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PART II

Chapter 6

From Household Earnings to Disposable Household Income Inequality*

This chapter provides an overview of levels of and trends in household income distribution for the working-age population. It compares the size of the different components which make up total household income across countries and over time: wages and salaries, self-employment income, capital income, and taxes and benefits. The chapter examines the relative contributions of these various income sources to levels of and trends in overall household income inequality. It also identifies whether particular income sources influence overall inequality primarily through changes in their shares in total income or through changes in the way they are distributed.

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6.1. Introduction

The previous chapters consider how personal and household earnings inequality among people of working age has changed. In the end, though, what matters most to people is the disposable income they have in their pockets. This income is derived from labour earnings, other cash sources, and benefits received minus taxes paid and contributions to social security.

How final disposable income is distributed is a prime concern for policy makers. This chapter explores in more detail how household earnings and income inequality are linked. There are various factors and mechanisms at play that may either offset or reinforce earnings inequality (Gottschalk and Danziger, 2005). One example would be that changes in the generosity of government cash tax/transfers and in income not generated through employment (*e.g.* income on capital or private transfers) have consequences for the overall distribution of income in a society.

This chapter begins with an overview of income distribution in OECD countries from the mid-1980s to the mid-2000s, drawing on information from the *OECD Database on Household Income Distribution and Poverty*. It compares the shares in household income of different income sources (such as earnings, capital income, taxes, benefits) across countries and over time. Using micro-level data for 24 OECD countries, the chapter then examines the relative contributions of the various income sources to levels and trends in overall income inequality. Finally, it considers whether and how different income sources influence overall inequality - primarily through changes in their share of total income or through the distribution of their components. It also discusses the effect of marginal increases in various income sources on overall inequality. The changing redistributive role of taxes and transfers is analysed in greater detail in Chapter 7.

The chapter finds the following key features when relating inequality of household earnings and other market income sources to inequality in households' final disposable income.

- Inequality in households' disposable income is lower, and higher with regard to market incomes, although there is much variation from one country to another.
- Disposable income inequality and market income inequality have both increased over the past 30 years. Inequality in disposable income rose more slowly than in market income during the late 1980s and early 1990s, but has grown at a faster rate than market income inequality since then.
- Capital income saw a greater increase in inequality than earnings in three-quarters of OECD countries. Although its contribution to household income inequality is lower than that of earnings, it has increased significantly in the past 20 years.
- Changes in overall household income inequality are also related to changes in the relative importance and distribution of taxes and benefits. Although taxes and benefits reduce the overall level of income inequality, they have become less effective in that respect since the mid-1990s in many OECD countries.

DIVIDED WE STAND: WHY INEQUALITY KEEPS RISING © OECD 2011

6.2. Inequality: trends in the distribution of market and disposable income

Moving from household earnings to household disposable income involves the inclusion of income from other sources, using the following definitions (based on the work of the Canberra group[1]):

- *Market income*: includes incomes from wages and salaries, self-employment income and cash property income together with occupational and private pensions.
- *Gross income:* is the sum of *market income* and social security cash benefits, private transfers and other cash income. Social security cash benefits include sickness, occupational injury and disease, and disability benefits, state old-age and survivors' pensions, child/family benefits, unemployment compensation benefits, maternity and other family leave benefits, social assistance cash benefits, war veterans' benefits and other social security benefits.
- *Disposable income:* is obtained by subtracting income tax and employees' social security contributions from *gross income*.

Including measures other than wages sometimes leads to measurement errors and comparability problems. Data on self-employment income, for example, are incomplete in some countries and capital income is frequently underestimated (Atkinson and Bourguignon 2000). Data on certain transfer components, such as occupational and private pensions are not available in certain countries, mainly in the early years. Benefits and social security transfers also change over time, with certain countries introducing for instance maternity benefits and social assistance benefits only in the late 1980s or early 1990s.[2]

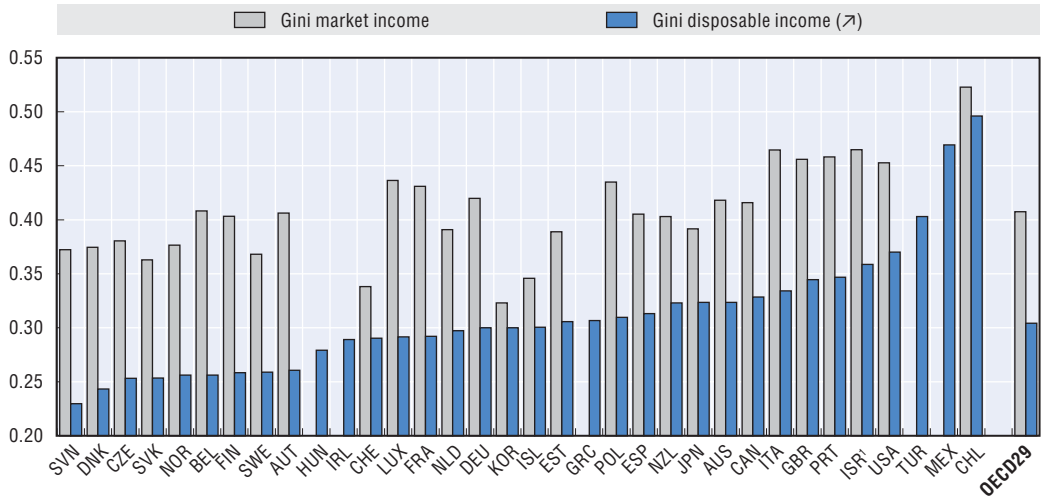
How does the distribution of household income compare across countries?

Figure 6.1 shows a summary measure for inequality, for both disposable income and market income: the Gini coefficient which has a range from zero (when everybody has identical incomes) to 1 (when all income goes to only one person).[3] Increasing values of the Gini coefficient thus indicate higher inequality in the distribution of income. Both income measures are adjusted to reflect differences in household needs depending on the number of persons in the household.[4] Consistent with the focus of the preceding chapters, the analysis refers to persons of working age (18- to 65-years old).[5]

Cross-country differences in disposable income inequality are large. Chile and Mexico record particularly high levels of income inequality, with a Gini coefficient which is more than 50% above the OECD average. Other countries with relatively high income inequality include Israel,[6] the United States and Turkey. At the other end of the spectrum are Denmark and Slovenia with inequality more than a fifth below the OECD average. Lower levels of income inequality are also prevalent in most of the remaining Nordic countries and some continental European countries.

The market income distribution is more unequal than the distribution of disposable income. On average, the Gini coefficient for market income is 0.41 or roughly 25% higher than for disposable income. But market income is less dispersed across OECD countries, suggesting that OECD tax-benefit systems work quite differently to offset market income inequality. The Gini coefficient for market incomes spans less than 20 points (from 0.32 to 0.52), compared to 27 points for disposable income (from 0.23 to 0.50). Chile shows the highest levels of inequality on both measures. Denmark and Sweden have the lowest levels of disposable income inequality but not in terms of market income, which is more

Figure 6.1. **Gini coefficients of inequality of market and disposable incomes, persons of working age, late 2000s**



Note: Late 2000s refer to a year between 2006 and 2009. OECD average excludes Greece, Hungary, Ireland, Mexico and Turkey (no information on market income available). Working age defined as 18- to 65-years old.

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

Source: OECD Database on Household Income Distribution and Poverty.

StatLink http://dx.doi.org/10.1787/888932536591

unequally distributed than, for instance, in Switzerland. Germany and Belgium, too, have market-income inequality levels above-average but taxes and benefits reduce disposable-income inequality to a level below the average.

How has the distribution of household income changed over time?

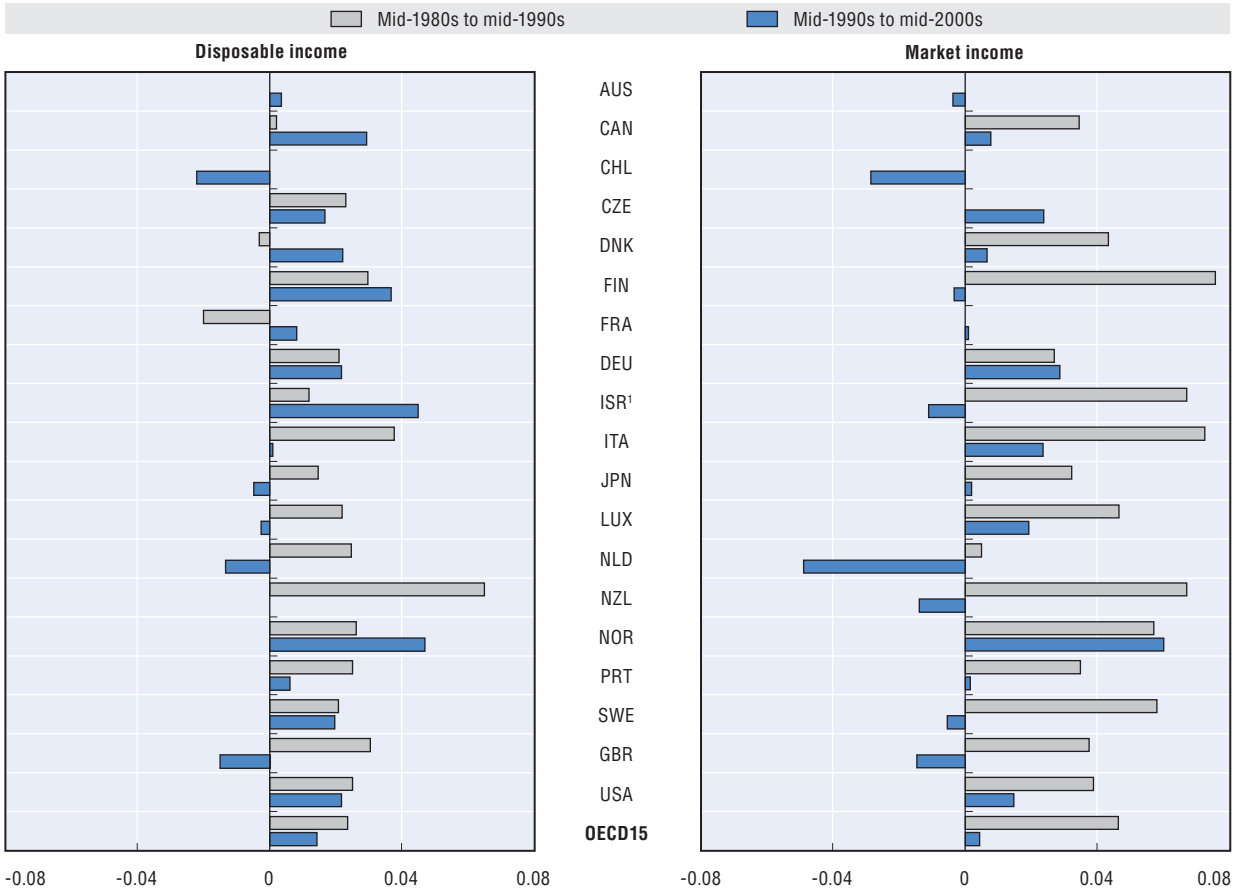
Inequality in disposable income among the working-age population increased in all OECD countries (except France) for which longer-term data between the mid-1980s and the mid-2000s are available (Figure 6.2, left panel). The Gini coefficient increased by around 3.8 percentage points (or 14%) during this period. The Nordic countries (except Denmark), Germany, Israel, New Zealand and the United States saw the largest increases of inequality (by more than 4 points). In France, inequality fell slightly over the same period and there was little change in Japan and the Netherlands.

It is also interesting to look at the evolution of distribution on disposable income by subperiods.[7] In all OECD countries shown here bar Denmark and France, income inequality increased from the mid-1980s to the 1990s. In the following decade, overall inequality continued to increase from the mid-1990s to the mid-2000s, but more diverse patterns across countries resulted in a much lower average increase. The distribution of disposable income contracted, especially in Chile but also in the Netherlands and the United Kingdom, or remained stable (changes below 1 percentage point) in one third of the selected OECD countries. But inequality increased in Israel, Finland and Norway. Canada, which had a stable income distribution up to the mid-1990s, saw a relatively strong increase in the more recent decade, primarily due to changes in the late 1990s.

One important driver of higher disposable income inequality was the rise in market income inequality in all countries, except Chile, France and the Netherlands (right-hand panel in Figure 6.2). The Gini measure of market income inequality increased by larger amounts than the Gini for disposable income, by some 5 percentage points over the whole

Figure 6.2. **Trends in inequality of disposable and market income, working-age population**

Percentage point changes, mid-1980s to mid-2000s



Note: OECD average excludes Australia, Chile, Czech Republic and France (no information on market income for the earlier period available). Mid-80s refer to 1990 for Czech Republic and Portugal, mid-00s refer to 2000 for Portugal. Working age is defined as 18 to 65-years old.

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

Source: OECD Database on Household Income Distribution and Poverty.

StatLink http://dx.doi.org/10.1787/888932536610

period. The Nordic countries (except Denmark), Germany and Israel showed large increases in inequality in both measures of income. On the other hand, Denmark and Luxembourg experienced little change in the distribution of disposable income while the distribution of market income widened.

By far the largest increases in inequality of market income occurred between the mid-1980s and the mid-1990s. In fact, about half of the selected OECD countries showed a decline in the Gini of market income in the more recent decade. Variations in market income inequality across periods partly reflect cyclical patterns of boom and bust, *e.g.* the recession of the late 1980s or the Nordic financial crisis at the beginning of the 1990s.

