

## Chapter 2

# Income and Wealth

*Income and wealth are essential components of individual well-being. Income allows people to satisfy their needs and pursue many other goals that they deem important to their lives, while wealth makes it possible to sustain these choices over time. Both income and wealth enhance individuals' freedom to choose the lives that they want to live, though there are some aspects of their lives that cannot be bought by money. This chapter presents a set of indicators that aims to provide a coherent, but non-exhaustive, picture of the economic conditions of people and households. The indicators measure the principal components that shape material conditions, their dynamics and how they are distributed within each country. This chapter finds that income and wealth have been substantially enhanced during the last fifteen years. However, this rise did not lift all boats: income inequality has been rising in many countries, and some groups have been left behind. This suggests that growth-oriented policies need to be designed to take into account distributional considerations.*

---

*This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.*

*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.*

## Why do income and wealth matter for well-being?

Household income and wealth are essential components of individual well-being. The ability to command resources allows people to satisfy basic needs and pursue many other goals that they deem important to their lives. Economic resources enhance individuals' freedom to choose the lives that they want to live and protect them against economic and personal risks. At the society-wide level, economic resources allow countries to invest in education, health, security, etc. Indeed, even if income alone is insufficient to assess a country's welfare, it is often a necessary condition for the country's overall development.

Household wealth, which derives from the accumulation of personal savings as well as from transfers between generations, also contributes in an important way to individual well-being, *e.g.* by protecting people from unexpected shocks and allowing them to smooth consumption over time. Preserving people's wealth also ensures that their material living standards can be sustained over time.

It is not enough to look simply at average levels of both household income and wealth. It is also critical to assess how economic resources are shared across individuals and population groups. Information on the distribution of household income and wealth, and how these are correlated, is therefore central for designing policies to improve people's material well-being. In addition, policies have to take into consideration distributional impacts to assess a possible trade-off between equity and efficiency and to consider whether some groups of the population will be left behind, with the potential drag on future growth that this implies.

## Measuring income and wealth

The measure and analysis of economic resources available to the population has a longstanding tradition. Economic statistics were among the first statistics ever to be produced,<sup>1</sup> and this long tradition has led to consistent, harmonised and regularly updated measures of economic resources.<sup>2</sup> In this respect, existing indicators of household economic resources are closer to ideal indicators than most other indicators of well-being shown in this report.

Economic statistics are compiled at an aggregate level through the national accounts system and at an individual level through household surveys and administrative records. The former have the advantage of being fully consistent with economy-wide measures such as GDP and productivity, while the latter make it possible to look at the distribution of economic resources within a country.

In general, income statistics at both the aggregate and individual levels are available with a greater degree of harmonisation than wealth statistics. Indeed, internationally comparable income indicators cover a large range of revenues, while wealth indicators tend to focus on a relatively narrow set of assets and liabilities. The collection of income indicators is also timelier than wealth indicators, especially at the individual level.

Despite the good quality of measures of economic resources, these indicators can be improved in several ways. First, it will be important to increase the consistency of the definitions and coverage between national accounts and household surveys.<sup>3</sup> Secondly, existing measures of household economic resources are often developed through separate instruments, making it impossible to analyse their "joint distribution" at the individual level (*i.e.* to identify people who combine low income and adequate wealth, or vice versa). Some

of these limits are addressed by a number of OECD ongoing projects that are discussed in more detail at the end of this chapter.

## Selected indicators

### Household net adjusted disposable income (IW I)

Household net adjusted disposable income is the best measure of people's economic resources that is available from the national accounts, as it combines information on a large number of market and non-market resources. Household net adjusted disposable income is obtained by adding to the flows that make up people's gross income (earnings, self-employment and capital income, as well as current monetary transfers received from other sectors) the social transfers in-kind that households receive from governments (such as education and health care services), and then subtracting the taxes on income and wealth, the social security contributions paid by households as well as the depreciation of capital goods consumed by households. The resulting aggregate can be viewed as the maximum amount that a household can afford to consume without having to reduce its assets or to increase its liabilities.<sup>4</sup>

Measures of average household net adjusted disposable income per capita are available within the system of national accounts (SNA) based on well-established standards for all OECD countries (OECD, 2010).<sup>5</sup> The concept hence meets a number of the criteria characterising "ideal" indicators (Table 2.1). Its main drawback is a lack of information at a disaggregated level (*e.g.* for different types of households). Household net adjusted disposable income is expressed in purchasing power parities for private consumption in the year 2000 (US dollars PPPs), so as to allow meaningful cross-country comparisons over time.<sup>6</sup>

Table 2.1. The quality of income and wealth indicators

	Target concept	INDICATORS								
		Relevance to measure and monitor well-being				Statistical quality				
		Face validity	Unambiguous interpretation (good/bad)	Policy amenable outcomes	Can be disaggregated	Well-established instrument collected	Comparable definition	Country coverage	Recurrent data collection	
Income and wealth										
IW I	Household Net Adjusted Disposable Income	Current and future consumption possibilities	√	√	~	x	√	√	√	√
IW II	Household Net Financial Wealth	Realised material well-being	~	√	~	x	√	√	√	√
iw 1	Household Final consumption	Satisfaction with material conditions	√	√	~	x	√	√	√	√
iw 2	Household Total consumption		~	~	~	x	~	~	~	~
iw 3	Subjective evaluation of material well-being		~	√	~	√	~	~	√	√

Note: The symbol √ shows that the indicator selected largely meets the criterion shown in the table; the symbol ~ that the indicator meets the criterion to a large extent; the symbol x that the indicator does not meet the criterion or it meets it only to a limited extent.

### **Household net financial wealth (IW II)**

Net financial wealth is important to protect households from economic hardship and vulnerability. Based on national accounts definitions, this aggregate includes a number of assets (*e.g.* gold, currency and deposits, shares, securities other than shares, loans, insurance technical reserves and other accounts receivable or payable owned by households) net of their financial liabilities. While this measure is available for most OECD countries, its obvious limitation is that it excludes households' non-financial assets (*i.e.* land and dwellings) which, in most countries, represent the largest component of households' overall net wealth. For example, it is estimated that on average in the OECD countries 67% of the population are homeowners (OECD, 2007). Comparable SNA information on land and dwellings is currently available only for a small number of OECD countries.

### **Household final consumption (iw 1)**

Material well-being can also be evaluated by looking at household consumption expenditures. While adjusted net disposable income describes the consumption and saving possibilities available to households, it is ultimately consumption that informs about their "achieved" or "realised" material conditions. Household final consumption covers all purchases made by resident households to meet their everyday needs. It is shown here as a secondary indicator, as consumption informs on current material well-being, but may not necessarily reflect life-long well-being possibilities.

### **Subjective evaluation of material well-being (iw 2)**

The indicators discussed so far are objective indicators. However, self-perceived evaluations of material living conditions offer a useful complement. Several recent analyses have drawn attention to the increasing gap between the evolution of objective measures of people's economic situation and people's own appreciation of this (Stiglitz *et al.*, 2009). The many factors that account for this gap (*e.g.* differences in the concepts measured, scope of measurement, limited validity of either type of indicator, different needs of households with the same amount of economic resources) underscore the importance of relying on both types of measures to assess people's material living conditions.

The indicator shown here is based on the European Union Statistics on Income and Living Conditions (EU-SILC). It refers to the share of the population who declare that they are "having great difficulty or difficulty to make their ends meet". The indicator relies on the same question across countries and is thus broadly comparable, although contextual factors and cultural effects may affect comparisons. It is also timely, as it is part of the core EU-SILC modules produced every year. However, this indicator is available only for European countries, which is why it is included here as a secondary indicator.

### **Measuring inequalities and poverty**

Indicators of average material well-being need to be supplemented with information on how this is distributed across the population. Looking at the distribution is important not only for getting a more accurate picture of the actual living conditions of different types of households and individuals, but also for designing tax and social policies.

As discussed above, it is not possible to assess income distribution through national accounts. Therefore indicators on the distribution of household economic resources refer to the concept of household disposable income, as measured through a combination of household surveys and administrative records. The distributional indicators used in this

chapter refer to the concept of “equivalised”<sup>7</sup> household disposable income, based on micro sources, as opposed to household net adjusted disposable income, drawn from the national accounts.<sup>8</sup> The income data necessary to calculate measures of inequalities are typically collected less frequently and require more time to compute than national accounts data; this implies that information on the distribution of household income presented in this chapter is less timely than that on average conditions. Two types of inequality measures are presented here:

- The Gini index, a summary measure of income dispersion in the population.<sup>9</sup> This measure is easy to understand, and has a number of appealing properties, such as summarising in a single number the income differences between each pair of people, rather than measuring distances relative to an arbitrary reference point such as the mean. This measure does nevertheless have some shortcomings (e.g. it can exhibit some inconsistency between measures at the national and sub-national levels; and it cannot be interpreted for variables with negative values, such as net wealth); for a discussion of the properties of the Gini index, see Sen and Foster, 1998.
- Measures of low income are also important, as low-income people typically experience deprivations in several domains, not just material ones. Indicators of low income usually look at its prevalence (i.e. headcount measures of the share of the population falling below a given income threshold) and intensity (i.e. gap measures of the average income shortfall of the poor expressed as a percentage of the income threshold). Both of the indicators shown in this chapter rely on a low-income threshold defined as 50% or 60% of the median income in each country.

