Institute for Fiscal Studies

Public economics: Inequality and Poverty

Chris Belfield

© Institute for Fiscal Studies

Overview

- Measuring living standards
  - Why do we use income?
  - Accounting for inflation and family composition
- Income Inequality
  - The UK income distribution
  - Measures of income inequality
  - Income inequality across and within ages
- Income Poverty
  - Measuring income poverty
  - How do we treat housing costs?
- Summary

© Institute for Fiscal Studies

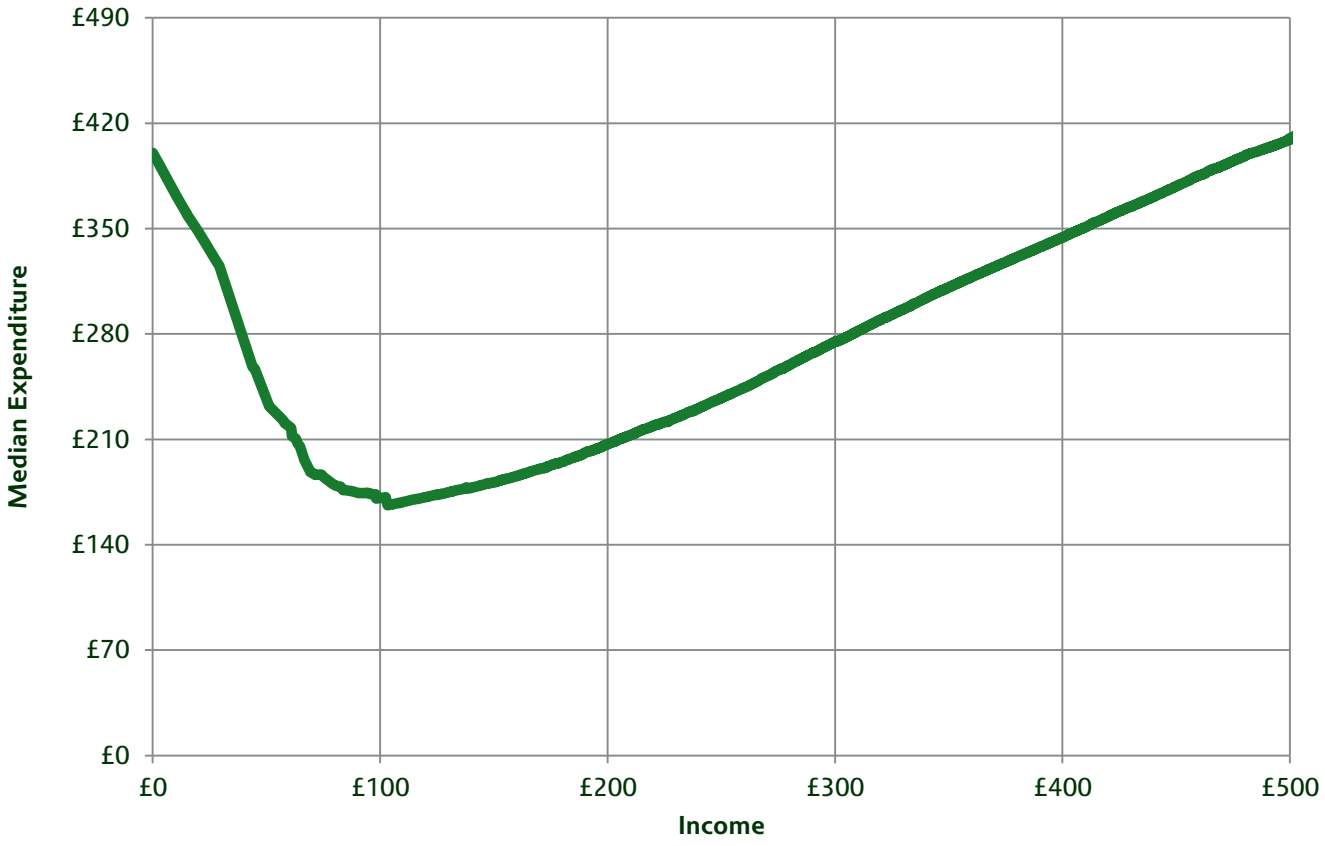
Why income?

- Economic analysis tends to focus on income inequality and income poverty
  - not because income is the only thing that matters…
  - …but because it is arguably the best measure of living standards we've got

- Consumption may be conceptually a better indicator of living standards
  - Income snapshots can be misleading
  - But it is difficult to measure…

© Institute for Fiscal Studies

Those with the lowest incomes do not have the lowest consumption…



Source: Brewer and O'Dea (2012)

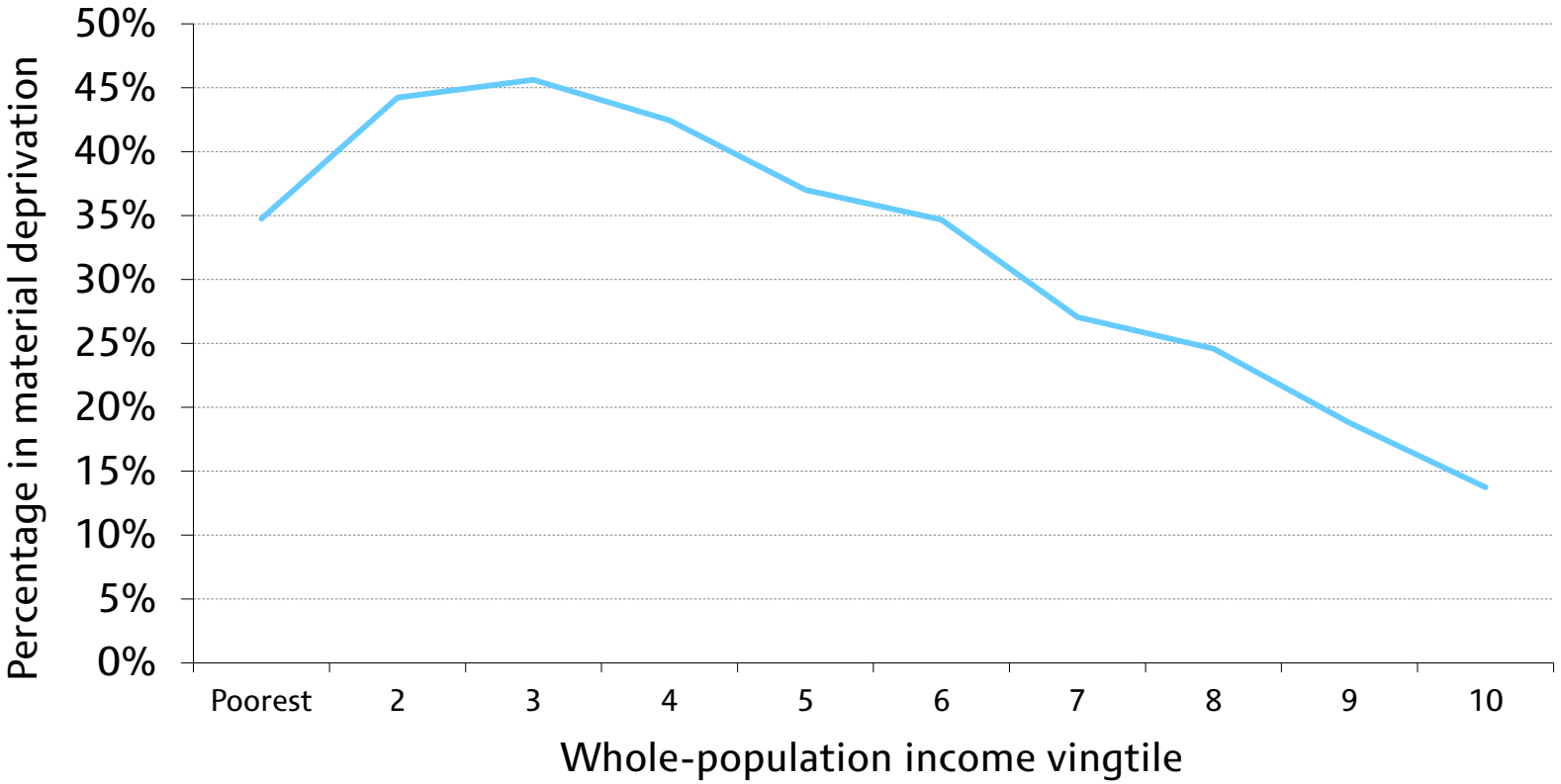
Institute for Fiscal Studies

Material Deprivation

- We can also look at another measure of hardship – material deprivation
- This is an indicator of families being unable to afford certain items
  - e.g a warm winter coat or to save £10 a month
- The answers to these questions are used to create a "deprivation score" out of 100
  - If more than 25 then classed as materially deprived
- Items that the majority of the population can afford are given more weight

© Institute for Fiscal Studies

… Nor are they most likely to be materially deprived



Source: Figure 5.7 of ***Living Standards, Poverty and Inequality: 2015***

Measurement of income

- Income as measured by government in “Households Below Average Income” (HBAI)
- Based on Family Resources Survey (from 1994-5 onwards)
  - 20,000 households across the UK
  - Subject to sampling error
- Income is measured net of direct taxes and benefits
- Measured at the household level (implicitly assumes income sharing)
- Adjusted for inflation

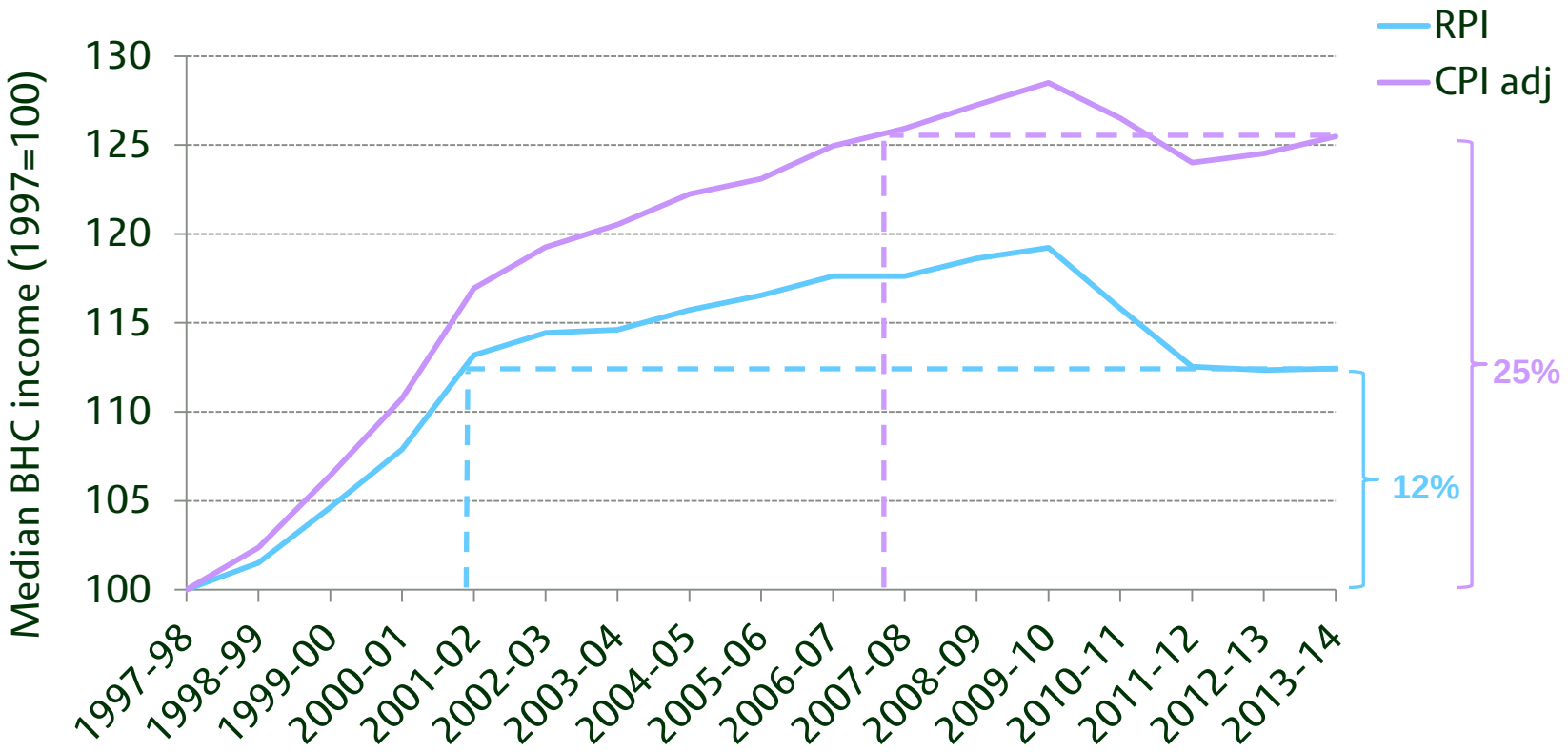
© Institute for Fiscal Studies

RPI and its problems

- In the official statistics RPI is used to account for inflation over time
- However recently RPI has been thought to overstate inflation due to a "formula effect"
  - Given the same price changes the RPI methodology will measure inflation to be around 1% higher than CPI
- It has been declassified as an official statistic
- An alternatives include RPIJ and CPIH…
- …but we use a variant of CPI we constructed ourselves

© Institute for Fiscal Studies

Adjusting for inflation



Notes: The RPI line is in fact RPI minus council tax, the inflation measure currently used to adjust HBAI incomes

© Institute for Fiscal Studies

Institute for Fiscal Studies

Measurement of income

- Income as measured by government in “Households Below Average Income” (HBAI)
- Based on Family Resources Survey (from 1994-5 onwards)
  - 25,000 households across the UK
  - Subject to sampling error
- Income is measured net of direct taxes and benefits
- Measured at the household level (implicitly assumes income sharing)
- Adjusted for inflation
- Adjusted for household size (equivalised)

© Institute for Fiscal Studies

Adjusting for household size

Source: FRS data years 1968 to 2013-14

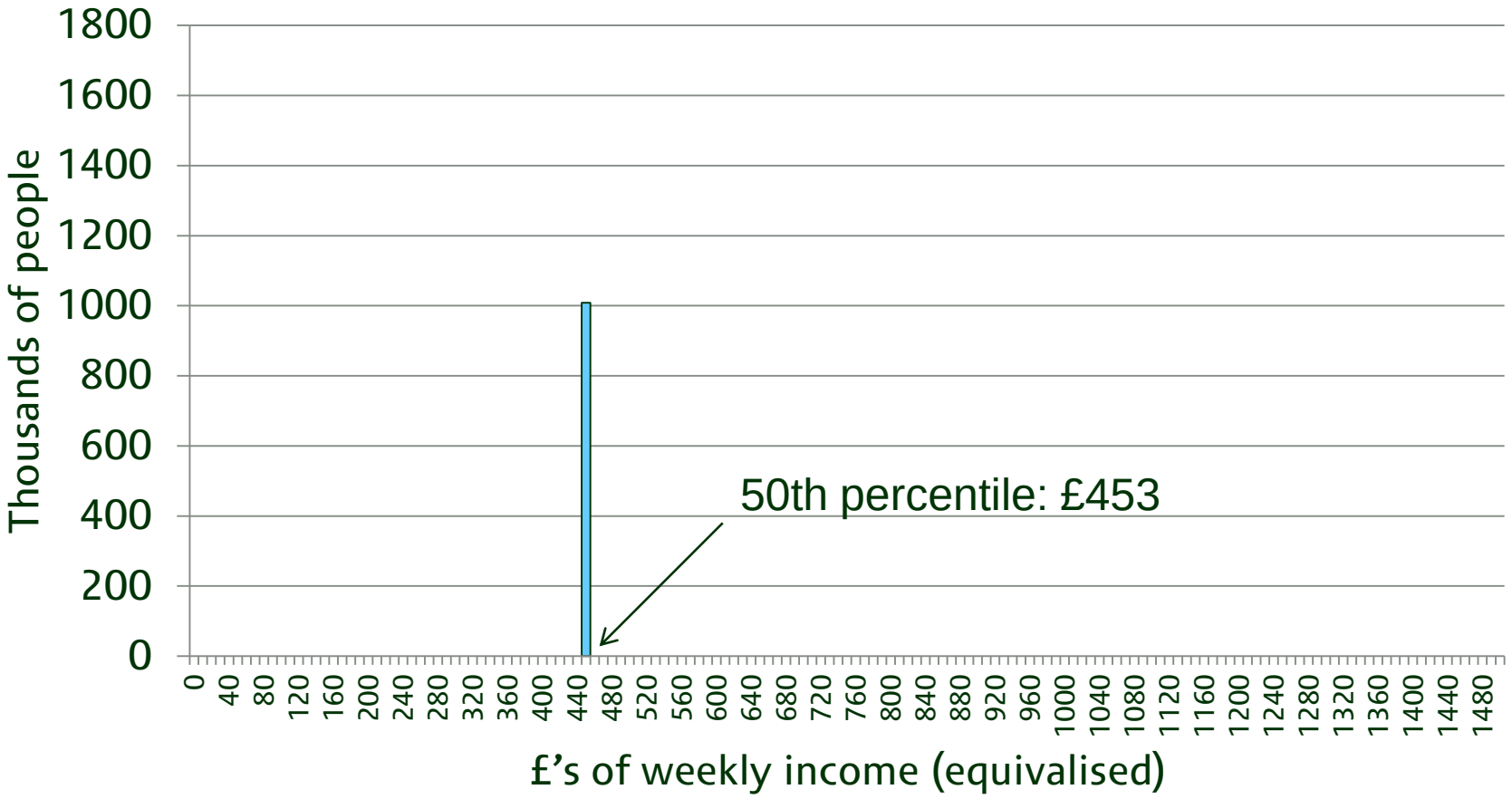
© Institute for Fiscal Studies

Institute for Fiscal Studies

Income inequality

© Institute for Fiscal Studies

The UK income distribution in 2013–14

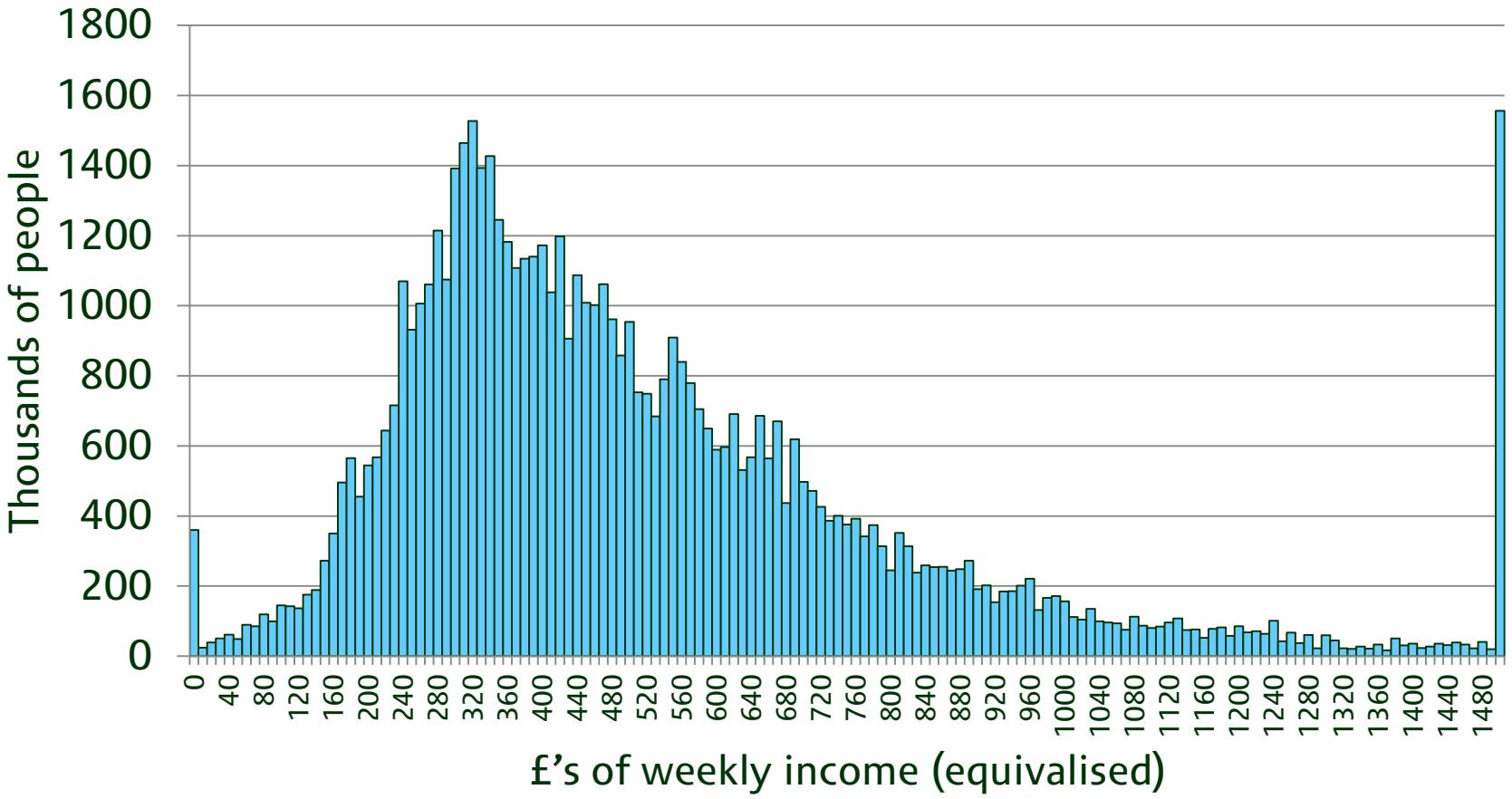


Source: Figure 3.1 of *Living Standards, Poverty and Inequality: 2014*

© Institute for Fiscal Studies

Institute for Fiscal Studies

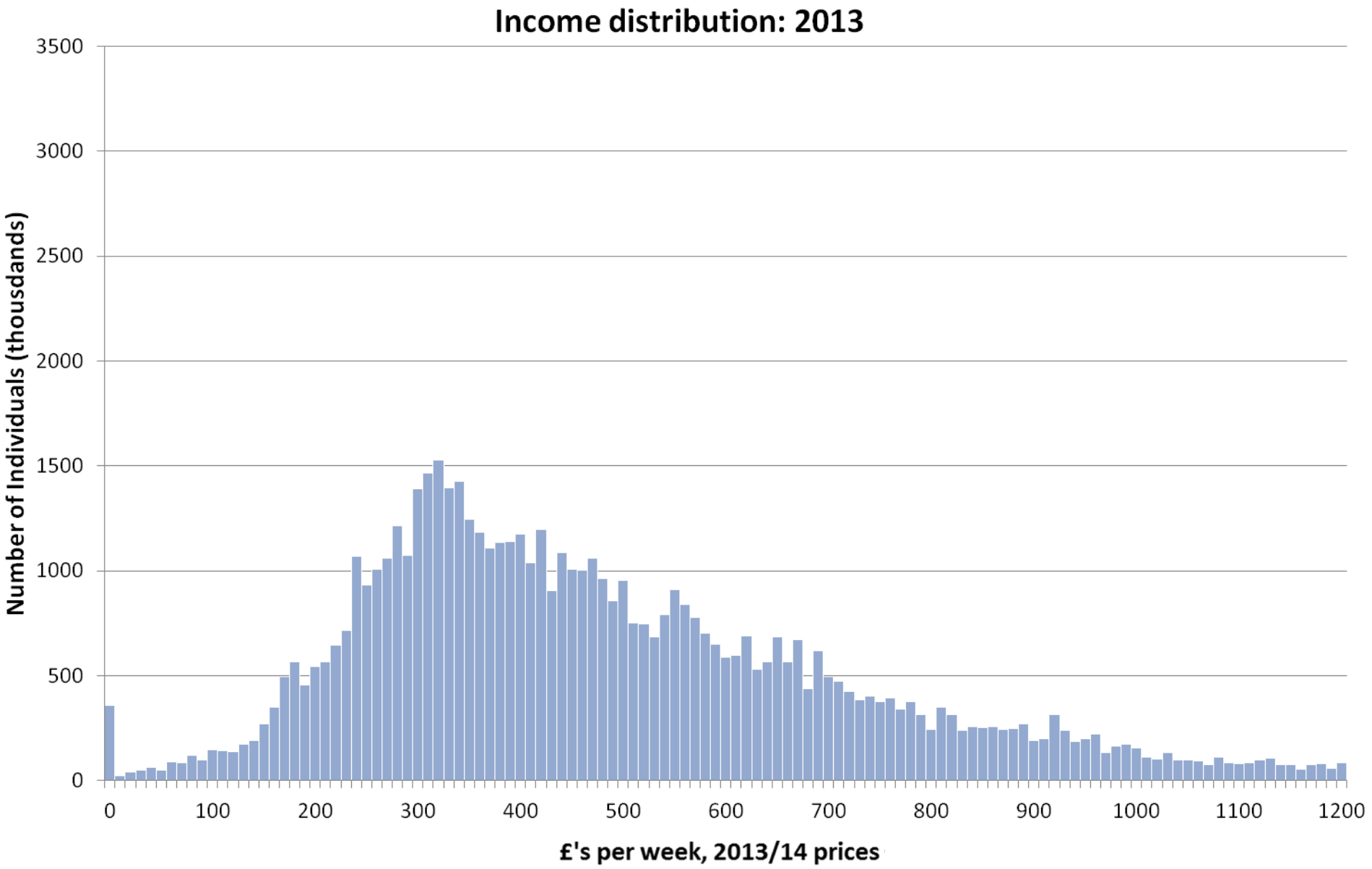
The UK income distribution in 2013–14

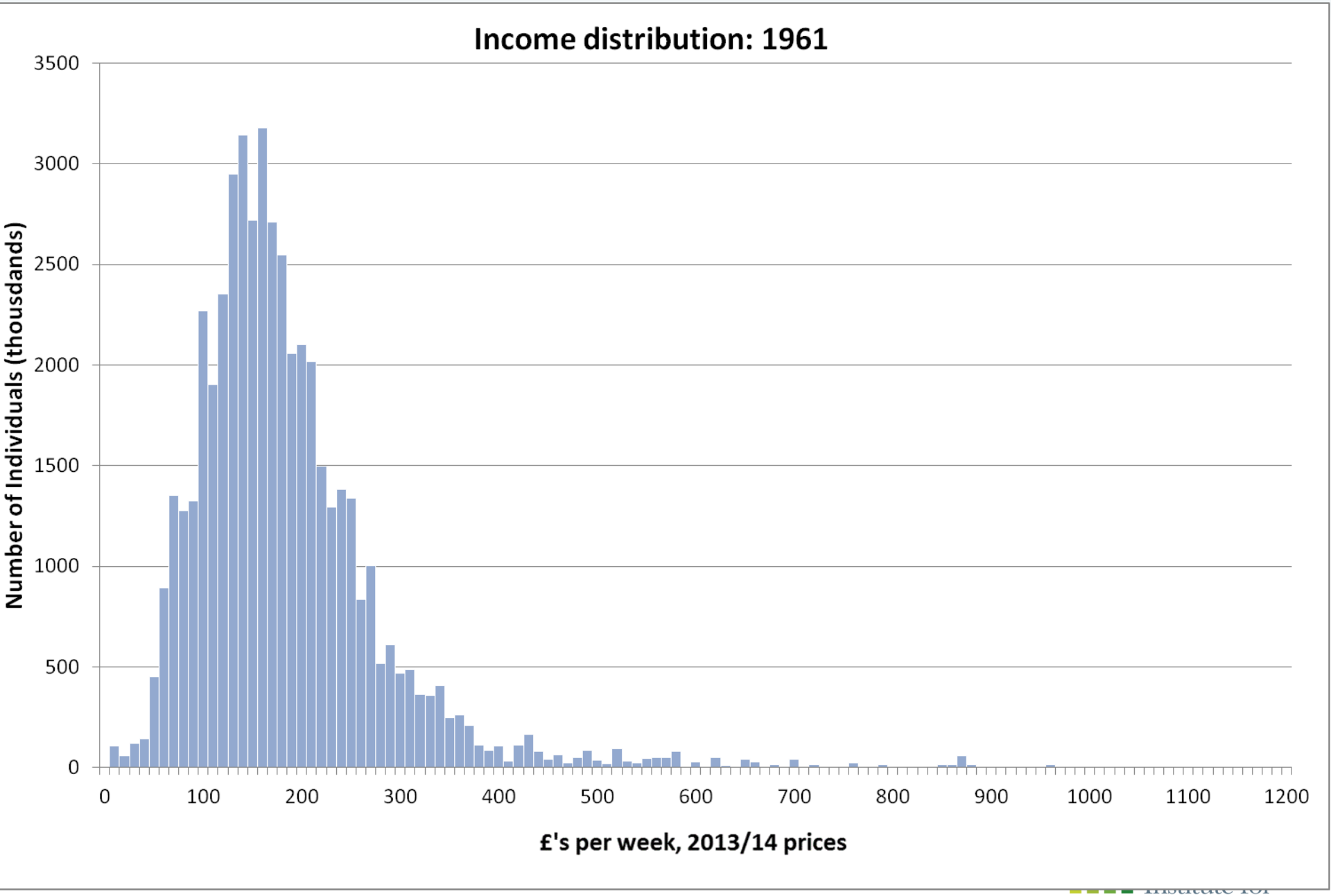


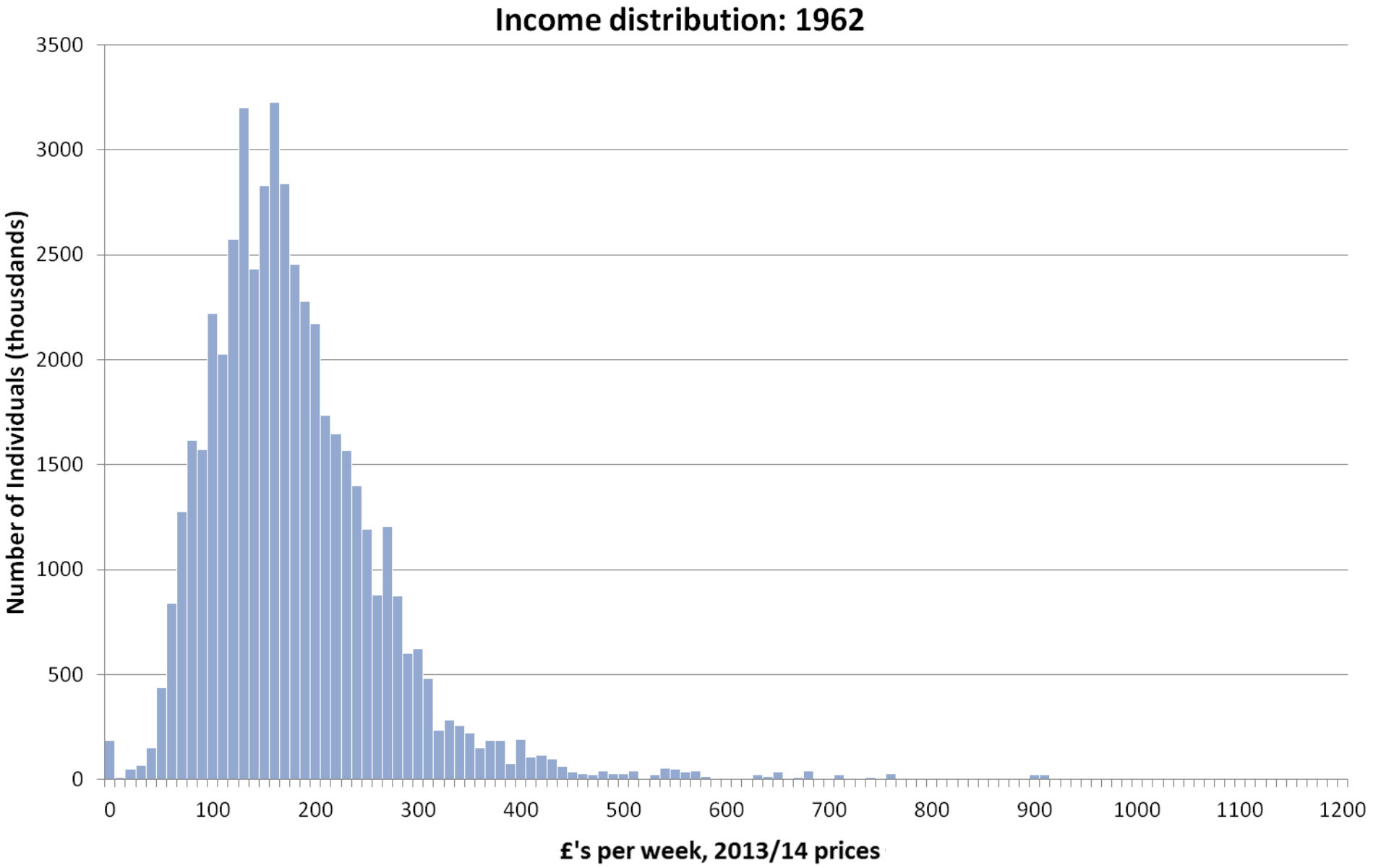
Source: Figure 3.1 of *Living Standards, Poverty and Inequality: 2014*