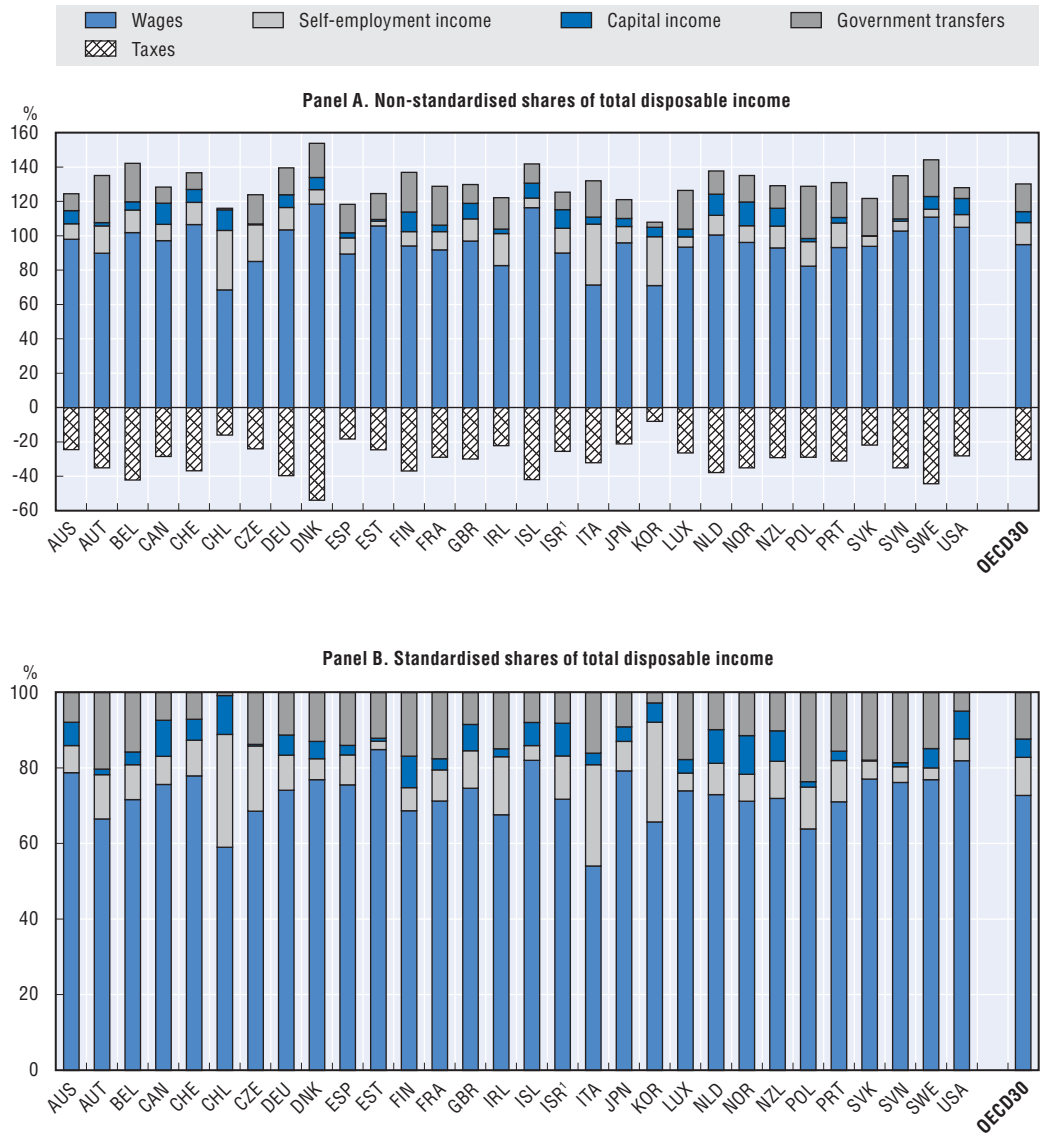
Changes in inequality between these two income concepts also highlight changes in how governments have countered inequality across countries and over time, as the difference between disposable and market income is accounted for by public transfers and income taxes and can be interpreted as first-order effect of redistribution. In the first decade, in most countries taxes and benefits reduced the increase in disposable income

substantively, particularly in Nordic countries. The redistributive effect, however, was less effective in the more recent decade. In Finland, Israel and Sweden, inequality of disposable income even increased despite a contraction in market income inequality.

How important are income components in terms of their share of total income?

Gross wages and salaries, together with income from self-employment make up the largest part of the disposable income of the working-age population, between 97% (Poland) and 127% (Denmark) of disposable net income (Figure 6.3, Panel A).[8] Cross-country

Figure 6.3. **Shares of disposable income components, working-age population, mid-2000s**



Note: Standardised shares in Panel B calculated by applying the average tax rate. OECD30 average excludes Greece, Hungary, Mexico and Turkey (no information on taxes available).

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

Source: OECD Database on Household Income Distribution and Poverty.

StatLink http://dx.doi.org/10.1787/888932536629

differences in tax rates are partly responsible for the relative size of these two components of disposable income. To facilitate comparison across countries, Panel B shows standardised shares.[9] Net wages and self-employment income together now account for 83%, on average, of total income. Korea (92%) has the highest share of these two components, while Poland (75%) has the lowest.

While wages are the largest component of income, income from self-employment is important in many OECD countries. On average, it represents 13% of gross disposable income and 10% when the standardised measure is used. These shares are likely to be higher in reality since income from self-employment is often not fully reported. Bearing this in mind, income from self-employment represents more than 28% of disposable income in Chile, Italy and Korea. In some countries such as Poland and Chile, the agricultural sector is relatively large and so therefore income from self-employment reflects the size in this sector. In Italy, on the other hand, the size of self-employment is also driven by the many small and medium-sized enterprises.

Gross wages and self-employment income taken together have fallen as a share of disposable income in the past two decades in more than half of the countries for which longer-term information is available (Table 6.1). On average, the share fell by close to 3 percentage points between the mid-1980s and the mid-2000s, 1.6 points for wages and 1.3 points for self-employment income. The share of wages decreased mainly in Finland, Germany, Israel and New Zealand, and self-employment income fell mostly in Ireland, Israel, Japan, the Netherlands and Norway.

The decline in the share of wages mostly happened during the earlier period of the mid-1980s to the mid-1990s, with Germany and the United States as notable exceptions. This period was characterised by labour market problems in many countries. In several countries (Finland, Italy, and the United Kingdom) the share of wages fell from the mid-1980s to mid-1990s but increased in the following decade. This was partially driven by high unemployment in the 1980s and early 1990s, which was then followed by employment growth, especially in Finland.

Income from capital and private transfers generally makes up a rather small proportion (around 5 to 8%) of disposable income. The share is negligible in most of the Central and Eastern European countries but more sizeable in Canada, Chile, Finland and Norway. However, shares have increased from even lower levels in more than two-thirds of the selected OECD countries, with the largest increases observed in Norway and Finland. By contrast, in New Zealand, the Netherlands and the United States, where the share of capital income was among the highest in the OECD, the relative importance of capital income has fallen since the 1980s.

Not surprisingly, the importance of social transfers varies strongly across the OECD. In some continental European countries, they represent a quarter or more of the disposable income of people of working age. But they are of marginal importance for the incomes of Chileans and Koreans (less than 3%) and relatively low and less important than capital income in Canada and the United States.

The share of government transfers shows variation over time as well: it increased, on average, by 2.7 percentage points, during the mid-1980s to mid-1990s but fell by almost the same amount in the subsequent decade. Part of this pattern may be attributed to changes in employment and reforms to unemployment benefit schemes: higher employment rates lower the share of income from unemployment benefits, as do specific government

Table 6.1. **Changes in shares of disposable income components in selected OECD countries**

Change in percentage points, mid-1980s to mid-2000s

	Wages and salaries		Self-employment income		Capital income		Government transfers		Taxes	
	Mid-80s to mid-90s	Mid-90s to mid-00s	Mid-80s to mid-90s	Mid-90s to mid-00s	Mid-80s to mid-90s	Mid-90s to mid-00s	Mid-80s to mid-90s	Mid-90s to mid-00s	Mid-80s to mid-90s	Mid-90s to mid-00s
Australia	. .	–0.6	. .	–1.1	. .	1.0	. .	–1.0	. .	–1.7
Canada	–0.4	0.1	2.9	–1.0	0.8	1.2	3.9	–3.5	7.1	–3.2
Chile	. .	4.7	. .	–4.0	. .	–2.6	. .	0.1	. .	–1.8
Czech Republic	. .	–3.6	. .	6.1	. .	–2.4	. .	1.2	. .	1.4
Denmark	1.1	2.3	–2.2	–0.3	0.0	2.4	6.9	–5.2	5.7	–0.8
Finland	–12.5	5.2	0.1	–2.9	2.7	5.6	14.0	–10.7	4.1	–4.6
Germany	3.2	–8.1	0.2	1.8	1.9	0.8	0.1	1.7	5.3	–3.9
Ireland	–0.1	6.1	–1.0	–4.7	–0.8	–0.1	0.0	–5.8	–1.9	–4.4
Israel[2]	–6.7	–2.2	0.2	–5.3	0.9	3.8	1.2	–1.0	–4.5	–4.7
Italy	–2.6	3.0	–0.6	6.7	–0.2	–5.5	5.3	–2.4	1.9	1.7
Japan	–0.6	–0.4	–2.2	–2.7	0.8	–0.1	1.2	3.5	–0.8	0.3
Netherlands	–1.5	0.0	–0.9	–1.7	–0.8	–1.4	–4.0	–4.4	–7.2	–7.4
Norway	–4.2	–3.4	–2.0	–2.8	1.6	5.5	4.2	–0.2	–0.4	–1.0
New Zealand	–5.1	–3.3	1.2	–1.7	–1.7	–0.9	–1.0	3.1	–6.6	–2.9
Portugal	. .	7.1	. .	–3.8	. .	–0.3	. .	–1.7	. .	1.4
Sweden	2.0	4.4	–0.5	1.2	2.3	0.1	5.9	–5.8	9.7	–0.1
United Kingdom	–6.4	3.7	2.1	–2.0	2.1	–1.2	–0.4	–0.2	–2.7	0.3
United States	5.7	–1.0	–1.5	1.2	–1.9	–0.9	0.8	–0.6	3.0	–1.4
OECD14	**–2.0**	**0.5**	**–0.3**	**–1.0**	**0.5**	**0.7**	**2.7**	**–2.3**	**0.9**	**–2.3**

1. Mid-2000s correspond to 2000 in Ireland and Portugal. OECD average excludes Australia, Chile, Czech Republic and Portugal.
2. Information on data for Israel: *http://dx.doi.org/10.1787/888932315602.*

Source: OECD Database on Household Income Distribution and Poverty.

StatLink http://dx.doi.org/10.1787/888932537845

measures to reduce inflows into these schemes and lower the generosity of social transfers (see Chapter 7).

On average, working-age households pay some 30% of their disposable income in income taxes and social security contributions. The share of taxes is highest Denmark, followed by Sweden, Belgium and Iceland (above 40%) and lowest in Chile and Korea (below 16%). Tax shares decreased by about 2 percentage points and this happened entirely during the more recent decade when many countries made reforms to their income taxation schemes (see Chapter 7 and Chapter 9). But trends differ widely between countries. In some countries, the share of taxes actually declined in both periods (Ireland, Israel, the Netherlands, Norway and New Zealand). In most others, tax shares started to decline later on. The only country which saw a constant increase in tax shares is Italy.

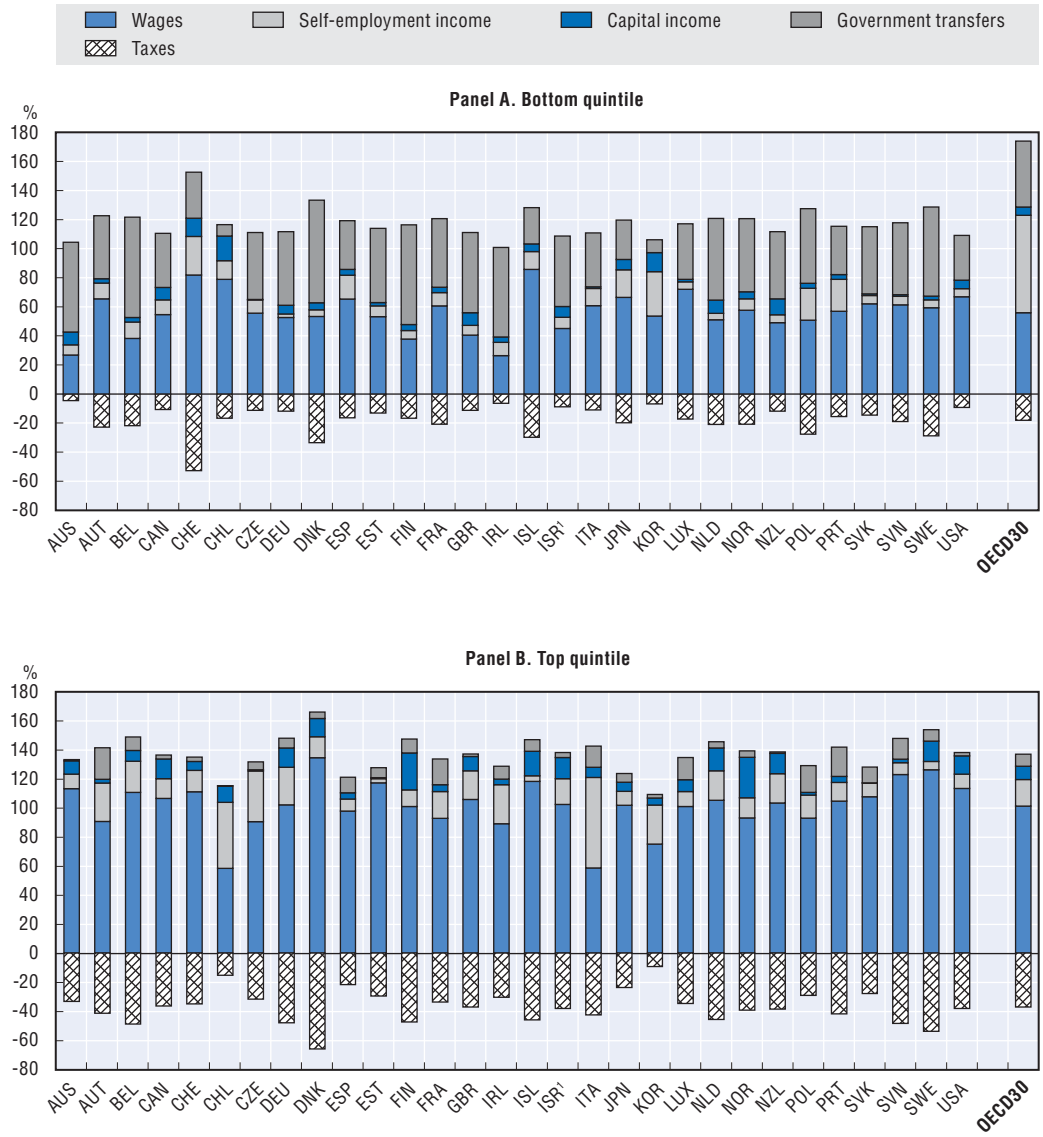
In sum, wages constitute by far the largest component of household income among working-age individuals but their share has fallen on average, in particular during the late 1980s and early 1990s. Transfer and tax shares have both fallen but during the more recent decade between the mid-1990s and mid-2000s. Shares of income from capital, savings and private transfers have tended to slightly increase. These patterns and trends of income components have, however, been different for the bottom than for the top of the income distribution.

A corrigendum has been issued for this page. See: http://www.oecd.org/dataoecd/38/8/49304717.pdf

How are income components allocated across the distribution?

Figure 6.4 shows the shares of the different components of disposable income for the poorest and richest 20% of the income distribution. On average across the OECD, the poorest 20% receive just two-thirds of total disposable income from gross wages and self-employment income, compared with some 120% for the top quintile.[10] In Australia, Finland, Ireland and the United Kingdom, wages and self-employment income even make up less than half of income in the bottom quintile. Being out of employment bears a higher risk of falling at the bottom of the income distribution in these countries. By contrast, on average across countries, 45% of

Figure 6.4. **Shares of income components in lower and higher income groups, mid-2000s**



Note: Bottom and top quintile defined according to disposable income. OECD30 average excludes Greece, Hungary, Mexico and Turkey (no information on taxes available).

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

Source: OECD Database on Household Income Distribution and Poverty.

StatLink http://dx.doi.org/10.1787/888932536648

income in the bottom quintile comes from government transfers, compared to a share of 8% in the top quintile. Social transfers are very large for the bottom quintile in Belgium, Finland and Denmark. Among incomes of the richest 20%, social transfers play a considerable role in Austria, Portugal, Poland and France. Capital incomes have a higher share in the top income quintile than in the bottom quintile, in line with the findings in other studies (Fräßdorf *et al.*, 2008; Piketty and Saez, 2003). The difference in capital shares is particularly pronounced in Germany, Israel and some of the Nordic countries.

Table 6.2 highlights the trends over time. On average across the countries included here, the share of capital incomes increased for richer households and the income composition of poorer households was marked by a decline in earnings shares and an increase in transfer shares. Wages as a share of income have declined for the poorest segment, most strikingly in Finland, Germany and Norway. In the Netherlands, both the share of earnings and the share of social transfers going to the bottom deciles fell; the change in the composition of lower incomes originated from lower taxes. In most countries, such changes in the composition of income are likely to have contributed to growing inequality.

