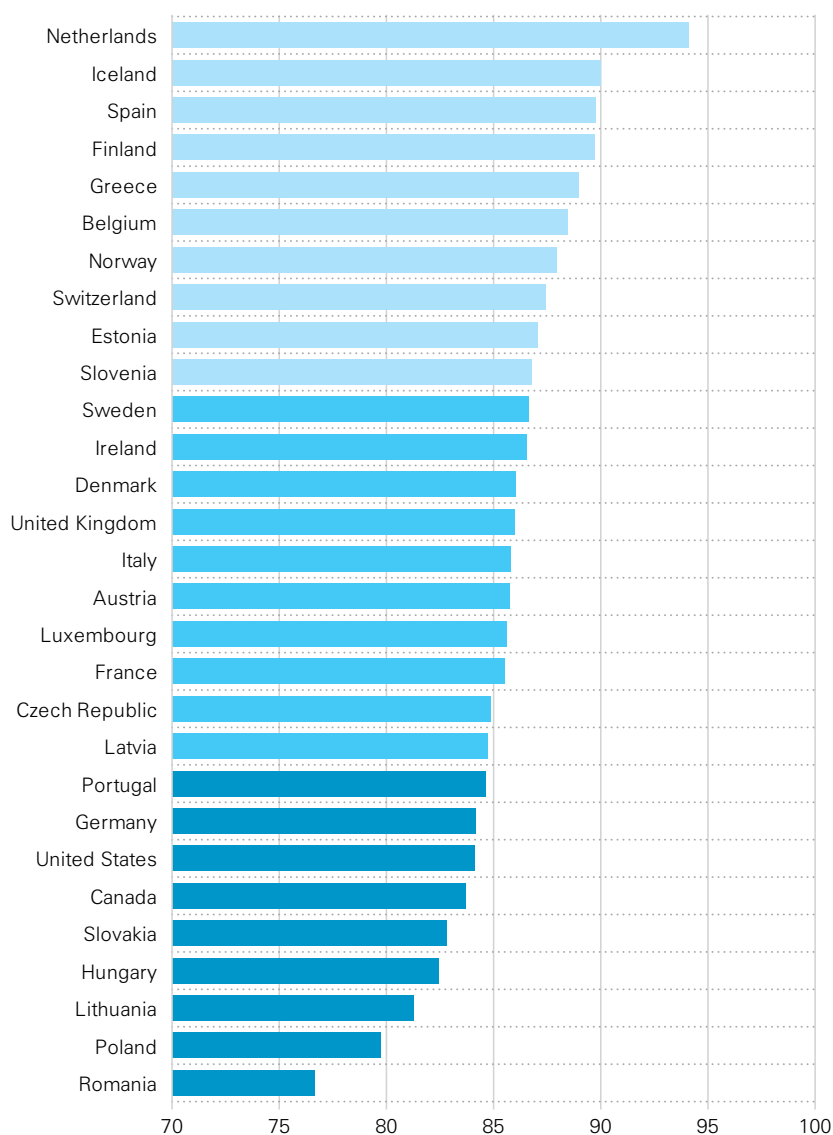
Several countries see almost as sharp a drop in ranking position when child well-being is assessed by children themselves:

- » Germany drops 16 ranking places (from 6th place to 22nd).
- » Luxembourg drops 10 ranking positions (from 7th to 17th).
- » Canada and Poland each drop 7 places.

3 Sometimes known as the 'Cantril Ladder' after Hadley Cantril (1906–1969) who first developed the scale in *The Pattern of Human Concerns* (1965).

Figure 6.0 The children’s life satisfaction league table

% of children aged 11, 13 and 15 who rate their life satisfaction with a score of 6 or more on the 11-step ‘Cantril Ladder’ scale



Findings

- » Over 85% of children in the developed nations have a high level of overall life satisfaction; even in the countries at the bottom of the league, more than 75% of children placed themselves above the mid-point of the life satisfaction ladder.
- » The Netherlands heads the league table of children’s subjective well-being with 95% of its children reporting a high level of life satisfaction.
- » In the top five countries – Finland, Greece, Iceland, the Netherlands and Spain – approximately 90% of children reported a high level of life satisfaction in 2009/2010.
- » Only in Poland and Romania does the ‘high life satisfaction’ rate fall below 80%.
- » Children in Canada, Germany, Portugal and the United States find themselves in the bottom third of the *Life Satisfaction League Table* – along with Hungary, Lithuania, Poland, Romania and Slovakia.

Figure 6.1 Comparison of the UNICEF overview of child well-being with the children's life satisfaction league table

Rank	UNICEF league table of child well-being	Rank	Children's life satisfaction league table	Difference in rank
1	Netherlands	1	Netherlands	no change
2	Norway	2	Iceland	+1
3	Iceland	3	Spain	+16
4	Finland	4	Finland	no change
5	Sweden	5	Greece	+20
6	Germany	6	Belgium	+3
7	Luxembourg	7	Norway	-5
8	Switzerland	8	Switzerland	no change
9	Belgium	9	Estonia	+14
10	Ireland	10	Slovenia	+2
11	Denmark	11	Sweden	-6
12	Slovenia	12	Ireland	-2
13	France	13	Denmark	-2
14	Czech Republic	14	United Kingdom	+2
15	Portugal	15	Italy	+7
16	United Kingdom	16	Austria	+2
17	Canada	17	Luxembourg	-10
18	Austria	18	France	-5
19	Spain	19	Czech Republic	-5
20	Hungary	20	Latvia	+8
21	Poland	21	Portugal	-6
22	Italy	22	Germany	-16
23=	Estonia	23	United States	+3
23=	Slovakia	24	Canada	-7
25	Greece	25	Slovakia	-2
26	United States	26	Hungary	-6
27	Lithuania	27	Lithuania	no change
28	Latvia	28	Poland	-7
29	Romania	29	Romania	no change

Findings

- » Overall there is a strong correlation between the two tables. Over half of the 29 countries featured have a similar ranking position whichever method of assessment is used (i.e. a difference in ranking position of five places or fewer).
- » The Netherlands and the Nordic countries perform strongly on both subjective and objective measures (though Norway and Sweden drop five and six places respectively when the measure used is children's own self-reported life satisfaction).
- » Most Central and Eastern European countries are found in the bottom half of both tables, with the notable exception of Estonia which rises by 14 places when measured by children's self-reported life satisfaction.

Relationships

Children's own subjective assessments can also provide a guide to one of the most critical of all factors in assessing well-being – the quality of the close relationships in the child's life.

From the earliest years, the child's sense of subjective well-being is intimately bound up with relationships, and particularly with parents and peers. A recent survey by the UK Children's Society, for example, finds that family relationships are the single most important contributor to children's subjective well-being.^{xxxv} Other studies have shown that relationships with peers can play an important role in both day-to-day well-being and long-term developmental progress. It is through relationships with peers that children experiment with social roles and learn and practise the control of aggression, the management of conflict, the earning of respect and friendship, discussion of feelings, appreciation of diversity, and awareness of the needs and feelings of others. No child grows up without experiencing some difficulty and tension in relationships with parents and peers, but for many children prolonged or more severe difficulties in these relationships can be a cause of stress, anxiety and depression.^{xxxvi, xxxvii}

The quality and contribution of the child's closest relationships is obviously difficult to define and measure; any indicator simple enough to be used for the compilation of national statistics cannot hope to provide any more than an approximate guide. Nonetheless, some insight may be gained from Figure 6.2, which sets

Figure 6.2 Children’s relationships with parents and peers

	Average of the three relationships scores	% of children who find classmates kind and helpful	% of children who find it easy to talk to mothers	% of children who find it easy to talk to fathers
Netherlands	84.5	80.4	91.7	81.4
Iceland	83.2	80.3	89.3	79.8
Sweden	79.9	82.0	85.5	72.4
Denmark	77.0	77.2	84.2	69.5
Romania	76.7	64.8	90.4	74.8
Finland	75.1	66.1	86.6	72.5
Ireland	74.8	73.4	82.9	68.1
Hungary	74.8	58.1	89.9	76.4
Spain	74.8	67.1	86.5	70.8
Germany	74.7	77.9	81.5	64.5
Norway	74.0	78.2	78.7	65.1
Portugal	73.9	79.4	81.3	61.2
Switzerland	73.5	78.9	79.7	62.0
Estonia	73.4	65.1	86.1	69.1
Austria	72.0	69.0	82.2	64.9
Luxembourg	71.9	73.5	79.5	62.7
United Kingdom	71.7	63.3	83.0	68.6
Poland	70.1	51.0	86.6	72.6
Belgium	69.9	75.0	77.5	57.3
Italy	69.3	68.5	79.7	59.9
Latvia	67.4	54.5	82.0	65.8
Slovakia	67.2	61.7	78.7	61.3
Lithuania	66.8	58.0	80.4	62.1
Czech Republic	66.8	56.0	81.4	62.8
Canada	66.7	58.2	79.3	62.6
Greece	63.8	44.3	83.1	64.1
United States	63.3	56.2	73.9	59.7
France	59.4	56.6	71.2	50.3

Note: Data for the indicators ‘easy to talk to mothers’ and ‘easy to talk to fathers’ are missing for Slovenia. It was therefore not possible to calculate an average score for relationships.

out the percentage of children in each country who:

- » find it easy to talk to their mothers
- » find it easy to talk to their fathers
- » find their classmates kind and helpful.