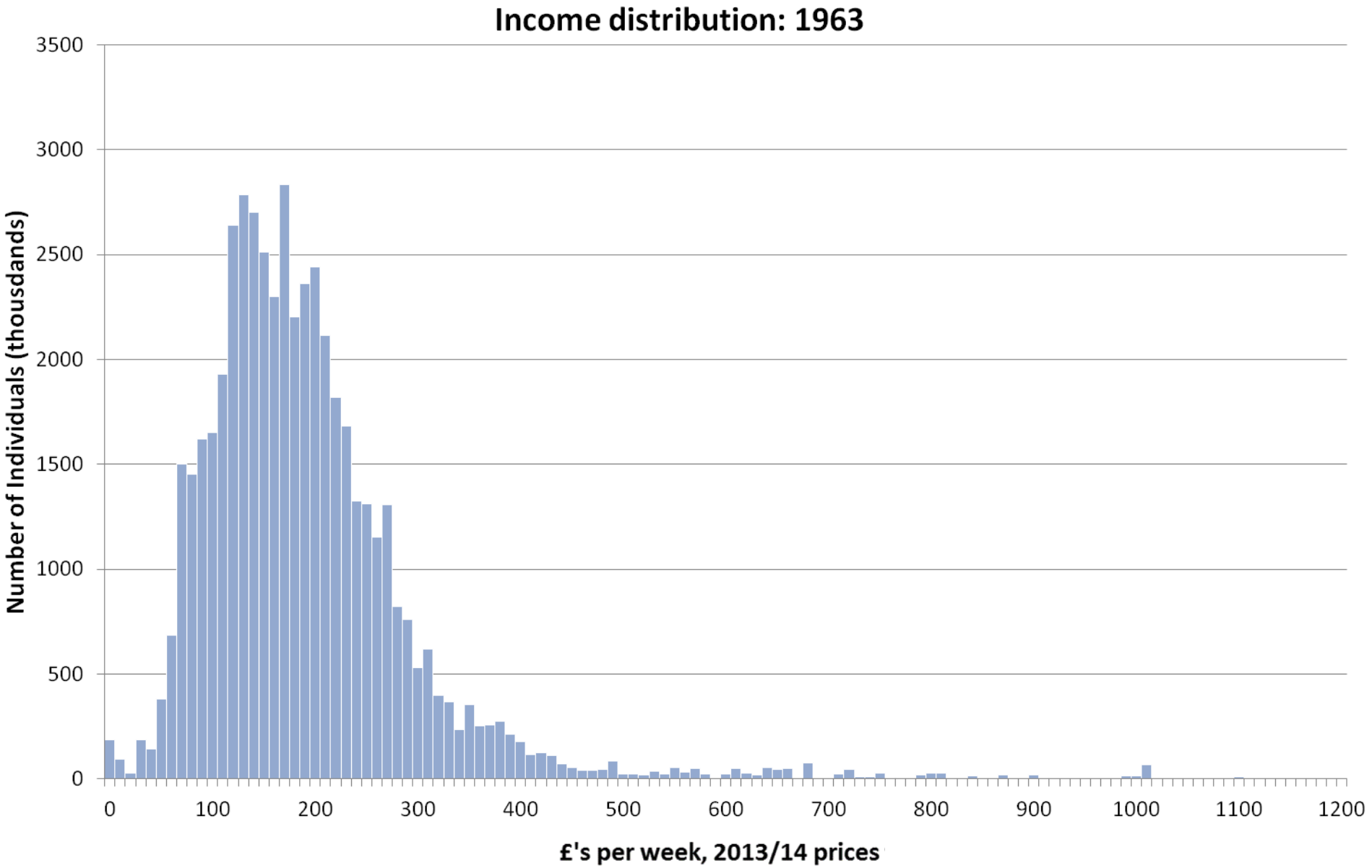
© Institute for Fiscal Studies

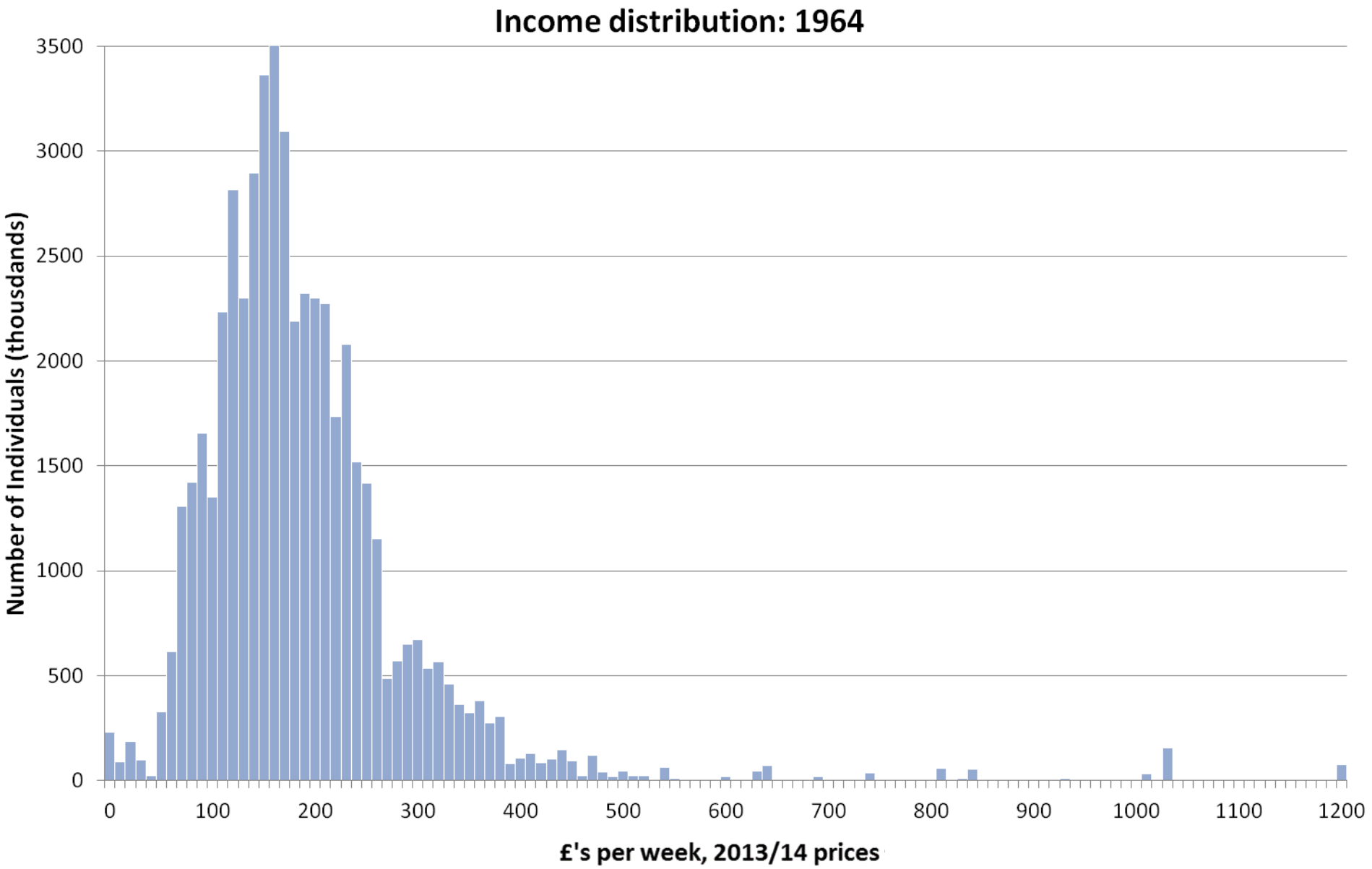
Institute for Fiscal Studies

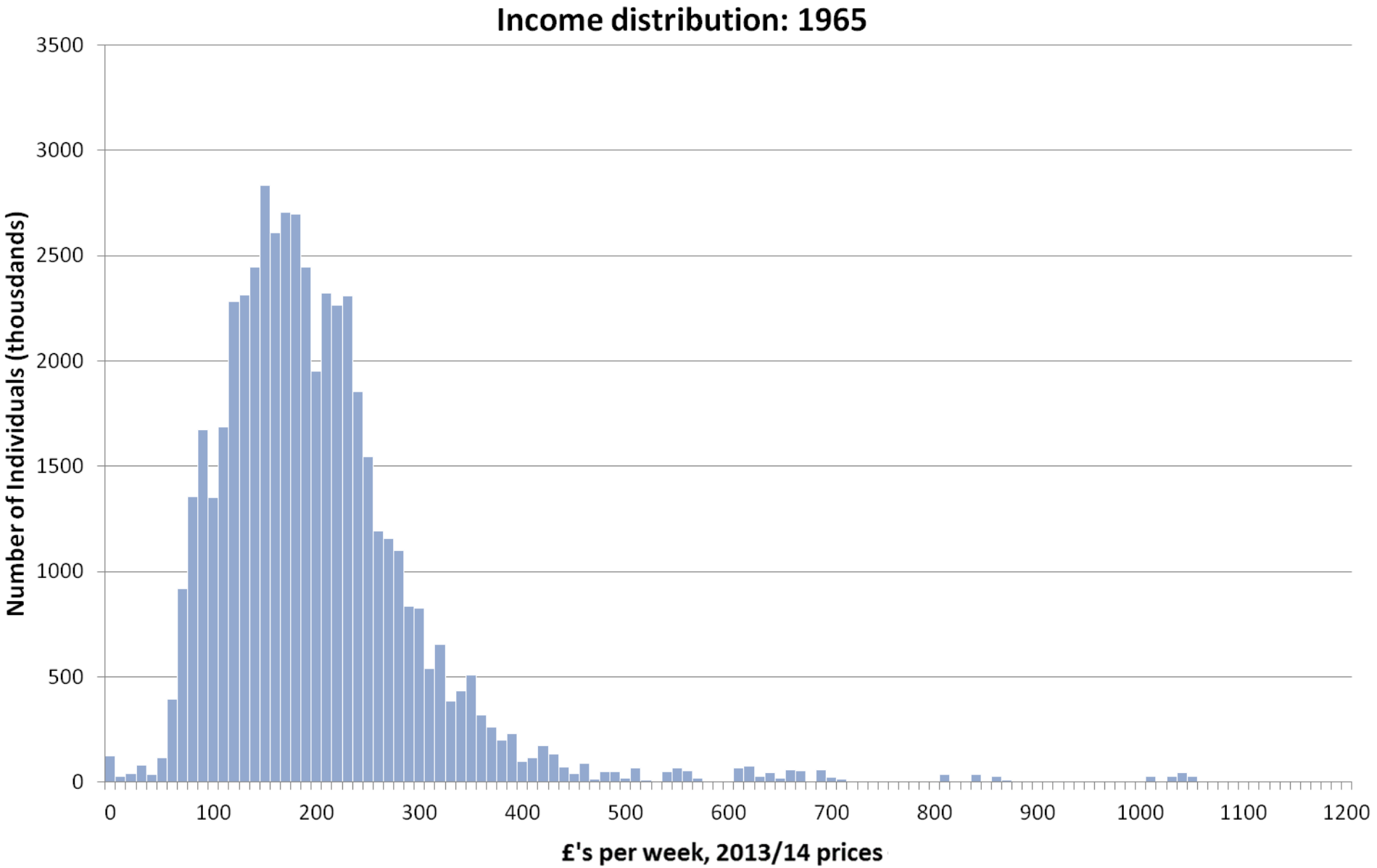

Income distribution: 2013
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

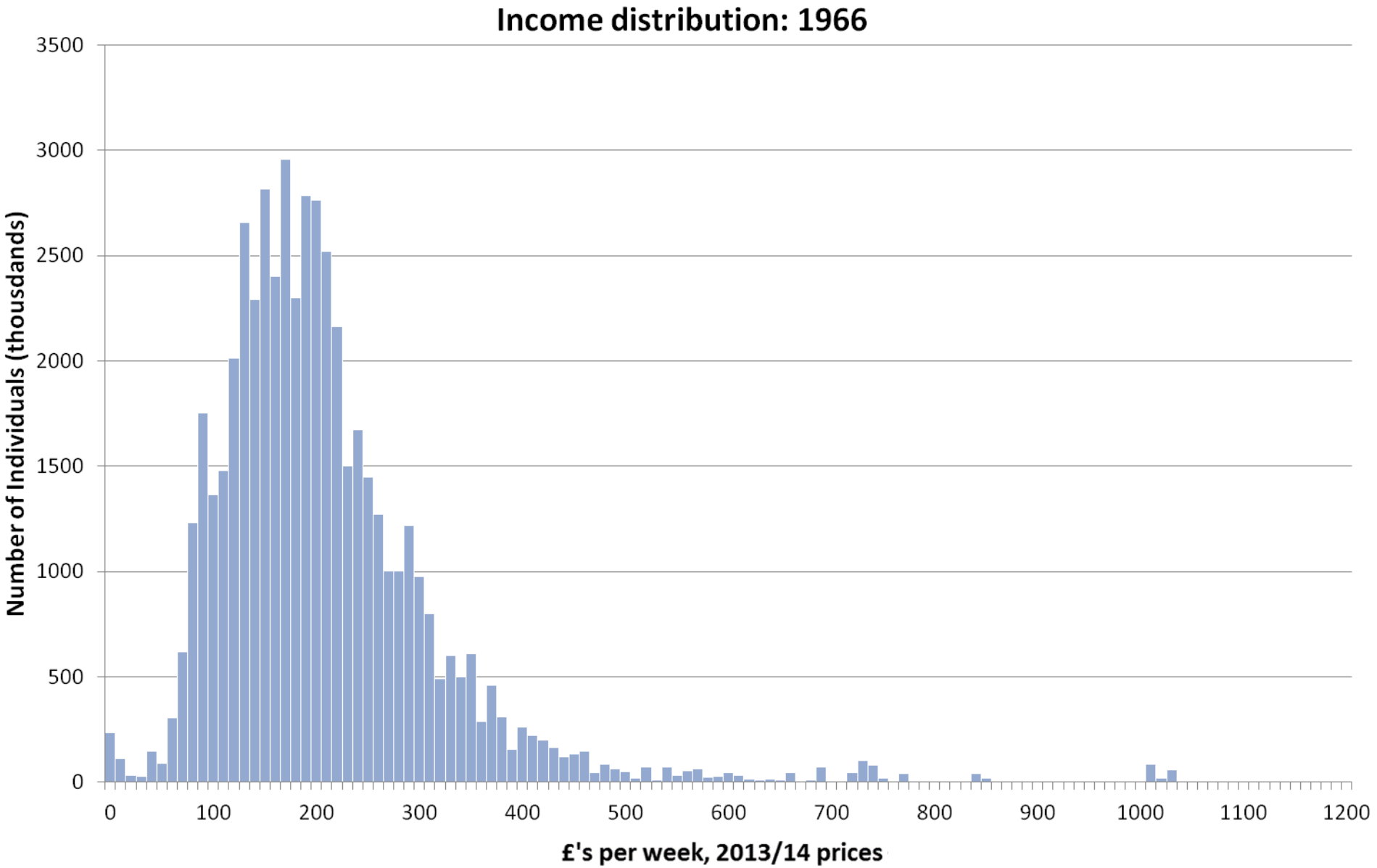

Income distribution: 1961
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

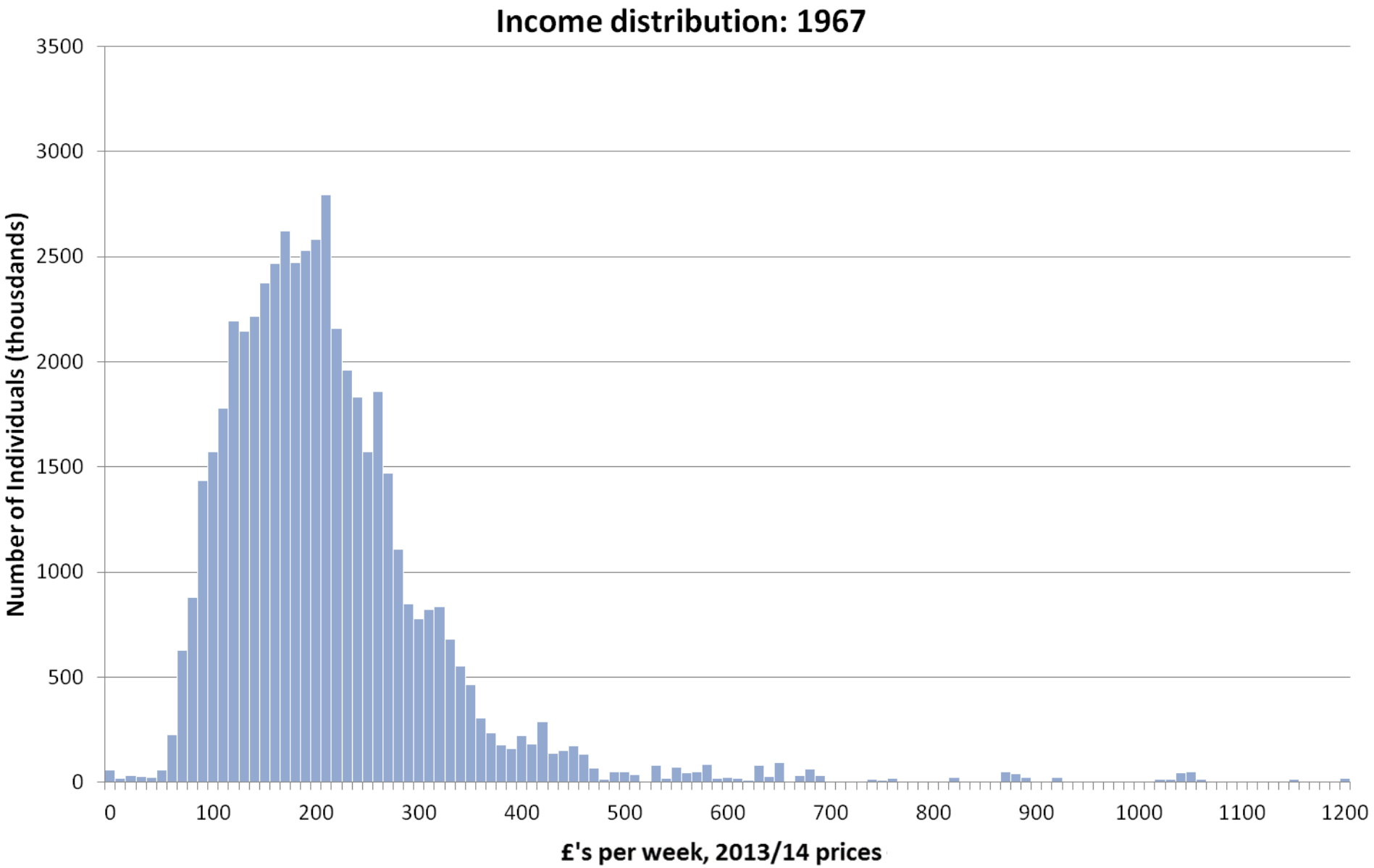

Income distribution: 1962
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

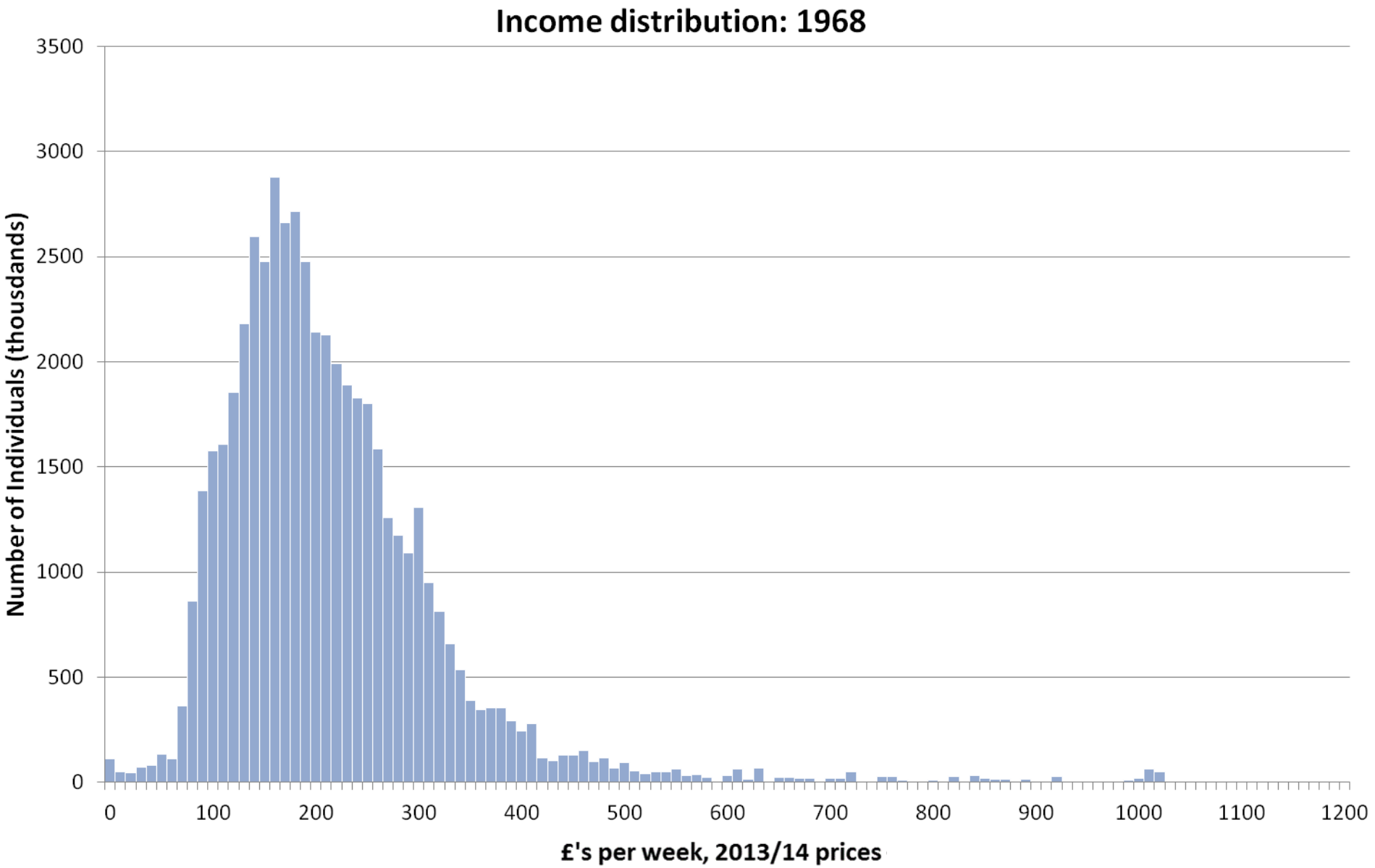

Income distribution: 1963
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

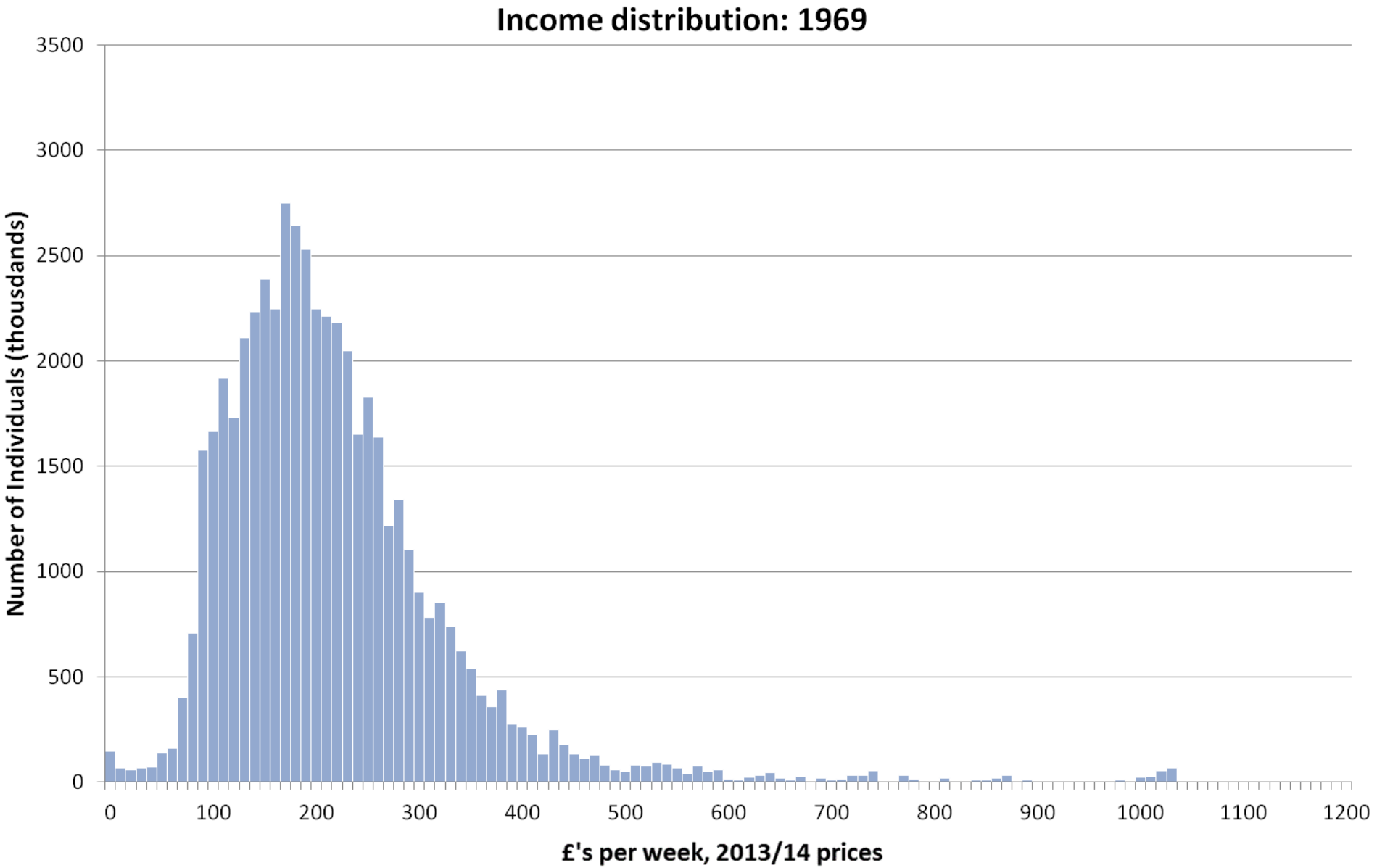

Income distribution: 1964
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

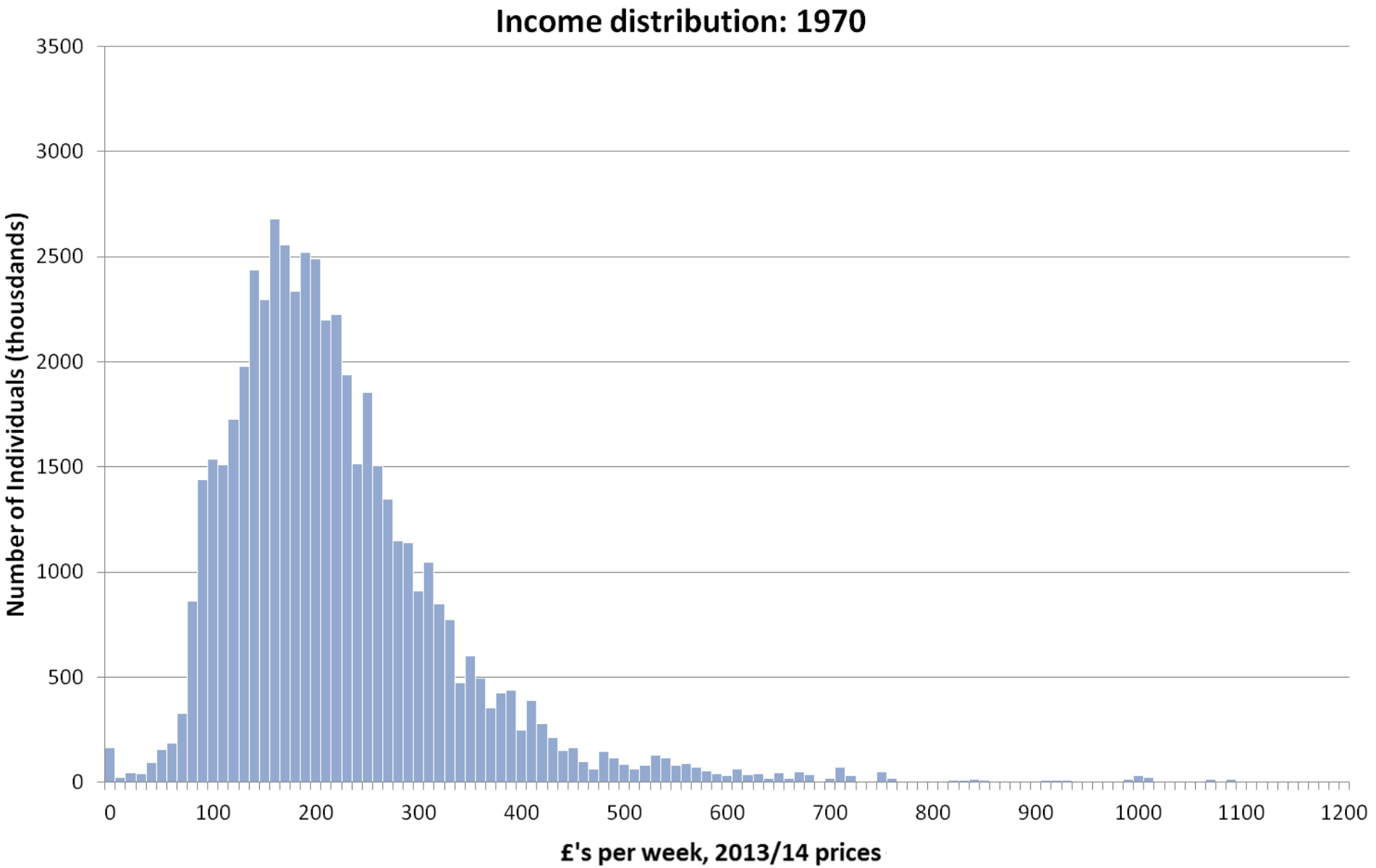

Income distribution: 1965
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

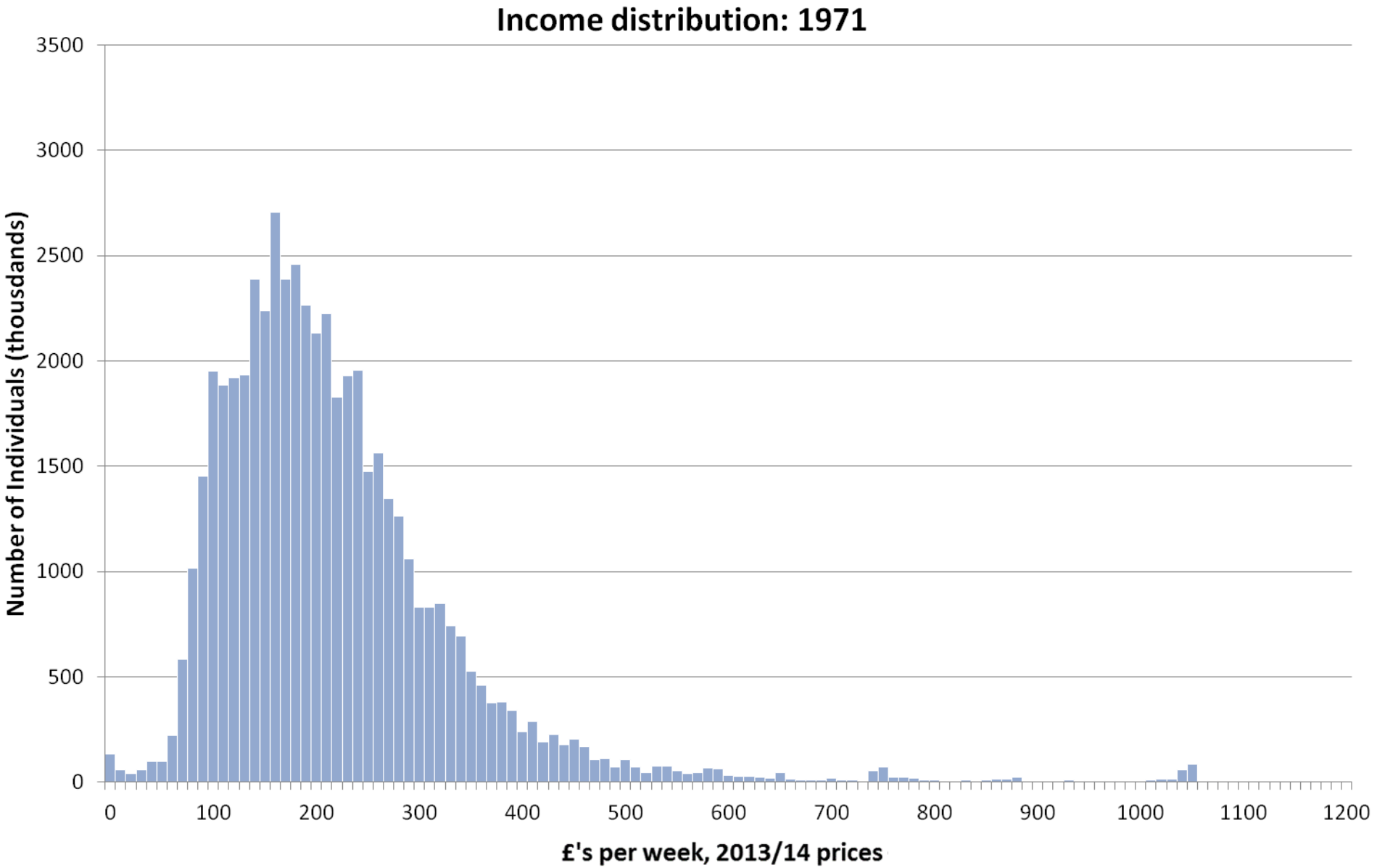

Income distribution: 1966
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

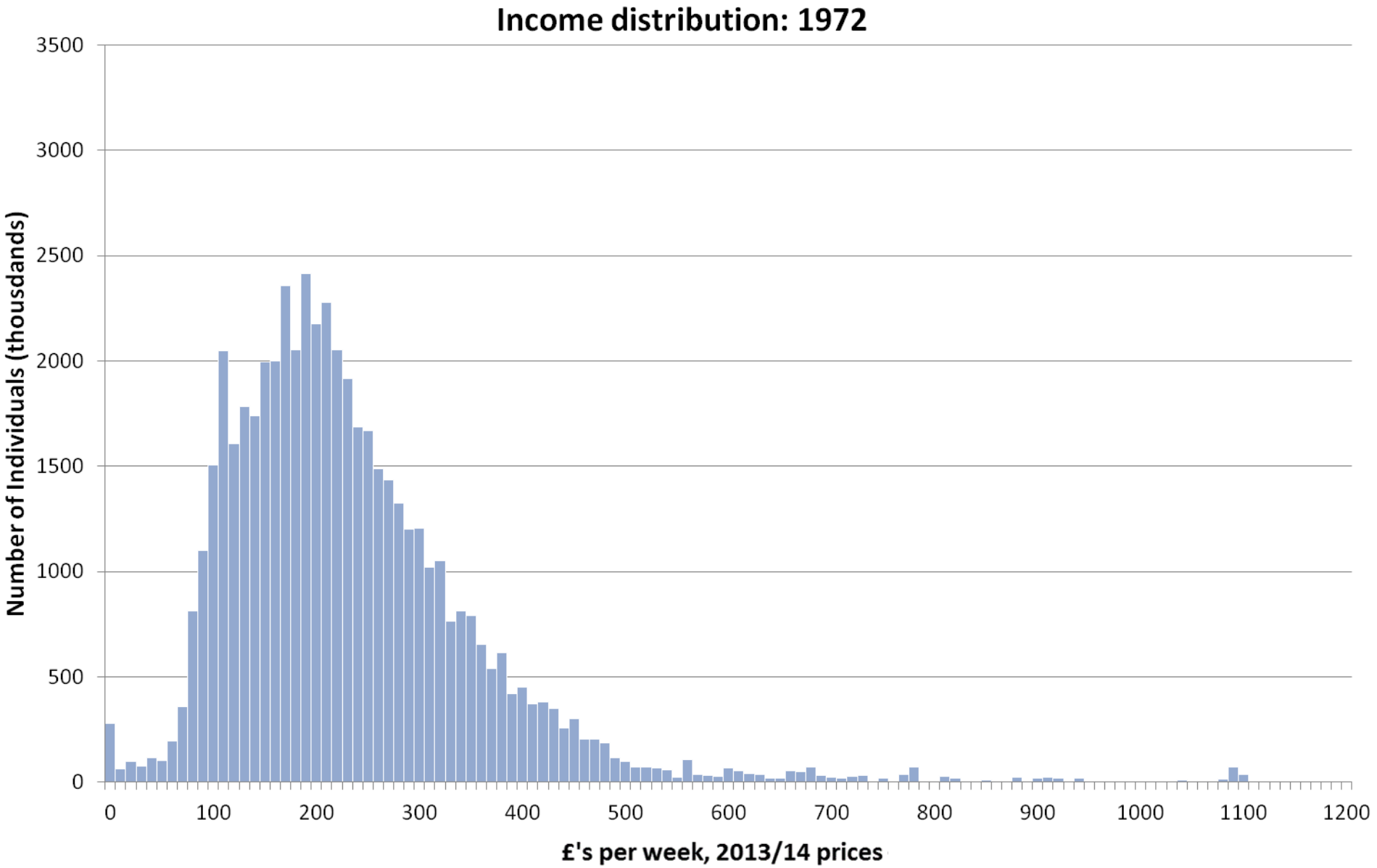

Income distribution: 1967
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

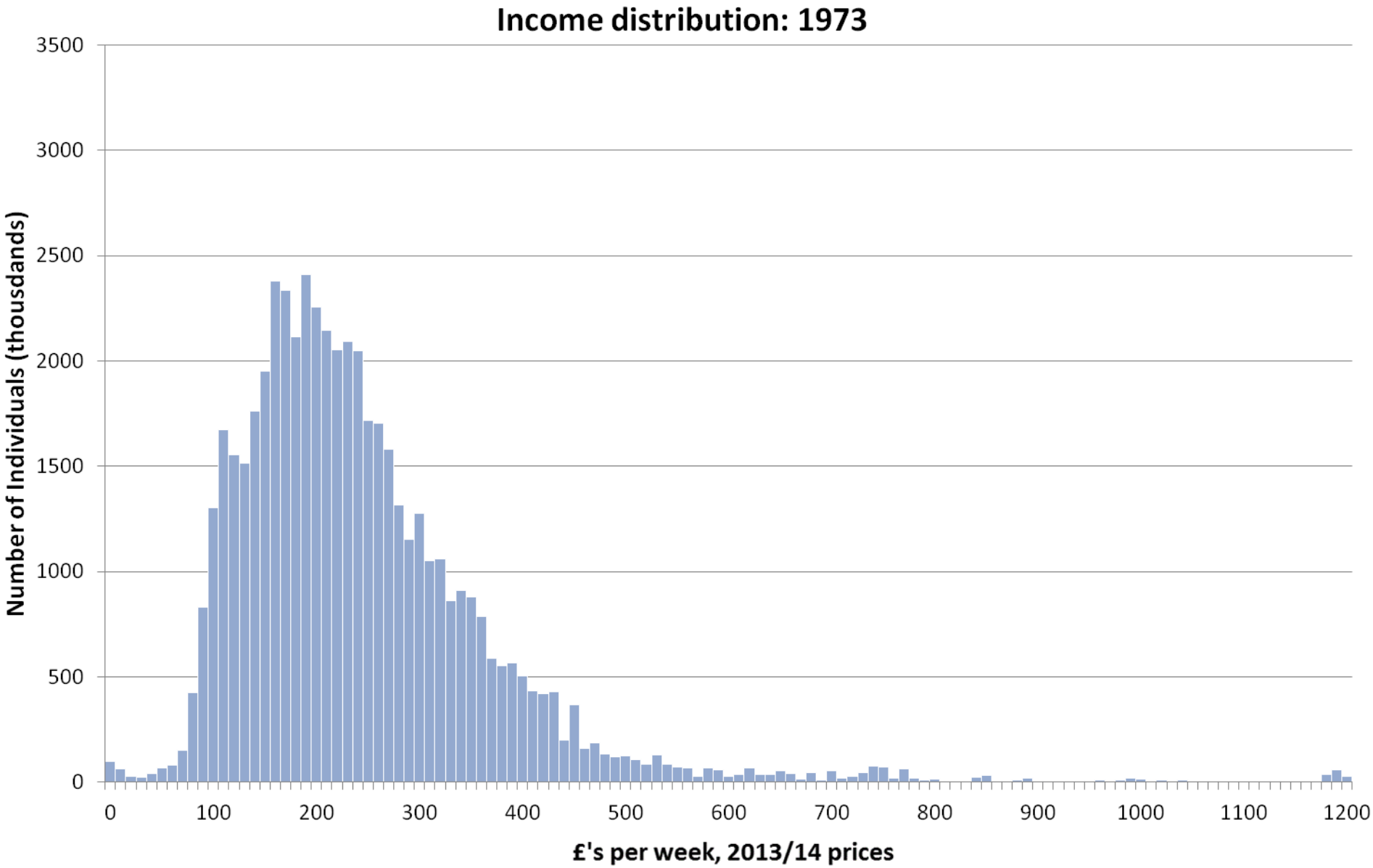

Income distribution: 1968
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

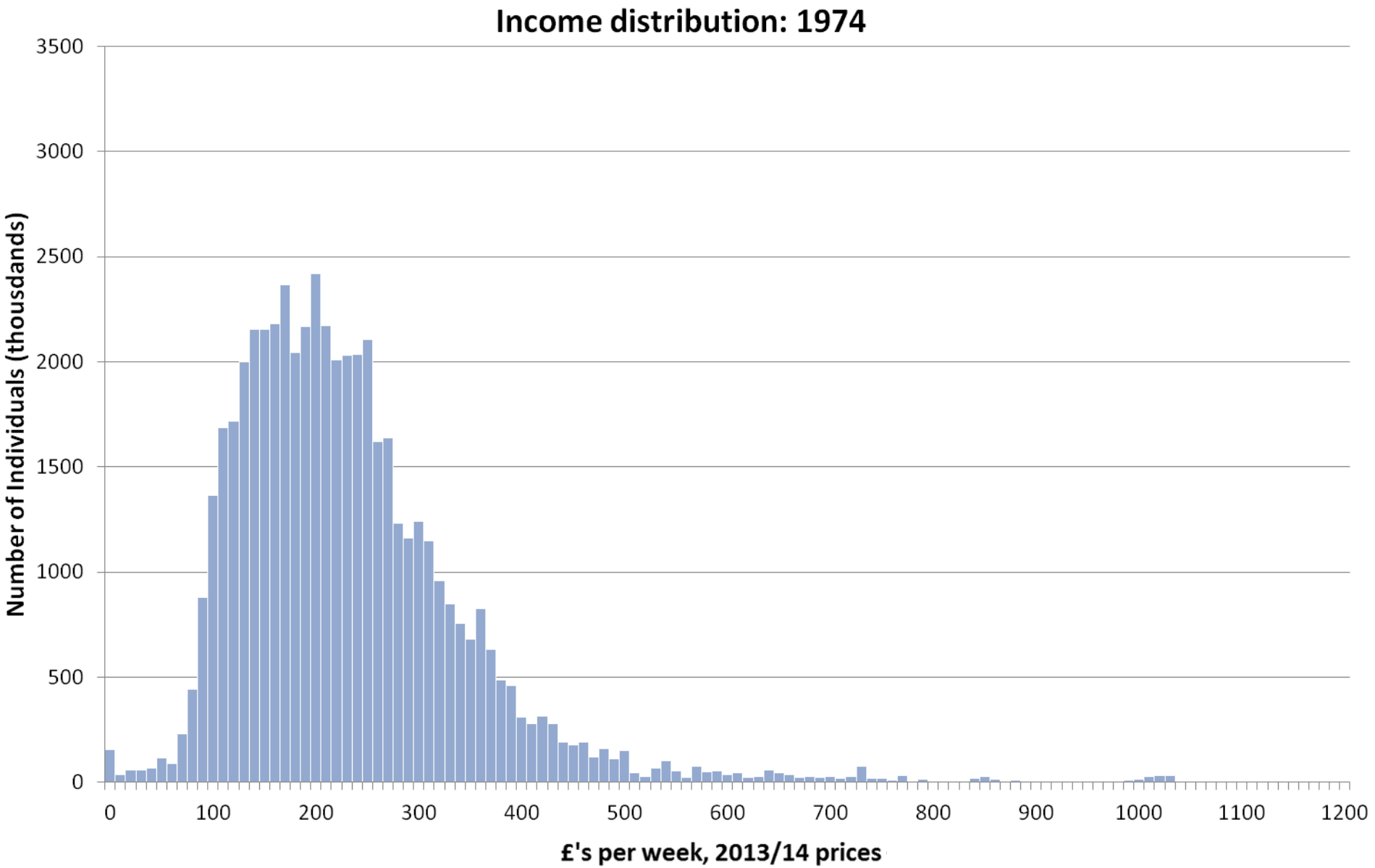

Income distribution: 1969
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

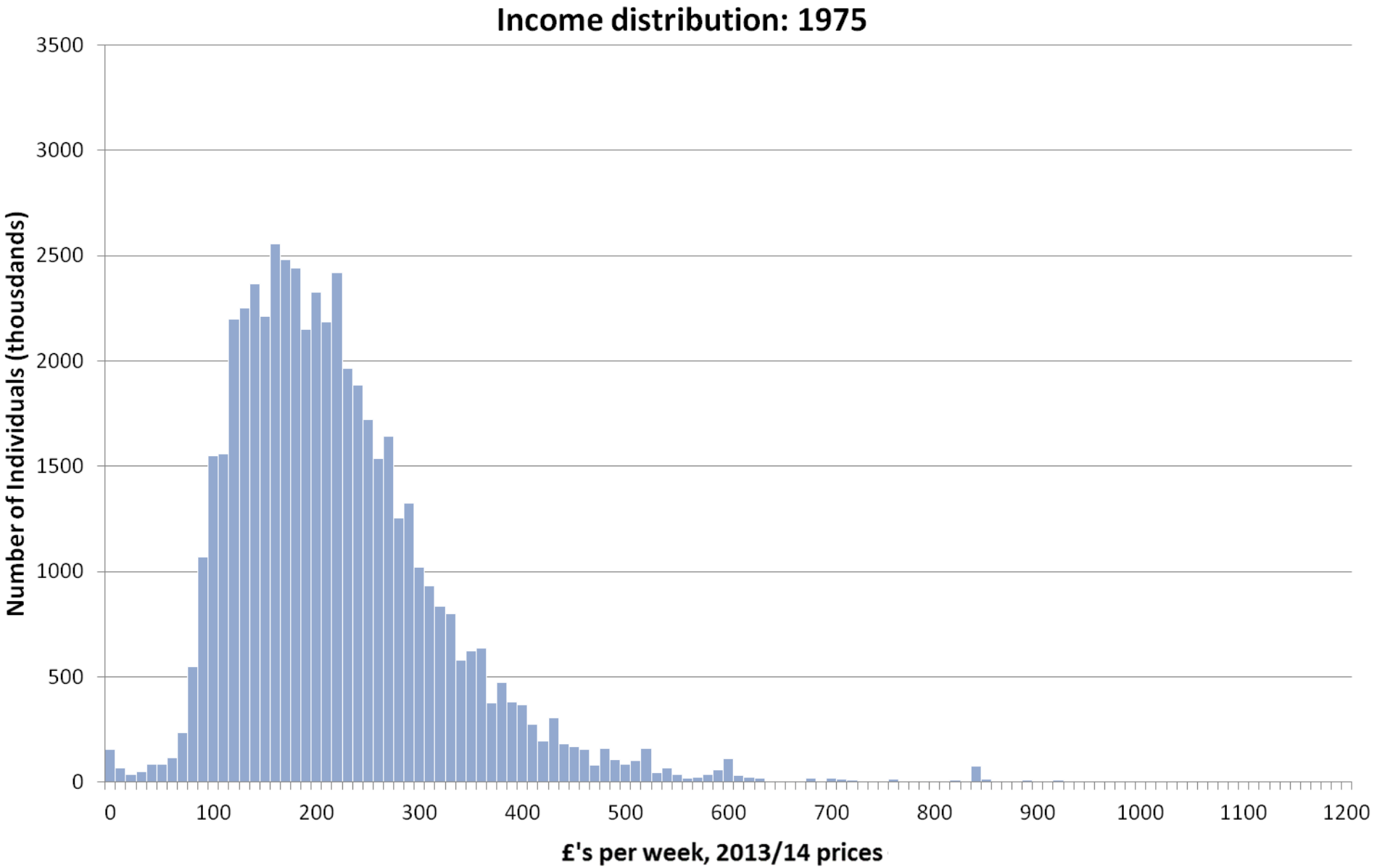

Income distribution: 1970
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

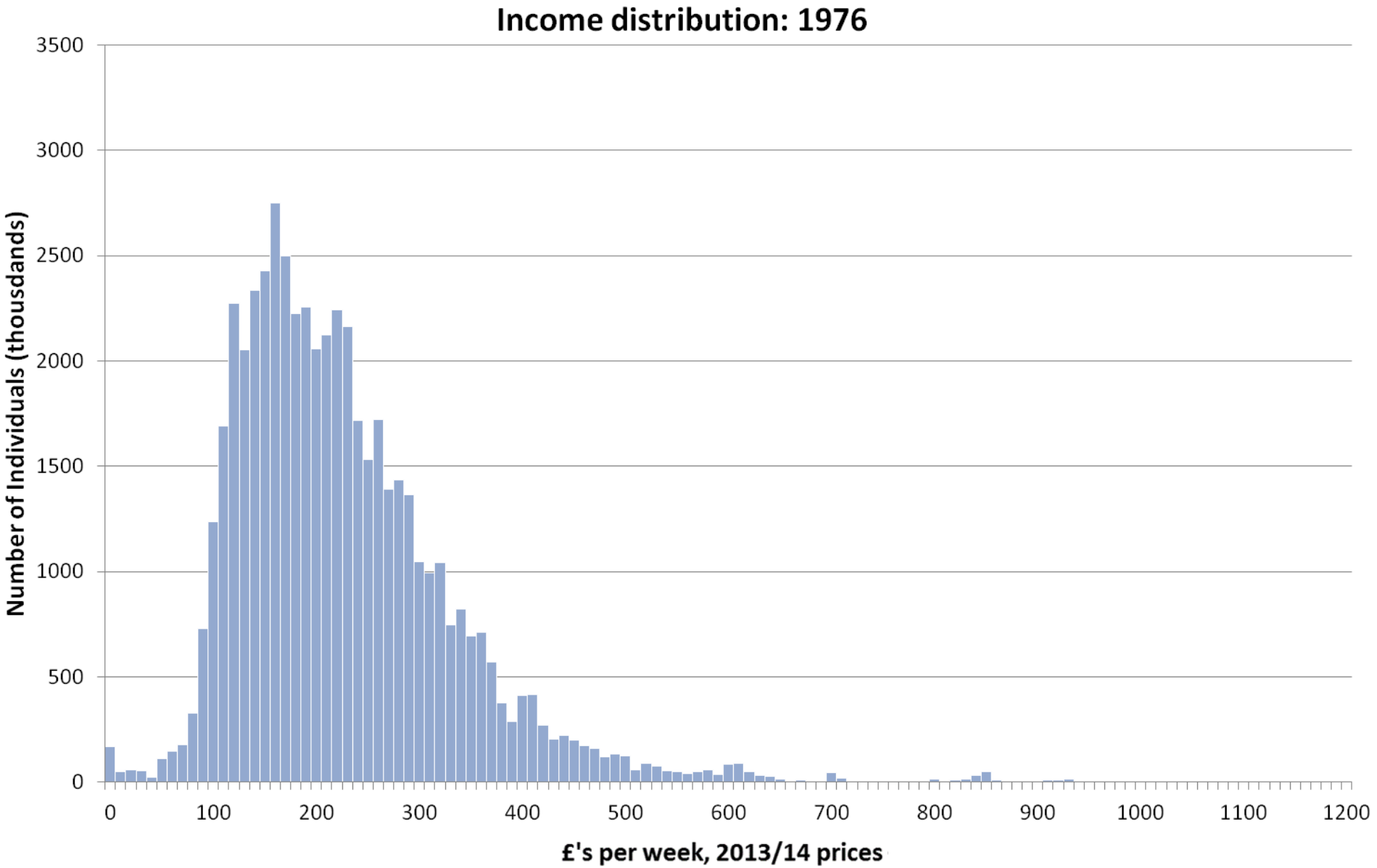

Income distribution: 1971
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

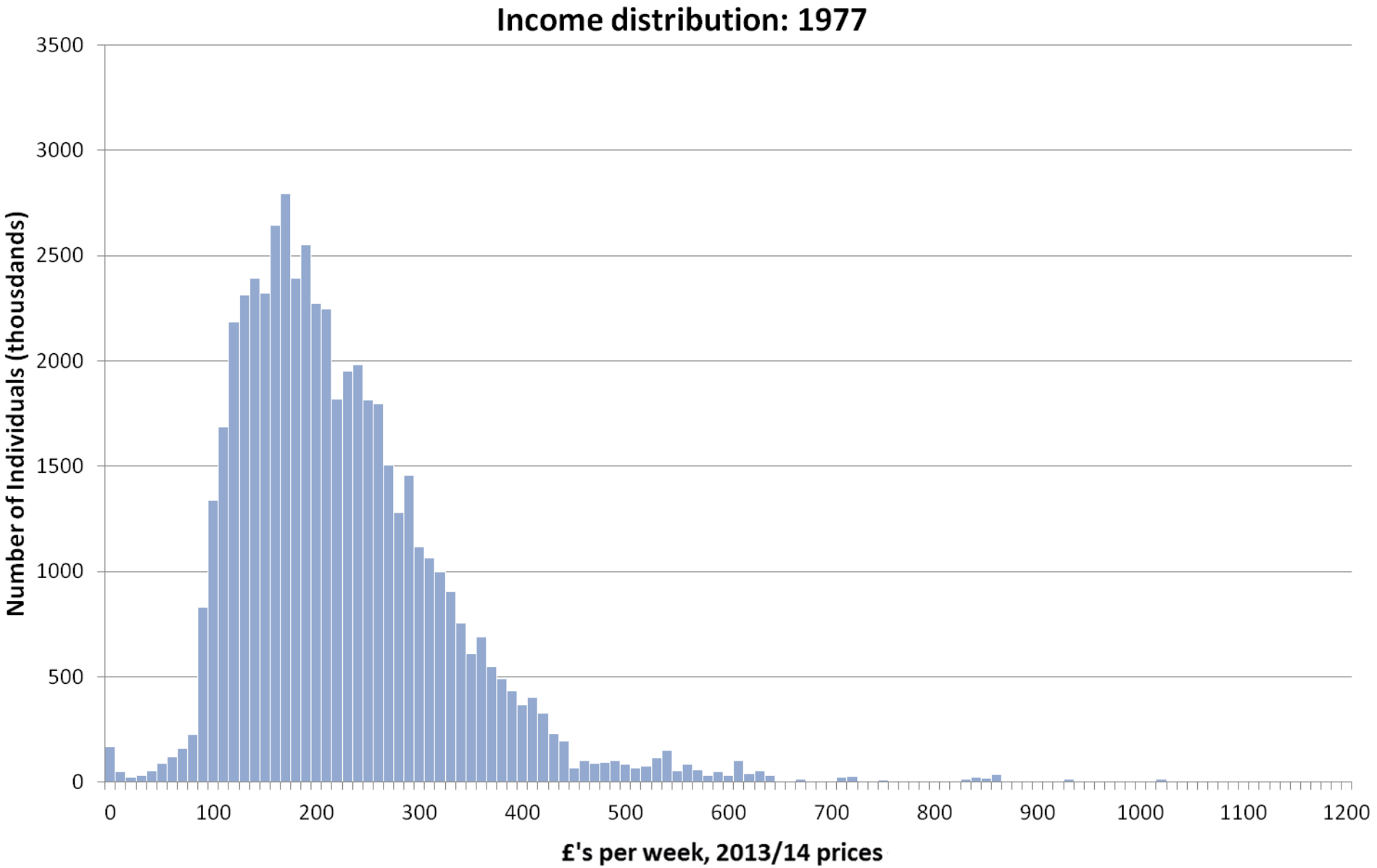

