

## 6. Real measures of income

As described in earlier sections, measures of income, such as national or disposable income are generally preferred, in theory, to GDP, in analyses of well-being both in nominal and real terms. However there are some specificities related to the calculation and associated interpretations of real income, as opposed to real GDP say, that are worth mentioning.

### Definition

Whereas GDP can be measured relatively simply in volume terms because price and quantity components exist, at least in principle, for all of the flows in GDP (via the expenditure or production approach), this is not the case for the additional income components that reflect the difference between GNI say and GDP; which cannot be decomposed into price and quantity dimensions. These flows can be measured in “real” terms through the use of an appropriate price index that measures their real purchasing power in relation to a selected basket of goods and services. But moving from real GDP to real GNI is not simply a case of choosing an appropriate price index to deflate the additional income components. Another adjustment that takes account of changes in the *terms of trade* is needed; which is only relevant for real measures.

Gross Domestic Income (GDI), as opposed to Gross National Income, in current prices is exactly equal to GDP. But if the prices of a country’s exports rise faster (or fall more slowly) than the prices of its imports (that is, if its terms of trade improve) fewer exports are needed to pay for a given volume of imports. Thus, an improvement in the terms of trade makes it possible for an increased volume of goods and services to be purchased by residents out of the incomes generated by a given level of domestic production. This improvement (or otherwise, *e.g.* if the prices of imports rise faster than exports), known as *trading gains and losses from changes in the terms of trade*, reflects the difference between real GDI and real GDP. It follows that it also forms part of the difference between real GDP and real national income (GNI and NNI) and disposable (and adjusted disposable) income.

These trading gains or losses are equal to the current trade balance deflated by a single price index, minus real exports, plus real imports (where estimates of

real exports and real imports are consistent with those used in real GDP). And so real GDI is equal to final consumption (households, NPISH and general government final consumption) + real gross capital formation + the “real” trade balance.

### Comparability

The comparability of current price measures of income is described in the previous sections. The choice of the single price index used to deflate the current trade balance varies across countries. The SNA recommends that the choice of the price index is left to statistical authorities to decide on the basis of national circumstances. Three approaches are commonly used. The first is to use either the overall import (or export) price index. The second is to use a weighted average of the overall import and export price indices. The third method, which is the approach used by many countries for simplicity, is a general price index (typically this is the implied deflator for gross domestic final expenditure). The advantage of this third approach is that the income components that reflect the difference between GNI (and other income measures) and GDP can also be (and usually are) meaningfully deflated using this same general price index.

### Source

- OECD (2010), *National Accounts of OECD Countries 2010, Volume I, Main Aggregates*, OECD Publishing, [http://dx.doi.org/10.1787/na\\_vol\\_1-2010-en](http://dx.doi.org/10.1787/na_vol_1-2010-en).

### Online database

- OECD (2010), “Aggregate National Accounts: Disposable income and net lending/borrowing”, *OECD National Accounts Statistics* (database), <http://dx.doi.org/10.1787/data-00002-en>.

### Further reading

- Eurostat (2001), *Handbook on Price and Volume Measures in National Accounts*, Eurostat, Luxembourg.
- Lequiller, F. and D. Blades (2007), *Understanding National Accounts*, OECD Publishing, <http://dx.doi.org/10.1787/9789264027657-en>.
- OECD (2000), *System of National Accounts, 1993 – Glossary*, OECD Publishing, <http://dx.doi.org/10.1787/9789264180871-en>.
- UN, OECD, IMF and Eurostat (eds.) (1993), *System of National Accounts 1993*, United Nations, Geneva, <http://unstats.un.org/unsd/sna1993>.

