The quality of data sources on Household and Individual Wealth in the UK

A methodological article produced by the Office for National Statistics

Introduction

There are two sources of National Statistics that produce estimates of wealth, the Wealth and Assets Survey (WAS) – a longitudinal sample survey of private households which started in 2006, produced by the Office for National Statistics (ONS)[1]; and Personal Wealth Statistics (PWS)[2] – a long standing series based on administrative data – produced by the HM Revenue & Customs (HMRC).

Both sets of data use the term 'wealth', but differ in the methodologies and definitions used in the compilation of their estimates. Both sources publish details of these alongside their respective data. The purpose of this note is to examine the two sources of data, highlight the main differences in the methodologies and definitions and to advise on the use of each source depending on the purpose of the analysis being carried out.

In summary

- The main advantages of PWS are the length of its time series and administrative source data. It is therefore a good source of data to gain a measure of change in wealth over time and the relative importance of each component of wealth at death, but it is not representative of the whole population.
- WAS is a large, longitudinal survey covering all individuals living in private households in Great Britain. The survey does use respondents' self-reported valuations, but every effort is made to ensure these are of good quality. The longitudinal nature of the survey means it is ideal for considering changes in wealth. However, the survey only commenced in 2006, so it is not possible to yet carry out much in the way of time series analyses. However, as WAS has better population coverage, it is the better source of data on wealth inequality for the periods it does cover (a view held jointly by both ONS and HMRC).
- The definition of wealth in the two series is different, and they therefore should not be used directly in conjunction with each other.

Wealth and Assets Survey

The Wealth and Assets Survey commenced in 2006 with the aim of measuring the economic well-being of households and individuals from a single source. WAS estimates are fundamental to understanding the distribution of assets and liabilities in Great Britain and fill gaps in official statistics for which evidence was lacking from either other survey sources or administrative data. It collects information concerning all forms of assets held by individuals within private households, including their financial wealth, property wealth, physical wealth and private pension wealth[3].

[1] WAS is funded by a consortium of government departments: ONS, the Department for Works and Pensions, HM Revenue & Customs, Scottish Government and the Financial Conduct Authority.
[2] UK Personal Wealth Statistics 2008 to 2010
[3] How do we measure Wealth

During the period 2010-2012, WAS achieved interviews with over 40,000 individuals aged 16 or over in more than 21,000 private households across Great Britain. This is larger than many other similar such surveys around the world, for example in 2010 the US Survey of Consumer Finances (US SCF) had a sample size of just under 6,500 completed family interviews, the Italian Survey of Household Income and Wealth (SHIW) had completed interviews from a little under 8,000 households (24,000 individuals) and the Australian Household Income and Labour Dynamics (HILDA) interviewed a little under 13,500 individuals.

The design of WAS also recognises the fact that wealth is highly skewed, with a small proportion of households owning a large share of the wealth, by over-sampling addresses likely to be in the wealthiest 10% of households at a rate three times[4] higher than other addresses. This ensures both good coverage of the very wealthy and more precise estimates for overall household wealth.

One of the major strengths of WAS is the longitudinal nature of the survey. Each wave of the survey returns to households and individuals interviewed at the previous wave, and from the third wave a new cohort sample was introduced at each wave to take account of the reduction in size of the existing sample because of the attrition that occurs between waves. Longitudinal analysis of the survey allows more precise estimates of change to be made, whilst the large overall sample size provides robust cross sectional estimates for each two year period.

To date WAS has concentrated on estimates of household wealth, as many assets are owned on a joint or household basis. Estimates for individual assets are currently available for some kinds of assets (for example, individual financial wealth and individual private pension wealth) but not for total individual wealth. ONS have longer term plans to develop measures of total individual wealth.

Household wealth estimates from WAS are restricted to personal assets only and do not include any business assets owned by individuals within each household.