Income distribution: 1972
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

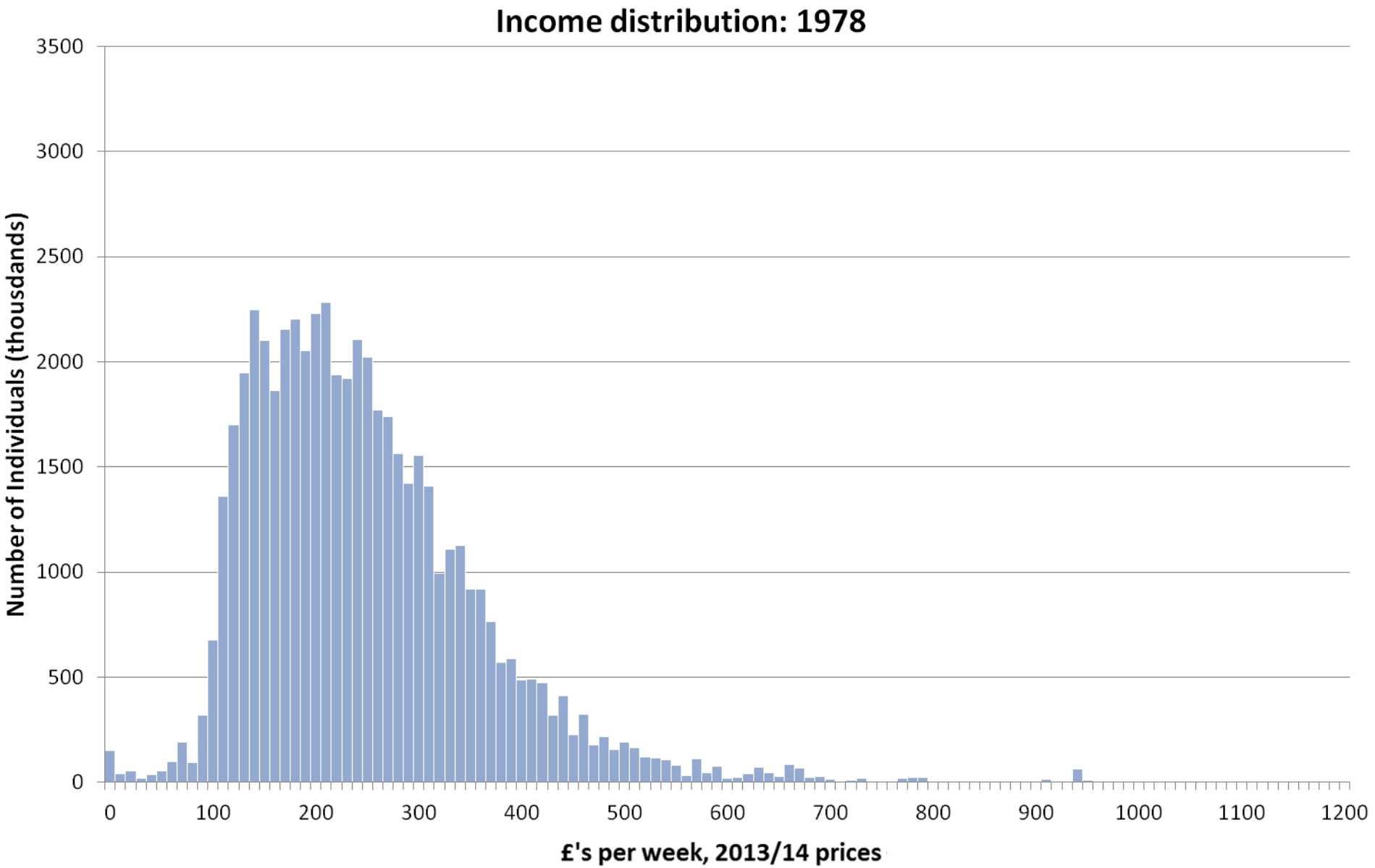

Income distribution: 1973
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

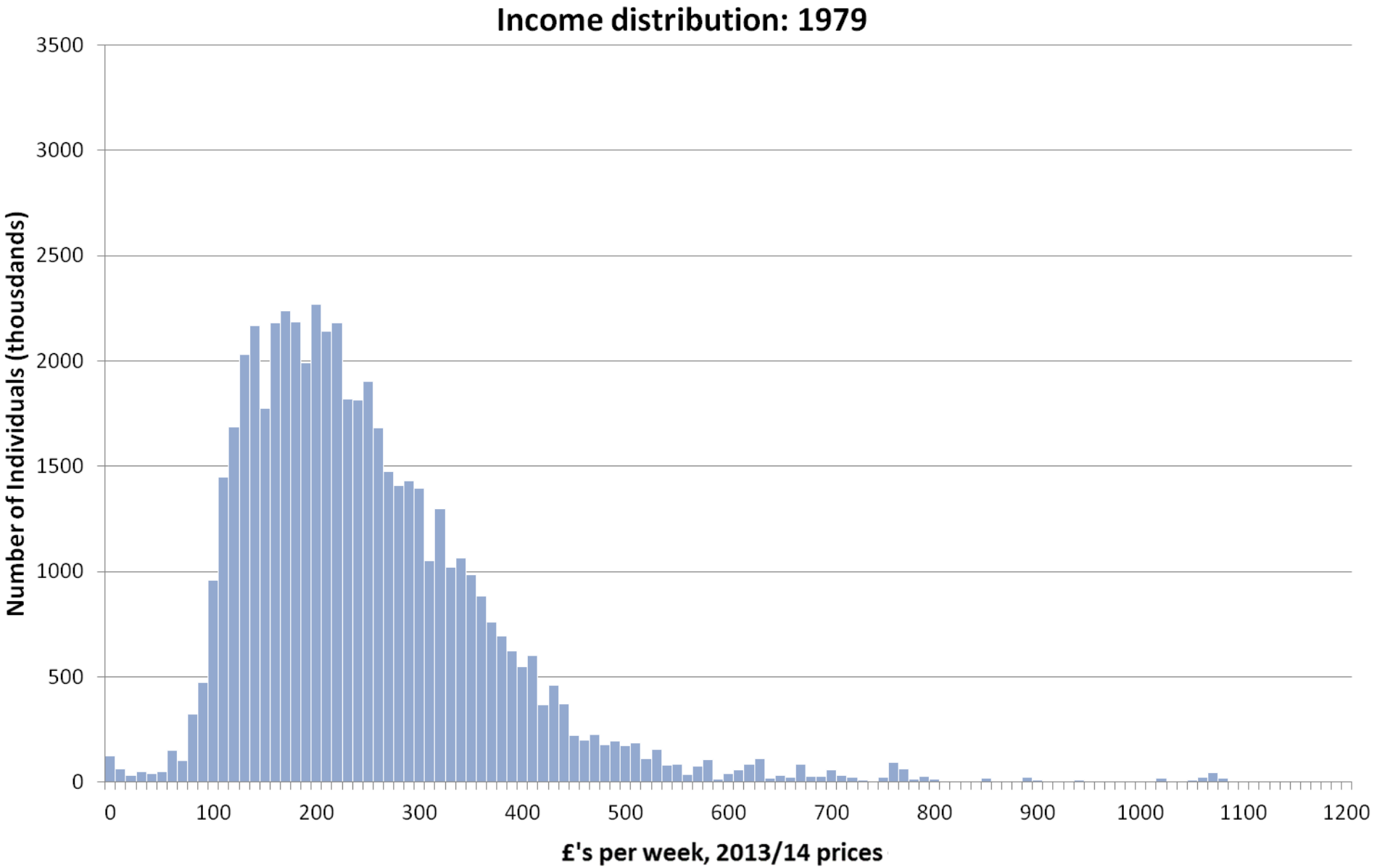

Income distribution: 1974
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

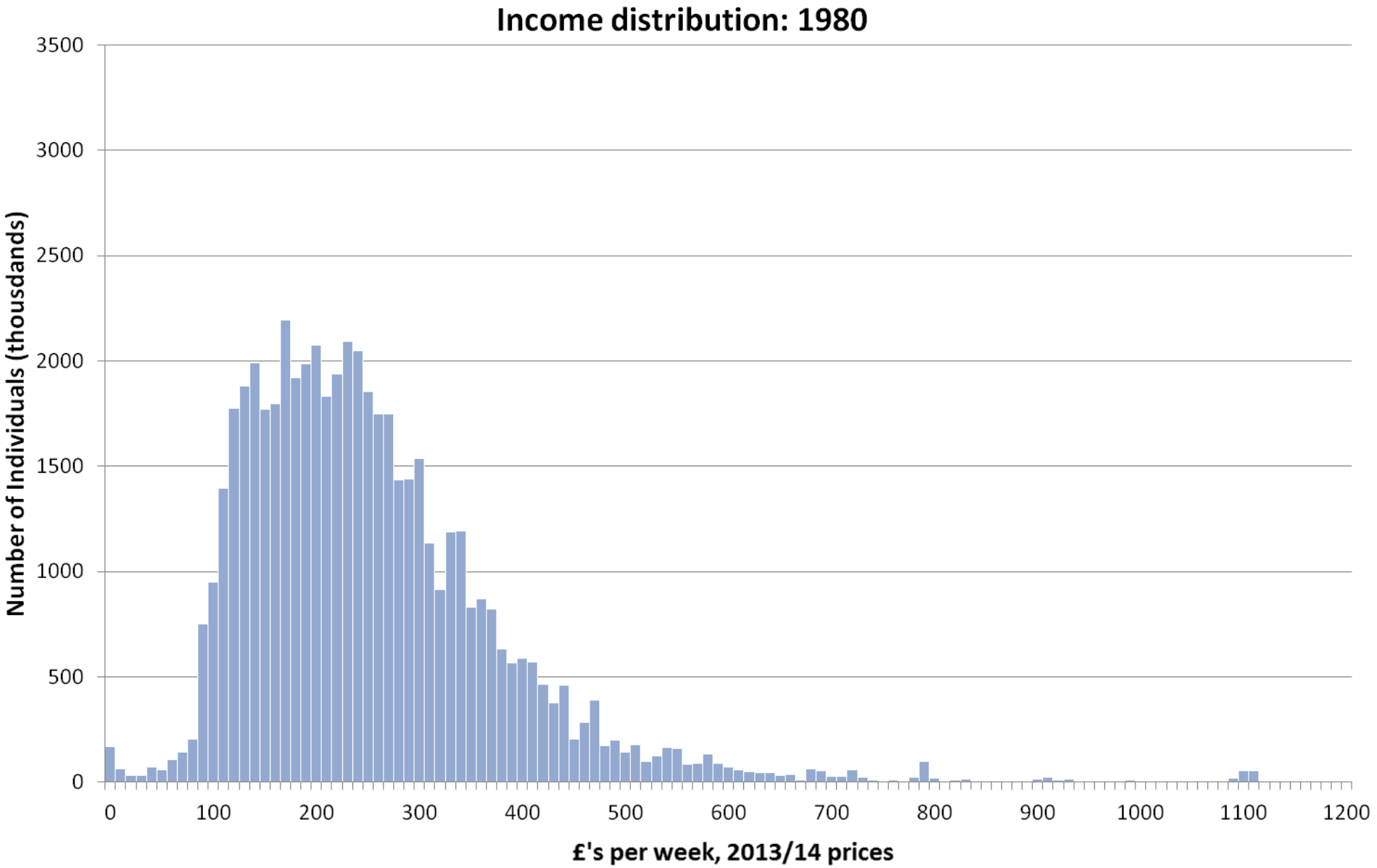

Income distribution: 1975
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

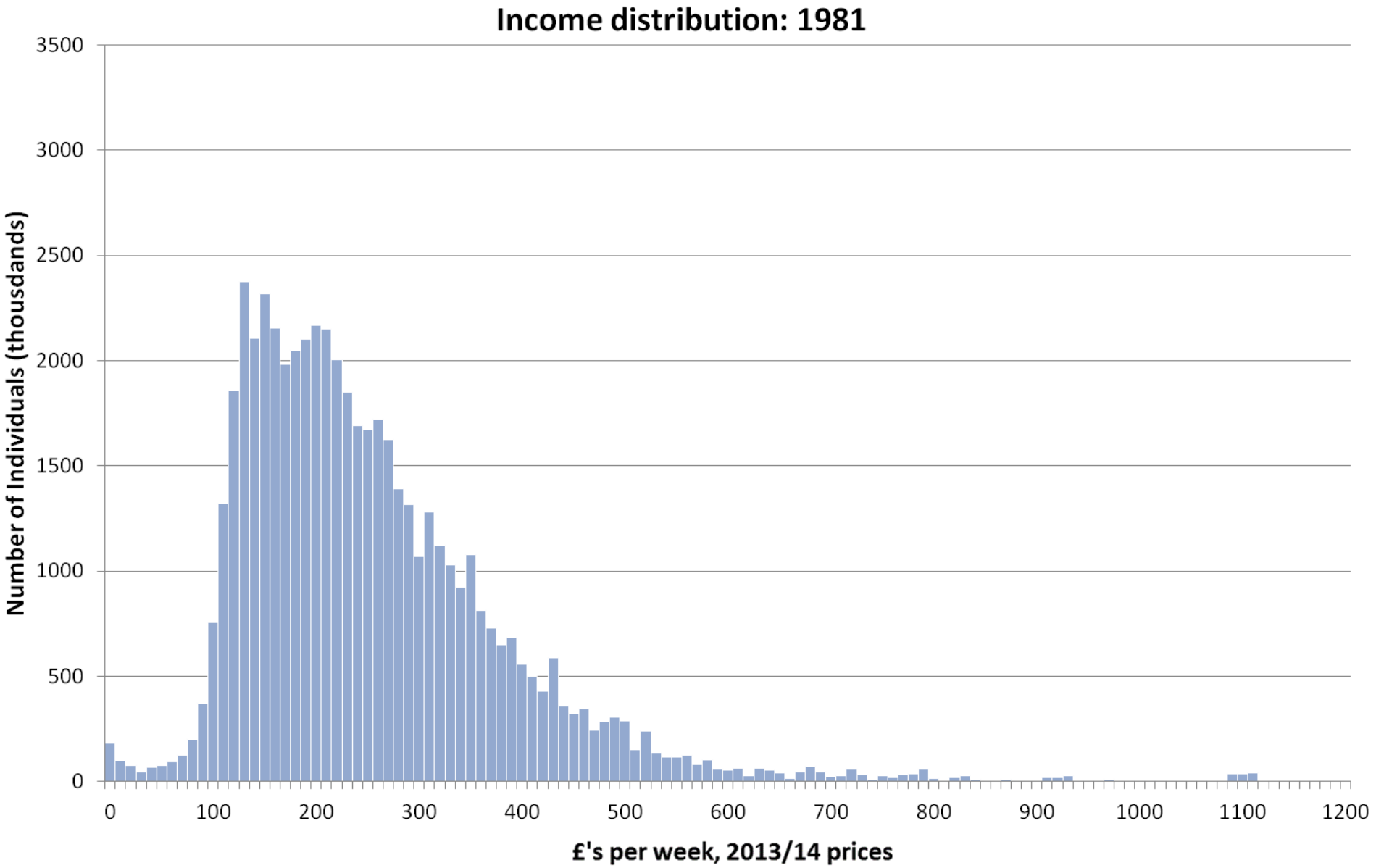

Income distribution: 1976
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

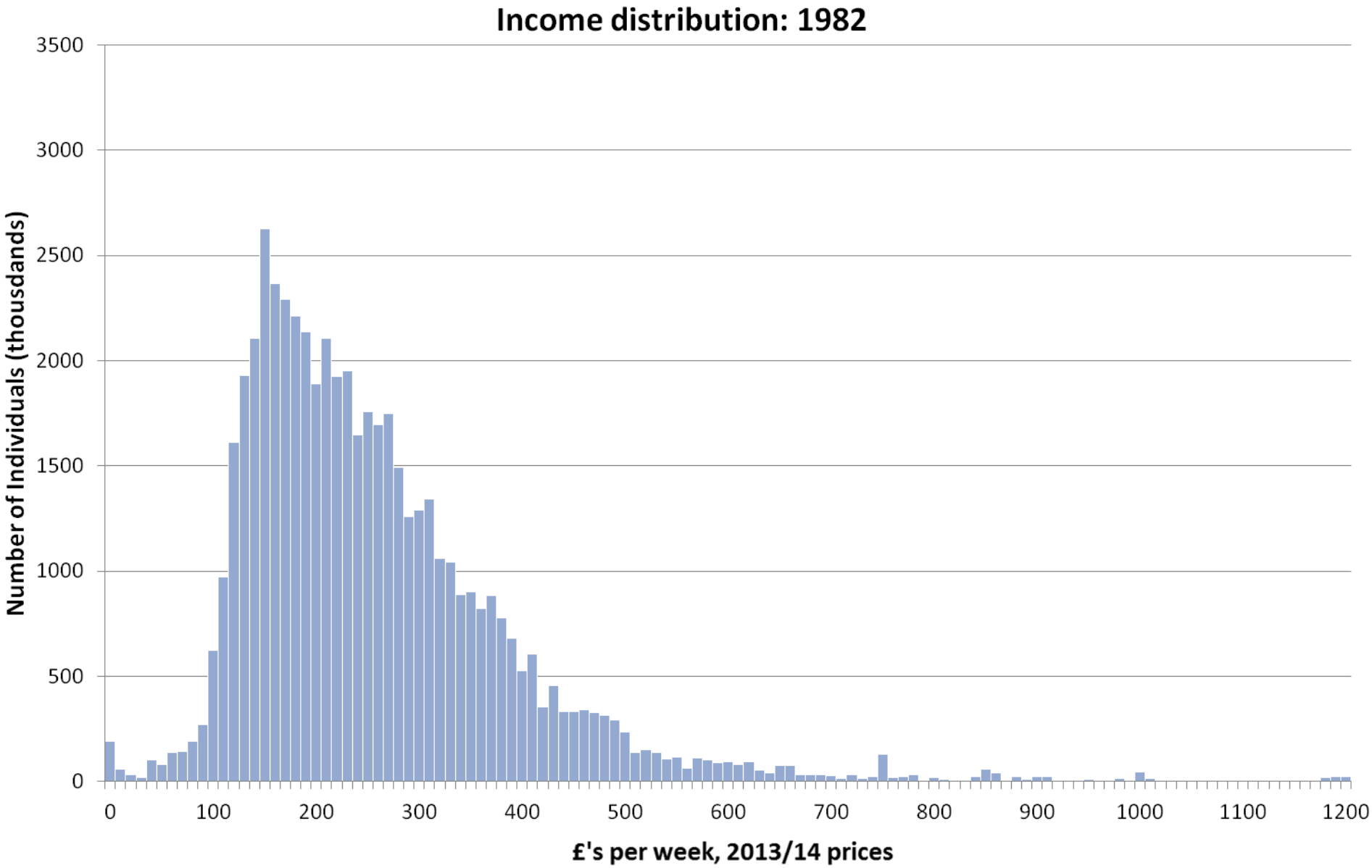

Income distribution: 1977
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

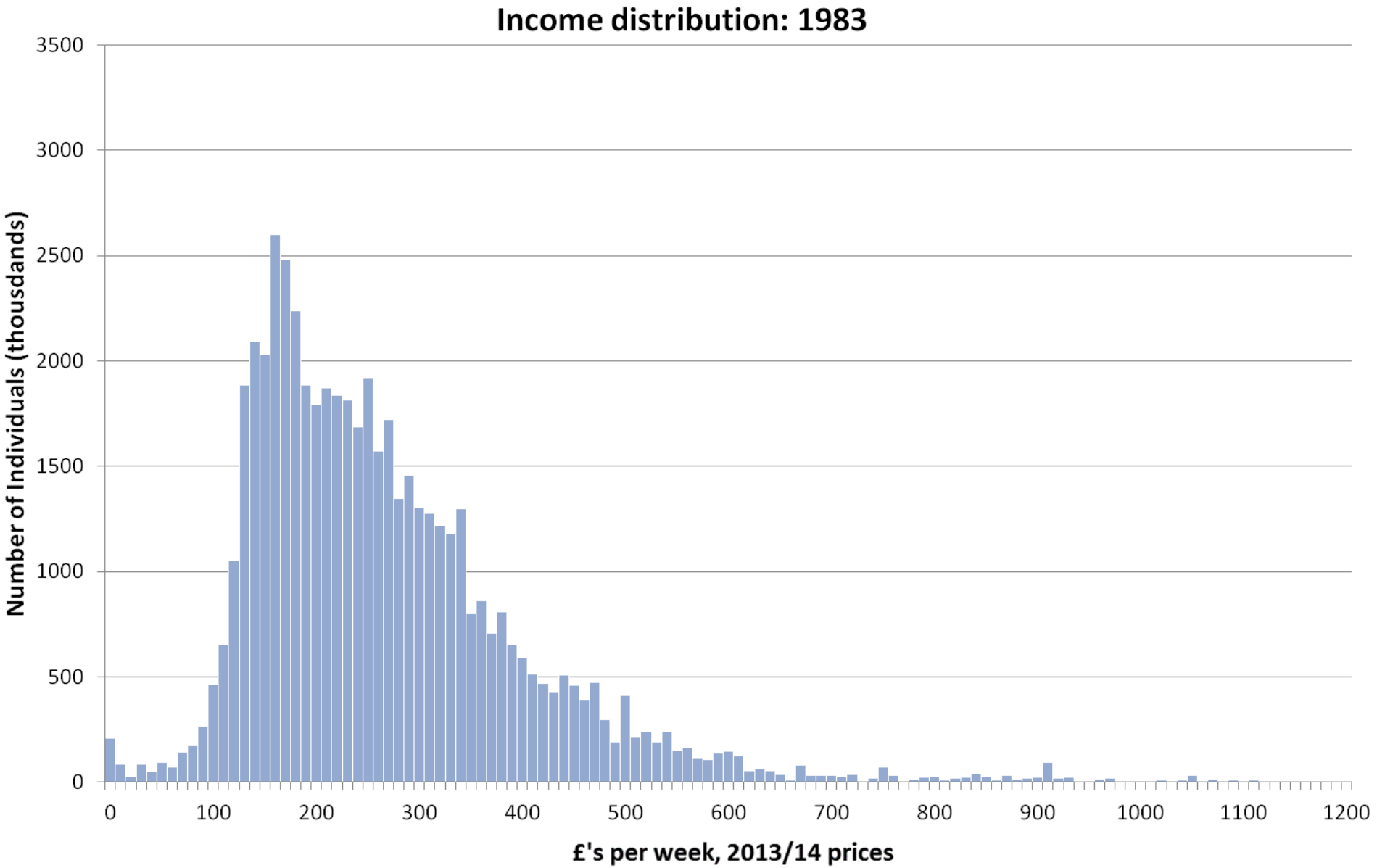

Income distribution: 1978
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

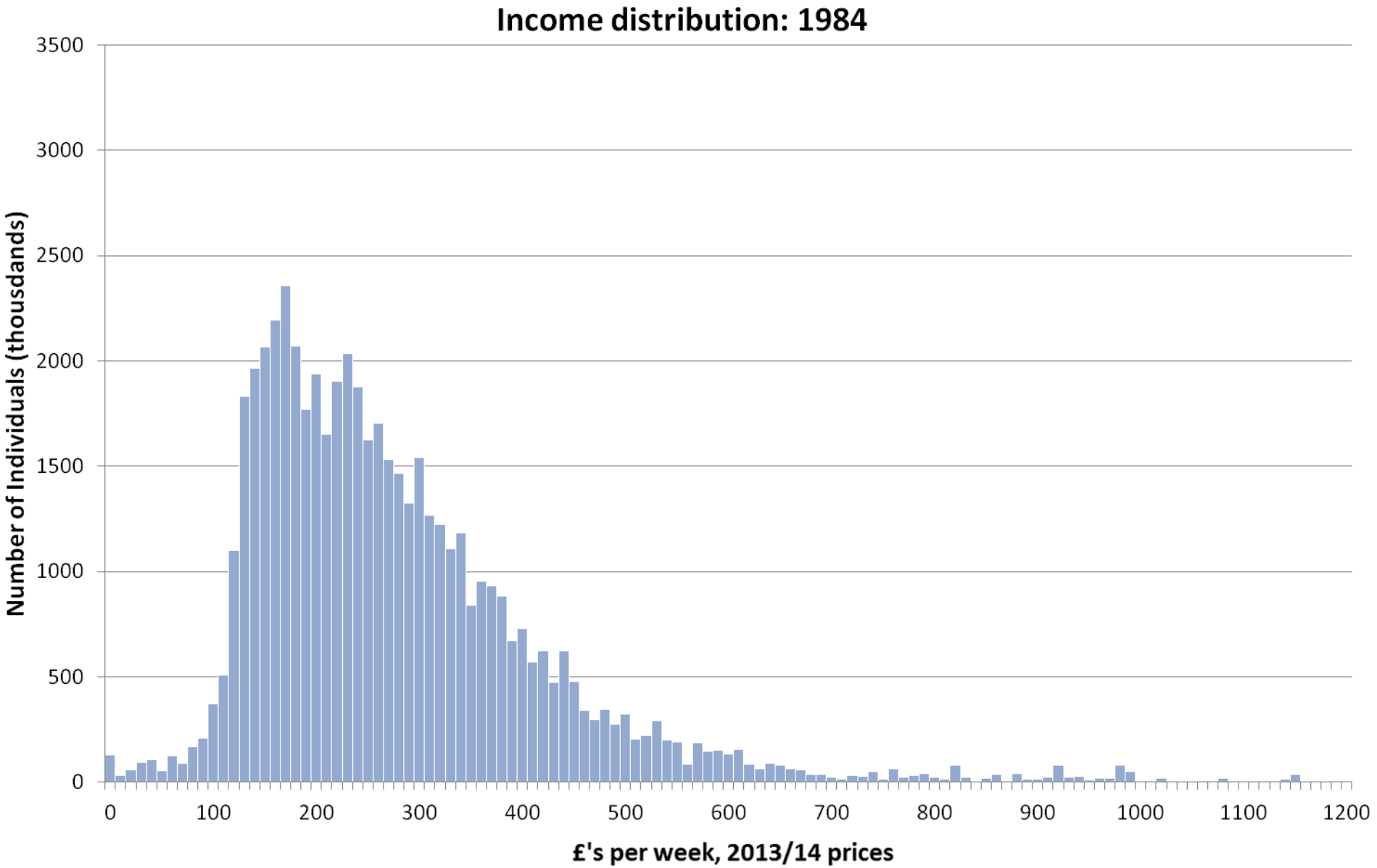

Income distribution: 1979
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

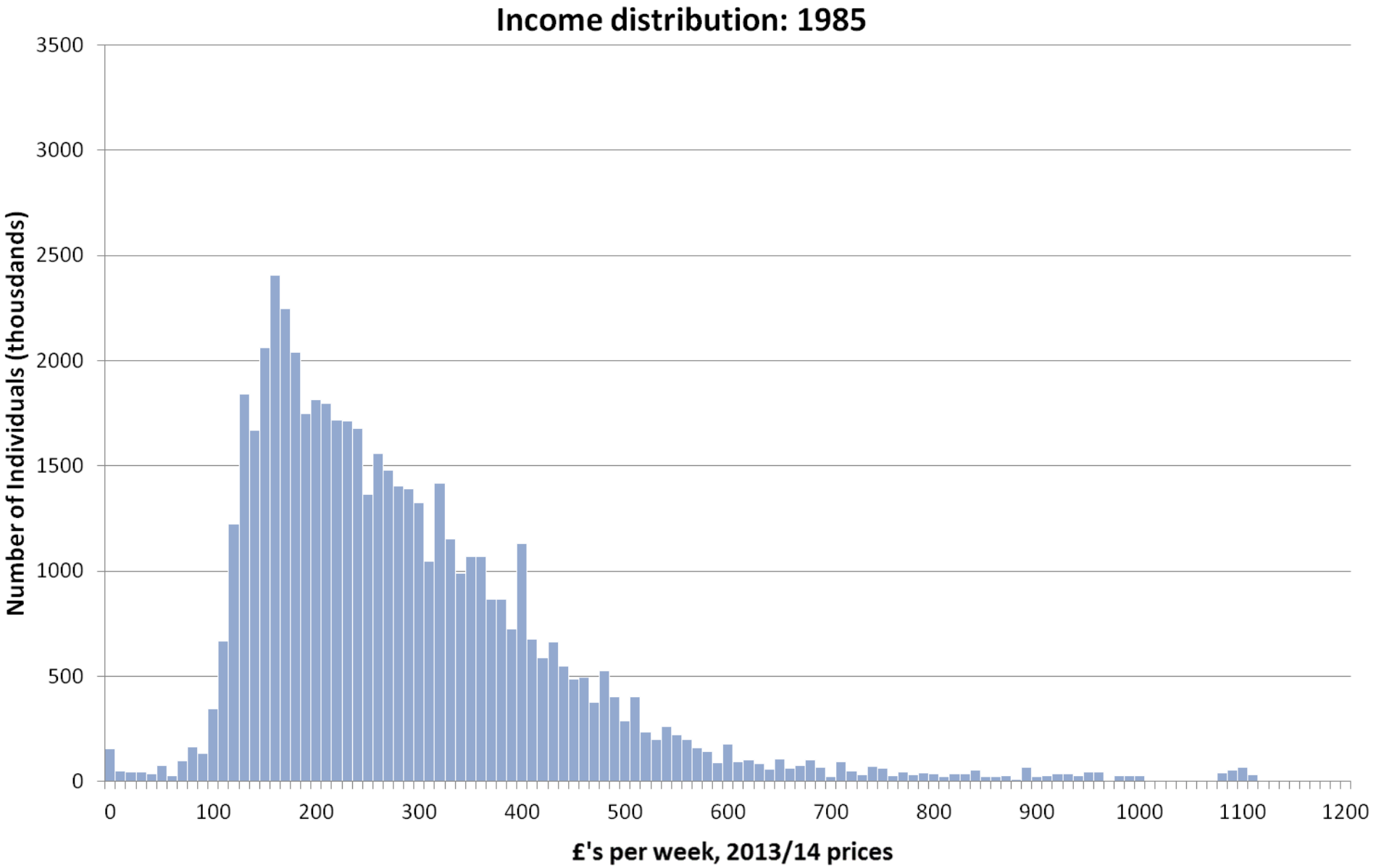

Income distribution: 1980
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

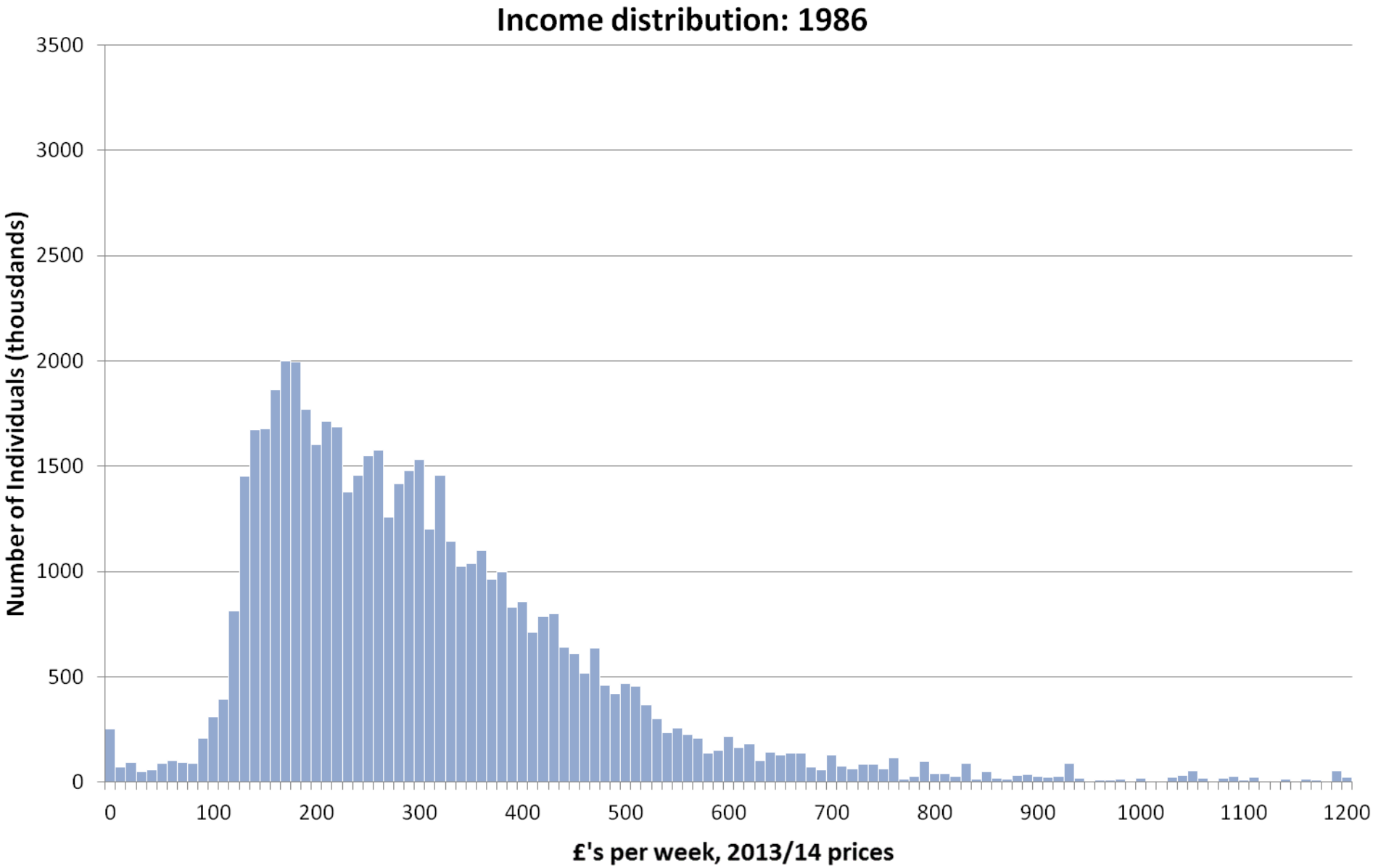

Income distribution: 1981
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

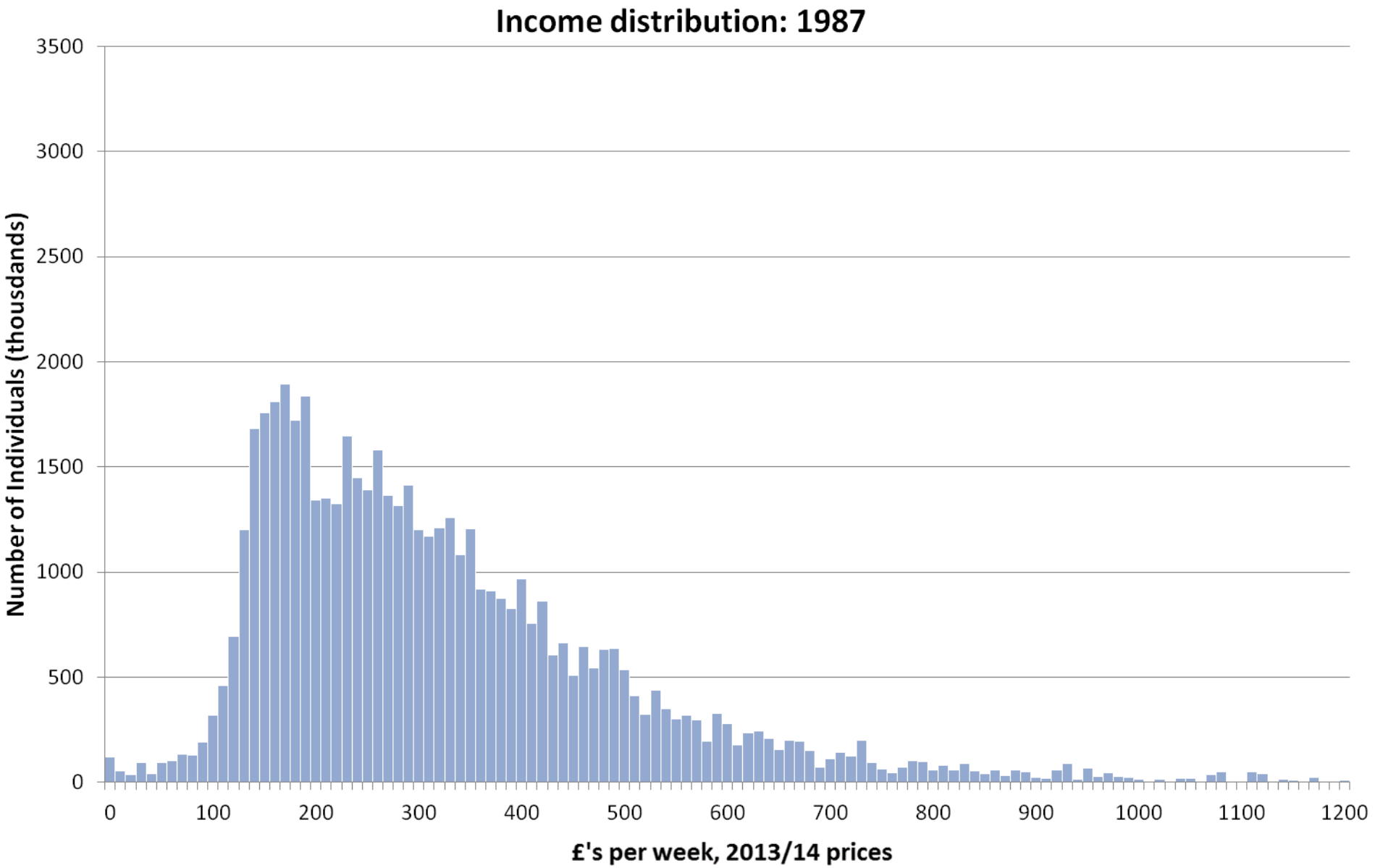

Income distribution: 1982
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

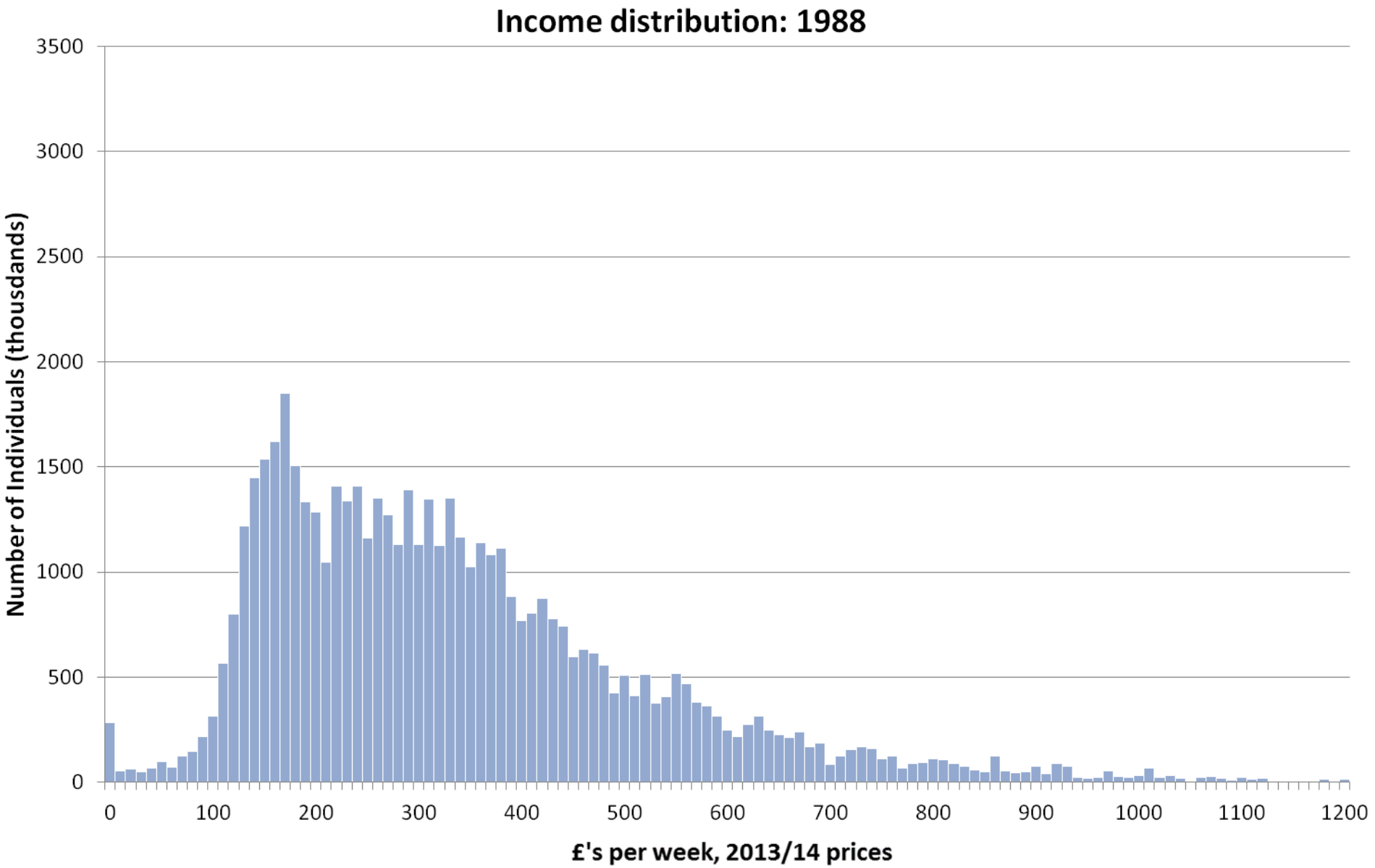

Income distribution: 1983
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

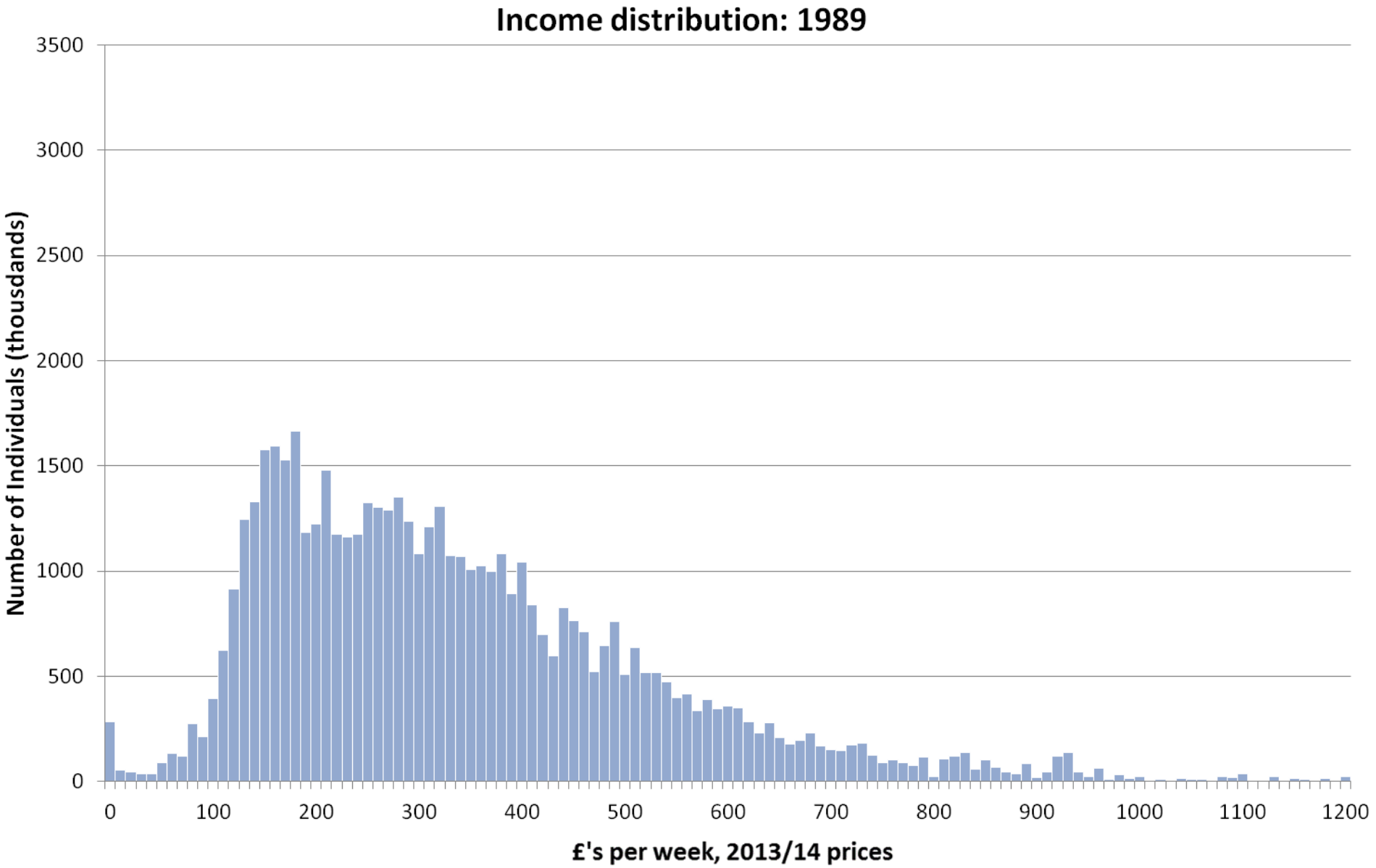

Income distribution: 1984
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

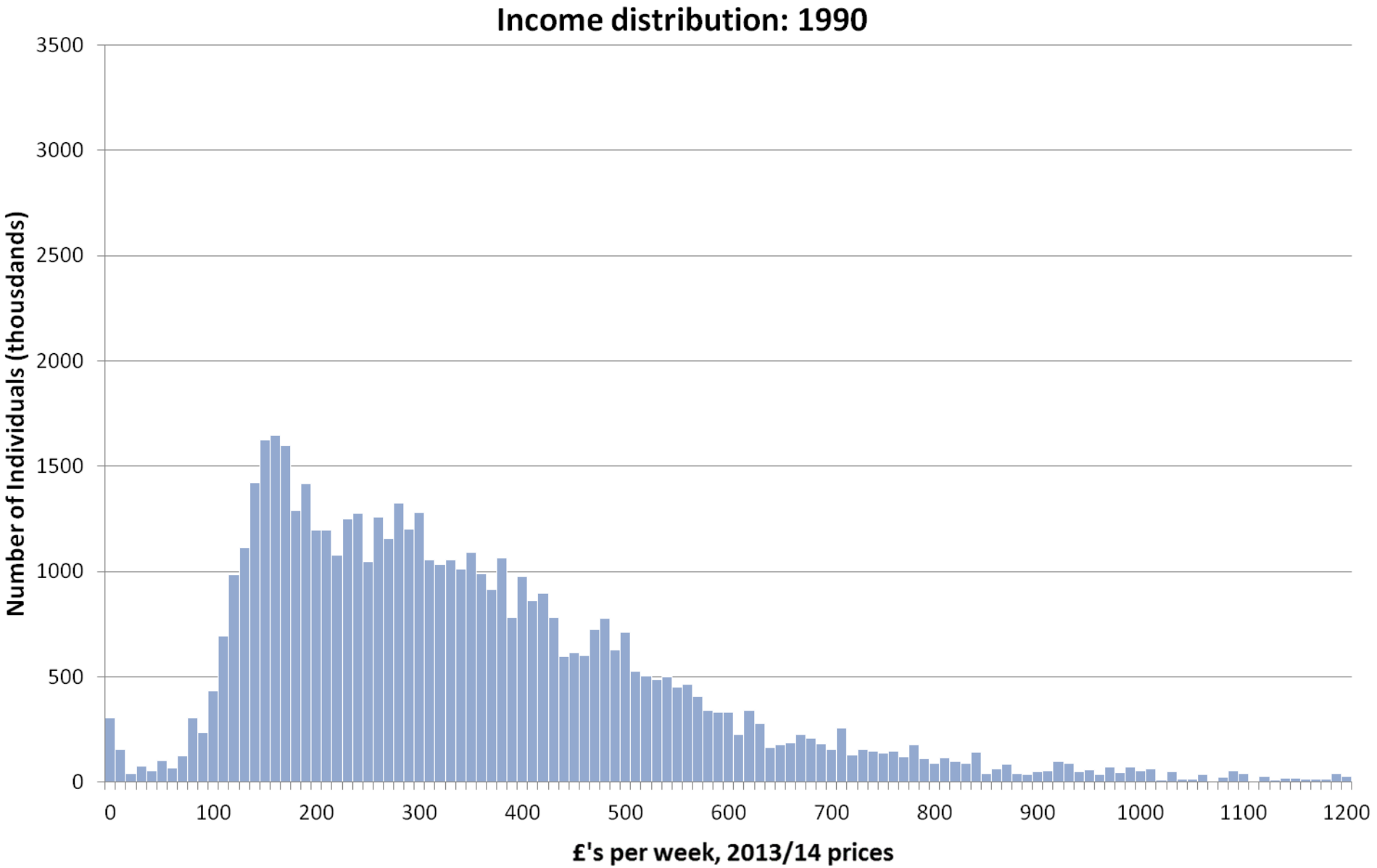

Income distribution: 1985
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