## Average patterns

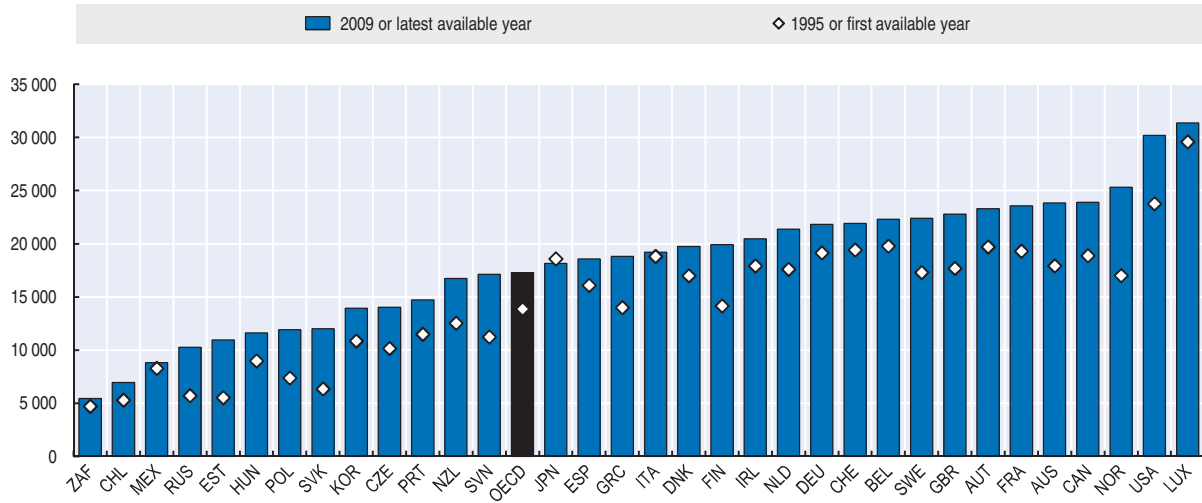
### **Households have enjoyed higher income on average over the past fifteen years**

Cross-country differences in household net adjusted disposable income *per capita* are large (Figure 2.1). For the countries analysed, household net adjusted disposable income is highest in Luxembourg, about six times as high as in Chile, the OECD country with the lowest level. In all these countries, the main component of household net adjusted disposable income is compensation of employees, followed by income from unincorporated enterprises and transfers in-kind provided by the public sector (Figure 2.2). Social security contributions and other taxes paid by households, net of the current monetary transfers that they receive, represent around 10% of household net adjusted disposable income. The structure of household net adjusted disposable income is relatively homogeneous across countries, with the exception of property income and of net contributions and taxes paid by households, which vary quite substantially across the countries considered.

Household net adjusted disposable income increased during the past decade or so in all OECD countries, with the largest rises recorded in Slovenia, the Slovak Republic, Estonia, Norway and the Russian Federation, while it has remained broadly stable in Japan, Italy and Mexico. Cross-country differences have changed little over the period. Overall, household income and GDP have not always moved in parallel during this period (Box 2.1). While numerous factors affect trends in household income, and disentangling their effects is difficult, Figure 2.3 shows that most changes in household net adjusted disposable income are due to movements in primary income. However, in most countries household net adjusted disposable income grew at a faster pace than gross income, indicating that redistributive policies have enhanced households' well-being.

Figure 2.1. Household net adjusted disposable income per capita, 2009

US dollars at 2000 PPPs



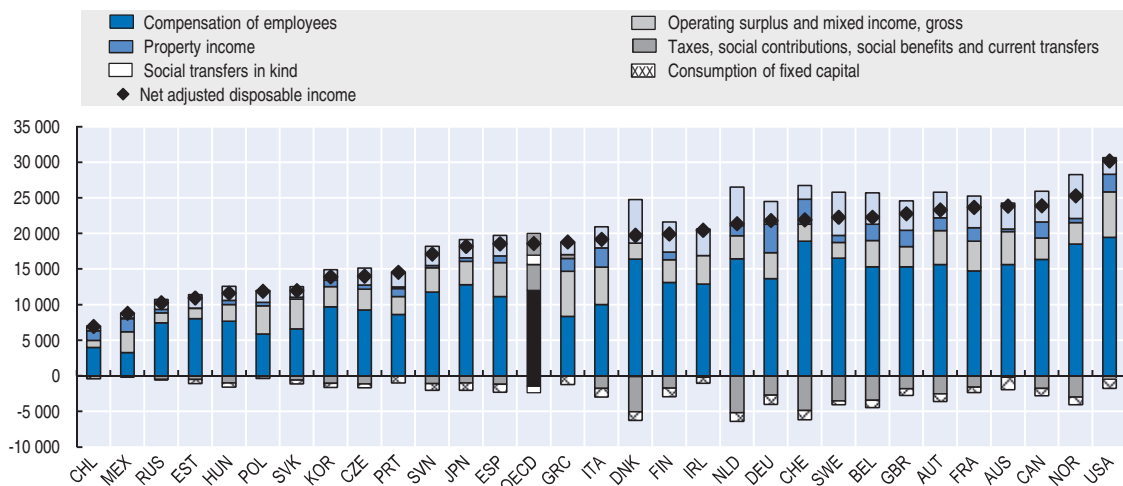
Note: Households include non-profit institutions serving households, except for New Zealand. Purchasing Power Parities are those for actual individual consumption of households. The latest available year is 2008 for Australia, Japan, Switzerland and the Russian Federation; and 2010 for Finland, Portugal and Sweden. The first available year is 2000 for Greece and Spain; 2002 for Ireland and the Russian Federation; 2003 for Chile, Mexico and South Africa; and 2006 for Luxembourg. Purchasing Power Parities for South Africa are OECD estimates.

Sources: OECD, National Accounts data; Statistics New Zealand; OECD estimates.

StatLink <http://dx.doi.org/10.1787/888932491884>

Figure 2.2. From gross income to net adjusted disposable income of households per capita, 2009

US dollars at 2000 PPPs per capita



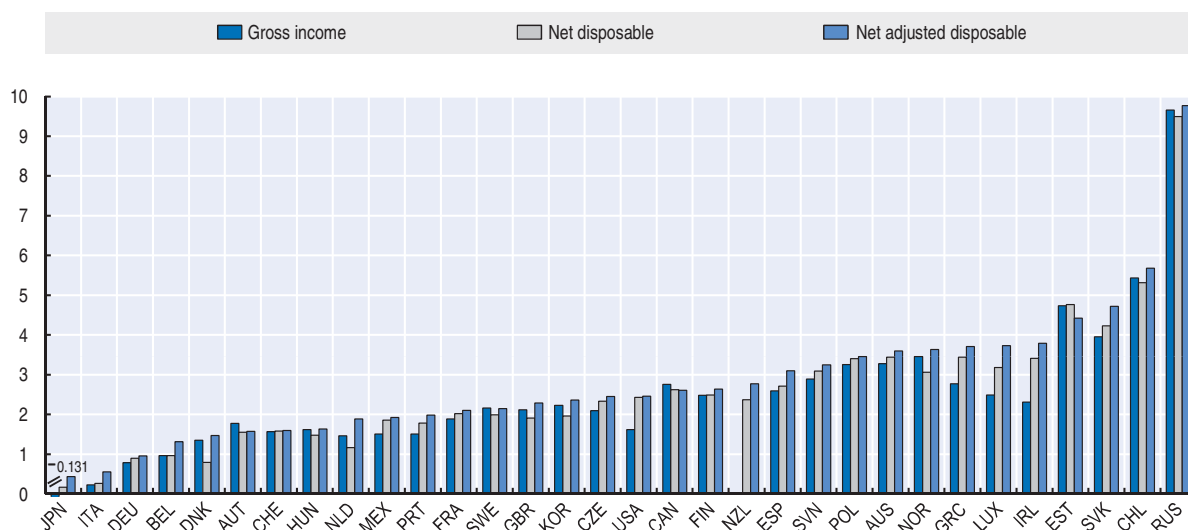
Note: The latest available year is 2008 for Australia, Japan, Switzerland and the Russian Federation; and 2010 for Finland, Portugal and Sweden. The sum of compensation of employees, property income and operating surplus is the primary income (also called market income). Taxes, social and in-kind benefits and various other transfers from the public sector represent the secondary income (i.e. income that the government redistributes to households directly or indirectly). Purchasing Power Parities are those for actual individual consumption of households.

