Social spending after the crisis
Social expenditure (SOCX) data update 2012

With the recent crisis that started in 2007/08, social spending increased to 22% of GDP on average across the OECD in 2009 and it has not gone down since. Population ageing is also set to drive up pension and health spending in the years ahead. The challenge now is to safeguard social support for future generations.

The global economic crisis has had a major impact on the share of economic resources absorbed by the welfare state. New OECD social expenditure data show that, on average across the OECD, public social spending-to-GDP ratios increased from around 19% in 2007 to 22% of GDP in 2009/11 and estimates for 2012 (see note to Chart 1) suggest it has remained high since.

In an economic downturn, spending-to-GDP ratios can rise for two reasons: i) because public spending goes up to address the greater need for social support, such as unemployment or housing benefit; and/or ii) GDP grows slowly or declines. Chart 1 disentangles these two effects and shows there was a significant increase in real (adjusted for changes in prices) social spending on average across the OECD. In particular, social spending increased markedly during 2008/09, but has stabilised since. Economic growth broadly follows the opposite trend: it declined from 2008 to 2009, edged up in 2009/10 and stabilised thereafter.

Across the OECD, social spending-to-GDP ratios increased markedly during the recent economic crisis

Real public social spending and real GDP (Index 100 in 2007) and public social spending in % of GDP (right scale), 2007-2012

Note: Public social spending totals reflect detailed social expenditure programme data for 1980-2009. Consistent with these historical series, public social expenditure totals were calculated for 2010 and 2011, and estimated for 2012, on the basis of national sources for non-European OECD countries, and/or the OECD Economic Outlook, No 91, May 2012, and the European Union's Annual Macro-economic database (AMECO), as at May 2012. Spending totals for 2010 and 2011 are subject to revision, but these are likely to be small (light shade); the estimates for 2012 are most likely to be affected by data revisions to spending and GDP (dark shade).

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Social spending and economic growth during the recent crisis

There have been wide differences between countries, with some much more affected by the crisis than others. For example, between 2007/08 and 2011/12, the decline in real social spending (and real GDP) was largest in Greece. Real social spending in the Netherlands increased by about 10% (most closely reflecting the OECD average), while with 29% the increase in real social spending was largest in Korea (Chart 2 – similar charts for all OECD countries are available on www.oecd.org/els/social/expenditure).

Social spending declined sharply in Greece and increased most in Korea

Real public social spending, real GDP and CPI (Index 100 in 2007, left scale) and public social spending in % of GDP (right scale), 2007-12, by level of change between 2007/08 and 2011/12

The table groups 32 OECD countries by their trends in real social spending (horizontal axis) and economic growth (vertical axis) between 2007/08 and 2011/12; countries are grouped on the basis of whether growth in GDP and social spending over this period has statistically been significantly above, around or below the OECD average (see the note to the table). For example, over the sample period, real social spending increased by 19% in Australia, while real GDP increased by 11%. Therefore, Australia is grouped (with Korea) among the countries with above-average growth of both GDP and social spending.

In most countries, real public social spending is now at least 6% higher than in 2007/08

<table>
<thead>
<tr>
<th>Change in real public social spending</th>
<th>Change in real GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>above-average (above 3.6%)</td>
<td>Germany</td>
</tr>
<tr>
<td>around-average (between 4% and 3.6%)</td>
<td>Austria Belgium</td>
</tr>
<tr>
<td>below-average (below 4.5%)</td>
<td>Czech Republic</td>
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<td></td>
<td>Greece Hungary</td>
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<td></td>
<td>Italy Portugal</td>
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<td>Iceland</td>
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<td>Norway</td>
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<td></td>
<td>Switzerland</td>
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<tr>
<td></td>
<td>United States</td>
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</tbody>
</table>

Note: Countries are grouped “above”, “average” and “below” in line with the changes to real social spending and real GDP between the average for 2007 and 2008 and the average for 2011 and 2012. The average change in real social spending between 2007-08 and 2011-12 was +9.9% with a standard deviation of 8.5%. The average change in real GDP over the same period was -0.7% with a standard deviation of 8.5%. The OECD average is calculated as the unweighted average for 32 OECD countries (except Japan and Turkey) for which data are available. Greece is the country with the largest decline in real social spending (-14%), the Netherlands is closest to average (+10%) and Korea had the largest growth (+29%). With around 30 countries in the sample, an observation is statistically significantly different from the average if it is at least half a standard deviation above or below the average change. In case of social spending trends the interval of around average growth from 2007/08 to 2011/12 is 5.7% to 14.2%; for GDP growth from -4.9% to 3.6%.

