

Article

# Measuring Real Household Disposable Income: 1997 to 2013

The effect of excluding Non-Profit Institutions Serving Households (NPISH) from Gross Disposable Income (GDI) and Real Household Disposable Income (RHDI).

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# 1. Introduction

This article shows the impact of excluding Non-Profit Institutions Serving Households (NPISH) from Gross Disposable Income (GDI) and Real Household Disposable Income (RHDI). Both are useful in the assessment of the economic position of Households.

In the UK's sector accounts, Households and NPISH are combined to create a single Households and NPISH sector. This is because NPISH are financed by households and their sole purpose is to serve households.

Alongside this combined Household and NPISH sector, the Office for National Statistics (ONS) aims to produce separate accounts for these two sectors to satisfy user need by the autumn of 2017. Ahead of this date, the ONS is publishing how the two key household measures, GDI and RHDI would be presented if NPISH were removed from their calculation.

Users should note that the data presented here are based on current compilation methods and are subject to change during the full separation of the two sectors.

## 2. Gross Disposable Income (GDI)

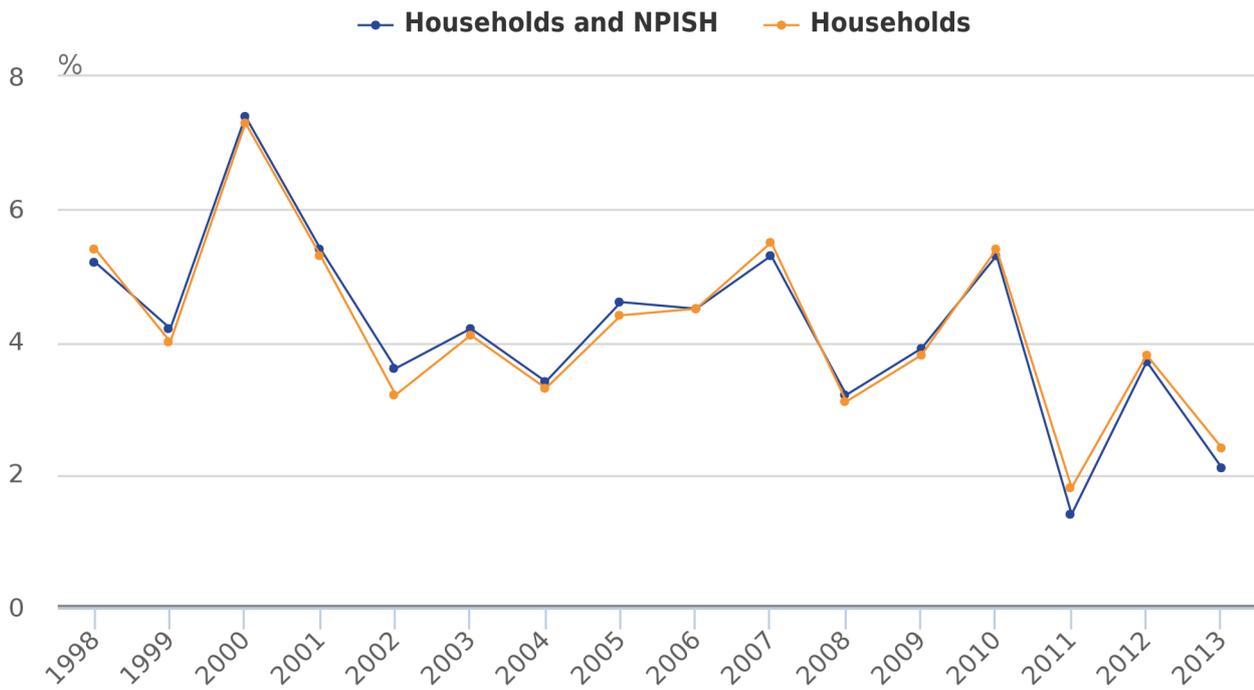
GDI represents the amount of money Households and the NPISH sectors have to spend on consumption, or to save and invest, after taxes, National Insurance, pension contributions and interest have been paid. A full description of the calculation of GDI is presented in Annex A.