Source: OECD, National Accounts data; Statistics New Zealand.

StatLink <http://dx.doi.org/10.1787/888932491903>

Figure 2.3. Real annual growth rates of various households income measures

Growth rates in percentages, period 1995-2009



Note: Households include non-profit institutions serving households, except for New Zealand. The annualized growth rate refers to 1995-2008 for Australia and Switzerland; 1995-2010 for Finland, Portugal and Sweden; 1996-2008 for Japan; 1998-2009 for the United States; 2000-09 for Greece and Spain; 2002-08 for the Russian Federation; 2002-09 for Ireland; 2003-09 for Chile and Mexico; and 2006-09 for Luxembourg. Data are deflated using actual individual consumption. Gross income data is not available for New Zealand.

Source: OECD, National Accounts data; Statistics New Zealand.

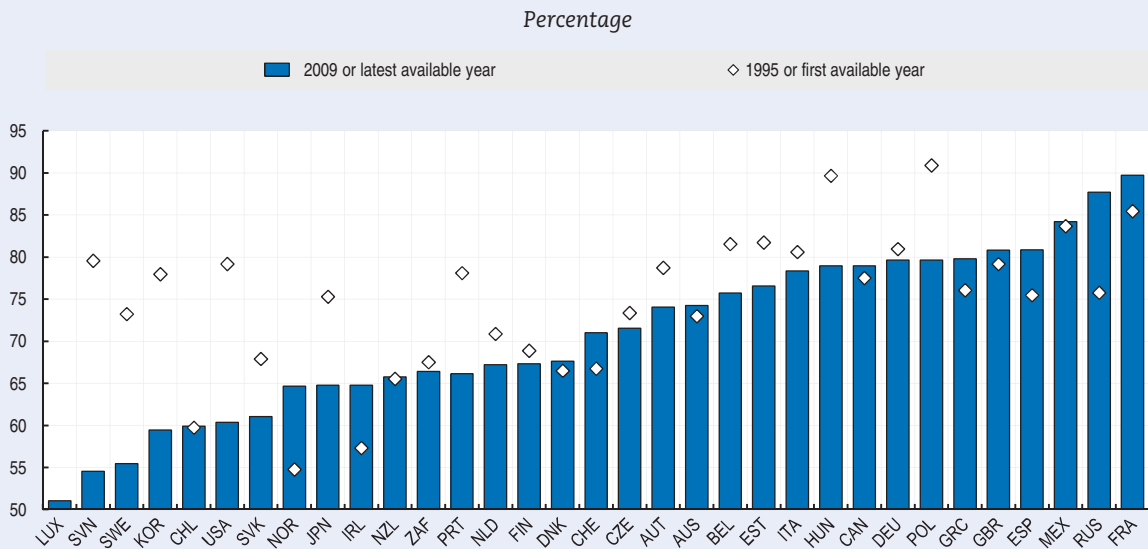
StatLink  <http://dx.doi.org/10.1787/888932491922>

### Box 2.1. Discrepancies between GDP and household net adjusted disposable income

Country-wide measures of economic production such as GDP cannot be considered as satisfactory proxies of households' material conditions, as shown by Figure 2.4. First, in around half of the countries household net adjusted disposable income represents only two-thirds of GDP, with a share lower than 60% in Luxembourg, Slovenia, Sweden and Korea. Second, in many OECD countries, these gaps have increased considerably in the past fifteen years. Such gaps highlight the discrepancy between a country's economic performance and the economic situation of households.

Many factors underlie these differences, including a faster rise in company re-invested profits than in employee compensation – resulting in a lower share of primary income accruing to households; changes in redistribution policies through taxes and social benefits; changes in firms' practices on the distribution of company profits and profits transferred abroad; and a faster rise in consumer prices than in the GDP deflator. However, discrepancies between GDP and household net adjusted disposable income may also be reflective of resources that will increase household living standards in the future (e.g. re-invested profits generate economic activity and thus income for households) or diminish it (e.g. higher public expenditure today financed through public debt may imply lower public expenditure tomorrow). Overall, it remains challenging to assess the impact of current redistribution of resources across the sectors of the economy on households' future well-being.

Figure 2.4. Household net adjusted disposable income as a share of gross domestic product



Note: Households include non-profit institutions serving households, except for New Zealand. Purchasing Power Parities are those for actual individual consumption of households. The latest available year is 2008 for Australia, Japan, Switzerland and the Russian Federation; and 2010 for Finland, Portugal and Sweden. The first available year is 2000 for Greece and Spain; 2002 for Ireland and the Russian Federation; 2003 for Chile, Mexico and South Africa; and 2006 for Luxembourg. Data on Gross domestic Product (GDP) for Mexico and the Russian Federation are OECD estimates.

Source: OECD, National Accounts data; Statistics New Zealand; and OECD estimates.

StatLink  <http://dx.doi.org/10.1787/888932491941>

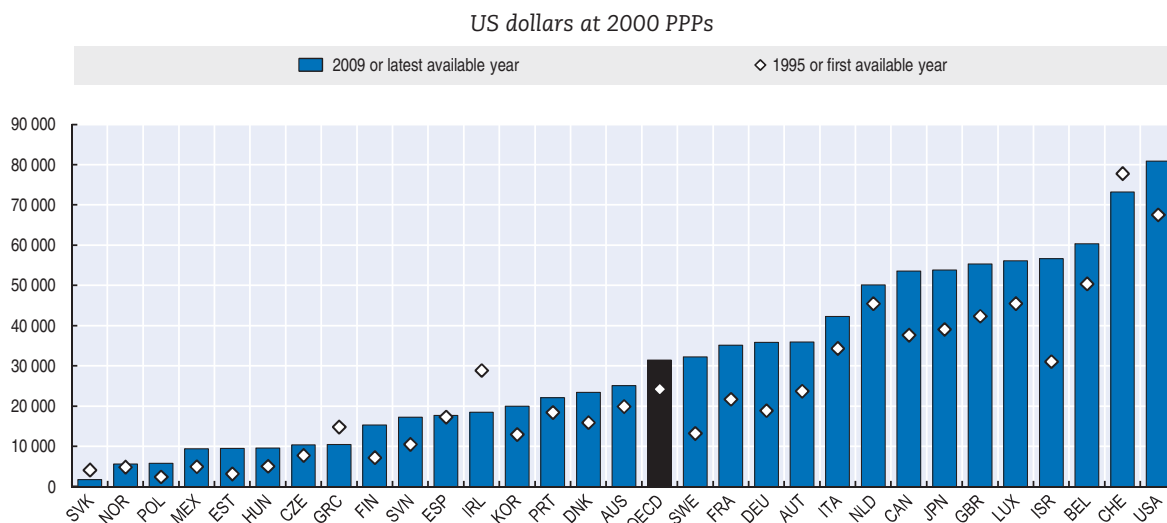
### Households are also wealthier on average

Household net financial wealth per capita differs across countries to a larger extent than does household income per capita (Figure 2.5). Household net financial wealth per capita is highest in the United States (with an average financial wealth nearly three times as large as income) and the lowest in the Slovak Republic, Norway and Poland.<sup>10</sup> Over the past fifteen years, net financial wealth has increased in most OECD countries, most notably in Israel, Germany and Sweden. Falls were, however, recorded in Ireland, Greece and Switzerland. The bulk of household net financial wealth reflects net equity in life insurance and pension reserves, shares and, for some countries, currency and deposits (Figure 2.6).

As mentioned above, non-financial assets account for a large share of households' total wealth, with land and dwellings owned by households accounting for the largest part. Unfortunately, statistical information on these assets is sparse and often not comparable across OECD countries.<sup>11</sup> Looking at countries where data are available, net financial wealth accounts for around one-third of total net wealth in Australia, Hungary and the Czech Republic, 80% in Japan and 60% in Canada.