Wealth in Great Britain[5], which presents the main results from the survey, was accredited as a National Statistic by the UK Statistics Authority following scrutiny to ensure compliance with its Code of Practice for Official Statistics. A rigorous review of the survey was undertaken during 2012[6] which concluded that the survey methodology and procedures were both effective and meeting user requirements.

ONS, together with other key stakeholders in government, have quality assured the WAS based estimates prior to the publication of each wave of data. In general, the WAS estimates have compared favourably with other sources, and where it was determined that there was an element of under or over reporting on the survey, this was clearly stated when publishing the data.

Personal Wealth Statistics

HMRC publishes Personal Wealth Statistics[7]. This is a long-standing series based on a sample[8] of forms submitted to HMRC for the purposes of administrating Inheritance Tax (IT), required only of

[4] Details of the oversampling and the weighting procedure, which takes account of the oversampling (see section 2.3 and 5.6)

[5] Wealth in Great Britain: Main results from the Wealth and Assets Survey 2010-2012

[6] Wealth and Assets Survey Review 2012

[7] UK Personal Wealth Statistics 2008 to 2010

those estates that obtain a grant of representation (probate). For many years this was the only source of wealth estimates available for the UK. Not all estates require a grant of representation, as they may not be needed if the estate is a low value estate, or if the estate passes to the surviving spouse/civil partner because it was held in joint names, and consequently these estates are not included in these data. The estates that are included are described as “Identified Wealth”.

The sample of estates is weighted based on their sampling proportion. The grossed up data still only represents the estates passing on death and requiring a grant of representation in that year. To estimate how this relates to the wealth of the population, multipliers are applied to the data based on the mortality rates for the gender, age group and marital status. Purely grossing the data by mortality rates for age and gender would result in a biased data set, as the mortality rates for the wealthier are lower and so these estates would be under-represented in the data. To adjust for this, the relationship between housing wealth and mortality was modelled based on the English Longitudinal Survey of Ageing (ELSA) using a logistic regression model.

A comparison of the grossed data to the population data shows that the data for 2008-10 covers 31% of estates. A higher proportion of the estates of older individuals are covered than those for younger individuals. It should be noted that whilst it is known that low value estates are not covered, the value of other estates not covered (e.g. those held in joint names) could be anywhere on the wealth distribution. Therefore the 31% of estates covered are not necessarily the wealthiest estates.

The methodology assumes that estates left on death are typical of those held by the living of the same age, gender and marital status but this is not always the case. For example some assets might be valued differently during life and at death (e.g. life insurance) and some people transfer some wealth to others in order to minimise the size of their estate on death for tax purposes. The data are not adjusted for these valuation differences or tax planning due to the uncertainty about the size of any differences and also uncertainty about which estates these apply to.

The use of Inheritance Tax forms means that the forms are completed by responsible persons, often professionals, who can be held to account by beneficiaries. This is a strength of the data as it will mean assets are independently valued and lead to a near complete record.

Some assets are not required to be reported on the forms used for the PWS data, and so will not be captured in them. For example assets held in trusts do not need to be reported on the form. The data are not adjusted to include these due to uncertainty about which estates the trusts’ wealth may belong to. Wealth held in pensions is not reported and so cannot be included.

Up until 2005, HMRC also produced estimates of “Adjusted Wealth”, which contained adjustments to compensate for unrecorded or under-recorded information and for valuation differences; and “Marketable Wealth”, which also included estimates of wealth for the small and joint estates not requiring a grant of representation. The table below looks at the distribution of Identified Wealth and Marketable Wealth for the period 2001-2003.

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[8] A stratified sample is taken based on the type of the estate for Inheritance Tax purposes, the size of the estate and the age of the person passing on death. This allows higher sampling rates to be used for the larger estates and also the younger ages of death, which helps to reduce the variability of the wealth data.