The related National Accounts transactions for both sectors are listed in Annex B.

Between 1997 and 2013, Households contributed, on average, 96.9% of the total combined Household and NPISH GDI by value. Hence NPISH contributed a relatively small average of 3.1% to GDI.

**Figure 1: Comparison of the growth between a combined Household and Non-Profit Institutions Serving Households Gross Disposable Income, and Household Gross Disposable Income**

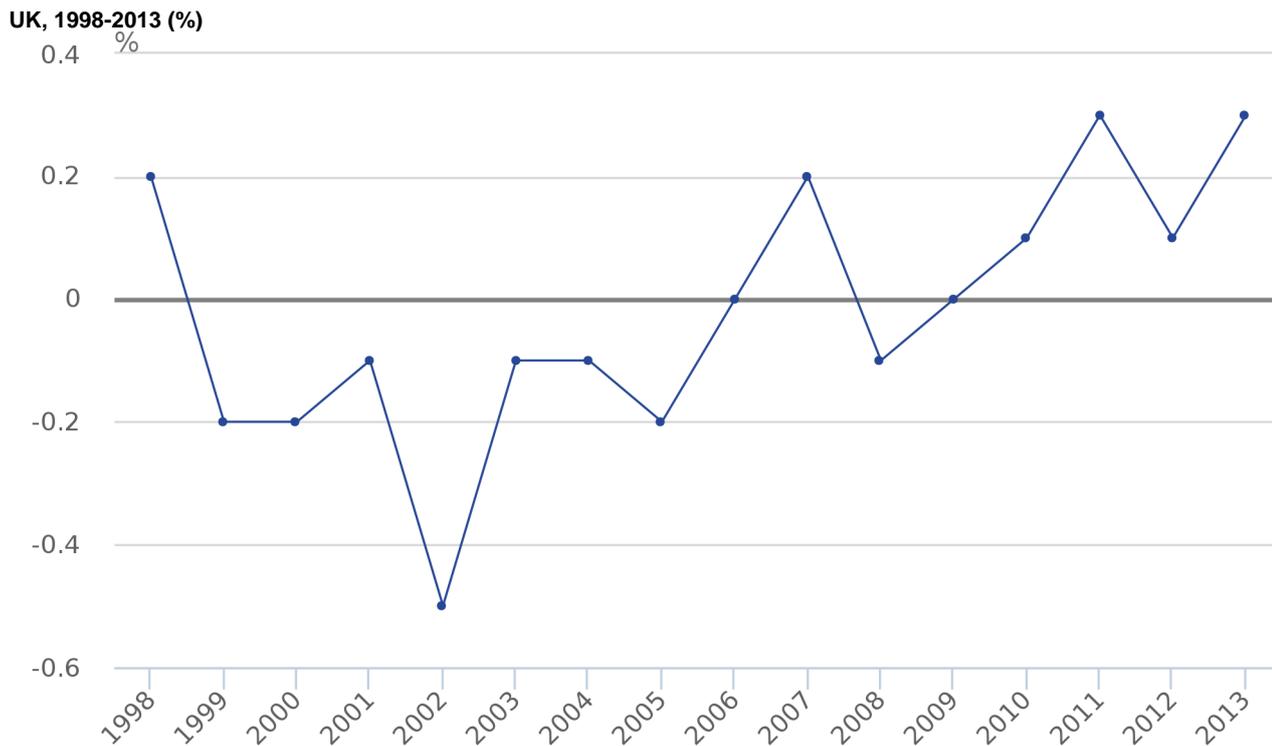
UK, 1998-2013 (%)



Source: Office for National Statistics

Figure 1 presents GDI growth between 1998 and 2013 with and without NPISH. The average growth for both GDI inclusive and exclusive of NPISH is 4.2% over this period.