Overall, the countries where children find it easy to talk to their mothers are also those where children find it easy to talk to their fathers. But there does not appear to be a significant association between ‘ease in talking to parents’ and ‘finding classmates kind and helpful’. In Hungary and Poland, for example, a high percentage of young people find it easy to talk to their parents but a low percentage find their classmates kind and helpful. In Belgium, the reverse is the case: a high percentage consider classmates kind and helpful but a much smaller percentage find it easy to talk to their fathers.

Findings

- » Measured by the average rating for the three relationships, the Netherlands again heads the rankings.
- » Denmark, Iceland, the Netherlands and Sweden are the only countries ranked in the top group for all three relationships.
- » Canada, France and the United States are the only countries ranked in the bottom group for all three relationships.
- » In every country, children found it more difficult to talk to their fathers than to their mothers – and the gap between the two measures is, on average, 16 percentage points. Only in Iceland does the difference narrow to less than 10 percentage points.

Nonetheless the table as a whole presents a positive picture of children's relationships in the developed nations. On average across the 28 countries, two thirds of children report that their classmates are kind and helpful, more than 83% find it easy to talk to their mothers, and 67% find it easy to talk to their fathers.

Controversy

Self-reported well-being measures are the subject of much academic debate.⁴ Proponents argue that if the aim is to measure children's well-being then there can be no more direct or reliable method than asking children themselves to say what they think about their own lives. In particular, self-reported measures such as the children's life satisfaction league table (Figure 6.0) have the advantage of allowing children themselves to decide what aspects of their lives are of most importance to them. The overview of child well-being presented in Part 1 is an index constructed by adults, circumscribed by the limitations of the available data, and based on a weighting system for which there is no agreed scientific basis. The *Children's Life Satisfaction Table*, on the other hand, allows young people to decide, in a less structured but arguably less arbitrary and more subtle way, what elements matter to their own well-being and what weight or importance to attach to

each. Adding momentum to these arguments is the desire to respect children's rights, to listen to their voices, and to include them as far as possible in the process of measuring and promoting their own well-being.

Critics might agree with all of the above points, but this would not deter them from expressing concerns about the validity of self-reported well-being measures – especially when used for purposes of international comparison. Chief among those concerns is that responses to survey questions may be culturally conditioned. A score of 6 on a *Life Satisfaction Scale*, for example, may mean one thing in a culture which emphasises accepting one's lot in life and discourages complaint – and quite another in a culture where children are encouraged to strive for better, to compare themselves to others, and to be aware of their rights.

A related concern is that a seemingly simple process like rating one's own life satisfaction on a scale of 0 to 10 can in practice involve complex psychological processes, of which perhaps the most applicable are cognitive dissonance and adaptive preference. Many studies have shown that people seek to maintain peace of mind, reconcile inner conflicts, or maintain a positive self-image, by adjusting their opinions, aspirations, and levels of

expectation according to their perception of what is possible or realistic. In this way, for example, it is conceivable that fatalism or resignation may come to be expressed as 'life satisfaction'.

Finally, it may be argued that subjective judgements of well-being are made in relation to the lives of others and that this makes cross-national comparison questionable. When asked to imagine '*the best possible life for me*' and '*the worst possible life for me*', for example, some children may take as their frame of reference the lives of family and friends, classroom and community; others may think less of the world around them and more of the virtual world as portrayed by media of all kinds. Might this not also be a distorting influence on levels of self-reported life satisfaction in different countries?

In sum, children – like adults – are likely to adapt their sense of life satisfaction both to their own realities and to the examples and norms set by the societies in which they live. Does this mean that some deprived and disadvantaged children report that they are 'satisfied' with their lives because they cannot realistically expect anything better? Or because they have been taught not to complain? Or because they feel defensive about their homes and protective towards their parents?^{xxxviii} Conversely, do some privileged

4 Subjective well-being measures first came to prominence with the work of Richard Easterlin's 1974 paper 'Does Economic Growth Improve the Human Lot? Some Empirical Evidence'. Since that time, the trickle of survey data on self-reported well-being has become a flood. Questions about happiness or subjective well-being are now included, for example, in the United States General Social Surveys, the Pew Survey of Attitudes, the Virginia Slims Poll, the DDB Needham Lifestyles Survey and the Gallup-Healthways Well-Being Index. France has brought together a Commission on the Measurement of Economic Development and Social Progress with a mandate to examine 'the adequacy of current measures of economic performance and how measures of development could take better account of societal well-being'.

children report 'dissatisfaction' because they are constantly being invited to compare their possessions and opportunities, their looks and bodies and lifestyles, with the rich and famous in the virtual community of a globalized and commercialized media?

Well-being and well-becoming

Such arguments caution against too glib a reading of subjective measures of well-being, especially when used as the basis for international comparison. But they do not add up to a dismissal. There is considerable evidence that subjective well-being measures reflect more than cultural conditioning, psychological adaptation, or genetic make-up. Life satisfaction measures, as we have seen, tend to correlate well with more objective measures of well-being and with other measures of coping ability and social competence.^{xxxix}

Subjective well-being measures record something real and important about children's lives. Caution is needed in interpreting the results, especially when making international comparisons, but it would be absurd to dismiss findings that show subjective well-being in one country to be markedly lower than in comparable countries, or that show a deteriorating trend over time, or that provide insights into differences by age or gender. For its part, the league table of overall

child well-being need not be ashamed of reflecting adult value judgements; it is part of the responsibility of adults to make such judgements on behalf of children (if a child were to consider that school achievement or taking exercise are not important to his or her well-being, this would not be a reason for adults to ignore such considerations).

This last point again reminds us that the 'objective' and 'subjective' measures of child well-being deployed in Parts 1 and 2 of this report are not measuring the same thing. For all these reasons, UNICEF takes the view that both the self-reported life satisfaction levels presented in Part 2 and the overview of child well-being presented in Part 1 provide valuable information about children's lives: while there is reason for care in interpreting the results of both, there is no reason to dispense with the services of either.

PART 3

CHILD WELL-BEING – THE 10 YEAR RECORD

The first UNICEF overview of child well-being was published in 2007, drawing on internationally comparable data from the years 2001 to 2003. The current overview draws on data from 2009 and 2010. Is it therefore possible to say whether child well-being has risen or fallen in economically advanced nations over the first decade of the 2000s?

Changes in measures and methods make it impossible to draw simple comparisons between the two overviews. However, overall progress in child well-being may be tracked over the decade by constructing a 'limited overview' using only those measures common to both 2001/2002 and 2009/2010.

The background paper^{xxxx} to this report sets out this 'limited overview' in more detail. Figure 7.0 summarizes the results by showing each country's league table ranking at the beginning and end of the decade (average rank for four available dimensions of child well-being – material well-being, health, education and behaviours and risks).

Overall, the results show that the rank order of countries has remained reasonably stable over the decade, but with some significant changes.