Figure 2.5. Household net financial wealth per capita

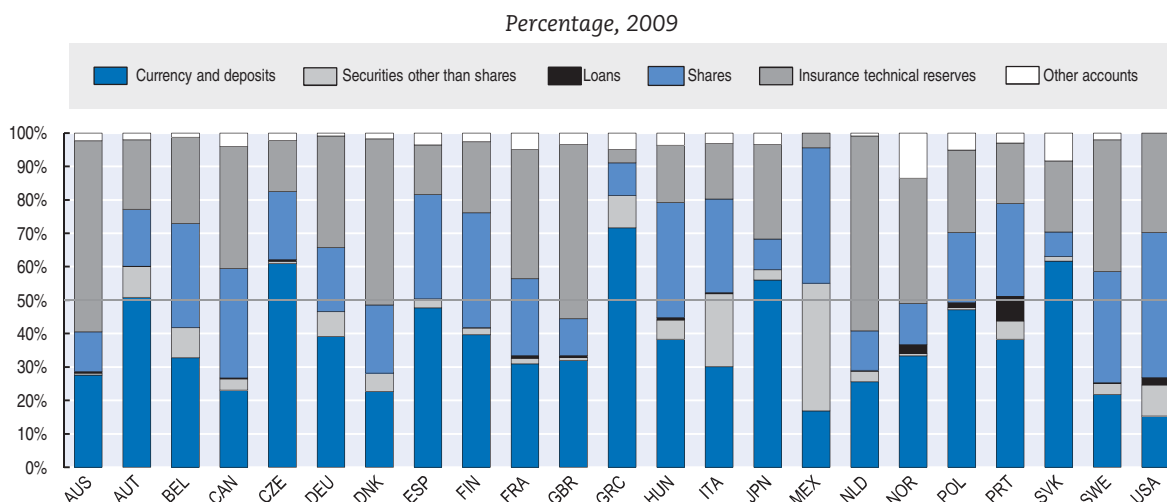


Note: Households include non-profit institutions serving households. Purchasing Power Parities are those for private consumption of households. The latest available year is 2010 for Belgium, Greece, Hungary, Norway, Slovenia and the United Kingdom. The first available year is 1997 for Mexico; 1999 for Switzerland; 2001 for Ireland, Israel and Slovenia; 2002 for Korea; and 2006 for Luxembourg.

Sources: OECD, National Accounts data; Statistics New Zealand.

StatLink <http://dx.doi.org/10.1787/888932491960>

Figure 2.6 Decomposition of household financial wealth of households by type of assets



Sources: OECD, National Accounts data.

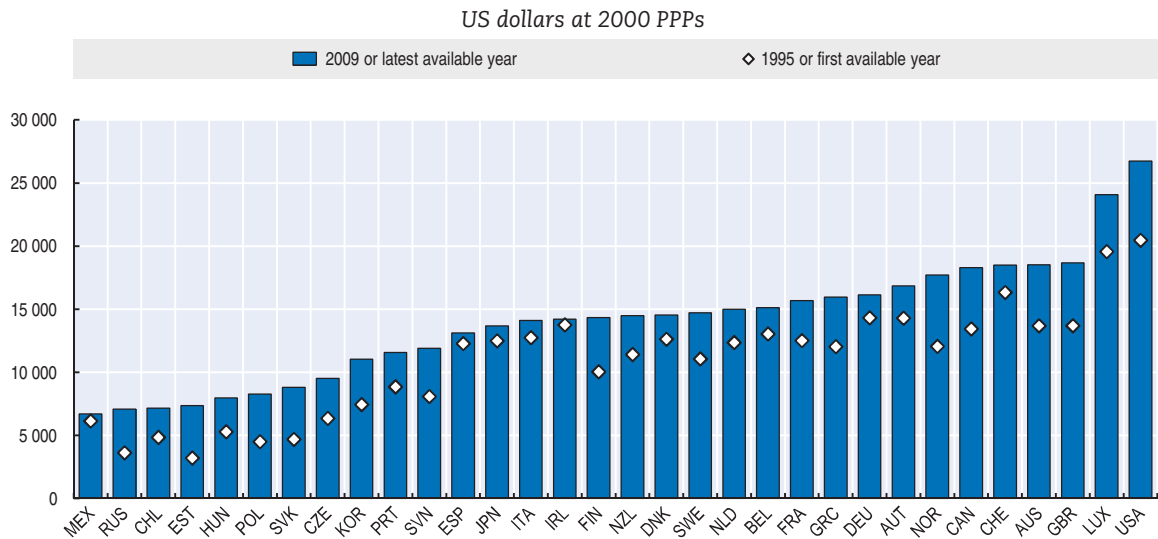
StatLink <http://dx.doi.org/10.1787/888932491979>

### Consumption expenditure increased at a slower pace than household income

Like income and wealth, household final consumption expenditure per capita varies across countries. It is highest in Luxembourg and the United States and lowest in Mexico, the Russian Federation, Chile and Estonia (Figure 2.7). Over the past fifteen years, household consumption expenditure per capita has increased in all countries but at a slower pace than household income. The strongest increases have been recorded in the United States, the

United Kingdom, Australia, Canada, Finland, the Slovak Republic, Poland, Estonia and the Russian Federation. By contrast, in Ireland, Spain and Mexico the level of final consumption remained broadly unchanged. Growth of household consumption expenditures is lower when households' pre-committed outlays, such as rent, utility bills and repayment of the principal residence through household loans and mortgages, are excluded. Box 2.2 discusses experimental measures of non-market consumption, which are currently being developed by an OECD project.

Figure 2.7. Household final consumption expenditure per capita



Note: Households include non-profit institutions serving households. Data are in US dollars at 2000 PPPs using the deflator of private consumption of households. The latest available year is 2007 for New Zealand; 2008 for Australia, Chile, Greece, Japan, Switzerland and the Russian Federation; and 2010 for Finland. The first available year is 1996 for Chile and Japan; 2000 for Greece and Spain; 2002 for Ireland and the Russian Federation; and 2003 for Mexico.

Source: OECD, National Accounts data.

StatLink  <http://dx.doi.org/10.1787/888932491998>

### Box 2.2. Accounting for non-market production of household services enhances material well-being

Final consumption, as defined and measured in the national accounts, focuses on marketable goods and services bought by households. While there is widespread agreement that many non-marketable services (such as own-produced meals, child care, etc.) contribute to people's material well-being, most of these services fall outside the production boundary of the national accounts and do not enter into the standard measurement of living standards – the only exceptions being dwelling services that benefit home-owners. To remedy this deficiency, the OECD has recently developed experimental measures of the monetary value of own-account production of services by households (Ahmad et Koh, 2011).

The evaluation of own-account production of household services is performed in two steps: first, the amount of time allocated to household production (on items such as cooking, cleaning, child-care, shopping, etc.) is computed, using information from Time Use Surveys; second, this number of hours is converted into a monetary aggregate by considering either the average wage prevailing on the labour market (as an approximation of the opportunity cost) or the typical wage of a worker performing housework (replacement cost).

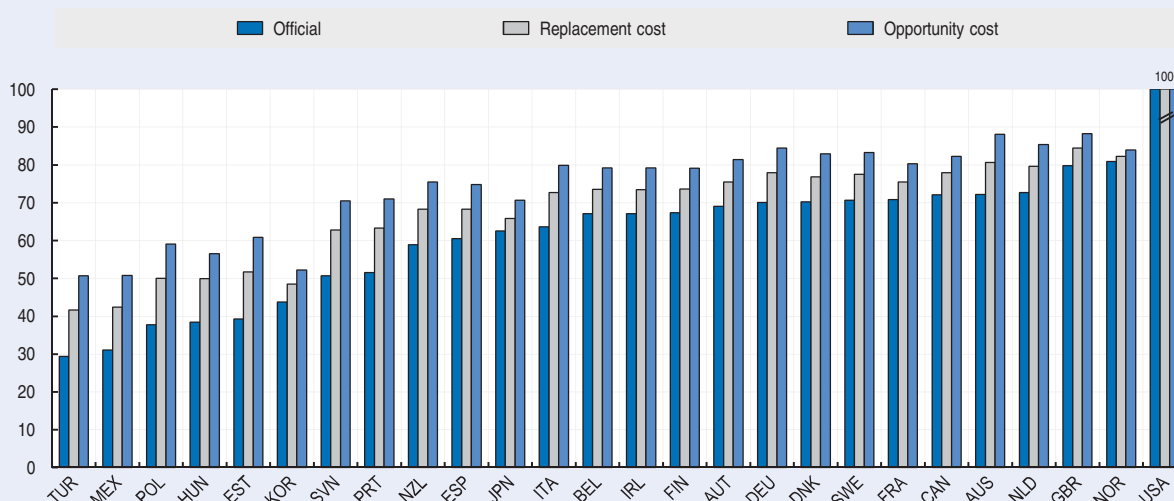
Estimates of the non-market consumption of household services highlight two main results (Figure 2.8). First, the value of own-account services of households is significant but varies across countries and

according to the method used to value the time that households devote to produce these services. Second, including own-account services produced by households in measures of consumption per capita does not fundamentally change the position of countries in international comparisons, although all countries improve their position relative to the United States (the country where household final consumption expenditure per capita is the highest). This “catching up” effect is largest for lower income countries such as Mexico or Poland, where the “marketisation” of the production of household services is less developed. Differences across countries may reflect involuntary choices, for example when unemployment obliges labour force participants to “produce at home” while, unconstrained, they would have chosen to have a paid job and to purchase on the market a greater share of the services that they consume.

