What does GDP per capita tell us about households’ material well-being?

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Although GDP per capita is often used as a broad measure of average living standards, high levels of GDP per capita do not necessarily mean high levels of household disposable income, a key measure of average material well-being of people. For example, in 2014 Norway had the highest GDP per capita in the OECD (162% of the OECD average), but only 115% of the OECD average for household disposable income. And in Ireland, GDP per capita was 24% above the OECD average, while household disposable income per capita was 22% below the OECD average. Conversely, in the United States GDP per capita was 34% above the OECD average while household disposable income was 46% above the OECD average. These differences between GDP per capita and household disposable income per capita reflect two important factors. First, not all income generated by production (GDP) necessarily remains in the country; some of it may be appropriated by non-residents, for example by foreign-owned firms repatriating profits to their parents. Secondly, some parts may be retained by corporations and government and not accrue to households.

International rankings of household disposable income per capita and GDP per capita can differ significantly

GDP per capita, by design an indicator of the total income generated by economic activity in a country, is often used as a measure of people’s material well-being. However, not all of this income necessarily ends up in the purse of households. Some may be appropriated by government to build up sovereign wealth funds or to pay off debts, some may be appropriated by firms to build up balance sheets, and yet some may be appropriated by parent companies abroad repatriating profits from their affiliates. At the same time, households can also receive income from abroad for example from dividends and interest receipts through investments abroad.

As such, a preferred measure of people’s material well-being is household disposable income per capita, which represents the maximum amount a household can consume without having to reduce its assets or to increase its liabilities.

The above-mentioned factors can create significant differences between measures of household disposable income per capita and GDP per capita. The United States for example see its position relative to the OECD average jump by more than 10 percentage points (46% above the OECD-average of household disposable income).

Figure 1. GDP and household adjusted disposable income, per capita
OECD = 100, year 2014
US dollars, current prices and current PPPs

* Data refer to 2013 for household adjusted disposable income for Mexico, New Zealand, and Switzerland.
income, compared to 34% above the OECD average of GDP per capita), ranking it 1st among OECD countries on household disposable income compared to 3rd on GDP per capita (Figure 1). This reflects in part repatriated (and redistributed) profits from US multinational activities abroad but also relatively lower general government expenditure and taxes on households.

On the other hand, Norway falls from 1st on a GDP basis to 4th on a household disposable income basis while Ireland drops dramatically (from 4th to 19th). For Ireland, one of the reasons relates to the presence of a significant number of foreign affiliates of multinational enterprises (responsible for around half of private sector GDP). While Irish GDP per capita was well above the OECD-average (24% higher), Irish household disposable income was significantly below the OECD-average (22% lower). Similar differences in household disposable income per capita relative to GDP per capita can also be seen in other countries where foreign affiliates play an important role in overall GDP (and that have only limited outward foreign investment) such as Hungary and the Czech Republic. Switzerland also sees falls in its household income vs GDP ranking, partly because of the relatively large number of cross-border workers.

For Norway, however, the divergence reflects other factors, linked to the large surplus generated by the Norwegian mining sector (around 25% of total economy value added), which is invested by the Norwegian government in its sovereign wealth fund³.

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*Figure 2. Real GDP and real household disposable income, per capita*

**Panel 1**: Average annual growth rates 2001 to 2007

- Real GDP per capita
- Real household adjusted disposable income per capita

*Average annual growth rates for Chile and Mexico 2003-2007*

**Panel 2**: Average annual growth rates 2008 to 2014

- Real GDP per capita
- Real household adjusted disposable income per capita

*Average annual growth rates for New Zealand and Switzerland 2008-2013*
Developments in household disposable income per capita can also differ significantly from developments in GDP per capita

Many factors can also contribute to diverging patterns of growth between household disposable income and GDP, for instance, declining shares of compensation of employees in value-added, and rising shares of profits retained by corporations. And in real terms, differences in consumer price inflation and changes in the GDP deflator, reflecting in part evolutions in terms of trade, can also contribute to divergences. Differences in tax and redistribution policy can also play a significant role.

Prior to the global financial crisis (2001-2007), real economic growth in many countries outpaced growth in real household disposable income, (Figure 2, panel 1). However, post crisis (2008-2014), around 60% of countries saw real household disposable income grow faster than real GDP, as governments intervened (including through automatic stabilisers) to cushion the negative impact of the crisis on households’ income. But countries hit hardest by the crisis saw real household disposable income contract at a faster pace than GDP (Figure 2, panel 2).

The measures explained

**Gross Domestic Product (GDP):** Gross domestic product (GDP) is the standard measure of the value added generated through the production of goods and services in a country during a certain period. Equivalently, it measures the income earned from that production, or the total amount spent on final goods and services (less imports).

**Household adjusted disposable income:** Household adjusted disposable income equals the total income received, after deduction of taxes on income and wealth and social contributions, and includes monetary social benefits (such as unemployment benefits) and in-kind social benefits (such as government provided health and education).

**Purchasing power parities (PPPs):** In their simplest form, PPPs are price relatives that show the ratio of the prices in national currencies of the same good or service in different countries. The Big Mac currency index from The Economist magazine is a well-known example of a one-product PPP. The Big Mac index is “the exchange rate that would mean that hamburgers cost the same in America as abroad”. For example, if the price of a hamburger in the UK is £2.29 and in the US, it is $3.54, the PPP for hamburgers between the UK and the US is £2.29 to $3.54 or 0.65 pounds to the dollar.

Where to find the underlying data


Further reading

1. In all graphs and calculations, the following OECD-countries have been excluded, because of lack of data on household disposable income: Iceland, Israel, Luxembourg and Turkey.

2. For convenience, household disposable income refers to household adjusted disposable income, which includes goods and services provided for free or at reduced prices by government and non-profit institutions serving households. It predominantly consists of health and education services and provides a more comparable measure, across countries and over time.

3. Note that this suggests that some care is needed in interpreting the sustainability of household disposable income over the longer term. Contemporaneous comparisons for example look at sustainability in the context of sustainable household finances, i.e. not building up household liabilities or reducing assets. But over the longer term persistently high government deficits or unfunded pension schemes may imply future declines in household disposable income (all other things being equal), while government surpluses may act as a buffer against potential declines (again all other things being equal).