Table 6.1. Real net national income index

Year 2000 = 100

|                 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001  | 2002  | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009  |
|-----------------|------|------|------|------|------|-------|-------|------|------|------|------|------|------|-------|
| Australia       | 85   | 89   | 93   | 98   | 100  | 104   | 108   | 115  | 119  | 125  | 131  | 137  | 140  | 139 e |
| Austria         | 91   | 92   | 95   | 97   | 100  | 100   | 103   | 104  | 107  | 109  | 113  | 116  | 117  | 112   |
| Belgium         | 90   | 93   | 95   | 97   | 100  | 100   | 102   | 102  | 104  | 105  | 107  | 110  | 109  | 107   |
| Canada          | 81   | 85   | 87   | 92   | 100  | 100   | 102   | 107  | 112  | 118  | 123  | 126  | 129  | 119   |
| Chile           | 87 e | 94 e | 97 e | 95 e | 100  | 102 e | 104 e | 109  | 122  | 134  | 148  | 159  | 159  | 156 e |
| Czech Republic  | 98   | 96   | 99   | 99   | 100  | 103   | 106   | 111  | 117  | 125  | 132  | 139  | 145  | 137   |
| Denmark         | 90   | 93   | 95   | 97   | 100  | 101   | 102   | 103  | 108  | 113  | 118  | 118  | 117  | 112   |
| Finland         | 79   | 86   | 91   | 95   | 100  | 103   | 105   | 105  | 110  | 111  | 115  | 120  | 119  | 108   |
| France          | 88   | 90   | 94   | 97   | 100  | 102   | 102   | 103  | 106  | 107  | 109  | 113  | 112  | 109   |
| Germany         | 94   | 94   | 96   | 98   | 100  | 101   | 101   | 102  | 105  | 106  | 110  | 113  | 113  | 108   |
| Greece          | 88 e | 92 e | 95 e | 97 e | 100  | 105   | 109   | 114  | 119  | 120  | 124  | 129  | 129  | 124   |
| Hungary         | 84   | 87   | 93   | 95   | 100  | 105   | 112   | 119  | 124  | 126  | 129  | 128  | 129  | 121   |
| Iceland         | 80   | 86   | 94   | 97   | 100  | 103   | 107   | 107  | 112  | 122  | 122  | 130  | 103  | 101   |
| Ireland         | 72   | 79   | 87   | 92   | 100  | 103   | 107   | 114  | 117  | 124  | 134  | 139  | 131  | 116   |
| Israel*         | 85   | 88   | 92   | 94   | 100  | 102   | 100   | 100  | 106  | 113  | 120  | 127  | 127  | 132   |
| Italy           | 93   | 95   | 97   | 98   | 100  | 102   | 102   | 103  | 104  | 104  | 106  | 107  | 103  | 98    |
| Japan           | 100  | 101  | 98   | 98   | 100  | 99    | 100   | 100  | 102  | 105  | 106  | 108  | 103  | 100 e |
| Korea           | 91   | 93   | 86   | 93   | 100  | 104   | 112   | 115  | 119  | 121  | 126  | 132  | 131  | 132   |
| Luxembourg      | 84   | 89   | 89   | 97   | 100  | 102   | 101   | 100  | 119  | 125  | 120  | 139  | 132  | 114   |
| Mexico          | 77 e | 84 e | 87 e | 92 e | 100  | 100 e | 102 e | 103  | 107  | 111  | 117  | 122  | 123  | 114 e |
| Netherlands     | 83   | 88   | 89   | 95   | 100  | 101   | 101   | 102  | 105  | 105  | 112  | 115  | 113  | 105   |
| New Zealand     | 89   | 92   | 95   | 98   | 100  | 106   | 111   | 118  | 122  | 125  | 126  | 133  | 130  | 130 e |
| Norway          | 77   | 82   | 80   | 86   | 100  | 102   | 100   | 101  | 109  | 121  | 130  | 130  | 138  | 124   |
| Poland          | 82   | 88   | 93   | 97   | 100  | 101   | 102   | 105  | 110  | 116  | 123  | 131  | 141  | 143   |
| Portugal        | 85   | 89   | 95   | 99   | 100  | 101   | 104   | 104  | 105  | 104  | 104  | 107  | 105  | 104   |
| Slovak Republic | 89   | 95   | 99   | 97   | 100  | 104   | 108   | 106  | 114  | 124  | 135  | 151  | 159  | 152   |
| Slovenia        | 85   | 89   | 92   | 98   | 100  | 104   | 109   | 114  | 118  | 122  | 129  | 137  | 139  | 130   |
| Spain           | 85   | 88   | 92   | 97   | 100  | 103   | 107   | 111  | 113  | 117  | 121  | 124  | 123  | 120   |
| Sweden          | 87   | 89   | 93   | 97   | 100  | 100   | 102   | 107  | 109  | 113  | 119  | 125  | 125  | 115   |
| Switzerland     | 89   | 92   | 95   | 97   | 100  | 97    | 97    | 103  | 105  | 109  | 111  | 107  | 98   | 112   |
| Turkey          | ..   | ..   | ..   | ..   | ..   | ..    | ..    | ..   | ..   | ..   | ..   | ..   | ..   | ..    |
| United Kingdom  | 85   | 89   | 94   | 96   | 100  | 103   | 108   | 111  | 114  | 116  | 118  | 123  | 124  | 116   |
| United States   | 82   | 87   | 92   | 96   | 100  | 101   | 102   | 104  | 108  | 112  | 115  | 115  | 113  | 110   |
| Euro area       | 90   | 92   | 95   | 98   | 100  | 102   | 103   | 104  | 107  | 108  | 111  | 114  | 113  | 108   |
| OECD-Total      | ..   | ..   | ..   | ..   | ..   | ..    | ..    | ..   | ..   | ..   | ..   | ..   | ..   | ..    |


