UKHLS Innovation Panel Household Wealth Questions: Preliminary Analysis

SC Noah Uhrig, Mark Bryan, Sarah Budd

Institute for Social and Economic Research

UKHLS Innovation Panel Household Wealth Questions: Preliminary Analysis

SC Noah Uhrig, Mark Bryan, Sarah Budd

Abstract

This analysis examines Innovation Panel Wave 3 (IP3) data concerning the collection of information on household wealth. We compare household savings and investment obtained from four different questionnaire designs against the UK Wealth and Assets Survey (WAS) and the original British Household Panel Survey (BHPS) protocol. Results suggest that an approach requiring each individual in the household to report on savings and a single individual within the household to report on investments provides consistently better data with little difference in administration burden over the current BHPS design. Therefore, this approach is recommended for *Understanding Society* Wave 4.

UKHLS Innovation Panel Household Wealth Questions: Preliminary Analysis
SC Noah Uhrig, Mark Bryan, Sarah Budd

Non-Technical Summary

This is an analysis of *Understanding Society* Innovation Panel Wave 3 (IP3) data concerning the collection of information on household wealth. It compares the amount of household savings and investment obtained from four different questionnaire designs. It also evaluates the total amount of household wealth obtained using each design against the UK Wealth and Assets Survey (WAS) as well as the original British Household Panel Survey (BHPS) protocol. The designs vary in terms of (a) who reports on investments and (b) whether respondents provide aggregate amounts or amounts itemized for each asset category. In terms of "who" reports on investments, this could be either all individuals in a household or just the household respondent.

One of the designs matches the original BHPS approach where all individuals within the household report on savings and investments in the aggregate. Our results suggest that important improvements to BHPS approach can be obtained with an alternative design..

Our results suggest that an approach requiring each individual in the household to report on savings and a single individual within the household to report on investments provides consistently better data with little difference in administration burden over the current BHPS design. The amount of missing data obtained about investments is negligible as compared to asking all respondents for investment amounts using this approach. Moreover, the wealth estimates obtained using this design are consistently closer to the WAS data than other designs suggesting that the data obtained using this protocol is more accurate. Therefore, this design is recommended for inclusion in Wave 4 of *Understanding Society*.

BACKGROUND

This note sets out some considerations for the collection of savings and investment information in *Understanding Society* Wave 4. The main consideration is whether to continue with measures used on the BHPS or to develop a 'better' approach using a set of questions about detailed holdings. Given that *Understanding Society* has a fresh sample, the latter idea is appealing though the existing BHPS protocol could be carried forward to maximise longitudinal comparability, particularly for BHPS respondents. Using experimental data from the *Understanding Society* Innovation Panel at Wave 3 (IP3), we examine four different question designs for collecting the amount of money held in savings and investments. By comparing the data resulting from each design to comparable measures from the UK Wealth and Assets Survey, we find appreciable variation across designs. This work suggests that using itemised reporting which brackets some reporting to the household questionnaire may yield the most accurate data.

DESIGN

Table 1 outlines the schematic design of the IP3 experiment. Regardless of experimental design, an initial question asked respondents to report which specific savings or investments they hold. Then, four different approaches to obtaining the amount held resulting in a cross of two separate treatments: (a) whether to ask for item-by-item amounts held in savings or investments versus obtaining only aggregate sums for each of savings or investments; and (b) whether to obtain information on all forms of savings or investments from each responding adult versus targeting the household respondent for information on certain types of investments. Households were randomly assigned to one of the four experimental treatments. All individuals interviewed as part of the household were subjected to the group's treatment.

Table 1. Schematic design of IP3 experimental treatments

	Individual Reporting	Financial Reporting
Aggregate Amounts	*Group 1*	*Group 2*
Itemised Amounts	*Group 3*	*Group 4*

Group 1 represents the current protocol used in the BHPS. Respondents are first asked to provide the aggregate amount held in all types of savings, then the aggregate amount held in types of investment. This approach is generally understood to obtain under-reporting of holdings[1].

