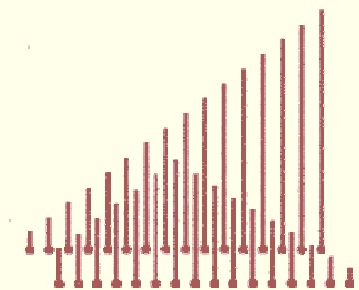


niesr

Unsustainable Consumption: The Structural Flaw behind the UK's Long Boom

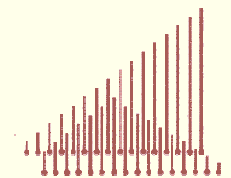
Martin Weale

National Institute of Economic
and Social Research

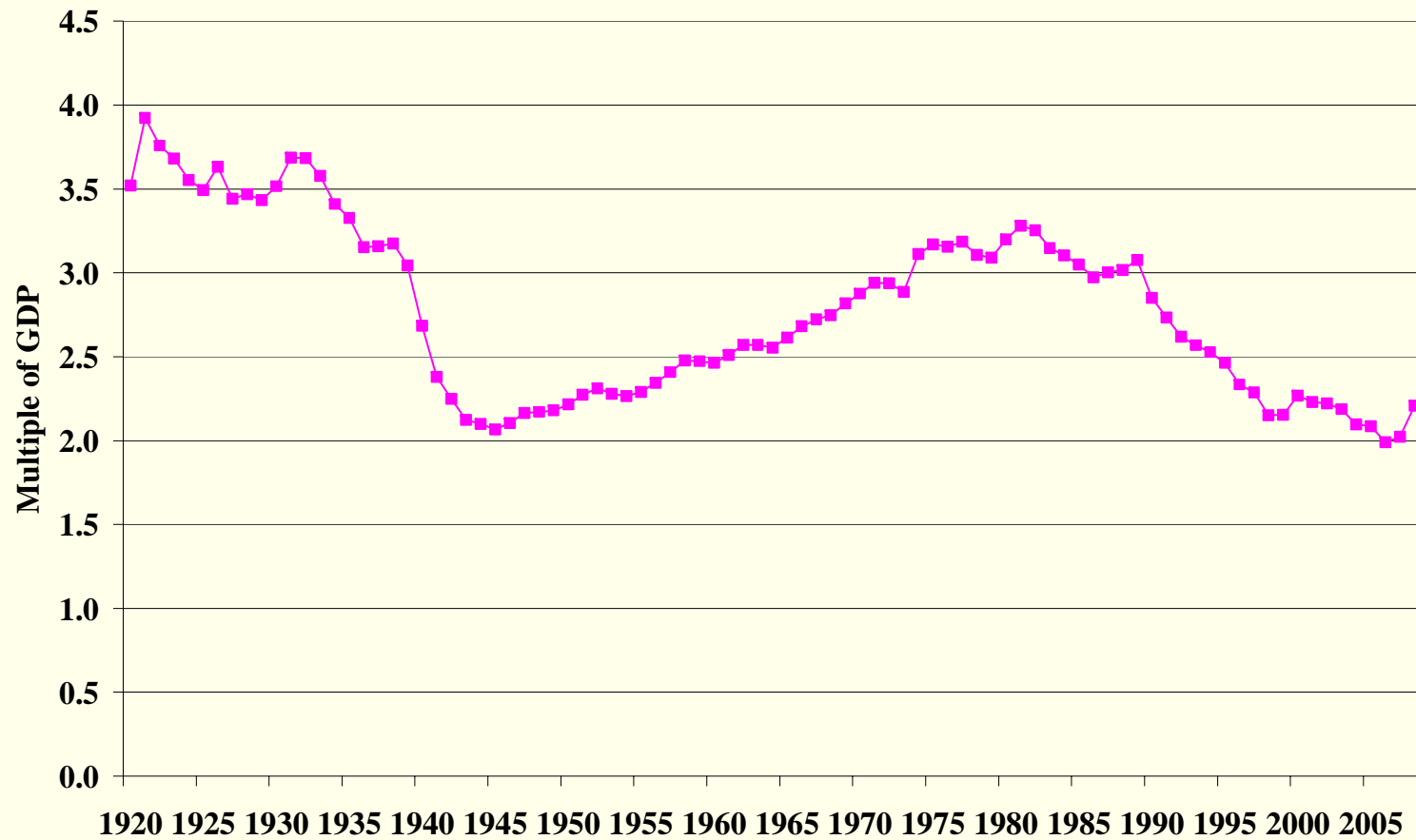


National Institute
of Economic and
Social Research

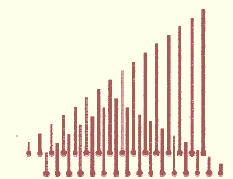
- In the 1990s the UK closed the gap in GDP *per capita* with its neighbours which had existed since the 1960s.