Changes in material well-being

It is also possible to compare the progress of countries over time by focusing not on composite measures but on individual

Figure 7.0 Limited overview of child well-being
Country rankings at beginning and end of the decade

Rank	Early 2000s	Rank	Late 2000s	Change in rank
1	Sweden	1	Netherlands	+2
2	Finland	2	Norway	+2
3	Netherlands	3	Finland	-1
4=	Denmark	4	Sweden	-3
4=	Norway	5	Germany	+2
6	France	6	Denmark	-2
7	Germany	7	Belgium	+1
8	Belgium	8=	France	-2
9=	Czech Republic	8=	Ireland	+4
9=	Poland	8=	Switzerland	+3
11	Switzerland	11	Portugal	+5
12	Ireland	12	Poland	-3
13	Spain	13	Czech Republic	-4
14=	Canada	14=	Canada	no change
14=	Italy	14=	Italy	no change
16=	Greece	16	United Kingdom	+4
16=	Portugal	17	Austria	+1
18	Austria	18=	Greece	-2
19	Hungary	18=	Hungary	+1
20=	United Kingdom	18=	Spain	-5
20=	United States	21	United States	-1

The tables are ranked by each country's average rank in four dimensions of child well-being – material well-being, health, education, and behaviours and risks – for which comparable data are available towards the beginning and end of the first decade of the 2000s.

Findings

- » Finland and the Netherlands lead the child well-being tables in both 2001/2002 and 2009/2010.
- » Austria, Greece, Hungary the United Kingdom and the United States are ranked in the bottom third of the table for both 2001/2002 and 2009/2010 (though the United Kingdom rose four places).
- » Over the decade, Portugal climbed from the bottom third to a mid-table position.

indicators of child well-being for which data are available at both the beginning and end of the decade.

In each case, countries are ranked by the levels recorded in 2009/2010.

Figure 7.1a, for example, shows that all 21 countries for which comparable data are available have seen a significant decline in material deprivation – as measured by the ‘low family affluence’ rate (see page 10). By the end of the decade, ‘low family affluence’ had fallen below 20% in all countries except Hungary.

Figure 7.1a also shows that the countries of Central and Eastern Europe are beginning to close the gap with the more established industrial economies of the West.

The Czech Republic, Hungary and Poland still report the highest rates of ‘low family affluence’, but (along with Portugal) they also record the sharpest falls. Over the decade, the ‘low family affluence’ rate declined by more than 20% in the Czech Republic and Poland, and by about 15% in Hungary.

The ‘low family affluence’ rate may of course continue to fall even if those on low incomes fall further and further behind the income norms of their societies (as it is based not on changing median incomes but on the possession of a fixed list of material goods and opportunities). Unfortunately, it is not possible to track and compare changes in relative child poverty over

the course of the decade because of technical changes in the equivalence rate by which the OECD adjusts household incomes to allow for differences in family size and composition.

Changes in child health

It is also possible to measure progress by tracking changes in some key indicators of child health.

Figure 7.1b, for example, shows that infant mortality rates (IMRs) have declined in all 21 countries for which data are available.

Here, also, there are signs that Central and Eastern Europe is catching up, with Hungary and Poland recording the biggest falls (along with Ireland).

Figure 7.1a Changes in the percentage of children reporting low family affluence between 2001/2002 and 2009/2010 (lacking specific items – see above and page 9)

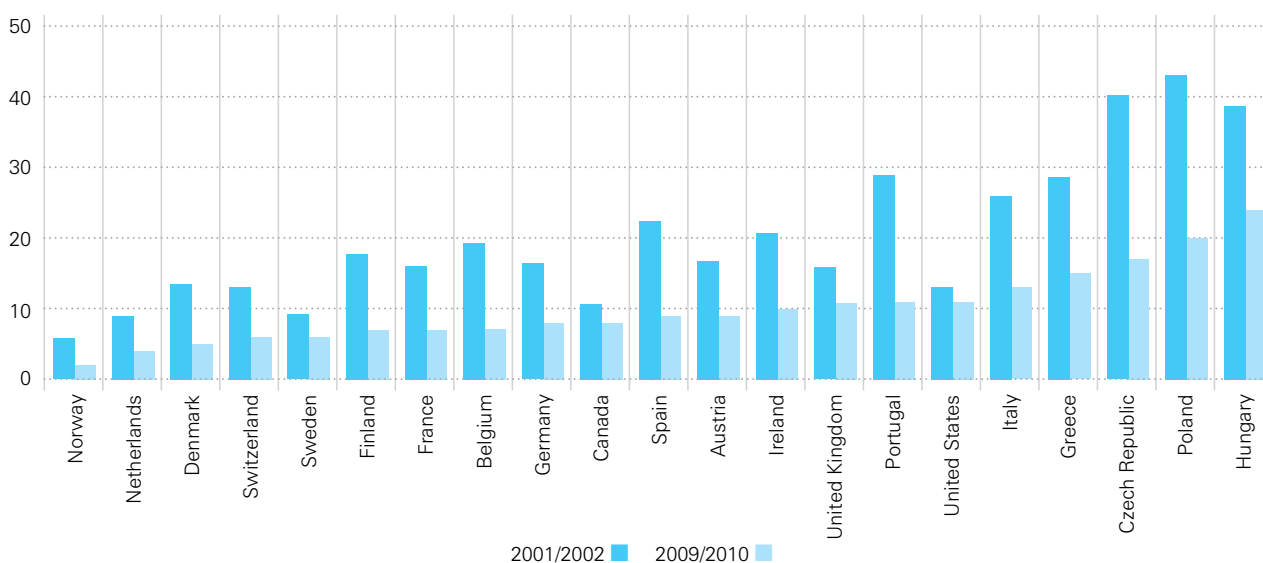
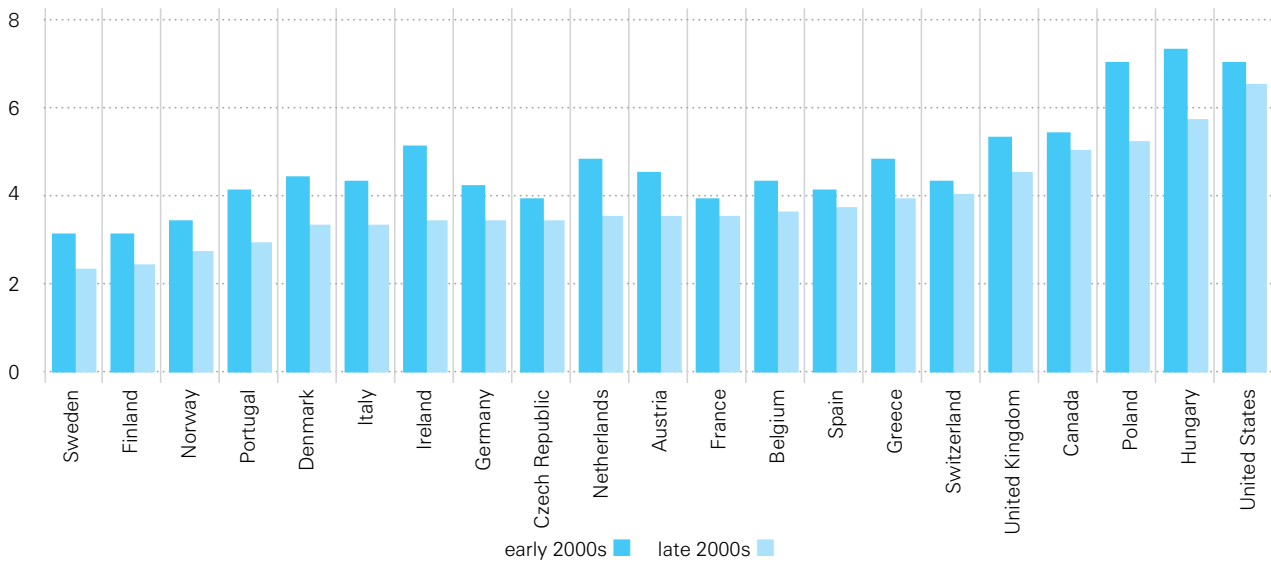
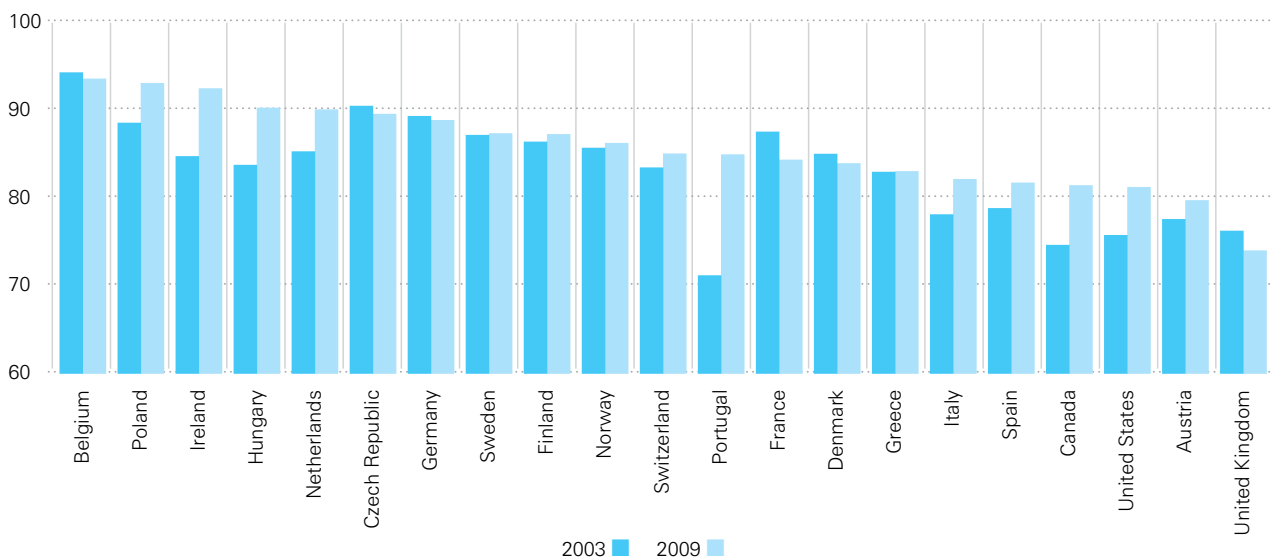


