

Applied Economics >

Volume 38, 2006 - Issue 2

370 | 9

Views | CrossRef citations to date | 0

Altmetric

Original Articles

Demographic change and the UK savings rate

David Demery & Nigel W. Duck ✉

Pages 119-136 | Published online: 01 Sep 2006

Cite this article <https://doi.org/10.1080/00036840500390361>

Sample our
Economics, Finance,
Business & Industry Journals
>> [Sign in here](#) to start your access
to the latest two volumes for 14 days

Full Article

Figures & data

References

Citations

Metrics

Reprints & Permissions

Read this article

Abstract

Microeconomic data are used to explore the effects of a changing age-structure on the UK's aggregate personal savings rate. The findings suggest that changes to the population's age structure have had detectable, sustained, but, relative to the yearly changes observed in the savings rate over the previous century, modest effects on aggregate personal sector savings. It is estimated that the projected changes to the UK's age structure over the next 40 years are likely to raise the UK's savings rate but by no more than 0.5 percentage points. The aggregate savings rate is estimated to be 1.5% in 2006, rising to 2.0% in 2046.

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click "Settings". For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All

Essential Only

Settings

The research reported in this paper is part of the project, The Macroeconomy and Demographic Change undertaken as part of the ESRC programme Understanding the Evolving Macroeconomy. Financial support from the ESRC (ESRC award reference number L138251001) is gratefully acknowledged. Material from the Family Expenditure Surveys used in this paper is Crown Copyright; it has been made available by the Office for National Statistics (ONS) through The Data Archive; it has been used by permission. Neither the ONS nor The Data Archive bear any responsibility for the analysis or interpretation of the data reported here. The authors are grateful for helpful comments from Cliff Attfield, David Winter, Edmund Cannon, Olwen Renowden, Elisabeth Dedman, Ian Tonks and Caroline Joll. We accept full responsibility for all remaining errors.

Notes

¹ These figures are based on the 2000-based Principal Projection, which is GAD's central projection.

² The FES is an annual cross-section survey of around 7000 households (or around 20 000 individuals). It is a voluntary survey with a response rate of around 70%, collecting detailed information on household and individual consumption and income, and on household and individual characteristics. Until 1993 the data were released on a calendar year basis; since then the data are organized by financial year. This source allows 30 consecutive calendar years of household and individual data from 1969 to 1998 to be derived.

³ National savings includes personal and corporate sector savings (the private sector), and saving by the government and the rest of the world.

⁴ Income tax is calculated on individual consumption. The reasons for this are explained below.

⁵ The data from the pre-1992 period are used for the analysis of the data period.

⁶ In the 1992 income tax data, the data are used for the analysis of the data period.

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click "Settings". For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All

Essential Only

Settings

⁷ In the National Statistics personal sector accounts, personal savings are defined as income net of taxes and social contributions – the latter including funded and unfunded pension contributions by employees and employers – minus personal consumption.

⁸ Annuities and pensions are treated as identical financial assets. For simplicity income derived from both is referred to as pensions.

⁹ The approach adopted has also been used recently by Chesher ([1997](#), [1998](#)) when analysing individual nutrient intake. For earlier applications to consumer behaviour see Mankiw and Weil ([1989](#)) and Weil ([1994](#)).

¹⁰ For a more detailed discussion of this procedure see Demery and Duck ([2001](#)).

¹¹ Ignoring, for the moment, bequests.

¹² There is a possibility that some of the estimates of γ may be negative. For this reason Deaton and Paxson ([2000](#)) employ a different technique to extract the age and cohort effects. This problem does not arise in the present case once age-groups are restricted – as done for reasons explained below – to those aged 16 and above.

¹³ The regressions also include year dummies to pick up cyclical influences on income and consumption, influences that are common to all ages and cohorts. Year effects were captured by including a set of $T - 2$ year dummies defined from $t = 3, \dots, T$ as where d_t is equal to one if the year is t and is zero otherwise (see Deaton, [1997](#)). The year dummy effects sum to zero by construction.