Large specialised surveys, like the Survey of Consumer Finances in the US or the Wealth and Assets Survey in the UK, ask very detailed questions about each item of savings or investment separately from each household member in order to arrive at household levels of wealth. Group 3 represents this approach. Both the *English Longitudinal Study of Aging* (ELSA) and *Household Income and Labour Dynamics in Australia* (HILDA) studies use some level of itemisation in their designs. The downside of itemised reporting may be the added administration time due to additional questions. Yet on ELSA, for example, the time required for additional questions seems to be minimal largely because the majority of respondents have few items upon which to report[2]. It may be the case that it takes longer to collect aggregate sums due to the added cognitive effort required to recall individual amounts and add up numbers. A further difference between itemised and aggregate reporting of amounts relates to the opportunity for item non-response to affect results as, with itemisation, there is greater scope for missing data.

HILDA differs from these other studies in that it brackets certain types of investments to be reported on by a single household respondent. Group 2 (aggregate) and Group 4 (itemised), shown in Table 1, incorporate this design. Each household member is asked only for details of savings and for details of a limited set of investments, while other investments are asked about at the household level by a "financial reporter". This approach has two advantages. First, in many households only one person looks after the household's finances. Asking about the same types of savings or investments from each household member could result in over-reporting. Also, it may be the case that a significant amount of missing data could result from asking all household members for amounts when many would not know the values held. The second advantage of splitting out a financial reporter is to minimise, therefore, missing data when aggregating all reported amounts to obtain a household value.

---

[1] Juster, F. T., Smith, J. P. and Stafford, F. (1999) 'The Measurement and Structure of Household Wealth', *Labour Economics,* 6: 253-275.
[2] Banks, J. (2009) 'Personal communication regarding the design of ELSA's wealth measures'

Table 2. Specific types of savings and investments queried.

Item	Aggregate category	Financial Reporter?
Savings or deposit accounts (with a bank, post office or building society)	Savings	
National Savings Accounts (formally National Savings Bank or Post Office Accounts)	Savings	
TESSA only ISAs or Cash ISAs	Savings	
National Savings Certificates	Investment	*
Premium Bonds	Investment	
Unit Trusts / Investment Trusts (excluding ISAs/PEPs)	Investment	*
Stocks and shares ISAs or PEPs	Investment	
Shares, UK or foreign (excluding ESAs/PEPs)	Investment	*
National Savings Bonds (Capital, Income or Deposit)	Investment	*
Other investments (Gilts, government or company securities)	Investment	*

Table 2 outlines the specific types of savings and investments queried. As implied above, the enumeration exercise differed between Groups 1 and 3 as compared to Groups 2 and 4. In the individual questionnaire, respondents in Groups 1 and 3 were presented with the full list of savings accounts and investment types whereas individuals in Group 2 and Group 4 were presented with only a limited set of categories. In these latter groups, the "financial reporter" was presented with the remaining set of categories in a section of the household questionnaire. Items marked with an asterisk in Table 2 were presented to the "financial reporter" rather than individual respondents. Respondents in Groups 1 and 2 provided aggregate amounts for "savings" and "investments" separately, whereas Groups 3 and 4 provided amounts for each item that they enumerated.

The aim of this analysis was to compare these four designs in terms of the missing data generated and the total amounts obtained for households. We examine these values in light of similar amounts obtained from BHPS Waves 10 and 15 which share the Group 1 design. We also compare amounts obtained through each design to amounts computed from the UK Wealth and Assets Survey which we treat as a "gold standard" given its design. All data has been inflated using the consumer price index to 2010 values for comparison. Moreover, the WAS does not collect financial details of full-time students between the ages of 16 and 18, therefore this segment of both the BHPS and IP samples have been excluded from this analysis.

There are some caveats to this comparison. First, the categories over which WAS respondents report are slightly different to the categories used in both the BHPS and the IP. The main differences are that amounts in National Savings accounts are combined with other savings and deposit accounts, and that amounts in premium bonds, National Savings bonds and National Savings certificates are collected as a single category rather than three separate categories.[3] Secondly, cross-sectional response weights were used to obtain amounts in the WAS and the BHPS whereas the IP figures are obtained from unweighted data.[4] Differences between numbers may be due, therefore, to important sample composition differences rather than overall design.