See also notes to Chart 1. Consumer price index figures refer to the OECD Main Economic Indicators (MEI) and 2012 data are based on the OECD Economic Outlook No. 91, OECD Annual Projections. Country charts for all OECD countries for which data are available can be found on www.oecd.org/els/social/expenditure.
Trends in GDP growth are more diverse than spending trends: about one-third of countries had average GDP growth, while almost two-thirds had average real social spending growth. In 26 out of 32 OECD countries, social spending was 6% higher in 2011/12 than in 2007/08, and in eight countries this increase exceeded 16%.

Non-European OECD countries had either above or average real GDP growth or social spending growth, or both. But Poland, Norway, Sweden and Switzerland also had above-average GDP growth. Between, 2007/08 and 2011/12 real GDP declined by 5% or more in the Czech Republic, Hungary, Iceland, Italy, Portugal, Slovenia, Spain and the United Kingdom, and by more than 10% in Estonia, Greece and Ireland (Chart 2).

**Social spending initially increased...**

The crisis led to an increase in social spending across the OECD. Timing varied but either in 2007/08 (e.g. Estonia and Ireland) or in 2008/09 (e.g. France and the United States) social spending started to go up. With the increase in joblessness – see the OECD Employment Outlook – spending on unemployment compensation increased from an average of 0.7% of GDP in 2007 to 1.1% in 2009. The increase in spending on unemployment benefits from 2008 to 2009 was most pronounced in Iceland from 0.3% of GDP in 2008 to 1.7% in 2009, Ireland from 1.4% to 2.6% and Spain from 2.2% to 3.5%.

The increase in average public spending on Active Labour Market Programmes (ALMPs) was small in comparison: from 0.5% in 2007 to 0.6% of GDP in 2009.

In countries where family support is largely income-tested, public spending on family benefits has also increased. In 2009, public spending on such benefits as a percentage of GDP was highest in Ireland and the United Kingdom, closely followed by Iceland, another country with income-tested child benefits (Chart 3). In the United Kingdom, for example, the rise in the number of low-income families increased both the take-up of benefits (both child tax credit and working tax credit) and the number of claimants with maximum payments. In effect, the family payment system did what it was supposed to do and cushioned the effect of the crisis for poorer families.

Another explanation for the rapid rise in family spending trends in Ireland and the United Kingdom is that it has become harder for single parents to find a job in recent years. This will sustain public spending on specific income support programmes to help them in both these countries.

**Family spending went up most in countries with income-tested child benefits**

<table>
<thead>
<tr>
<th>Country</th>
<th>Public spending on family benefits as percentage of GDP, 2007</th>
<th>Increase 2007-2009</th>
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<tbody>
<tr>
<td>Ireland</td>
<td>3.0</td>
<td>1.2</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>3.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>3.1</td>
<td>1.2</td>
</tr>
<tr>
<td>France</td>
<td>3.3</td>
<td>1.4</td>
</tr>
<tr>
<td>Iceland</td>
<td>3.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Denmark</td>
<td>3.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Sweden</td>
<td>3.1</td>
<td>1.3</td>
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<tr>
<td>Netherlands</td>
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<tr>
<td>Sweden</td>
<td>3.1</td>
<td>1.3</td>
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<tr>
<td>Austria</td>
<td>2.8</td>
<td>1.2</td>
</tr>
<tr>
<td>Germany</td>
<td>2.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Ireland</td>
<td>3.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Germany</td>
<td>2.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Estonia</td>
<td>2.5</td>
<td>1.2</td>
</tr>
<tr>
<td>OECD</td>
<td>2.3</td>
<td>1.1</td>
</tr>
<tr>
<td>West Bank</td>
<td>2.3</td>
<td>1.1</td>
</tr>
<tr>
<td>Mexico</td>
<td>2.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Korea</td>
<td>0.7</td>
<td>0.5</td>
</tr>
</tbody>
</table>