- In the early years of the current decade its performance was substantially better.
- Was the UK's economic performance sustainable?
- Was consumption at a level likely to lead to future disappointment even before the crisis?



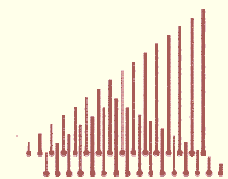
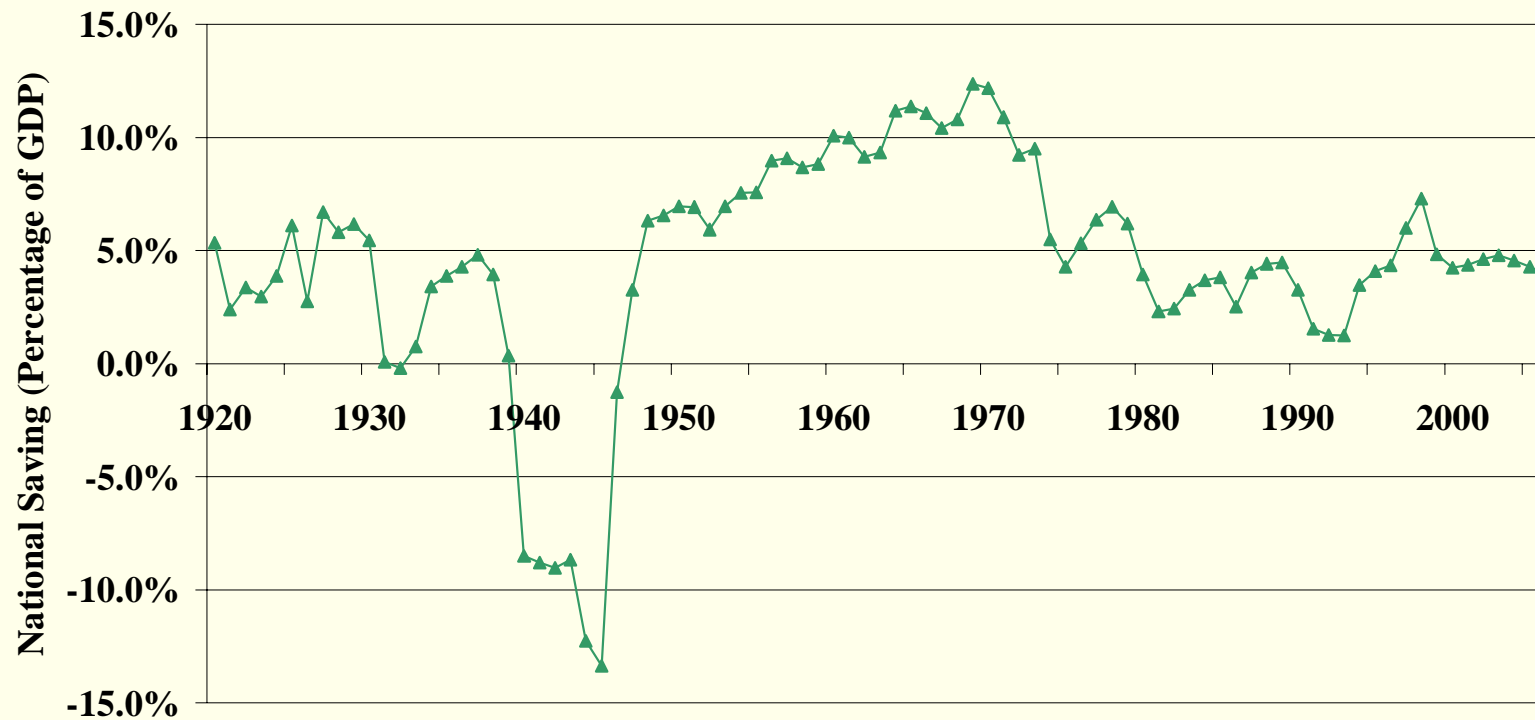
Produced UK Wealth as a Multiple of GDP



niesr



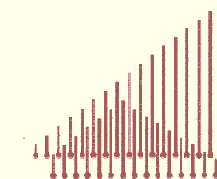
Net National Saving as a Proportion of GDP