**Figure 2: Differences in growth between a combined Household and Non-Profit Institutions Serving Households Gross Disposable Income, and Household Gross Disposable Income**



Source: Office for National Statistics

Figure 2 illustrates the differences in growth of GDI inclusive and exclusive of NPISH between 1998 and 2013. Although the average difference over the period is zero, the pattern changes over time. It is at or below zero from 1999 to 2005, but mainly positive from 2006.

In 2002, GDI is 0.5% lower if NPISH is removed. This is because in that year they contributed proportionally more to the combined GDI annual growth. NPISH contributes 3.2% of GDI in 2002, up from 2.8% in 2001; a positive level shift not experienced in other years.

In both 2011 and 2013, GDI is 0.3% higher if NPISH are removed. In 2011, NPISH contributes 3.1% of GDI, down from 3.4% in 2010. A similar level shift is seen in 2013, where the contribution falls to 2.7% from 3.0% in 2012. Here NPISH are having a negative influence on the currently published income growth.

### 3. Real Household and NPISH Disposable Income

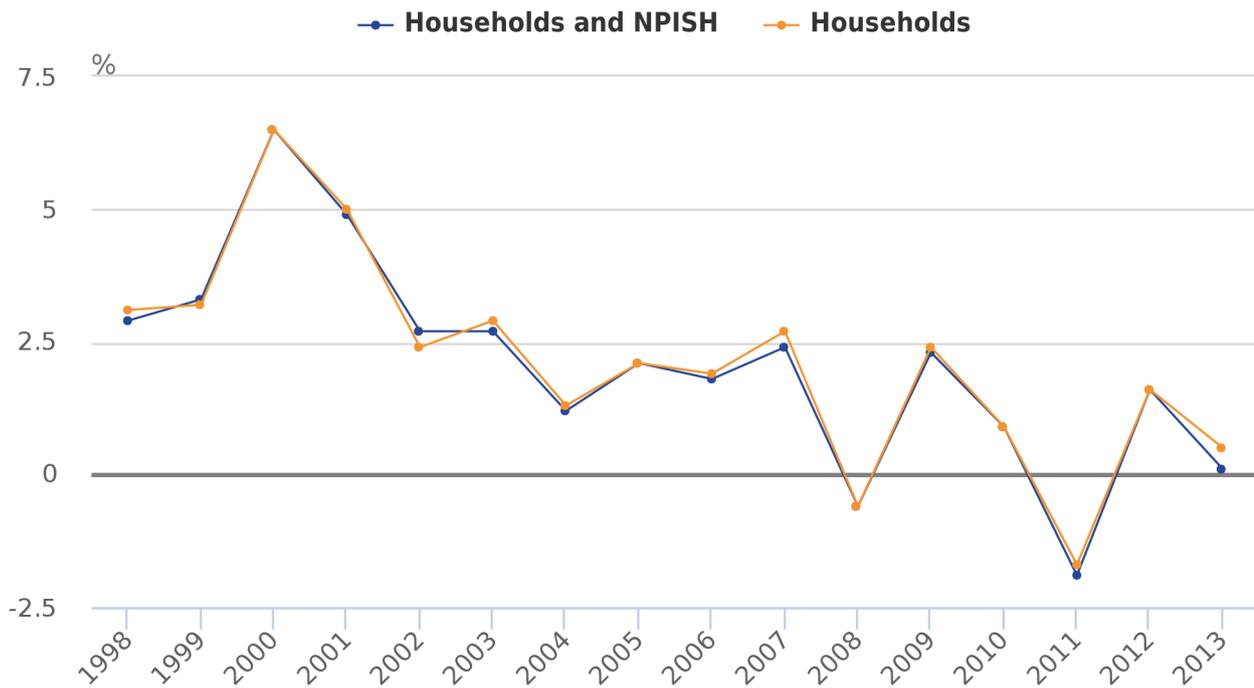
GDI is a key measure of how much Households have to spend or save, yet it does not allow for the impact price changes have on this amount over time. To measure the disposable income available to Households on a comparable basis, the impact of inflation on Households' spending power must be removed.