1. Since 2008 the child tax credit is paid in cash in Luxembourg. However, since the former were not reported, the change leads to an increase in recorded spending on family support.
2. Due to reform in 2007/8, spending on public spending on home-help services decreased in the Netherlands.
3. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and the Israeli settlements in the West bank under the terms of international law.
4. In Federal countries, as for example in Canada, Switzerland and the United States, childcare spending by local governments is not necessarily reported to Federal governments. For these countries indicators underestimate the extent of public spending on childcare.

... and then stabilised in most countries, though some faced painful cuts....

In Greece and Hungary, real public social spending in 2011/12 was 13% to 14% lower than in 2007/08. But even though still higher than in 2007/08 other countries have seen a decline in real spending since hitting a peak in 2009 in Iceland and Ireland, 2010 in Portugal, Spain and the United Kingdom, and 2011 in the Czech Republic and Slovenia.
In 2009 and after, the crisis led to cuts in cash benefits in many countries including Estonia, Greece, Iceland and Ireland. In addition, price increases also played a significant role in eroding the value of real social spending. Chart 2 showed this effect for Greece, but its impact was also large in Hungary, Iceland, Poland and Turkey (see charts on www.oecd.org/els/social/expenditure).

The crisis often also provided added impetus for reforms needed to ensure the financial sustainability of pension systems. In particular, many countries increased retirement ages (often gradually phased in). Such reforms are unlikely to deliver immediate reductions in social spending, but it illustrates that the crisis has put further focus on the need to reform social welfare systems to cope with ageing and the resulting structural upward pressure on social spending.

**Key social policy areas**

Public social expenditure amounted to 22.1% of GDP on average in the OECD area in 2009, but this varied considerably across countries. Spending was highest at over 30% of GDP in France and Denmark, and lowest at below 10% of GDP in Korea and Mexico (Chart 4).

Countries on average spent more on cash benefits (12.6% of GDP) than on social and health services (9.0% of GDP), but Nordic countries, Canada, the Netherlands, New Zealand and the United Kingdom had a more equal balance in spending on cash and in-kind benefits. Low-spending countries like Mexico and Korea had a greater focus on services in social support.

With the advent of the crisis, income support to the working-age population has become more important. From 2007 to 2009, spending on unemployment compensation increased while spending on sickness and disability remained high at 2% of GDP. The combined effects were largest in Estonia, Iceland and Ireland, where cash benefits to the working-age population increased from, respectively, 3.1%, 3.7% and 5.3% of GDP in 2007 to 5.7%, 5.9% and 8.7% of GDP in 2009.

In terms of spending, the most important social policy areas were cash benefits to older people – just below 8% of GDP – and public health expenditure (Chart 4). But there is large variation among countries. In Italy, public spending on old-age and survivor’s pensions accounted for 15.4% GDP compared with a low of 1.7% in Mexico.

What data are included in the SOCX database?

The new release of the OECD Social Expenditure database (SOCX) includes detailed social expenditure programme data for 1980-2009 for 34 OECD countries. SOCX presents public and private benefits with a social purpose grouped along the following policy areas: old age, survivors, incapacity-related benefits, health, family, active labour market programmes, unemployment, housing and other social policy areas.

In addition to the detailed information available for 1980-2009 (including 2010 for Australia, Canada, Germany, Ireland, New Zealand, and the United States; and 2010 and 2011 for Chile, Israel, and Mexico), SOCX includes indicators on aggregate public social spending for 2010-11 based on national aggregates and estimates for 2012.

SOCX also includes indicators on net (after-tax) social expenditure for 30 countries for 2009 (information on taxation of benefits often does not become available until two years after the fiscal year). Time series for the majority of countries are available since 2001. Relevant fiscal details involves direct taxation of benefit income, indirect taxation of consumption out of benefit income, and tax breaks with a social purpose, e.g. favourable fiscal treatment of dependent children, or health insurance contributions.