RESULTS

Tables 3, 4 and 5 contain various summary measures of the household aggregate values of assets held as savings and investments among households that reported holding these assets. Table 3 reports the total amount at the household level, while Table 4 shows the amount of savings and Table 5 shows the amount of investments. In obtaining aggregate household amounts, an important decision is how to treat missing data (Don't Know or a Refusal) provided by household members. On the one hand, missing data can be treated as zero when totalling across household members. On the other hand, it can be treated as missing resulting in a null value for the household if any individual reports missing data. This problem can be exacerbated with itemised reporting where there is more opportunity to obtain a "Don't Know" or "Refuse" response leading to a missing summary measure for each individual and subsequently the respondent's household. We report both approaches. The upper panel in each table reflects treating missing as zero. The bottom panel reflects treating "Don't Know" and "Refused" as missing in obtaining the household totals. Note, a small number of respondents enumerate holdings, either savings or investments, but report a zero amount. We examined whether treating these as inapplicable as distinct from a zero value made a difference to the results. Although the measures changed slightly, the overall differences were slight. For this reason we do not report these results.

---

[3] WAS respondents were also asked explicitly about fixed-term investment bonds held with banks or building societies (this category does not appear in BHPS).
[4] The WAS weights also adjust for the oversampling of households predicted to have high wealth levels.

Table 3. Total household savings and investments, means, standard deviations and other summary measures, comparing the four IP3 experimental treatments to the BHPS Waves 10 and 15 and the Wealth and Assets Survey.

INAP/DK/REF treated as zero	Mean	Sd	Median	P10	P90	Coefficient of Variation	N Any Reported	N Amt Obtained	Loss due to missing
BHPS W10	£19,765.11	£50,797.09	£4,015.49	£1.23	£49,224.16	2.57	6,641	6,484	2.36%
BHPS W15	£22,272.35	£59,734.48	£4,427.50	£0.00	£52,884.00	2.68	6,045	5,864	2.99%
WAS	£45,167.11	£148,243.30	£7,655.21	£27.34	£103,345.30	3.28	22,990	22,950	0.17%
Group 1: Agg, Ind	£16,895.16	£26,176.82	£4,600.00	£0.00	£60,000.00	1.55	205	205	0.00%
ratio to WAS	*0.37*	*0.18*	*0.60*	*0.00*	*0.58*				
Group 2: Agg, Fin	£44,722.48	£130,261.80	£6,250.00	£0.00	£107,500.00	2.91	189	189	0.00%
ratio to WAS	*0.99*	*0.88*	*0.82*	*0.00*	*1.04*				
Group 3: Item, Ind	£22,034.95	£37,618.99	£4,000.00	£0.00	£80,250.00	1.71	205	205	0.00%
ratio to WAS	*0.49*	*0.25*	*0.52*	*0.00*	*0.78*				
Group 4: Item, Fin	£46,875.00	£104,821.20	£5,327.75	£0.00	£132,600.00	2.24	190	190	0.00%
ratio to WAS	*1.04*	*0.71*	*0.70*	*0.00*	*1.28*				

