



What is happening to inequality?

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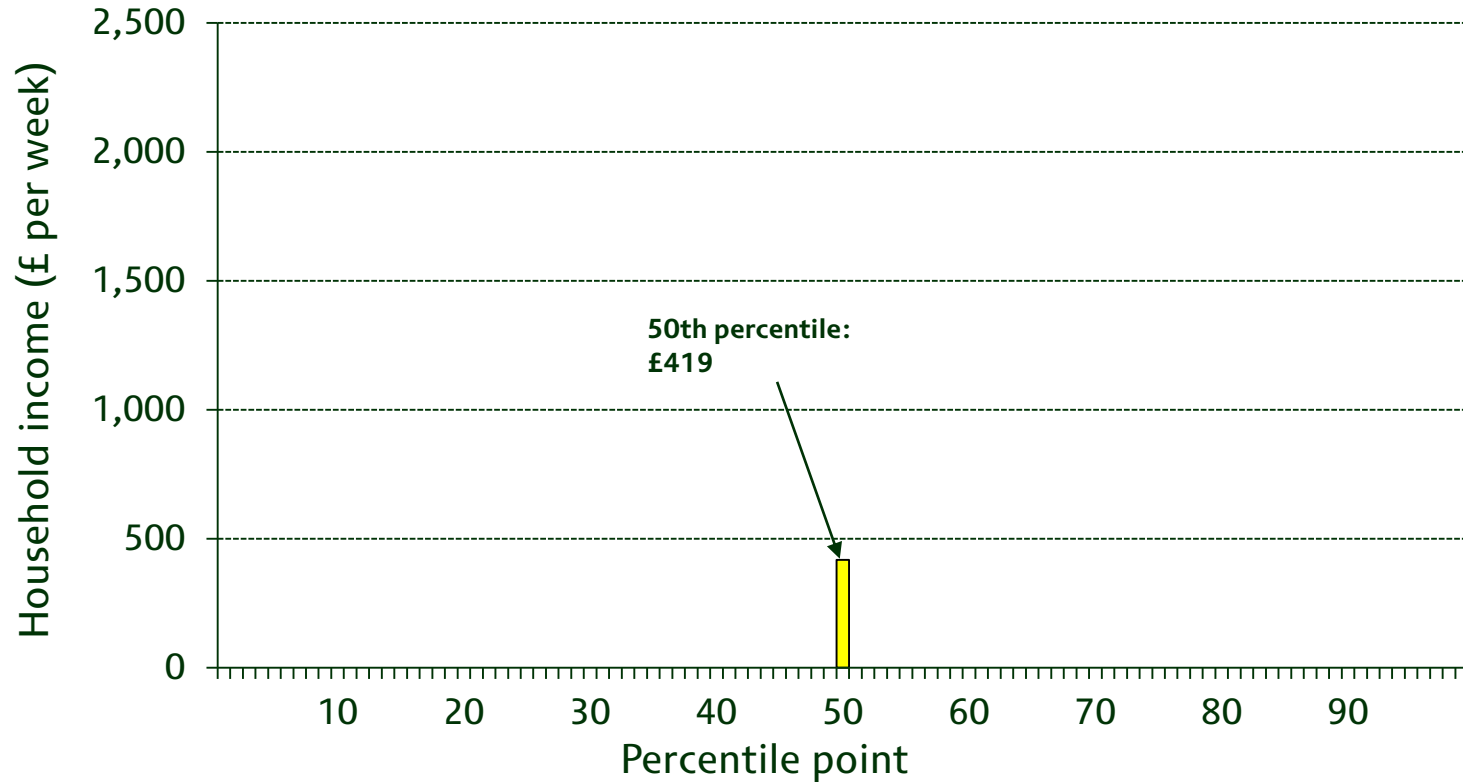
Paul Johnson

September 13, 2012

# What is actually happening to inequality

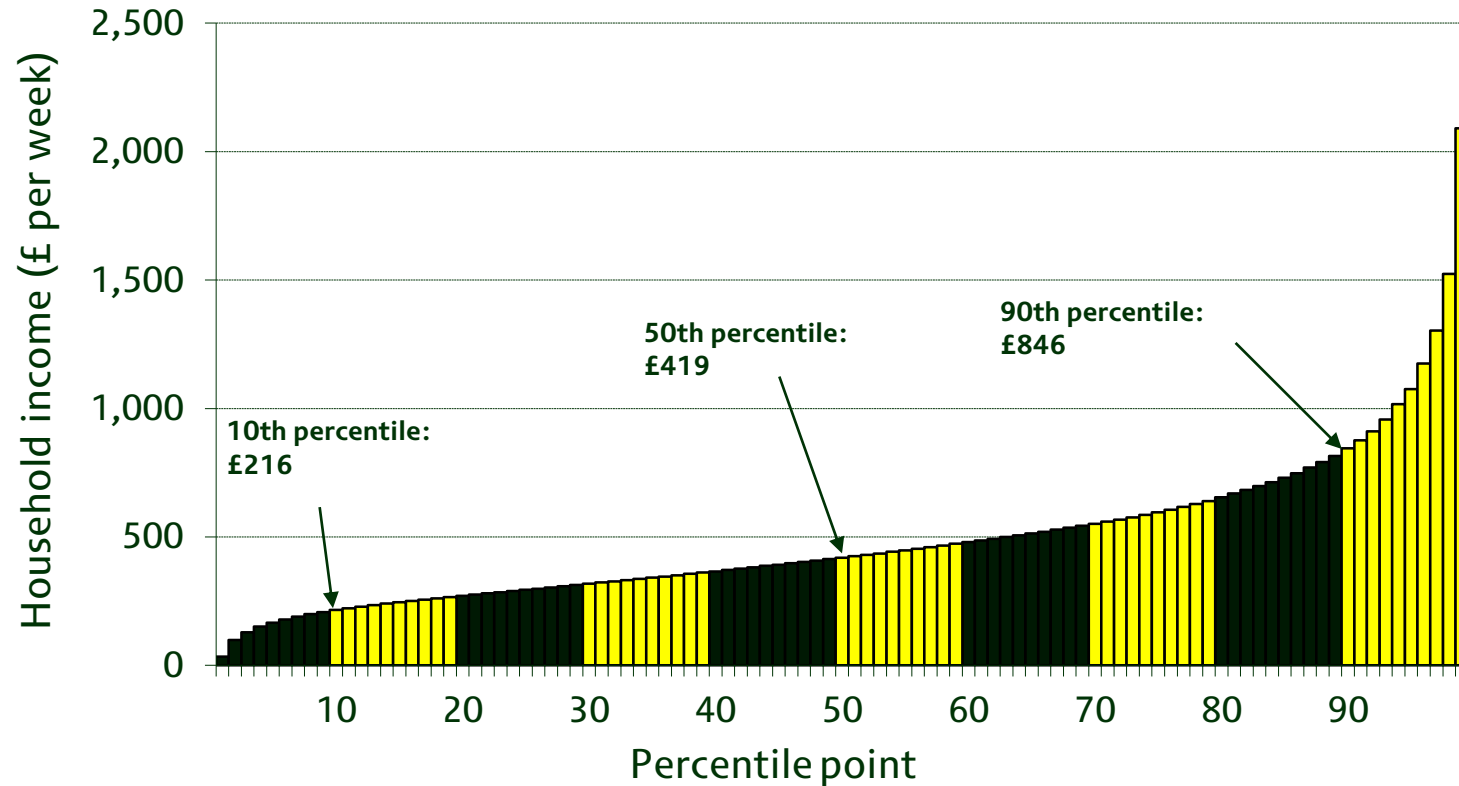
- The standard analysis
  - What HBAI tells us
  - The components of inequality
- The complications
  - Under reporting of income
  - Other measures of income and consumption
- The role of government
  - Importance of tax and transfers
  - How different measures give different answers
  - Going beyond transfers
- Conclusions

# Median household £419 a week in 2010-11



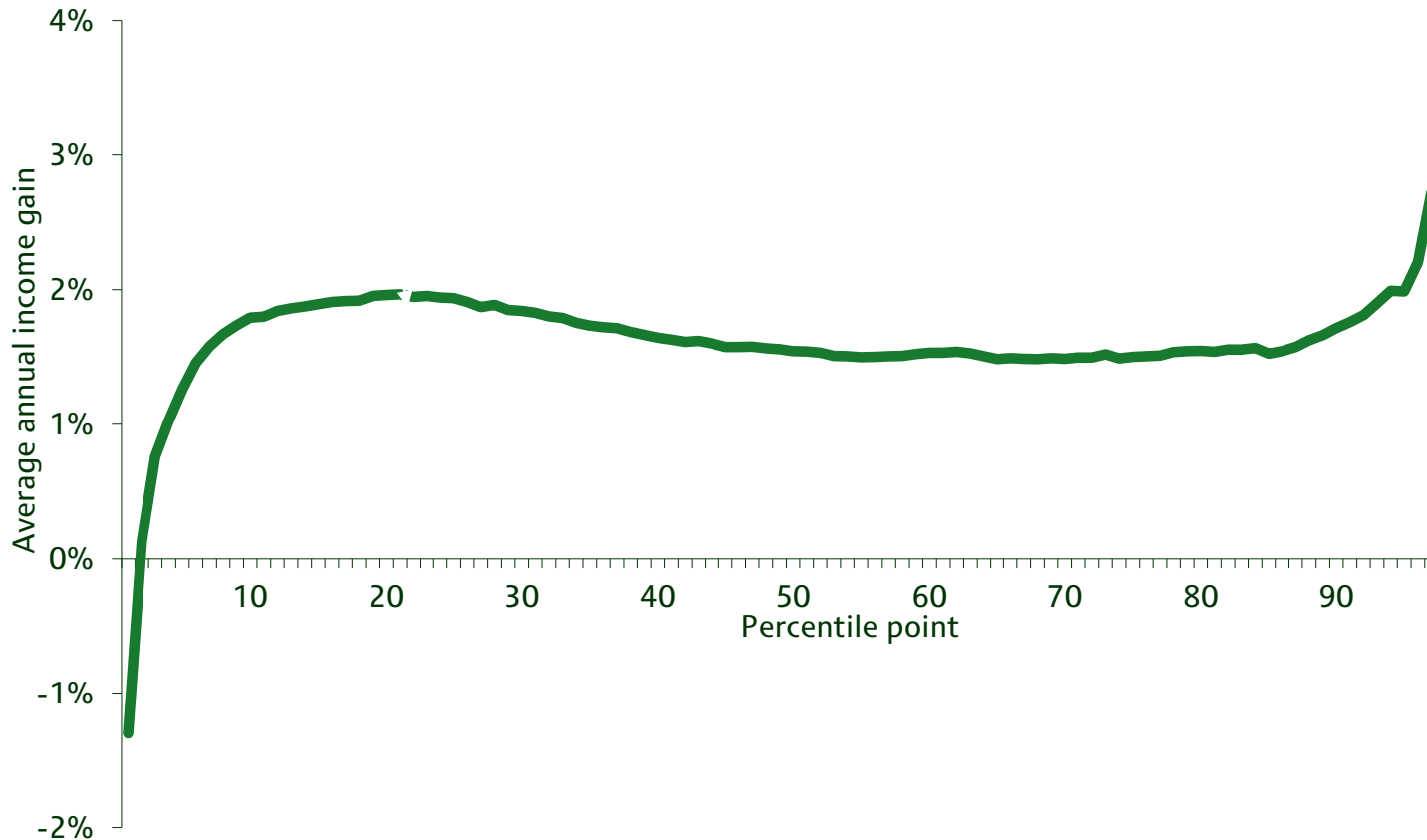
Source: Figure 3.1 of *Living Standards, Poverty and Inequality: 2012*

# 90<sup>th</sup> centile income about 4 times 10<sup>th</sup> centile



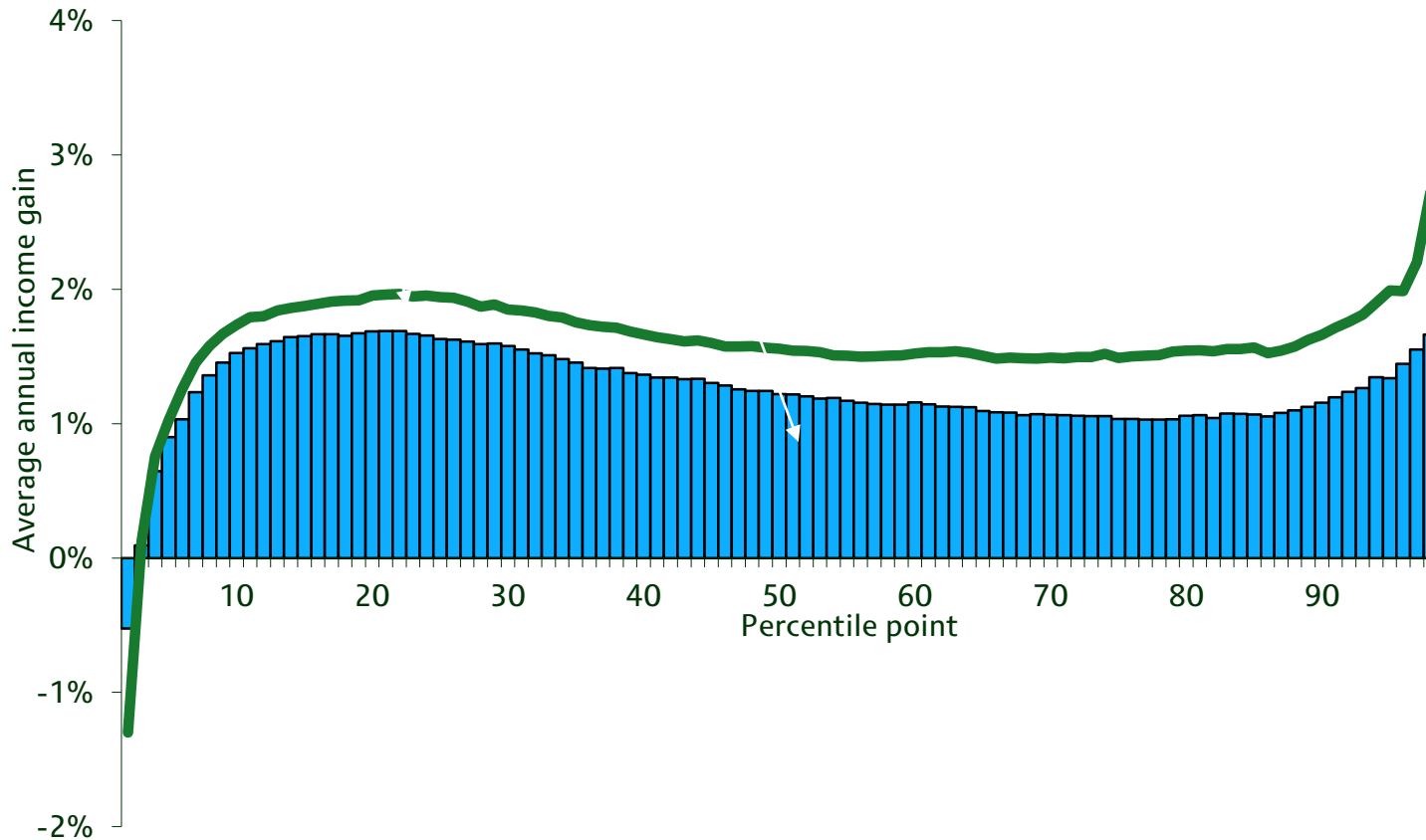
Source: Figure 3.1 of *Living Standards, Poverty and Inequality: 2012*