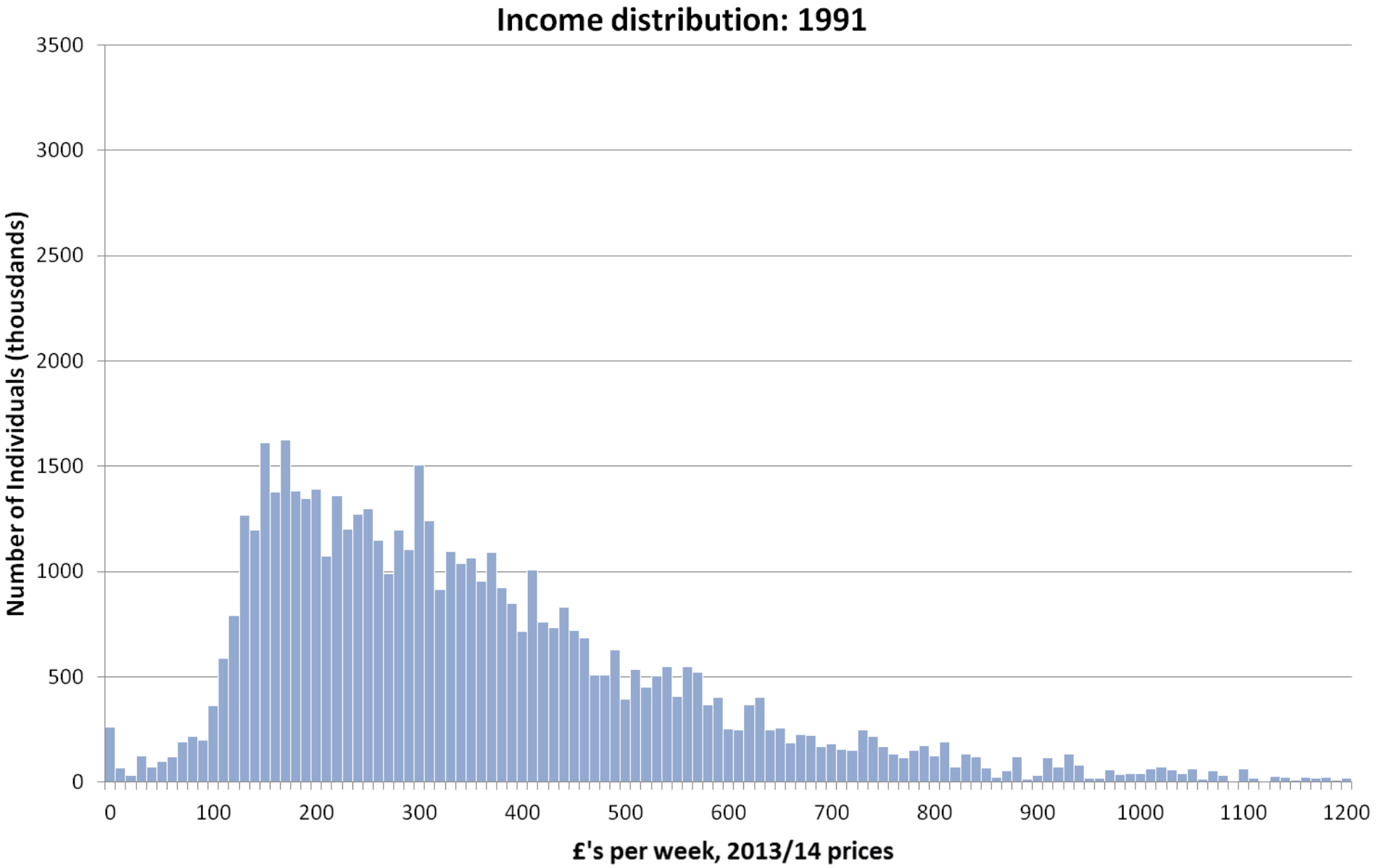

Income distribution: 1986
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

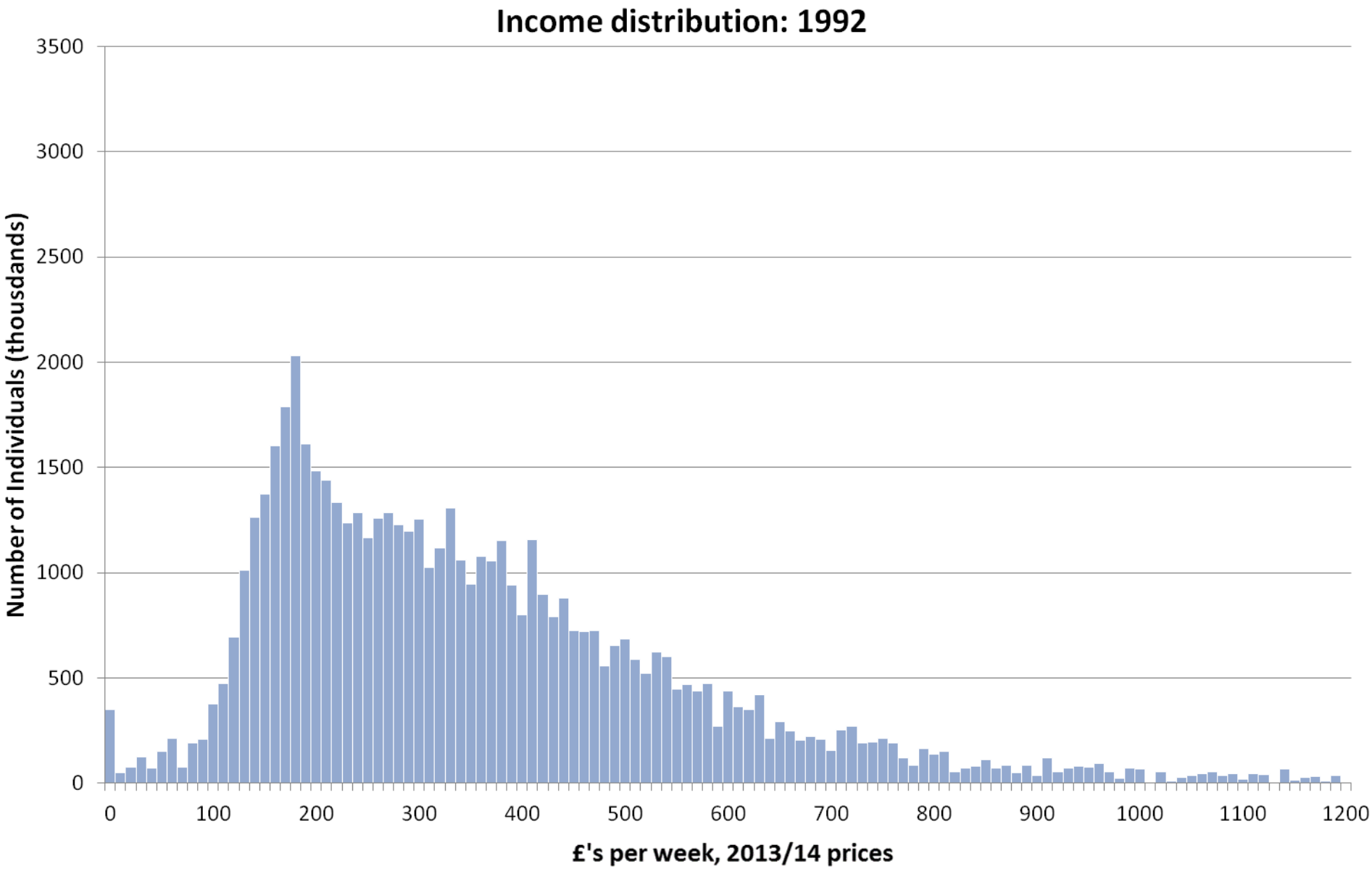

Income distribution: 1987
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

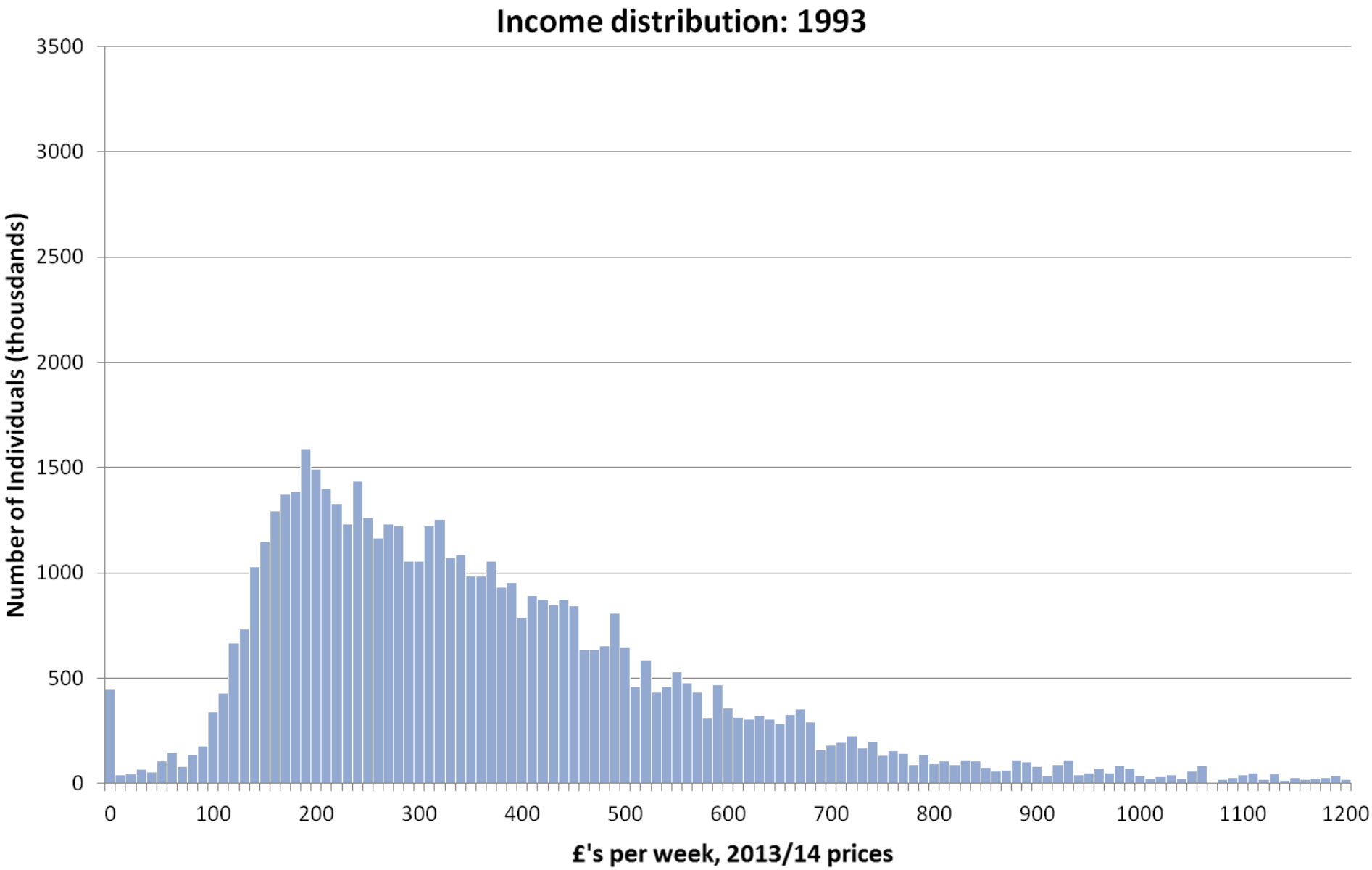

Income distribution: 1988
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

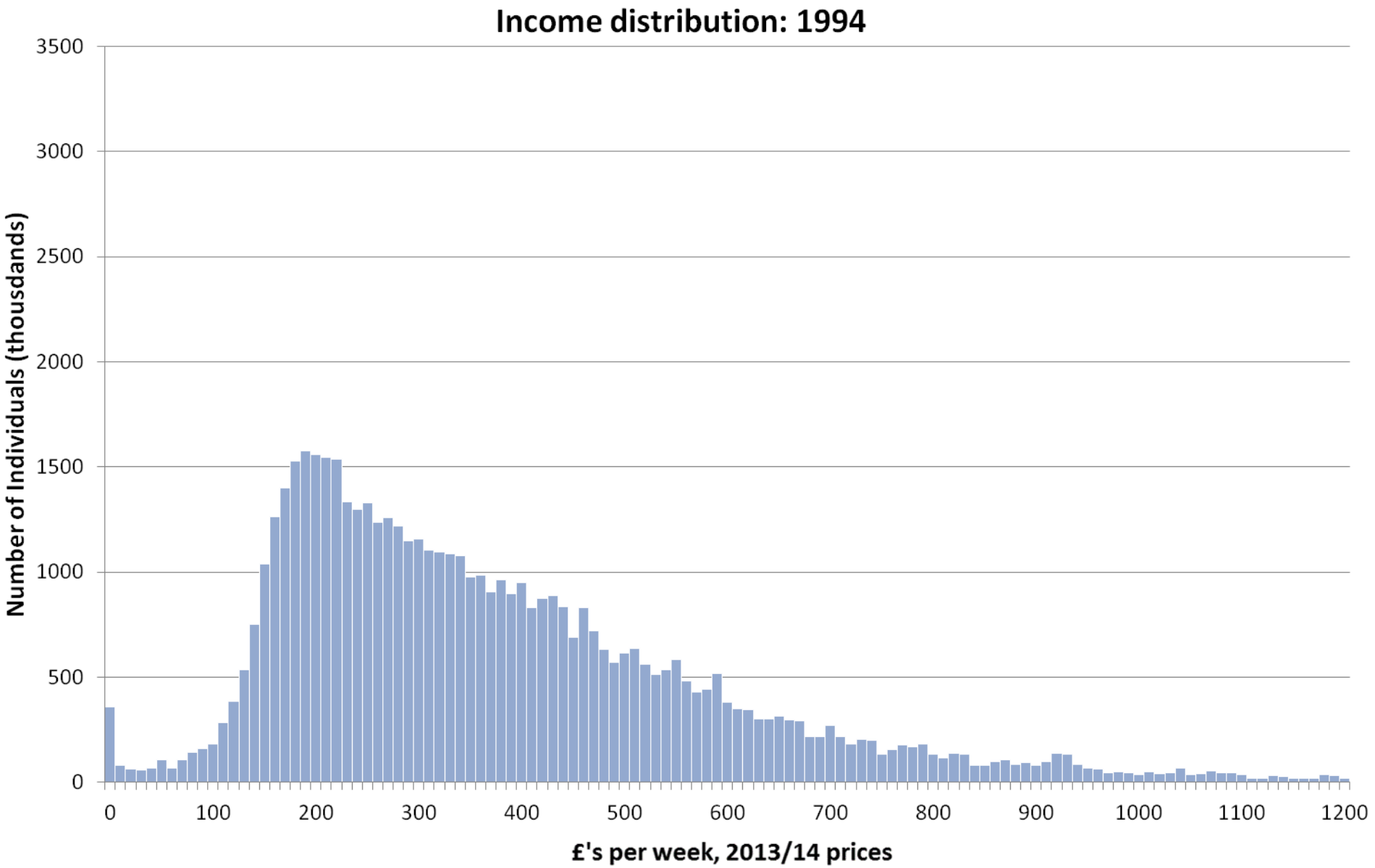

Income distribution: 1989
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

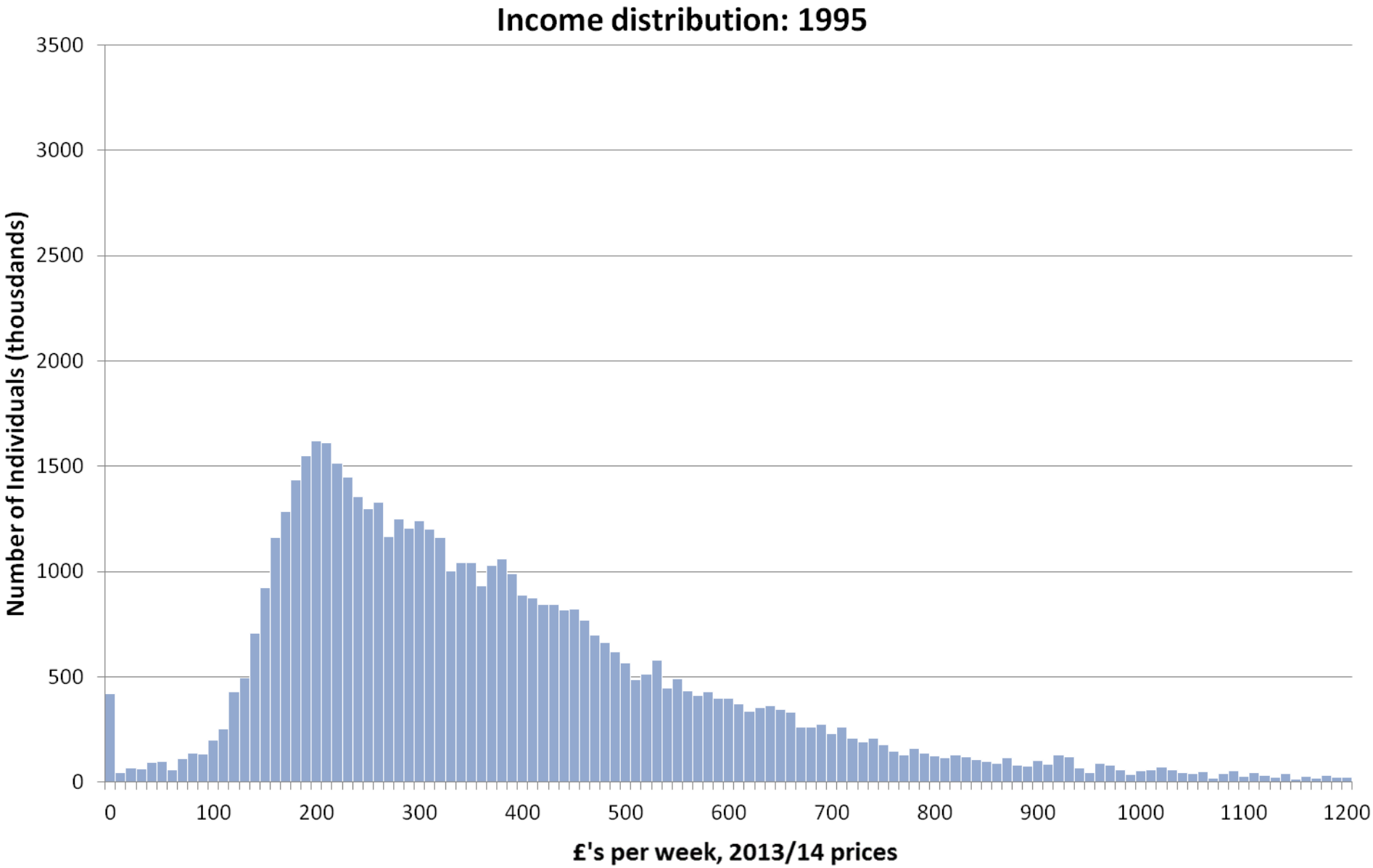

Income distribution: 1990
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

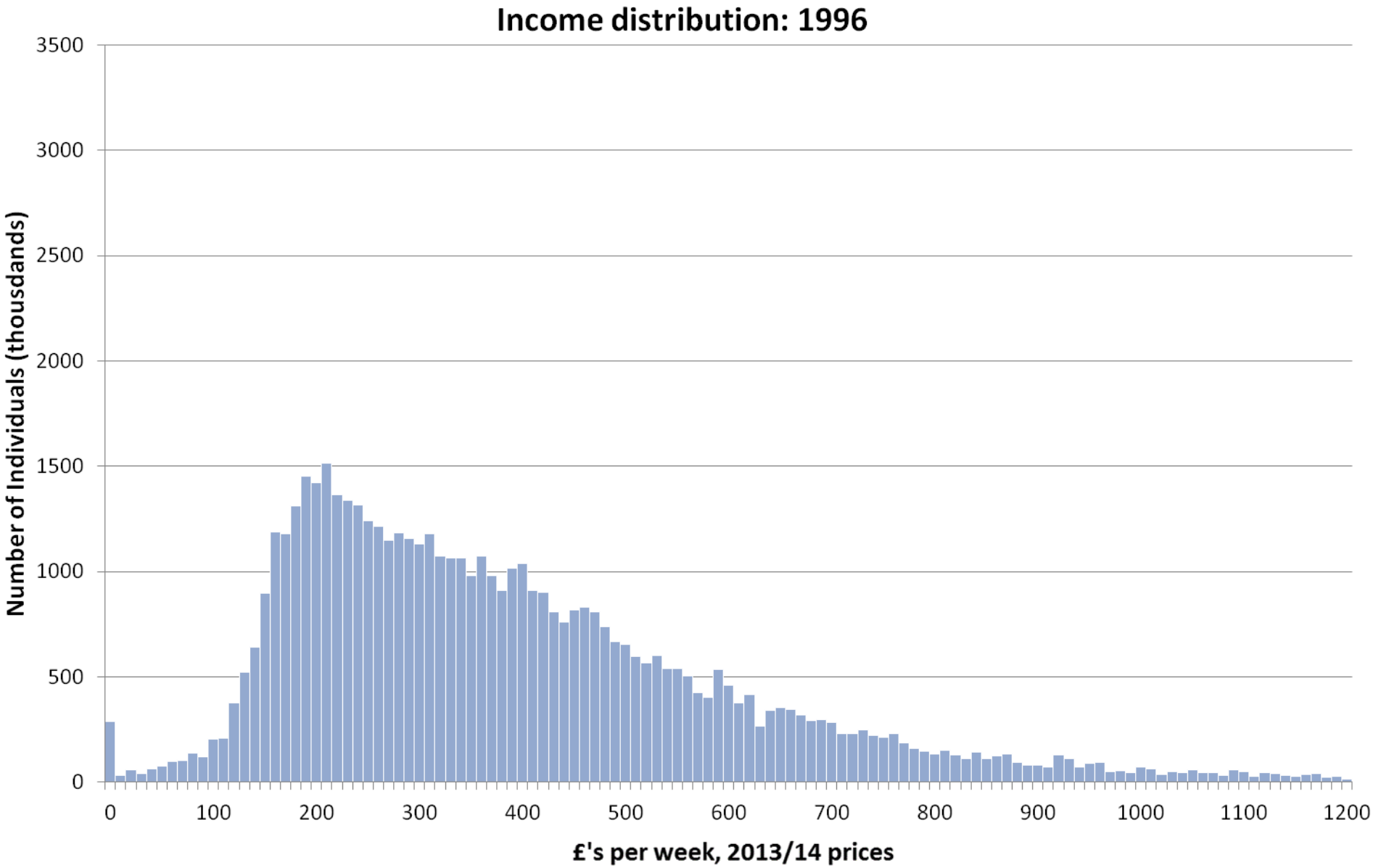

Income distribution: 1991
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

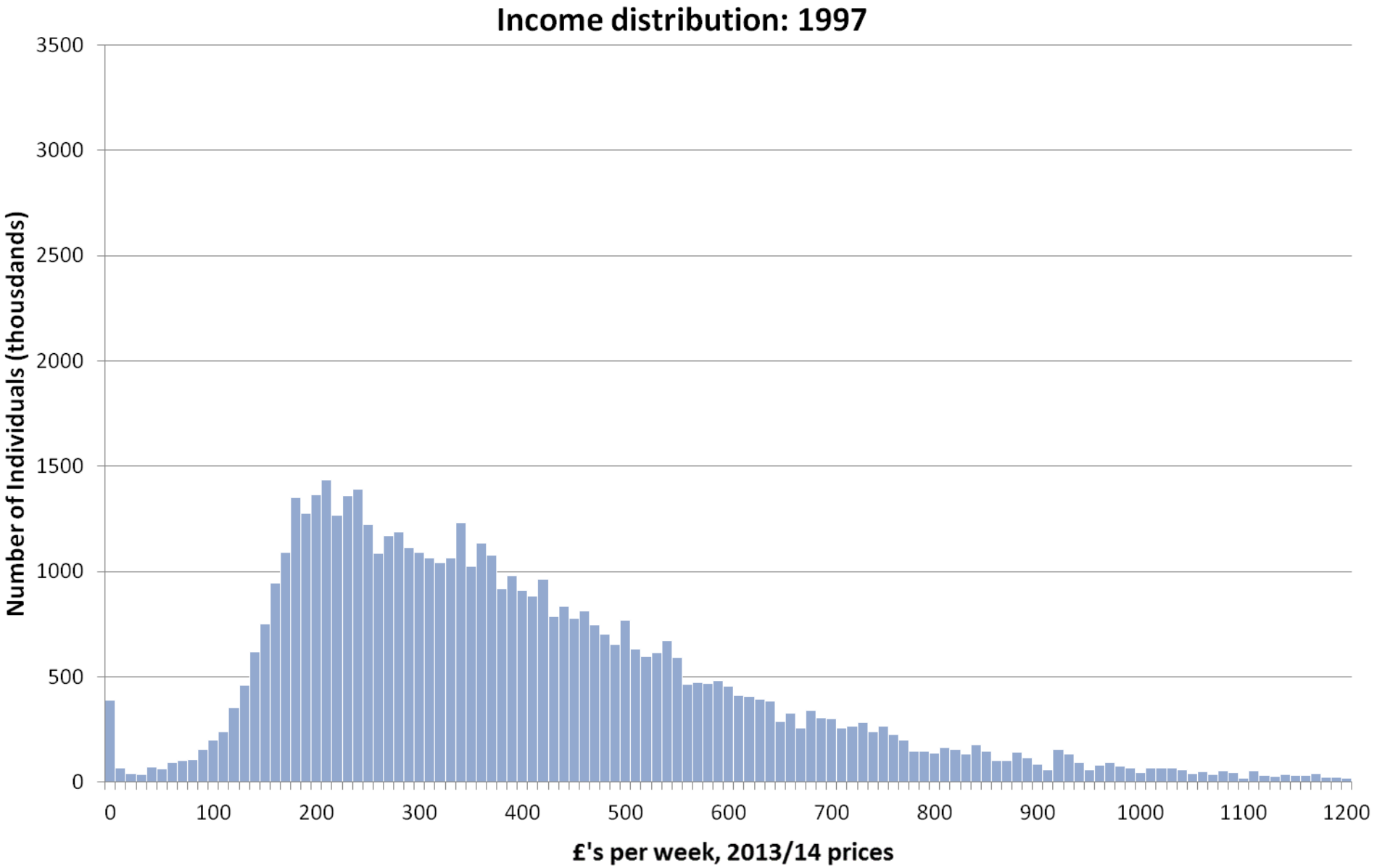

Income distribution: 1992
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

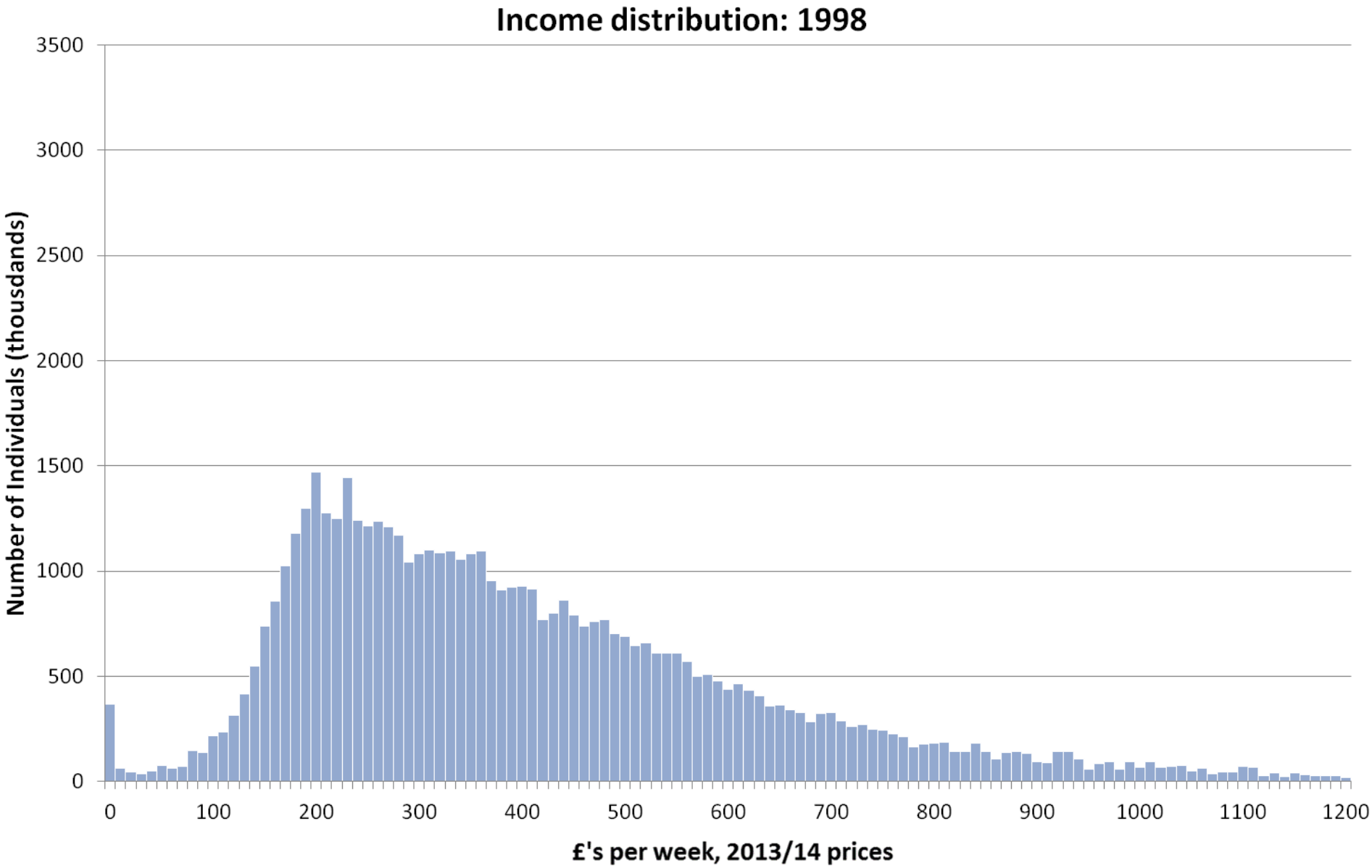

Income distribution: 1993
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

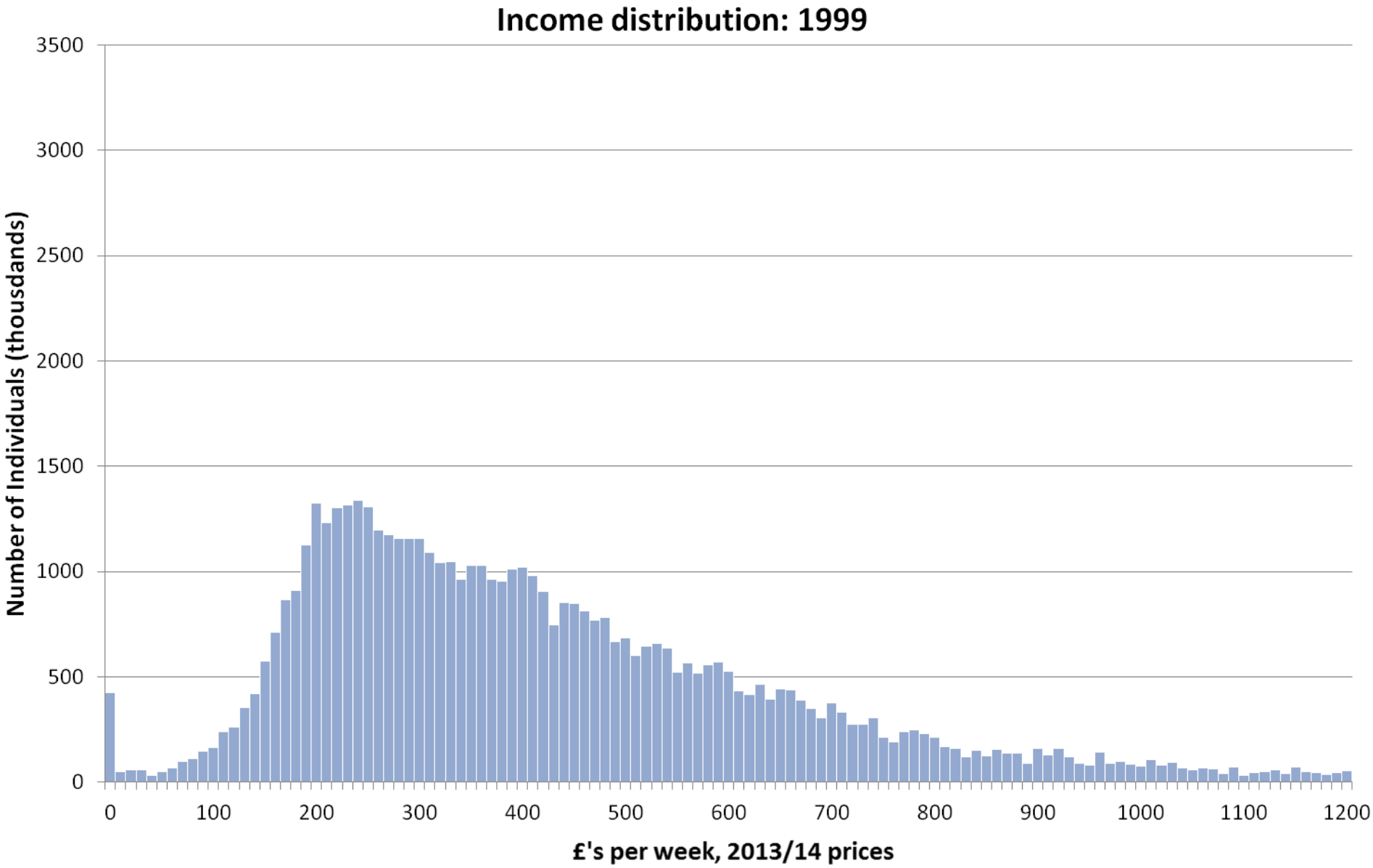

Income distribution: 1994
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

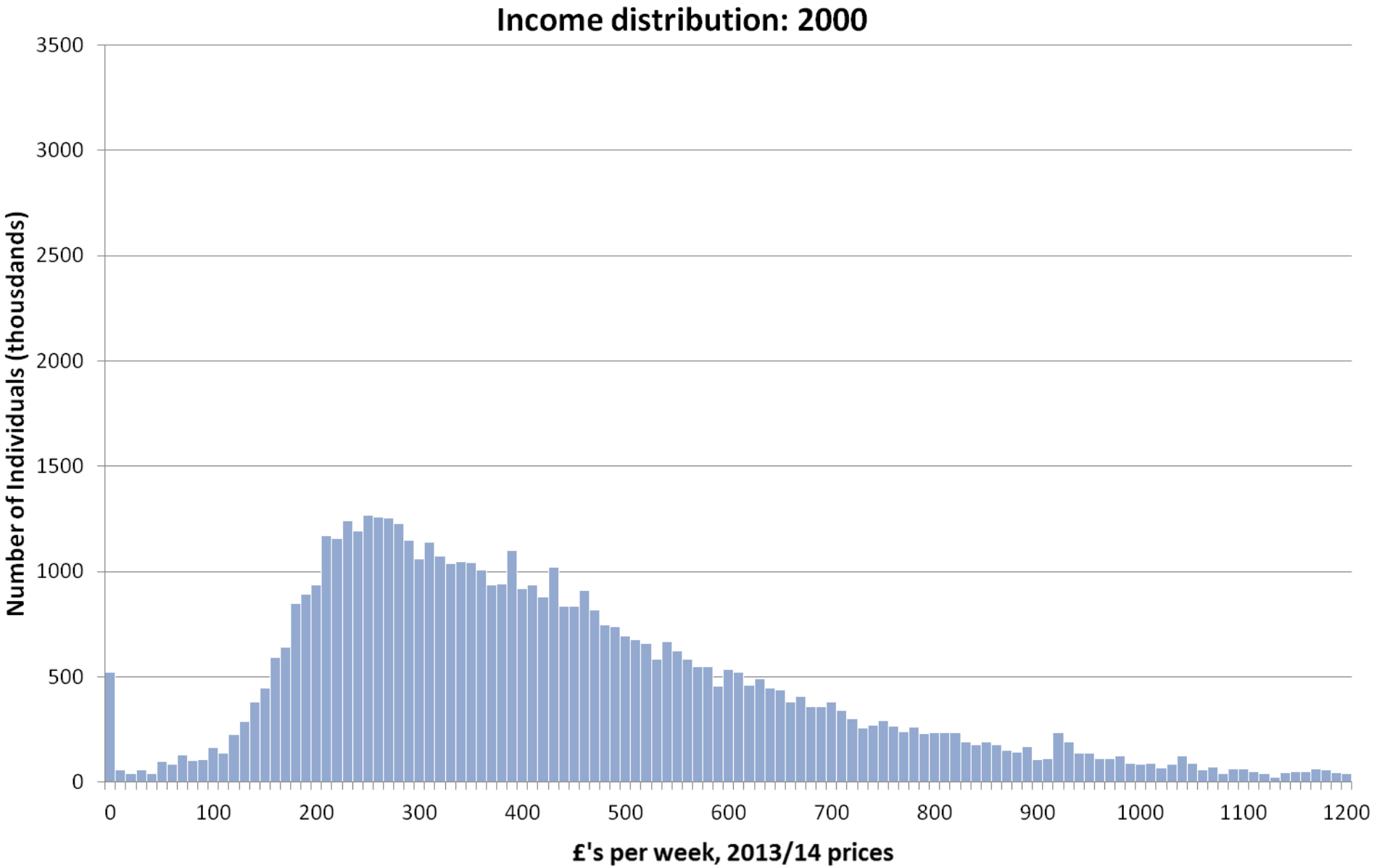

Income distribution: 1995
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

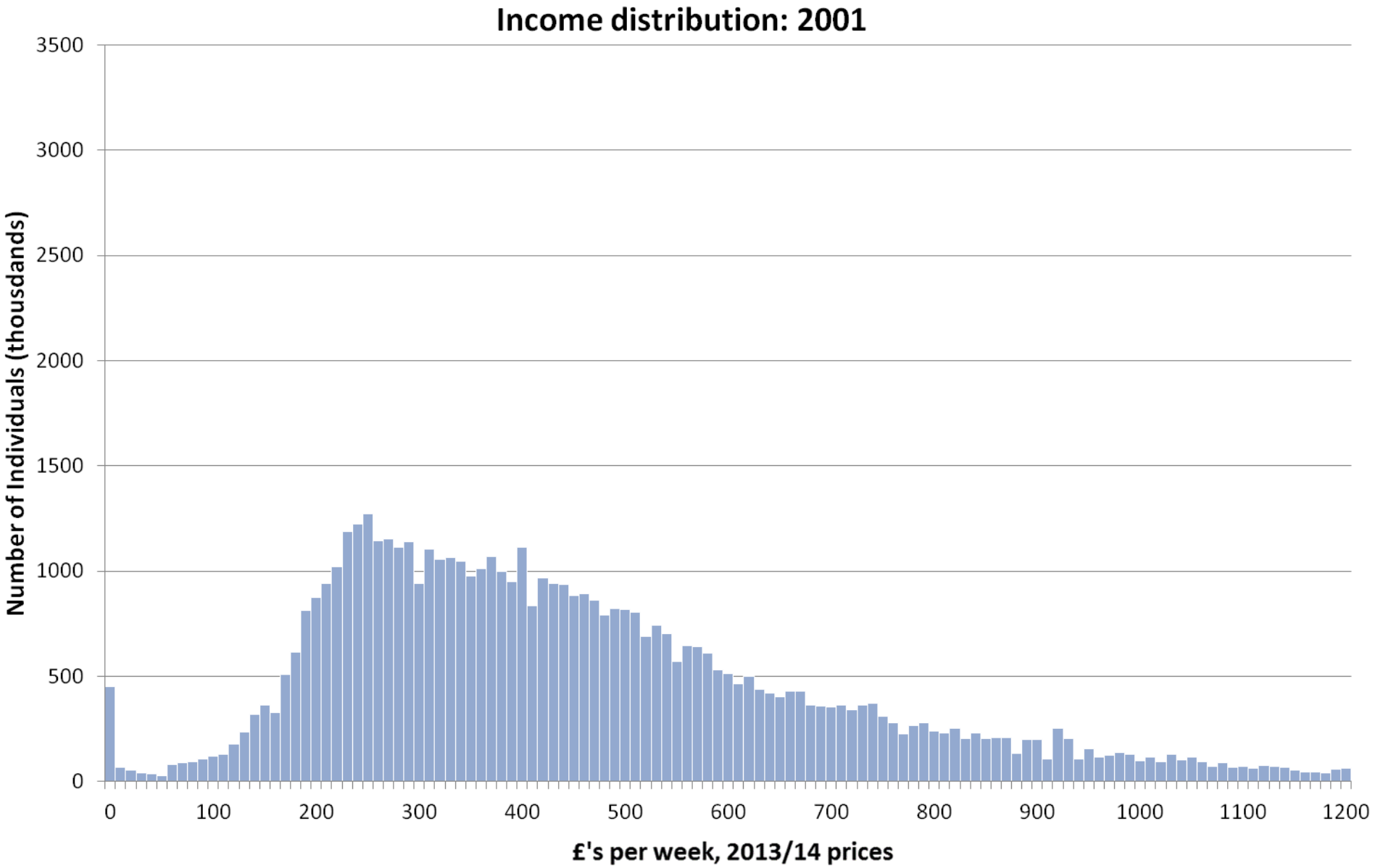

Income distribution: 1996
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

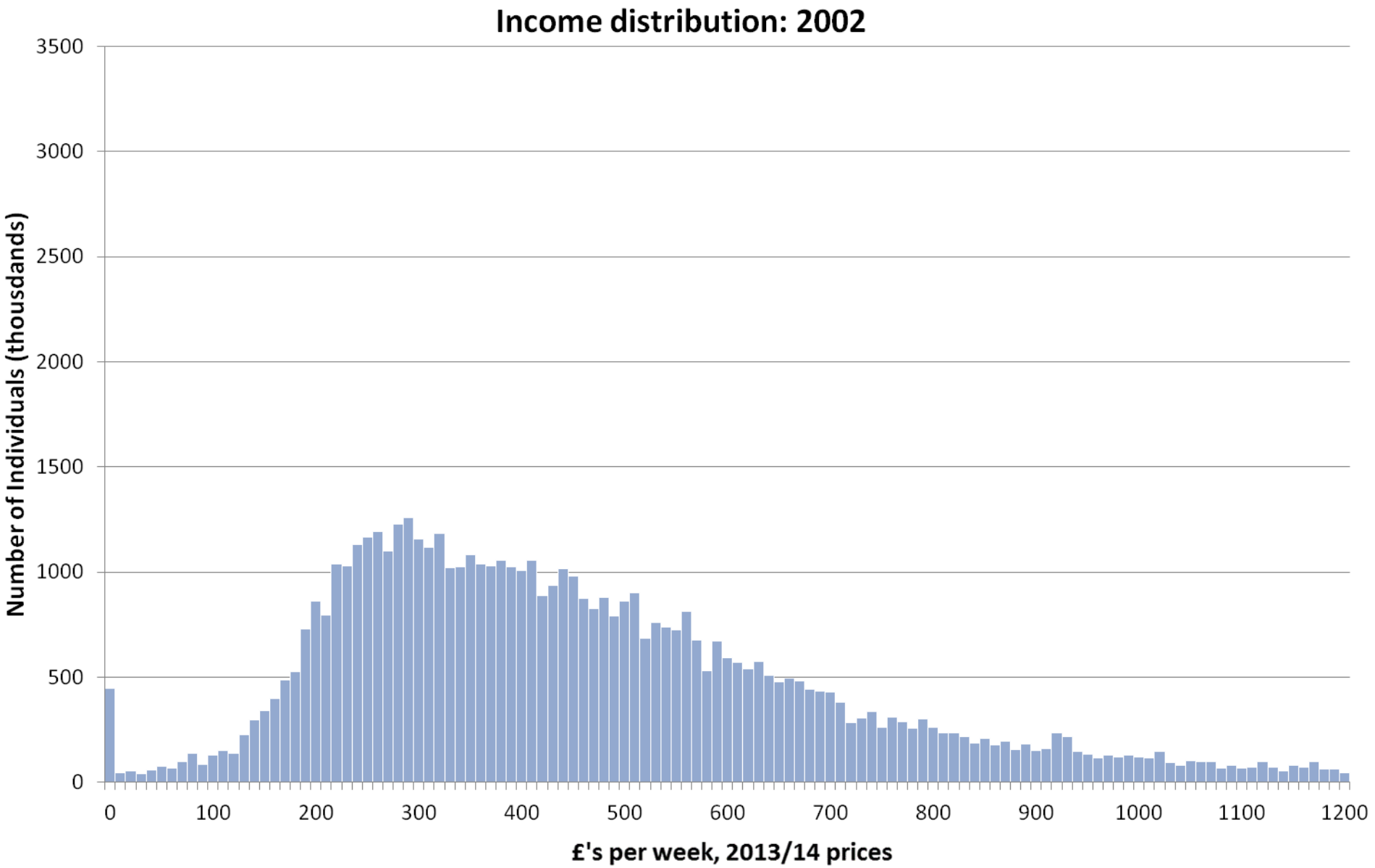

Income distribution: 1997
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

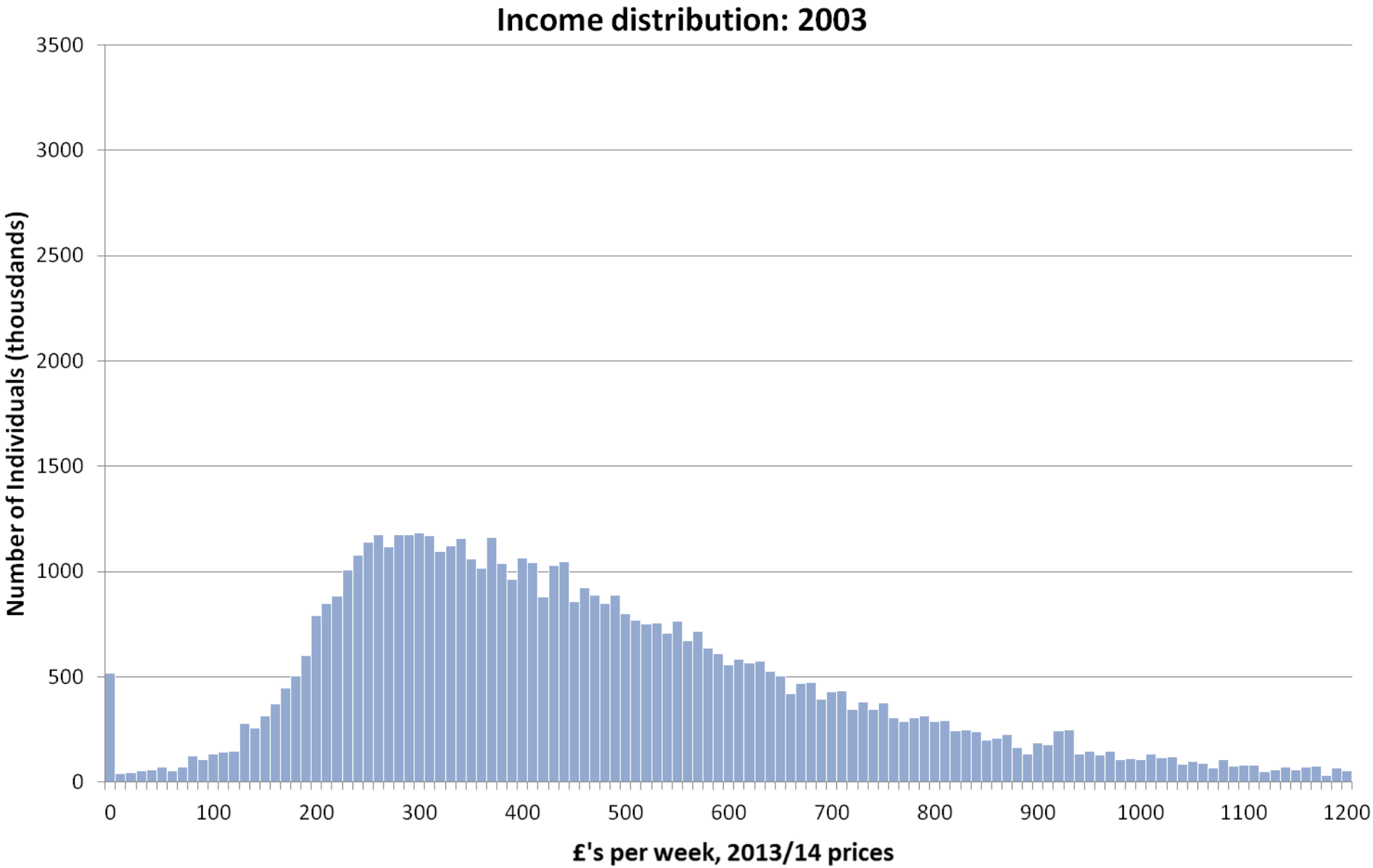

Income distribution: 1998
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

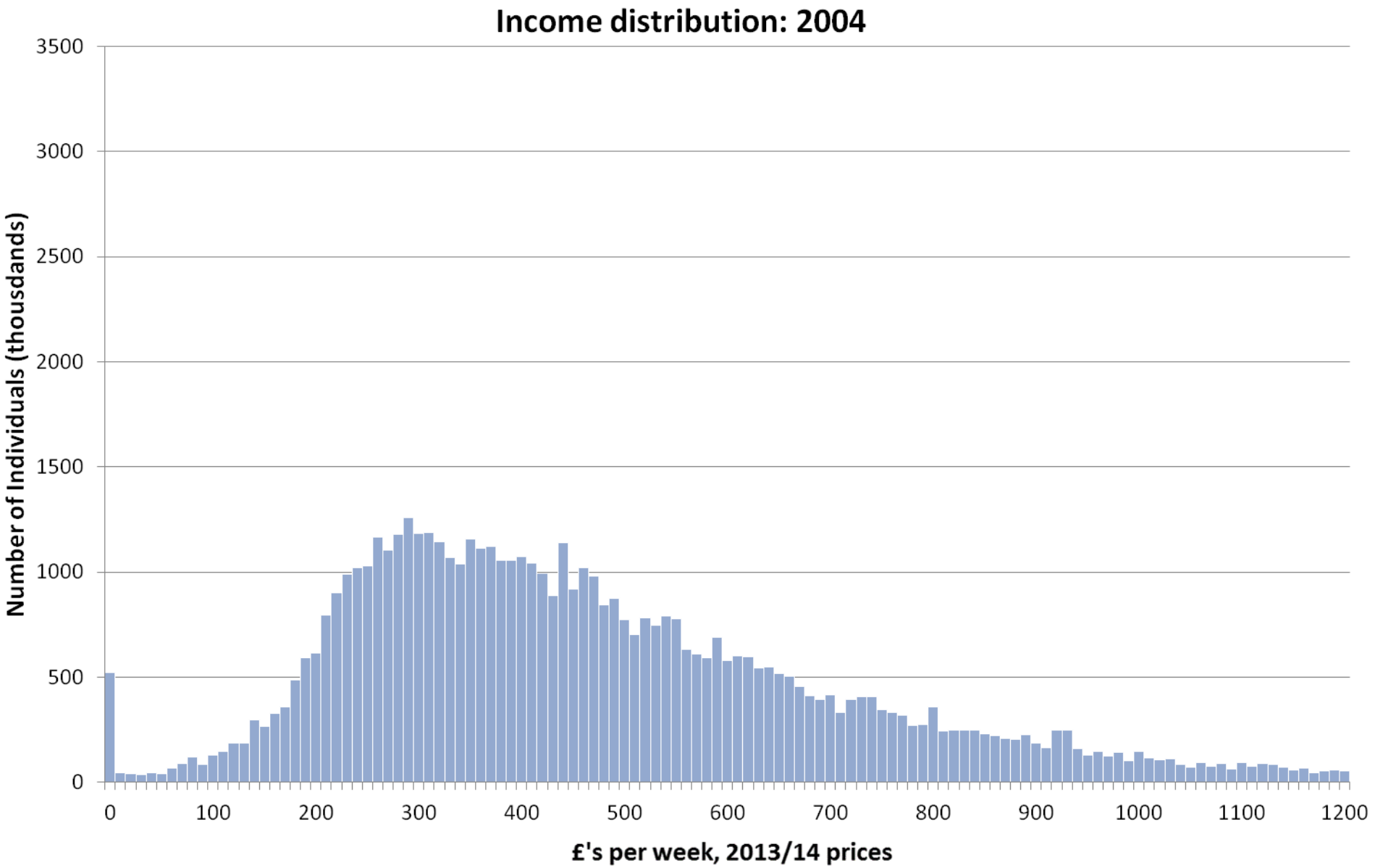