Table 6.2. **Changes in wage, capital and other income shares for poorer and richer income segments**

Change in percentage points, mid-1980s to mid-2000s

	Wages and salaries		Self-employment income		Capital income		Government tansfers		Taxes	
	Bottom quintile	Top quintile	Bottom quintile	Top quintile	Bottom quintile	Top quintile	Bottom quintile	Top quintile	Bottom quintile	Top quintile
Canada	–1.5	3.7	1.9	3.2	0.0	–0.3	1.9	–0.3	2.4	6.3
Denmark	–9.2	6.2	–9.9	1.8	–3.6	7.7	21.8	–2.4	–0.8	13.3
Finland	–17.6	–15.7	–8.9	–0.4	0.7	21.8	21.3	–1.0	–4.4	–0.7
Germany	–15.2	–9.5	–1.9	3.6	0.2	6.4	10.5	–0.1	–6.5	0.2
Ireland	16.2	5.3	–0.2	–11.1	–0.4	–0.8	–16.2	–0.4	–0.7	–7.0
Israel[1]	1.5	–12.2	–10.5	–7.4	1.4	7.8	7.7	–0.1	0.2	–11.9
Italy	–1.4	–0.7	–6.6	16.6	–4.1	–6.1	1.6	0.0	–10.5	9.8
Japan	–6.5	4.8	–9.7	–7.6	2.0	–0.4	12.3	1.6	–1.9	–1.6
Netherlands	–9.7	2.4	0.6	–6.7	–0.2	–4.0	–8.5	–4.1	–17.8	–12.4
Norway	–15.1	–13.6	–3.5	–7.9	–1.3	19.7	18.1	–0.4	–1.8	–2.1
New Zealand	–11.4	–6.8	1.5	0.3	–1.2	–2.4	3.7	–1.4	–7.4	–10.4
Sweden	–2.4	4.0	–4.1	3.6	–2.0	7.7	15.2	–3.1	6.7	12.2
United Kingdom	4.1	1.1	–3.4	0.5	0.1	0.3	–3.3	–0.8	–2.6	1.0
United States	4.9	7.8	–2.2	–0.3	–2.0	–4.7	0.0	0.2	0.7	3.1
OECD14	**–4.7**	**–1.5**	**–4.1**	**–0.8**	**–0.7**	**3.7**	**6.3**	**–1.0**	**–3.3**	**0.0**

Note: Mid-2000s correspond to 2000 in Ireland.

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

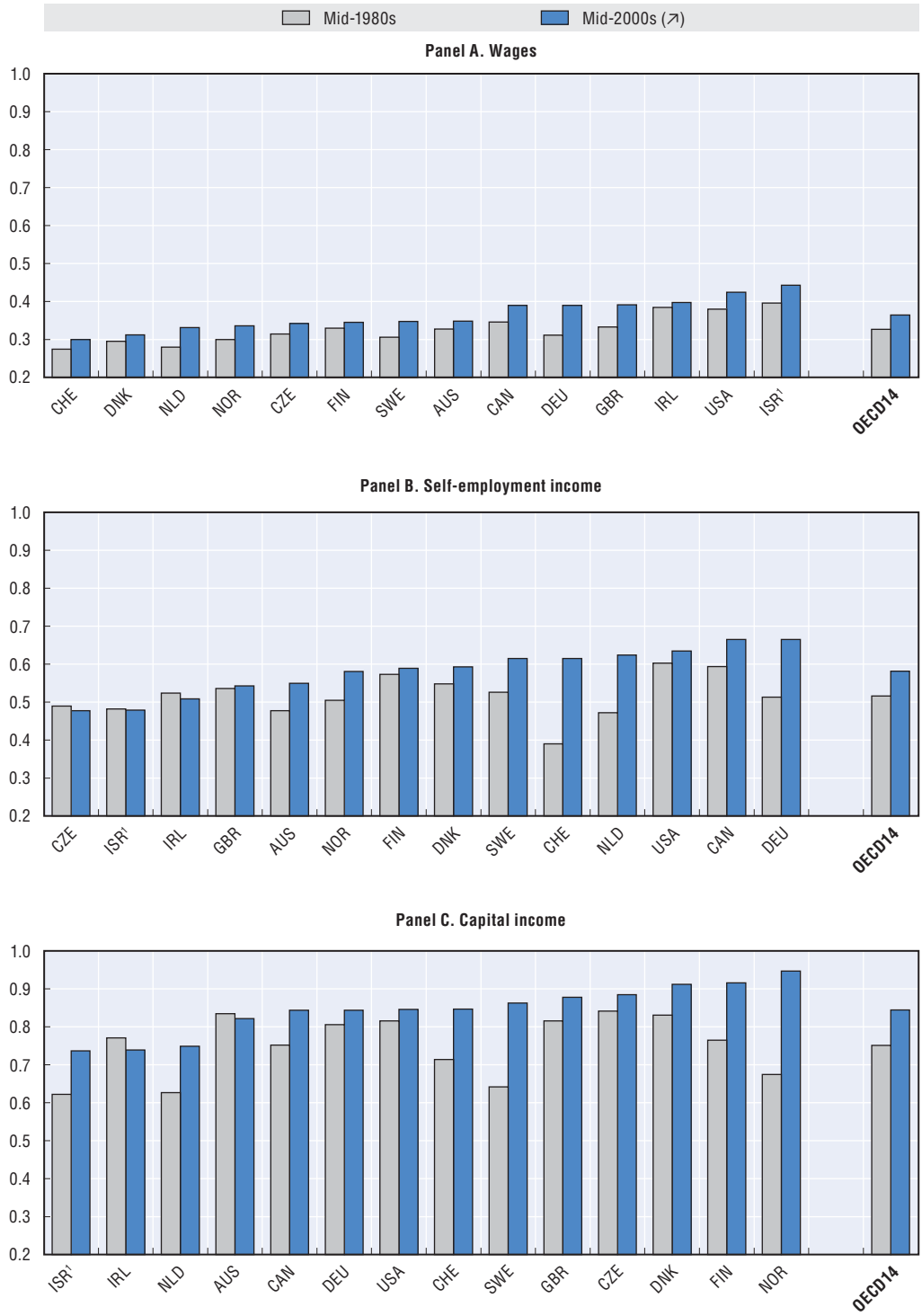
Source: OECD Database on Household Income Distribution and Poverty.

StatLink http://dx.doi.org/10.1787/888932537864

The concentration of components of market income

The OECD data discussed above reveal the relative importance of a given income source in disposable income in terms of its share. However, the contribution of one particular income source to inequality depends not only on its size relative to total income but also on its dispersion. This section looks in more detail how the different components of market income are distributed. The degree of concentration of these components – wages and salaries, self-employment income and capital investment income – is presented in Figure 6.5. Calculations are based on the micro-level data from the Luxembourg Income

Figure 6.5. **Gini coefficients of concentration of market income sources, mid-1980s and mid-2000s**



Note: Mid-1980s refers to 1982 for Switzerland; 1983 for the Netherlands; 1984 for Germany; 1985 for Australia; 1986 for Israel, Norway, United Kingdom, United States; 1987 for Canada, Denmark, Finland, Ireland, Sweden; and 1996 for Czech Republic. Mid-2000s refers to: 2003 for Australia; 2004 for Canada, Czech Republic, Denmark, Finland, Germany, Ireland, the Netherlands, Norway, Switzerland, United Kingdom, United States; 2005 for Israel and Sweden. Countries are ranked in increasing order according to the respective income component in the mid-2000s. Gini coefficients are calculated excluding zeroes, and ranked according to the respective income source.

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

Source: OECD Secretariat calculations from the Luxembourg Income Study (LIS). StatLink *http://dx.doi.org/10.1787/888932536667*

Study (LIS), for a subset of 14 countries for which income estimates on a gross basis are available over the period.[11]

Not surprisingly, incomes from self-employment and capital income are more unequally distributed than wages in all OECD countries under review. On average, the Gini coefficient for self-employment income was 0.58 in the mid-2000s and 0.84 for income from capital investment compared with an OECD average of 0.36 for gross wages. Capital income is most unequally distributed in the Nordic countries, the Czech Republic and in the United Kingdom.

On average in OECD countries, all components of market income have become more unequal over the past two decades. Wage inequality has increased in all of the selected OECD countries, but by less than income from self-employment and capital income.[12] Strong increases in the concentration of self-employment income occurred in Switzerland and the Netherlands, while concentration of capital income increased markedly in Norway and Sweden.

6.3. How much of inequality is explained by each of the income sources?

Inequality of disposable income can rise through three different mechanisms: 1) a particular source of income becomes more unequally distributed; 2) the share of one unequally distributed source of income increases; or 3) a particular income source is allocated in a way that disproportionately favours the rich. This section examines first, which of the income components have contributed most to rising income inequality and second, which of the three factors above were most important. It uses a decomposition method[13] described in Box 6.1 and draws on analysis of LIS data for a period of between the mid-1980s and mid-2000s, covering 14 OECD countries. For ten additional countries, income amounts are available only on a net basis (*i.e.* after taxes and contributions). The results for these countries are shown in Annex 6.A1.

Total income is broken down by ten different sources, with taxes and social security contributions being treated as a negative income. Figure 6.6 shows at a glance the inequality decomposition by sources for the latest year available, across 14 OECD countries for which data on gross incomes are available. On average of these countries, there are five sources of income which contribute to rising inequality and four sources which reduce inequality. The first group includes wages, income from self-employment, capital income, occupational pensions and other income sources. The second group covers means-tested and social insurance benefits, income taxes and social security contributions. Private transfers are relatively small and neutral in terms of inequality.

The following sub-sections discuss whether there were any significant changes in the contributions of the different income components to overall inequality over time. Two periods are considered: the decade from the mid-1980s to mid-1990s and the subsequent decade from the mid-1990s to mid-2000. Where significant changes were found, the driving elements – changing shares or changes in dispersion or correlation of the income source to total income – are identified. The detailed decomposition results for all years are presented in Annex Tables 6.A1.2 and 6.A1.3 for countries with gross and net income information, respectively.

Box 6.1. **Decomposing income inequality by sources**

According to Lerman and Yitzhaki (1985), the Gini coefficient for total income, *G*, can be represented as:

$$G = \sum_{k=1}^{k} C_k = \sum S_k G_k R_k \qquad (1)$$

where S_k is the share of source *k* in total income, G_k is the Gini coefficient corresponding to the distribution of income from source *k*, and R_k is the correlation of income from source *k* with the distribution of total income $C_k = \frac{S_k G_k R_k}{G}$ is the relative contribution of source *k* to total income inequality.

Using this income decomposition, it is possible to estimate the effect of small changes in a specific income source on inequality, holding income from all other sources constant. The partial derivative of the Gini coefficient with respect to a percentage change *e* in source *k* is equal to:

$$\frac{\partial G}{\partial e} = S_k(G_k R_k - G) \qquad (2)$$

The influence of any income component upon total income inequality depends on: *i)* how important the income source is with respect to total income; *ii)* how equally or unequally the income source is distributed ; and *iii)* how the income source and the distribution of total income are correlated (Stark *et al.*, 1986). For example, an income source that represents a large share of total will have a large effect on inequality if it is unequally distributed. On the other hand, an income source that is unequally distributed but is not highly correlated with total income will have a small impact on inequality or could contribute negatively to inequality.

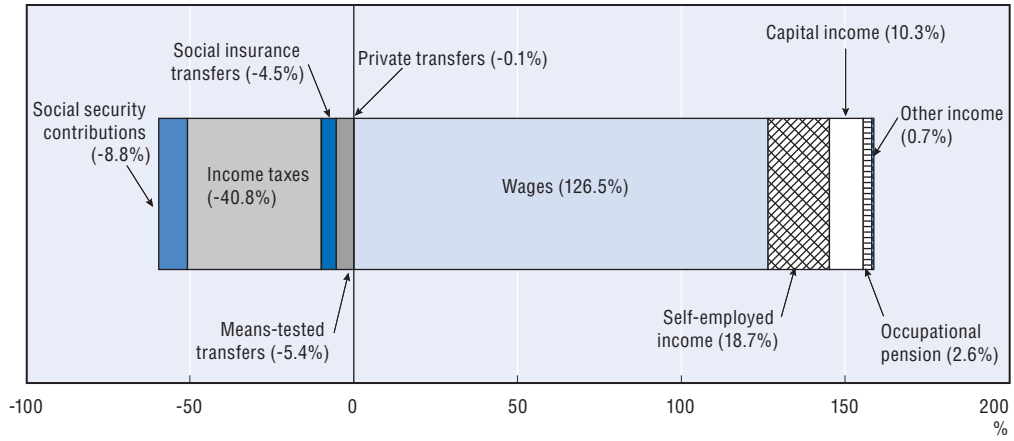
The percentage change in inequality resulting from a small percentage in income from source *k* holding all other factors constant equals the original contribution of source *k* to income inequality minus source *k*'s share of total income:

$$\frac{\partial G / \partial e}{G} = \frac{S_k G_k R_k}{G} - S_k \qquad (3)$$

The percentage change in total income inequality caused by a small change in the income source *k* is equal to its contribution to total income inequality minus its contribution to total income. The sign of the marginal effect depends on the sign of *R* since *S* and *G* are always positive. This means that if the correlation of income from source *k* with the distribution of total income is negative, the marginal effect will be negative. Otherwise, the sign will depend on the sign of $G_k R_k - G$. If the difference is positive, *i.e.* if total income is more equally distributed than income from source *k*, the marginal effect will be negative.

While such decomposition method makes it possible to identify how each income source affects the distribution of household income, there has been criticism with regard to interpretation of the results on taxes and transfers. By definition, the decomposition rule above has a property whereby the contribution of a source to overall income inequality is null if all individuals receive the same amount from the source. This is regarded as not being intuitive as an equally distributed flat-rate transfer which is "added" to an unequally distributed pre-transfer income would be normally be expected to lower inequality. Chapter 7 which looks at the changing role of redistribution of taxes and transfers in detail applies an analytical framework which takes this issue into account.

Figure 6.6. **Decomposition of income inequality by income source, average of 14 OECD countries, mid-2000s**



Note: Working-age population. Income inequality is measured by the Gini coefficient. Total Income refers to disposable household income, adjusted for household size with a square-root equivalence scale.

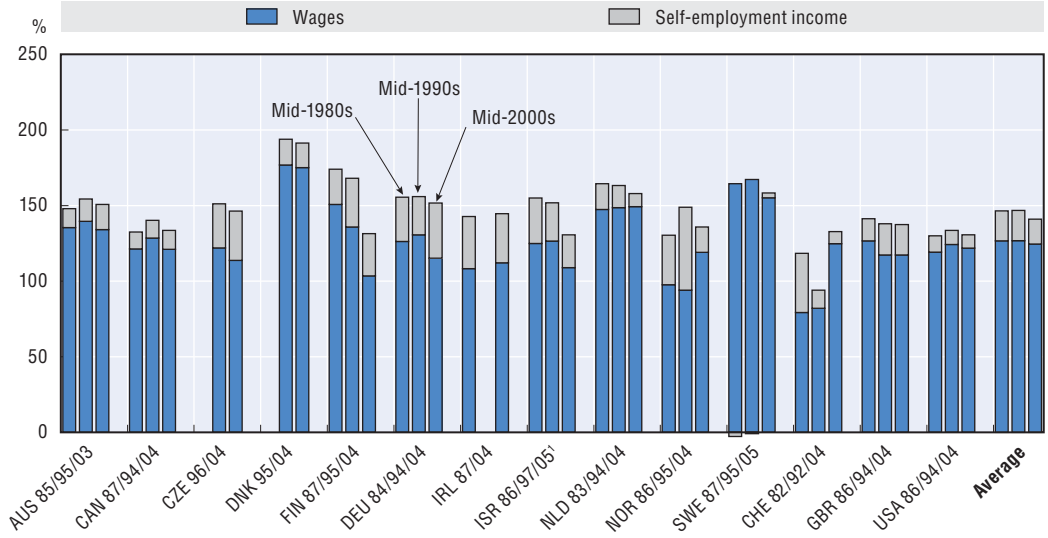
Source: OECD Secretariat calculations from the Luxembourg Income Study (LIS).