While providing interesting insights, these estimates are only a very first step towards the production of satellite accounts for the household sector. Much more work is needed to consolidate the methodology and produce these on a more systematic basis, as for instance suggested in Eurostat (2003). Interesting examples of comprehensive accounts for the production of the household sector can be found in Landefeld *et al.* (2009) for the United States and in Ruger and Varjonen (2008) for Finland and Germany.

Figure 2.8. Household total consumption, including non-market services, 2008

US dollars per capita at 2008 PPPs, USA=100



Note: “Official” refers to consumption as it is measured in the National Accounts. The second and third bars refer to measures of total consumption where non-market services have been included using two types of valuation for the labour used in household production: “replacement cost” values time spent using the wage of a household worker while “opportunity cost” uses the average wage prevailing on the labour market.

Source: OECD (2011), “Incorporating Household Production into International Comparisons of Material Well-Being”, OECD Statistics Directorate Working paper (forthcoming).

StatLink  <http://dx.doi.org/10.1787/888932492017>

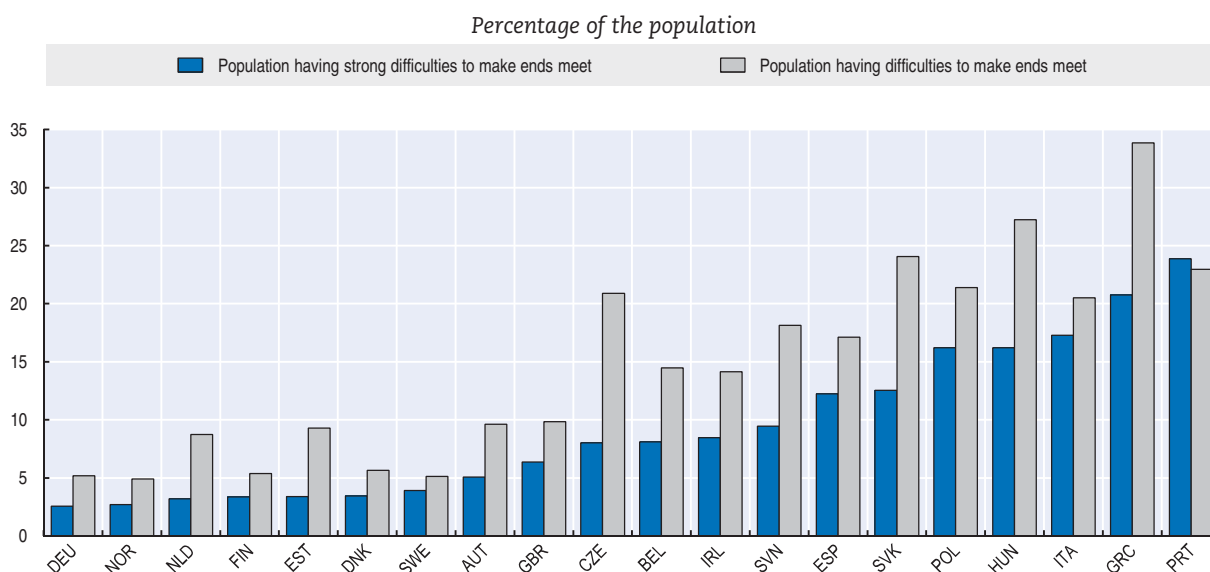
Comparing income and consumption provides an indication of the sustainability of household living standards. In 2009, households in Greece, New Zealand and Denmark recorded negative household saving rates, indicating that average current household consumption was higher than the current income received during the same year. By contrast, household net saving rates were positive and relatively high in many continental European countries. Saving rates started to decline towards the end of the 1990s in many OECD countries, notably Korea, Japan and the United Kingdom, while they remained more stable in the euro area and in the United States. These trends have been reversed following the recent financial crisis, as many households strived to repair the losses to their assets. The drivers of these trends are essentially related to institutional, demographic and socio-

demographic factors at the country level, while real interest rates, credit conditions and inflation influence household savings at the macroeconomic level (Hüfner and Koske, 2010).

### **In European countries many households find it difficult to make ends meet**

The share of households in European countries who declare that they are having difficulty making ends meet is around 15% on average, with 10% reporting that they are having strong difficulty (Figure 2.9). Over 40% of households report strong or some inability to make ends meet in Greece, Hungary and Portugal, as compared to only 8% in Germany and Norway.

Figure 2.9. Population unable to make ends meet, 2008



Source: OECD Secretariat calculations based on data from the European Union Statistics on Income and Living Conditions (EU-SILC).

StatLink <http://dx.doi.org/10.1787/888932492036>

### **There is a relatively strong correlation between the various measures of income and wealth**

While the various indicators discussed so far measure different components of households' material well-being, it is interesting to see whether they provide a consistent picture. Per capita levels of household income and wealth are significantly correlated across countries, though to a lower extent than household income and consumption expenditures (Table 2.2).

The correlation between household adjusted disposable income per capita and measures of how households perceive the state of their material conditions is also interesting (Stiglitz *et al.*, 2009). Across OECD countries, higher average household income per capita is associated with lower reported inability to make ends meet, but this relationship tends to flatten out along the income ladder (not shown here). Economic insecurity (*e.g.* having a precarious job) and higher levels of certain types of household expenditures that weigh heaviest on people's budget (*e.g.* housing) are possible reasons for the discrepancy between objective measures of household living conditions and the subjective appreciation of them reported by people.

Table 2.2. Correlation between different indicators of income and wealth

		IW I Household net adjusted disposable income	IW II Household net financial wealth	iw 1 Household final consumption	iw 2 Household total consumption	iw 3 Share of households having strong difficulties to make ends meet
IW I	Household net adjusted disposable income	1 (31)	0.70 (28)	0.95 (31)	0.96 (25)	-0.52 (20)
IW II	Household net financial wealth		1 (28)	0.73 (28)	0.66 (25)	-0.24 (20)
iw 1	Household final consumption			1 (28)	0.66 (25)	-0.35 (20)
iw 2	Household total consumption				1 (25)	-0.55 (17)
iw 3	Share of households having strong difficulties to make ends meet					1 (20)

Note: Values in parenthesis refer to the number of observations. All correlations are significant at the 1% level. As the two different measures of household total consumption are almost perfectly correlated with each other (correlation of 0.99), only one is represented here (opportunity cost).  
Source: OECD's calculations.

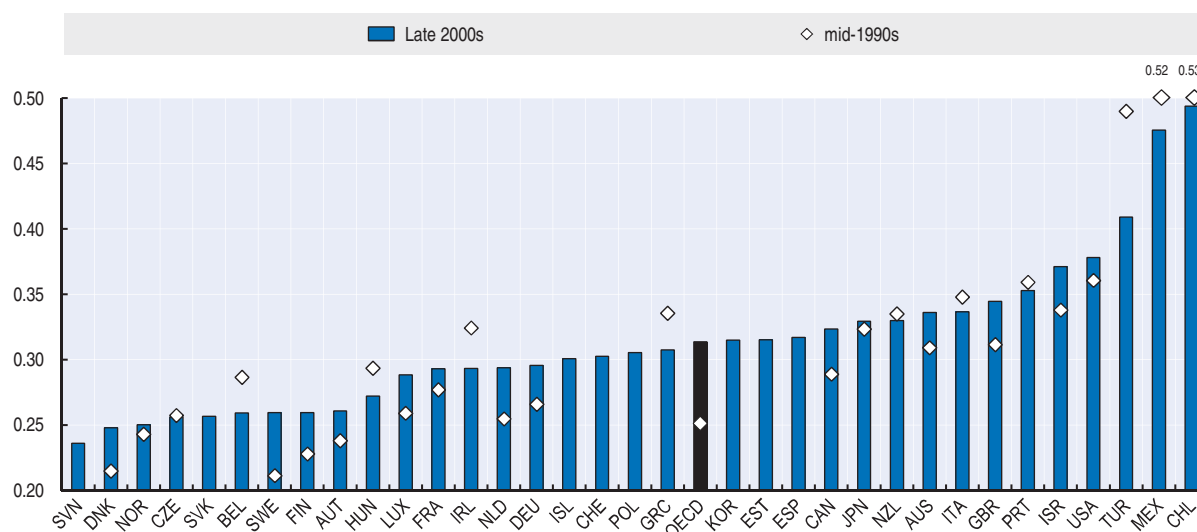
StatLink  <http://dx.doi.org/10.1787/888932493803>

## Inequalities

### The shape of the income distribution differs significantly across countries...

Despite the substantial increase in average living standards experienced during the past fifteen years, not all people have benefited from this to the same extent. There are indeed large differences in how household disposable income is distributed within countries (Figure 2.10). Some OECD countries such as Chile and Mexico, but also Turkey, the United States and Israel, have a much more unequal income distribution than others. By contrast, the Nordic and Eastern European countries are characterised by lower income inequalities.