Income distribution: 1999
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

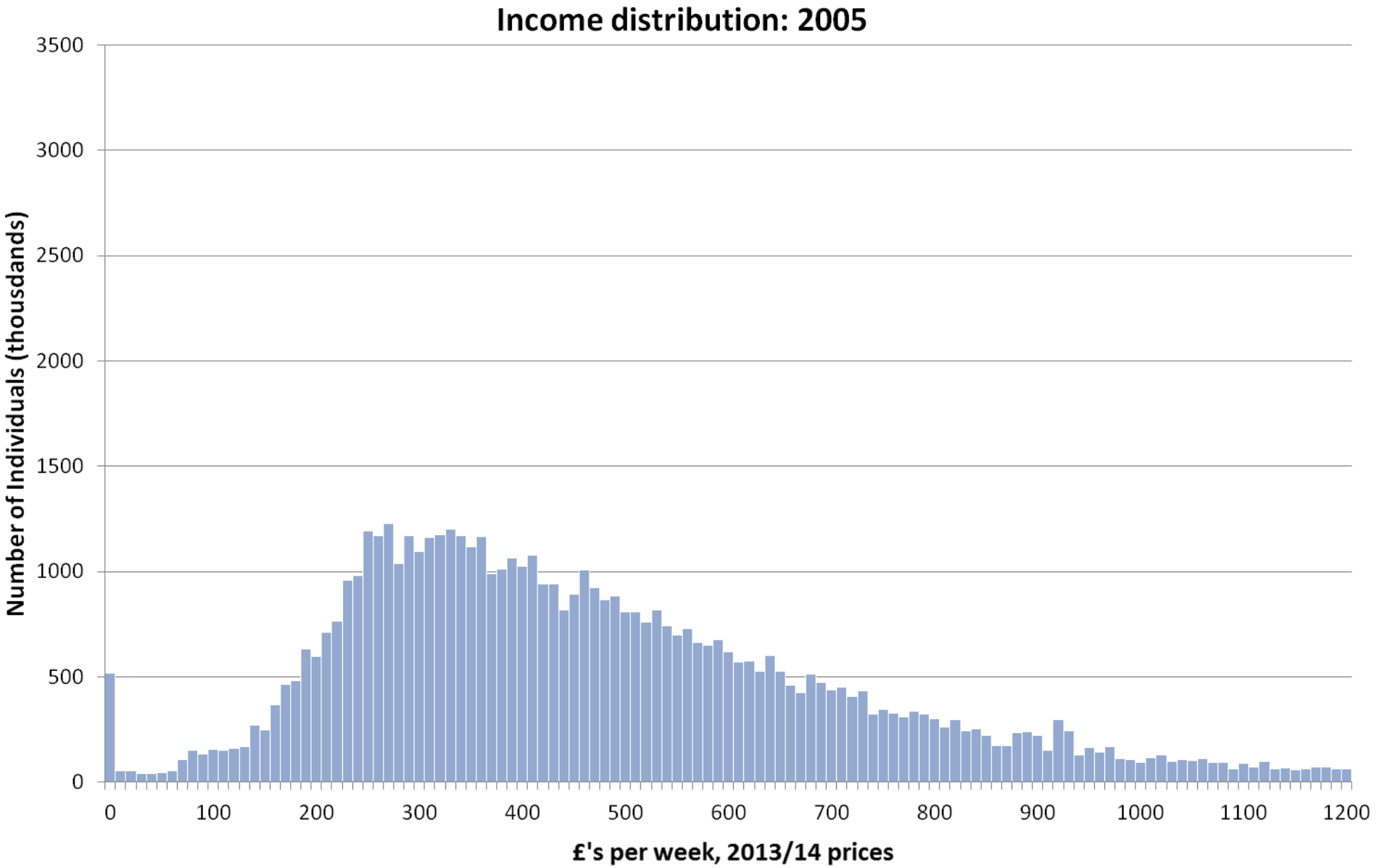

Income distribution: 2000
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

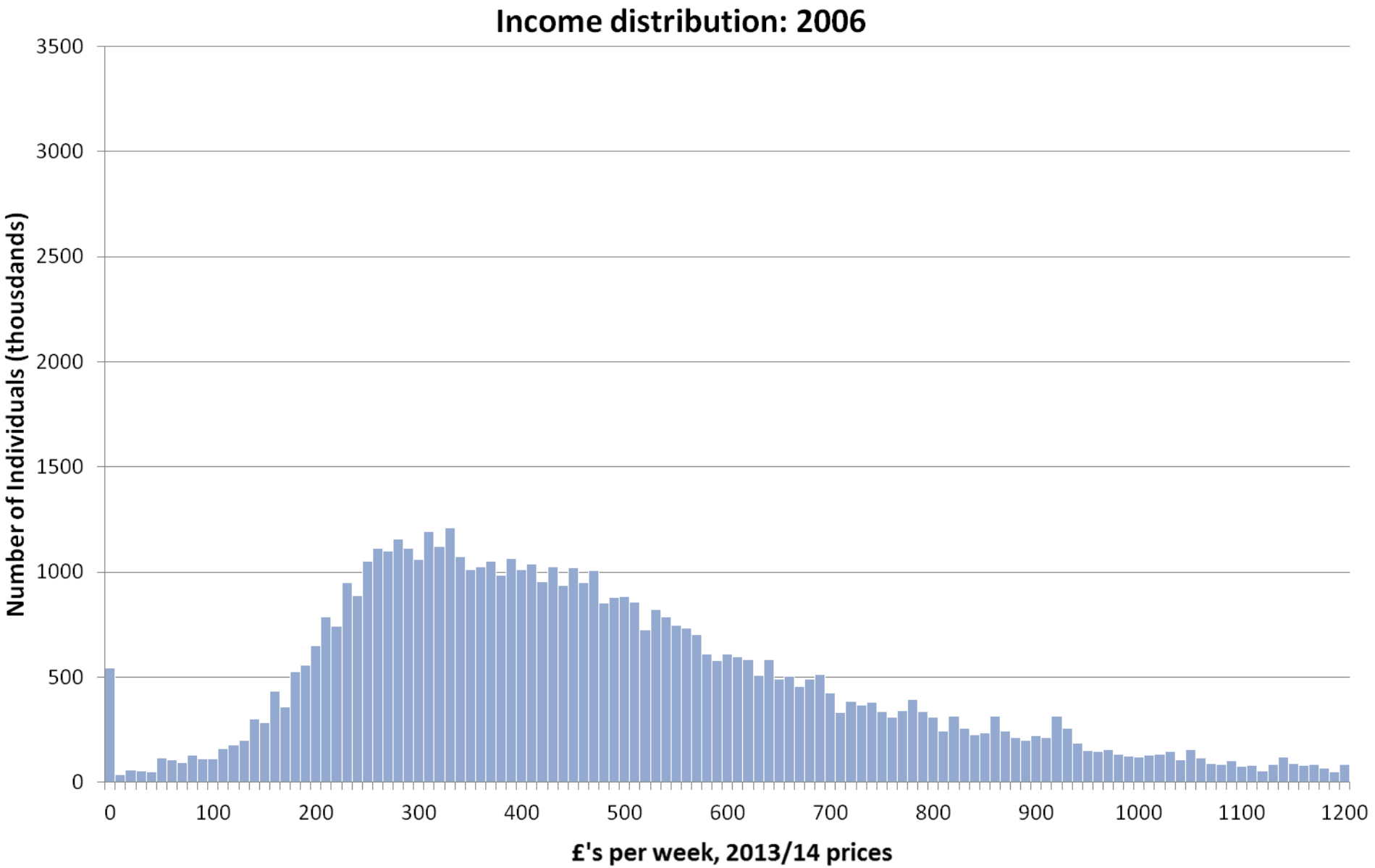

Income distribution: 2001
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

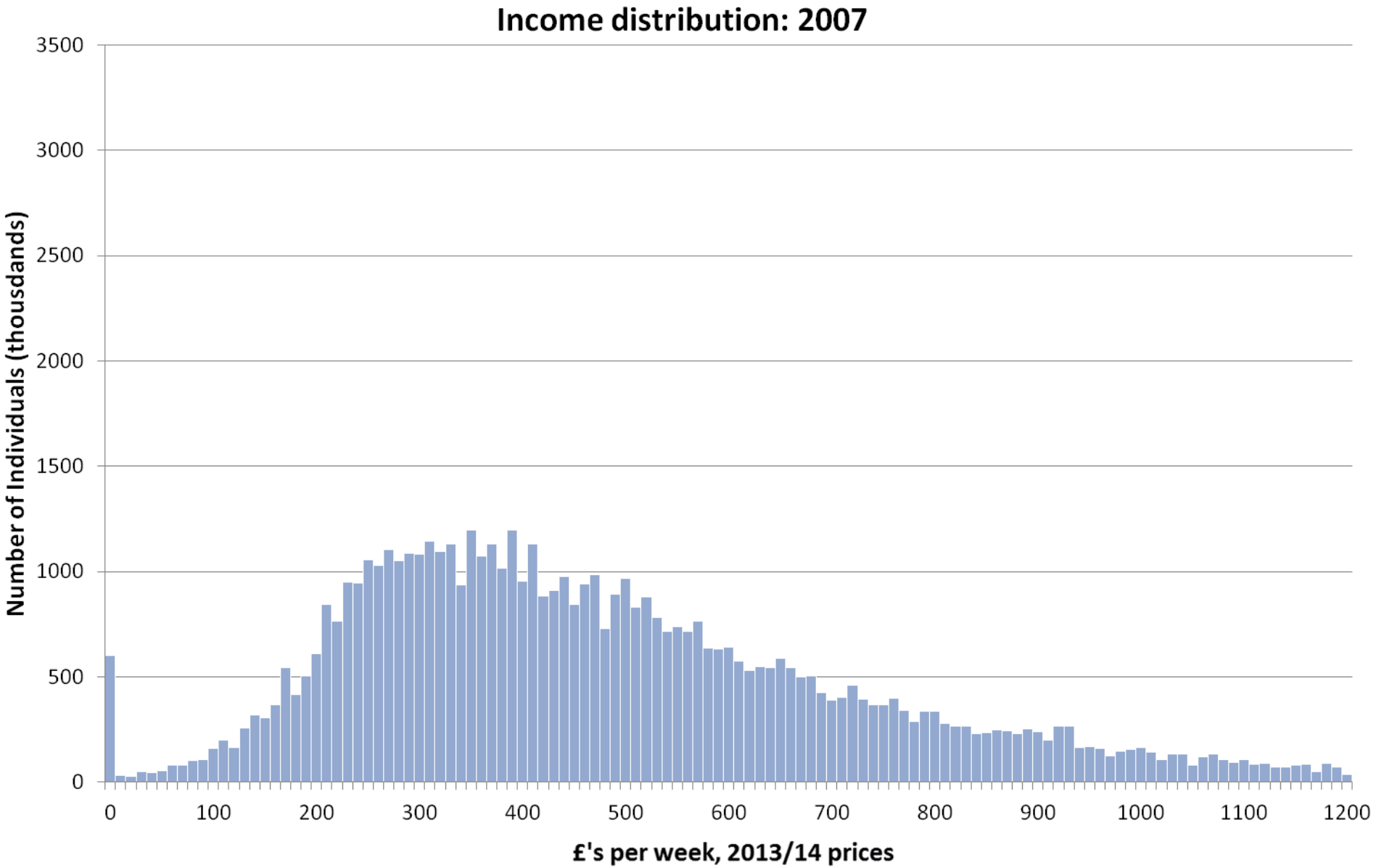

Income distribution: 2002
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

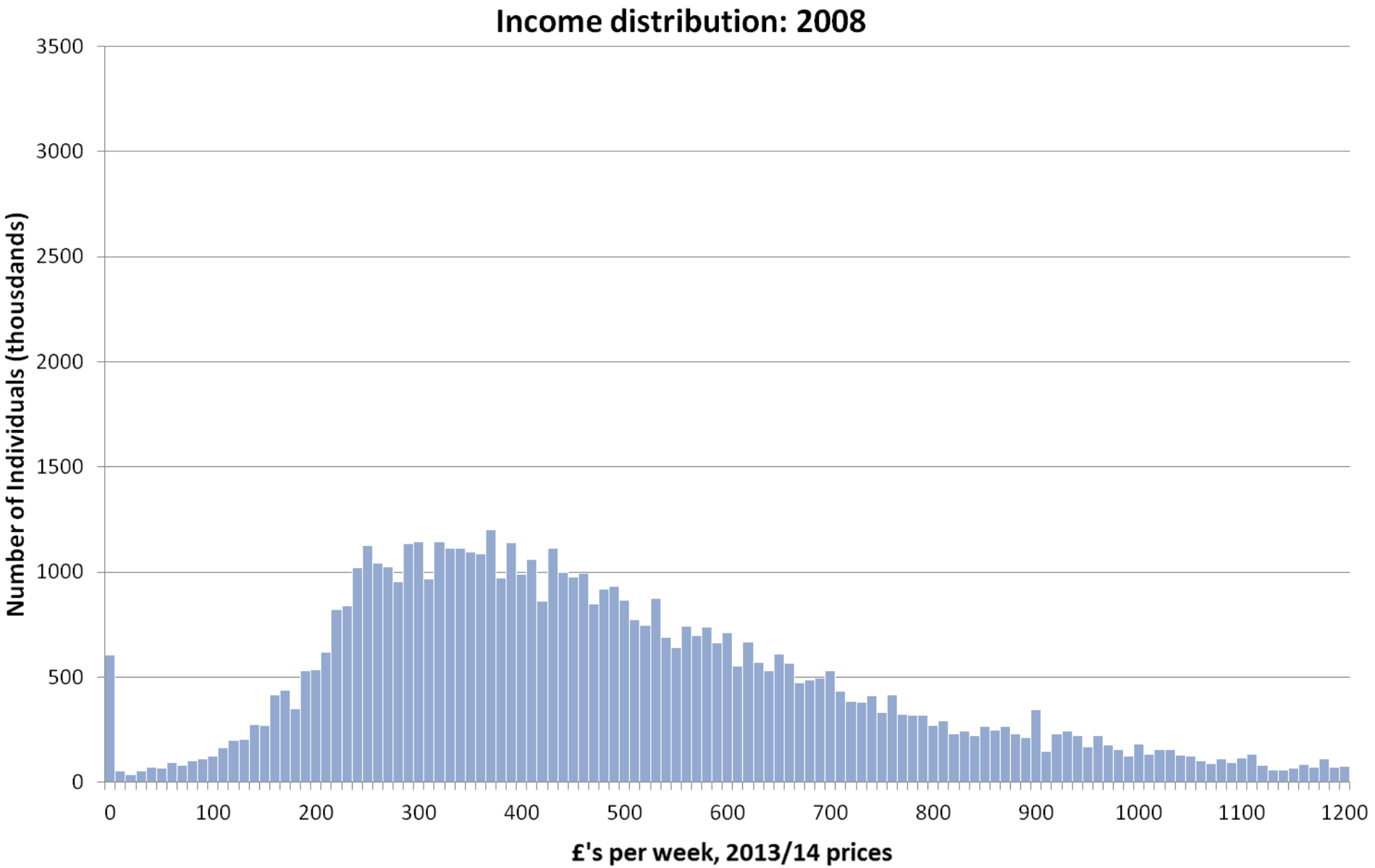

Income distribution: 2003
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

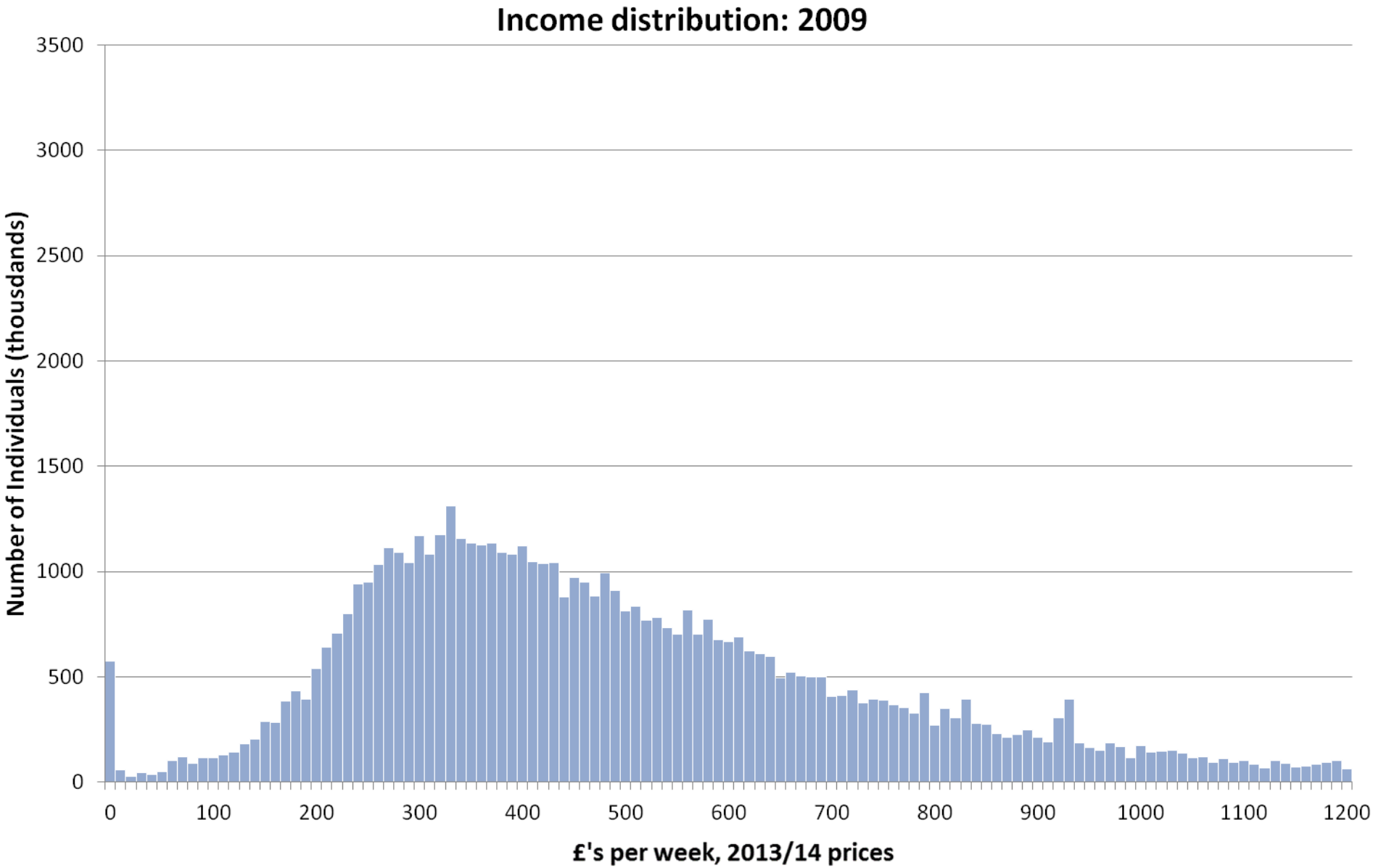

Income distribution: 2004
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

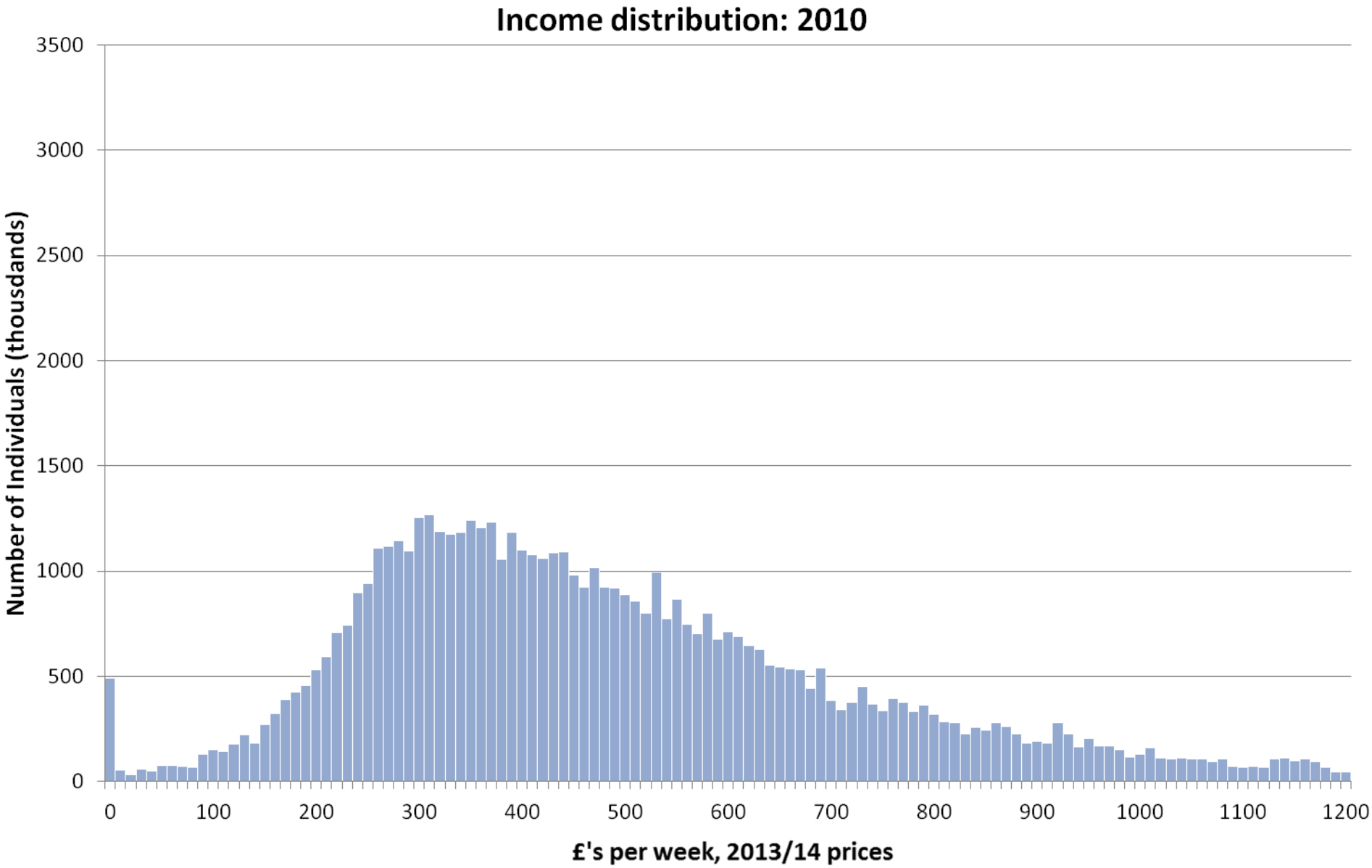

Income distribution: 2005
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

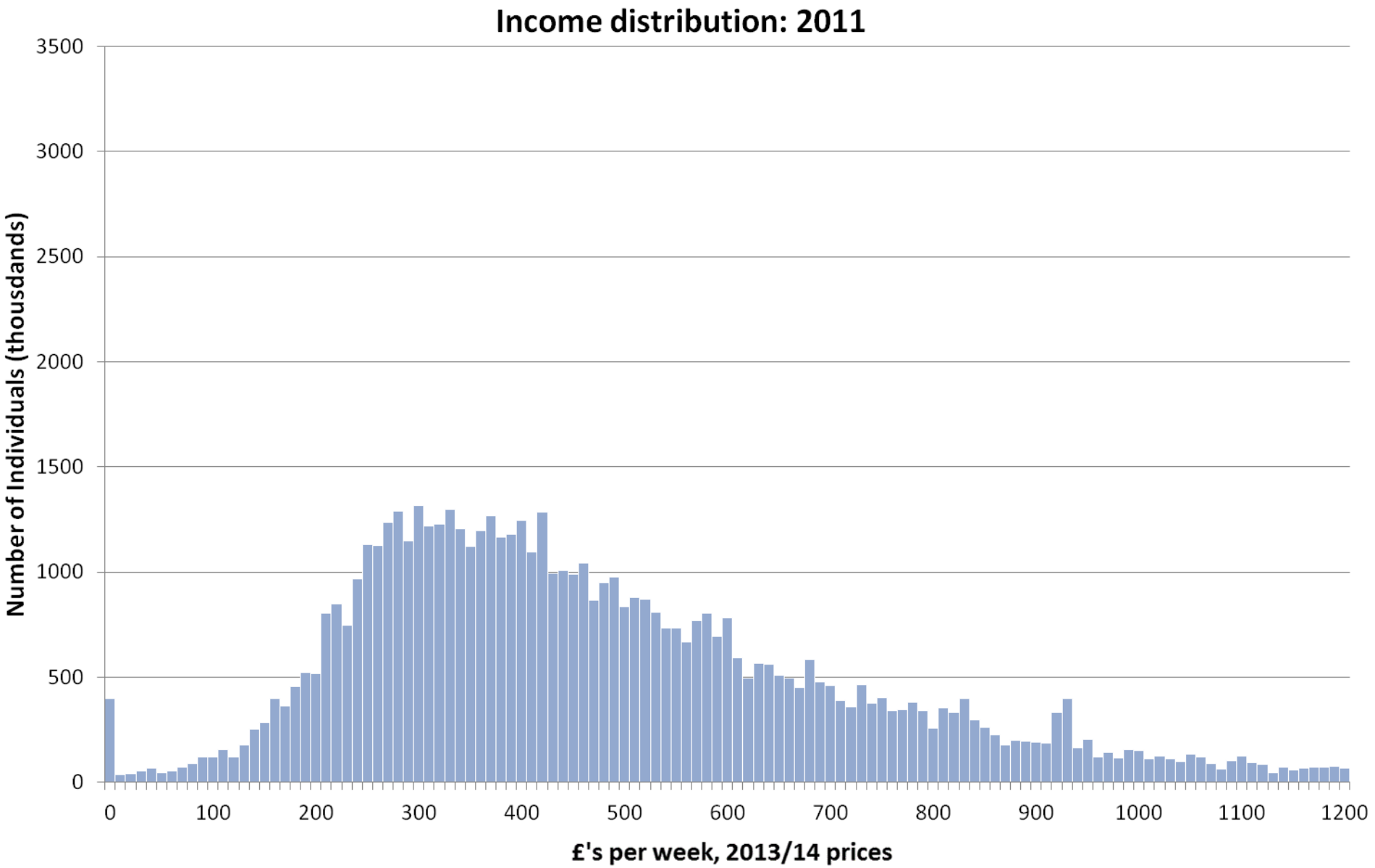

Income distribution: 2006
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

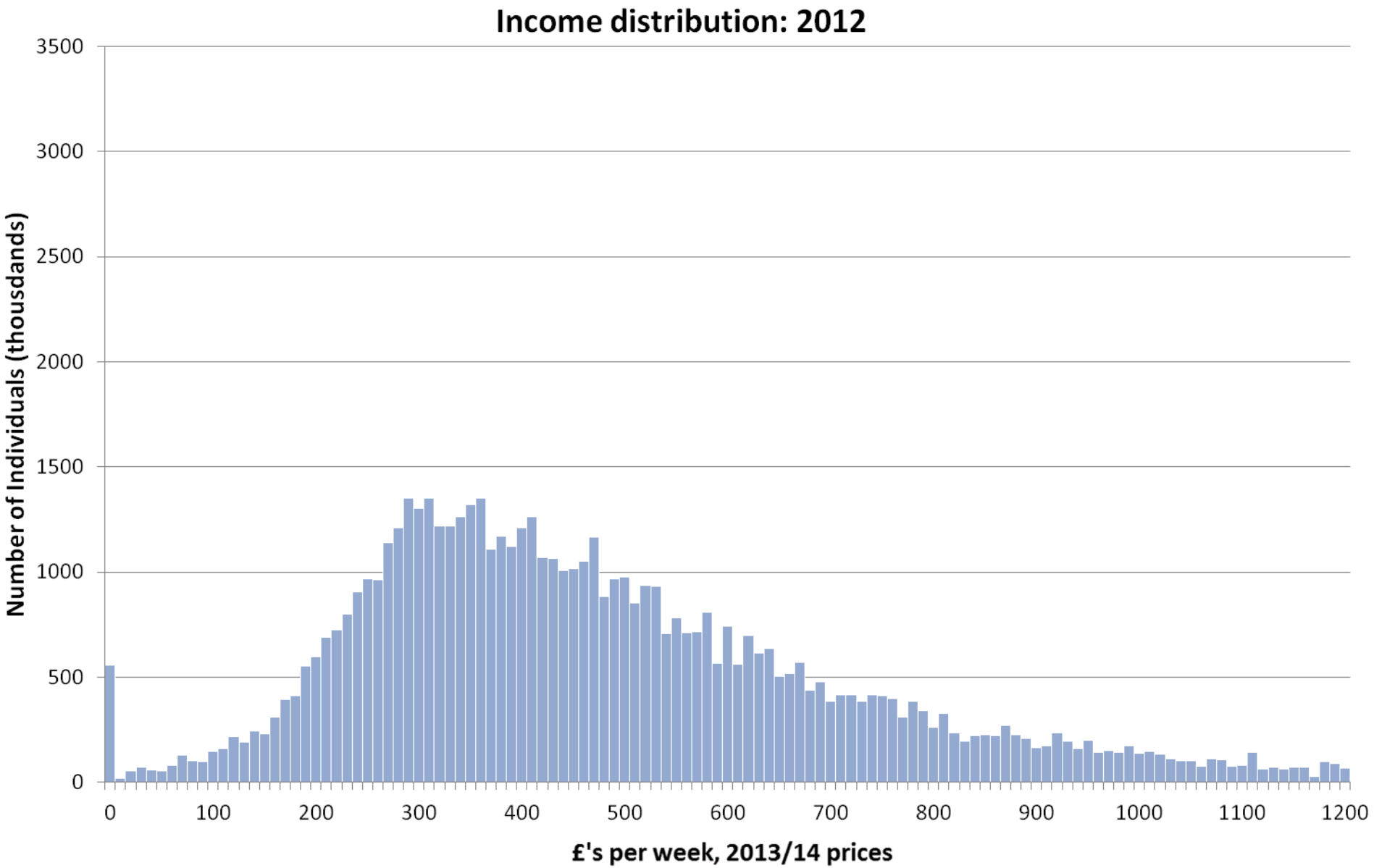

Income distribution: 2007
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

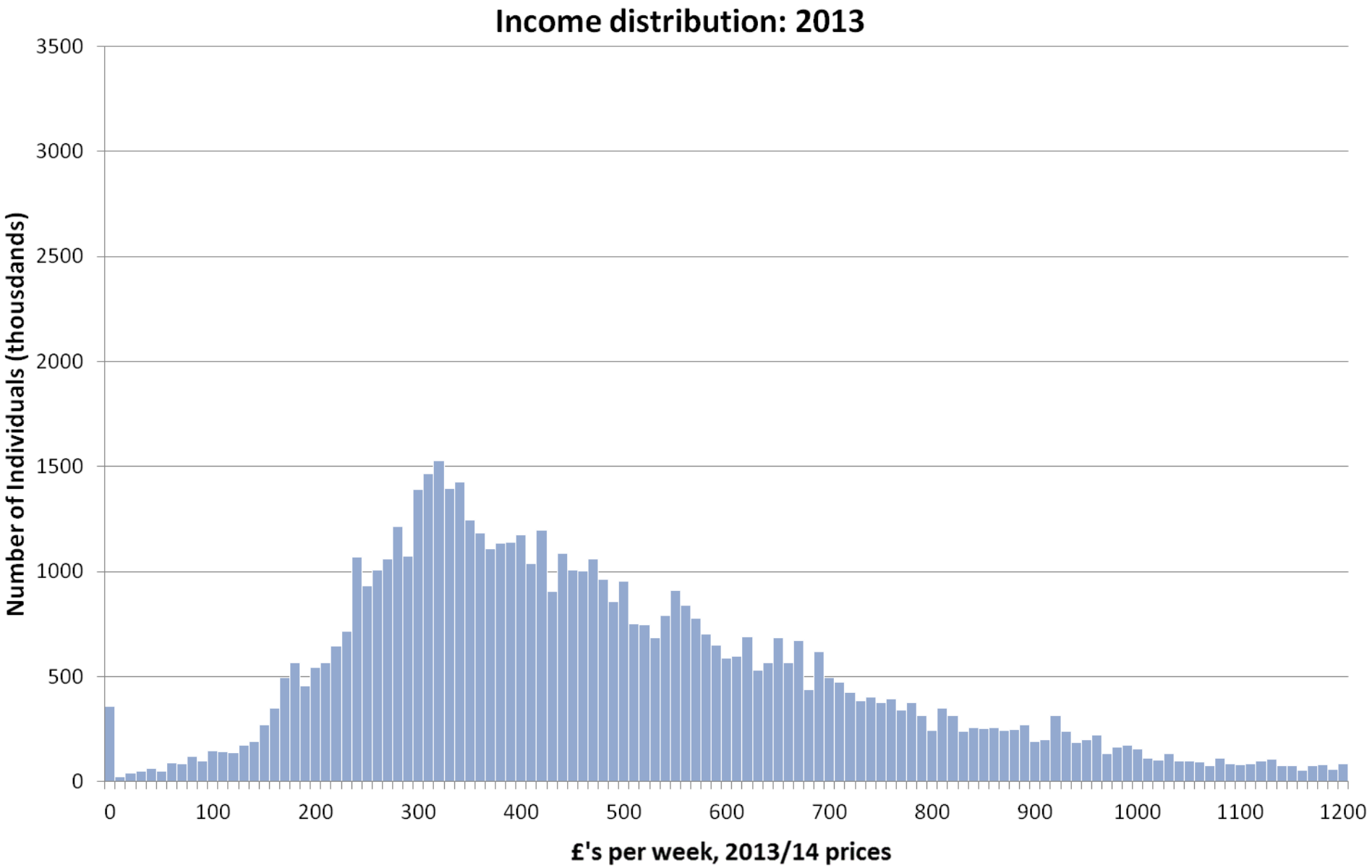

Income distribution: 2008
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

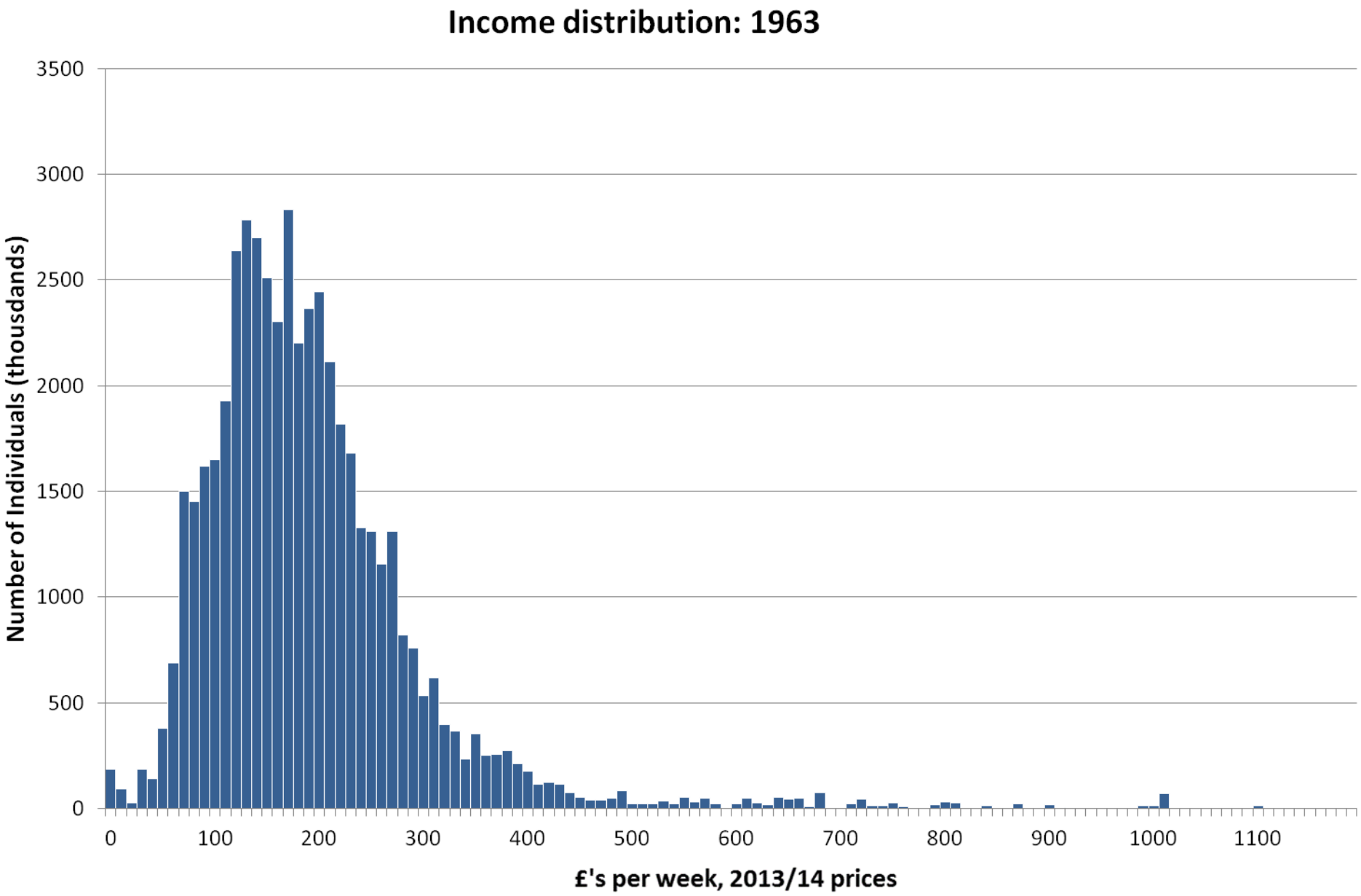

Income distribution: 2009
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

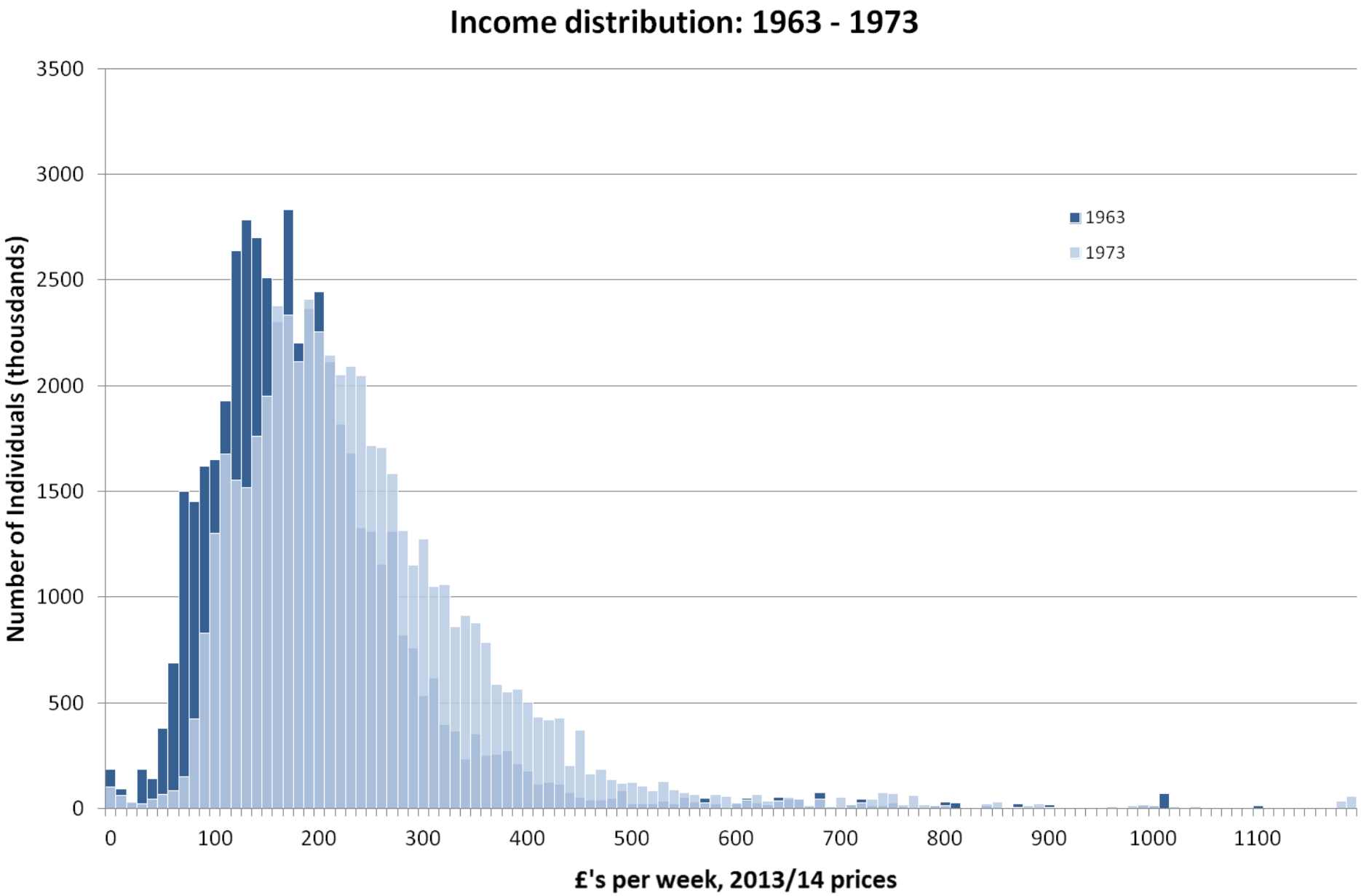

Income distribution: 2010
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

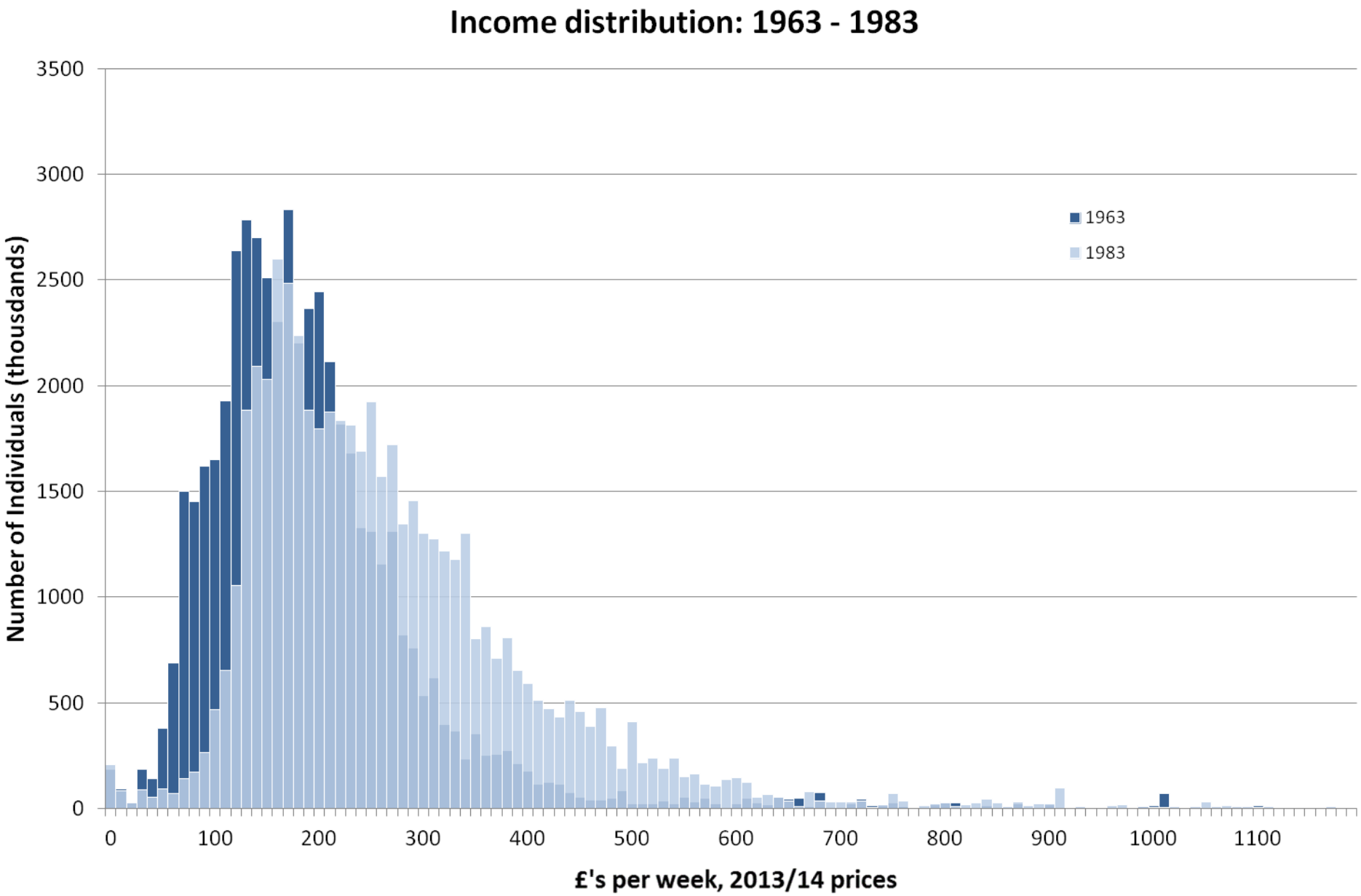

Income distribution: 2011
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

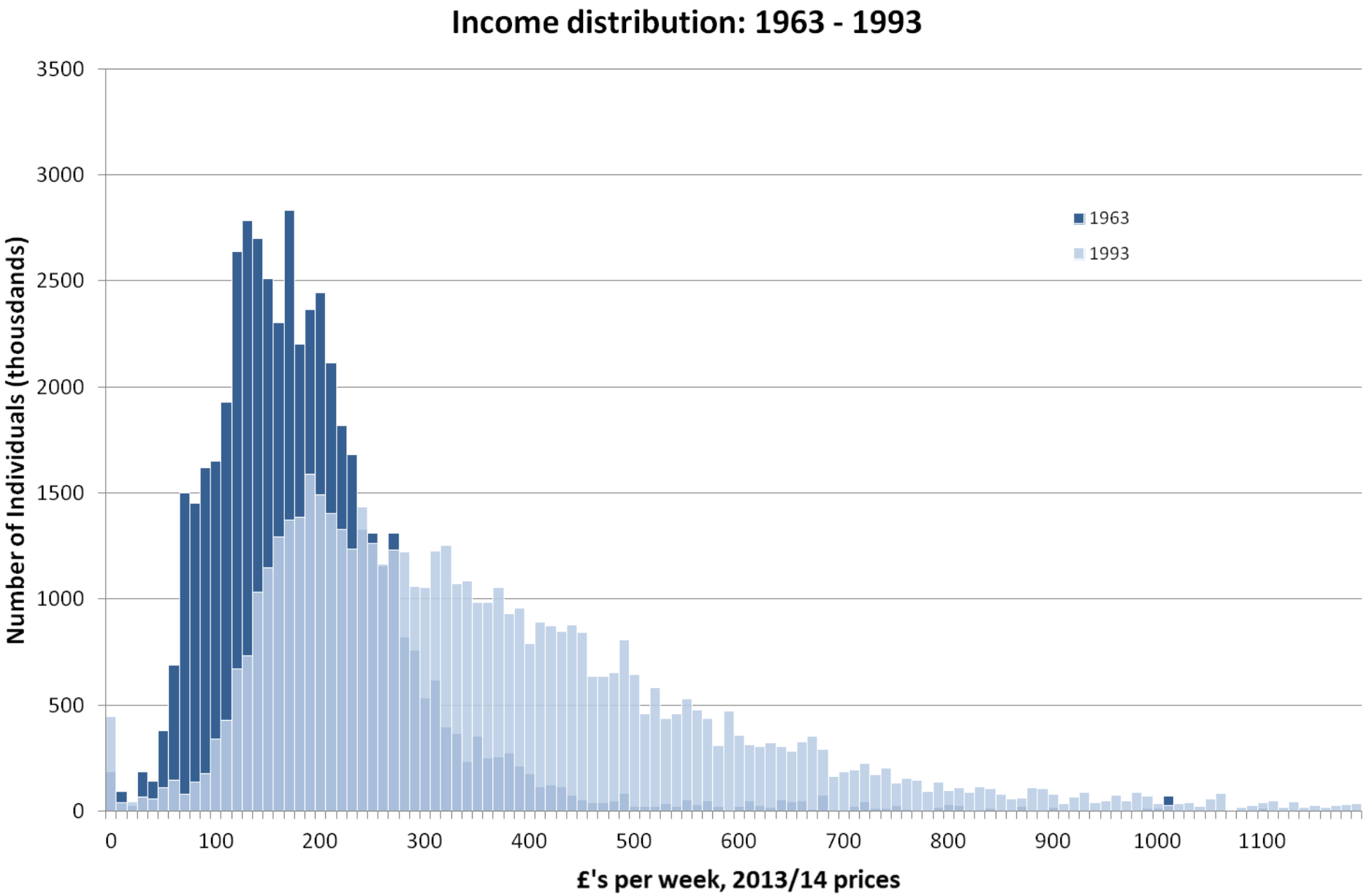

Income distribution: 2012