Figure 7.1b Changes in infant mortality rate between the early 2000s and late 2000s

Deaths under 12 months old per 1,000 live births

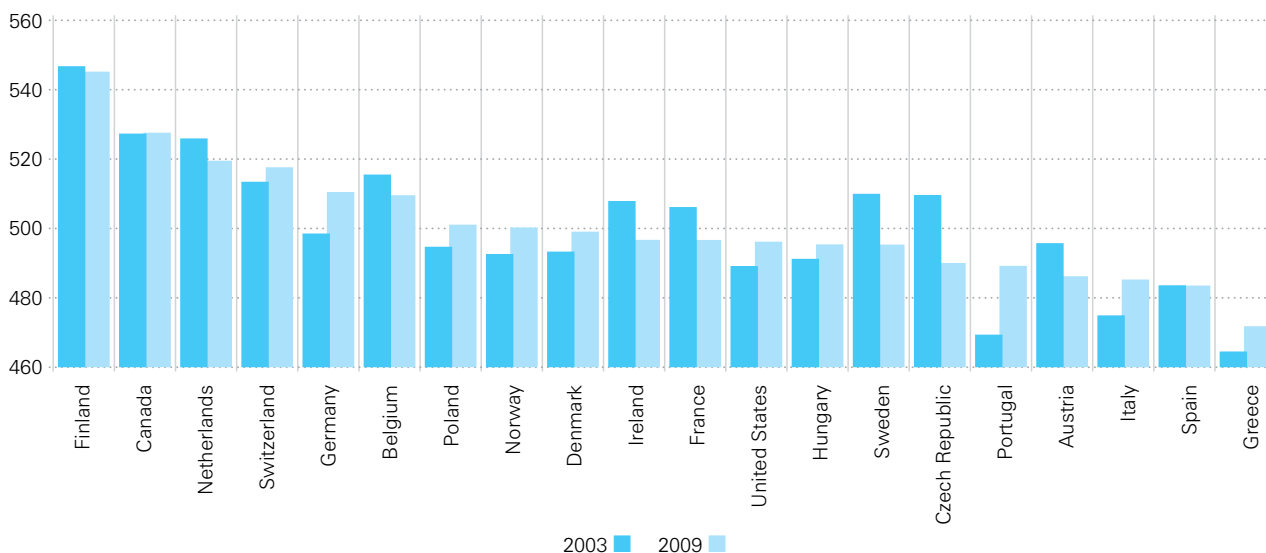
**Figure 7.1c** Changes between 2003 and 2009 in the percentage of young people aged 15–19 remaining in education

Findings

- » Overall, the table shows a rise in further education enrolment rates in 14 out of 21 countries, with particularly significant increases in Canada, Hungary, Ireland, Portugal and the United States.
- » Although starting from a high level at the beginning of the decade, France registered the biggest fall in further education enrolment – dropping more than three percentage points.
- » The United Kingdom also saw a decline of more than two percentage points despite starting from a low position at the beginning of the decade.

Figure 7.1d Changes in educational achievement between 2003 and 2009

Average score in PISA tests of reading, maths and science literacy



Note: Data for the United Kingdom are not included, though reported in Report Card 7, due to technical reasons.

Findings

- » Overall, the table shows a relatively stable picture of educational achievement.
- » Finland is the outstanding performer in both 2003 and 2009.
- » Canada and the Netherlands take second and third places in both periods.
- » The biggest gains in average PISA scores over the period were made by Germany and Italy but above all by Portugal which, between 2003 and 2009, has gone a long way towards closing the ‘educational achievement gap’ with other European countries.
- » Significant declines were recorded by Austria, the Czech Republic, France, Ireland and Sweden.

The Czech Republic, with an IMR of under 5 per 1,000 at the beginning of the decade, had no need of catching up.

As noted in Part 1, the official comparison of infant mortality rates may do an injustice to the bottom ranked country – the United States – as it is possible that the comparison is not ‘like-for-like’ (it is possible that infant mortality rates in the United States might be affected by the deaths of extremely premature and/or low birthweight babies who survive for a short period because of intensive neonatal care but who

would not, in other countries, be classified as ‘live births’).

Changes in education

Two indicators are also available to measure progress in children’s and young people’s educational well-being (in this case between 2003 and 2009).

Figure 7.1c, for example, records changes in further education enrolment rates.

Educational achievement

Secondly, the *Programme of International Student Assessment*

(PISA) makes it possible to track nation-by-nation changes in educational achievement.

Figure 7.1d shows the changes in PISA scores of 15-year-olds in 20 countries between 2003 and 2009 (average of scores in reading, maths and science literacy).

Changes in behaviours

Changes in some key aspects of children’s behaviours and lifestyles can also be measured over a period corresponding to approximately the first decade of the 2000s. Figure 7.2a, for example, shows changes

Figure 7.2a Changes between 2001/2002 and 2009/2010 in the percentage of young people aged 11, 13 and 15 who are overweight