INAP treated as zero, DK/REF dropped	Mean	Sd	Median	P10	P90	Coefficient of Variation	N Any Reported	N Amt Obtained	Loss due to missing
BHPS W10	£22,439.86	£54,245.39	£5,534.38	£159.88	£57,803.44	2.42	6,641	5,458	17.81%
BHPS W15	£25,669.84	£63,608.25	£6,764.23	£245.97	£61,493.02	2.48	6,045	4,751	21.41%
WAS	£45,656.53	£150,652.80	£8,202.01	£109.36	£103,400.00	3.30	22,990	20,423	11.17%
Group 1: Agg, Ind	£18,616.10	£26,162.85	£6,000.00	£150.00	£60,000.00	1.41	205	156	23.90%
ratio to WAS	*0.41*	*0.17*	*0.73*	*1.37*	*0.58*				
Group 2: Agg, Fin	£46,321.11	£132,989.20	£10,250.00	£225.00	£110,000.00	2.87	189	139	26.46%
ratio to WAS	*1.01*	*0.88*	*1.25*	*2.06*	*1.06*				
Group 3: Item, Ind	£22,579.34	£35,689.13	£6,050.00	£57.50	£80,250.00	1.58	205	155	24.39%
ratio to WAS	*0.49*	*0.24*	*0.74*	*0.53*	*0.78*				
Group 4: Item, Fin	£52,579.97	£106,979.30	£10,000.00	£50.00	£165,000.00	2.03	190	135	28.95%
ratio to WAS	*1.15*	*0.71*	*1.22*	*0.46*	*1.60*				

Regarding the total amount held in savings and investments at the household level, there are significant differences across experimental treatments. Experimental treatments involving a financial reporter seem to generate mean and median values closer to the Wealth and Assets Survey as compared to those not involving a financial reporter. The ratio of the Group 2 mean to WAS is 0.99, while the ratio of medians is 0.82. The ratio of Group 4 mean to WAS is 1.04, while median is 0.70. On the other hand, Group 1 (based on BHPS questions) shows a mean ratio of 0.37 and median ratio of 0.60 to the WAS data. The ratios for Group 2 and Group 4 are quite high, suggesting that the quality of data collected in the IP is comparable. The amount of variation in Groups 2 and 4 is also closer to WAS than the other two groups. The ratio of the IP to WAS standard deviation is 0.88 for Group 2 and 0.71 for Group 4, compared to only 0.18 for Group 1. Examining the ratio of means and medians between the IP treatments and the WAS when DK/REF cases are excluded from the totals yields similar results. However, all IP3 treatments seem to generate slightly more missing data as compared to the BHPS, though there is no effect of experimental treatment on the amount of missing data ($X^2 = 1.6$, *n.s.*).

Table 4 contains results for the reporting of savings amounts only. Here the pattern is slightly different from the results obtained when savings and investments are considered together. Namely, itemised reporting seems to yield means which are closer to the WAS values. In terms of savings, the questionnaire does not differ between Group 3 and Group 4 – all individuals in the household report on each savings account separately. Nevertheless, the ratio between Group 3 mean and WAS is 0.62 but the Group 4 mean to WAS is 0.81. Similarly, Group 1 and Group 2 differ only in who reports on key investments but the treatment is identical for savings. Here, both the Group 1 and Group 2 ratio of means to WAS is 0.47. Median ratios do not differ across the four groups very much. This suggests that itemisation and aggregation in reporting do not differ appreciably in obtaining amounts held in savings. However, there is somewhat higher variation in the amount obtained in Group 4, and the upper end of the Group 4 distribution seems to be more similar to WAS data than the other groups as the 90th percentile sits at about 98 percent of the WAS value. We find little difference in pattern of these ratios when DK/REF options are treated as missing, though for Group 3, the ratios of means increases to 0.70 and the median ratio goes very close to 1.00. Note, there is little difference across the four treatments in the effect of DK/REF ($X^2 = 1.0$, *n.s.*).

Table 4. Household savings, means, standard deviations and other summary measures, comparing the four IP3 experimental treatments to the BHPS Waves 10 and 15 and the Wealth and Assets Survey.