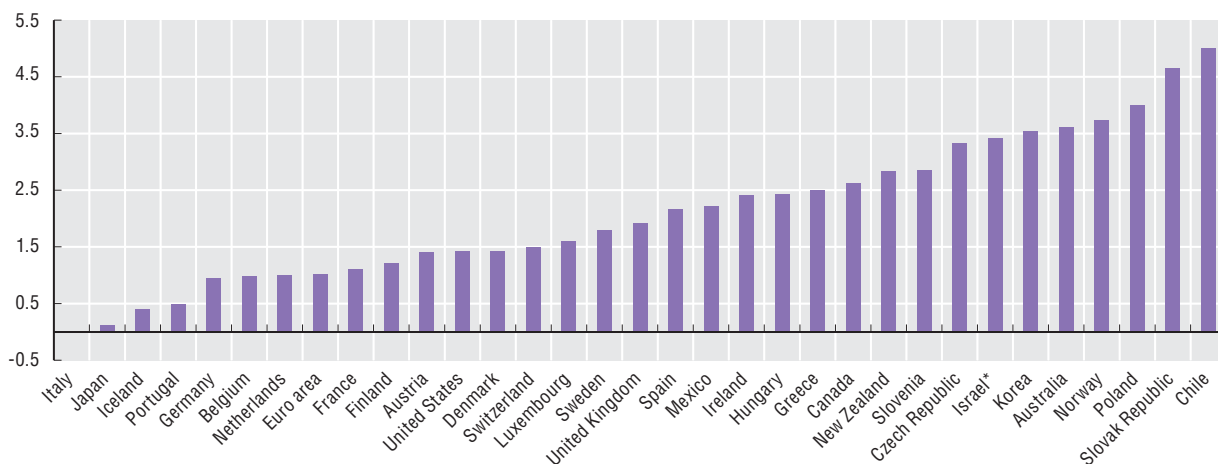

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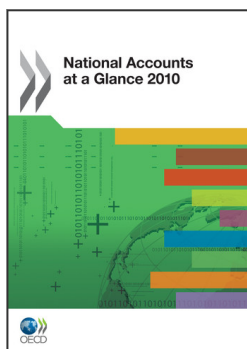
Figure 6.1. Real net national income

Average annual growth rates between 1999 and 2009



StatLink  <http://dx.doi.org/10.1787/888932351151>

\* 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.



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