Data for 24 European countries were provided by Eurostat as based on the information in their European system of integrated social protection (ESSPROS), while information for other countries is provided by national correspondents. Data on health and active labour market programmes come from OECD health data and the OECD/Eurostat database on labour market policies. Information on the direct taxation of benefit income and tax breaks with a social purpose was provided by the delegates to the Committee on Fiscal Affairs' Working Party No. 2 on Tax Policy Analysis and Tax Statistics.

It should be borne in mind that the quality of data on the impact of tax systems (frequently estimates based on Tax models), and private and social spending and spending by local government (because of under-reporting), is not as high as the quality of information on budgetary allocations towards social purposes. For more detail regarding the sources and methodology underlying SOCX and its indicators on social spending, see Adema, W., P. Fron and M. Ladaique (2011), "Is the European Welfare State Really More Expensive? Indicators on Social Spending, 1980-2012 and a Manual to the OECD Social Expenditure database (SOCX)”, OECD Social, Employment and Migration Working Paper No. 124. (www.oecd.org/els/social/expenditure).

The OECD SOCX database is available via the OECD statistical browser OECD.stat. To facilitate international comparisons, this information is related to gross domestic product, gross national income, total government expenditure, and in purchasing power parities per head.
Pensions and health are the main items of public social spending

Available aggregate social spending data for about half of the OECD countries from the early 1960s onwards suggest welfare states often have more than doubled in size over the past 50 years. This is related to the introduction and increased generosity of social programmes, particularly in the 1960s and 1970s, while in more recent years the effect of ageing populations on pension and health-related spending is becoming more important.

There is considerable cross-national variation in trends. However, in general it seems that public social spending-to-GDP ratios increase with economic crises but only decline slowly afterwards, if at all. On average across the OECD, public social spending-to-GDP ratios increased by about 2.5 percentage points after the economic shocks in the early 1980s and 1990s, without a strong subsequent decline. So far, there is little evidence that this trend will be different following the increase in the spending-to-GDP ratio in 2008/09.
Demographic pressures

The population structure is a key driver of social spending. Countries with a young population are much less likely to have higher social-spending-to-GDP ratios than countries with older populations, but have a greater share of education spending. For example, in a “very young country” such as Mexico, where only about 6% of the population is older than 65, public spending on education (4.8% of GDP in 2009) is much higher than public spending on the elderly (including pensions, long-term care and health) at 2.8% of GDP.

On average across the OECD, public social spending on the elderly amounted to 11% of GDP in 2009 (Chart 5; see the column with country labels). The proportion of elderly in the population is around 15% across the OECD and on average they “receive” 40% of all public spending on education and social policy. In countries where only one in ten persons or less is over 65, only a quarter of social spending goes to the elderly. In Japan and Italy where senior citizens constitute about 20% of the population, public spending on the elderly is about 60% of all public social and education spending.

Of course, the rules and structure of benefit systems also matter. Thus, despite a similar age profile of the population, public spending in Italy on the elderly is about 3.5 percentage points of GDP higher than in Japan, reflecting higher spending on pensions.

In addition to the crisis and fiscal consolidation efforts which have put pressure on social protection systems, population ageing will be a key driver of future increases in social spending. OECD projections suggest that public spending on health and long-term care services might almost double from 7% in 2009 to 13% in 2050 on average across the OECD.

Similarly, pension spending could increase in line with an ageing population. But OECD Pensions at a Glance and OECD Pensions Outlook show that in many countries pension reforms have improved the financial sustainability of pensions systems through, for example, less generous indexation procedures for benefit payments, a greater reliance on private and/or defined contribution schemes, or higher retirement ages. These changes may not immediately affect the level of current spending, but they will reduce the growth of public pension spending in future.
Pension spending will grow but not as fast as elderly populations

From gross to net (after taxes) total (public and private) social expenditure

The gross social spending data discussed above allow for monitoring of public social spending policy trends. However, they do not account for private social spending and the effect tax systems can have on the social spending effort within countries and cross-national comparisons of spending.