INAP/DK/REF treated as zero	Mean	Sd	Median	P10	P90	Coefficient of Variation	N Any Reported	N Amt Obtained	Loss due to missing
BHPS W10	£10,082.99	£22,871.45	£2,828.68	£1.23	£24,597.21	2.27	6,248	6,104	2.30%
BHPS W15	£1,345.86	£34,811.68	£3,689.58	£0.00	£31,361.44	2.59	5,718	5,543	3.06%
WAS	£23,172.86	£71,558.69	£5,468.00	£10.94	£52,492.84	3.09	21,658	21,653	0.02%
Group 1: Agg, Ind	£10,863.99	£17,045.70	£3,000.00	£0.00	£33,000.00	1.57	199	199	0.00%
ratio to WAS	*0.47*	*0.24*	*0.55*	*0.00*	*0.63*				
Group 2: Agg, Fin	£10,875.46	£18,134.79	£3,250.00	£0.00	£36,000.00	1.67	182	182	0.00%
ratio to WAS	*0.47*	*0.25*	*0.59*	*0.00*	*0.69*				
Group 3: Item, Ind	£14,473.03	£25,741.73	£3,225.00	£0.00	£42,825.00	1.78	190	190	0.00%
ratio to WAS	*0.62*	*0.36*	*0.59*	*0.00*	*0.82*				
Group 4: Item, Fin	£18,759.09	£36,571.07	£3,025.00	£0.00	£51,200.00	1.95	176	176	0.00%
ratio to WAS	*0.81*	*0.51*	*0.55*	*0.00*	*0.98*				

INAP treated as zero, DK/REF dropped	Mean	Sd	Median	P10	P90	Coefficient of Variation	N Any Reported	N Amt Obtained	Loss due to missing
BHPS W10	£11,355.05	£24,220.59	£3,689.58	£153.73	£27,056.93	2.13	6,248	5,163	17.37%
BHPS W15	£15,554.38	£37,562.90	£4,919.44	£245.97	£36,895.81	2.41	5,718	4,527	20.83%
WAS	£24,356.71	£73,714.96	£6,025.74	£109.36	£54,680.04	3.03	21,658	19,879	8.21%
Group 1: Agg, Ind	£12,720.06	£18,069.91	£5,000.00	£150.00	£40,000.00	1.42	199	157	21.11%
ratio to WAS	*0.52*	*0.25*	*0.83*	*1.37*	*0.73*				
Group 2: Agg, Fin	£12,901.77	£18,383.18	£5,750.00	£200.00	£37,000.00	1.42	182	138	24.18%
ratio to WAS	*0.53*	*0.25*	*0.95*	*1.83*	*0.68*				
Group 3: Item, Ind	£16,943.24	£27,888.53	£6,000.00	£60.00	£43,500.00	1.65	190	143	24.74%
ratio to WAS	*0.70*	*0.38*	*1.00*	*0.55*	*0.80*				
Group 4: Item, Fin	£22,963.97	£40,510.35	£5,000.00	£60.00	£62,500.00	1.76	176	132	25.00%
ratio to WAS	*0.94*	*0.55*	*0.83*	*0.55*	*1.14*				

Table 5. Household investments, means, standard deviations and other summary measures, comparing the four IP3 experimental treatments to the BHPS Waves 10 and 15 and the Wealth and Assets Survey.

INAP/DK/REF treated as zero	Mean	Sd	Median	P10	P90	Coefficient of Variation	N Any Reported	N Amt Obtained	Loss due to missing
BHPS W10	£17,314.63	£49,470.79	£3,074.65	£1.23	£40,708.38	2.86	3,762	3,674	2.34%
BHPS W15	£17,199.20	£52,900.04	£1,721.81	£0.00	£39,970.46	3.08	3,251	3,180	2.18%
WAS	£42,215.76	£140,249.90	£6,288.21	£10.94	£95,799.43	3.32	13,545	13,510	0.26%
Group 1: Agg, Ind	£11,030.28	£20,431.50	£1,450.00	£0.00	£36,500.00	1.85	118	118	0.00%
ratio to WAS	*0.26*	*0.15*	*0.23*	*0.00*	*0.38*				
Group 2: Agg, Fin	£58,317.24	£152,923.90	£12,500.00	£0.00	£124,000.00	2.62	111	111	0.00%
ratio to WAS	*1.38*	*1.09*	*1.99*	*0.00*	*1.29*				
Group 3: Item, Ind	£14,485.97	£28,249.03	£1,505.00	£0.00	£50,000.00	1.95	122	122	0.00%
ratio to WAS	*0.34*	*0.20*	*0.24*	*0.00*	*0.52*				
Group 4: Item, Fin	£46,705.42	£103,882.60	£5,150.00	£0.00	£126,500.00	2.22	120	120	0.00%
ratio to WAS	*1.11*	*0.74*	*0.82*	*0.00*	*1.32*				