Real Household and NPISH Disposable Income is calculated as GDI divided by the implied price growth (or deflator) of a combined Household and NPISH Final Consumption Expenditure. See Annex C for a full description of how the combined Household and NPISH Final Consumption deflator is calculated.

The implied price growth for Households and NPISH combined is higher than that of Households in all years from 1999 to 2009, meaning that the NPISH experience of price growth is greater than that of Households. However, between 2010 and 2012, this situation is reversed and NPISH reduced price growth in these three years by 0.1%. These data are available to users on request.

**Figure 3: Comparison of the growth between a combined Household and Non-Profit Institutions Serving Households Real Household Disposable Income, and Household only Real Household Disposable Income**

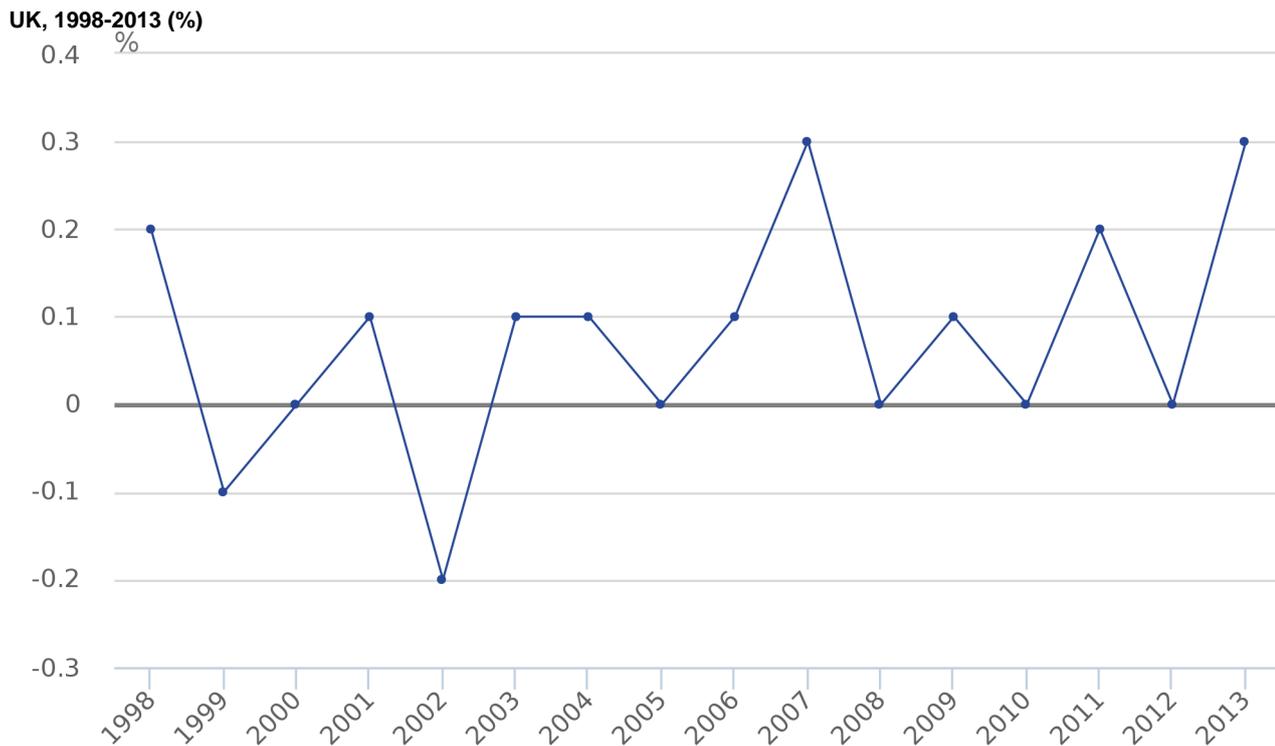
UK, 1998-2013 (%)



Source: Office for National Statistics

Figure 3 illustrates the impact of excluding NPISH on the growth of RHD between 1998 and 2013. The average growth for both RHD inclusive and exclusive of NPISH is 2.1% over this period.