Private social benefits

Private social expenditure includes all social benefits delivered through the private sector (not transfers between individuals) which involve an element of compulsion or inter-personal redistribution. Private social benefits often involve benefits prescribed under occupational accidents and diseases legislation (e.g., Australia), sickness benefits (e.g., Germany) and old-age pensions. Private pension plans involve mandatory and voluntary employer-based programmes (e.g., the United Kingdom), or tax-supported individual pension plans (e.g., the United States); private pension benefit payments exceeded 3% of GDP in Canada, Iceland, Japan, the Netherlands, the United Kingdom and the United States (Chart 7).

Most countries also have a redistributive element in private health expenditure (pooling of contributions and risk-sharing in private insurance plans), but this is nowhere as important as in the United States, where private social health spending amounted to 5.7% of GDP in 2009. In all, private social spending was highest at over 10% of GDP in the United States, while it accounted for around 5% of GDP in Canada, Iceland, the Netherlands, and the United Kingdom. At the other end of the ranking, private social spending amounts to less than 1% of GDP in about one-third of OECD countries.

The impact of the tax system

The tax system can affect social spending in three different ways:

1. Governments levy direct income tax and social security contributions on cash transfers to beneficiaries. Chart 7 shows governments in Denmark and Sweden claw back almost 5% of GDP through direct taxation of benefit income; this is over 3% in Finland and the Netherlands. By contrast, direct taxation of benefit income is limited in the Czech Republic, Ireland, Israel, Korea, Mexico and the Slovak Republic.

2. Benefit income is provided to finance consumption of goods and services, on which government levy indirect taxation. Tax rates on consumption are often considerably lower in non-European OECD countries where tax revenue on consumption out of benefit income generally amounts to less than 1% of GDP (Chart 7). In Europe, this is lowest in the Slovak Republic and Spain at 1.5% of GDP and highest in Austria, Denmark, Estonia, Luxembourg and Sweden at around 3% of GDP.

3. Governments can also use so-called “tax breaks with a social purpose” (TBSP) to directly provide social support to households (for example, child tax allowances), or stimulate the provision and take-up of private social benefits (e.g., tax relief towards the provision of private health plans). In 2009, the value of TBSPs exceeded of 1% of GDP in Canada, France, Germany, Mexico, Portugal, Spain and the United States.

As direct and indirect taxation on benefits is generally larger than the value of TBSPs, public
social effort is less than what is suggested by gross (pre-tax) social spending data, except in Korea, Mexico and the United States.

**Cross-country rankings**

Moving from gross public to net total social expenditure not only leads to greater similarity in spending levels across countries (Chart 7), it also changes the ranking among countries. Estonia, Denmark, Finland, Luxembourg and Poland drop five to ten places in the rankings and all these countries tax benefits and associated consumption above the OECD average.

7 In most OECD countries net total social spending is around 20-25% of GDP

From gross public to total net social spending, in % of GDP at market prices, 2009

By contrast, Canada, Iceland, Japan and the United Kingdom move up the rankings by five to ten places. In all these countries, private social spending is important while limited direct and indirect taxation of benefit income also plays a role in Canada and Japan. As private social spending is so much larger in the United States compared with other countries, its inclusion moves the United States from 23rd in the ranking of the gross public social spending effort (figure in bracket next to the country name in Chart 7) to 2nd place when comparing net total social spending across countries.

*Information on data for Israel: http://dx.doi.org/10.1787/888932315602

**Follow-up:**

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**Further reading:**

- Pensions at a Glance; Pensions Outlook 2012, via www.oecd.org/els/social/pensions
- OECD Family database, via www.oecd.org/social/family/database
- Doing Better for Families, via www.oecd.org/els/social/family/doingbetter
- Sickness, Disability and Work, via www.oecd.org/els/disability
- Employment Outlook, via www.oecd.org/employment/outlook
- Divided We Stand: Why Inequality Keeps Rising, via www.oecd.org/els/social/inequality