INAP treated as zero, DK/REF dropped	Mean	Sd	Median	P10	P90	Coefficient of Variation	N Any Reported	N Amt Obtained	Loss due to missing
BHPS W10	£19,654.27	£52,683.81	£3,689.58	£29.52	£47,964.55	2.68	3,762	3,157	16.08%
BHPS W15	£19,933.28	£56,307.95	£2,689.58	£24.60	£49,194.41	2.82	3,251	2,613	19.62%
WAS	£43,136.56	£143,621.10	£6,999.05	£54.68	£96,072.83	3.33	13,545	12,097	10.69%
Group 1: Agg, Ind	£12,142.31	£20,659.60	£2,000.00	£20.00	£36,500.00	1.70	118	101	14.41%
ratio to WAS	*0.28*	*0.14*	*0.29*	*0.37*	*0.38*				
Group 2: Agg, Fin	£61,649.66	£156,612.50	£20,000.00	£2.00	£131,000.00	2.54	111	105	5.41%
ratio to WAS	*1.43*	*1.09*	*2.86*	*0.04*	*1.36*				
Group 3: Item, Ind	£15,896.36	£28,346.76	£3,000.00	£50.00	£62,150.00	1.78	122	99	18.85%
ratio to WAS	*0.37*	*0.20*	*0.43*	*0.91*	*0.65*				
Group 4: Item, Fin	£48,692.17	£105,684.30	£6,000.00	£2.00	£128,000.00	2.17	120	115	4.17%
ratio to WAS	*1.13*	*0.74*	*0.86*	*0.04*	*1.33*				

Table 5 contains results for household investments. Here, the role of a financial reporter seems to be important. The ratio of means for both Group 1 and Group 3 tends to be low – 0.26 for Group 1 and 0.34 for Group 3. However, the ratio of means for Group 2 is 1.38 and Group 4 its 1.11. Obtaining numbers which are so much larger than WAS also may be problematic, however. Over-estimation of the amount held in investments may represent a difference in samples between the WAS and the IP – as with all values reported, these figures could change somewhat were sample weights available for the IP. Nevertheless, the consistency between the use of a financial reporter as distinct from self-reports from all individuals (i.e, Groups 1 and 3 versus Groups 2 and 4) suggests that the design plays a role in obtaining an over-report of investment amounts. Considering the ratio of medians, Group 4 seems to come closest with a ratio of 0.82 compared to Group 2 which is nearly 2 times higher than the WAS figure. Group 1 and Group 3 medians are starkly different from the WAS data – 0.23 and 0.24 respectively. The use of a financial reporter also gives variation in reported investments that is closer to WAS than when individuals report separately. The ratio of the IP to WAS standard deviation is 1.09 for Group 2 and 0.74 for Group 4, while it is only 0.15 for Group 1 and 0.20 for Group 3. The figures in the bottom panel of Table 5, where DK/REF cases are dropped, mirrors the upper panel. However, the amount of DK/REF responses varies significantly across experimental treatments. Using a financial reporter significantly reduces the amount of missing data on investments ($X^2 = 18.6$, $p < 0.001$).

Table 6 presents results from an analysis of variance exploring the main effects of using a financial reporter and itemisation on mean amounts reported. Shown are results for combined household savings and investments, savings alone and investments alone. The results are substantively similar if DK/REF are treated as missing rather than zero in obtaining household totals, so we report only results from analyses treating missing as zero. We see that overall model fit is good regardless of outcome assessed. Important differences emerge across the experimental treatments, however. For total savings and investments combined, there is no main effect of itemisation in explaining variability of means ($F = 0.36$, *n.s.*) whereas the use of a financial reporter seems to capture the lion's share of variability ($F = 18.82$, $p < 0.001$). There is no interaction between these design features. This pattern is mirrored in the results for investments alone where we observe a significant main effect of using a financial reporter ($F = 21.69$, $p < 0.001$) but no effect of itemisation and no interaction between itemisation and a financial reporter. For savings, itemisation does play a role ($F = 9.60$, $p < 0.01$) whereas using a financial reporter has no effect and there is no interaction between these designs.