# Income growth 1996-97 to 2009-10 equalising over middle 90%



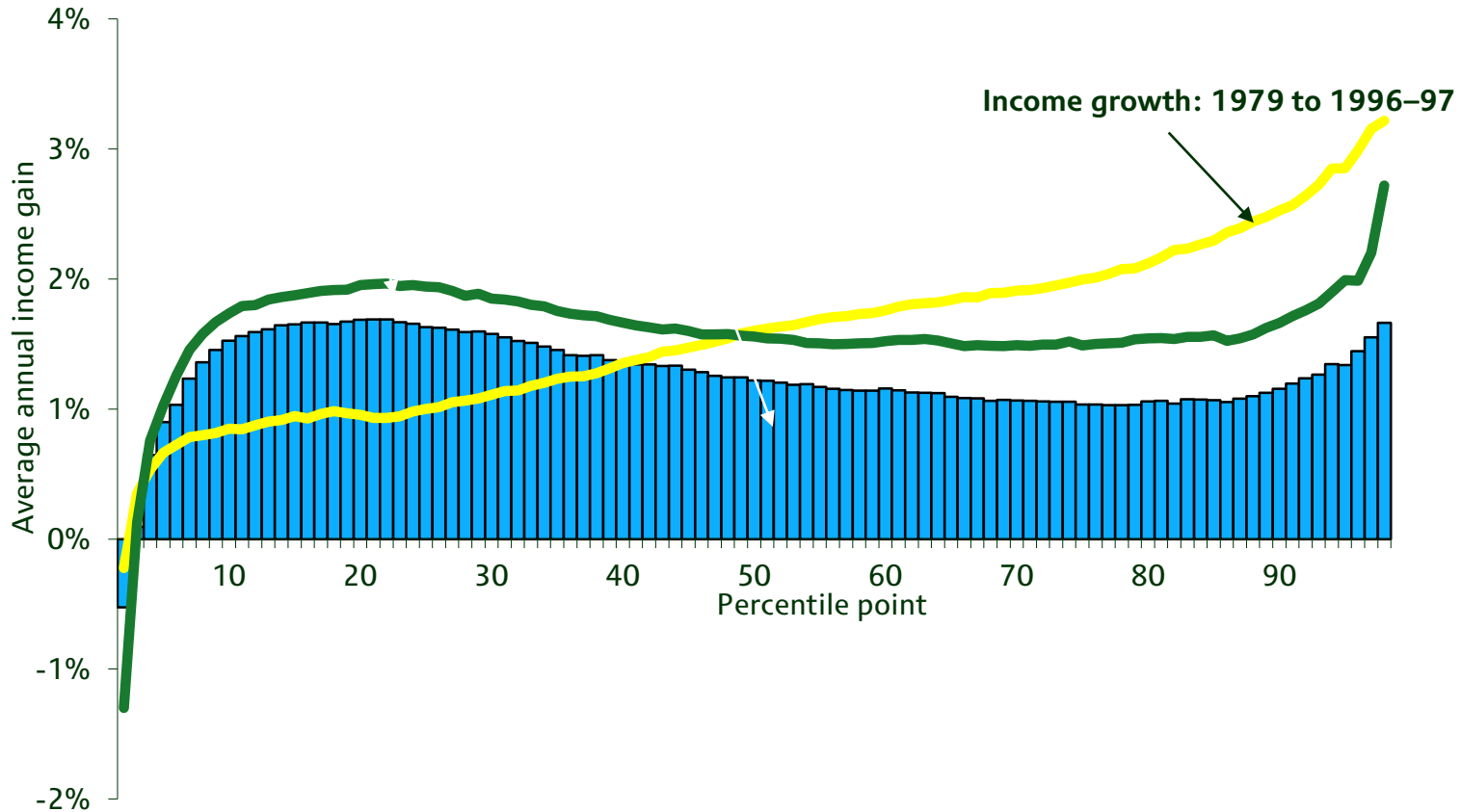
Source: Figure 3.5 of *Living Standards, Poverty and Inequality: 2012*

# Income falls in 2010-11 bigger at top end



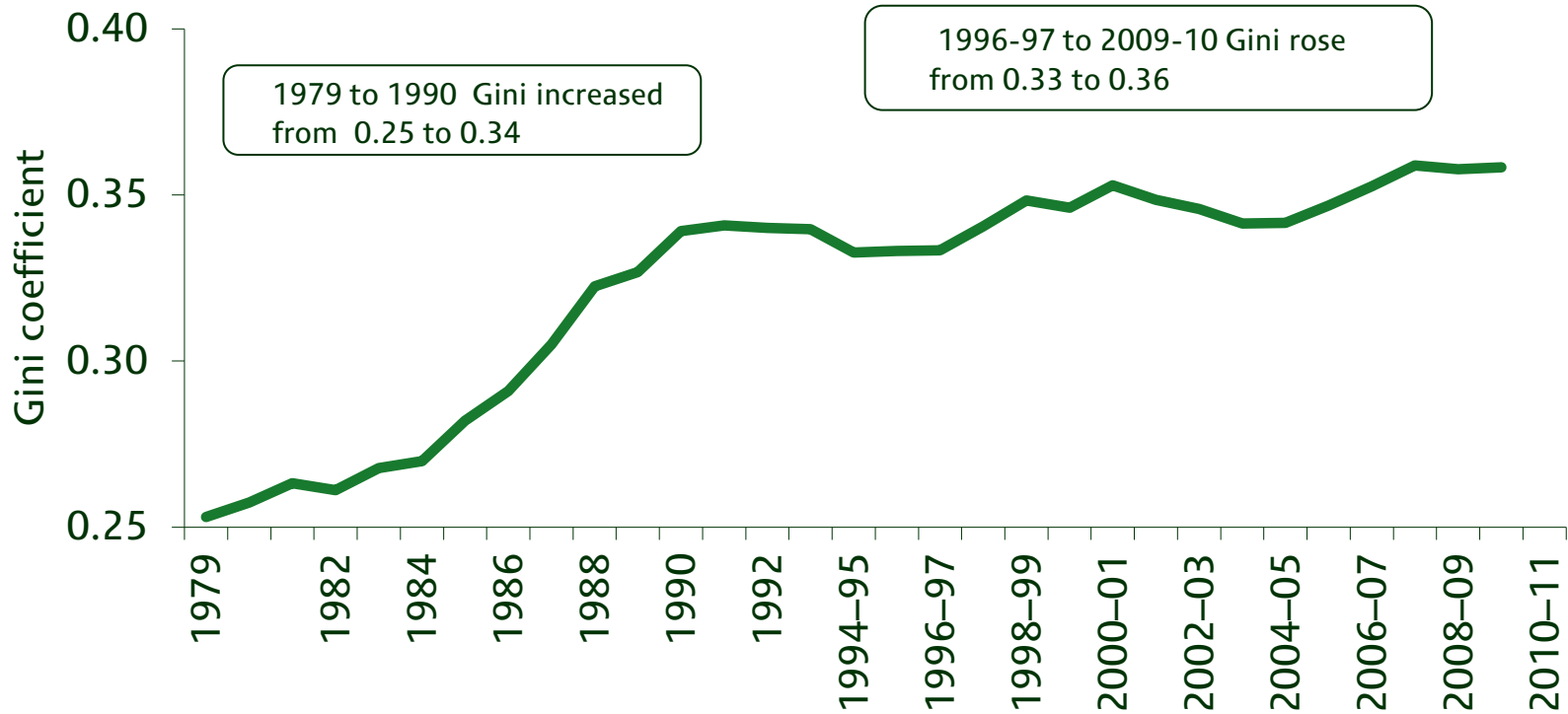
Source: Figure 3.5 of *Living Standards, Poverty and Inequality: 2012*

# In stark contrast to story since 1979



Source: Figure 3.5 of *Living Standards, Poverty and Inequality: 2012*

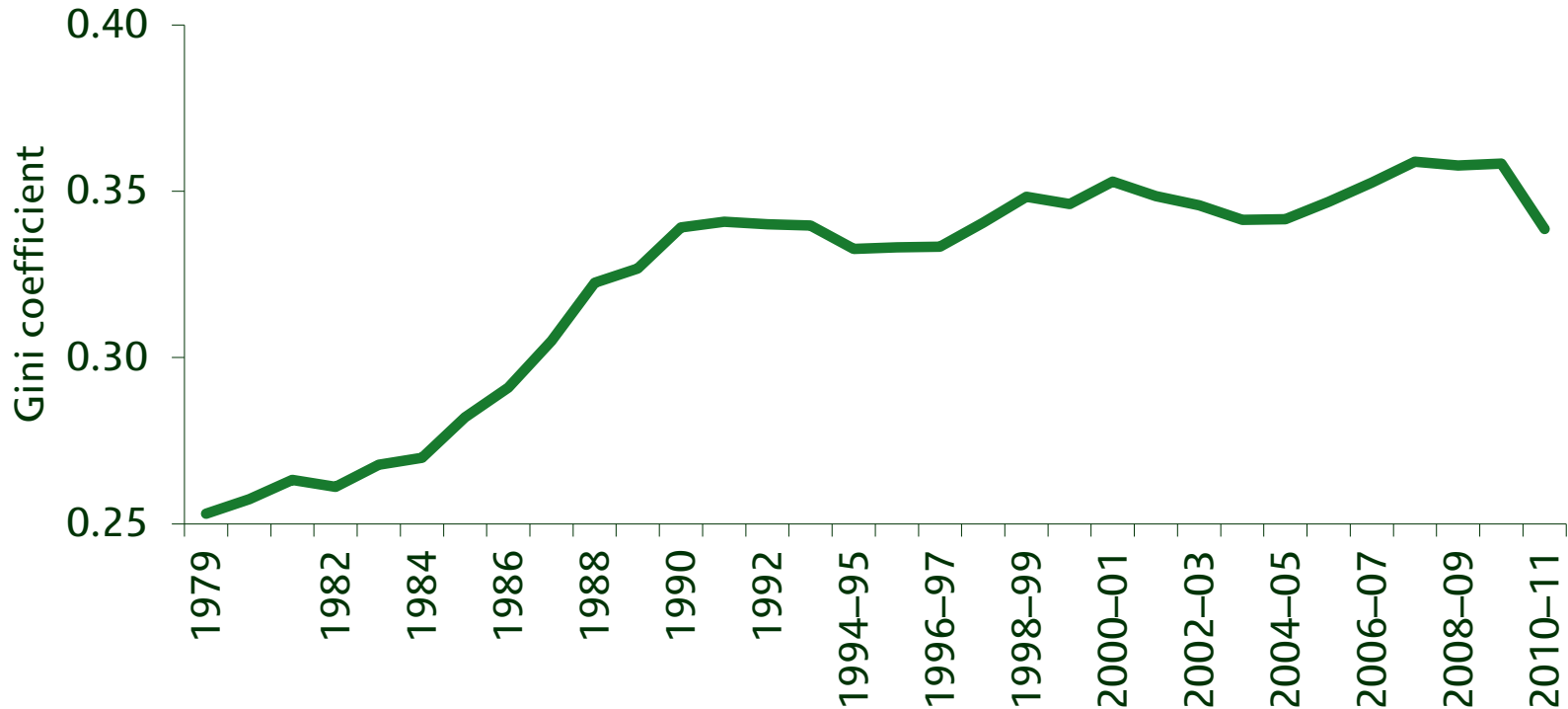
# Gini up sharply to 1990, modestly 1996-2009



Source: Figure 3.7 of *Living Standards, Poverty and Inequality: 2012*



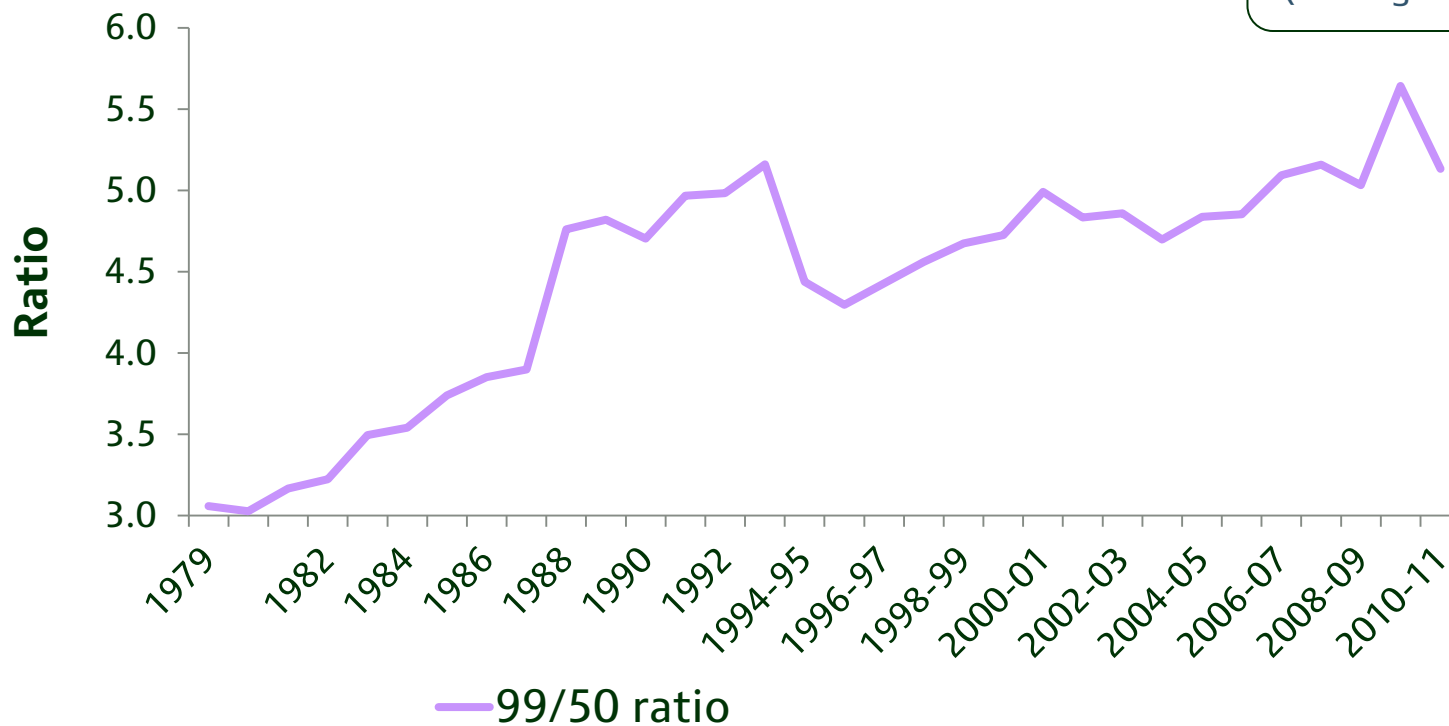
## With sharp fall in 2010-11



- Gini fell from 0.36 to 0.34 in 2010-11
- Largest one year fall since at least 1961
- Returns Gini to below its 1997-98 level

# Inequality ratios: 1979 to 2010-11 (GB)

99/50 ratio fell to 5.1  
(still higher than 2008-09)