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

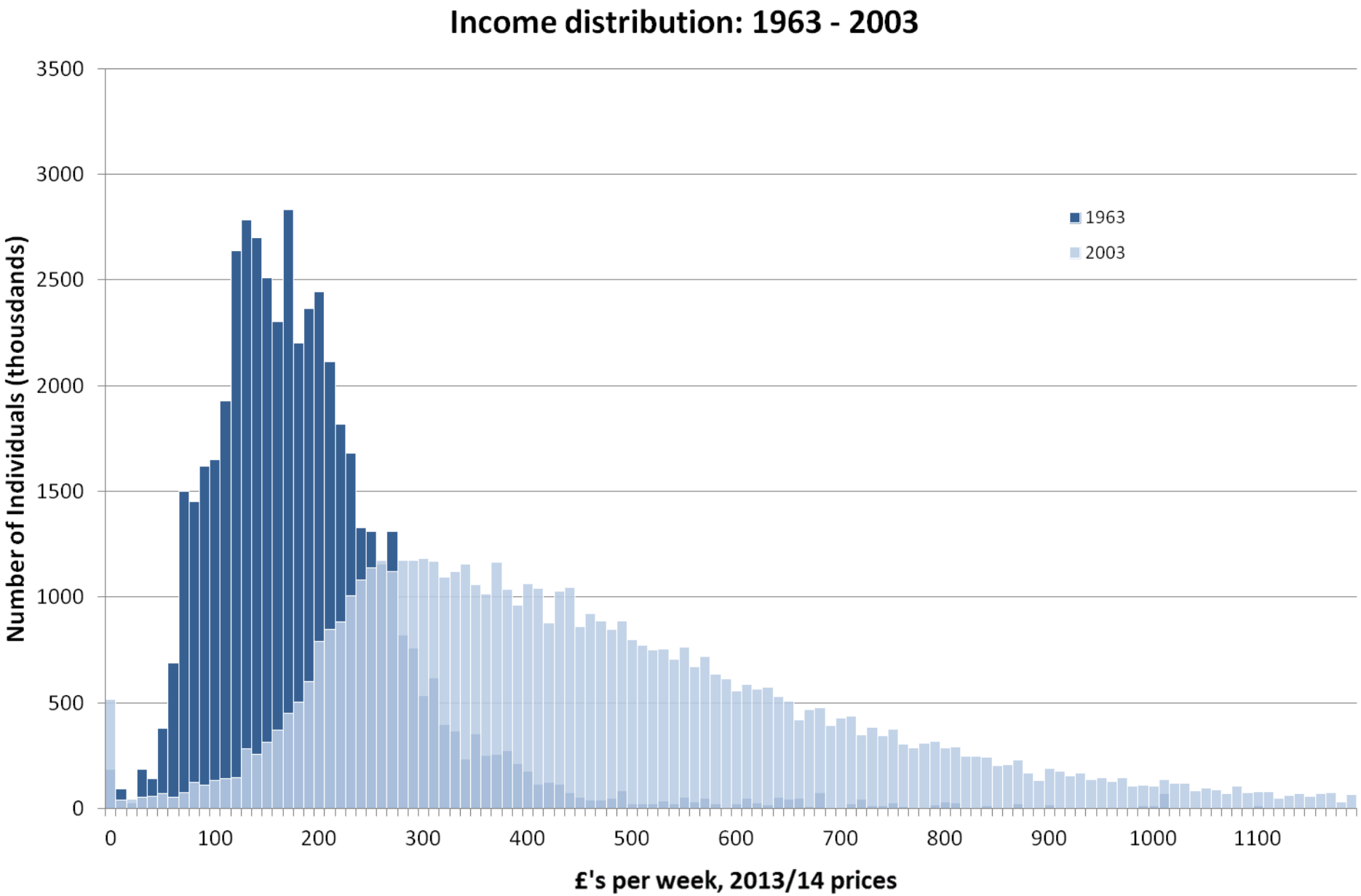

Income distribution: 2013
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
£'s per week, 2013/14 prices

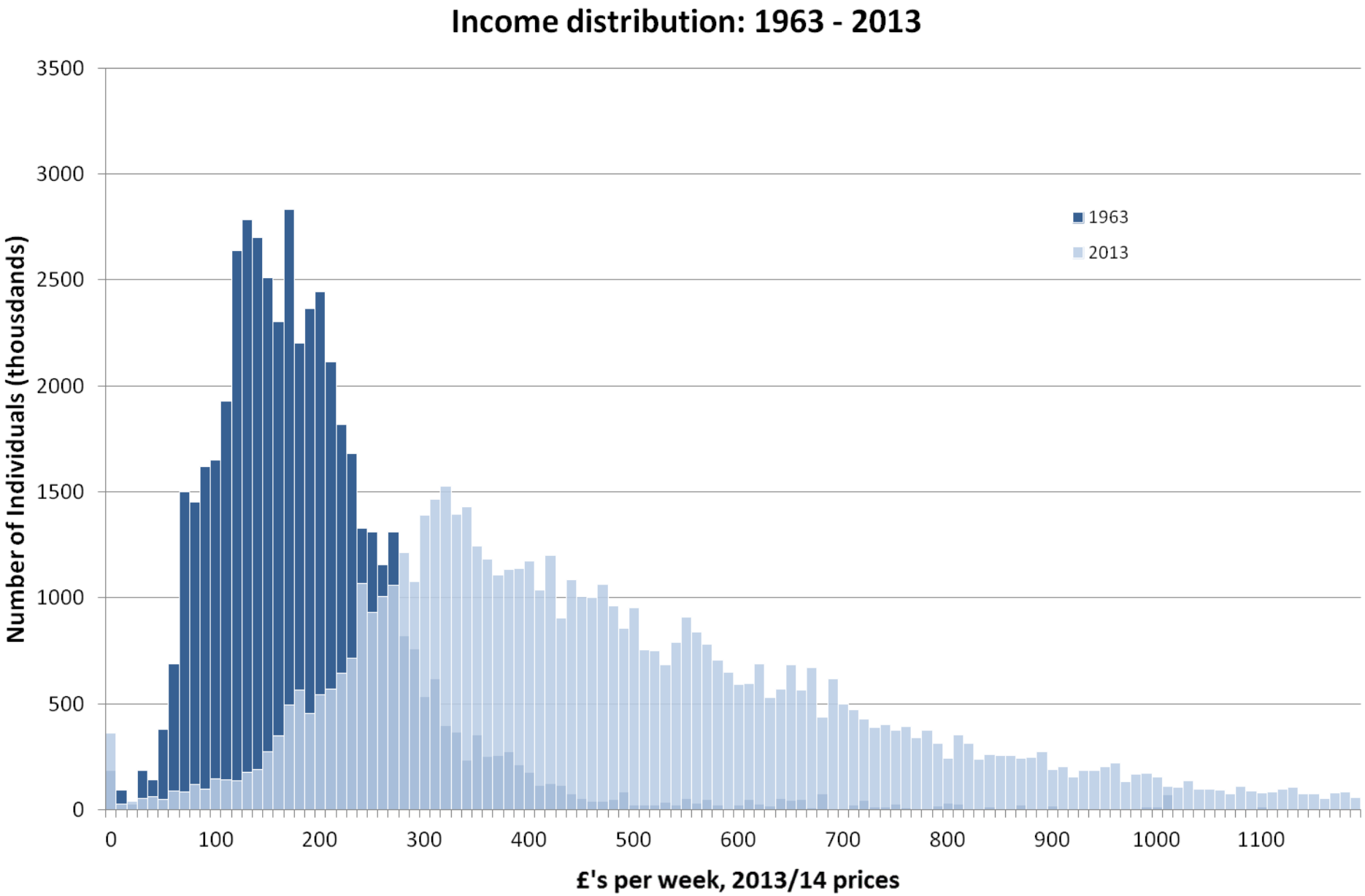

Income distribution: 1963
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
1100
£'s per week, 2013/14 prices


Income distribution: 1963 - 1973
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
1963
1973
0
100
200
300
400
500
600
700
800
900
1000
1100
£'s per week, 2013/14 prices

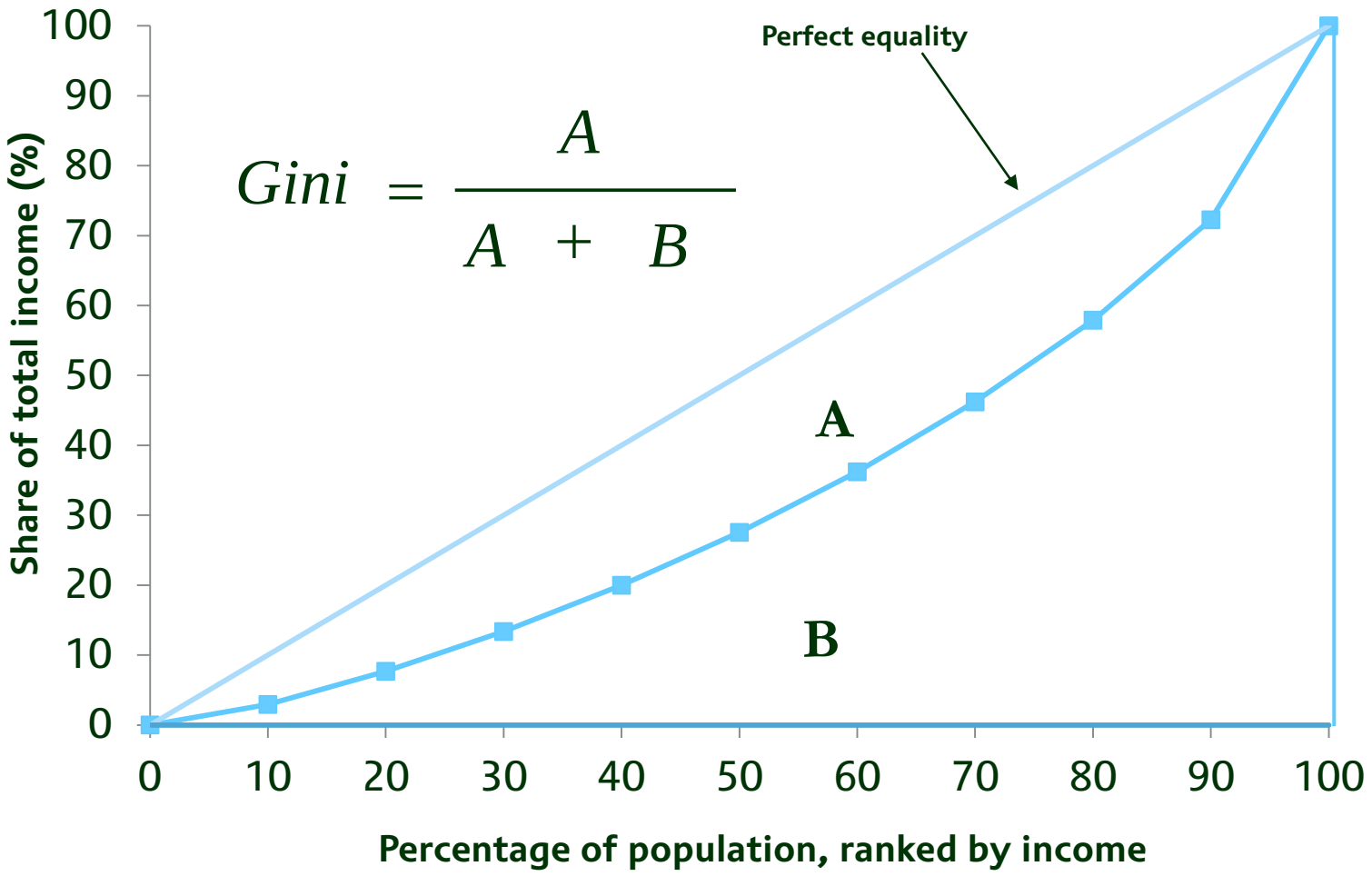

Income distribution: 1963 - 1983
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
1963
1983
0
100
200
300
400
500
600
700
800
900
1000
1100
£'s per week, 2013/14 prices


Income distribution: 1963 - 1993
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
1963
1993
0
100
200
300
400
500
600
700
800
900
1000
1100
£'s per week, 2013/14 prices


Income distribution: 1963 - 2003
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
1963
2003
0
100
200
300
400
500
600
700
800
900
1000
1100
£'s per week, 2013/14 prices

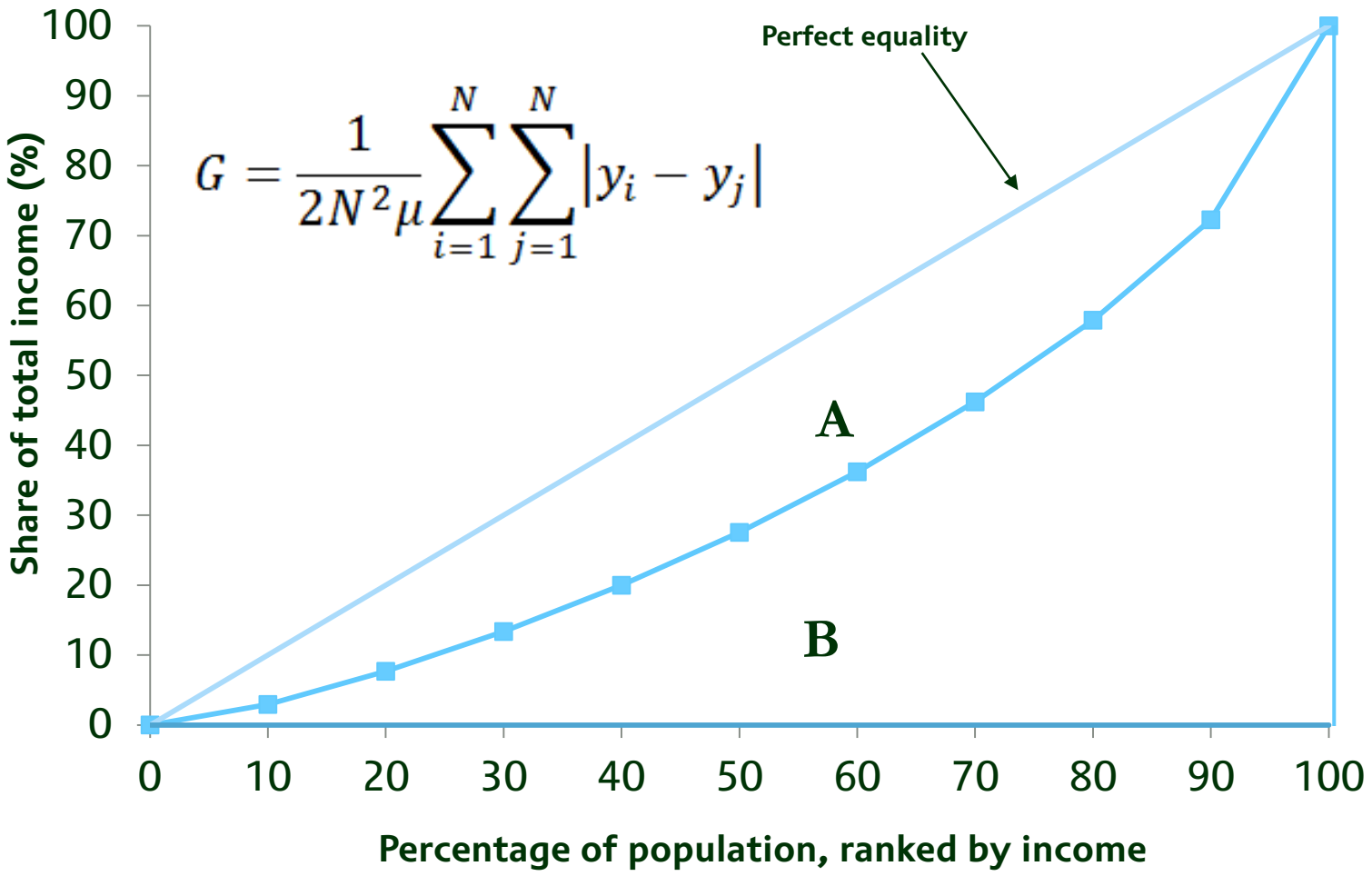

Income distribution: 1963 - 2013
Number of Individuals (thousands)
3500
3000
2500
2000
1500
1000
500
0
1963
2013
0
100
200
300
400
500
600
700
800
900
1000
1100
£'s per week, 2013/14 prices

Measuring income inequality: the Gini coefficient



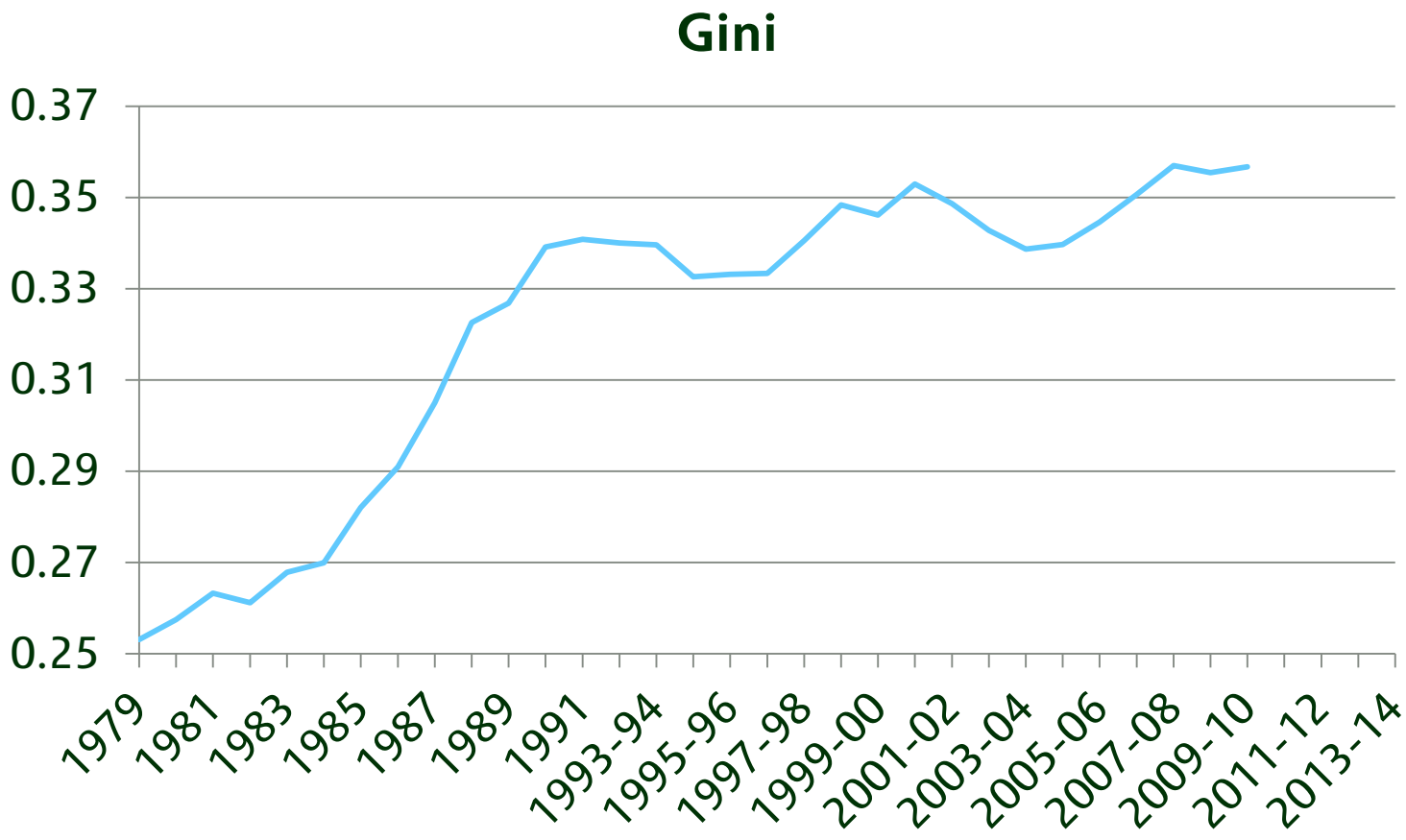
Institute for Fiscal Studies

Measuring income inequality: the Gini coefficient



Institute for Fiscal Studies

Gini coefficient: 1979 to 2009–10



© Institute for Fiscal Studies

Institute for Fiscal Studies

Why did income inequality rise?