StatLink http://dx.doi.org/10.1787/888932536686

Wages and income from self-employment

In all OECD countries under review, wages and self-employment income are the main determinants of inequality levels in disposable income of the working-age population. Together they contribute 145% of disposable income inequality on average across countries where information on gross income was available (Figure 6.7) and 88% for those countries with net income information (see Table 6.A1.3).[14] Wages explain more than 80% of the joint contribution of wages and self-employment income to income inequality. At the same

Figure 6.7. **Contribution of wages and self-employment income to overall inequality, mid-1980s to mid-2000s**



Note: Working-age population. Averages exclude Czech Republic, Denmark and Ireland.

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

Source: OECD Secretariat calculations from the Luxembourg Income Study (LIS).

StatLink http://dx.doi.org/10.1787/888932536705

time, income from self-employment contributes more notably to inequality in the Czech Republic, Germany and Ireland, explaining about one third of overall inequality in these countries.

There were no notable changes in the inequality contribution of wages in the period of the mid-1980s to mid-1990s but the contributions tended to decrease in the more recent period. This was particularly the case in Finland, Germany and Israel. There were only two countries where wage income in the mid-2000s explained more of inequality than they did in the mid-1990s, Norway and Switzerland. In all these five countries, changes in the share of wages in income (S_k) were the main responsible for the changed contributions (downwards or upwards), followed by a stronger (weaker) correlation of wages with total income (R_k). Changes in wage dispersion (G_k) did not play a major role (Table 6.A1.2). For the remaining OECD countries – those reporting incomes net of taxes – the contribution of wages to inequality also saw a downward trend and, in most cases, this was a the result of a decline in its relative share to total income, too.

The contribution of self-employment income to inequality levels developed in a similar way: little changes in the first period and a reduction in the second, mainly in Finland, Israel, the Netherlands, Norway and Switzerland. On the other hand, the contribution of self-employment income to inequality became more important in Australia, the Czech Republic and Germany. To the contrary of wages, it is not only or mainly changes in shares which were responsible for the lower contribution, but also decreased correlation between self-employment income and total income (Netherlands, Switzerland) and a lower dispersion of this income source (Finland) (Table 6.A1.2). Among countries reporting net incomes, self-employment income became more important as a contributor to inequality in Hungary, Italy and Luxembourg – in all three countries due to a higher correlation with total household income (Table 6.A1.3).

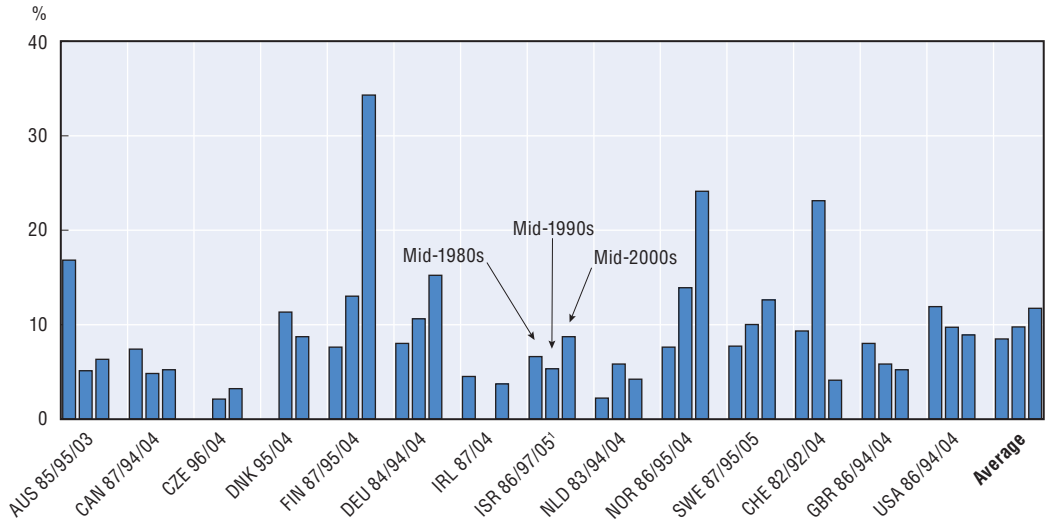
Capital income and occupational pensions

On average, income from capital contributed moderately – about 10% – to income inequality. However, its contribution has steadily increased, by almost 2 percentage point during each sub-period (Figure 6.8). This is mainly due to the developments in the Nordic countries (except Denmark) and Germany. The main factor which drove up the contribution in these countries was an increased factor correlation, *i.e.* capital income went increasingly to richer households, even in cases where its total share did not increase (Sweden) (Table 6.A1.2). On the other hand, the contribution of capital income to total inequality tended to decrease in the English speaking countries. Again, this was driven by a lower factor correlation but also a lower share in total income, and despite the fact that capital income itself became more unequally distributed in some of these countries (see Figure 6.5, Panel C).

The contribution of capital income to total income inequality also increased in countries which report only net incomes (Table 6.A1.3), albeit at a lower rate but notably in Austria, Belgium and France. Again, the key factor at play was a growing correlation between capital income and total income.

Other sources of market income, such as occupational and private pensions generally have a marginal impact on inequality, less than 3% on average (Figure 6.6). But there are some exceptions: in Israel, they contribute roughly 7% to overall inequality and their contribution has been increasing. They are also relatively important in Canada and

Figure 6.8. **Contribution of capital income to overall inequality, mid-1980s to mid-2000s**



Note: Working-age population. Averages exclude Czech Republic, Denmark and Ireland.
1. Information on data for Israel: *http://dx.doi.org/10.1787/888932315602*.

Source: OECD Secretariat calculations from the Luxembourg Income Study (LIS).

StatLink *http://dx.doi.org/10.1787/888932536724*

Sweden, with a 5% contribution to inequality. The increasing contributions of occupational pensions to inequality in Canada and Israel were entirely driven by increasing shares in income. In no country do occupational pensions have a negative, *i.e.* inequality-reducing contribution.

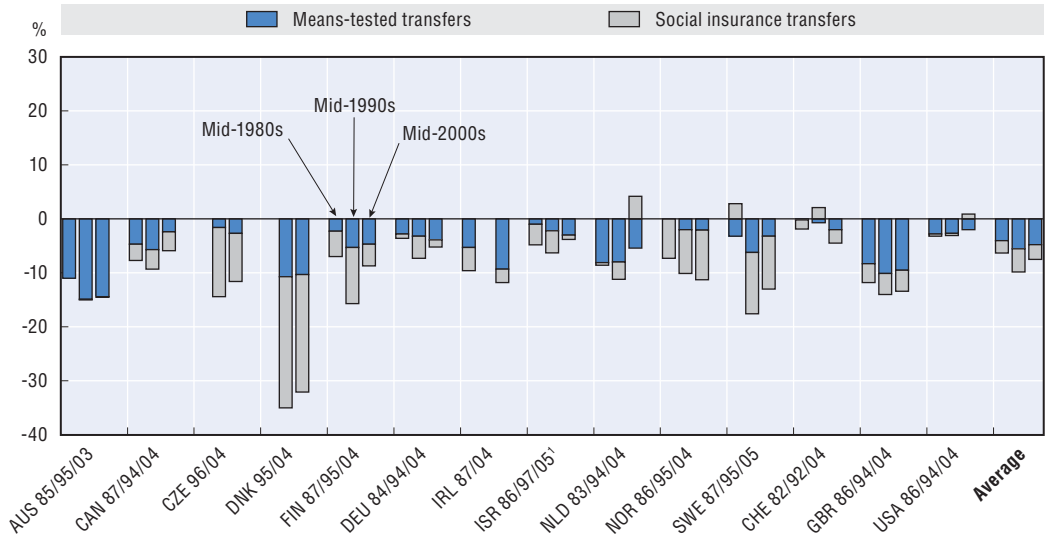
Social transfers

Means-tested transfers and social insurance benefits are an important policy tool in the redistribution of income. Social insurance benefits are related to former incomes and thus, by definition, redistribute much less than means-tested benefits. This is particularly true for pension benefits, which tend to be positively correlated with inequality in the overall income distribution.[15] Therefore, despite its lower share in most countries, the inequality-reducing contribution of means-tested transfers is slightly higher (–5.4%) than that of social insurance benefits (–4.5%) (Figure 6.6). Taking both types of social transfers together, Denmark stands out with the highest contribution to reducing inequality (–30%) (Figure 6.9). The contributions exceed 10% in Australia, the Czech Republic, Ireland, Norway, Sweden and the United Kingdom.

As for changes over time, the general picture is that of growing inequality reduction through social transfers between the mid-1980s and mid-1990s, followed by a decrease of this effect in the subsequent decade. This pattern holds for all countries except Norway and Switzerland, but also for most countries which report only net incomes (Table 6.A1.3). These contrasting developments may be explained by population structure changes (*e.g.* growing unemployment and thus unemployment benefits in the first decade, but a decline thereafter) or by discrete policy changes (*e.g.* changes to benefit rates, eligibility conditions or targeting features) and are discussed in more detail in Chapter 7.

Some first information on driving patterns and elements for the changing roles of social transfers for overall inequality can be obtained from the results of the decomposition

Figure 6.9. **Contribution of social insurance and means-tested transfers to overall inequality, mid-1980s to mid-2000s**



Note: Working-age population. Averages exclude Czech Republic, Denmark and Ireland.
1. Information on data for Israel: *http://dx.doi.org/10.1787/888932315602.*
Source: OECD Secretariat calculations from the Luxembourg Income Study (LIS).

StatLink *http://dx.doi.org/10.1787/888932536743*

analysis in Table 6.A1.2. It appears that, in most countries, the growth in inequality reduction of social insurance transfers in the first decade was due to both increases in shares of this income source and a more negative correlation with total income, *i.e.* increased targeting. At the same time, the greater role of means-tested transfers to reducing inequality was almost entirely due to the latter effect of targeting. For the second decade, in which transfers became less inequality-reducing, drivers were more diverse across countries but in some countries the reduced role of means-tested transfers was also due to lower shares of these benefits in income (Australia, Canada, Netherlands and Sweden). The inequality-reducing role of both social transfer types also saw a decline, albeit modestly, in the United States over this period despite of an increase in the share of benefits. This may be party explained by a shift of this source of income towards higher-income groups.

Taxes

Direct taxes, and in particular income taxes, contribute to reducing overall income inequality to a large degree across the countries under study[16] (Figure 6.10). The effect is strongest in the four Nordic countries, Germany and the Netherlands. On average, changes over time in the redistributive contribution of direct taxes were somewhat similar than for social transfers but less pronounced. The strong contribution to decreasing inequality remained broadly at the same level between the mid-1980s and mid-1990s but became slightly weaker in the second decade.

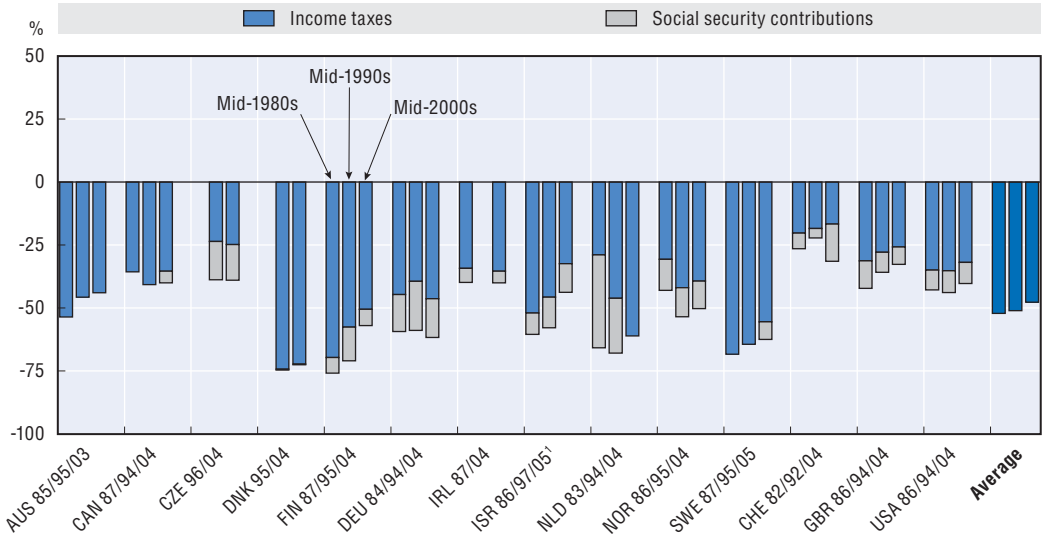
But there were some diversities across countries. In Australia, Finland, Israel, Sweden and the United Kingdom, the equalising effect of direct taxes has weakened continuously over the past 20 years. The decline in the equalising contribution of taxes can reflect changes in the structure of populations and pre-tax earnings, as well as changes in the structure of tax systems. In the United Kingdom, for instance, the removal of the higher-rate tax brackets and reduction in the basic tax rate has been cited as one explanation of the

increase in inequality during the late 1980s (*e.g.* Clark and Leicester, 2004). The relative importance of such mechanisms is analysed and discussed in Chapter 7, for a sub-set of OECD countries.

What has been driving the decline in taxes' contributions to reducing inequality in the group of countries where this happened? Clearly, in almost all countries of this group and in both periods, the key factor was the decline in the share of direct taxes in total income, despite in some cases a higher correlation of taxes with income and a higher (negative) dispersion – which both can be taken as a short-cut for greater progressivity (Finland and Sweden in particular, see Table 6.A1.2). One country stands out: in the United Kingdom, shares of income taxes did not change and the decreasing effect of taxes was entirely due to lesser progressivity, as proxied by a lower correlation of income taxes with total income.

In countries where the equalising contribution of direct taxes increased, this was in general due to all the underlying elements together: an increasing size and a higher progressivity (Canada, the Netherlands and Norway in the earlier period, and Czech Republic, Germany and Switzerland in the later period).

Figure 6.10. **Contribution of income taxes and social security contributions to overall inequality, mid-1980s to mid-2000s**



Note: Working-age population. Averages exclude Czech Republic, Denmark, the Netherlands and Ireland and lump together all direct taxes. For Canada, Sweden (mid-1980s and mid-1990s) and the Netherlands (mid-2000s), social contributions are included in income taxes.

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

Source: OECD Secretariat calculations from the Luxembourg Income Study (LIS).