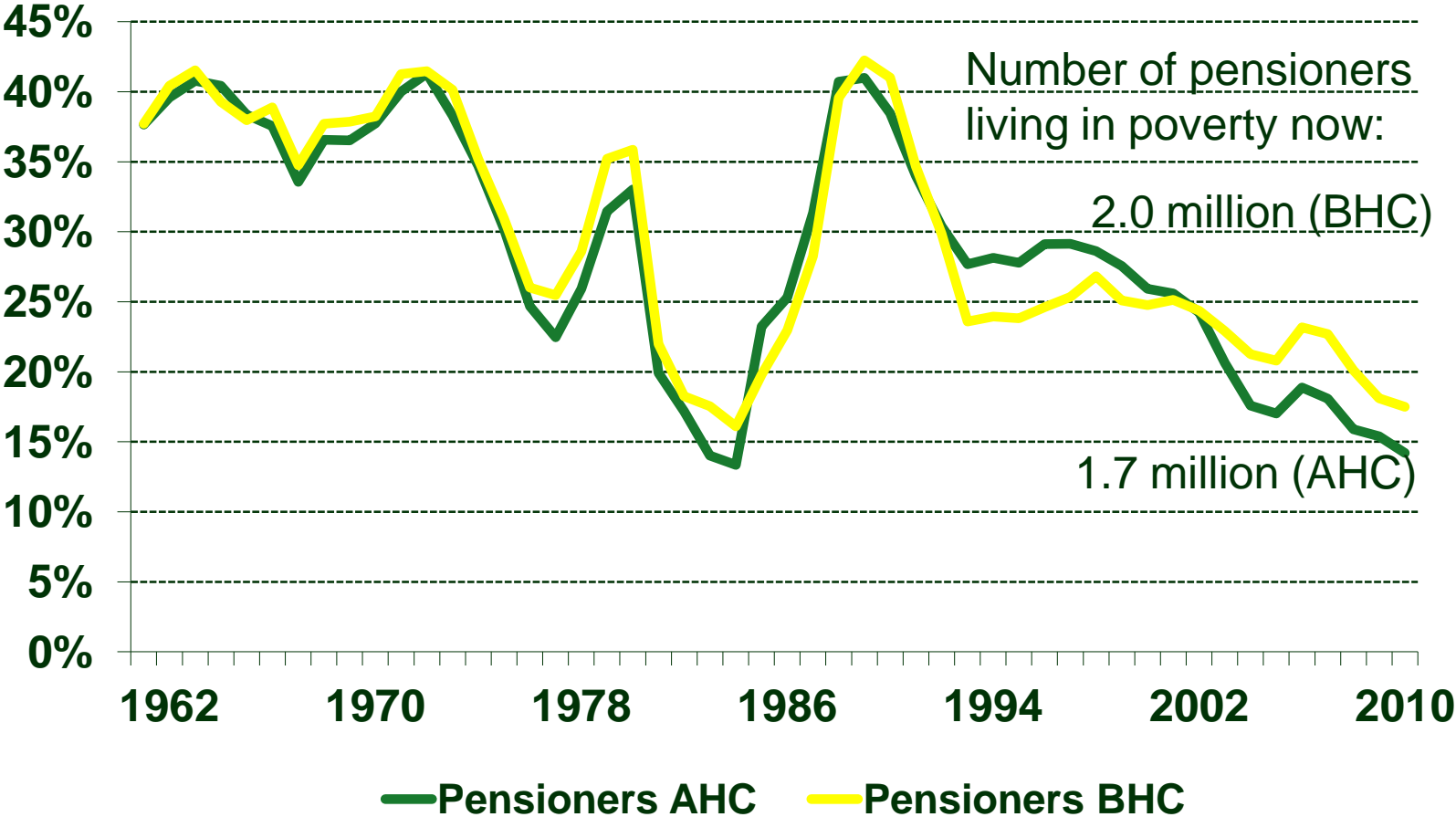


Source: Figure 3.9a of *Living Standards, Poverty and Inequality: 2012*

# At the bottom of the distribution

- Pensioners have done very well

# Relative pensioner poverty lowest since 1984

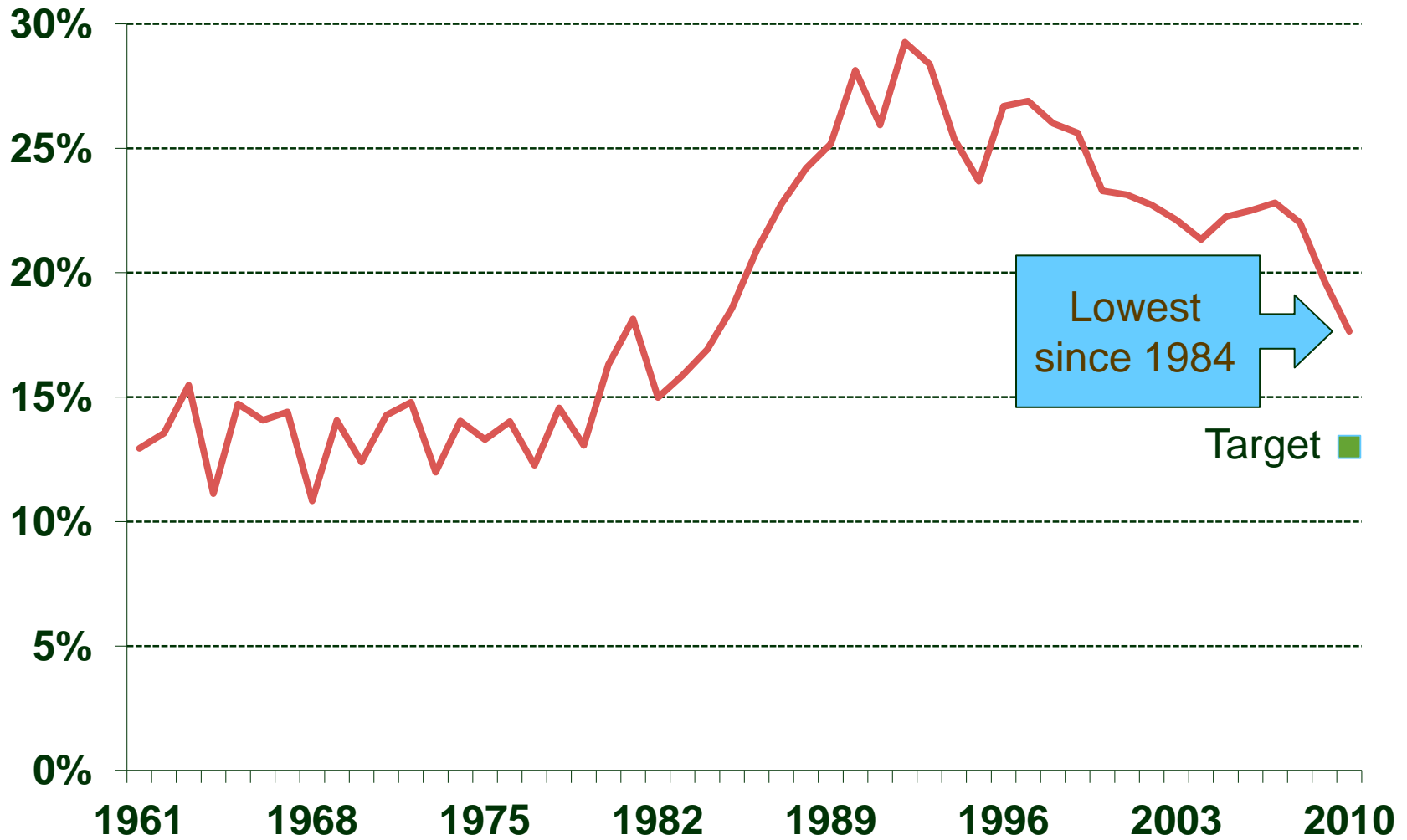


Source: HBAI Data (FES and FRS)

# At the bottom of the distribution

- Pensioners have done very well
- Families with children on an improving trend

# While relative BHC child poverty rates are back at mid 1980s levels

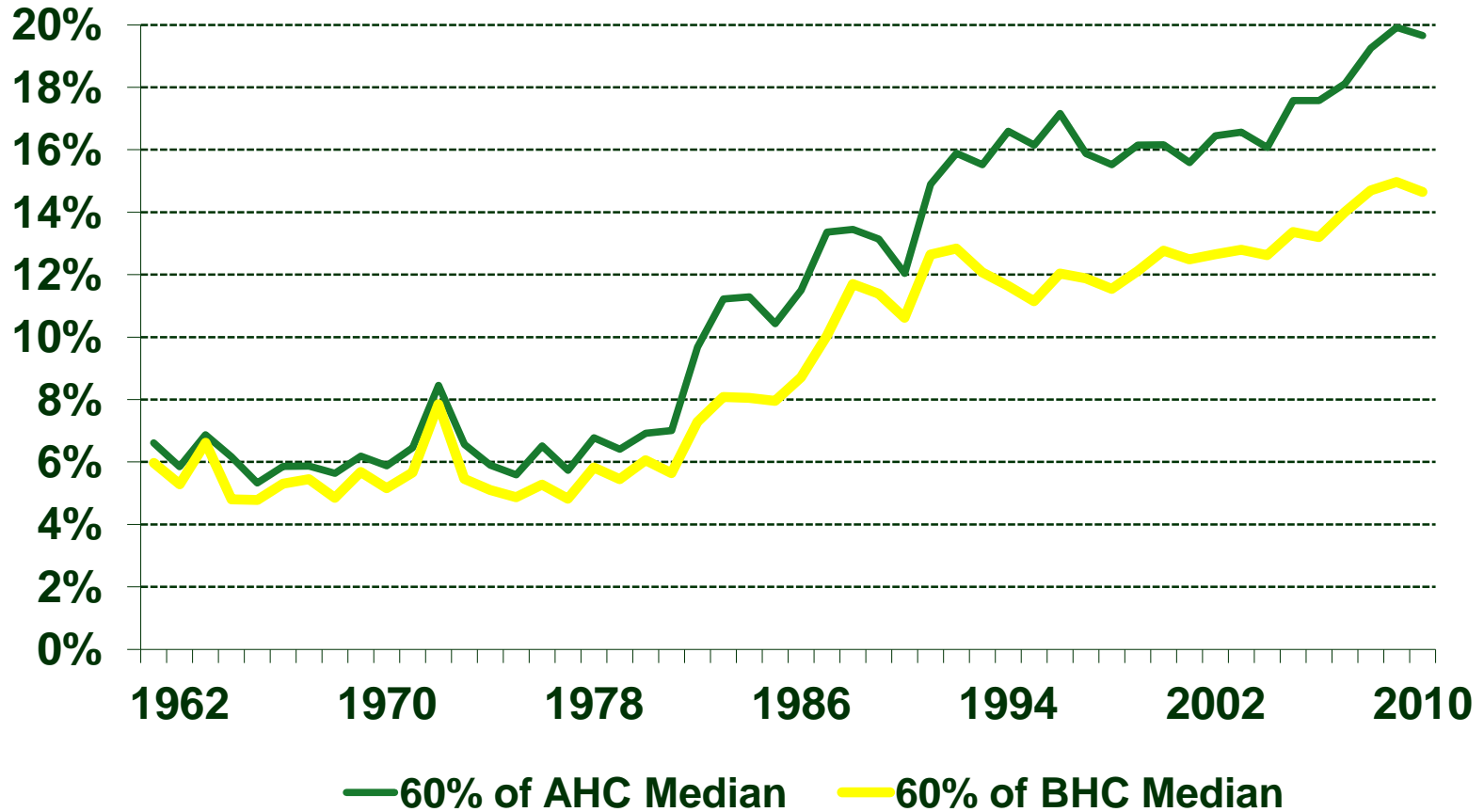


Notes: Poverty line is 60% of median income. Years up to and including 1992 are calendar years; thereafter, years refer to financial years. Incomes are measured before housing costs have been deducted.  
Source: Authors' calculations using Family Resources Survey and Family Expenditure Survey.

# At the bottom of the distribution

- Pensioners have done very well
- Families with children on an improving trend
- But the working age childless have not done well

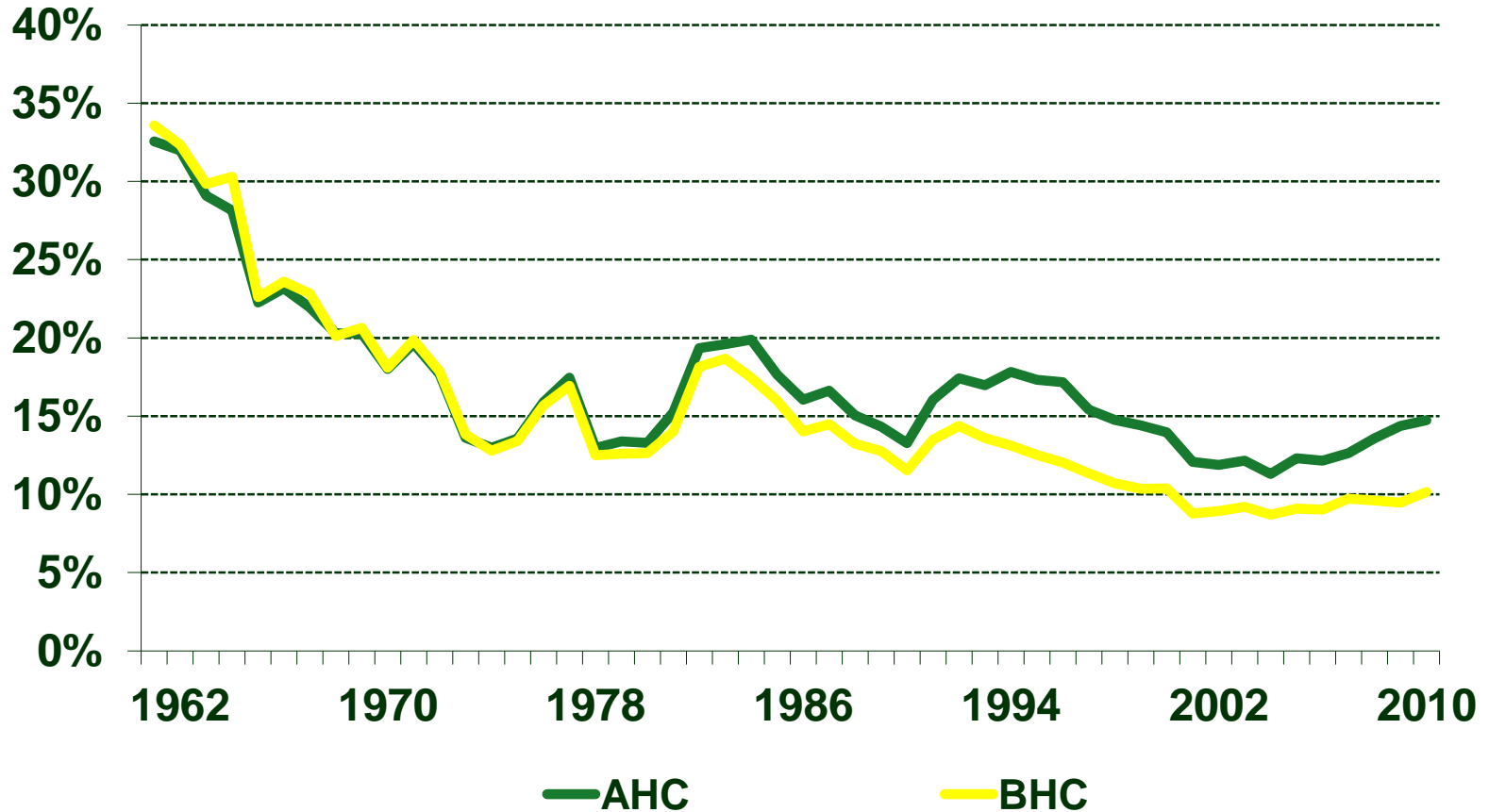
# Relative poverty among working-age adults without children on continuing upward trend



Source: HBAI Data (FES and FRS)

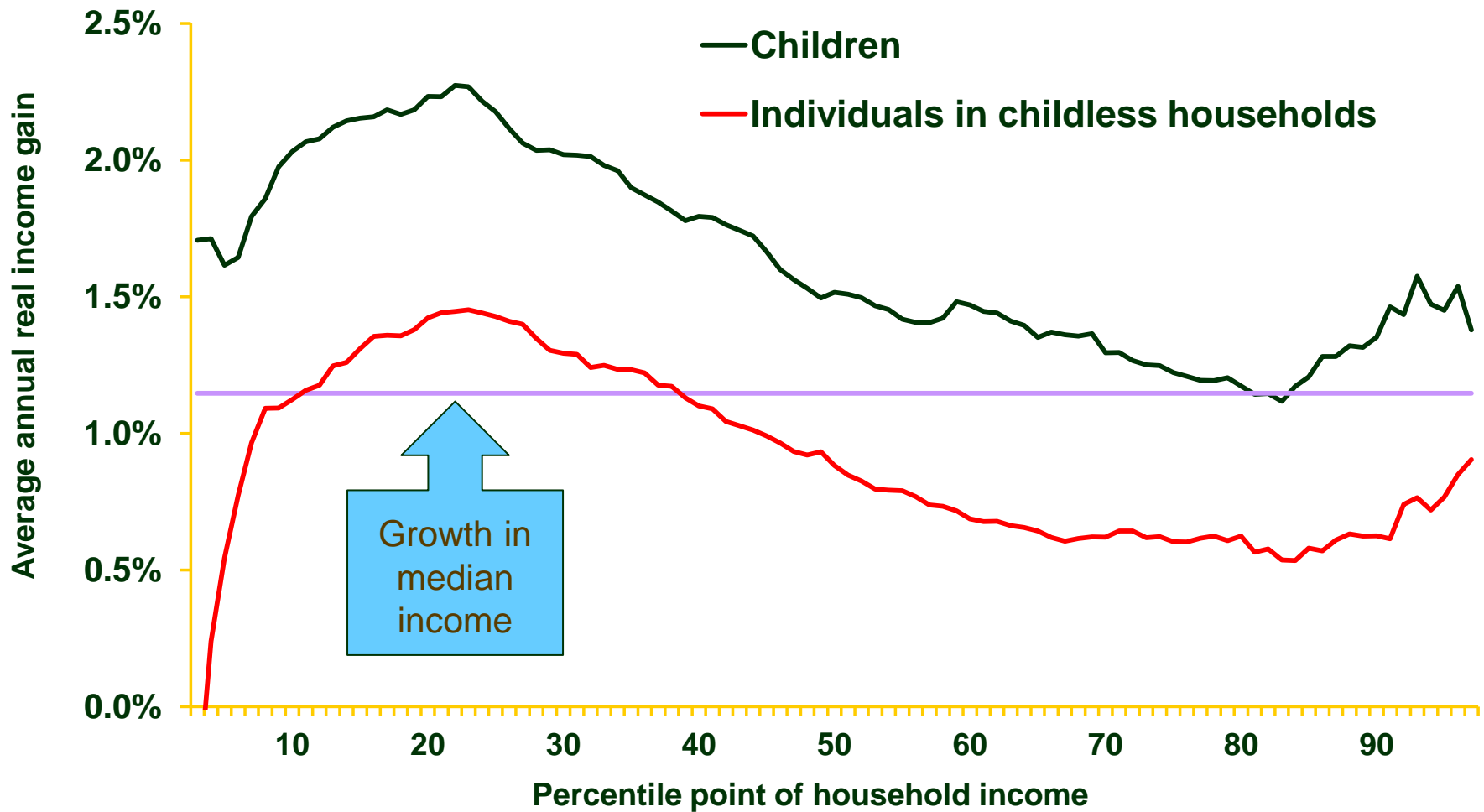


# Absolute poverty among working-age adults without children similar to 1970s levels...



Source: HBAI Data (FES and FRS)