Figure 2.10 Gini index of income inequalities.



Note: Data refer to mid-2000s instead of late 2000s for Greece and Switzerland. For Austria, Belgium, the Czech Republic, Estonia, Finland, Iceland, Luxembourg, Poland, Portugal, the Slovak Republic, Slovenia, Spain and Switzerland the values are provisional.

Source: OECD Income distribution and poverty database.

StatLink  <http://dx.doi.org/10.1787/888932492055>

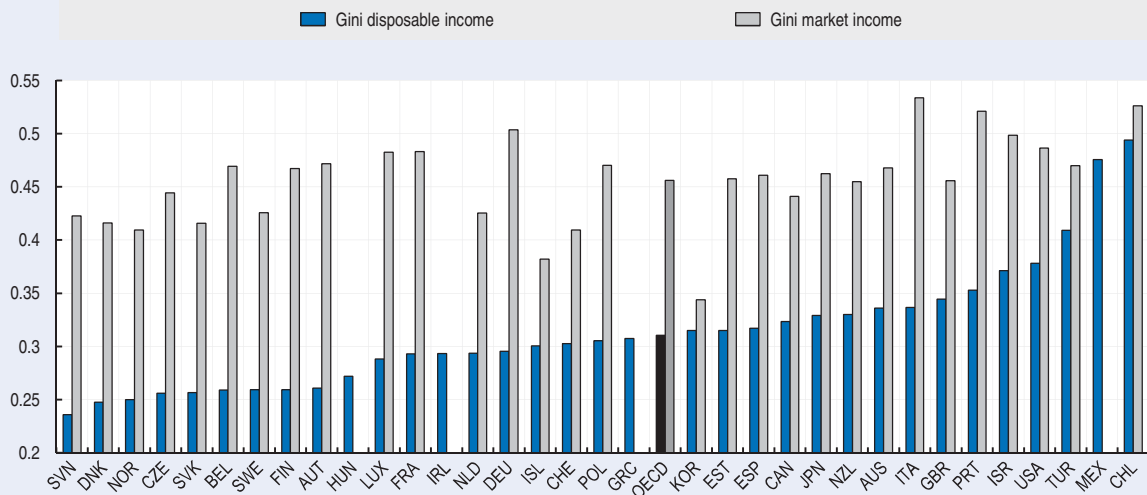
**...and across time**

Figure 2.10 also shows how the Gini index has changed relative to the mid-1990s (OECD, 2011b). Over this long time period, income inequality increased in most OECD countries, especially in Sweden, Netherlands and Denmark, while it fell in a few, such as Turkey, Ireland, Belgium, Greece, and Chile. While it is challenging to assess the driving forces of income inequality, some key factors are described in Box 2.3.

**Box 2.3. What drives income disparities?**

The income distribution in OECD countries depends on many factors. First, changes in demographic patterns and household structures may increase inequality: for example, the recent increase in the share of people living alone have decreased households' economies of scale for consumption, putting specific population groups such as single parents, young persons and elderly living alone at greater risk of poverty. Population ageing combined with the increasing economic insecurity of youth reinforces this risk. Second, labour market trends may contribute to higher income inequality (figure 2.11); earnings account for a large share of household disposable income and earnings disparities have increased rapidly over the past two decades (chapter 3 on "Jobs and earnings"); another trend is the increased incidence of atypical work such as part-time and temporary jobs. Third, the degree of redistribution achieved by policies, through cash benefits and taxes, may have changed over time. On average, redistribution schemes in OECD countries reduce income inequality by around one-third, with cash benefits having the greatest impact; over the last decade, tax systems have become less progressive, notably so in the case of income taxes. A detailed analysis of policy and non-policy drivers of income disparities is presented in (OECD, 2011b).

Figure 2.11. Inequality in market and disposable income, among the entire population, 2008



Note: OECD average excludes Greece, Hungary, Ireland and Mexico, as no data on market incomes are available for these countries. Data refer to 2006 for Japan; 2007 for Denmark, Hungary and Turkey and 2009 for Chile. For Austria, Belgium, the Czech Republic, Estonia, Finland, Iceland, Luxembourg, Poland, Portugal, the Slovak Republic, Slovenia, Spain and Switzerland the values are provisional. Countries are ranked in increasing order of disposable income inequality.

Source: Adapted from OECD (2011b) Income distribution and poverty database.

StatLink  <http://dx.doi.org/10.1787/888932492074>

**Cross-countries differences in low income levels are also large**

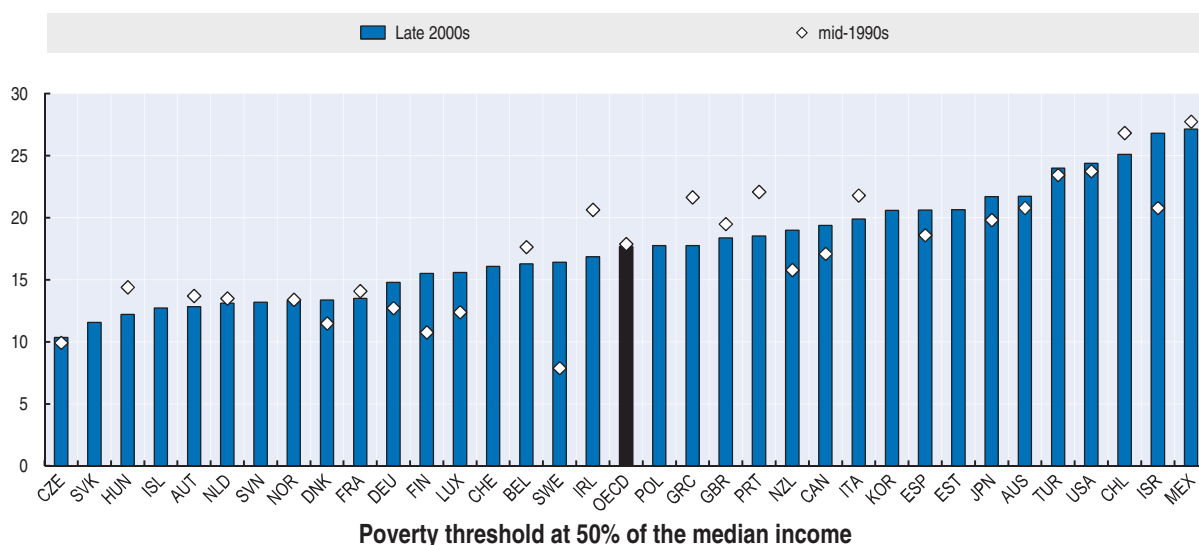
As in the case of overall income inequality, the number of low-income people varies significantly across OECD countries (Figure 2.12). In Mexico and Israel, at least 25% of the population is below the low-income threshold of 60% of median income, compared to only

10% in the Czech Republic. The low-income headcount is below 20% in all OECD European countries, with the exception of Italy, Spain and Estonia, where it is above, on average. These general patterns are consistent for a lower poverty threshold (i.e. 50% of median income, Figure 2.12 second panel). However, the number of low-income people changes substantially across the two poverty measures, particularly so for the Czech Republic, Denmark, Finland, France, Hungary, Israel, Netherlands and Sweden. This suggests that many of the policies targeted towards low-income people succeed in fighting poverty only to a limited extent. As poverty is defined in relative terms (i.e. with respect to the median), the observed patterns tend to reflect inequality at the lower end of the income distribution, rather than absolute living standards.