StatLink *http://dx.doi.org/10.1787/888932536762*

Summing up the changing role of income sources to overall inequality

The above analysis makes it clear that changes in contributions of the different income sources to total inequality differed between the two sub-periods under study, the decade from the mid-1980s to mid-1990s and the subsequent decade. In the earlier period, no noticeable change occurred in the role of wages and self-employment income as well as that of direct taxes. However, the disequalising role of capital income increased during that period (except in the English speaking countries), mainly because of a higher correlation

with total income, *i.e.* capital income went increasingly to richer households. At the same time, the equalising role of social transfers became stronger. In the case of social insurance transfers, this was often driven by higher shares in income, while in the case of means-tested transfers the correlation with total income became weaker, *i.e.* targeting increased.

But in the more recent period, patterns changed. The contribution of wages and self-employment income to total inequality declines, mostly because of lower shares of these income sources. The contribution of capital income continues to increase. At the same time, the role of social transfers inverses, as their equalising contribution becomes weaker. This is due to both lower shares and lower targeting. And the same pattern – less inequality reduction – now occurs for direct taxes, predominantly due to lower tax shares rather than lower progressivity, with the notable exception of the United Kingdom.

6.4. Redistributive effects of marginal increases in individual income components

After analysing the contribution of different income components to overall inequality and the changes over time, it is interesting to look at what would happen to inequality when one income component is increased or reduced relative to other sources of income.[17] This information can be of particular interest for policy makers as it illustrates, for instance, whether an increase in means-tested transfers will have the same impact on overall inequality as a similar increase in social insurance benefits.

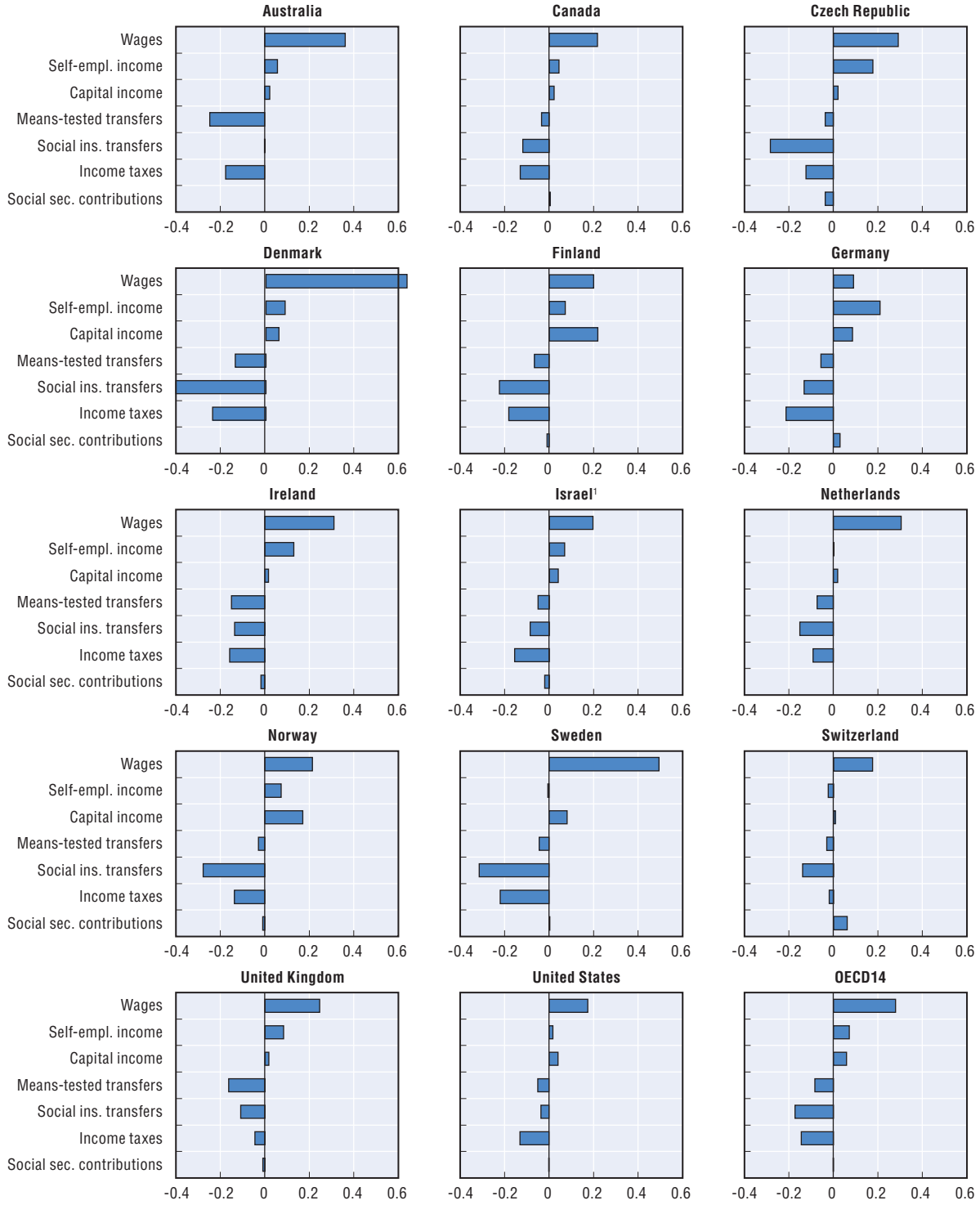
Figure 6.11 shows the percentage change in inequality due to a 1% increase in individual income components for the mid-2000s, for the sample of 14 OECD countries (other years are detailed in Annex Table 6.A1.4). Inequality will increase most if the relative share of wages grows. A 1% increase in wages, holding income from all other sources constant, would widen income inequality by almost 0.3%. Marginal increases in self-employment and capital income would have lower but sizeable effects: 0.07% and 0.06%, respectively.

In a majority of OECD countries, the effects of marginal increases in wages, self-employment and capital income became bigger over the earlier period from the mid-1980s to the mid-1990s. However, between the mid-1990s to mid-2000s, the marginal effects of wages and self-employment income dropped to a larger extent than they increased previously, while the marginal effect of capital income continued increasing.

On average across the 14 OECD countries shown in Figure 6.11, the impact of a marginal increase in social transfers (social insurance and means-tested transfers taken together) results in a decrease of overall inequality by 0.26%. The marginal effects of social transfers vary greatly across countries.[18] Denmark has the largest marginal reduction of inequality, reflecting the overall importance of social transfers in this country. A marginal increase in social insurance benefits would reduce inequality twice as much than a similar increase in means-tested transfers (0.173 versus 0.084). This is driven mostly by the larger relative share in total income of this type of transfers.[19] The marginal effect of means-tested transfers is comparatively higher only in Ireland and the United Kingdom, apart from Australia where no social insurance transfers exist.

Social transfers have become more effective at reducing inequality at the margin during the earlier period but less effective during the more recent decade and that holds for both social insurance and means-tested transfers (Table 6.A1.4). Over the whole period, only the Nordic countries (except Denmark) and Switzerland bucked this trend. On the other hand,

Figure 6.11. **Redistributive effects of marginal increases in individual income components, mid-2000s**



Note: Working-age population.

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

Source: OECD Secretariat calculations from the Luxembourg Income Study (LIS).

StatLink http://dx.doi.org/10.1787/888932536781

the marginal effect of social insurance transfers became weaker in many countries, notably in Israel and the Netherlands where this also concerned means-tested transfers.

Taxes (particularly income taxes) also play an important role in redistribution. Figure 6.11 indicates that a 1% rise in income taxes, on average, reduces inequality of household income by about 0.14%. Social security contributions generally exert little redistributive effect, and in some cases, are regressive. In Switzerland and Germany, for instance, an increment in social security contributions would increase income inequality. Over the whole period, taxes have become less effective at reducing inequality at the margin in half of the countries for which tax information is available.

The marginal effect of direct taxes is smaller than the effect of social transfers which is partly explained by the negligible role of social security contributions in reducing inequality at the margin. The marginal impact of taxes on inequality did generally not change during the decade of the mid-1980s to mid-1990s but weakened over the more recent decade, in particular in Canada, Finland, Israel and the Netherlands.

6.5. Summary and conclusions

Inequality in market income among the working-age population is much higher than in disposable income, although both have increased since the mid 1980s. It rose at a much faster pace than disposable income inequality between the mid-1980s and mid-1990s, but has grown at a slower rate since then. The distribution of all components of market income has become more unequal over the past two decades and the share of wages and self-employment income going to the poorest 20% of the population has fallen more sharply than for the top earners.

Wages and self-employment income account for most of the income *inequality levels* in OECD countries. Wages, in particular, are the largest income source for the working-age population and have become increasingly concentrated. Capital income has contributed comparatively little to inequality levels. On the other hand, social transfers and income taxes have helped to curb inequality levels significantly, particularly in the Nordic countries and the Netherlands.

Changes in the size and the distributive patterns of labour earnings explain much but not all *inequality trends*, which were also driven by changes in capital income and in taxes and transfers. With the exception of the English-speaking countries, the contribution of capital income to inequality has grown since the mid-1980s as capital income has increasingly gone to richer households. At the same time, the contribution of wages and self-employment income to total inequality actually declined during the past ten years, mostly because their share of household income has fallen.

Changes in inequality are also related to changes in the relative importance of income taxes and benefits. The contribution of taxes and transfers to reductions in overall inequality decreased in many OECD countries between the mid-1990s and the mid-2000s. Chapter 7 examines the underlying drivers of these changes and to what extent they are related to changes in tax/transfer policies.

Social transfers (both social insurance and means-tested transfers) and income taxes can have a significant impact on household income inequality. Across the OECD countries under study, the average impact of a marginal increase of 1% in social transfers would be a fall in overall inequality of 0.26%. For income taxes the effect would be 0.14%.

Notes

1. An international expert group on household income statistics aimed to address the common conceptual, definitional, and practical problems that national statistical offices are facing in the area of household income distribution statistics (see *www.lisproject.org/links/canberra/finalreport.pdf*).
2. In Spain, for instance, non-contributory benefits were introduced at the beginning of the 1990s with the creation of the new Ministry of Social Affairs.
3. The ranking of countries using the Gini coefficient, as shown in Figure 6.1, should nevertheless be interpreted with caution. It is, for instance, possible for the income distribution to change significantly while the Gini coefficient remains unchanged. For this reason, other more tail-sensitive measures of inequality may yield different results. At the same time, studies comparing different inequality measures including mean log deviation, the coefficient of variation and interdecile ratios and shares suggest that the overall ranking across countries is not greatly affected by the specific choice of inequality indicators (see Table A1.1 and OECD, 2008).
4. Incomes and its subcomponents are adjusted with an equivalence scale equal to the square-root of the household size. This implies that the economic needs of a four-person household are assumed to be equivalent to those of two single-person households (see OECD, 2005).
5. While the unit of observation is the working-age individual, the income concept remains that of household income. Therefore, the household income "attached" to individuals may contain income sources from other household members, such as old-age pensions if there are elderly people living in the household.
6. 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 Israeli settlements in the West Bank under the terms of international law.
7. The analysis confirms the results from previous studies on levels and trends in income inequality (Atkinson, 2000; Smeeding, 2002; OECD, 2008; Tóth and Medgyesi, 2011; Večernik, 2010) but data comparability issues remain cross-country and over time (Atkinson and Brandolini, 2001). Annex Table 6.A1.1 presents a comparative table for Gini coefficients from the *OECD Database on Household Income Distribution and Poverty* and from the Luxembourg Income Study (LIS) for a sub-section of countries. The results are similar for most countries in terms of the level of inequality and the direction of trends.
8. The combined shares could exceed 100% since taxes are treated as negative income.
9. For each of the four positive income sources, the standardised share is calculated by dividing with the average tax rate.
10. As wages and self-employment incomes are recorded in gross values, their share can exceed 100% of net disposable household income.
11. The concepts and methods of the OECD income distribution questionnaires and the LIS data are comparable as both datasets follow the guidelines of the Canberra Experts Group on Household Income Statistics. For comparison, Table 6.A1.1 in the annex shows the Gini coefficients of the working-age population for selected OECD countries from both sources.
12. Capital income witnessed a greater increase in inequality than earnings in 10 of the 14 countries shown in Figure 6.5. When extending the sample with countries for which only net income information is available, this pattern is found in 18 of 24 OECD countries.
13. The decomposition analysis uses the Lerman and Yitzhaki (1985) and Stark *et al.* (1986) decomposition method (see Box 6.1) that makes it possible to determine the impact of a particular income source on total net income inequality represented by the Gini coefficient (for an empirical application of this method, see for instance Garner and Terrell, 2001).
14. The contribution of a given income source to inequality can exceed 100% because there are also sources that contribute negatively. The sum of the contributions from all income sources is 100%.
15. This refers notably to disability and early-retirement pension benefits. Note that, due to the household income definition, some working-age people may also receive a positive amount of old-age pensions if there are elderly people (*e.g.* grandparents) living in the same household.
16. The results also suggest that the effect of direct taxes on overall inequality, at any given year, was stronger than that of social transfers. This finding, however, is linked to the type of decomposition method applied here which analyses the impact on inequality of each component simultaneously and implies that the contribution of a component to overall income inequality is zero if all individuals receive the same amount from the source (see Box 6.1). Therefore, a flat-rate transfer

to every individual would be regarded as distributionally neutral and a strictly earnings-related social insurance transfer would increase inequality. These results may be regarded as not being intuitive as such transfers which are "added" to more unequally distributed pre-transfer incomes would normally be expected to lower inequality. Chapter 7 applies an analytical framework which takes this issue into account.

17. The decomposition method applied in this chapter also allows evaluating the effect of marginal changes in a specific income source on inequality. Equation 3 in Box 6.1 shows that the relative variation of the overall Gini coefficient due to a small change in income for component k is equal to its relative contribution to total inequality minus its contribution to total income.

18. Looking at benefits by type (tables not shown), different country groupings emerge in terms of the inequality-reducing marginal effects. A marginal increase in disability benefits has the strongest effect in reducing inequality in about half of the countries, including northern European countries (with the exception of Finland) and Australia. Raising social-assistance transfers results in the largest marginal reduction in inequality in Germany, Finland, Ireland, Israel, the Netherlands, the United Kingdom and the United States. Finally, in Canada, unemployment benefits have the largest effect in terms of reducing inequality at the margin.

19. From equation 3 in Box 6.1 it follows that differences in the second component (Sk) are driving the marginal results.

References

Atkinson, A.B. (2000), "The Changing Distribution of Income: Evidence and Explanations", *German Economic Review*, Vol. 1, No. 1, Blackwell Publishing, pp. 3-18.

Atkinson, A.B. and F. Bourguignon (2000), *Handbook of Income Distribution*, Vol. 1, Elsevier, Amsterdam, pp. 1-58.

Atkinson, A.B. and A. Brandolini (2001), "Promise and Pitfalls in the Use of 'Secondary' Data-Sets: Income Inequality in OECD Countries", *Temi di discussione (Economic Working Paper),* No. 379, Economic Research Department, Bank of Italy.

Clark, T. and A. Leicester (2004), "Inequality and Two Decades of British Tax and Benefit Reform", *Fiscal Studies*, Vol. 25, No. 2, pp. 129-158.

Fräßdorf A., M. Grabka and J. Schwarze (2008), "The Impact of Household Capital Income on Income Inequality: A Factor Decomposition Analysis for Great Britain, Germany and the USA", *Working Paper,* No. 89, Society for the Study of Economic Inequality, ECINEQ.

Garner, T. and K. Terrell (2001), "Some Explanations for Changes in the Distribution of Household Income in Slovakia: 1988 and 1996", *William Davidson Institute Working Paper Series,* No. 377, William Davidson Institute at the University of Michigan Stephen M. Ross Business School.