# Families with children have done better than the childless across the distribution since 1998-99

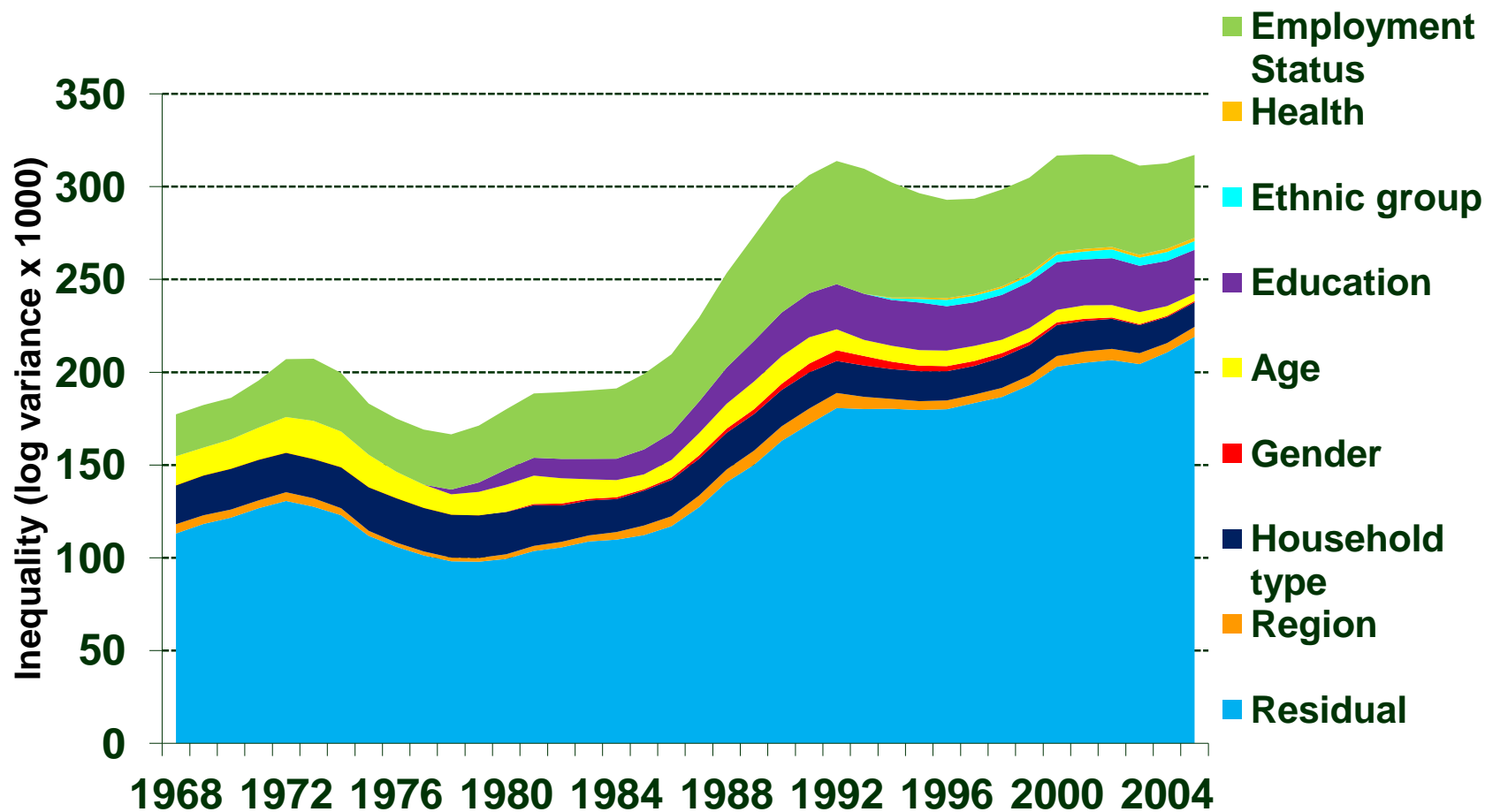


Notes: Changes in income at the 1<sup>st</sup>, 2<sup>nd</sup>, 98<sup>th</sup> and 99<sup>th</sup> percentiles are not shown on this graph due to very high levels of statistical uncertainty. Incomes have been measured before housing costs have been deducted. Source: Authors' calculations using Family Resources Survey, 1998-99 and 2010-11.

## So the story seems to be

- Big increase in inequality since 1979
- Modest increase during 2000s driven by the tails
- Childless working age done particularly badly
- But inequality growth is overwhelmingly *within* identifiable groups

# Income inequality – factor decomposition



Source: HBAI Data (FES and FRS) and authors' analysis

# But is that the whole story?

- Two good reasons for thinking we are (increasingly) underestimating living standards lower down the distribution
  - First: important elements of benefit spending appear to be very poorly captured in the data

# Only half of tax credit and two thirds of Income Support spending captured in the data

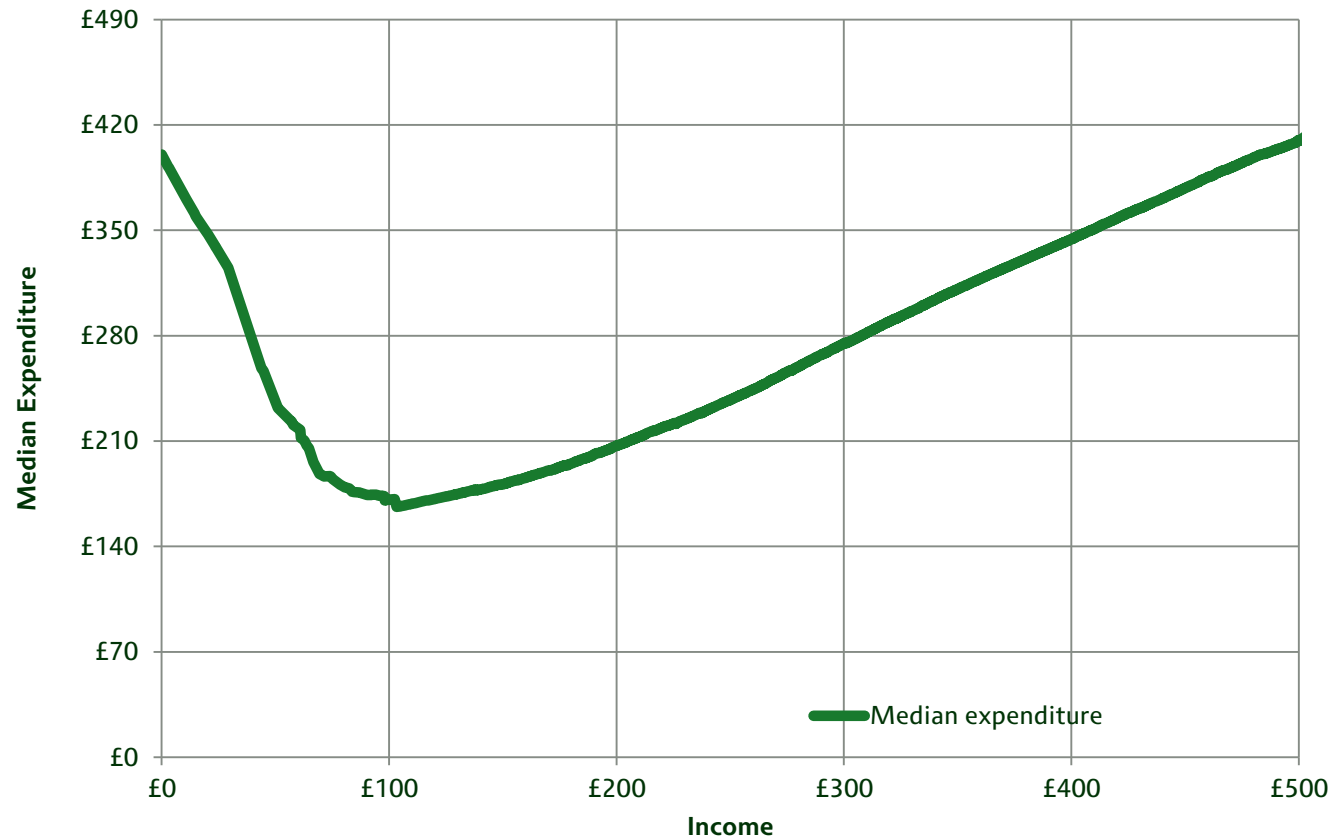
|                                   | Coverage | Spend (£m/yr) |
|-----------------------------------|----------|---------------|
| Retirement pension                | 95%      | 66,480        |
| “Other”                           | 52%      | 27,970        |
| Working and child tax credits     | 50%      | 21,270        |
| Rent rebates and allowances       | 83%      | 18,930        |
| Income support & pension credit   | 68%      | 16,580        |
| Child benefit                     | 96%      | 11,880        |
| Incapacity benefit                | 74%      | 6,670         |
| Maternity/Statutory maternity pay | 119%     | 1,900         |
| Jobseekers allowance              | 80%      | 1,200         |
| War pensions                      | 33%      | 1,020         |
| Student support                   | 236%     | 970           |

Notes: based on Barnard (2011) analysis of LCFS 2009 and 2010

# But is that the whole story?

- Two good reasons for thinking we are (increasingly) underestimating living standards lower down the distribution
  - First: important elements of benefit spending appear to be very poorly captured in the data
  - Second: incomes at the bottom of the distribution don't match consumption

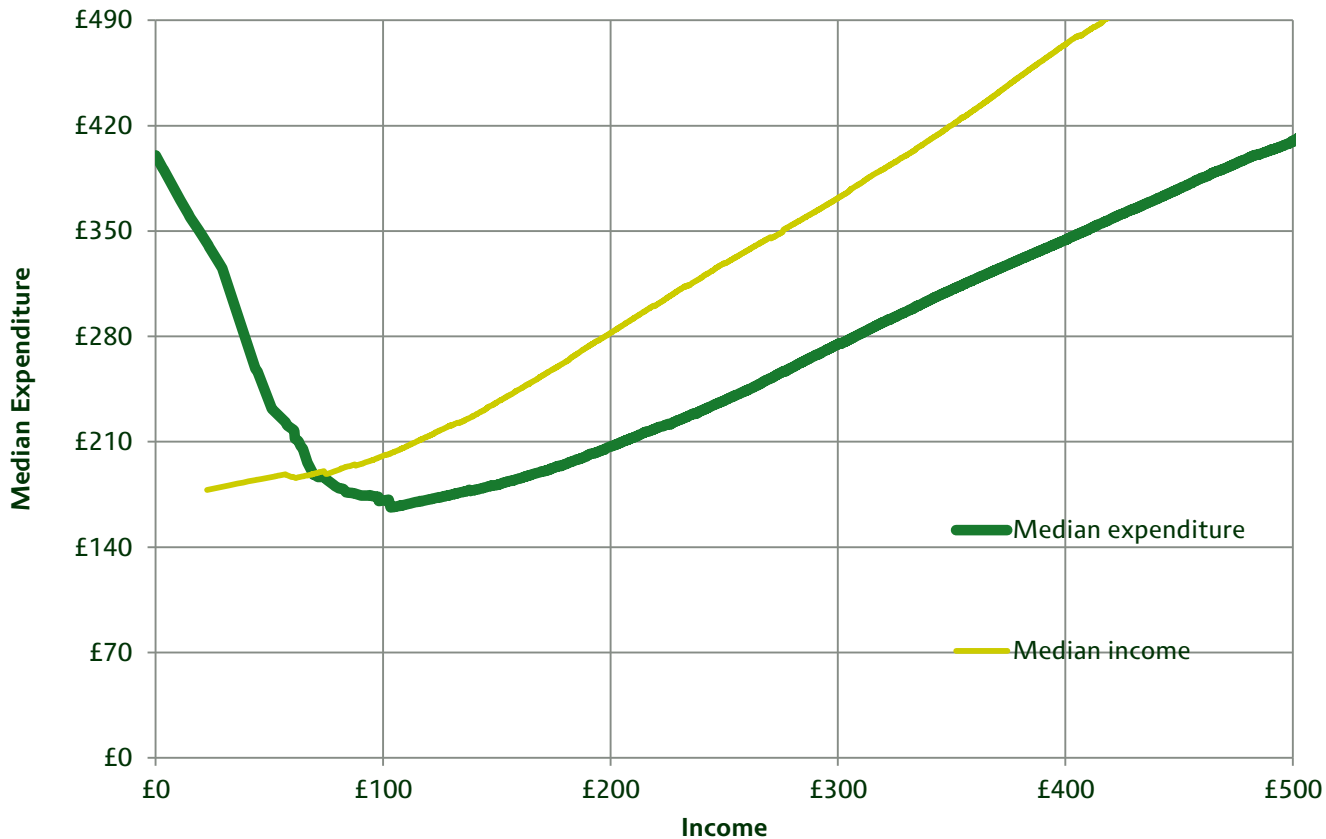
# Those with the lowest cash incomes do not have the lowest cash outlays...



Notes: LCFS 2009; Great Britain only



...but those with the lowest cash outlays *do* have the lowest cash income

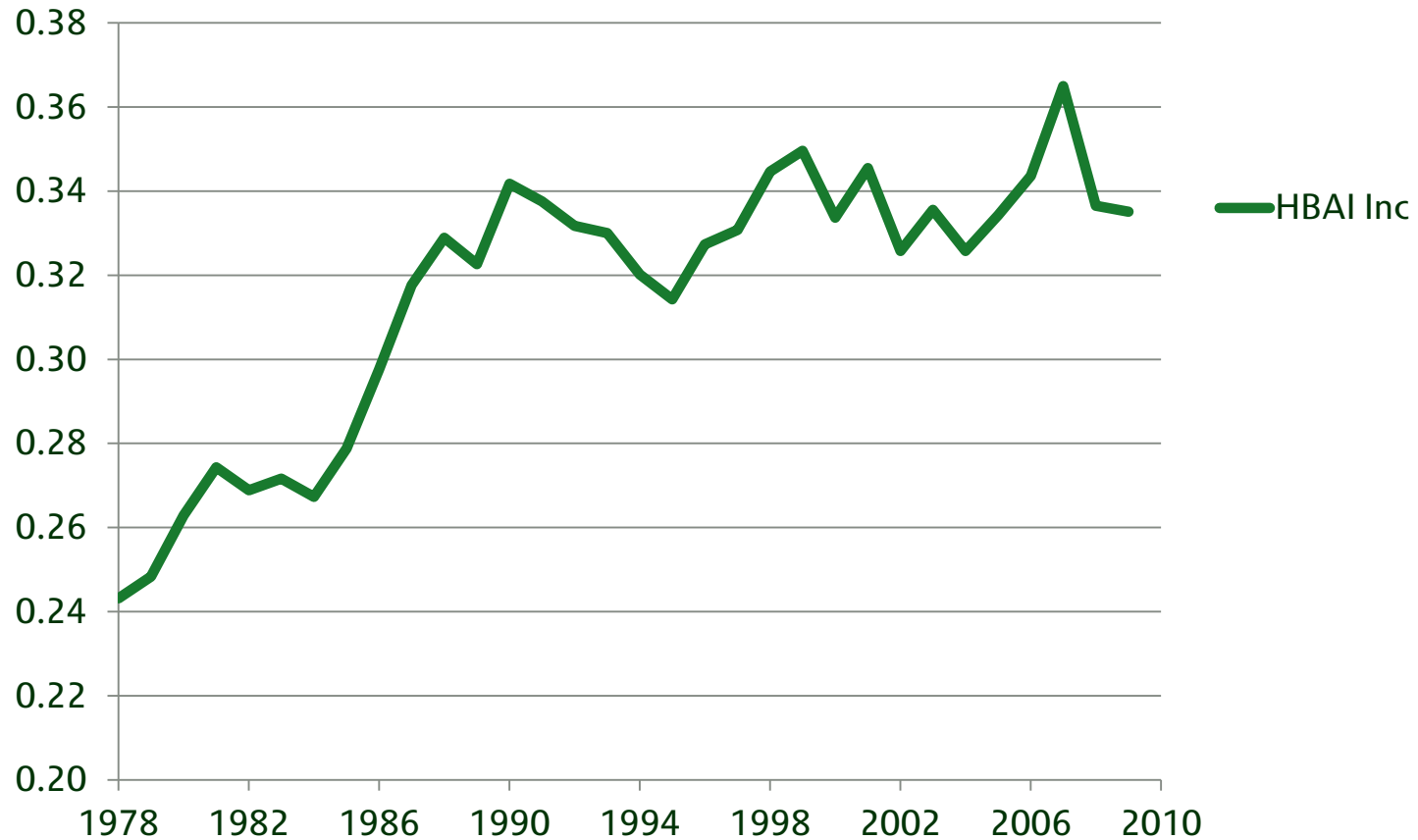


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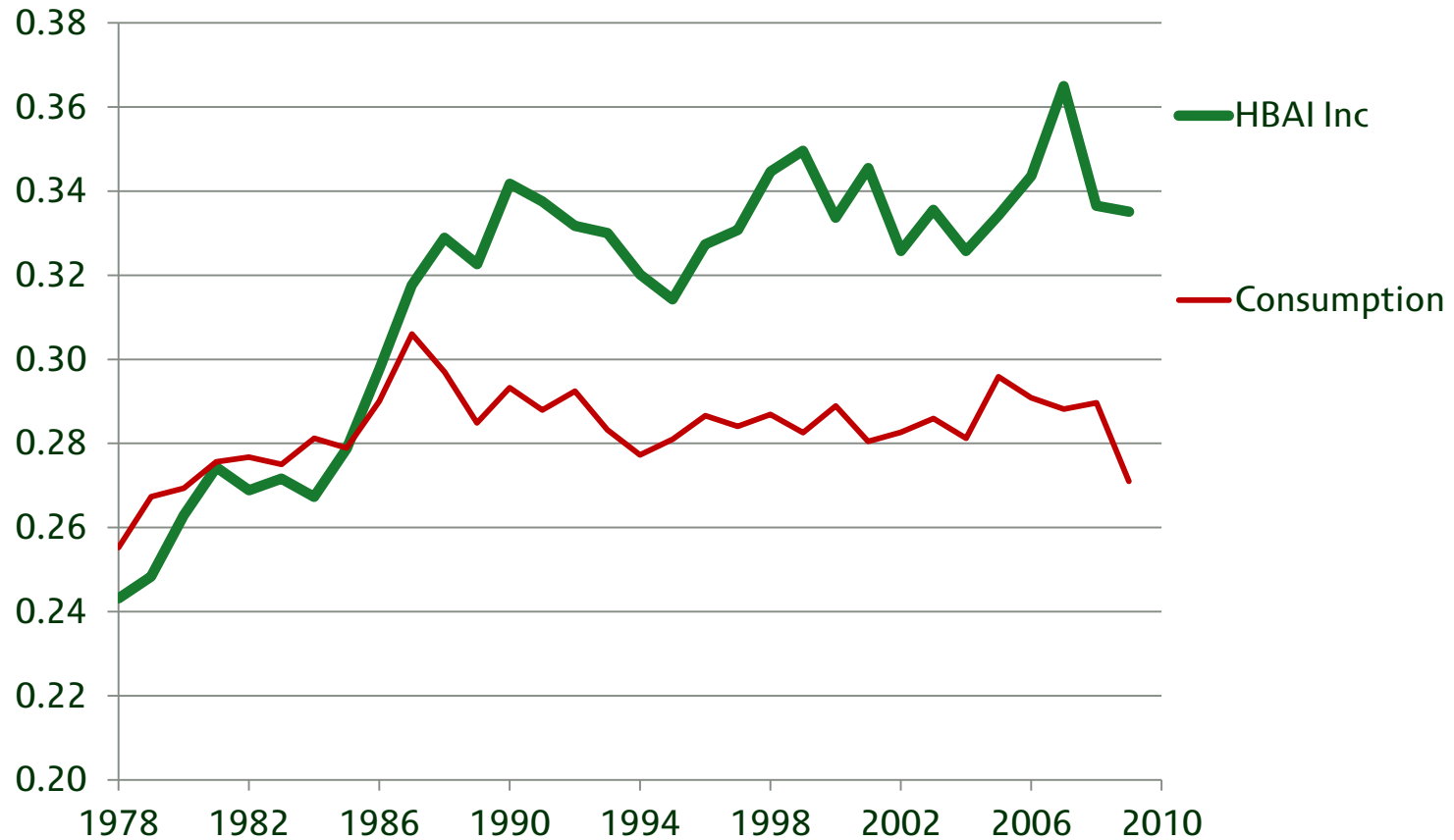
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- In addition
  - Inequality in consumption has grown much less quickly than inequality in income