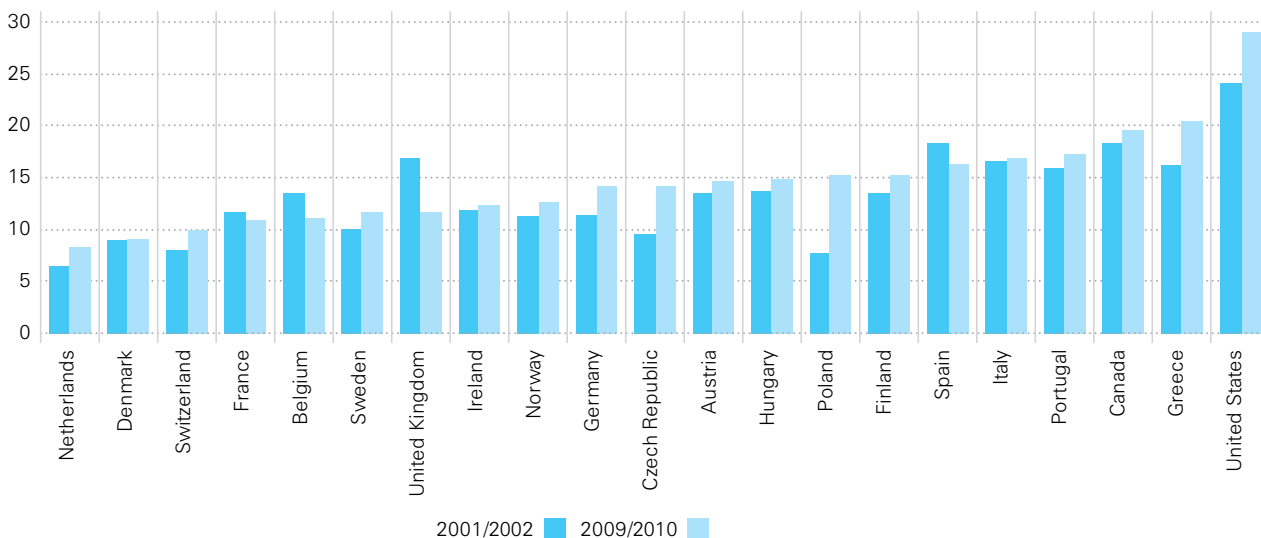
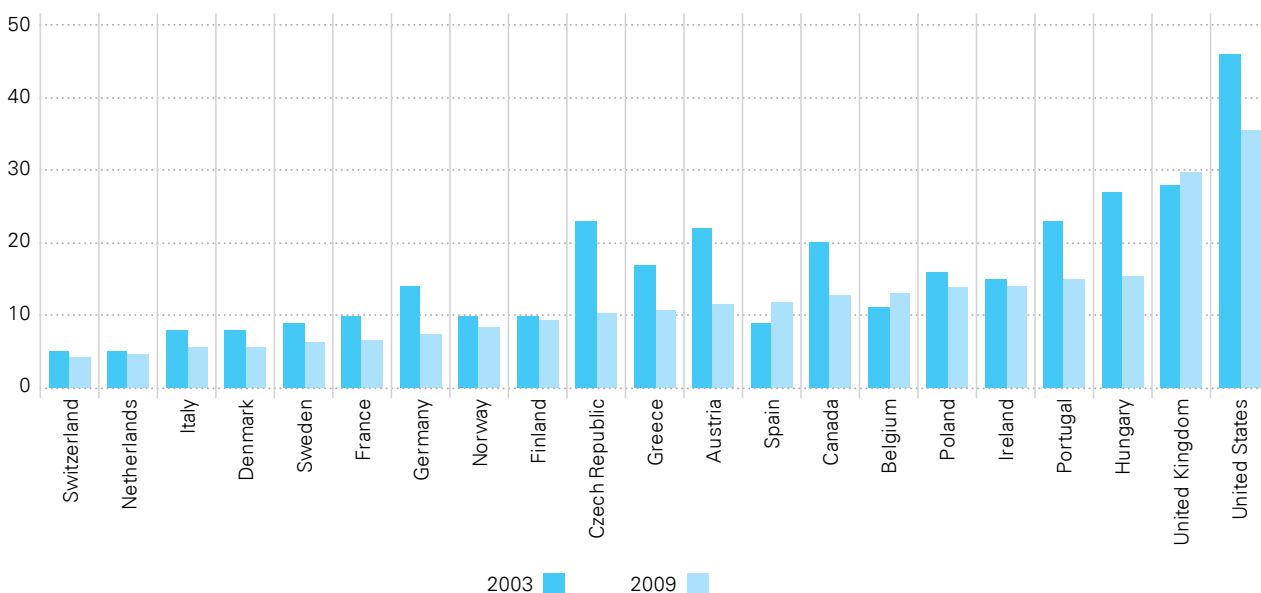


Figure 7.2b Changes between 2003 and 2009 in the teenage fertility rate (annual number of births per 1,000 girls aged 15 to 19)



in the percentage of children whose self-reported height and weight places them in the 'overweight' category (computed by body mass index).

Births to teenagers

Certain risk behaviours in children and young people can also be

measured and compared across countries over the six years 2003 to 2009.

Figure 7.2b, for example, looks at changes in the proportion of girls who give birth while still in their teens.

Risk behaviours

The first decade of the 2000s saw very significant progress in reducing the proportion of children and young people who expose themselves to health problems and other dangers by smoking cigarettes, drinking alcohol and

Findings

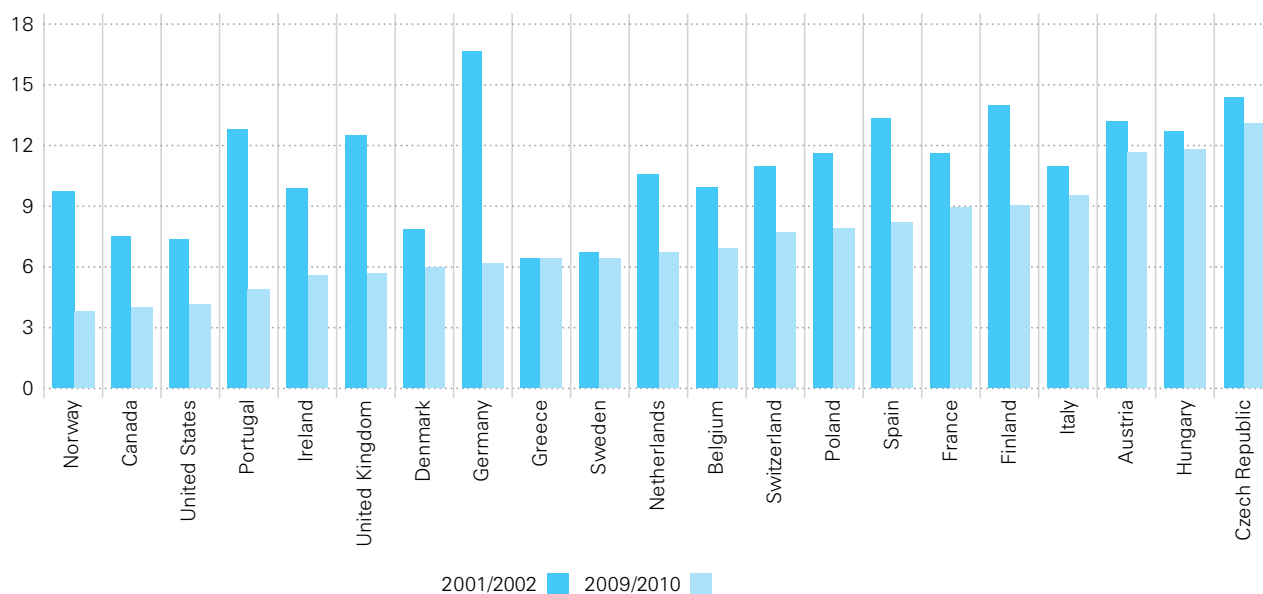
Obesity

- » The percentage of overweight children rose in 17 of the 21 countries over the decade.
- » The sharpest rise was seen in Poland, where the percentage of overweight children doubled.
- » Only Belgium, France, Spain and the United Kingdom saw a fall in the percentage of overweight children.
- » The United States had the highest proportion of children overweight at both the beginning and end of the decade, reaching almost 30% by 2009/2010.

Teenage births

- » Births to teenagers declined in 18 out of 21 countries between 2003 and 2009.
- » Austria, the Czech Republic, Hungary and United States all recorded falls in teenage fertility rates of 10 points or more.
- » The exceptions to the falling trend were Belgium, Spain and the United Kingdom. This finding is particularly significant for the United Kingdom because its teenage fertility rate at the beginning of the decade was already the highest in Europe.
- » Despite a 10 point fall over the decade, the United States continues to have the highest teenage fertility rate in the developed world.

Figure 7.3a Changes between 2001/2002 and 2009/2010 in the percentage of young people aged 11, 13 and 15 who reported smoking at least once a week



using cannabis. Figures 7.3a, 7.3b and 7.3c summarize trends in each of these high-risk behaviours over the decade.

The three charts, tracking recent trends in three of the risk behaviours most likely to damage the short- and long-term well-being

of children, tell a story of significant progress over the decade.

Violence

Continuing the good news, the great majority of developed countries also saw a decline in the percentage of children who report being involved in fighting and who report having been

bullied. Figures 7.4a and 7.4b tell the story of this progress.

Children's subjective well-being

Finally, the children's life satisfaction scale also makes it possible to look at how children's overall subjective well-being has changed over the first decade of the 2000s (Figure 7.5).