Steady States

Average savings rate 1995-2007	4.8%
Average GDP growth rate	2.8% p.a.
Steady state wealth/GDP ratio	$4.8/2.8=1.72$

Assumes that wealth is revalued in line with the GDP deflator



A time-series model

$$\Delta c_t = \alpha_1 \Delta c_{t-1} + \alpha_2 \Delta c_{t-2} + \beta_0 \Delta y_t + \beta_1 \Delta y_{t-1} + \beta_2 \Delta y_{t-2} + \gamma_1 \Delta w_{t-1} + \gamma_2 \Delta w_{t-2} \\ + \theta_c c_{t-1} + \theta_y y_{t-1} + \theta_w w_{t-1} + \phi + \varepsilon_t$$

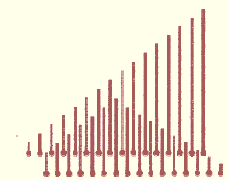
Pre-1980. Homogeneity is rejected. No steady state relationship between income, consumption and wealth.

Post-1980. Homogeneity between consumption and income. No influence of wealth on consumption.

Gives steady-state ratio of wealth to net income of 1.72 (0.17)

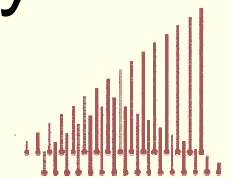
Converts to ratio of wealth to GDP of 1.55

Pre-crisis the trend of wealth decumulation had some way to run.



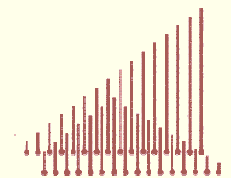
Sensible Savings Policy

- Should consumption grow faster or slower than income across cohorts?
- Depends on interest and discount rates and inter-temporal elasticity of substitution.
- There is no clear case for saying resources should be transferred from the future.
- Each generation should pay its own way.



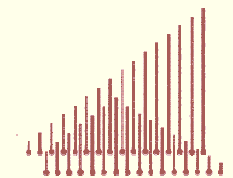
Treatment of Land

- Other studies (e.g. Scholz, 2006) treat land like produced capital.
- Land was not originally accrued by saving.
- The economic effect of very steep increases in land prices is to transfer resources from future generations to the present- in much the same way
- In the UK between 1987 and 2007 the impact was much like adding 100% of GDP to the National Debt

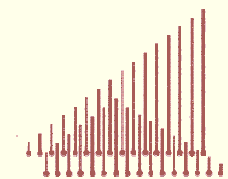


How Much Saving is Needed? (Khoman and Weale, 2009)

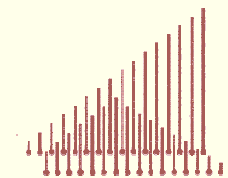
- Assume each cohort receives its labour income and that rent on land is allocated among adults on a *per capita* basis.
- Add together public and household consumption at basic prices.



- For twenty-year olds compare discounted life-time labour and land income with discounted life-time public and private consumption at basic prices.
- For the current population balance discounted remaining life-time labour and land income plus produced capital against discounted remaining life-time consumption.
- In both cases calculate the adjustment to consumption needed for balance.
- The affordability ratio is the ratio of affordable to actual consumption.



Affordability Ratio	Base Case	No Rise in Longevity	Five Years more Work
Twenty-year olds	0.918	0.935	0.959
Current Adult Population	0.928	0.963	1.029



Conclusions

- A macro-analysis shows that the UK has had an unsustainably high level of consumption over the last twenty years.
- A cohort analysis suggests consumption in 2005 needed to be 7% lower than it actually was.
- Rising longevity is only a small part of this problem.
- But working 3 ½ years longer would solve