¹⁴ Deaton and Paxson, in their analysis of Taiwanese and Thai households, also obtain negative income (and consumption) estimates for children and this forced them to use procedures that avoided the need to take logarithms of negative numbers (see Deaton and Paxson, [2000](#), p. 220).

¹⁵ Jappelli and Pista-Piscina (1999) find that the stock of pension funds is a more important determinant of pension adjustment for the elderly. Miles ([1999](#)) also suggests that the elderly is due to the transfer of pension funds to the elderly.

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click "Settings". For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All

Essential Only

Settings



¹⁶ The state pension is treated as a transfer from one generation to the next and the adjustment factor is not applied. The proportion of income attributed to non-state pensions for households with heads aged 65 and above rose from approximately 12% in 1969 to about 30% in 1998.

¹⁷ The authors are grateful to Steve Smallwood of the Government Actuary's Department for providing mortality data for the period 1980–1999.

¹⁸ This latter approach ignores the effects of migration on the grounds that these effects are small over the relevant age group.

¹⁹ In fact there are a small number of people in each year who receive annuity income who are below the age of 50.

²⁰ Findings reported by Finkelstein and Poterba ([2000](#)) and by Murthi et al. ([1999](#)) suggest this 25% indexation may be an overestimate (at least for the private sector) and hence the proportion attributed to interest income may be on the high side.

²¹ The savings rate implied in Model A corresponds to the personal sector savings rate published in the national accounts (ignoring the equity adjustment discussed above). The implied aggregate savings rates from Model B would be closer to a savings rate derived from a consolidation of the accounts of the personal and financial sectors. However, because Model B underestimates the savings of working individuals, it will underestimate the true ‘consolidated’ savings rate.

²² The cohort estimates for Model A are virtually identical to those estimated for Model B.

²³ It is assumed that individuals over 80 years old have the same age and cohort characteristics of those aged 80.

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All

Essential Only

Settings

The same age group appears

Depends on the cohort estimate formally requested

age group

tion that

he


lf could be

t the

– is invalid.

²⁷ The choice of the year of birth on which to base these re-estimates does have implications for the savings rate predicted. As a close examination of [Figs 5 and 6](#) reveal, the 1935 cohort effect is low. The estimates reported below were carried out taking the 1935 cohort as the base. The general behaviour of the aggregate savings rate was much the same as that reported below but was approximately one percentage point lower.

²⁹ Of course for all the pre-1936 cohorts the growth factor -1.9% rather than $+1.9\%$ has been applied. The projections shown for the 1969–1998 period ignore the estimated effects of the year dummies for those years. For the early part of this period the population proportions were only available in five-yearly groups. To construct an aggregate savings rate these proportions were then applied to the average income and consumption of each five-year age group predicted using FES-based estimates of the yearly age and cohort effects.



About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All

Essential Only

Settings

³⁴ Notable recent examples are Paxson ([1996](#)), Deaton and Paxson ([1997](#)) and Banks et al. ([1998](#)). The FES is considered sufficiently accurate for the analysis of consumption and savings. Atkinson and Micklewright ([1983](#)) suggest that there is little evidence of under-reporting in the income series, with the exception of investment income. Attanasio and Weber ([1993](#)) suggest that for consumption, ‘under-reporting is noticeable only on alcohol, a relatively small item. Expenditure on other items is thought to be accurately recorded, thanks to the careful sampling design’ (p. 633).

Related research

People also read


Recommended articles

Cited by
9



About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All 

Essential Only

Settings

Information for

Authors

R&D professionals

Editors

Librarians

Societies

Opportunities

Reprints and e-prints

Advertising solutions

Accelerated publication

Corporate access solutions

Open access

Overview

Open journals

Open Select

Dove Medical Press

F1000Research

Help and information

Help and contact

Newsroom

All journals

Books

Keep up to date

Register to receive personalised research and resources by email



Sign me up



Copyright © 2024 Informa UK Limited [Privacy policy](#) [Cookies](#) [Terms & conditions](#)

[Accessibility](#)



Taylor & Francis Group
an informa business

Registered in England & Wales No. 3099067
5 Howick Place | London | SW1P 1WG

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All

Essential Only

Settings