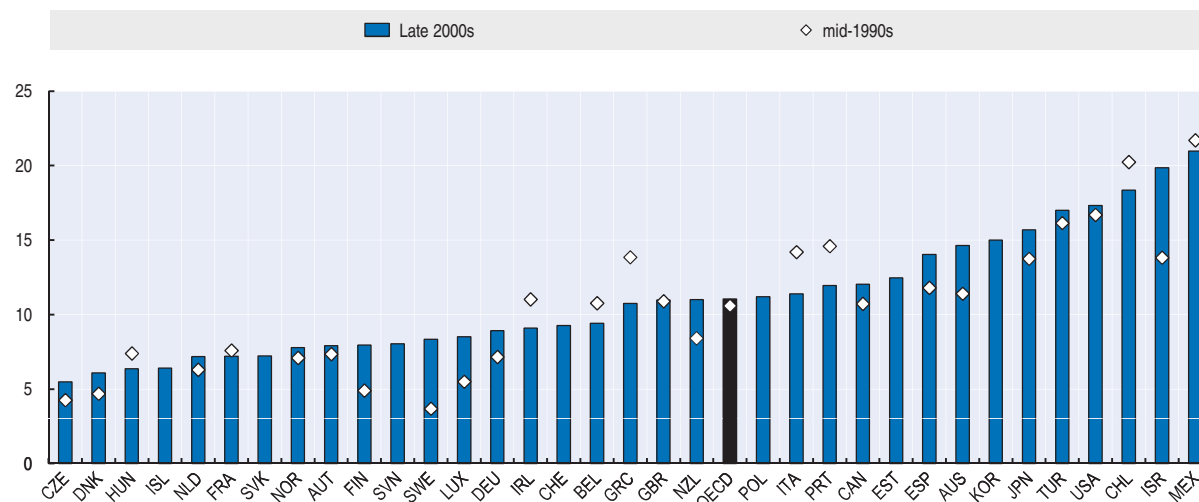
Figure 2.12. Incidence of income poverty

Percentage of low-income people over the total population

Poverty threshold at 60% of the median income



Poverty threshold at 50% of the median income



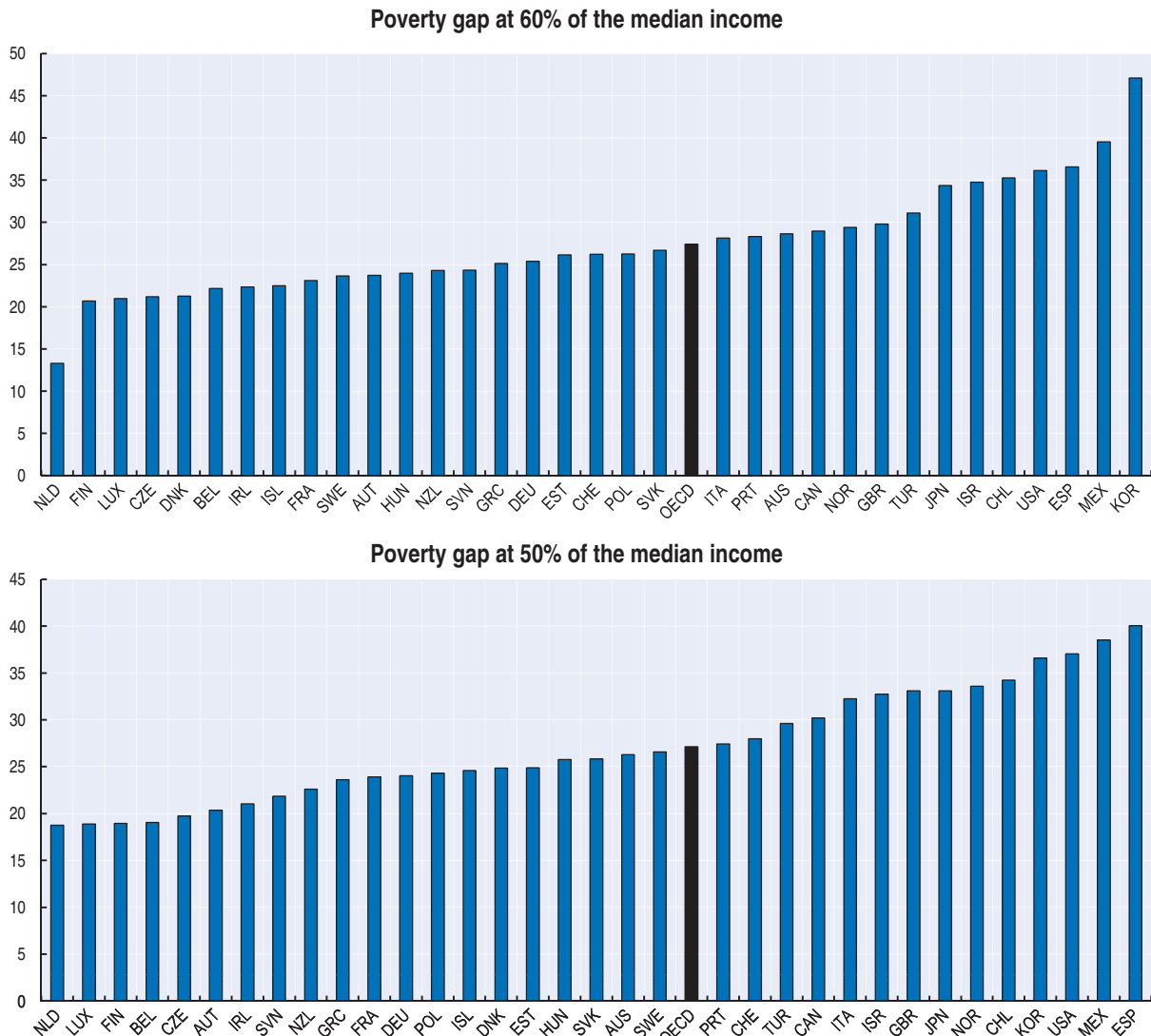
Note: Percentage of individuals with equivalised disposable income of less than 60% or 50% of the median income of the entire population. Data refer to mid-2000s instead of late 2000s for Greece and Switzerland. Data for mid-1990s are not available for Estonia, Israel, Korea, Poland, the Slovak Republic, Slovenia and Switzerland.

Source: OECD Income distribution and poverty database.

StatLink  <http://dx.doi.org/10.1787/888932492093>

Figure 2.13. Depth of income poverty, late 2000s

Income of the low-income people as percentage of the poverty threshold



Note: The indicator shown here is computed as the distance between the poverty threshold (set at 60% or 50% of median income) and the average income of the poor, expressed as a percentage of the poverty threshold. Data refer to mid-2000s instead of late 2000s for Greece and Switzerland.

Source: OECD Income distribution questionnaire.

StatLink  <http://dx.doi.org/10.1787/888932492112>

The depth of income poverty also varies across OECD countries, irrespective of the poverty threshold used (Figure 2.13). Korea records the deepest poverty: the people at the bottom of the distribution have an income that is 47% lower than the 60% poverty threshold (and 37% lower than the 50% poverty threshold). Conversely, Netherlands, Canada, Czech Republic, Finland and Luxembourg have poverty gaps well below the OECD average. Across countries, there is a strong correlation between the prevalence of low income and its depth, with countries recording the largest number of low-income people also being those where these people are the furthest away from the poverty threshold. Some countries, however, have both a low prevalence of low income and a large poverty gap.



The two indicators presented here refer to what is conventionally referred to as “income poverty”. This reflects the view that income is essential to exit poverty. Nonetheless, low income is only one aspect of material deprivation, and dimensions other than economic resources are also important (OECD, 2008; Alkire and Foster, 2011).

### **What about wealth inequality and how does it relate to income distribution?**

The empirical analysis of wealth distribution is severely constrained by weaknesses in available data. Ongoing international initiatives aim to address these weaknesses, but currently the state of knowledge on wealth inequality is far more uncertain than for income inequality. The analysis of the joint distribution of income and wealth faces similar challenges. The Luxembourg Wealth Study (LWS), an international research project, provides data on wealth and income through a coherent and harmonised framework. For the countries covered by the LWS<sup>12</sup> it appears that:

- Although there are significant cross-country differences in the distribution of household wealth, these differences are on average more pronounced than those for income. Within countries, wealth inequalities (as measured by quartile ratios) are on average twice as large as for income.
- Net wealth and income are highly, but not perfectly, correlated. For example, many of the households classified as income poor do own some assets (Sierminska *et al.*, 2006).