Figure 7.3b Changes between 2001/2002 and 2009/2010 in the percentage of young people aged 11, 13 and 15 who reported having been drunk on more than two occasions

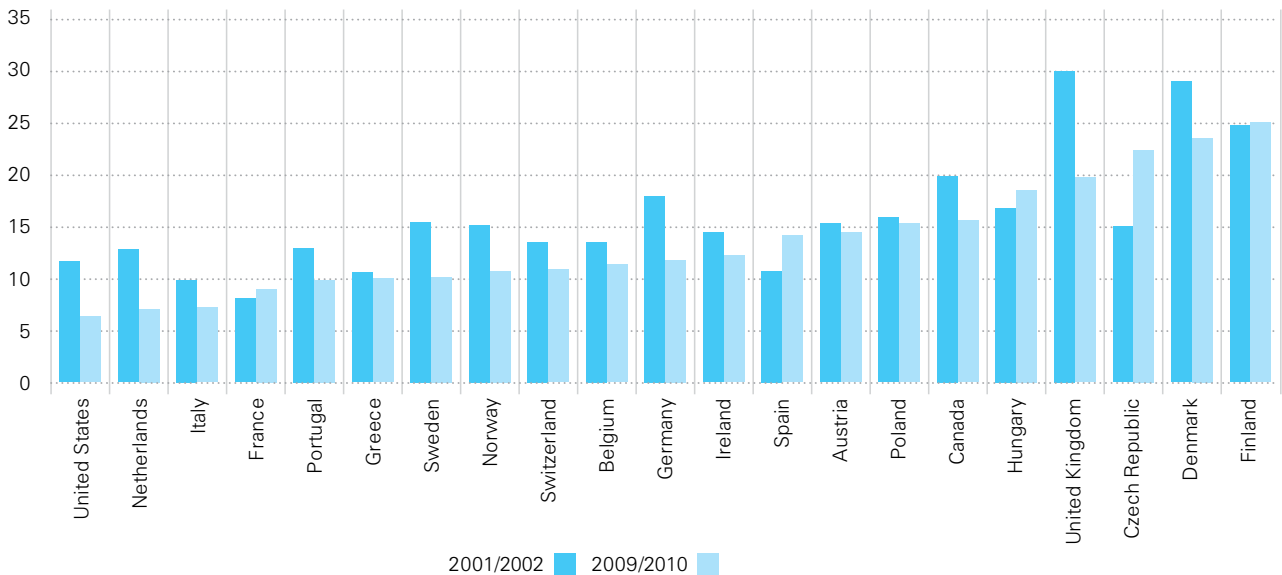
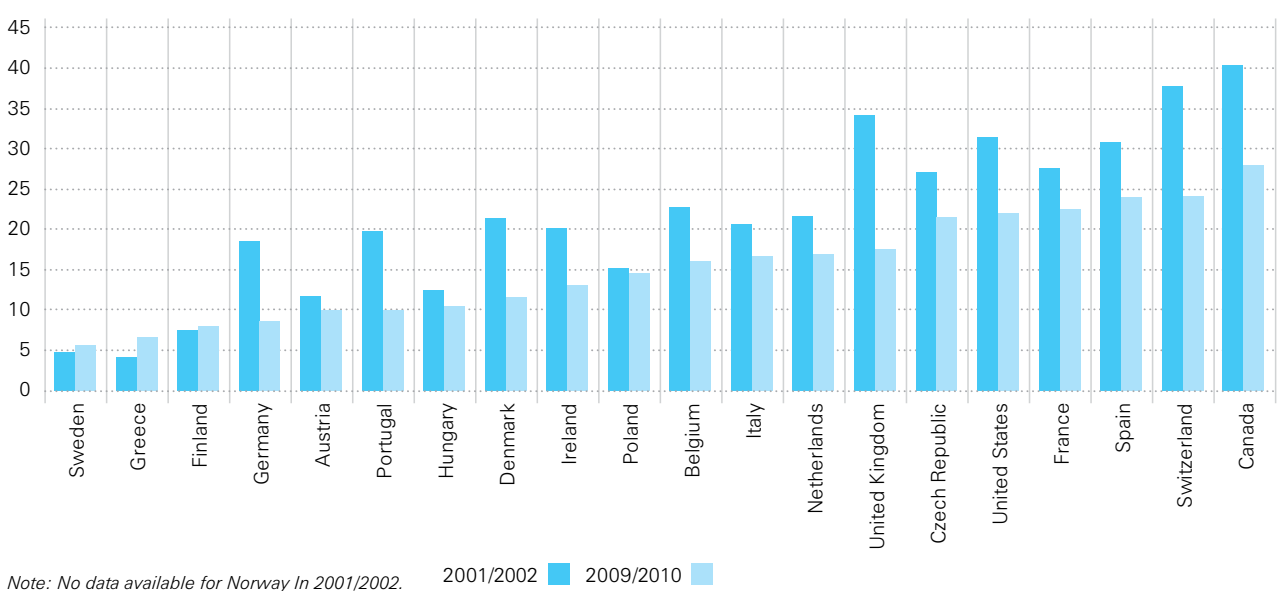


Figure 7.3c Changes between 2001/2002 and 2009/2010 in the percentage of young people aged 11, 13 and 15 who reported having used cannabis in the last 12 months



Note: No data available for Norway in 2001/2002.

First call

While there have clearly been setbacks for children in particular countries on particular indicators, the overall story of the first decade of the 2000s is one of steady improvement in most measures of children’s well-being. Indicators

such as the ‘low family affluence rate’, the infant mortality rate, and the cigarette smoking rate have fallen in every single country for which data are available. Further education enrolment rates have increased in most nations, and the great majority of countries have

also seen declines in teenage birth rates, cannabis use, fighting and bullying.

Mitigating the good news is the fact that, in some countries and for some indicators, this progress may have been halted or even thrown into reverse by the widespread economic

Findings

Cigarettes

- » The percentage of children and young people who smoke cigarettes has fallen in all 21 countries for which comparable data are available (with the exception of Greece and Sweden where rates were low at the beginning of the decade and have remained stable).
- » The biggest falls over the decade were recorded in Germany, Norway, Portugal and the United Kingdom – all of which more than halved the proportion of young people who report smoking cigarettes.

Alcohol

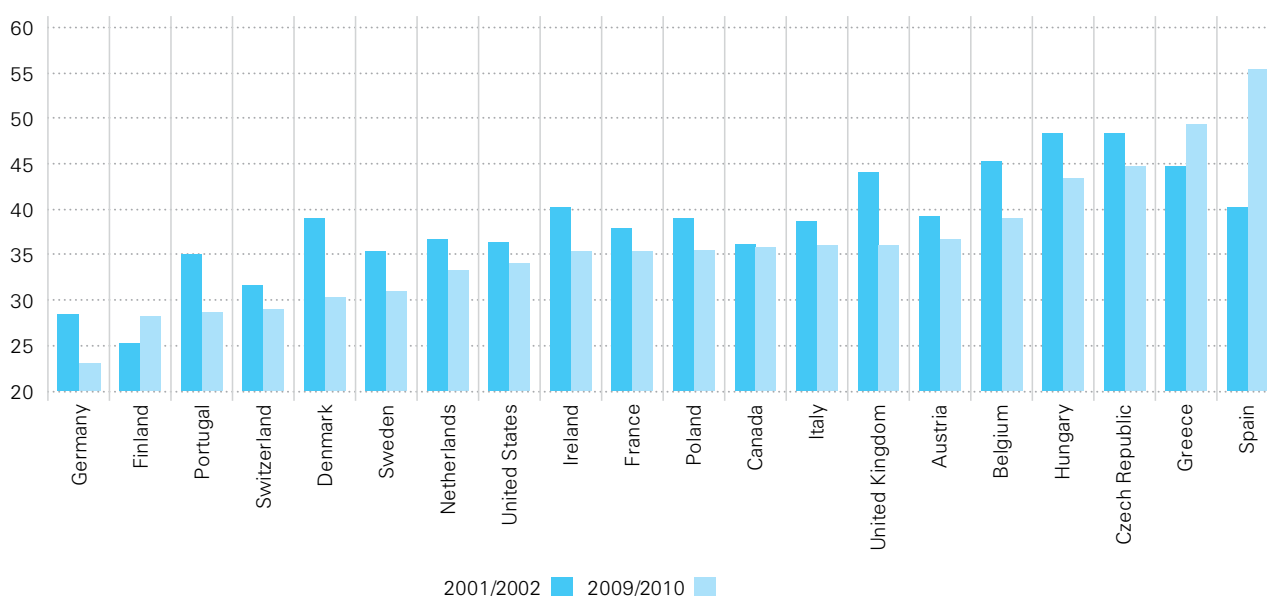
- » More than three-quarters of the 21 countries also saw declines in alcohol use by young people – as measured by the proportion of 11-, 13- and 15-year-olds who report having been drunk on at least two occasions.
- » The biggest falls were again recorded in Germany (where the alcohol abuse rate fell from 18% to under 12%) and in the United Kingdom (which saw a decline from 30% to just under 20%).