- Lots of explanations
  - Skills-biased technological changes [see Acemoglu (2002), Machin (2001) and Goldin and Katz (2008)]
  - Labour market institutions: weaker trade unions and a decline of collective bargaining (Goodman and Shephard 2002)

© Institute for Fiscal Studies

Why did income inequality rise?

- Quantile regression and Chambelain (1994)

© Institute for Fiscal Studies

Quantile regression

- OLS minimises the SQUARED errors:

$$\min_b \frac{1}{n} \sum_{i=1}^{n} (y_i - x_i b)^2$$

- Median regression minimises ABSOLUTE errors:

$$\min_b E\left[|Y - Xb|\right].$$

- Quantile regression minimises the CHECK function:

$$\min_b E\left[\tau\left(Y - Xb\right) \cdot 1\left[Y - Xb \geq 0\right] - \left(1 - \tau\right)\left(Y - Xb\right) \cdot 1\left[Y - Xb < 0\right] | x\right]$$

© Institute for Fiscal Studies

Why did income inequality rise?

- Quantile regression and Chambelain (1994)

$$\ln(Wages_i) = \beta_0 + \beta_1 Trade_Union_i + X_i'\beta_j + u_i$$

Sector	0.1	0.25	0.5	0.75	0.9	OLS
Manufacturing	0.281 (0.12)	0.249 (0.12)	0.169 (0.11)	0.075 (0.1)	−0.003 (0.11)	0.158 (0.14)
Non-manufacturing	0.47 (0.14)	0.406 (0.14)	0.333 (0.13)	0.248 (0.16)	0.184 (0.18)	0.327 (0.16)

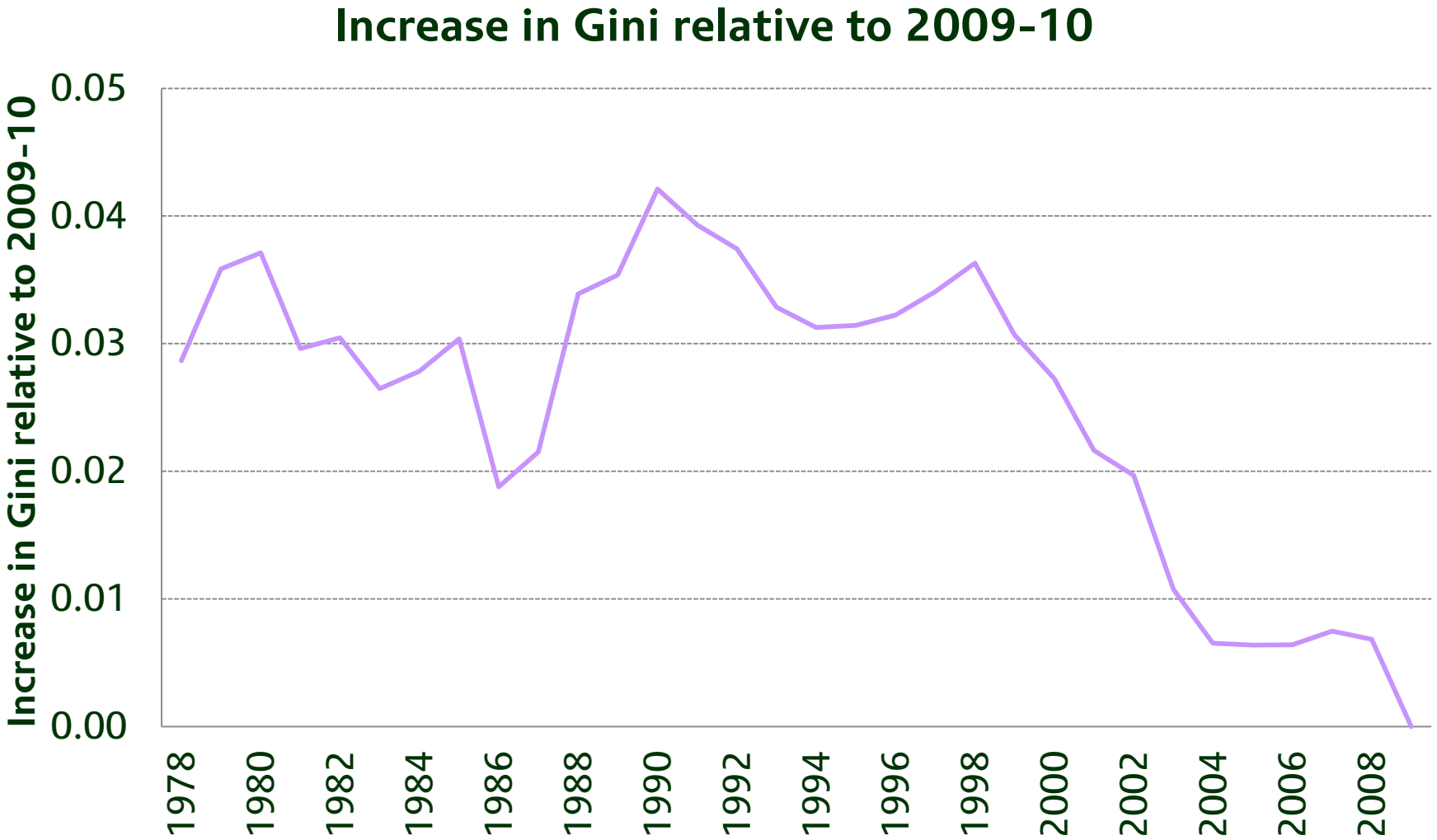
© Institute for Fiscal Studies

Why did income inequality rise?

- Lots of explanations
  - Skills-biased technological changes [see Acemoglu (2002), Machin (2001) and Goldin and Katz (2008)]
  - Labour market institutions: weaker trade unions and a decline of collective bargaining (Goodman and Shephard 2002)
  - More inequality in employment status across households (Gregg and Wadsworth, 2008)
  - Changes in the tax and benefit system

© Institute for Fiscal Studies

Replacing tax/benefit system with those from previous years (UK)

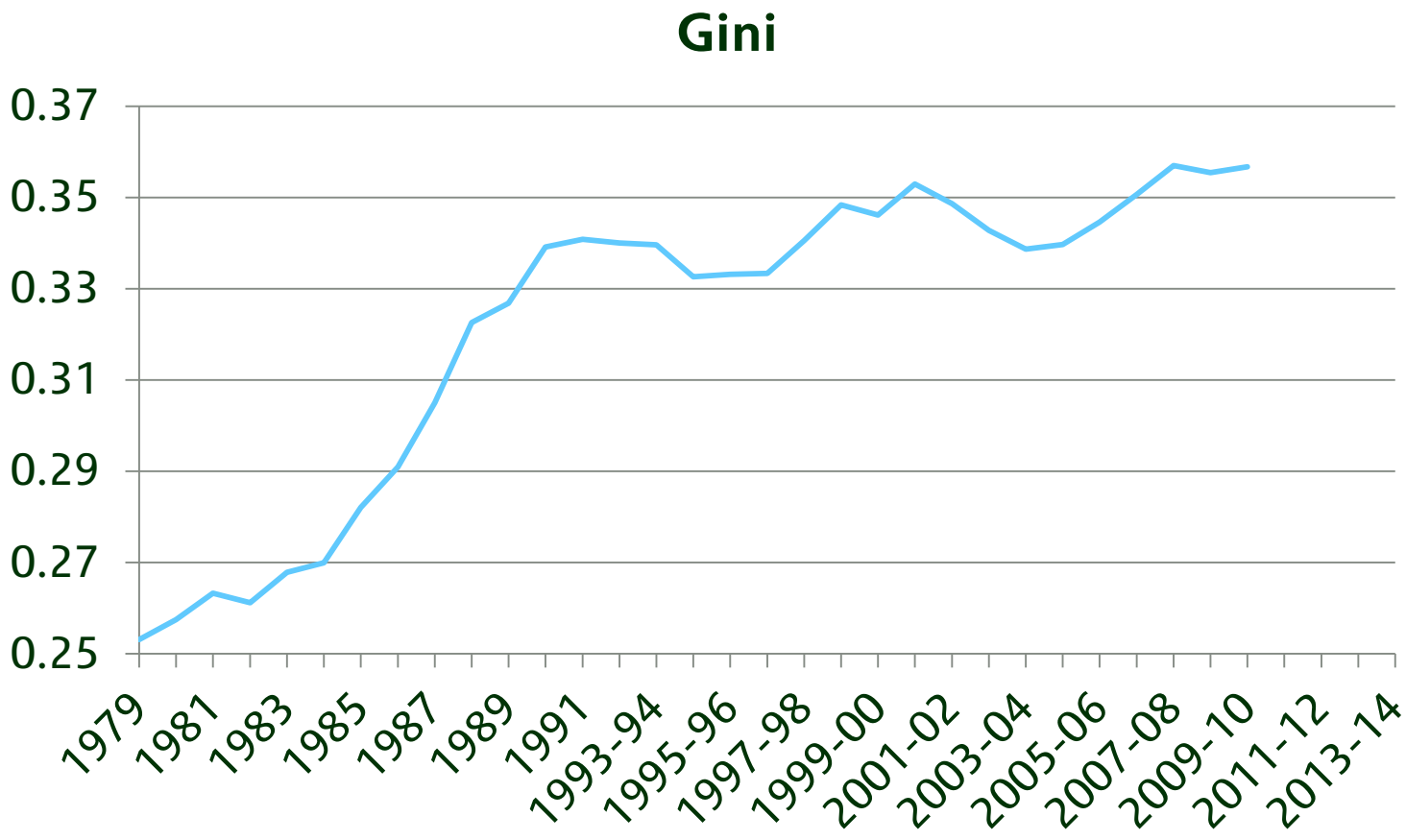


Source: Adam and Browne (2010).

Note: Tax and benefit systems from previous years have been uprated in line with the Retail Prices Index. Years up to and including 1992 are calendar years; thereafter, years refer to financial years.

Institute for Fiscal Studies

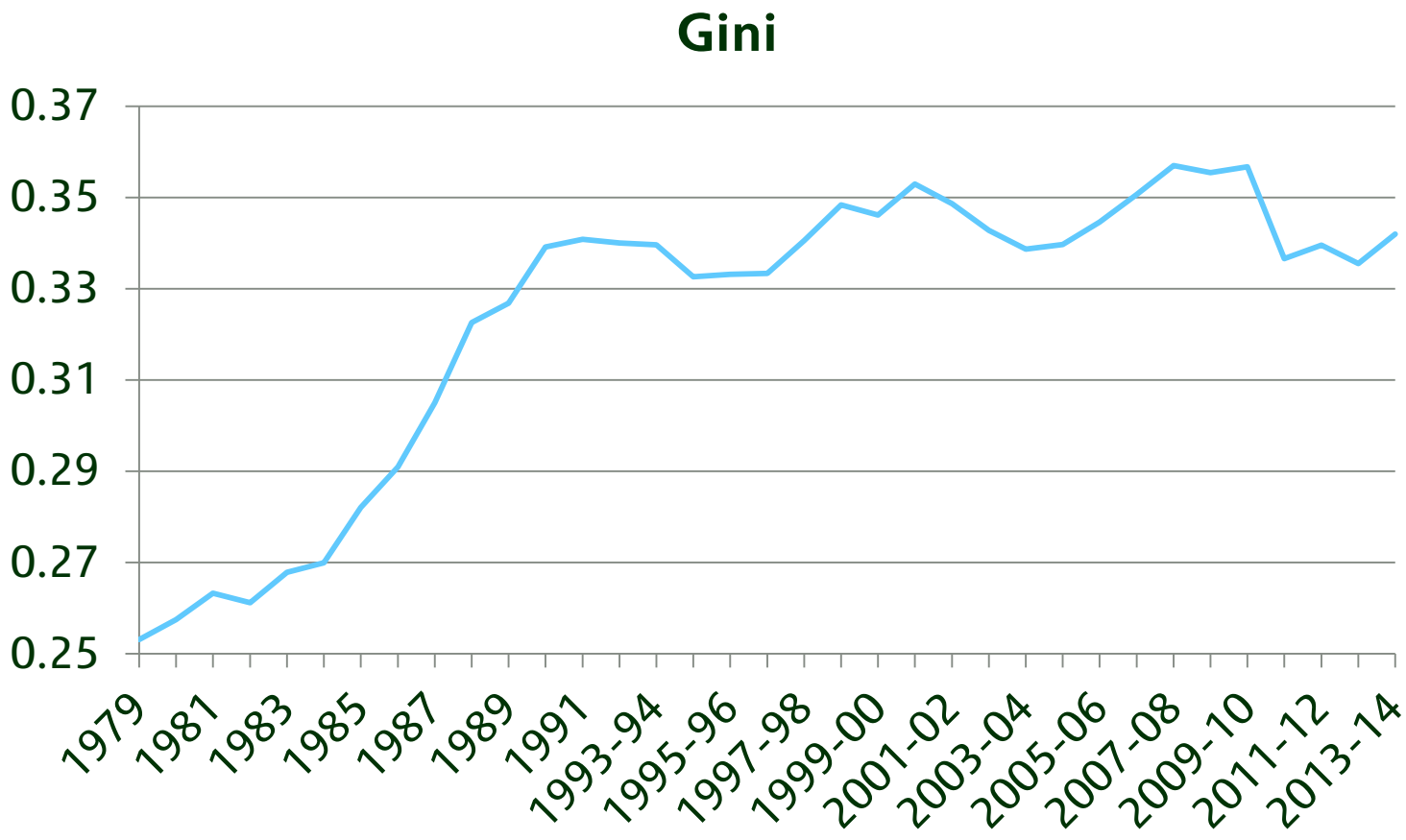
Gini coefficient: 1979 to 2013–14



© Institute for Fiscal Studies

Institute for Fiscal Studies

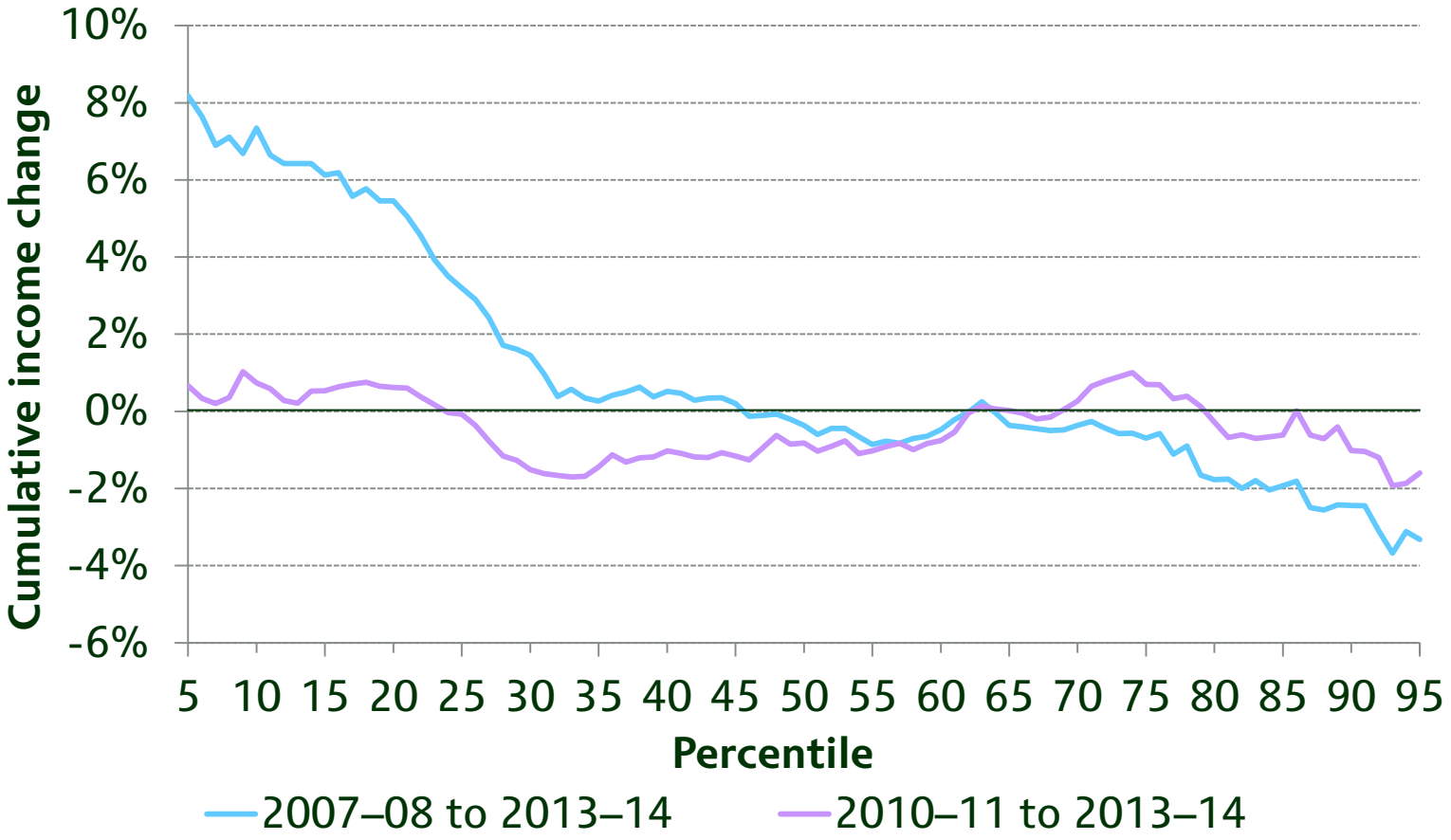
Gini coefficient: 1979 to 2013–14



© Institute for Fiscal Studies

Institute for Fiscal Studies

Real income growth by percentile point

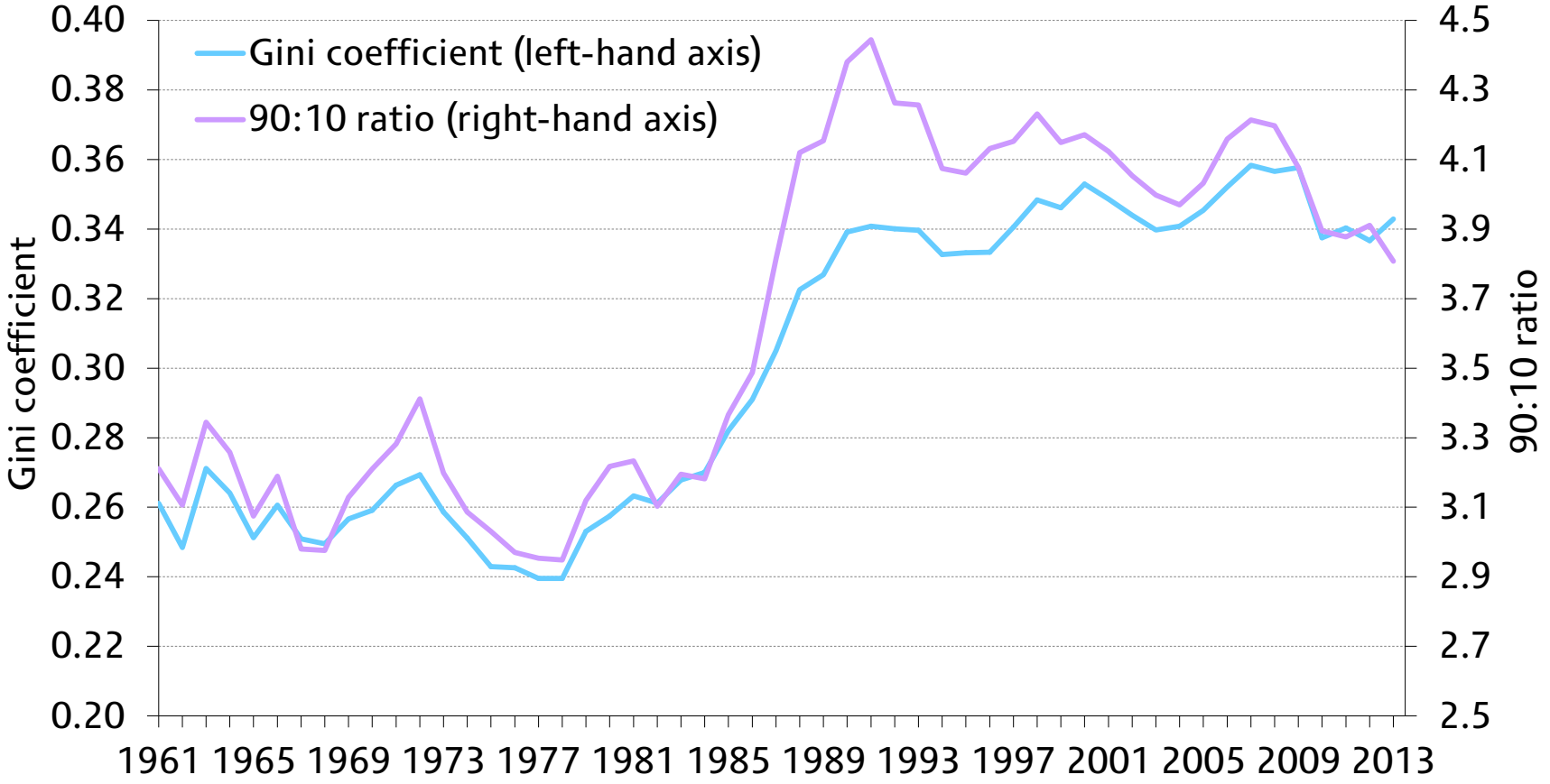


Source: Figure 3.2 of *Living Standards, Poverty and Inequality: 2014*

© Institute for Fiscal Studies

Institute for Fiscal Studies

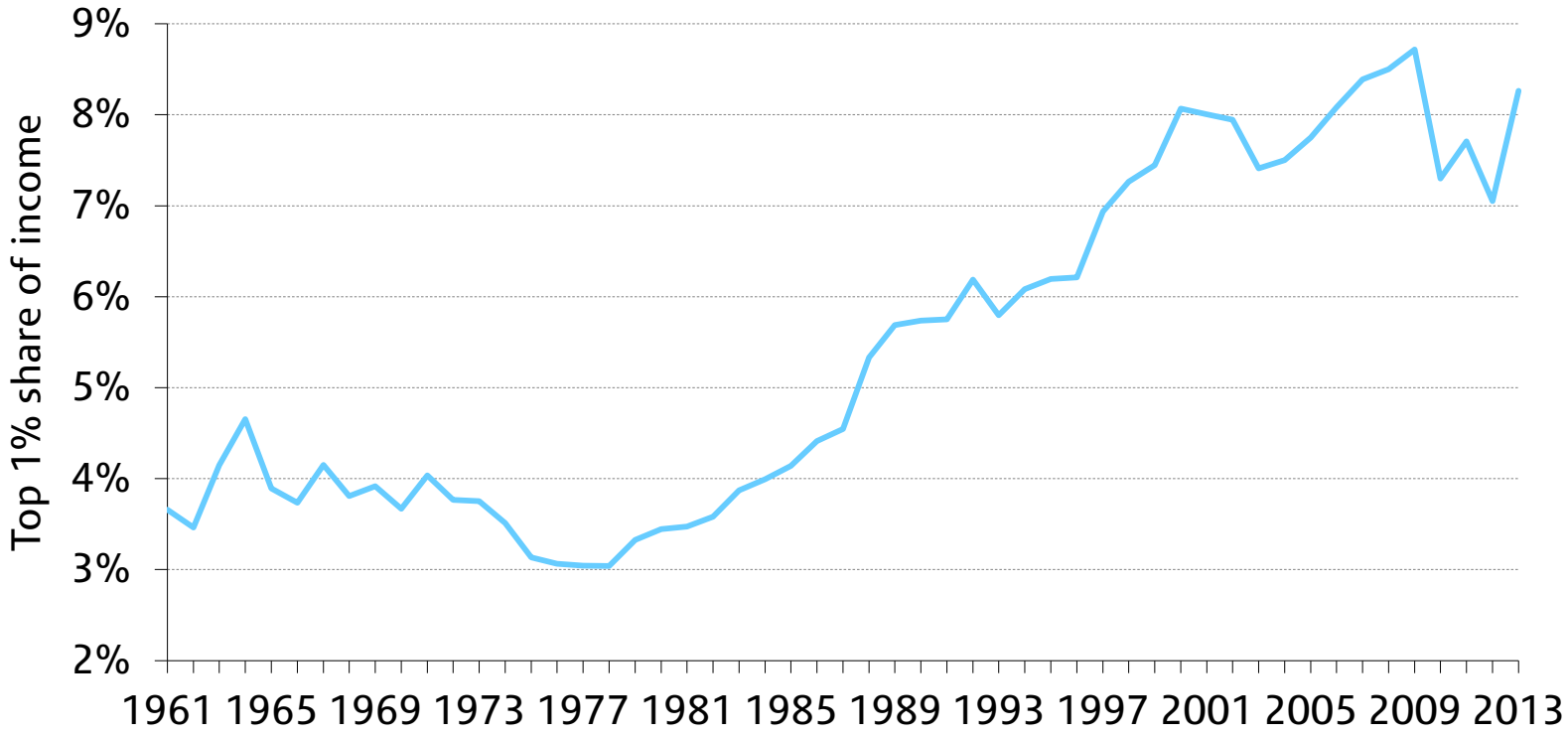
Comparing to the 90:10 differential



© Institute for Fiscal Studies

Institute for Fiscal Studies

Income share of top 1%



© Institute for Fiscal Studies

Institute for Fiscal Studies

Inequality by age

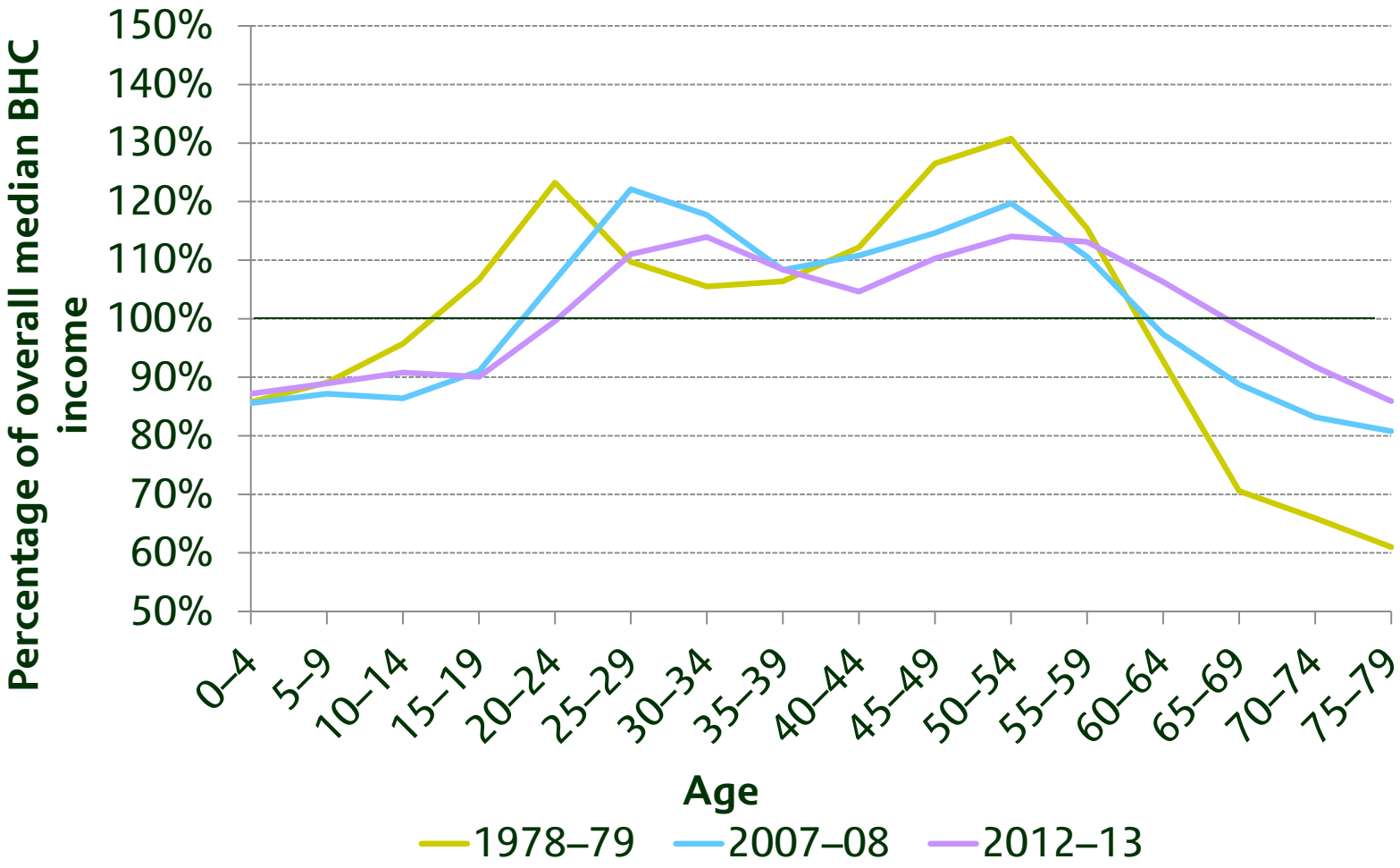
- So far we have only discussed inequality in the whole income distribution

- This conflates two types of inequality we might be interested in:
  - Inequality across ages
  - Inequality between people of the same age

- This is important as we might care more about inequality in total lifetime resources than income differences between working age individuals and pensioners

© Institute for Fiscal Studies

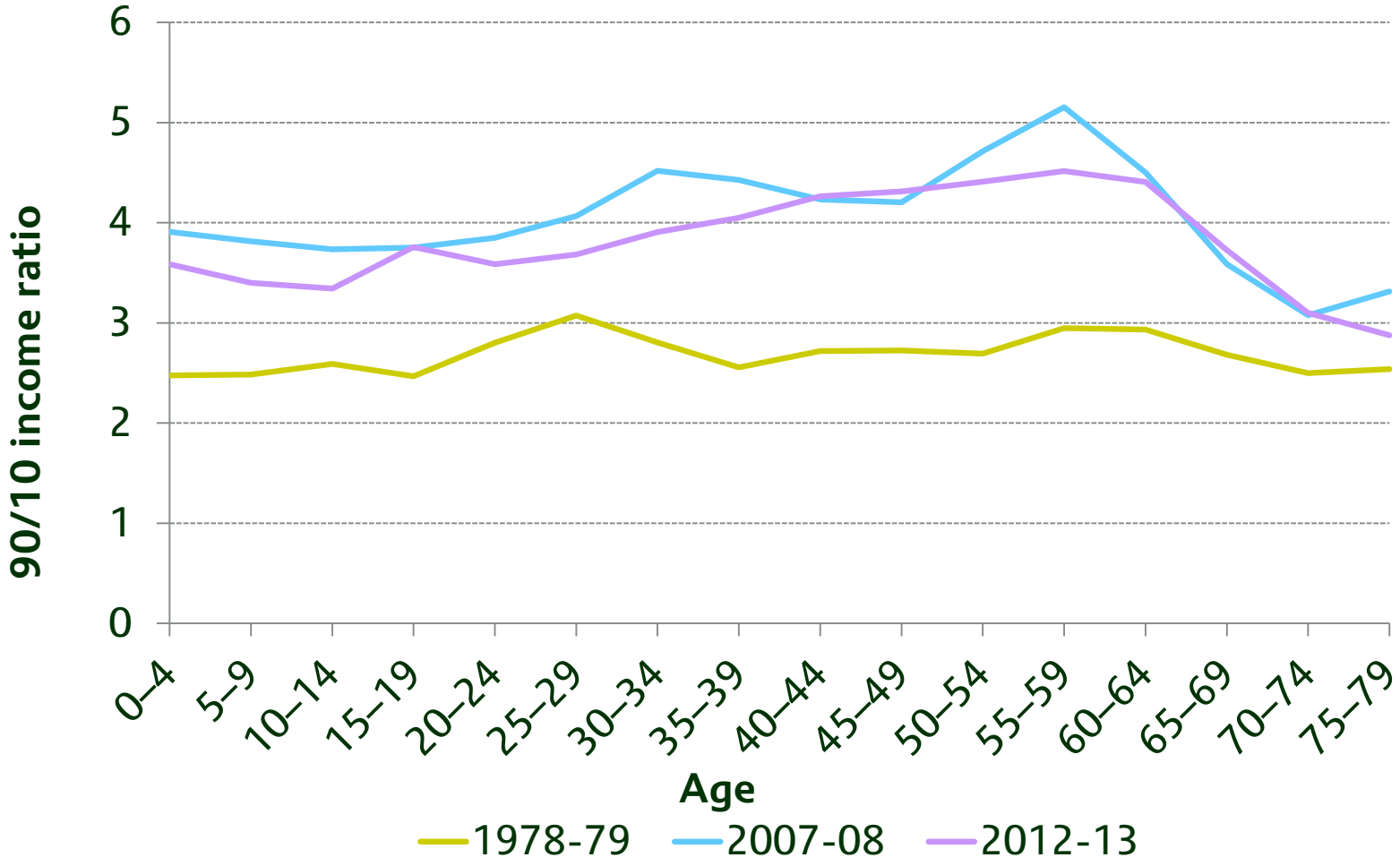
Inequality across ages



© Institute for Fiscal Studies

Institute for Fiscal Studies

Inequality within ages



© Institute for Fiscal Studies

Institute for Fiscal Studies

Inequality by age

- Between 1978-79 and 2007-08 inequality between ages fell as pensioners become relatively less poor
- At the same time inequality within age rose
- Looking at inequality in the whole income distribution conflates these two effects
- Since 2007-08 the fall in inequality has been the result of falls in inequality both within and between ages

© Institute for Fiscal Studies

Poverty

© Institute for Fiscal Studies

What is poverty?

- Destitution, relative deprivation, capability or functioning in society, livelihood sustainability?
  - What can we measure?

- Economists have tended to define poverty as having income below a certain “poverty line”

- One alternative is a “poverty gap” measure
  - weights people according to how far they are below the poverty line
  - but the data towards the bottom of the income distribution is not good enough

© Institute for Fiscal Studies

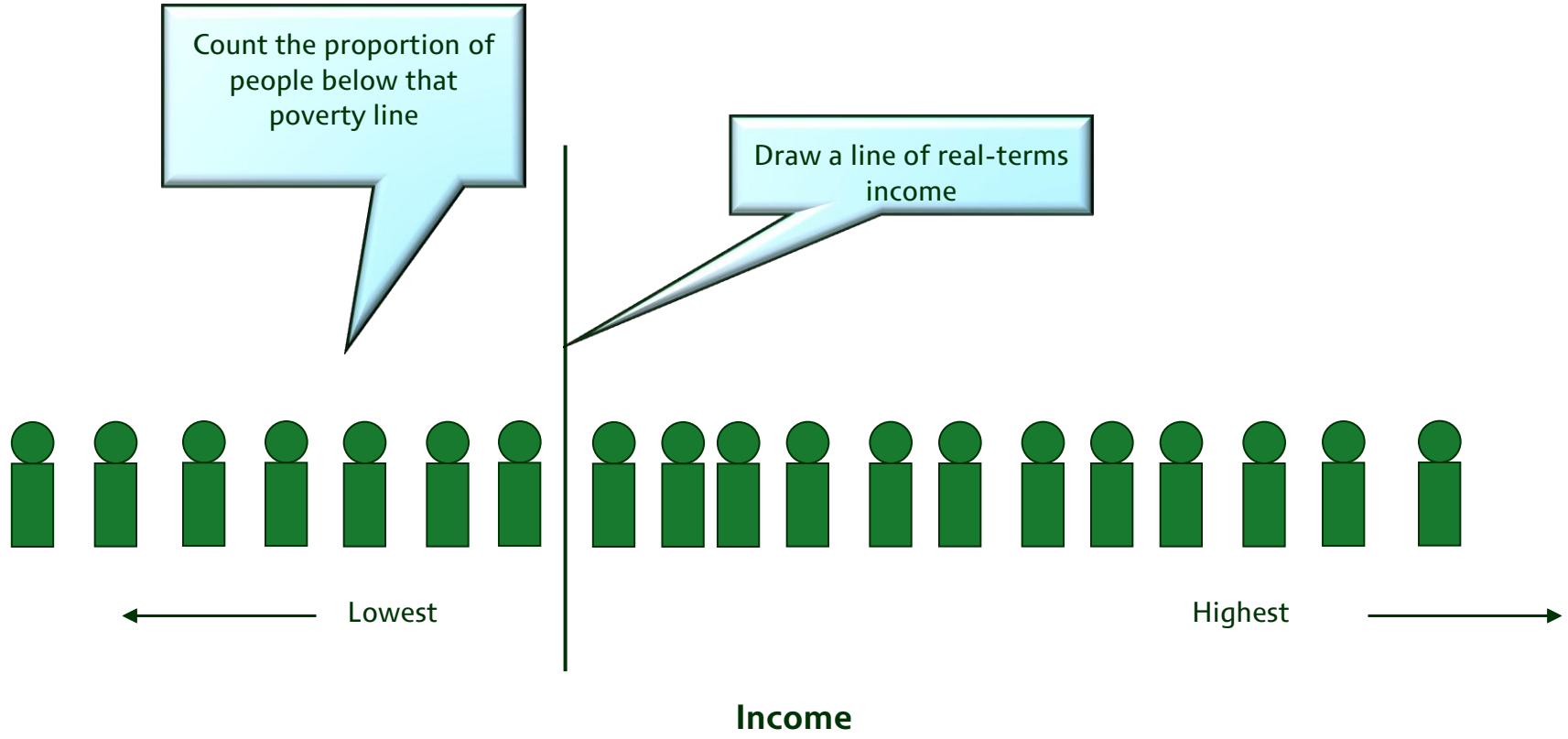
Poverty lines

- 2 types of poverty lines are used

1. Absolute Poverty lines
   - Defined as a certain level of real-terms income
   - Example: $1 a day poverty line (in 1990 prices) (Ravallion et al 1991), US government basket of goods and services
   - However in the UK we typically use a 60% of 2010/11 median income