**Figure 4: Differences in growth rates between a combined Household and Non-Profit Institutions Serving Households Real Household Disposable Income and Household only Real Household Disposable Income**



Source: Office for National Statistics

The average difference in growth rates between 1998 and 2013 is 0.1%. This suggests that RHDIs are one percentage point higher when NPISH are excluded. It is important to note that although Figure 3 suggests there is no difference between RHDIs inclusive and exclusive of NPISH, this is due to rounding.

In 1999 and 2002, there are differences in RHDIs growth of -0.1% and -0.2% respectively when NPISH are removed. The impact of the weaker GDI growth Households experienced in 2002 is shown in the comparable RHDIs growth difference for that period.

In 2007, stronger Household GDI and a lower price growth experience give Households 0.3% greater RHDIs growth.

In 2011 and 2013, a 0.3% difference to GDI contributes to a greater Households RHDIs growth of 0.2% and 0.3% respectively.

## 4. Conclusion

In conclusion, Households are currently combined with NPISH in the UK's Sector Accounts. GDI growth between 1998 and 2013 averages 4.2% for Households and NPISH, and for Households only. There is no difference, on average, between these two series throughout this period.

RHDIs growth between 1998 and 2013 averages 2.1% for Households and NPISH, and for Households only. There is an average difference of 0.1% between the two series purely due to rounding. This means RHDIs would be one percentage point higher if NPISH were excluded.

## 5. Background notes

1. Details of the policy governing the release of new data are available by visiting [www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html](http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html) or from the Media Relations Office email: [media.relations@ons.gsi.gov.uk](mailto:media.relations@ons.gsi.gov.uk)

## 6. Annex A: Calculation of GDI

GDI is calculated as follows:

D.1 - Compensation of employees (wages and salaries, national insurance contributions, employer's pension contributions)

plus

B.2g - Gross operating surplus (primarily imputed rental of owner-occupied dwellings)

plus

B.3g - mixed income (income from self-employment)

plus

D.4 received - Property income (return on ownership of financial assets, for example, rent on land, interest, dividends and pension income – both state and privately funded)

plus

D.62 received - Other social benefits (including child benefit, disability living allowance, unemployment and jobseeker benefits and incapacity benefits)

plus

D.7 received- Other current transfers received (for example, claims made under non-life insurance policies, gifts received from abroad)

Less:

D.4 used - Property income (rent on land and interest paid only)

plus

D.5 - Taxes on income and other current taxes (for example, council tax)

plus

D.61 - Social contributions (national insurance contributions by employees, employers and social contributions by the self and non-employed),

plus

D.7 used - Other current transfers paid (for example, charitable donations)

## 7. Annex B: Household and NPISH Contribution to GDI

### Component of GDI - Household/NPISH Split

Gross Operating Surplus (B.2g) - Household and NPISH

Mixed Income (B.3g) - Household only

Compensation of Employees (D.1) - Household only

Property Income (D.4) - Household and NPISH

Current Taxation (D.5) - Household and NPISH

Social Contribution and Benefits (D.6) - Household and NPISH

Other Current Transfers (D.7) - Household and NPISH

## 8. Annex C: Calculation of RHDI

### Households

#### Calculation of RHDI for Households only

$$RHDI_{Households} = (GDI \times Households\ Implied\ Deflator) \times 100$$

Where:

$$Household\ Implied\ Deflator = \frac{HHFCE\ in\ Current\ Prices}{HHFCE\ in\ Chain\ Volume\ Measures}$$

Households only

### Households and NPISH

#### Calculation of RHDI for Households and NPISH

$$RHDI_{Households\ and\ NPISH} = (GDI \times Households\ and\ NPISH\ Implied\ Deflator) \times 100$$

Where:

$$Households\ and\ NPISH\ Implied\ Deflator = \frac{HHFCE\ in\ Current\ Prices}{HHFCE\ in\ Chain\ Volume\ Measures}$$

Households and NPISH