- » Despite the declining overall trend, the children and young people of three countries – the Czech Republic, Denmark and Finland – still have alcohol abuse rates of over 20%.
- » The biggest rise in alcohol abuse by young people was seen in the Czech Republic (rising from 15% to 22%).

Cannabis

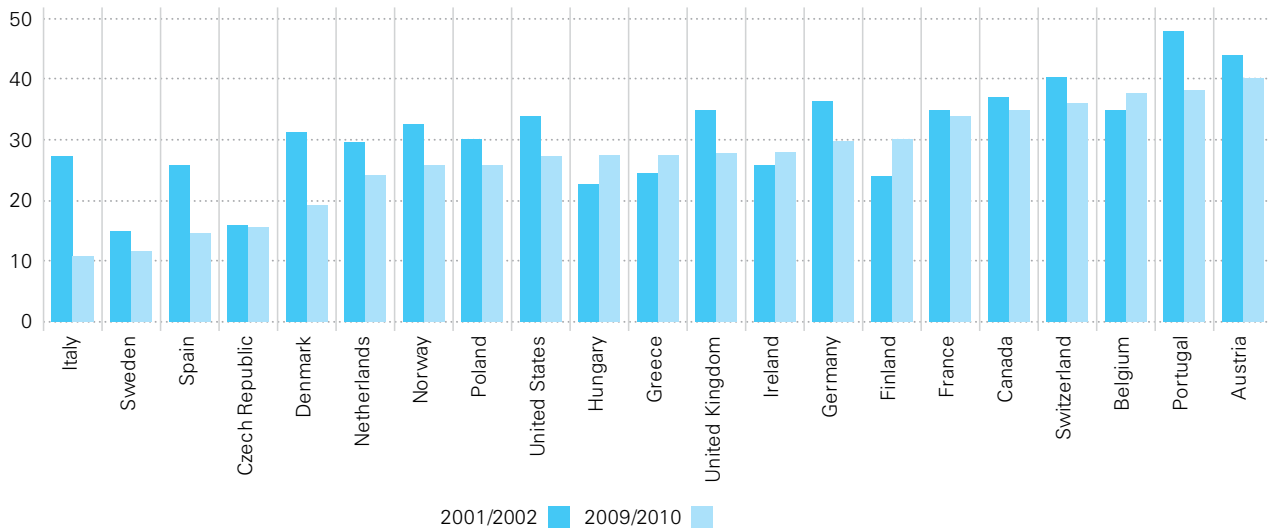
- » 17 out of 20 countries reported a fall in cannabis use.
- » The biggest percentage point falls were achieved in Canada, Germany, Switzerland and the United Kingdom.
- » Canada still has the highest level of cannabis use among young people, despite reducing its usage rate from 40% in 2001/2002 to 28% in 2009/2010.
- » Germany has more than halved cannabis use among young people over the decade (from 19% to 9%).
- » Starting from a higher level, the United Kingdom has also halved cannabis use among young people (from 34% to 17%).
- » Switzerland has cut cannabis use among young people by more than a third (from 38% to 24%).

Figure 7.4a Changes between 2001/2002 and 2009/2010 in the percentage of young people aged 11, 13 and 15 who reported having been involved in fighting at least once in the previous twelve months



Note: No data available for Norway in 2001/2002.

Figure 7.4b Changes between 2001/2002 and 2009/2010 in the percentage of young people aged 11, 13 and 15 who reported having being bullied at least once in the past couple of months



Note: See page 27 for the HBS definition of bullying provided to students.

Findings

Fighting

- » The proportion of children and young people who report being involved in fighting fell in 17 of the 20 countries for which data are available.
- » Denmark saw the biggest fall in the percentage who report being involved in fighting (down from 40% to 30%).
- » Spain saw the biggest rise (from 40% to 55%).
- » Germany is a clear leader in having the lowest percentage of children who report being involved in fighting (23%).

Being bullied

- » The percentage of children who report being bullied also fell in 16 out of 21 countries.
- » Italy saw the biggest fall in bullying over the decade and now has the lowest 'bullying rate' of any developed country.
- » Denmark, Italy and Spain all recorded a fall in the bullying rate of more than 10 percentage points.
- » The Czech Republic and Sweden achieved further small declines despite having the lowest bullying rates at the beginning of the decade.
- » Five countries – Belgium, Finland, Greece, Hungary and Ireland – saw a rise in the bullying rate over the decade.

recession beginning in late 2008. The statistics used in this report reflect the beginning of the downturn but by no means its full consequences. Over the last three years, many developed nations have witnessed further rises in unemployment, falling real incomes (especially for the already low paid), and cuts in the government services

on which disadvantaged families depend most heavily.

Unfortunately, few countries have up-to-date information on what has been happening to children's lives during this period. But even without detailed data, it is possible to anticipate some of the likely consequences. UNICEF and other

organizations working with children know from long experience what is likely to happen when economies enter periods of turbulence and recession. In the second half of the 1980s and the early 1990s, for example, many nations began to suffer the consequences of a debt crisis and an economic adjustment process which saw unemployment

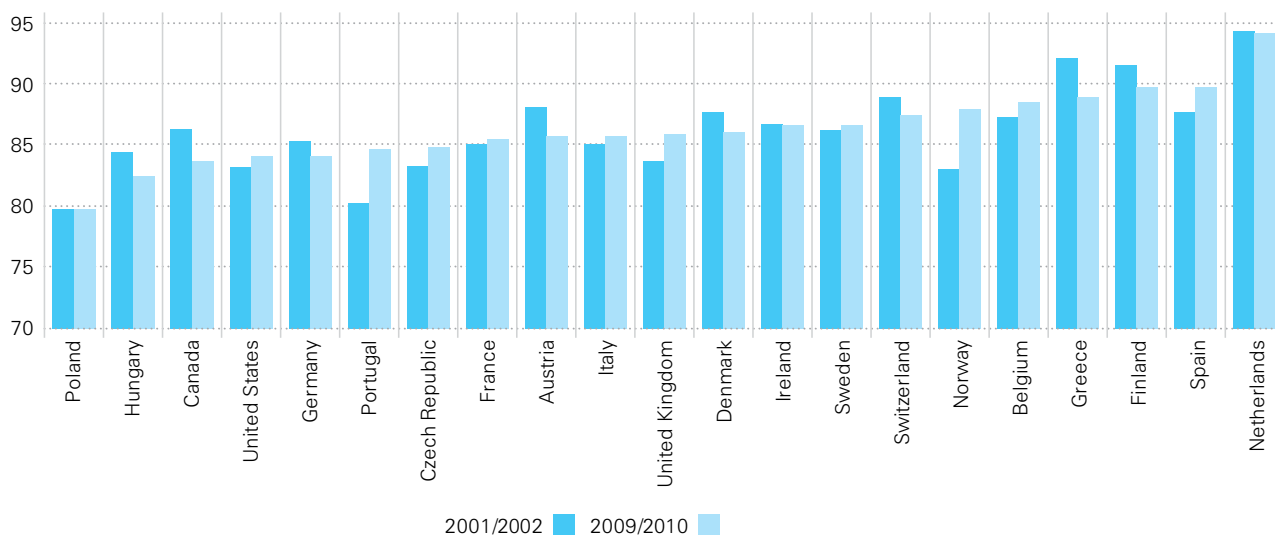
and underemployment rise and government expenditures and services fall. Throughout that period UNICEF argued, not always successfully, for ‘adjustment with a human face’ – urging the World Bank and the IMF, as well as national governments and aid agencies, to do all within their power to prevent the heaviest burden of economic recession from falling on those least able to sustain it. Today, that same argument needs to be brought to bear on the governments of the world’s richest nations.

At the heart of the case to be made is the fact that childhood is a period of special susceptibility; a time of rapid and miraculously delicate development of mind and body; a time when skill should be building on skill, but a time when disadvantage can also build on disadvantage; a time in which future patterns and pathways of health and well-being are being laid down and in which disruption can have lifelong consequences. Protecting the years of childhood is therefore essential both for the

well-being of those who are children today and for the well-being of the societies of tomorrow. It is therefore a commitment that should not be set aside, even temporarily, because other problems appear more pressing, a commitment that should have a first call on societies’ capacities, a commitment to be maintained in good times and bad. There will always be something more immediate than protecting the well-being of children. There will never be anything more important.