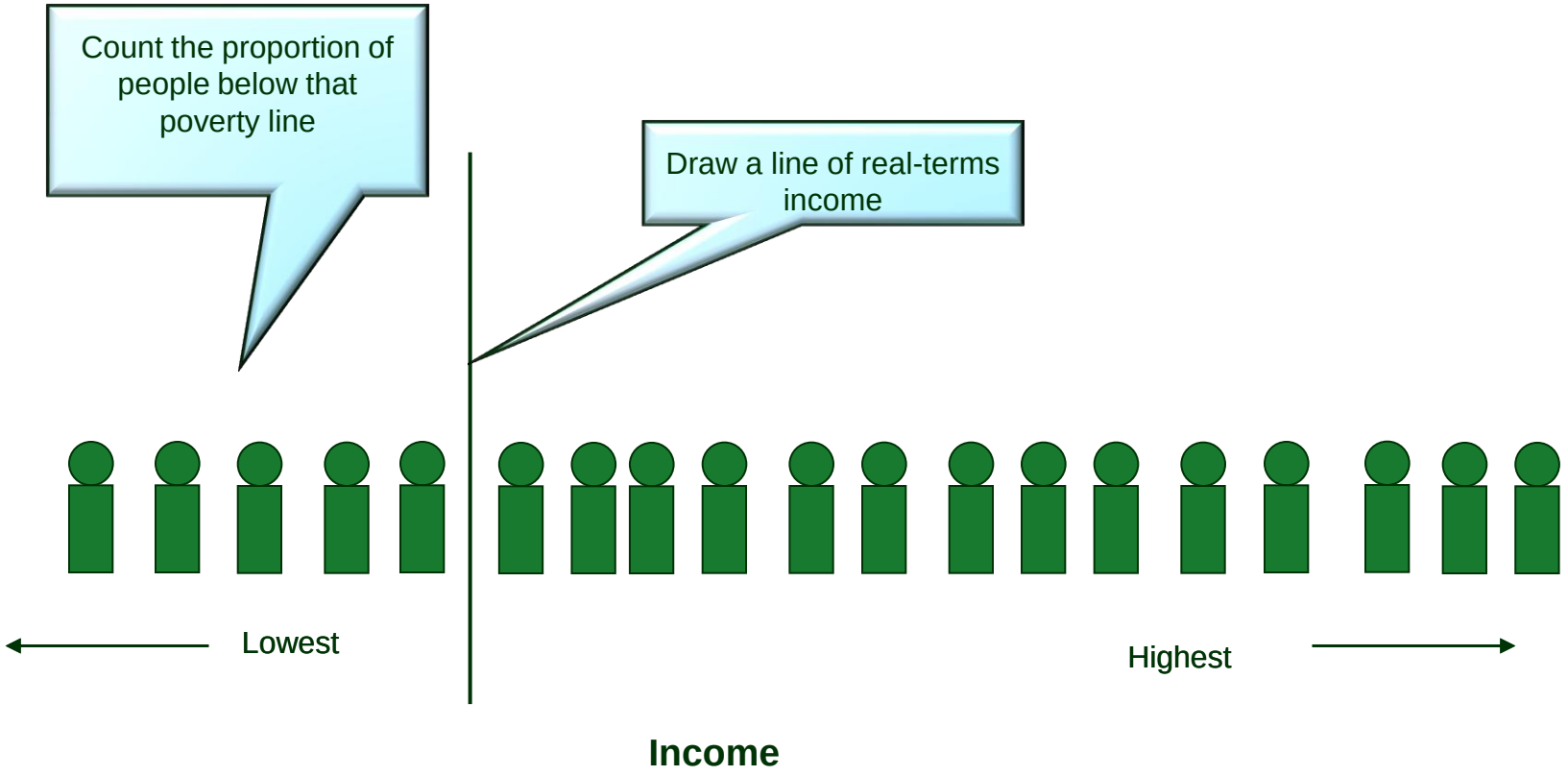
© Institute for Fiscal Studies

Calculating absolute poverty



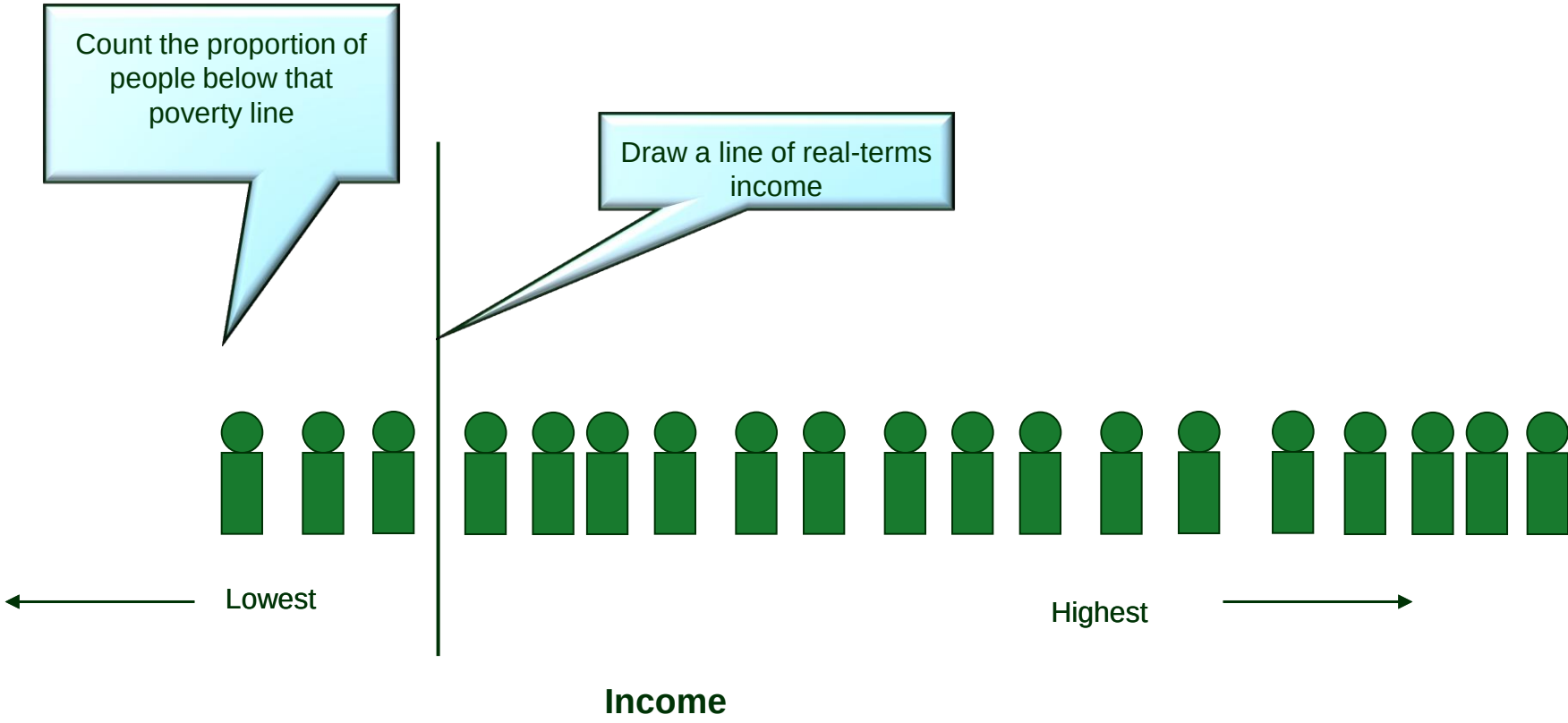
© Institute for Fiscal Studies

Absolute poverty over time



© Institute for Fiscal Studies

Absolute poverty over time



© Institute for Fiscal Studies

Poverty lines

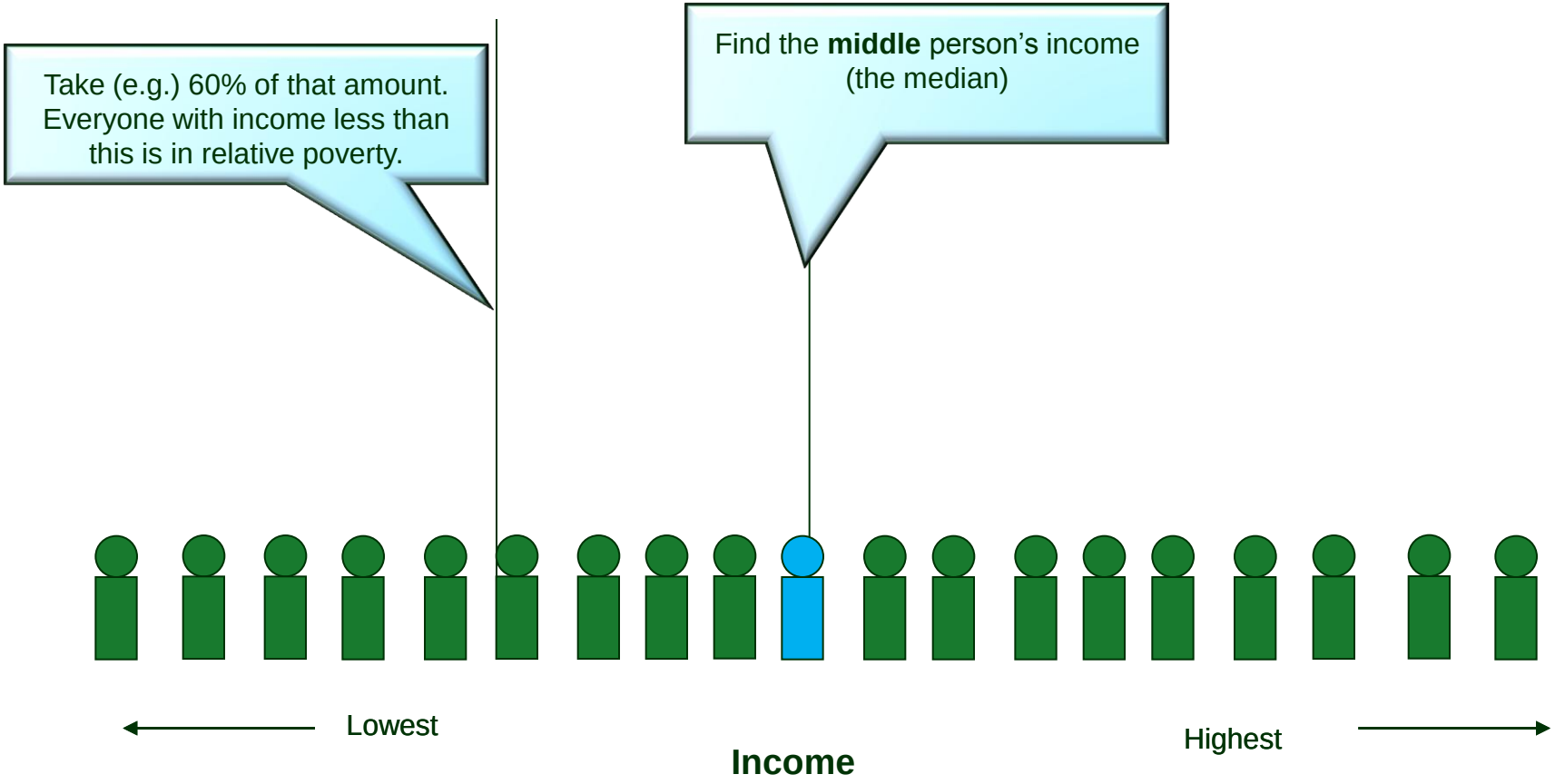
- 2 kinds of poverty lines are used

1. Absolute Poverty lines
   - Defined as a certain level of real-terms income
   - Example: $1 a day poverty line (in 1990 prices) (Ravallion et al 1991)
   - However in the UK we typically use a 60% of 2010/11 median income

2. Relative Poverty lines
   - Defined as a certain percentage of median income in the country
   - UK government ~~uses~~ used 60% of median income for old child poverty targets

© Institute for Fiscal Studies

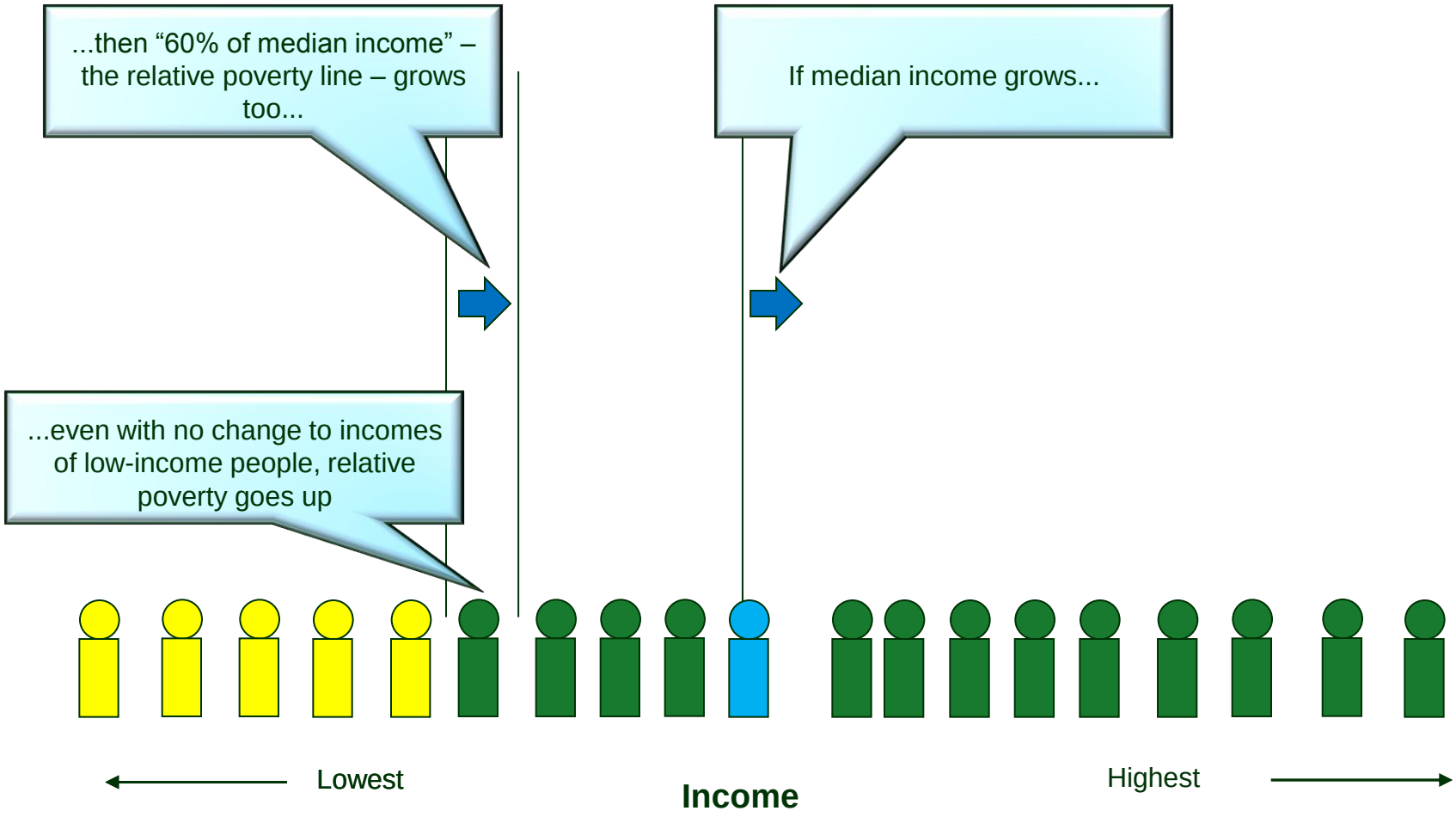
Calculating relative poverty



© Institute for Fiscal Studies

Institute for Fiscal Studies

Relative poverty over time – a moving target



© Institute for Fiscal Studies

Why look at relative **and** absolute poverty?

- Relative poverty is really a measure of inequality between the middle and the bottom of the income distribution
  - Particularly problematic when median income is falling
- Absolute poverty lines become irrelevant in the long run
  - Often moved on an ad hoc basis eg. 2010 baseline for 2020 child poverty targets
- Changes in absolute poverty perhaps more significant in the short run, with changes in relative poverty more significant in the long run

© Institute for Fiscal Studies

Measuring poverty – Housing costs

- We typically create two alternative measures of household income
  - Before Housing Costs (BHC)
  - After Housing Costs (AHC)
- We could use either to create a measure of poverty
- Which is better depends on how we think about spending on housing
  - BHC income treats housing costs like any other form of consumption
  - AHC income treats housing as a fixed cost that households have little or no choice over
- It can also depend on other factors that are driving housing cost changes

© Institute for Fiscal Studies

Measuring poverty – Housing costs

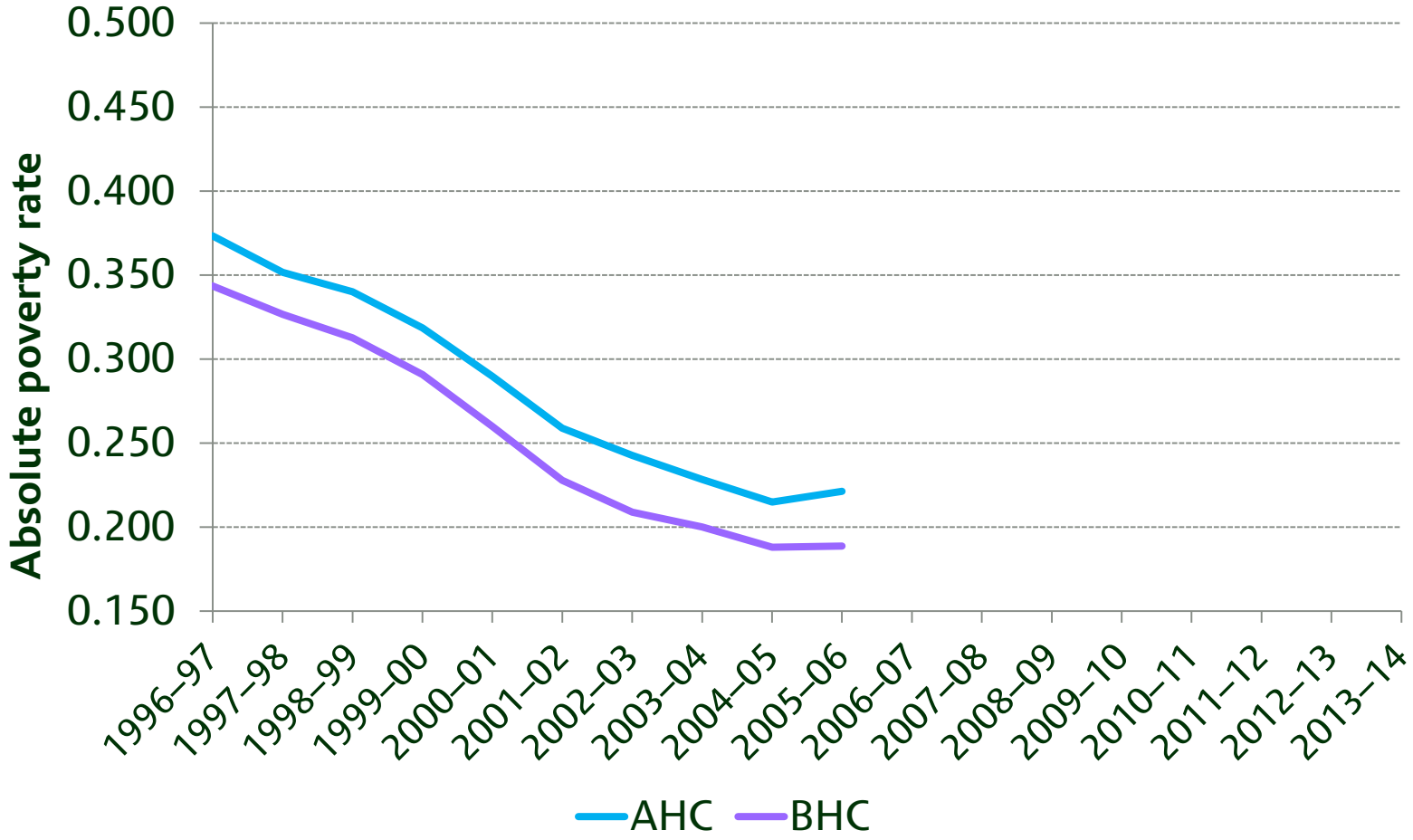
- Before looking at recent trends it is important to understand how the two income measures are calculated over time.

- BHC incomes are spent on basket of goods that includes housing, therefore housing costs are included in the inflation measure.
  - This means that the average trend in housing costs is removed as it forms part of inflation, but variation in individuals' housing costs from the mean will not be removed

- AHC incomes are, by definition, not spent on housing. Therefore a different measure of inflation excluding housing costs is used
  - All variation in housing costs is removed

© Institute for Fiscal Studies

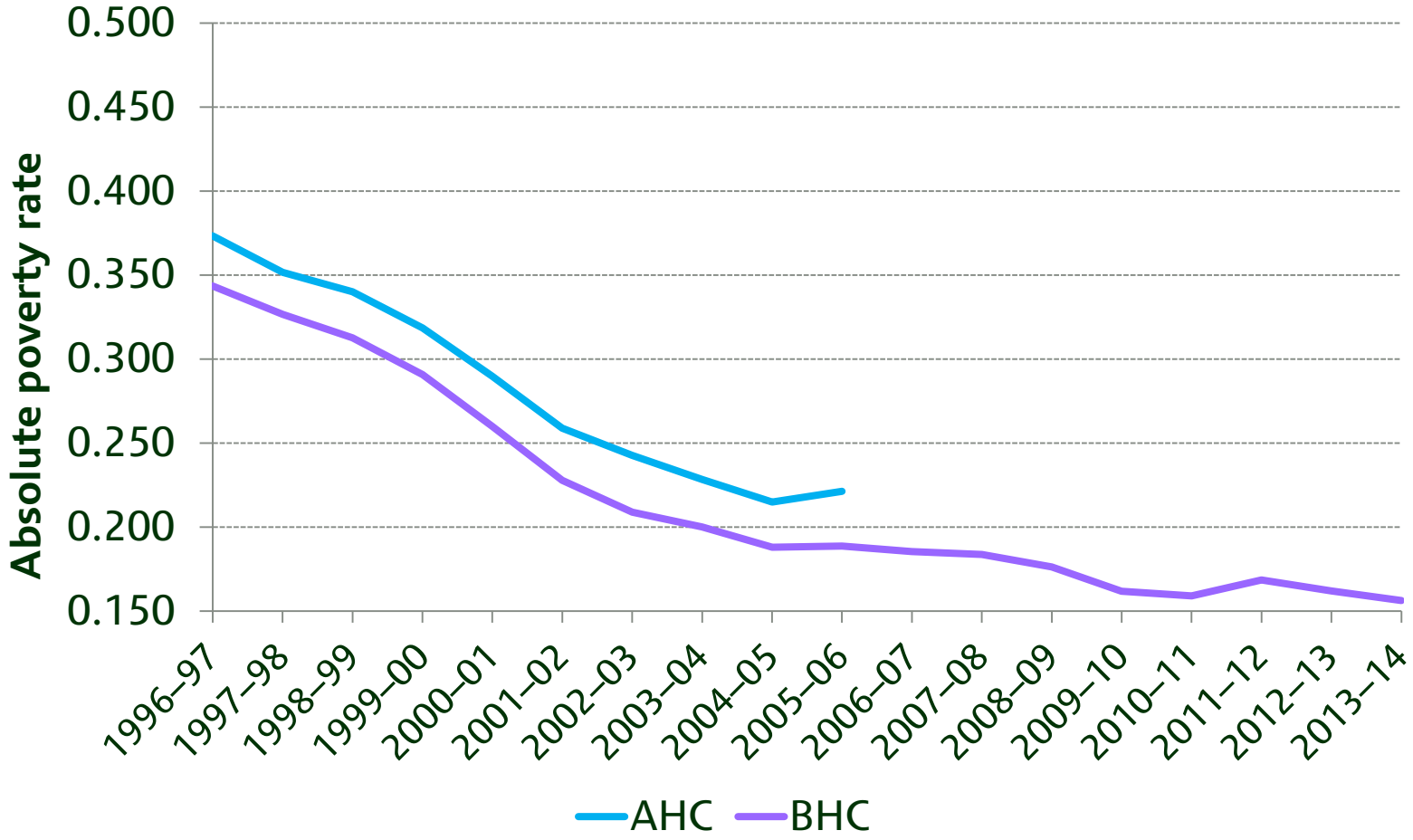
Measuring poverty – Housing costs



© Institute for Fiscal Studies

Institute for Fiscal Studies

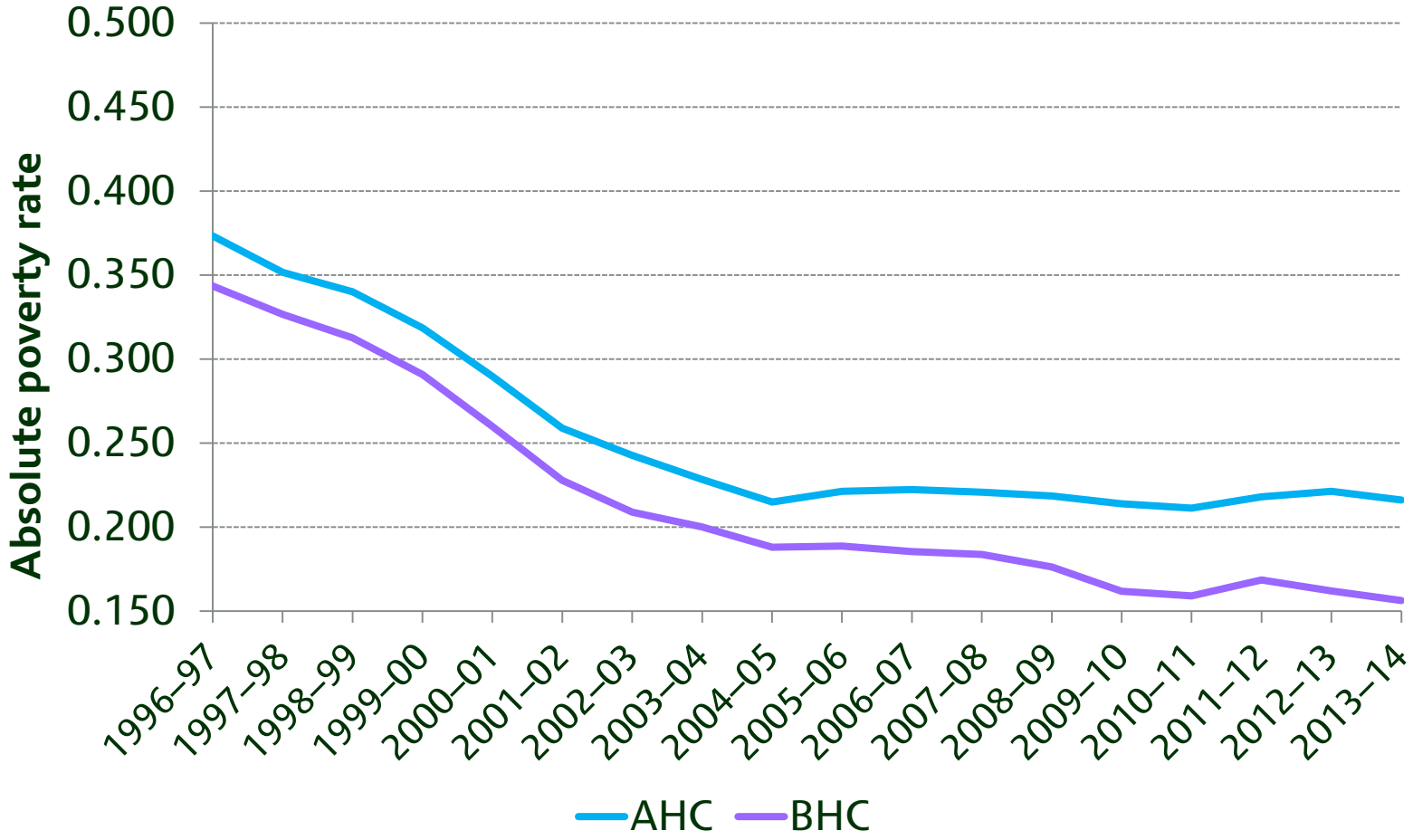
Measuring poverty – Housing costs



© Institute for Fiscal Studies

Institute for Fiscal Studies

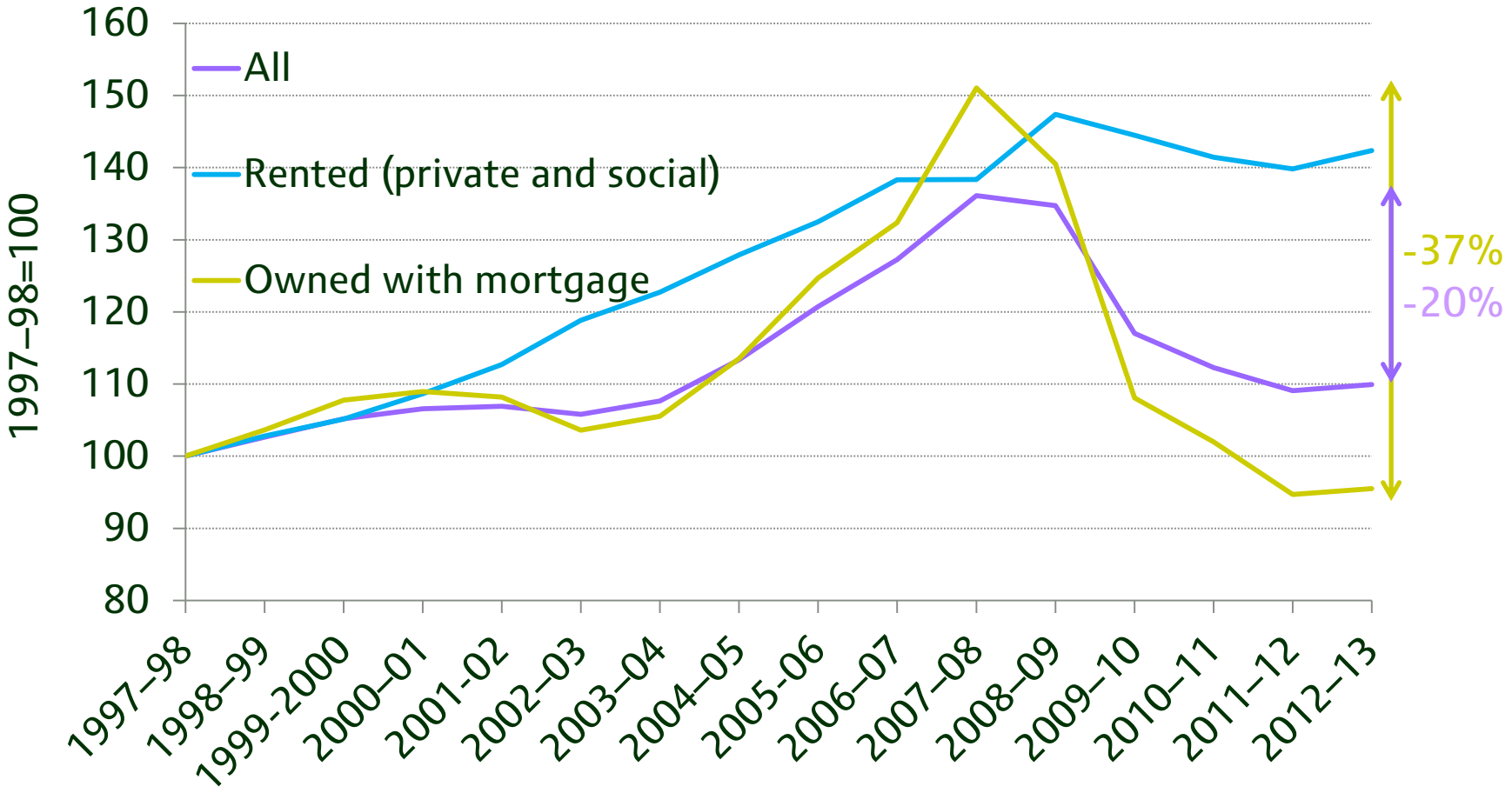
Measuring poverty – Housing costs



© Institute for Fiscal Studies

Institute for Fiscal Studies

Real mean housing costs by tenure



Source: Figure 2.7 of *Living Standards, Poverty and Inequality: 2014*

© Institute for Fiscal Studies

Institute for Fiscal Studies

Summary

- When using measures of living standards it is important to **correctly** account for inflation and household composition
- Income inequality rose quickly across the distribution in the 1980s and fell during the recession
- Poverty can be defined according to an absolute or relative income measure
- AHC poverty may been a better measure of changes in recent years

© Institute for Fiscal Studies

References (1)

- Acemoglu, D. (2002)"Technical Change, Inequality and the Labor Market", Journal of Economic Literature 40 (1)

- Adam, S., and Browne ,J. (2010) "Redistribution, work incentives and thirty years of UK tax and benefit reform", IFS Working Paper 10/24

- Belfield, Cribb, Hood and Joyce (2014) "Living Standards, Poverty and Ineqaulity in the UK: 2013" IFS Report R86

- Brewer, M., and O'Dea, C. (2012) "Measuring Living Standards with income and consumption: Evidence from the UK", IFS Working Paper W12/12

- Browne, J., Hood, A. and Joyce, R. (2013) "Child and working-age poverty in Northern Ireland from 2010 to 2020", IFS Report R78

- Cribb, J., Hood, A., Joyce, R., and Phillips, D. (2013) "Living Standards, Poverty and Ineqaulity in the UK: 2013" IFS Report R81

© Institute for Fiscal Studies

References (2)

- Cribb, J., Joyce, R., and Phillips, D. (2012) “Living Standards, Poverty and Ineqaulity in the UK: 2013” IFS Report RX
- Goldin, C., and Katz, L. (2008) “The Race Between Education and Technology”, Harvard University Press, Cambridge MA
- Goodman, A. and Shephard, A. (2002), Inequality and living standards in Great Britain: some facts, IFS Briefing Note 19 , Institute for Fiscal Studies, London
- Gregg , P. and Wadsworth ,J. (2008) “Two Sides to Every Story: Measuring Polarization and Inequality in the Distribution of Work”, Journal of the Royal Statistical Society Series A
- Machin, S. (2001) “The Changing Nature of Labour Demand in the New Economy and Skill-Biased Technology Change”, Oxford Bulletin of Economics and Statistics 63 (S1)
- Ravallion, M., Datt, G., and van de Walle, D. (1991) “Quantifying Absolute Poverty in the Developing World,” Review of Income and Wealth no.37 pp 345-361

© Institute for Fiscal Studies

Extra slides

© Institute for Fiscal Studies

Relationship between work status and poverty

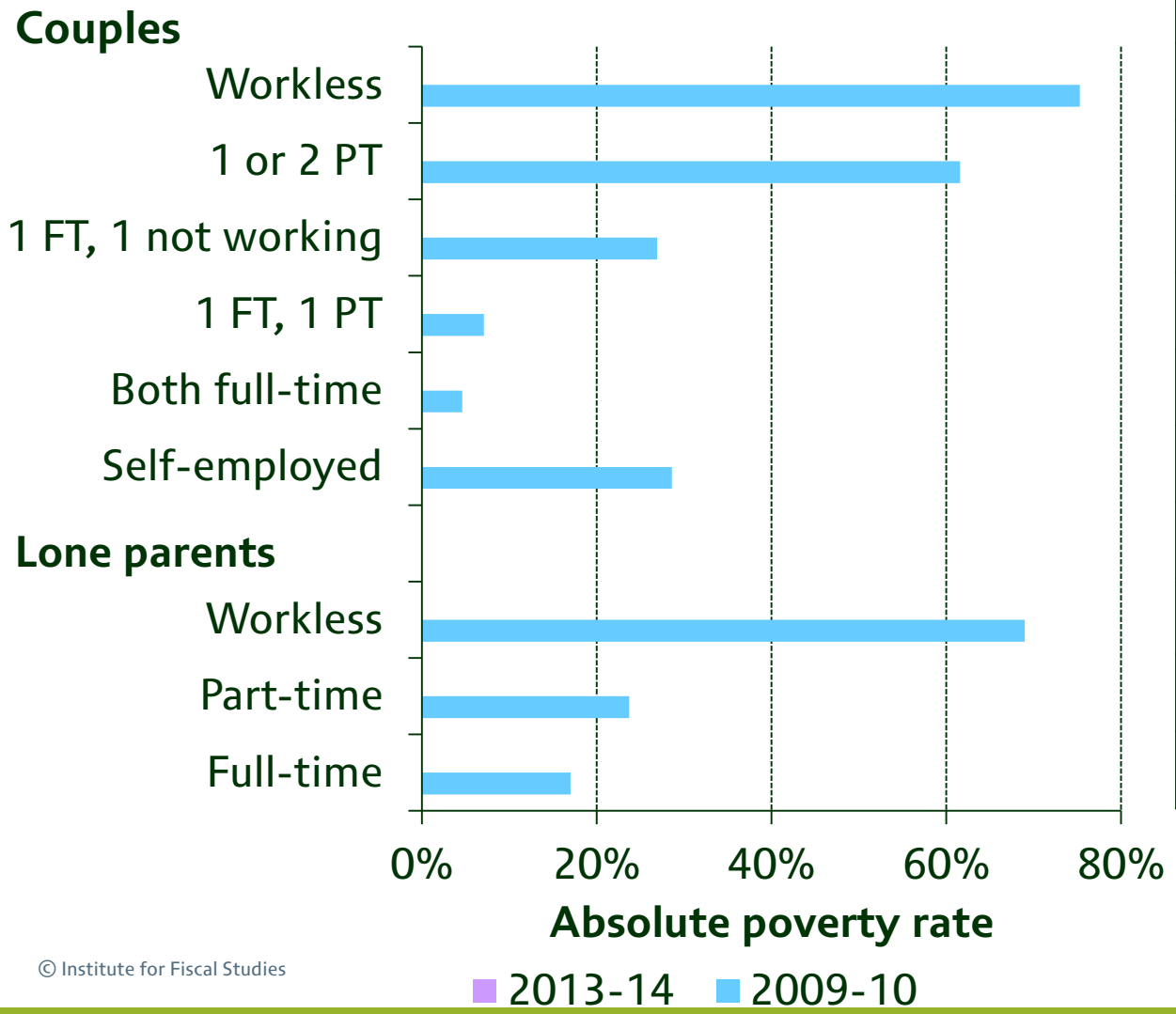
- Between 2009–10 and 2013–14 there were contrasting labour market trends
  - The employment rate recovered (increased by 3.2ppt in the HBAI data)
  - But real earnings fell

- How has this impacted poverty?
  - Child poverty was broadly unchanged Between 2009–10 and 2013–14
  - However during this period the proportion of children living in workless families from 18% to 16%

© Institute for Fiscal Studies

Child poverty by parental work status

Source: Table 4.5 of *Living Standards, Inequality and Poverty in the UK: 2015*



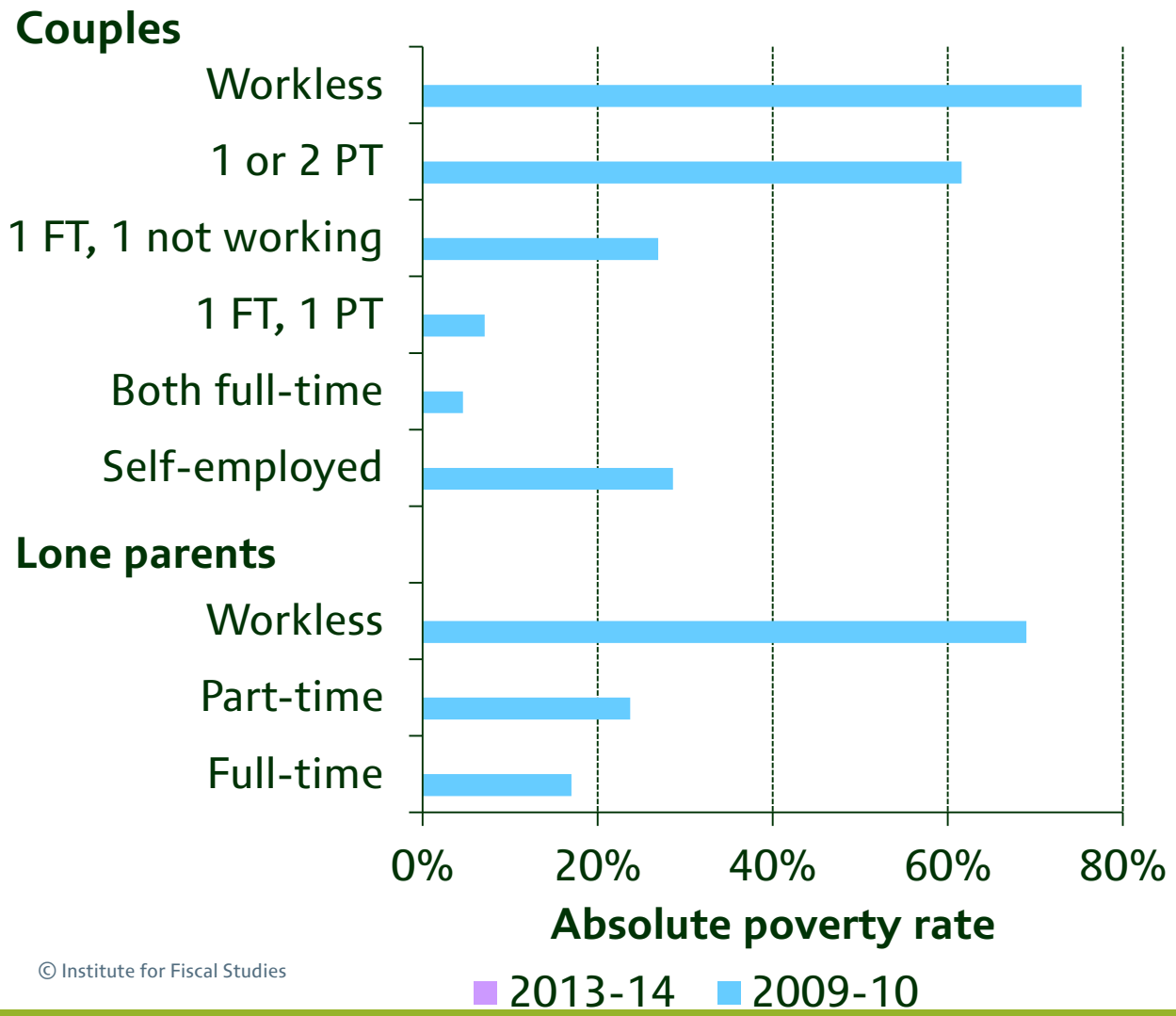
Proportion of child population in 2009-10
6.9%
4.7%
16.9%
20.8%
15.8%
11.6%
11.4%
6.1%
5.7%

© Institute for Fiscal Studies

Institute for Fiscal Studies

Child poverty by parental work status

Source: Table 4.5 of *Living Standards, Inequality and Poverty in the UK: 2015*



Proportion of child population in 2009-10	Change between 2009-10 and 2013-14
6.9%	-1.2ppt
4.7%	-0.4ppt
16.9%	-0.6ppt
20.8%	+0.1ppt
15.8%	+1.2ppt
11.6%	+0.6ppt
11.4%	-0.8ppt
6.1%	+0.9ppt
5.7%	+0.2ppt

© Institute for Fiscal Studies

Institute for Fiscal Studies

Child poverty by parental work status

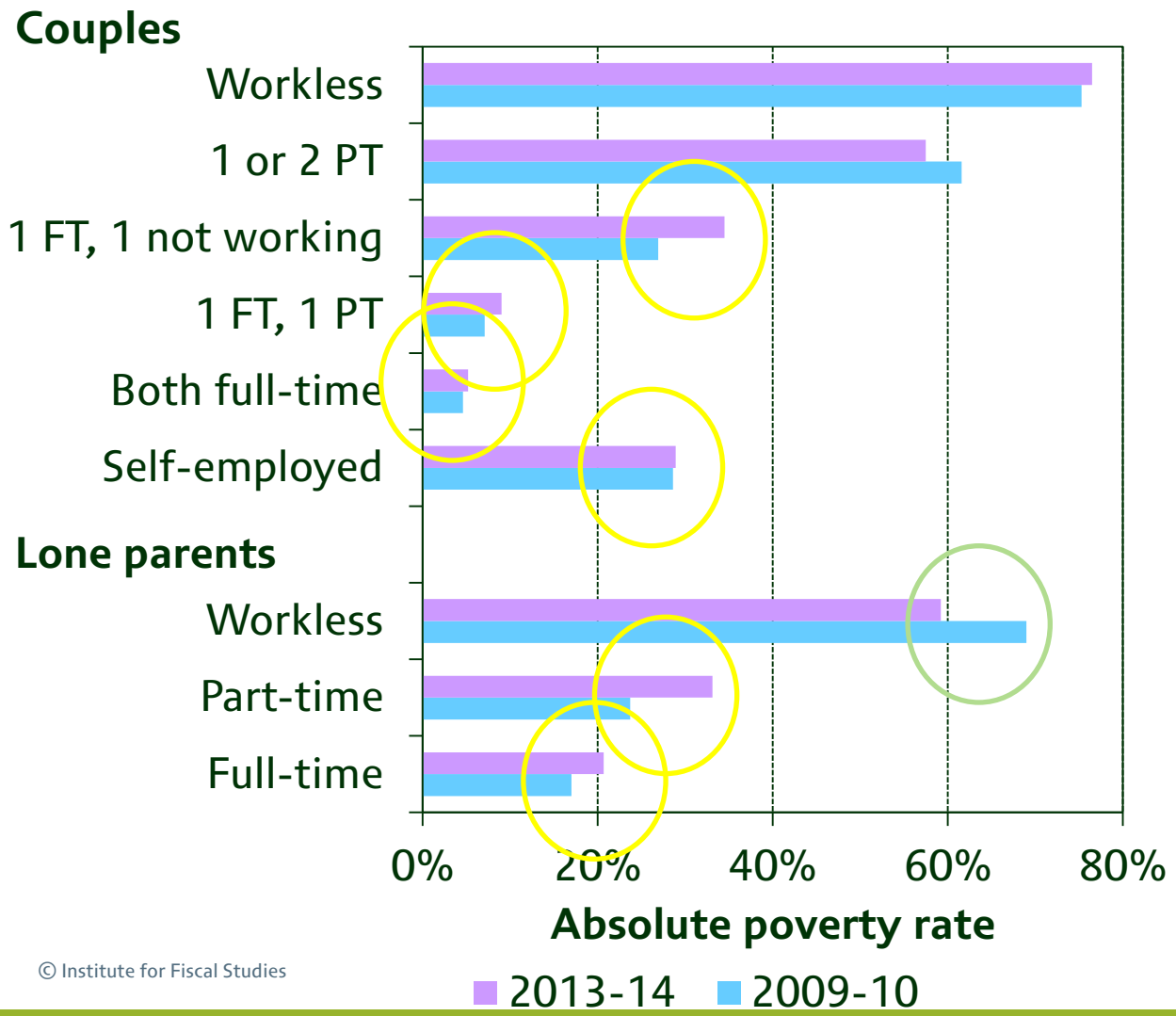
- These changes acted to reduce the child poverty rate by more the 1ppt

- However at the same time there were increases in the poverty rate in working families

© Institute for Fiscal Studies

Child poverty by parental work status

Source: Table 4.5 of *Living Standards, Inequality and Poverty in the UK: 2015*



Proportion of child population in 2009-10	Change between 2009-10 and 2013-14
6.9%	-1.2ppt
4.7%	-0.4ppt
16.9%	-0.6ppt
20.8%	+0.1ppt
15.8%	+1.2ppt
11.6%	+0.6ppt
11.4%	-0.8ppt
6.1%	+0.9ppt
5.7%	+0.2ppt

© Institute for Fiscal Studies

Institute for Fiscal Studies

Why was child poverty flat between 2009–10 and 2013–14

1. Employment growth reduced the proportion of children living in workless families
2. Fall in child poverty rate among workless lone parents
3. Rise in in-work poverty

- In 2009–10 54% of children in poverty lived in working families, by 2013–14 this had risen to 63%

© Institute for Fiscal Studies