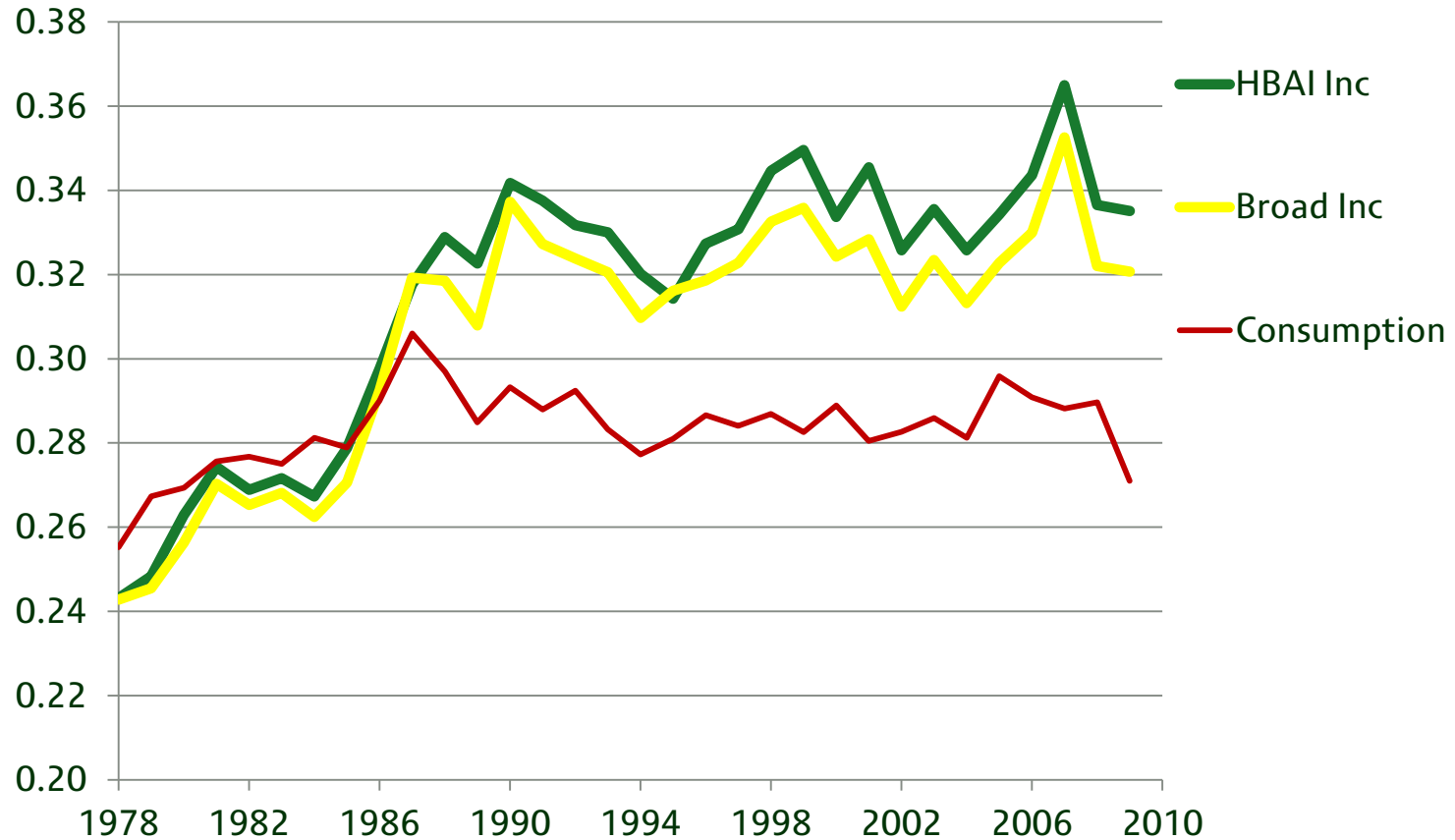
# Remember the rising Gini



# Doesn't look so dramatic when you look at consumption



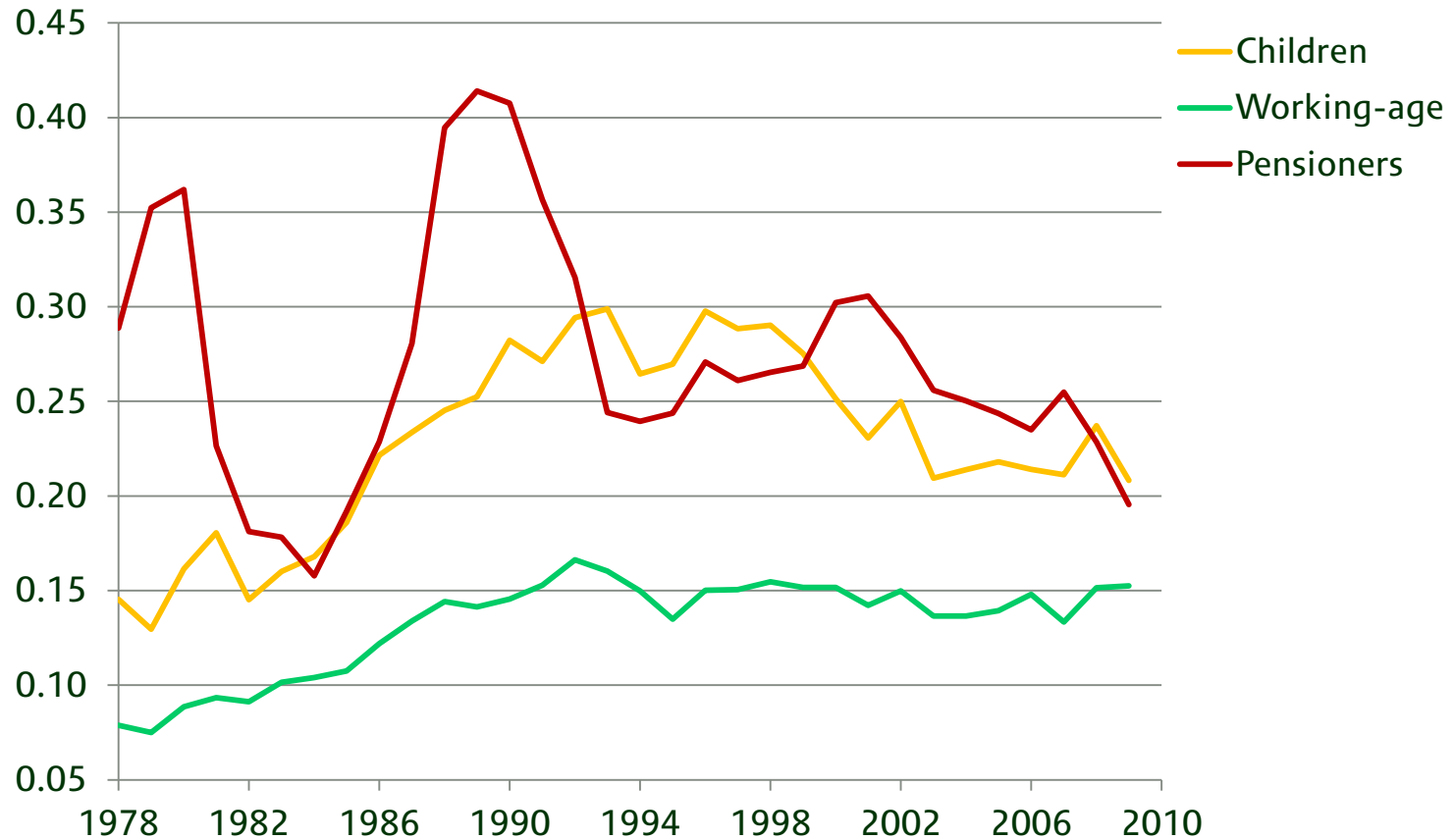
# While a broader measure of income matters little



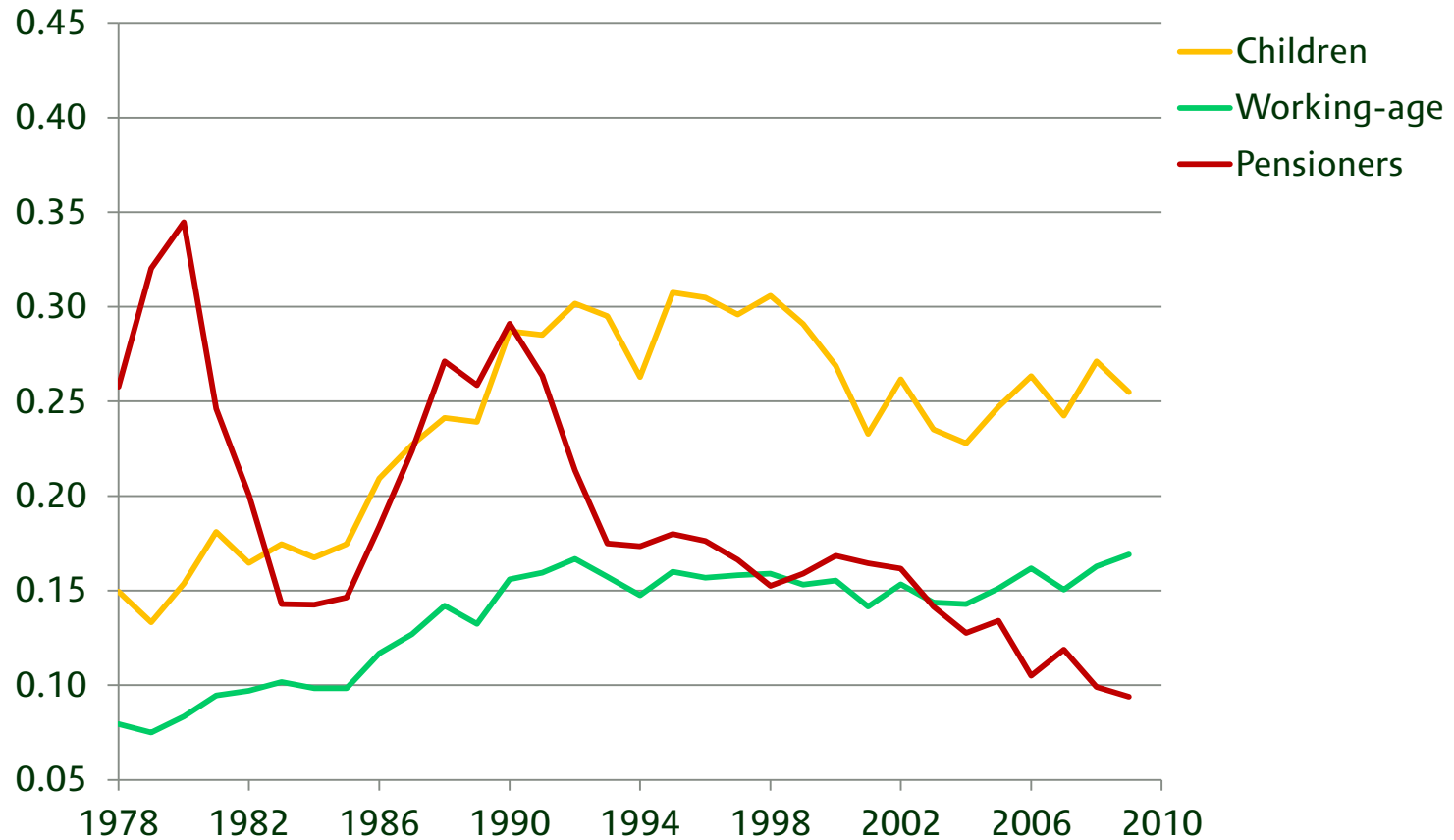
# But is that the whole story?

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  - First: important elements of benefit spending appear to be very poorly captured in the data
  - Second: incomes at the bottom of the distribution don't match consumption
- In addition
  - Inequality in consumption has grown much less quickly than inequality in income
  - Relative performance of different groups is highly sensitive to measure of income/consumption used