Figure 7.5 Changes in children’s self-reported life satisfaction

Changes between 2001/2002 and 2009/2010 in the percentage of children aged 11, 13 and 15 who rate their life satisfaction with a score of 6 or more on the 11-step ‘Cantril Ladder’ scale



Findings

- » The subjective well-being story is mixed – with approximately half of the 21 countries showing a rise in children’s overall life satisfaction and half showing a fall. In almost all cases the recorded changes were small.
- » The children of the Netherlands reported the highest level of life satisfaction at both the beginning and end of the decade.
- » The children of Norway, Portugal and the United Kingdom saw the biggest percentage point rises in life satisfaction.
- » Austria, Canada and Greece showed the biggest falls (though in each case the fall was less than three points).
- » Two Nordic countries, Denmark and Finland, also saw a small decline in children’s overall life satisfaction.

REFERENCES

- i UNICEF Innocenti Research Centre (2007). *Child Poverty in Perspective: 'An overview of child well-being in rich countries'*, *Innocenti Report Card 7*. Florence: UNICEF Innocenti Research Centre.
- ii Duncan, G., K. Telle, K. Ziol-Guest and A. Kalil (2009). 'Long-run Impacts of Early Childhood Poverty: Comparative evidence from Norwegian registry data and the U.S', PSID, paper prepared for the conference 'The Long-run Impact of Early Life Events'. Michigan: National Poverty Center, University of Michigan, March 12-13 2009.
- iii Johnson, R. and R. Schoeni (2007). 'The Influence of Early-Life Events on Human Capital, Health Status, and Labor Market Outcomes over the Life Course', *Working Paper Series*. Berkeley, CA: Institute for Research on Labor and Employment, UC Berkeley.,
- iv UNICEF Innocenti Research Centre (2012). 'Measuring Child Poverty: New league tables of child poverty in the world's rich countries', *Innocenti Report Card 10*. Florence: UNICEF Innocenti Research Centre.
- v Ibid.
- vi Currie, C., C. Zanotti, A. Morgan, et al. (2012). 'Social Determinants of Health and Well-being among Young People'. *Health Behaviour in School-aged Children (HBSC) Study: International report from the 2009/2010 survey*. Copenhagen: World Health Organization.
- vii Centers for Disease Control and Prevention (1984). 'Morbidity and Mortality Weekly Report' (MMWR), US Department of Health and Human Services, Atlanta, August 17, 1984, Vol. 33(32):459-60,465-67.
- viii Institute of Health Equity (2012). 'An Equal Start: Improving outcomes in children's centres: The evidence review'. London: Department of Epidemiology and Public Health, University College London.
- ix UNICEF, op. cit. (2007).
- x Godfrey, C., S. Hutton, J. Bradshaw, R. Coles, G. Craig, J. Johnson (2002). 'Estimating the Cost of Being "Not in Education, Employment or Training" at Age 16-18', *Research Report RR346*. York: Social Policy Research Unit, University of York.
- xi Quintini G., J. P. Martin and S. Martin (2007). 'The Changing Nature of the School-to-Work Transition Process in OECD Countries', *IZA discussion paper 2582*. Paris: OECD Employment Division. Available at: <http://ftp.iza.org/SSRN/pdf/dp2582.pdf>
- xii OECD (2011). *Education at a Glance: OECD indicators*. Paris: OECD, pp. 340-341. Available at: <http://www.oecd.org/education/preschoolandschool/educationataglance2011oecdindicators.htm>
- xiii Currie et al., op. cit. (2012).
- xiv Ibid.
- xv Ibid.
- xvi Moore, K., N. Jones and E. Broadbent (2008). 'School Violence in OECD Countries', Woking: Plan Limited.
- xvii Cornell University (2007). 'Child Development and the Physical Environment', Cornell University, College of Human Ecology. See also: <http://www.who.int/ceh/indicators/en/> and http://ec.europa.eu/health/healthy_environments/partnerships/index_en.htm
- xviii Evans, G. W. (2006). 'Child Development and the Physical Environment', *Annual Review of Psychology*, Vol. 57: 423-451.
- xix European Union Statistics on Income and Living Conditions (EU-SILC) (2009),.
- xx Margolin G. and E. B. Gordis (2004). 'Children's Exposure to Violence in the Family and Community', *Current Directions in Psychological Science*, Vol. 13, No. 4: 152-155. Available at: http://www.psy.miami.edu/faculty/dmessaging/c_c/rsrscs/rdgs/peers_social_general/margolin.exposure2violence.curdir.04.pdf
- xxi Cohen, E., B. McAlister Groves and K. Kracke (2009). 'Understanding Children's Exposure to Violence. Moving From Evidence to Action', *Children Exposed to Violence Issue Brief No. 1*. North Bethesda, MD: Safe Start Center.
- xxii Institute of Health Equity, op. cit. (2012).
- xxiii Kershaw, P. (2010). 'Smart Family Policy: Measuring and monitoring its development across Canada', Presentation given at Offord Centre for Child Studies, 17 June 2010. Available at: <http://www.offordcentre.com/conference/presentations/Paul%20Kershaw%20June%202010.pdf>
- xxiv Janus, M. and D. R. Offord (2007). 'Development and Psychometric Properties of the Early Development Instrument (EDI): A measure of children's school readiness', *Canadian Journal of Behavioural Science*, Vol. 39, No. 1: 1-22.
- xxv Ibid., p. 5.
- xxvi Ibid., p. 14.

- xxvii Hertzman, C. and J. Bertrand (2007). 'Children in Poverty and the Use of Early Development Instrument Mapping to Improve Their Worlds', *Paediatrics and Child Health*. Vol. 12(8): 687–692. Available at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2528797/>
- xxviii Janus and Offord, op. cit. (2007), p. 13.
- xxix Janus, M. (2010). *The Natural History of the Early Development Instrument*. Presentation given at Offord Centre for Child Studies, 16 June 2010. Available at: <http://www.offordcentre.com/conference/presentations/Magdalena%20EDI%20conf%20June%202010%20.pdf>
- xxx Council of Australian Governments, COAG, *Human Capital Reform: Report by the COAG National Reform Initiative Working Group*, February, 2006.
- xxxi Goldfeld, S., M. Sayers, S. Brinkman, S. Silburn and F. Oberklaid (2009). 'The Process and Policy Challenges of Adapting and Implementing the Early Development Instrument in Australia', *Early Education and Development*. Vol. 20 No.6: 979.
- xxxii Australian Early Development Index. Available at: <http://maps.aedi.org.au/>
- xxxiii Centre for Community Child Health and Telethon Institute for Child Health Research (2009). *A Snapshot of Early Childhood Development in Australia – AEDI National Report 2009*. Canberra: Australian Government.
- xxxiv Australian Institute of Health and Welfare (2011). 'Headline Indicators for Children's Health, Development and Wellbeing'. Cat. no. PHE 144. Canberra: AIHW, p. 64.
- xxxv Children's Society Quarterly Surveys. Available at: <http://www.childrengsociety.org.uk/what-we-do/research/well-being/background-programme/quarterly-surveys>
- xxxvi Ladd, G. W. (2005). 'Children's Peer Relations and Social Competence: A century of 'progress'', *Current Perspectives in Psychology*, Yale University Press.
- xxxvii Morrison Gutman, L., J. Brown, R. Akerman and P. Obolenskaya (2010). 'Change In Wellbeing from Childhood to Adolescence: Risk and resilience', Centre for Research on the Wider Benefits of Learning. London: Institute of Education.
- xxxviii The Children's Society (2012). *The Good Childhood Report 2012: A review of our children's well-being*. Available at: http://www.childrengsociety.org.uk/sites/default/files/tcs/good_childhood_report_2012_final.pdf
- xxxix Currie et al., op. cit. (2012).
- xxxx Martorano, B., L. Natali, C. de Neubourg and J. Bradshaw (2013). 'Child Well-being in Economically Rich Countries: Changes in the first decade of the 21st century', *Working Paper 2013-02*. Florence: UNICEF Office of Research.

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Innocenti Report Card 2

A league table of child deaths by injury in rich nations

Innocenti Report Card 3

A league table of teenage births in rich nations

Innocenti Report Card 4

A league table of educational disadvantage in rich nations

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A comparative overview

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