Gottschalk, P. and S. Danziger (2005), "Inequality of Wage Rates, Earnings and Family Income in the United States, 1975-2002", *Review of Income and Wealth*, Vol. 51, No. 2, Blackwell Publishing, pp. 231-254.

Lerman, R. and S. Yitzhaki (1985), "Income Inequality Effects by Income", *Review of Economics and Statistics*, Vol. 67, No. 1, MIT Press, pp. 151-156.

Luxembourg Income Study (LIS) Database, *www.lisdatacenter.org* (multiple countries: microdata runs completed between 21 July 2010 and 3 August 2011), LIS, Luxembourg.

OECD (2005), "What Are Equivalence Scales?", available online at *www.oecd.org/els/social*.

OECD (2008), *Growing Unequal? Income Distribution and Poverty in OECD Countries,* OECD Publishing, Paris.

Piketty, E. and T. Saez (2003), "Income Inequality in the United States, 1913-1998", *Quarterly Journal of Economics*, Vol. 118, No. 1, pp. 1-39.

Smeeding, T. (2002), "Globalization, Inequality and the Rich Countries of the G-20: Evidence from the Luxembourg Income Study (LIS)", *LIS Working Paper*, No. 320.

Stark, O., J.E. Taylor, J. Edward and S. Yitzhaki (1986), "Remittances and Inequality", *Economic Journal*, Vol. 96, No. 383, Royal Economic Society, pp. 722-740.

Tóth, I. and M. Medgyesi (2011), "Income Distribution in New (and Old) EU Member States", *Corvinus Journal of Sociology and Social Policy*, Vol. 2, No. 1, pp. 3-31.

Večernik, J. (2010), "Earnings Disparities and Income Inequality in CEE Countries: An Analysis of Developments and Relationships", *LIS Working Paper*, No. 540.

ANNEX 6.A1

Additional Tables

This chapter uses data from the *OECD Database on Household Income Distribution and Poverty* complemented by results based on analyses of the micro-records of the *Luxembourg Income Study* project (LIS). The key features and underlying surveys of the OECD database are documented on the methodological sub-page of the OECD inequality webpage *www.oecd.org/els/social/inequality* under *www.oecd.org/document/2/0,3746,en_2649_33933_45043394_1_1_1_1,00.html* . The key features of the micro data on LIS are documented at the LIS webpage (*www.lisdatacenter.org*). The concepts and methods of both databases are oriented as closely as possible along the guidelines of the Canberra Experts Group on Household Income Statistics (*www.lisproject.org/links/canberra/finalreport.pdf*).

Table 6.A1.1. **Gini coefficients from the *OECD Database on Household Income Distribution and Poverty* and from the LIS dataset**

	Gini coefficients, working-age population, disposable income									
	Mid-1980s		Around 1990		Mid-1990s		Around 2000s		Mid-2000s	
	OECD Questionnaire	LIS	OECD Questionnaire	LIS	OECD Questionnaire	LIS	OECD Questionnaire	LIS	OECD Questionnaire	LIS
Australia		0.290 (1985)			0.301(1995)	0.313 (1995)	0.292 (2000)	0.315 (2001)	0.305 (2004)	0.321 (2003)
Austria	0.225 (1983)				0.233 (1993)	0.298 (1994)	0.246 (1999) |		0.267 (2004)	0.289 (2004)
Belgium		0.231 (1985)			0.281 (1995)	0.265 (1995)	0.284 (2000) |	0.269 (2000)	0.265 (2004)	
Canada	0.291 (1985)	0.297 (1987)	0.287 (1990)	0.283 (1991)	0.293 (1995)	0.297 (1994)	0.326 (2000)	0.319 (2000)	0.322 (2005)	0.310 (2004)
Czech Republic			0.227 (1992)	0.206 (1992)	0.251 (1996)	0.253 (1996)	0.260 (2002)		0.267 (2004)	0.262 (2004)
Denmark	0.209 (1985)	0.224 (1987)	0.215 (1990)	0.213 (1992)	0.206 (1995)	0.209 (1995)	0.219 (2000)		0.228 (2005)	0.223 (2004)
Finland	0.205 (1986)	0.217 (1987)			0.234 (1995)	0.222 (1995)	0.260 (2000)		0.271 (2005)	0.271 (2004)
France	0.300 (1984)	0.316 (1984)	0.290 (1990) |		0.280 (1996)	0.309 (1994)	0.288 (2000)	0.302 (2000)	0.288 (2004)	
Germany	0.246 (1985)	0.255 (1984)	0.250 (1990)	0.249 (1989)	0.267 (1995)	0.260 (1994)	0.262 (2000)	0.269 (2000)	0.288 (2004)	0.303 (2004)
Greece	0.330 (1988)				0.322 (1994)	0.350 (1995)	0.335 (1999)		0.311 (2004)	0.343 (2004)
Hungary			0.266 (1991)	0.279 (1991)	0.297 (1995)	0.339 (1994)	0.296 (2000)	0.298 (1999)	0.300 (2005)	0.307 (2005)
Ireland	0.338 (1987)	0.332 (1987)			0.321 (1994)		0.290 (2000) |		0.305 (2004)	0.325 (2004)
Israel[1]	0.317 (1985)	0.300 (1986)	0.321 (1990)		0.329 (1995)	0.332 (1997)	0.340 (2000)		0.374 (2005)	0.356 (2005)
Italy	0.310 (1984)	0.306 (1986)	0.293 (1991)	0.288 (1991)	0.348 (1995)	0.335 (1995)	0.341 (2000)	0.338 (2000)	0.348 (2004)	0.331 (2004)
Luxembourg	0.239 (1986)	0.227 (1985)			0.261 (1996)	0.237 (1994)	0.262 (2001)	0.262 (2000)	0.259 (2004)	0.272 (2004)
Mexico	0.447 (1984)	0.441 (1984)			0.519 (1994)	0.509 (1994)	0.502 (2000)	0.507 (2000)	0.469 (2004)	0.482 (2004)
Netherlands	0.273 (1985)	0.243 (1987)	0.290 (1990)	0.261 (1991)	0.298 (1995)	0.260 (1994)	0.293 (2000)		0.285 (2005)	0.263 (2004)
Norway	0.211 (1986)	0.210 (1986)			0.237 (1995)	0.238 (1995)	0.260 (2000)	0.249 (2000)	0.284 (2004)	0.247 (2004)
Poland				0.277 (1992)		0.303 (1995)	0.318 (2000) |		0.357 (2004)	0.330 (2004)
Spain	0.302 (1995)		0.270 (1990)	0.306 (1990)	0.278 (1995)	0.360 (1995)	0.274 (2000) |	0.335 (2000)	0.307 (2004)	0.332 (2004)
Sweden	0.195 (1983)	0.203 (1987)	0.205 (1991)		0.216 (1995)	0.215 (1995)	0.242 (2000)	0.243 (2000)	0.236 (2004)	0.233 (2004)
Switzerland		0.311 (1982)		0.300 (1992)			0.276 (2000)	0.268 (2002)	0.270 (2004)	0.254 (2004)
United Kingdom	0.316 (1985)	0.300 (1986)	0.359 (1991)		0.346 (1994)	0.341 (1994)	0.363 (2000)	0.351 (1999)	0.331 (2004)	0.349 (2004)
United States	0.326 (1984)	0.333 (1986)	0.337 (1990)	0.331 (1991)	0.351 (1665)	0.365 (1994)	0.346 (2000)	0.364 (2000)	0.373 (2005)	0.369 (2004)

Note: Income refers to disposable household income adjusted with an equivalence scale of the square root of the household size. Straight lines indicate breaks in data series.

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

Source: OECD Database on Household Income Distribution and Poverty. OECD Secretariat calculations from the Luxembourg Income Study (LIS).

StatLink *http://dx.doi.org/10.1787/888932537883*

Table 6.A1.2. **Decomposition of (disposable) income inequality by income sources, countries reporting gross incomes**

Panel A. Mid-1980s

	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk
	Australia					**Canada**					**Czech Republic**					**Denmark**					**Finland**				
Wages		1.36	1.00	0.46	0.86		1.21	0.95	0.45	0.85												1.51	0.98	0.45	0.75
Self-employment income		0.12	0.11	0.92	0.35		0.11	0.09	0.93	0.40												0.23	0.23	0.81	0.27
Capital income		0.17	0.09	0.88	0.63		0.07	0.04	0.89	0.56												0.08	0.03	0.84	0.57
Occupational pensions		0.00	0.02	0.97	–0.05		0.03	0.03	0.97	0.33												0.01	0.08	0.88	0.02
Means-tested transfers		–0.11	0.08	0.74	–0.54		–0.05	0.02	0.87	–0.71												–0.02	0.02	0.89	–0.47
Social insurance transfers		–	–	–	–		–0.03	0.08	0.70	–0.15												–0.05	0.10	0.65	–0.16
Private transfers		0.00	0.01	0.99	–0.26			–	–	–												0.00	0.00	0.99	–0.19
Other income		0.00	0.01	0.98	0.22		0.01	0.01	0.97	0.17												0.01	0.01	0.96	0.30
Income taxes		–0.54	–0.31	–0.54	–0.95		–0.36	–0.23	–0.51	–0.91												–0.70	–0.39	–0.44	–0.88
Social security contributions			–	–	–			–	–	–												–0.06	–0.05	–0.39	–0.64
Total disposable income	0.29					0.30															0.22				
	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk
	Germany					**Ireland**					**Israel[1]**					**Netherlands**					**Norway**				
Wages		1.26	1.14	0.38	0.75		1.08	0.84	0.56	0.77		1.25	0.96	0.49	0.80		1.47	1.12	0.47	0.72		0.98	1.02	0.33	0.61
Self-employment income		0.29	0.11	0.95	0.71		0.34	0.22	0.88	0.60		0.30	0.20	0.92	0.50		0.17	0.09	0.96	0.50		0.33	0.14	0.88	0.55
Capital income		0.08	0.03	0.84	0.70		0.05	0.03	0.87	0.54		0.07	0.03	0.98	0.71		0.02	0.01	0.99	0.59		0.08	0.04	0.83	0.52
Occupational pensions			–	–	–		0.02	0.02	0.98	0.42		0.03	0.04	0.95	0.25		0.08	0.06	0.97	0.33		0.01	0.01	0.98	0.17
Means-tested transfers		–0.03	0.01	0.95	–0.52		–0.05	0.06	0.80	–0.34		–0.01	0.01	0.98	–0.48		–0.08	0.04	0.95	–0.57		0.00	0.01	0.89	–0.01
Social insurance transfers		–0.01	0.10	0.77	–0.03		–0.04	0.10	0.66	–0.22		–0.04	0.09	0.69	–0.19		–0.01	0.20	0.77	–0.01		–0.07	0.08	0.73	–0.26
Private transfers		–0.01	0.01	0.99	–0.32		0.00	0.00	1.00	0.38		0.01	0.02	0.97	0.15		0.00	0.01	0.99	0.06		0.00	0.01	0.96	–0.04
Other income			–	–	–			0.00	1.00	0.00			–	–	–			–	–	–		0.12	0.04	0.93	0.67
Income taxes		–0.45	–0.23	–0.53	–0.92		–0.34	–0.22	–0.66	–0.80		–0.52	–0.26	–0.66	–0.91		–0.29	–0.18	–0.48	–0.87		–0.31	–0.22	–0.41	–0.72
Social security contributions		–0.15	–0.17	–0.35	–0.62		–0.06	–0.05	–0.58	–0.65		–0.09	–0.07	–0.53	–0.70		–0.37	–0.35	–0.33	–0.81		–0.12	–0.12	–0.29	–0.75
Total disposable income	0.26					0.33					0.30					0.26					0.21				
	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk					
	Sweden					**Switzerland**					**United Kingdom**					**United States**									
Wages		1.64	1.06	0.40	0.78		0.79	0.96	0.31	0.82		1.27	0.94	0.50	0.80		1.19	1.04	0.45	0.85					
Self-employment income		–0.03	0.13	0.88	–0.05		0.39	0.16	0.91	0.85		0.15	0.10	0.93	0.47		0.11	0.09	0.94	0.43					
Capital income		0.08	0.05	0.77	0.44		0.09	0.06	0.84	0.60		0.08	0.05	0.87	0.57		0.12	0.07	0.88	0.68					
Occupational pensions			–	–	–		0.00	0.00	1.00	–0.22		0.04	0.04	0.95	0.33		0.03	0.03	0.96	0.37					
Means-tested transfers		–0.03	0.01	0.93	–0.52		0.00	0.00	1.00	–0.78		–0.08	0.06	0.85	–0.50		–0.03	0.01	0.94	–0.73					
Social insurance transfers		0.03	0.22	0.64	0.04		–0.02	0.02	0.93	–0.25		–0.04	0.11	0.63	–0.15		0.00	0.04	0.89	–0.04					
Private transfers		–0.01	0.01	0.94	–0.22		0.01	0.02	0.97	0.15		0.01	0.01	0.97	0.20		0.00	0.01	0.97	0.07					
Other income			0.00	0.99	0.17		0.00	0.00	0.99	0.12			0.00	0.93	0.11		0.01	0.01	0.97	0.28					
Income taxes		–0.68	–0.48	–0.35	–0.84		–0.20	–0.15	–0.50	–0.86		–0.31	–0.21	–0.54	–0.84		–0.35	–0.22	–0.59	–0.90					
Social security contributions			–	–	–		–0.06	–0.07	–0.32	–0.89		–0.11	–0.10	–0.48	–0.67		–0.08	–0.08	–0.42	–0.81					
Total disposable income	0.20					0.31					0.30					0.33									

Table 6.A1.2. **Decomposition of (disposable) income inequality by income sources, countries reporting gross incomes** *(cont.)*