# Relative poverty rate, HBAI income (<60% of median household income)

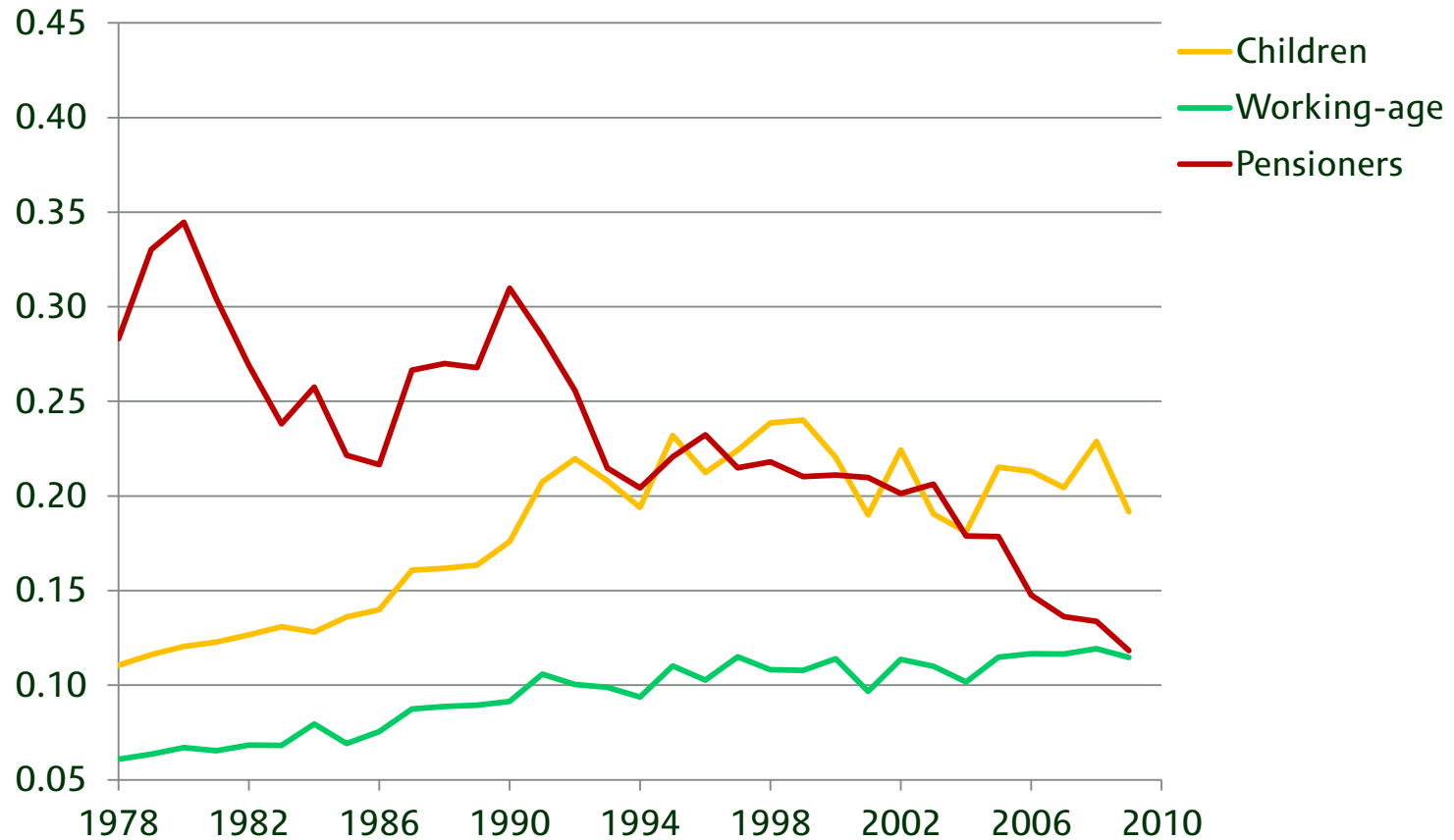


# Relative poverty rate, broad income (<60% of median household income)

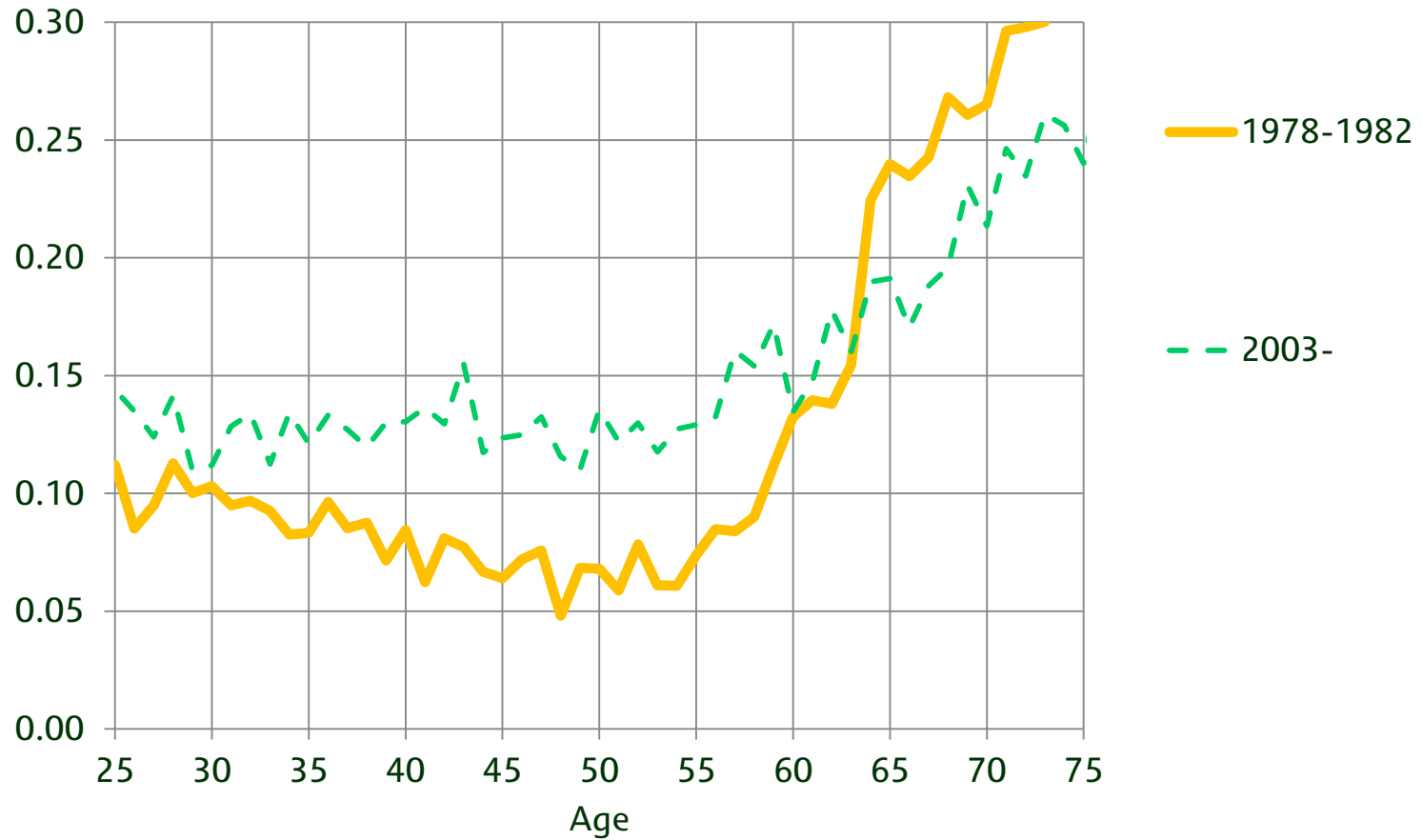




# Relative poverty rate, consumption (<60% of median household income)



# Relative poverty rate by age and time, HBAI income



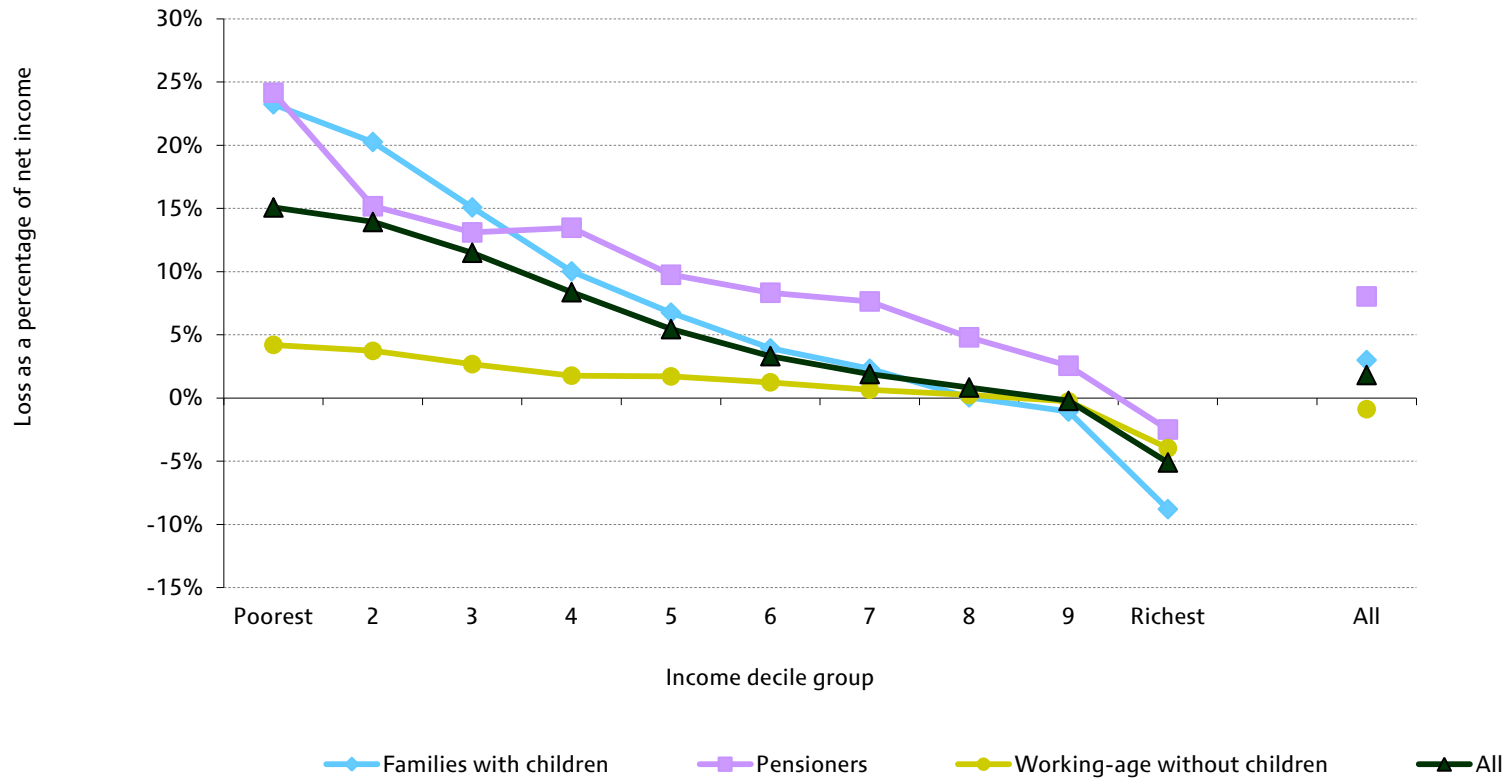
# So overall

- There may have been more a reduction in inequality in living standards in the 2000s than HBAI data suggests
- Once you account for a broader definition of income pensioners have not only done relatively better than other groups but are now significantly less likely to be poor than working age people with or without children

# What about the role of government

- Of course the tax and transfer system is important
- 2000s saw an additional £30 billion a year spent on benefits and tax credits
  - Mostly focussed on pensioners and families with children

# Effects of tax benefit changes 1997-2010



# A very close correspondence between movements in benefit levels and child poverty levels

|         | Couple, 3 children, no work | Lone parent, 1 child, no work | Lone parent, 1 child, part-time work | Change in BHC relative child poverty rate in UK |
|---------|-----------------------------|-------------------------------|--------------------------------------|---|
| 1999-00 | +                           | +                             | +                                    | -   |
| 2000-01 | +                           | +                             | +                                    | -   |
| 2001-02 | +                           | +                             | +                                    | -   |
| 2002-03 | +                           | -                             | +                                    | -   |
| 2003-04 | +                           | +                             | +                                    | -   |
| 2004-05 | +                           | +                             | +                                    | -   |
| 2005-06 | -                           | -                             | -                                    | +   |
| 2006-07 | -                           | -                             | -                                    | +   |
| 2007-08 | -                           | -                             | -                                    | +   |
| 2008-09 | +                           | +                             | +                                    | -   |
| 2009-10 | +                           | +                             | +                                    | -   |
| 2010-11 | +                           | +                             | +                                    | -   |

 Entitlements grew faster than relative poverty line (median income)

 Entitlements grew more slowly than relative poverty line (median income)

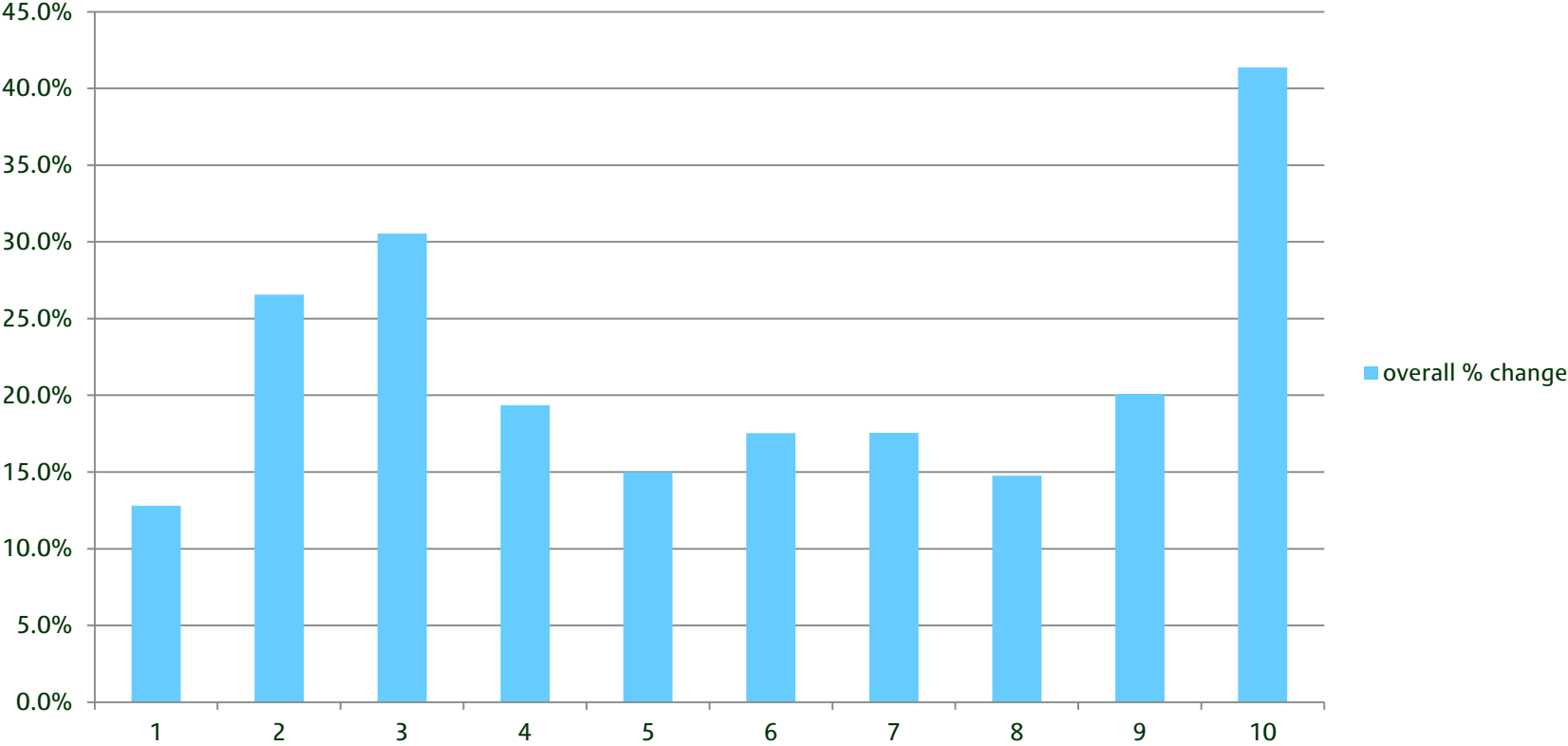
Notes: Ignores Housing Benefit, Council Tax Benefit and the value of free school meals. The working lone parent earns an amount that is below the personal income tax allowance and the primary threshold for National Insurance contributions.  
Source: Authors' calculations using TAXBEN, the IFS tax and benefit micro-simulation model.

# What about the role of government

- Of course the tax and transfer system is important
- 2000s saw an additional £30 billion a year spent on benefits and tax credits
  - Mostly focussed on pensioners and families with children
- This had a big effect on inequality

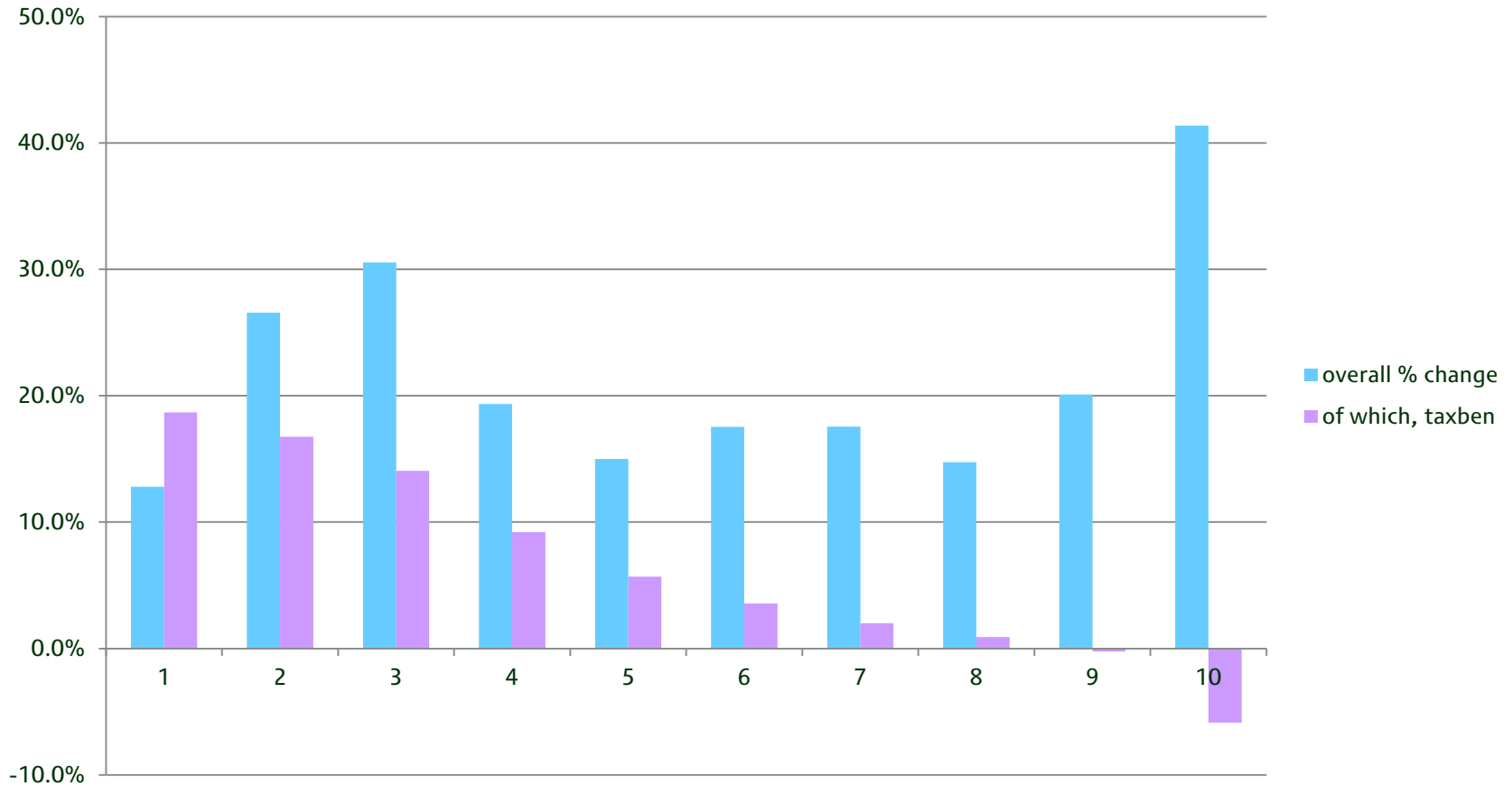
# Actual income changes 1997-2009 favoured deciles 2 to 4 (and 10)