Personal Wealth Statistics: Percentage of wealth owned, United Kingdom

	Top 10% of Individuals				Top 50% of Individuals			
	2001	2002	2003	2001-2003	2001	2002	2003	2001-2003
Marketable Wealth[1]	54%	54%	53%		93%	92%	93%	
Identified Wealth[2]				45%				88%

1. Marketable Wealth Table 13.5
2. Identified Wealth Table 13.8

This gives an indication of the scale of the effect of going from Identified Wealth, covering approximately one third of all individuals, to Marketable Wealth, the measure that was formerly used to consider the distribution of wealth for the whole population.

Following a review and consultation after publication of the statistics for 2005, it was decided that the assumptions made in order to create the Marketable Wealth estimates were not robust enough for this series to continue. HMRC states that UK personal wealth statistics are ..."not a suitable data source for estimating total wealth in the UK, or wealth inequality across the whole of the wealth population; the Wealth and Asset Survey is more suitable for those purposes".

Comparison of the two sources

Annex 1 highlights the differences between the two sources of data and looks at the strengths and weaknesses of each.

In summary:

- WAS data are only available from 2006; PWS data are available from 1976.
- The definition of wealth used in the two series is not the same, therefore the series now available from WAS cannot be used alongside the historic PWS series.
- The WAS sample is representative of all individuals living in private households in Great Britain; The PWS sample covers only 31% of the population – but this is not necessarily the top 31% of the population.

Annex 1

Key differences between wealth estimates from WAS & HMRC

	Wealth and Assets Survey (WAS)	Personal Wealth Statistics (PWS)	Comment on strengths and weaknesses
Source	Self-reporting sample survey of private households.	The statistics are based on a sample of forms submitted to HMRC for the purposes of administrating Inheritance Tax (IT), required only of those estates that obtain a grant of representation (probate).	WAS self-reported wealth values may be less accurate than the tax returns, which are often prepared by professionals. However, ONS makes every effort to ensure the highest quality data possible is collected i.e. this survey is only conducted on a face-to-face basis, using highly trained and well briefed interviewers. Respondents are encouraged wherever possible to refer to documentation (e.g. mortgage statements, pension statements). The WAS data are quality assured and compared with other data sources for consistency and are documented in the latest WAS publication. As the HMRC source data only capture certain individuals (those that are richer and recently deceased, and not estates that are passed to the surviving spouse / civil partner as they were jointly owned), there is no claim made that these are representative of the whole UK population. It has always been recognised that this source of data does not fully represent lower value estates.
Unit	Household	Individual	WAS estimates are presented at a household level, whereas the HMRC statistics are at an individual level. It would therefore be expected, other things being equal, that WAS would report a more equal distribution as intra-household wealth inequalities would not be apparent.
Coverage	All persons living in private households in Great Britain.	PWS only includes wealth represented by the estates that need a grant of representation. In 2010, this covered about 31% of individuals in the UK.	Whereas the latest PWS statistics do not include estimates relating to the whole population (those without a grant of representation), those originally published for the years up to 2005 did include some information on “Adjusted Wealth” and “Marketable Wealth” which adjusted for both asset likely to be excluded or undervalued and for the ‘missing’ population. HMRC discontinued publication of these tables with effect from the 2011 release (covering 2001-2007) following a public consultation, partly because of the uncertainties surrounding the robustness of the adjustments made and partly because WAS was becoming available as a better alternative source of the wealth of the whole population. But the old tables are still available in the archives for the public to see.
Wealth Definition	WAS does not include the business assets of individuals, but does include Private Pension wealth.	PWS does include business assets but does not include private pension wealth or assets in the form of trusts.	Wealth held in pensions makes up around 38% of overall wealth estimates on WAS, but together with assets held in trusts, is not included in the PWS data. Business assets are included in the PWS data but are not included in WAS.
Time series	Series commence in 2006	Series commenced in 1976	The PWS series has been produced for many years, but its limitations were recognised. The latest estimates do not claim to cover the whole population - this series was stopped, partly because WAS had commenced and would be the better source for total wealth of the whole population.