Panel B. Mid-1990s

	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk
	Australia					**Canada**					**Czech Republic**					**Denmark**					**Finland**				
Wages		1.40	0.99	0.49	0.89		1.29	0.97	0.46	0.86		1.22	0.95	0.40	0.80		1.77	1.10	0.42	0.80		1.36	0.92	0.47	0.70
Self-employment income		0.15	0.11	0.94	0.47		0.12	0.08	0.94	0.44		0.29	0.12	0.94	0.66		0.17	0.08	0.94	0.46		0.32	0.18	0.87	0.46
Capital income		0.05	0.04	0.92	0.47		0.05	0.03	0.93	0.53		0.02	0.01	0.98	0.65		0.11	0.04	0.92	0.70		0.13	0.04	0.92	0.72
Occupational pensions		0.01	0.01	0.98	0.25		0.03	0.03	0.96	0.31			–	–	–		0.03	0.02	0.98	0.35		0.05	0.10	0.88	0.12
Means-tested transfers		–0.15	0.11	0.73	–0.59		–0.06	0.03	0.91	–0.66		–0.02	0.01	0.90	–0.40		–0.11	0.04	0.90	–0.69		–0.05	0.02	0.89	–0.59
Social insurance transfers		0.00	0.00	0.99	–0.46		–0.04	0.09	0.68	–0.17		–0.13	0.15	0.66	–0.33		–0.24	0.23	0.63	–0.35		–0.10	0.16	0.54	–0.26
Private transfers		0.00	0.01	0.98	–0.15			–	–	–			–	–	–		–0.01	0.01	0.92	–0.43		0.01	0.01	0.92	0.17
Other income		0.01	0.01	0.99	0.34		0.02	0.02	0.96	0.31			–	–	–		0.02	0.02	0.94	0.35		0.00	0.00	0.98	0.19
Income taxes		–0.46	–0.27	–0.56	–0.96		–0.41	–0.25	–0.52	–0.92		–0.24	–0.12	–0.53	–0.95		–0.74	–0.52	–0.35	–0.86		–0.58	–0.34	–0.42	–0.89
Social security contributions			–	–	–			–	–	–		–0.15	–0.12	–0.41	–0.80		0.00	–0.01	–0.41	–0.62		–0.13	–0.09	–0.40	–0.80
Total disposable income	0.31					0.30					0.253					0.21					0.22				
	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk
	Germany					**Ireland**					**Israel[1]**					**Netherlands**					**Norway**				
Wages		1.31	1.13	0.39	0.76							1.27	0.98	0.51	0.84		1.48	1.12	0.43	0.79		0.94	0.86	0.42	0.62
Self-employment income		0.25	0.10	0.95	0.72							0.25	0.18	0.90	0.53		0.15	0.07	0.97	0.56		0.55	0.32	0.81	0.51
Capital income		0.11	0.04	0.84	0.76							0.05	0.02	0.96	0.74		0.06	0.03	0.89	0.58		0.14	0.05	0.88	0.73
Occupational pensions		0.00	0.01	0.99	0.23							0.06	0.04	0.95	0.52		0.09	0.06	0.97	0.38		0.01	0.01	0.97	0.15
Means-tested transfers		–0.03	0.02	0.93	–0.54							–0.02	0.01	0.96	–0.72		–0.08	0.04	0.93	–0.60		–0.02	0.01	0.90	–0.40
Social insurance transfers		–0.04	0.11	0.74	–0.13							–0.04	0.09	0.66	–0.22		–0.03	0.16	0.77	–0.07		–0.08	0.11	0.66	–0.28
Private transfers		–0.01	0.01	0.98	–0.25							0.01	0.02	0.97	0.26		0.00	0.01	0.99	0.06		0.00	0.01	0.95	–0.18
Other income			–	–	–								–	–	–		0.01	0.01	0.98	0.44		0.01	0.00	1.00	0.84
Income taxes		–0.39	–0.20	–0.55	–0.92							–0.46	–0.24	–0.69	–0.93		–0.46	–0.26	–0.51	–0.90		–0.42	–0.27	–0.41	–0.89
Social security contributions		–0.20	–0.20	–0.37	–0.69							–0.12	–0.10	–0.44	–0.91		–0.22	–0.23	–0.28	–0.88		–0.12	–0.10	–0.32	–0.86
Total disposable income	0.26										0.33					0.26					0.24				
	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk					
	Sweden					**Switzerland**					**United Kingdom**					**United States**									
Wages		1.67	1.04	0.42	0.82		0.82	0.83	0.41	0.71		1.17	0.91	0.54	0.81		1.24	1.07	0.47	0.90					
Self-employment income		–0.01	0.05	0.93	–0.04		0.12	0.13	0.91	0.31		0.21	0.13	0.93	0.59		0.09	0.08	0.95	0.46					
Capital income		0.10	0.05	0.84	0.52		0.23	0.11	0.83	0.75		0.06	0.04	0.88	0.63		0.10	0.05	0.90	0.75					
Occupational pensions		0.06	0.03	0.95	0.43		0.04	0.03	0.96	0.43		0.05	0.05	0.94	0.33		0.03	0.03	0.97	0.46					
Means-tested transfers		–0.06	0.03	0.89	–0.50		–0.01	0.01	0.96	–0.22		–0.10	0.07	0.83	–0.63		–0.03	0.02	0.93	–0.66					
Social insurance transfers		–0.11	0.23	0.60	–0.18		0.02	0.06	0.87	0.12		–0.04	0.08	0.70	–0.24		0.00	0.04	0.88	–0.04					
Private transfers		–0.01	0.01	0.94	–0.24		0.00	0.02	0.96	–0.08		0.00	0.01	0.98	0.07		0.00	0.01	0.97	0.10					
Other income			–	–	–		0.00	0.00	0.98	0.18		0.01	0.01	0.99	0.77		0.00	0.00	1.00	0.51					
Income taxes		–0.64	–0.43	–0.35	–0.90		–0.18	–0.13	–0.54	–0.79		–0.28	–0.21	–0.55	–0.81		–0.35	–0.21	–0.64	–0.96					
Social security contributions			–	–	–		–0.04	–0.06	–0.68	–0.28		–0.08	–0.07	–0.55	–0.69		–0.09	–0.08	–0.46	–0.84					
Total disposable income	0.21					0.30					0.34					0.37									

Table 6.A1.2. **Decomposition of (disposable) income inequality by income sources, countries reporting gross incomes** *(cont.)*

Panel C. Mid-2000s

	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk
	Australia					**Canada**					**Czech Republic**					**Denmark**					**Finland**				
Wages		1.34	0.98	0.50	0.88		1.21	0.99	0.44	0.85		1.14	0.85	0.47	0.74		1.75	1.11	0.42	0.84		1.04	0.83	0.49	0.69
Self-employment income		0.17	0.11	0.94	0.52		0.13	0.08	0.94	0.50		0.33	0.15	0.91	0.62		0.16	0.08	0.95	0.50		0.28	0.21	0.83	0.44
Capital income		0.06	0.04	0.93	0.53		0.05	0.03	0.94	0.57		0.03	0.01	0.98	0.72		0.09	0.03	0.93	0.72		0.34	0.12	0.93	0.81
Occupational pensions		0.01	0.02	0.98	0.22		0.05	0.05	0.94	0.32			–	–	–		0.04	0.02	0.97	0.35		0.00	0.01	0.99	0.15
Means-tested transfers		–0.14	0.10	0.73	–0.61		–0.02	0.01	0.95	–0.71		–0.03	0.01	0.94	–0.68		–0.10	0.04	0.90	–0.72		–0.05	0.02	0.92	–0.72
Social insurance transfers		0.00	0.00	1.00	–0.71		–0.04	0.08	0.68	–0.19		–0.09	0.19	0.62	–0.19		–0.22	0.19	0.66	–0.39		–0.04	0.18	0.63	–0.09
Private transfers		0.00	0.01	0.98	–0.17		0.00	0.01	0.97	–0.17			–	–	–		–0.01	0.01	0.92	–0.40		0.00	0.01	0.91	–0.04
Other income		0.00	0.00	1.00	0.24		0.03	0.02	0.95	0.40		0.01	0.02	0.92	0.18		0.02	0.01	0.83	0.48		0.00	0.00	1.00	0.04
Income taxes		–0.44	–0.26	–0.56	–0.96		–0.35	–0.22	–0.52	–0.93		–0.25	–0.12	–0.56	–0.93		–0.72	–0.48	–0.36	–0.92		–0.51	–0.32	–0.46	–0.91
Social security contributions			–	–	–		–0.05	–0.05	–0.36	–0.75		–0.14	–0.11	–0.47	–0.74		0.00	–0.01	–0.39	–0.63		–0.07	–0.06	–0.45	–0.71
Total disposable income	0.32					0.31					0.26					0.22					0.27				

	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk
	Germany					**Ireland**					**Israel**[1]					**Netherlands**					**Norway**				
Wages		1.15	1.06	0.45	0.73		1.12	0.81	0.55	0.81		1.09	0.89	0.52	0.83		1.49	1.19	0.38	0.76		1.19	0.98	0.38	0.78
Self-employment income		0.37	0.16	0.93	0.76		0.33	0.19	0.90	0.61		0.22	0.15	0.92	0.57		0.09	0.08	0.95	0.25		0.17	0.09	0.93	0.46
Capital income		0.15	0.07	0.87	0.80		0.04	0.02	0.96	0.58		0.09	0.05	0.94	0.71		0.04	0.02	0.74	0.56		0.24	0.07	0.95	0.87
Occupational pensions		0.01	0.01	0.99	0.35		0.02	0.02	0.98	0.42		0.07	0.05	0.95	0.52			–	–	–		0.01	0.02	0.95	0.18
Means-tested transfers		–0.04	0.02	0.93	–0.67		–0.09	0.02	0.93	–0.67		–0.03	0.02	0.92	–0.63		–0.05	0.02	0.95	–0.68		–0.02	0.01	0.97	–0.71
Social insurance transfers		–0.01	0.12	0.65	–0.05		–0.03	0.06	0.82	–0.63		–0.01	0.08	0.73	–0.05		0.04	0.19	0.79	0.06		–0.09	0.19	0.60	–0.20
Private transfers		–0.01	0.01	0.97	–0.30		0.01	0.11	0.63	–0.11		0.02	0.03	0.95	0.21		0.00	0.01	0.97	0.02		0.00	0.00	0.99	0.35
Other income			–	–	–			0.00	1.00	0.40			–	–	–		0.00	0.00	0.99	0.33		0.00	0.00	0.99	0.52
Income taxes		–0.46	–0.25	–0.62	–0.91		–0.35	–0.20	–0.67	–0.89		–0.32	–0.17	–0.74	–0.93		–0.61	–0.52	–0.36	–0.76		–0.39	–0.26	–0.42	–0.89
Social security contributions		–0.15	–0.18	–0.42	–0.60		–0.05	–0.03	–0.78	–0.68		–0.11	–0.09	–0.49	–0.89			–	–	–		–0.11	–0.10	–0.30	–0.88
Total disposable income	0.30					0.33					0.36					0.23					0.24				

	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk
	Sweden					**Switzerland**					**United Kingdom**					**United States**				
Wages		1.55	1.06	0.41	0.84		1.25	1.07	0.38	0.78		1.17	0.93	0.53	0.83		1.22	1.05	0.48	0.90
Self-employment income		0.03	0.04	0.95	0.20		0.08	0.10	0.92	0.21		0.20	0.12	0.94	0.64		0.09	0.07	0.95	0.48
Capital income		0.13	0.05	0.91	0.71		0.04	0.03	0.87	0.36		0.05	0.03	0.92	0.59		0.09	0.05	0.91	0.74
Occupational pensions		0.05	0.03	0.95	0.38		0.00	0.00	1.00	0.22		0.03	0.05	0.94	0.26		0.02	0.02	0.98	0.36
Means-tested transfers		–0.03	0.01	0.95	–0.65		–0.02	0.01	0.93	–0.58		–0.10	0.07	0.79	–0.62		–0.02	0.03	0.72	–0.34
Social insurance transfers		–0.10	0.22	0.58	–0.18		–0.03	0.11	0.81	–0.07		–0.04	0.07	0.70	–0.28		0.01	0.05	0.90	0.08
Private transfers		–0.01	0.01	0.93	–0.45		–0.01	0.02	0.92	–0.11		0.00	0.01	0.97	0.01		0.00	0.01	0.96	0.02
Other income		0.01	0.00	0.98	0.48		0.00	–	–	–		0.00	0.00	1.00	0.30		0.00	0.00	0.99	0.23
Income taxes		–0.56	–0.34	–0.41	–0.94		–0.17	–0.15	–0.46	–0.62		–0.26	–0.21	–0.52	–0.82		–0.32	–0.19	–0.67	–0.93
Social security contributions		–0.07	–0.07	–0.28	–0.80		–0.15	–0.21	–0.24	–0.74		–0.07	–0.06	–0.54	–0.75		–0.08	–0.08	–0.42	–0.90
Total disposable income	0.23					0.25					0.35					0.37				

Note: Working-age population. Income inequality is measured by the Gini coefficient. Disposable income refers to household income adjusted with an equivalence scale of the square of household size. *Ck* is the relative contribution of source *k* to total income inequality. *Sk* is the share of source *k* in total income, *Gk* is the Gini coefficient of income source *k*, and *Rk* is the correlation of income from source *k* with the distribution of total income. For further definitions see Box 6.1.

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

Source: OECD Secretariat calculations from the Luxembourg Income Study (LIS).

StatLink http://dx.doi.org/10.1787/888932537902

Table 6.A1.3. **Decomposition of (disposable) income inequality by income sources, countries reporting net incomes**

Panel A. Mid-1980s

	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk
	Austria					**Belgium**					**France**					**Greece**					**Hungary**				
Wages							1.06	0.76	0.39	0.83		0.88	0.73	0.47	0.80										
Self-employment income								–	–	–		0.07	0.06	0.95	0.38										
Capital income							0.05	0.02	0.97	0.67		0.03	0.02	0.95	0.47										
Occupational pensions							0.00	0.00	1.00	0.50			–	–	–										
Means-tested transfers							–0.01	0.01	0.99	–0.22		–0.02	0.02	0.84	–0.34										
Social insurance transfers							–0.11	0.21	0.63	–0.18		0.03	0.16	0.75	0.08										
Private transfers							0.00	0.01	0.99	–0.13		0.00	0.00	0.99	–0.02										
Other income								–	–	–		0.01	0.00	0.99	0.38										
Total disposable income						0.23					0.32														
	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk
	Italy					**Luxembourg**					**Mexico**					**Poland**					**Spain**				
Wages		0.54	0.60	0.47	0.59		0.72	0.69	0.38	0.62		0.65	0.63	0.60	0.76							0.82	0.70	0.50	0.74
Self-employment income		0.31	0.22	0.84	0.51		0.17	0.09	0.91	0.46		0.24	0.27	0.81	0.50							0.16	0.18	0.85	0.32
Capital income		0.09	0.04	0.85	0.71		0.06	0.02	0.96	0.59		0.05	0.03	0.98	0.75							0.02	0.01	0.99	0.55
Occupational pensions			–	–	–			–	–	–			–	–	–								–	–	–
Means-tested transfers			–	–	–		0.00	0.00	0.99	–0.34			–	–	–								–	–	–
Social insurance transfers		0.06	0.14	0.80	0.17		0.03	0.18	0.69	0.06		0.03	0.02	0.98	0.60							0.00	0.11	0.83	0.01
Private transfers			–	–	–		0.00	0.00	0.99	–0.14		0.03	0.05	0.94	0.30								–	–	–
Other income			–	–	–		0.02	0.01	0.97	0.47			–	–	–								–	–	–
Total disposable income	0.31					0.23					0.44										0.32				

Table 6.A1.3. **Decomposition of (disposable) income inequality by income sources, countries reporting net incomes** *(cont.)*