overall % change

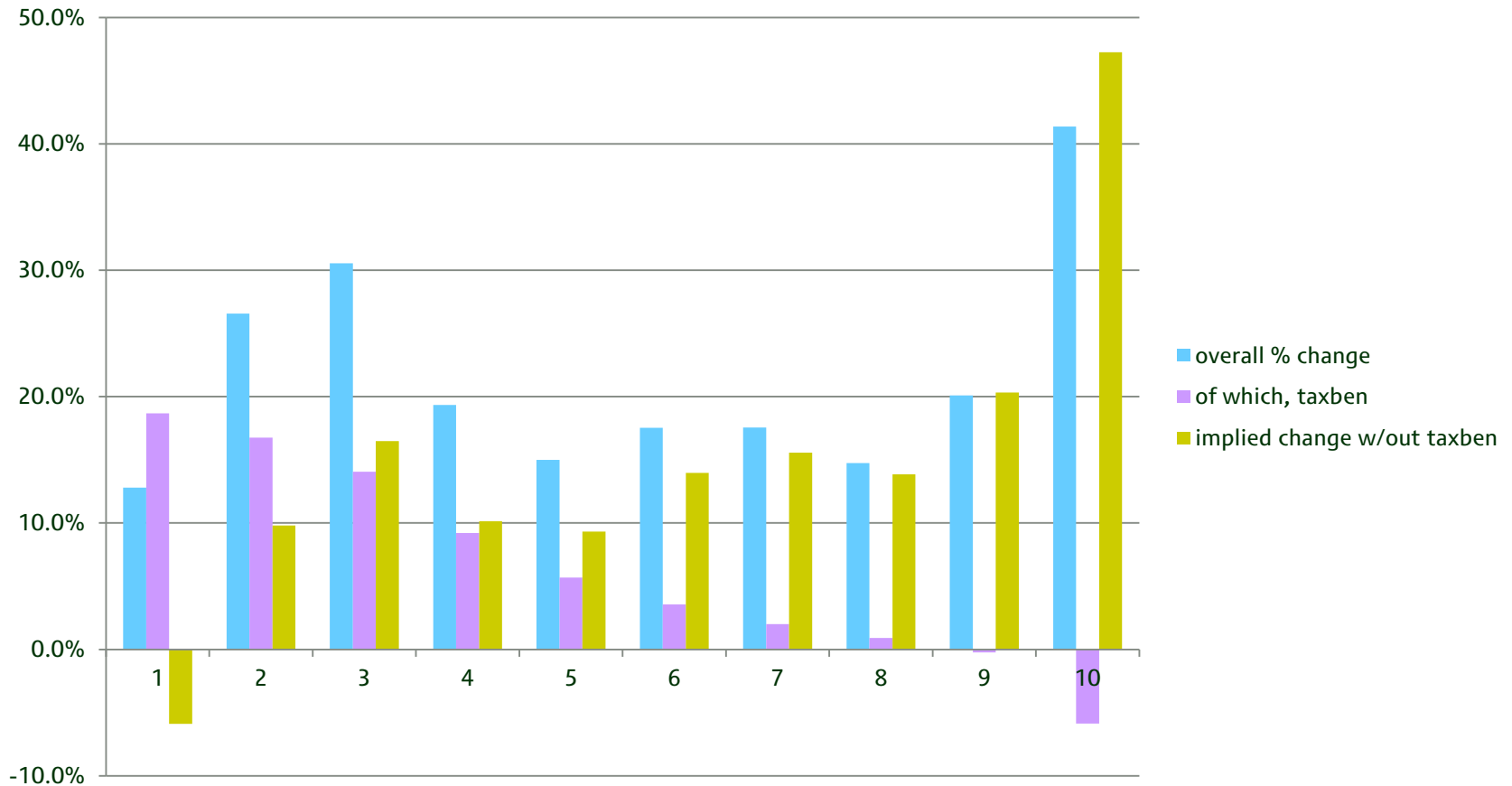




# Very heavily driven by tax and benefit changes



# Without those changes pattern is much less progressive



**I INCREASED  
THE GAP BETWEEN  
RICH AND POOR  
VOTE FOR ME**

Or vote for change. Vote Conservative



**I MITIGATED THE INCREASE IN  
THE GAP BETWEEN RICH AND  
POOR, LEAVING THE GAP  
SMALLER THAN IT OTHERWISE  
WOULD HAVE BEEN (UNDER  
RPI UPDATING OF THE 1996-97  
TAX AND BENEFIT SYSTEM)**

**VOTE FOR ME**



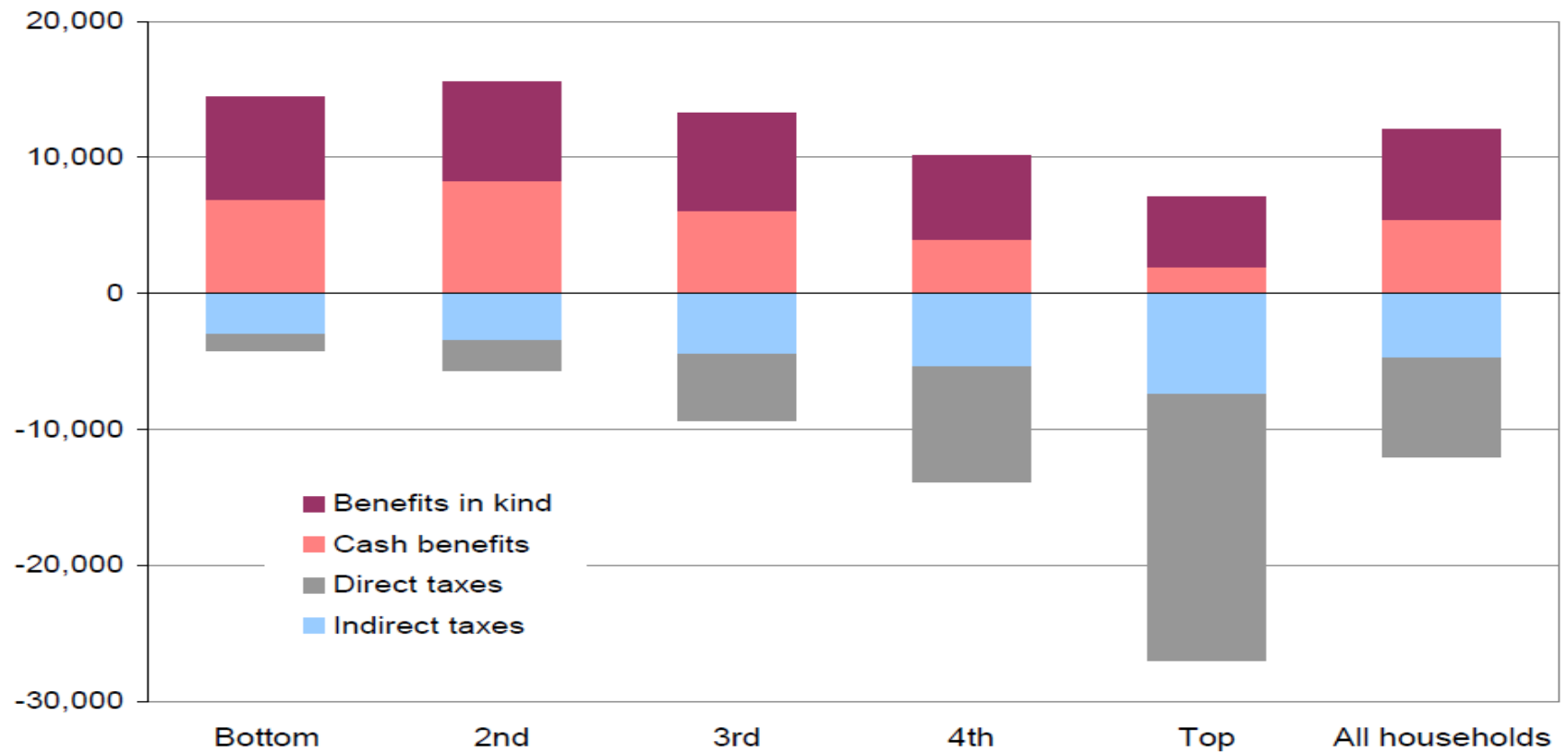
# What about the role of government

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- This had a big effect on inequality
- Other spending is also equalising
  - *At least* in the sense that cost of service provided is a higher proportion of income of poor than of rich

# Benefits in kind matter a lot

Summary of the effects of taxes and benefits by quintile groups, ALL households<sup>1</sup>, 2009

Average per household (£ per year)



Source: Office for National Statistics

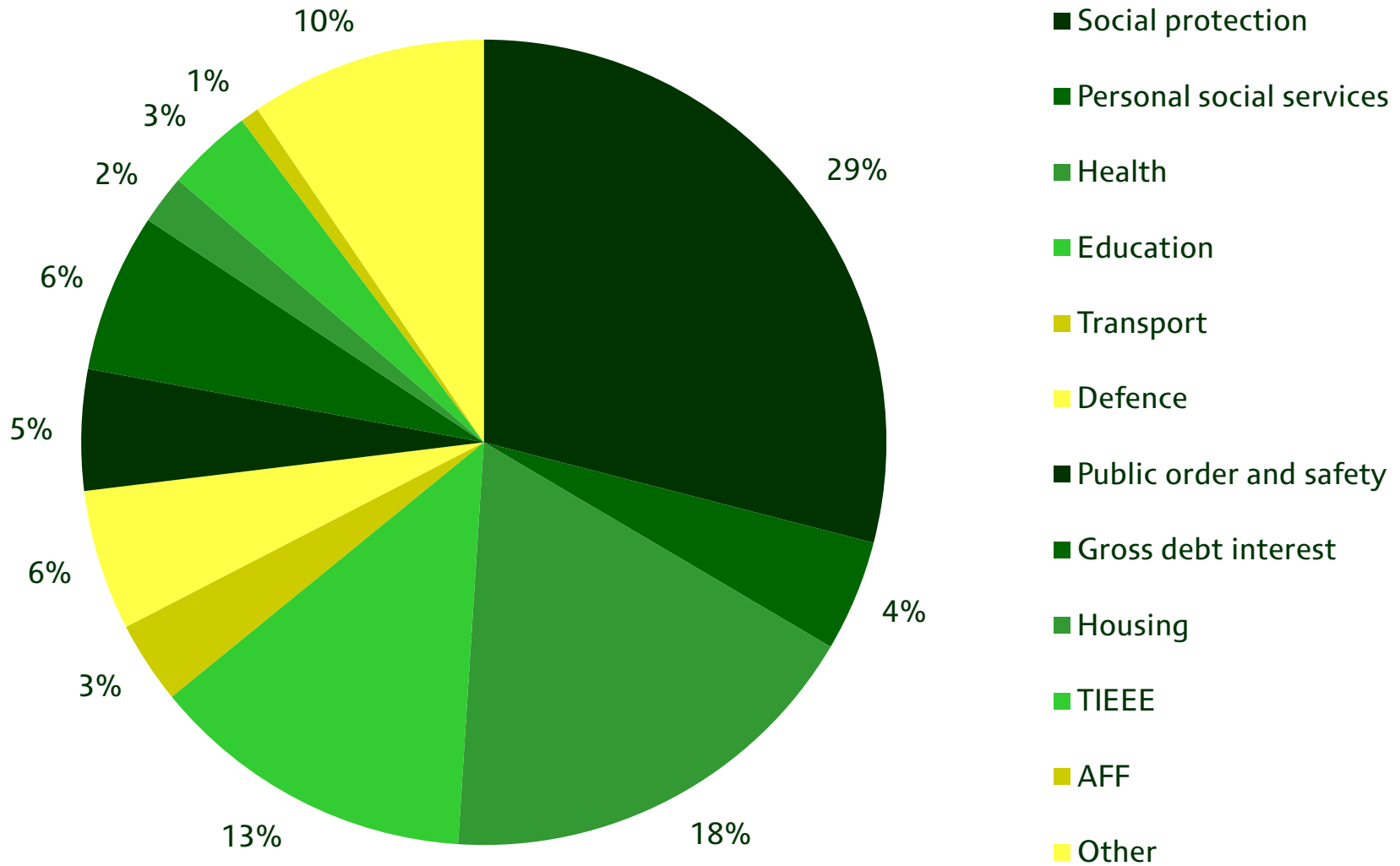
## Note:

1 Households are ranked by their equivalised disposable incomes, using the modified-OECD scale.

# What about the role of government

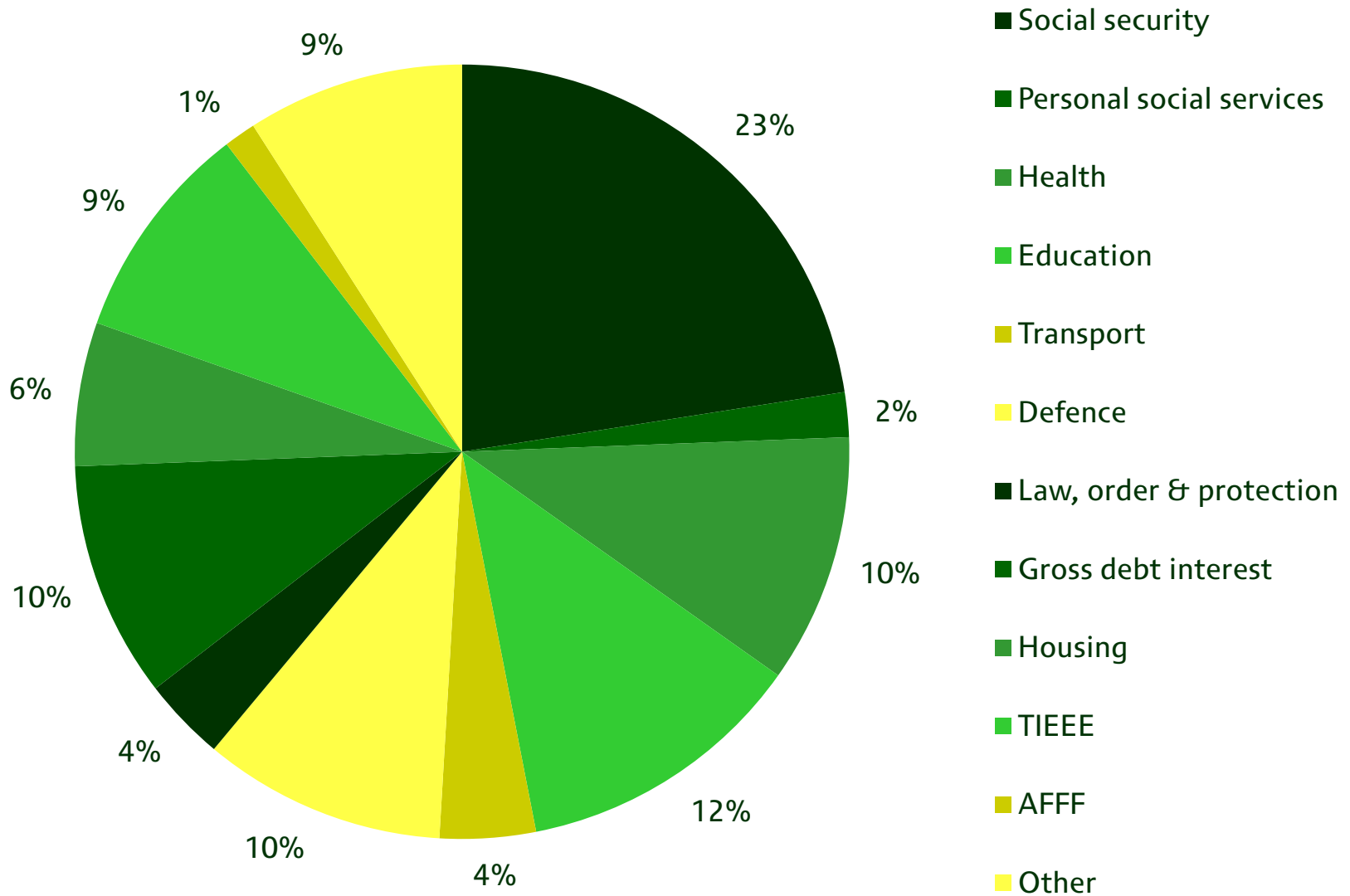
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  - *At least* in the sense that cost of service provided is a higher proportion of income of poor than of rich
- And spending on the welfare state has become much more important over time