## **The statistical agenda ahead**

Despite the rich amount of statistical information available in this field (compared to other dimension of people’s well-being) data gaps remain significant, requiring action in a number of fields:

- First, the availability of data on average economic conditions needs to be improved, in line with the recommendations of the last editions of the system of national accounts. Not all OECD countries currently compile detailed household sector accounts, and even when they do practices differ in terms of household sector definition (*e.g.* including or excluding non-profit institutions serving households, treatment of unincorporated enterprises) and the range of transactions included (*e.g.* whether measures include or exclude capital depreciation or social transfers in kind provided by governments). There is a need for a more accurate decomposition of the household sector where households ought to be clearly isolated from the other components of the sector.
- Second, to enhance the availability of comparable data, especially for measures of the household balance sheet, action should be taken to expand the coverage of assets to dwellings and land, so as to better monitor how household net worth changes with developments in the housing market, and to improve the timeliness of the compilation of household balance sheets.<sup>13</sup>
- Third, it would be important to develop better measures of non-market household services, in particular by improving the comparability and the timeliness of Time Use Surveys (see also Chapter 6 on the Work and Life Balance).
- Fourth, the availability, timeliness and comparability of micro data on household economic conditions need to be improved. This applies in particular to micro data on household wealth, an area where no international standards currently exist and where few countries undertake regular compilations. Steps also need to be taken to develop

instruments that would allow understanding the relationship between income and other dimensions of people's material conditions, for example, joint surveys on household income, consumption and wealth, or matching of individual records. To address this issue, the OECD has set up an expert group whose mandate is to develop guidelines to measure income, consumption and wealth in a fully integrated framework.

- Fifth, there needs to be better reconciliation of macro (national accounts) and micro measures (e.g. survey-based) of household economic conditions, in order to achieve greater comparability between them. This would allow considering average achievements and their distribution simultaneously. To that end, the OECD and EUROSTAT have set up an expert group whose mandate is to compare both sources in order to measure disparities within the national accounts framework, using a common methodological basis across OECD countries.

## Conclusion

This chapter has discussed material conditions in OECD countries on the basis of some well-established measures of household income and wealth. In most OECD countries, judged on these grounds, life has been getting better, as average measures of household income and wealth have risen over the last fifteen years. Alternative indicators considered in this chapter point toward the same conclusion, despite some differences between objective and subjective indicators. But life is not equally good for everybody, as not all households have experienced an equally good rise in living standards. Within-country inequalities remain high in many countries, as does the number of low-income people. This suggests a strong role for policies that specifically address distributional concerns.

## Notes

1. At the microeconomic level, the first household survey on material conditions took place in the United Kingdom in 1795; at the macroeconomic level a first quantitative framework for measuring national income can be traced back to 1665 in the United Kingdom.
2. See the second edition of the Canberra Group Handbook on Household Income Statistics (UN, 2011) and the System of National Accounts 2008 for the latest updates on the underlying framework.
3. Discrepancies reflect differences in terms of both population coverage and practical definitions of several elements included in survey data on household economic resources. For example, national accounts have a broader definition of the household sector, including non-profit institutions serving households and unincorporated enterprises, and also exhaustive population coverage while surveys typically exclude some specific groups (e.g. people living in institutions or in remote and sparsely populated areas).
4. All the data shown in this chapter refer to the aggregate of households (which includes unincorporated enterprises) and non-profit institutions serving households. SNA data referring to the sector of households alone are available for only 22 of the 32 OECD countries that regularly compile household accounts.
5. Ideally, average household net adjusted disposable income should be expressed on an equivalised basis (i.e. adjusted by the possible economies of scales enjoyed by households in sharing the income of their members) and not *per capita*. This would increase comparability with the income indicators used for assessing inequality, which are typically expressed in equivalised terms. However, carrying out a similar adjustment for aggregate income indicators, such as those derived from national accounts, would require annual data on the number of both people and households, which are not available within the SNA (EU countries are planning to make increasing use of aggregates "per consumption unit" in the future). Measures of income and consumption per consumption unit typically rise at a slower pace than per capita measures, reflecting trends

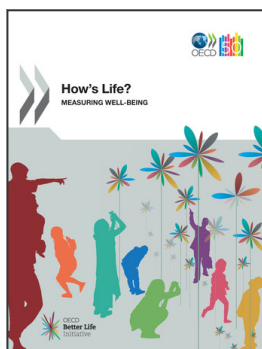
towards smaller families, the greater frequency of divorce and separations and the increase in people living alone. This mechanism is also one of the drivers of greater income inequality.

6. For comparison at one point in time current PPPs are preferred over constant PPPs since they capture both volume and price changes. However, when combining cross-country comparisons and time-series analysis, constant PPP series are considered best-practices. A caveat on the use of constant PPPs is that they do not fully take into account shift in prices and price structures; this may be problematic if the analysis is carried out over a long period of time (Bournot *et al.*, 2011).
7. The notion of “equivalisation” implies that the income attributed to each person in a household reflects income sharing within the household and adjusts for household needs. All the distributional indicators shown in this chapter assume that these needs increase with household size, but less than proportionally (total household income is divided by the square root of household size).
8. In addition to the differences discussed above, further discrepancies between the two approaches arise as the macro-economic definition focuses on the type of transaction from which incomes are generated while it disregards the medium of payment. Conversely the micro-economic definition relies on the medium of payment as the main factor for classifying incomes in various typologies.
9. The Gini index is defined as the area between the Lorenz curve, which plots cumulative shares of the population from the poorest to the richest, against the cumulative share of income that they receive) and the 45° line, taken as a ratio of the whole triangle. It ranges between zero (everybody has the mean income) and one (all income goes to the richest individual).
10. These differences may partly reflect the varying importance of household non-financial assets in total net wealth across countries.
11. See OECD *National Accounts at a Glance (2010)* for additional developments.
12. Austria, Canada, Cyprus, Finland, Germany, Italy, Japan, Luxembourg, Norway, Sweden, United Kingdom, United States.
13. These recommendations are contained in the Report “*Emphasize the Household Perspective*”, from the Eurostat Taskforce on Household Perspective and Distributional Aspects of Income, Consumption and Wealth established as part of the Eurostat/Insee Sponsorship, which follows-up Stiglitz *et al.*, (2009).

## References

- Ahmad N. and S.-H. Koh (2011), “Incorporating Household Production into International Comparisons of Material Well-Being”, OECD Statistics Directorate Working Paper (forthcoming), Paris.
- Alkire, S. and J. Foster (2011), “Counting and multidimensional poverty”, *Journal of Public Economics*, Vol. 95, No. 7-8, pp. 476-487.
- Bournot S., F. Koechlin and P. Shreyer (2011), “2008 Benchmark PPP Measurement and Uses”, OECD Statistical Brief, March, No. 17.
- Chakravarty, S. R. (2009), *Inequality, Polarization and Poverty: Advances in Distributional Analysis*, Springer-Verlag, Heidelberg.
- Eurostat (2003), *Household Production and Consumption, Proposal for a Methodology of Household Satellite Accounts*, Luxembourg.
- Hüfner, F. and I. Koske (2010), “Explaining Households Saving Rates in G7 Countries: Implications for Germany”, *OECD Economics Department Working Paper*, No. 754.
- Landefeld J.S., B.M. Fraumeni and C.M. Vojtech (2009), “Accounting for household production: A prototype satellite account using the American Time-Use Survey”, *Review of Income and Wealth*, Series 55, No. 2.
- OECD (2007), *Regions at a Glance*, OECD Publishing, Paris.

- OECD (2008), *Growing Unequal? Income Inequality and Poverty in OECD Countries*, OECD Publishing, Paris.
- OECD (2010), *National Accounts at a Glance*, OECD Publishing, Paris.
- OECD (2011) *The Causes of Growing Inequality in OECD Countries*, OECD Publishing, Paris.
- Ruger Y. and J. Varjonen (2008), "Value of Household Production in Finland and Germany, Analysis and Recalculation of the Household Satellite Account System in Both Countries", *National Consumer Research Center Working Paper No. 112*.
- Sen, A. (1999), *Development as Freedom*, Oxford, Oxford University Press.
- Sen, A. and J. E. Foster (1998), *On Economic Inequality*, Oxford University Press.
- Sierminska, E., A. Brandolini and T.M. Smeeding (2006), "Comparing Wealth Distributions across Rich Countries: First Results from the Luxembourg Wealth Study", *Luxembourg Wealth Study Working Paper No.1*.
- Stiglitz, J.E., A. Sen and J.-P. Fitoussi (2009), Report by the Commission on the Measurement of Economic Performance and Social Progress, [http://www.stiglitz-sen-fitoussi.fr/documents/rapport\\_anglais.pdf](http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf)
- United Nations (2011), *The Camberra Group Handbook on Household Income Statistics*, forthcoming, Geneva.



**From:**  
**How's Life?**  
Measuring Well-being

**Access the complete publication at:**  
<https://doi.org/10.1787/9789264121164-en>

**Please cite this chapter as:**

OECD (2011), "Income and Wealth", in *How's Life?: Measuring Well-being*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/9789264121164-4-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to [rights@oecd.org](mailto:rights@oecd.org). Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at [info@copyright.com](mailto:info@copyright.com) or the Centre français d'exploitation du droit de copie (CFC) at [contact@cfcopies.com](mailto:contact@cfcopies.com).