Panel B. Mid-1990s

	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk
	Austria					**Belgium**					**France**					**Greece**					**Hungary**				
Wages		0.78	0.67	0.45	0.78		0.80	0.66	0.42	0.76		0.76	0.67	0.47	0.74		0.55	0.50	0.59	0.64		0.93	0.66	0.55	0.88
Self-employment income		0.17	0.09	0.94	0.59		0.19	0.07	0.96	0.72		0.17	0.10	0.94	0.60		0.26	0.29	0.74	0.42		0.05	0.03	0.96	0.63
Capital income		0.03	0.02	0.79	0.43		0.05	0.03	0.90	0.52		0.07	0.04	0.82	0.66		0.09	0.05	0.90	0.63		0.02	0.01	0.98	0.72
Occupational pensions		0.00	0.01	0.99	0.09		0.00	0.00	1.00	0.31			–	–	–		0.01	0.01	0.98	0.42			–	–	–
Means-tested transfers		0.00	0.01	0.95	–0.11		–0.01	0.01	0.98	–0.29		–0.03	0.02	0.85	–0.66		0.00	0.00	0.98	0.09		–0.01	0.01	0.90	–0.25
Social insurance transfers		0.01	0.18	0.65	0.03		–0.09	0.19	0.62	–0.19		0.02	0.16	0.71	0.06		0.09	0.13	0.81	0.30		–0.01	0.27	0.48	–0.02
Private transfers		0.01	0.02	0.95	0.21		0.02	0.02	0.94	0.37		0.00	0.01	0.97	0.08		0.00	0.01	0.97	0.09		0.01	0.01	0.96	0.27
Other income		0.00	0.00	0.89	0.33		0.03	0.02	0.76	0.39		0.00	0.00	1.00	0.43		0.00	0.00	0.91	0.44		0.01	0.01	0.96	0.19
Total disposable income	0.30					0.27					0.31					0.35					0.34				
	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk
	Italy					**Luxembourg**					**Mexico**					**Poland**					**Spain**				
Wages		0.54	0.56	0.51	0.63		0.83	0.69	0.41	0.70		0.69	0.66	0.64	0.82		0.63	0.52	0.56	0.65		0.77	0.67	0.52	0.79
Self-employment income		0.21	0.17	0.85	0.48		0.14	0.08	0.91	0.45		0.24	0.24	0.84	0.61		0.24	0.14	0.91	0.59		0.19	0.16	0.88	0.51
Capital income		0.13	0.07	0.79	0.75		0.06	0.03	0.91	0.57		0.03	0.02	0.99	0.75		0.01	0.00	0.99	0.61		0.03	0.02	0.92	0.56
Occupational pensions		0.04	0.04	0.95	0.37			0.00	0.99	–0.33			–	–	–			–	–	–		0.00	0.00	0.99	0.47
Means-tested transfers		0.00	0.01	0.98	0.12		–0.02	0.01	0.90	–0.33			–	–	–		0.00	0.01	0.93	–0.07		–0.01	0.01	0.94	–0.42
Social insurance transfers		0.07	0.14	0.80	0.20		–0.02	0.19	0.66	–0.03		0.03	0.04	0.93	0.36		0.08	0.27	0.61	0.15		0.00	0.11	0.79	0.01
Private transfers		0.00	0.01	0.99	0.16		–0.01	0.00	0.99	–0.47		0.01	0.03	0.95	0.21		0.04	0.04	0.87	0.29		0.00	0.01	0.98	–0.03
Other income		0.01	0.01	0.99	0.53			–	–	–		0.00	0.00	0.99	0.70		0.01	0.02	0.96	0.15		0.02	0.02	0.69	0.49
Total disposable income	0.33					0.24					0.51					0.30					0.36				

Table 6.A1.3. **Decomposition of (disposable) income inequality by income sources, countries reporting net incomes** *(cont.)*

Panel C. Mid-2000s

	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk
	Austria					**Belgium**					**France**					**Greece**					**Hungary**				
Wages		0.48	0.57	0.45	0.54		0.75	0.69	0.37	0.78		0.79	0.70	0.45	0.76		0.54	0.53	0.56	0.63		0.60	0.51	0.54	0.67
Self-employment income		0.27	0.13	0.91	0.68		0.23	0.08	0.97	0.80		0.15	0.08	0.95	0.59		0.31	0.27	0.79	0.50		0.26	0.12	0.91	0.74
Capital income		0.06	0.03	0.90	0.74		0.08	0.04	0.92	0.64		0.08	0.04	0.83	0.70		0.07	0.04	0.92	0.62		0.08	0.03	0.97	0.85
Occupational pensions			–	–	–		0.00	0.00	1.00	0.12			–	–	–			–	–	–			–	–	–
Means-tested transfers		–0.01	0.01	0.97	–0.48		–0.01	0.01	0.98	–0.40		–0.05	0.02	0.86	–0.66		0.00	0.00	0.98	–0.21		–0.02	0.02	0.91	–0.40
Social insurance transfers		0.21	0.27	0.66	0.34		–0.11	0.15	0.65	–0.29		0.04	0.15	0.74	0.09		0.07	0.14	0.79	0.22		0.06	0.31	0.53	0.11
Private transfers		–0.01	0.01	0.95	–0.16		0.03	0.02	0.95	0.50		0.00	0.01	0.97	–0.08		0.00	0.01	0.96	–0.10		0.02	0.01	0.99	0.66
Other income		0.00	0.00	1.00	–0.13		0.03	0.02	0.75	0.42		0.00	0.00	0.99	0.10		0.01	0.01	1.00	0.76			–	–	–
Total disposable income	0.29					0.27					0.30					0.34					0.31				
	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk	Gini	Ck	Sk	Gk	Rk
	Italy					**Luxembourg**					**Mexico**					**Poland**					**Spain**				
Wages		0.48	0.57	0.50	0.57		0.65	0.66	0.45	0.69		0.70	0.70	0.58	0.83		0.62	0.54	0.57	0.66		0.84	0.74	0.46	0.82
Self-employment income		0.38	0.22	0.88	0.66		0.22	0.09	0.96	0.80		0.22	0.20	0.87	0.60		0.23	0.15	0.89	0.57		0.06	0.09	0.90	0.26
Capital income		0.05	0.03	0.87	0.69		0.07	0.04	0.93	0.70		0.02	0.01	0.98	0.75		0.01	0.01	0.99	0.63		0.03	0.02	0.95	0.56
Occupational pensions			0.00	0.99	–0.05			–	–	–		0.00	0.00	1.00	0.72			0.00	1.00	–0.38			–	–	–
Means-tested transfers		0.00	0.01	0.98	–0.15		–0.02	0.01	0.95	–0.63		–0.01	0.01	0.91	–0.49		–0.01	0.01	0.97	–0.30		0.00	0.00	0.99	0.44
Social insurance transfers		0.09	0.17	0.78	0.21		0.08	0.19	0.70	0.19		0.05	0.04	0.96	0.55		0.12	0.26	0.67	0.24		0.06	0.14	0.79	0.17
Private transfers		0.00	0.00	0.99	–0.05		0.00	0.01	0.97	–0.15		0.02	0.03	0.94	0.24		0.02	0.03	0.91	0.20		0.00	0.01	0.99	0.01
Other income			0.00	0.99	0.03			0.00	0.99	0.04		0.00	0.00	1.00	0.28		0.01	0.01	0.97	0.43		0.01	0.01	0.99	0.24
Total disposable income	0.33					0.32					0.48					0.33					0.33				

Note: Working-age population. Income inequality is measured by the Gini coefficient. Disposable income refers to household income adjusted with an equivalence scale of the square of household size. *Ck* is the relative contribution of source *k* to total income inequality, *Sk* is the share of source *k* in total income, *Gk* is the Gini coefficient of income source *k*, and *Rk* is the correlation of income from source *k* with the distribution of total income. For further definitions see Box 6.1.

Source: OECD Secretariat calculations from the Luxembourg Income Study (LIS).

StatLink http://dx.doi.org/10.1787/888932537921

Table 6.A1.4. **Marginal effects of changes in income components**

Panel A. Mid-1980s

	Wages	Self-employment income	Capital income	Occupational pensions	Means-tested transfers	Social insurance transfers	Private transfers	Other income	Income taxes	Social security contributions
Countries reporting gross incomes										
Australia	0.356	0.011	0.080	–0.022	–0.189		–0.004	–0.001	–0.231	
Canada	0.263	0.023	0.030	0.002	–0.070	–0.115		–0.005	–0.128	
Czech Republic										
Denmark										
Finland	0.530	0.000	0.042	–0.075	–0.035	–0.146	–0.003	0.002	–0.309	–0.007
Germany	0.121	0.182	0.045		–0.042	–0.103	–0.012		–0.216	0.024
Ireland	0.245	0.125	0.013	0.004	–0.117	–0.139	0.000	0.000	–0.125	–0.006
Israel[1]	0.291	0.104	0.037	–0.008	–0.016	–0.125	–0.009		–0.258	–0.016
Netherlands	0.353	0.078	0.012	0.016	–0.119	–0.209	–0.004		–0.112	–0.014
Norway	–0.042	0.185	0.039	–0.001	–0.007	–0.153	–0.005	0.080	–0.090	–0.005
Sweden	0.588	–0.160	0.031		–0.045	–0.194	–0.014	0.000	–0.207	
Switzerland	–0.164	0.234	0.036	–0.001	–0.003	–0.041	–0.008	–0.002	–0.056	0.005
United Kingdom	0.324	0.046	0.032	0.001	–0.142	–0.141	–0.005	–0.001	–0.106	–0.008
United States	0.151	0.018	0.053	0.002	–0.041	–0.041	–0.006	–0.001	–0.132	–0.003
Average	0.251	0.071	0.038	–0.008	–0.069	–0.128	–0.006	0.008	–0.164	–0.003
Countries reporting net incomes										
Austria										
Belgium	0.298		0.032	0.001	–0.010	–0.314	–0.007			
France	0.149	0.010	0.008		–0.032	–0.134	–0.003	0.001		
Greece										
Hungary										
Italy	–0.053	0.089	0.043			–0.079				
Luxembourg	0.029	0.079	0.035		–0.004	–0.145	–0.004	0.010		
Mexico	0.016	–0.024	0.021			0.006	–0.019			
Poland										
Spain	0.123	–0.028	0.009			–0.104				
Average	0.094	0.025	0.025	0.001	–0.015	–0.128	–0.008	0.006		

Table 6.A1.4. **Marginal effects of changes in income components** *(cont.)*

Panel B. Mid-1990s

	Wages	Self-employment income	Capital income	Occupational pensions	Means-tested transfers	Social insurance transfers	Private transfers	Other income	Income taxes	Social security contributions
Countries reporting gross incomes										
Australia	0.404	0.042	0.014	–0.003	–0.258		–0.008	0.000	–0.190	
Canada	0.317	0.033	0.019	0.000	–0.085	–0.128		0.000	–0.156	
Czech Republic	0.267	0.171	0.013		–0.026	–0.274			–0.118	–0.033
Denmark	0.673	0.087	0.076	0.011	–0.143	–0.473	–0.012	0.009	–0.228	0.000
Finland	0.445	0.143	0.086	–0.055	–0.075	–0.267	–0.003	0.000	–0.232	–0.042
Germany	0.178	0.158	0.062	–0.001	–0.048	–0.148	–0.014		–0.192	0.005
Ireland										
Israel[1]	0.287	0.078	0.028	0.019	–0.032	–0.136	–0.004		–0.221	–0.020
Netherlands	0.365	0.076	0.029	0.025	–0.117	–0.189	–0.004	0.005	–0.203	0.012
Norway	0.076	0.233	0.088	–0.004	–0.034	–0.188	–0.009	0.004	–0.150	–0.016
Sweden	0.635	–0.058	0.051	0.029	–0.091	–0.342	–0.013		–0.212	
Switzerland	–0.014	–0.008	0.121	0.011	–0.017	–0.037	–0.019	–0.002	–0.056	0.021
United Kingdom	0.261	0.078	0.022	–0.004	–0.166	–0.118	–0.006	0.008	–0.067	–0.008
United States	0.174	0.015	0.045	0.006	–0.043	–0.044	–0.007	0.000	–0.142	–0.004
Average	0.313	0.081	0.050	0.003	–0.087	–0.195	–0.009	0.003	–0.167	–0.009
Countries reporting net incomes										
Austria	0.108	0.080	0.004	–0.001	–0.017	–0.168	–0.006	0.000		
Belgium	0.144	0.117	0.020	0.000	–0.015	–0.276	0.007	0.003		
France	0.089	0.078	0.030		–0.048	–0.143	–0.006	0.000		
Greece	0.046	–0.031	0.033	0.001	–0.002	–0.040	–0.008	0.001		
Hungary	0.273	0.022	0.010		–0.025	–0.273	–0.002	–0.005		
Italy	–0.019	0.038	0.055	0.002	–0.004	–0.070	–0.004	0.003		
Luxembourg	0.141	0.061	0.033	0.000	–0.026	–0.201	–0.008			
Mexico	0.027	–0.001	0.008			–0.014	–0.021	0.001		
Poland	0.110	0.105	0.003		–0.013	–0.187	–0.008	–0.009		
Spain	0.095	0.038	0.010	0.000	–0.025	–0.111	–0.006	–0.001		
Average	0.101	0.051	0.021	0.000	–0.019	–0.148	–0.006	–0.001		

Table 6.A1.4. **Marginal effects of changes in income components** *(cont.)*

Panel C. Mid-2000s

	Wages	Self-employment income	Capital income	Occupational pensions	Means-tested transfers	Social insurance transfers	Private transfers	Other income	Income taxes	Social security contributions
Countries reporting gross incomes										
Australia	0.362	0.057	0.022	–0.007	–0.247	–0.001	–0.009	–0.001	–0.176	
Canada	0.217	0.044	0.022	0.000	–0.035	–0.119	–0.008	0.005	–0.131	0.005
Czech Republic	0.291	0.177	0.020		–0.037	–0.284		–0.006	–0.124	–0.037
Denmark	0.638	0.086	0.058	0.012	–0.139	–0.408	–0.015	0.009	–0.242	0.000
Finland	0.200	0.072	0.219	–0.002	–0.066	–0.224	–0.008	0.000	–0.182	–0.010
Germany	0.090	0.209	0.086	0.001	–0.057	–0.132	–0.013		–0.214	0.030
Ireland	0.311	0.130	0.016	0.005	–0.151	–0.137	0.003	0.000	–0.159	–0.018
Israel[1]	0.196	0.069	0.040	0.019	–0.050	–0.086	–0.011		–0.156	–0.021
Netherlands	0.304	0.002	0.019		–0.073	–0.151	–0.010	0.000	–0.091	
Norway	0.214	0.073	0.170	–0.006	–0.029	–0.277	0.000	0.002	–0.137	–0.010
Sweden	0.494	–0.006	0.081	0.017	–0.045	–0.314	–0.014	0.004	–0.220	0.003
Switzerland	0.176	–0.024	0.008	0.000	–0.030	–0.139	–0.033		–0.019	0.061
United Kingdom	0.246	0.084	0.018	–0.014	–0.163	–0.109	–0.008	0.000	–0.045	–0.009
United States	0.174	0.017	0.040	–0.001	–0.051	–0.037	–0.008	–0.001	–0.131	–0.002
Average	0.280	0.071	0.059	0.002	–0.084	–0.173	–0.010	0.001	–0.145	–0.001
Countries reporting net incomes										
Austria	–0.094	0.143	0.032		–0.009	–0.058	–0.013	–0.001		
Belgium	0.056	0.147	0.045	–0.001	–0.010	–0.254	0.013	0.004		
France	0.090	0.067	0.037		–0.069	–0.116	–0.008	–0.001		
Greece	0.016	0.040	0.029		–0.003	–0.071	–0.016	0.005		
Hungary	0.083	0.140	0.050		–0.034	–0.250	0.011			
Italy	–0.083	0.163	0.024	–0.001	–0.010	–0.085	–0.005	–0.003		
Luxembourg	–0.014	0.130	0.037		–0.034	–0.110	–0.008	–0.001		
Mexico	0.001	0.015	0.008	0.001	–0.011	0.004	–0.018	0.000		
Poland	0.078	0.080	0.003	0.000	–0.015	–0.133	–0.014	0.001		
Spain	0.101	–0.027	0.011		0.001	–0.080	–0.004	–0.002		
Average	0.023	0.090	0.028	0.000	–0.019	–0.115	–0.006	0.000		

Note: Working-age population. Income inequality is measured by the Gini coefficient. Disposable income refers to household income adjusted with an equivalence scale of the square of household size. The values shown indicate by how much a 1% increase in one income component increases or decreases (negative sign) overall inequality, in percentage terms.

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

Source: OECD Secretariat calculations from the Luxembourg Income Study (LIS).

StatLink http://dx.doi.org/10.1787/888932537940