# Public spending in 2010-11





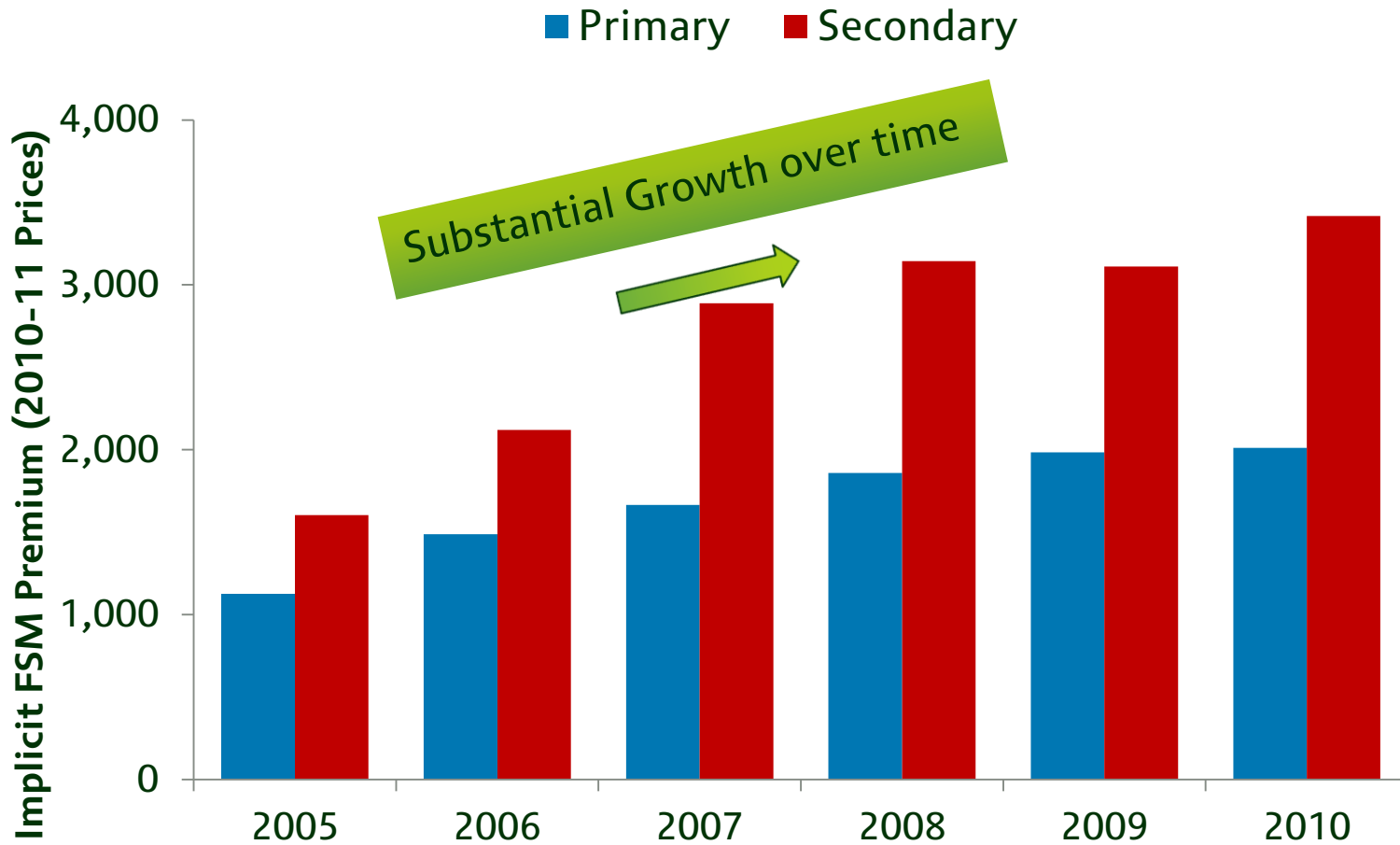
# Public spending in 1978-79



# What about the role of government

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- Other spending is also equalising
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- And spending on the welfare state has become much more important over time
- A lot of that spending now more skewed to those on low incomes

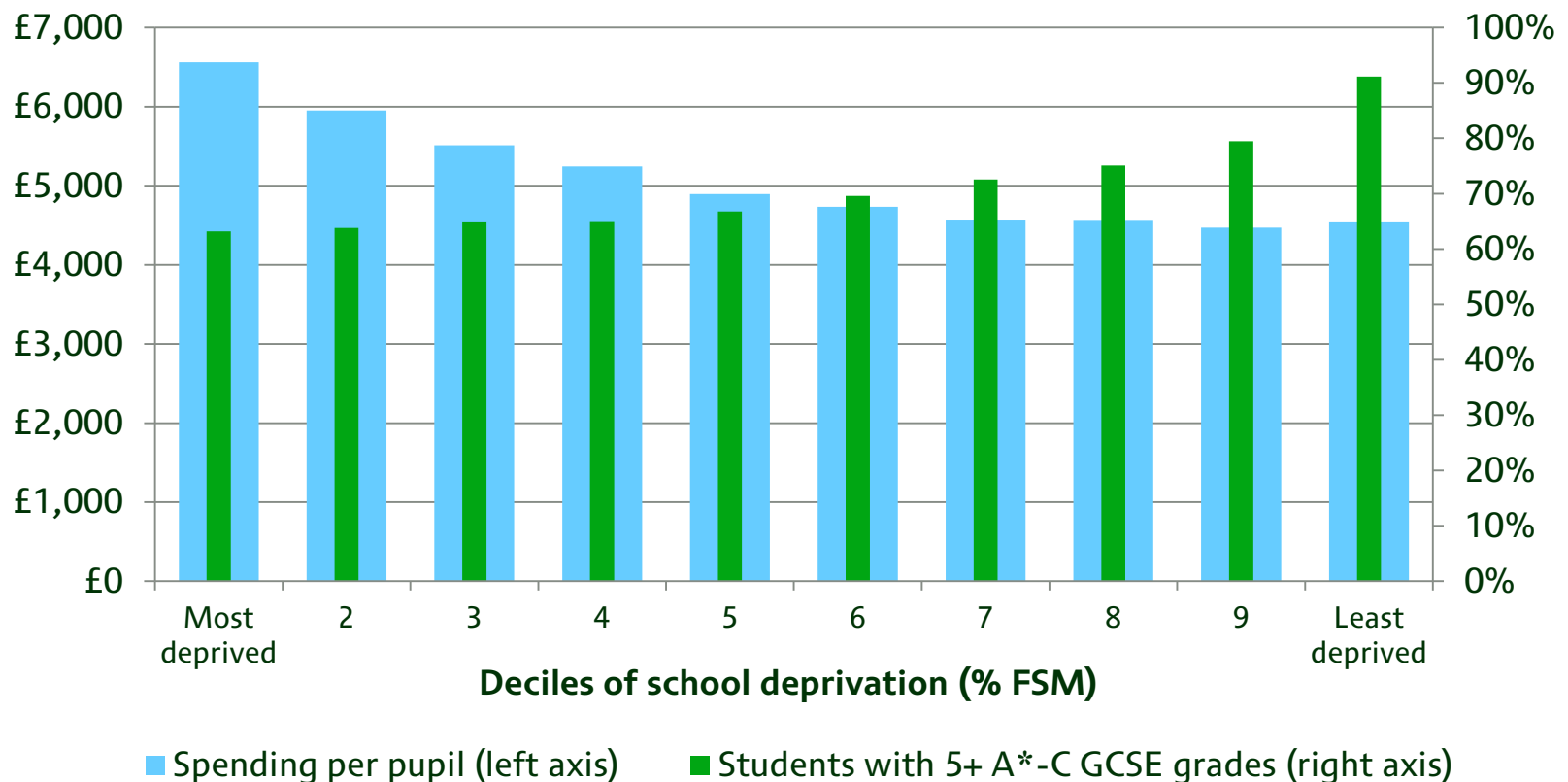
# Funding focused more deprived schools



Notes: Implicit FSM Premium calculated as the extra funding associated with one extra pupil eligible for FSM, holding other pupil and school characteristics constant.

Sources: For a full list of sources please see Table 2.2. ([link](#))

# Though we don't know how much value that adds

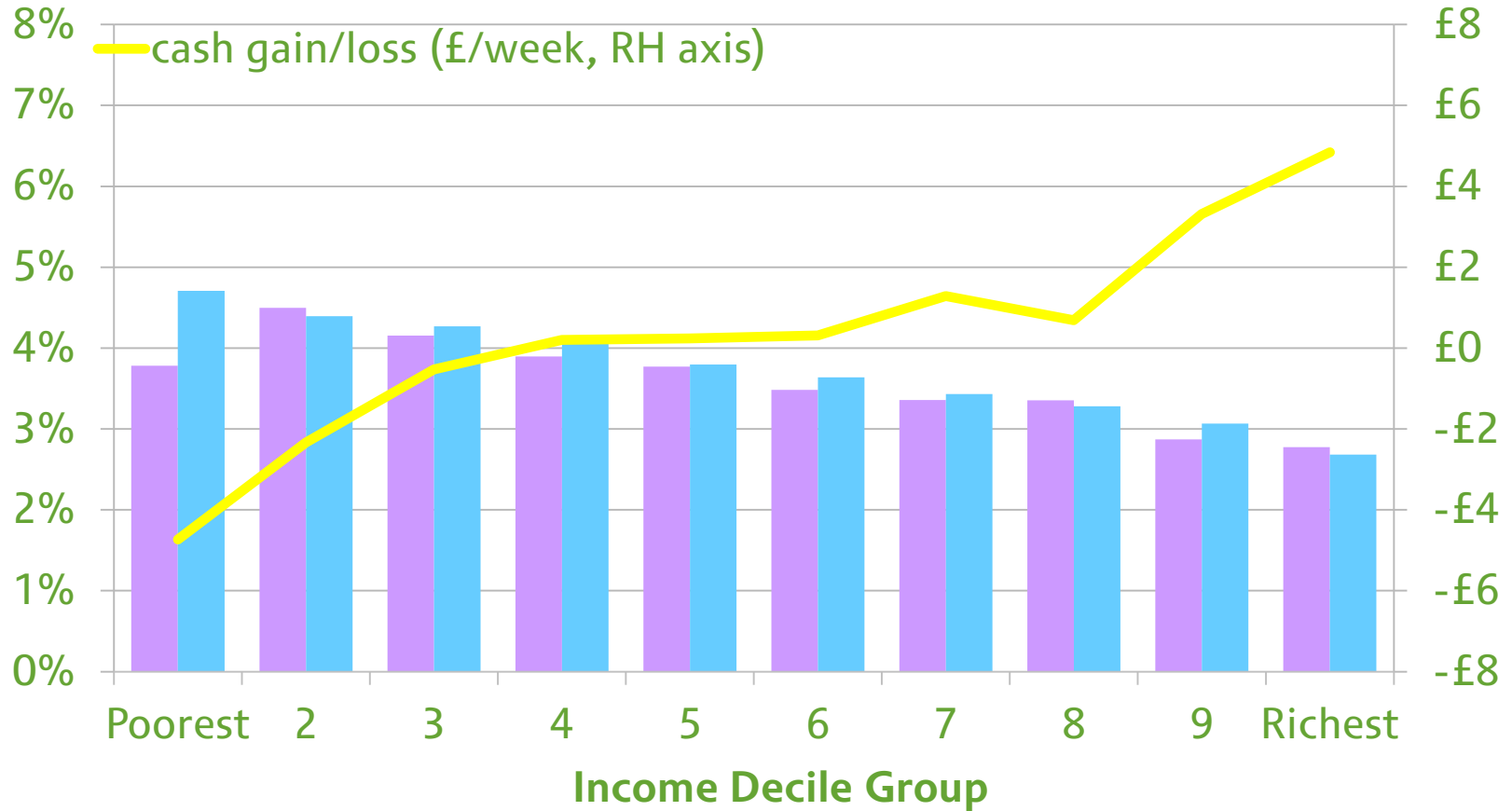


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- This had a big effect on inequality
- Other spending is also equalising
  - *At least* in the sense that cost of service provided is a higher proportion of income of poor than of rich
- And spending on the welfare state has become much more important over time
- A lot of that spending now more skewed to those on low incomes
- And just as with measuring living standards need be clear what measure of inequality government is impacting on

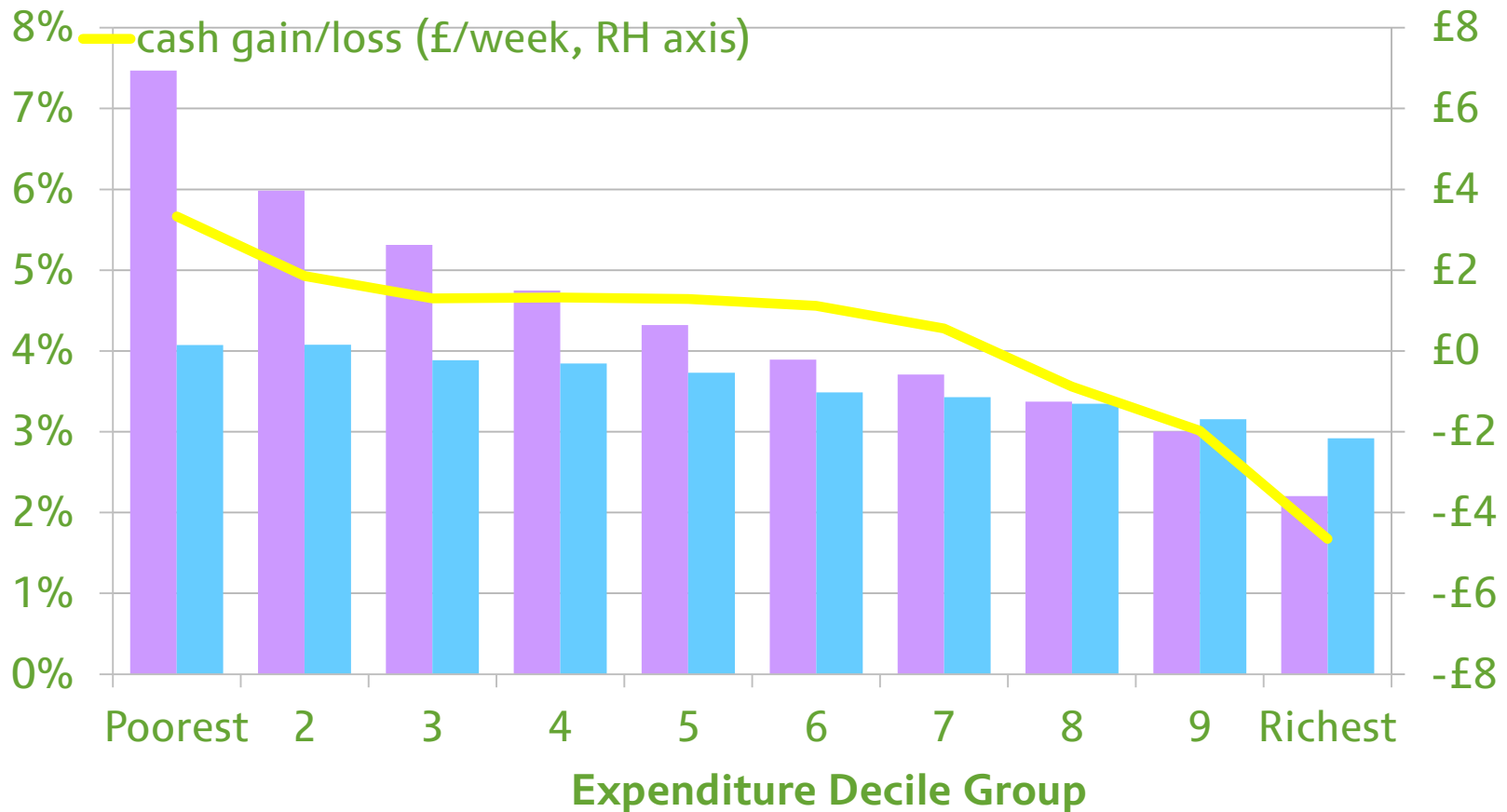
# VAT reform: effects by income

■ % rise in non-housing expenditure ■ % rise in income



# VAT reform: effects by expenditure

■ % rise in non-housing expenditure ■ % rise in income



# To conclude

- The HBAI story tells us what has happened to household incomes over time
  - But only on a particular measure
  - Using a broader measure of income changes the picture between groups
  - And inequality in measured consumption has grown much less
- Redistribution through the welfare system over recent years has been very important
  - Though very costly and being partially reversed
- And don't forget the wider role of the state in redistributing
  - Nor the costs (as well as the benefits) inherent in that redistribution