Table 6. Results of an analysis of variance comparing effects of using a financial reporter to itemisation on mean household amounts.

	Overall Model fit	Main effect of financial reporter	Main effect of itemisation	Interaction of treatments
Total savings & investments	$F = 6.42$; $p < 0.001$	$F = 18.82$, $p < 0.001$	$F = 0.36$, n.s.	$F = 0.06$, n.s.
Savings	$F = 3.99$, $p < 0.01$	$F = 1.34$, n.s.	$F = 9.60$, $p < 0.01$	$F = 1.33$, n.s.
Investments	$F = 7.47$, $p < 0.001$	$F = 21.69$, $p < 0.001$	$F = 0.23$, n.s.	$F = 0.78$, n.s.

Note, treating DK/REF as missing does not change these effects, the patterns of variability in means are identical. Therefore, we only report results from models treating DK/REF as zero.

Table 7. Question administration times (minutes), individual level data only.

	Mean	StDev	Median	p10	p90	N	Min	Max
Group 1: Agg, Ind	1.62	1.06	1.38	0.58	2.75	295	0.15	6.37
Group 2: Agg, Fin	1.40	0.84	1.25	0.57	2.33	275	0.02	6.32
Group 3: Item, Ind	1.79	1.33	1.40	0.52	3.42	289	0.17	8.07
Group 4: Item, Fin	1.38	0.96	1.13	0.53	2.67	255	0.18	6.18
Total	1.55	1.08	1.29	0.55	2.83	1114	0.02	8.07

H0: Means are equal	
Group 1 with Group 3	$p = 0.09$
Group 2 with Group 4	$p = 0.83$

H0: Medians are equal	
Group 1 with Group 3	$X^2 = 0.01$, *n.s.*
Group 2 with Group 4	$X^2 = 3.42$, $p < 0.10$

Table 7 contains average administration times per responding adult across the four experimental treatments. Note, we do not have household level timings so the means and medians shown in Table 7 are only for individual respondents. For this reason, we only compare the effects of itemisation within financial reporter treatments – i.e., Group 1 with Group 3 and Group 2 with Group 4. Though administration times at the individual level are not particularly long across all groups, the difference in mean administration time between Group 1 and Group 3 is marginally significant (Group 1 = 1.62mins versus Group 3 = 1.79mins, p = 0.09) whereas there is a no difference in median times between these groups.. Within the financial reporter treatments, itemisation does not seem to make any difference to either mean or median administration times. The enumeration exercise reveals that approximately 73 percent of households have a type of saving account whereas only 46 percent of households have any form of investments. If household level timings could be added to these figures, it seems likely that the administration times for Groups 2 and 4 would increase only slightly. Thus, taken together, there appears to be negligible difference in respondent burden, as measured by administration time, across the experimental groups.

CONCLUSIONS

This analysis has compared the amount of household savings and investment obtained from four different questionnaire designs. The designs varied in terms of (a) who reported on investments – all individuals in a household or just the household respondent, and (b) whether respondents provided aggregate amounts or itemised amounts. The Group 1 design matches the BHPS at Waves 10 and 15, but the data obtained does not seem to parallel comparable figures obtained from the WAS. The design of Group 1 seems especially ill suited to obtaining information on investments.

Based on these results, we believe that the design of Group 4 provides consistently better data with little difference in administration burden over the current BHPS design. The amount of missing data obtained about investments is negligible as compared to asking all respondents for investment amounts. Moreover, the mean and median values for this group are consistently closer to the WAS data than other groups suggesting that the data obtained using this design tends to be more accurate. For these reasons, we believe this design would be better suited for inclusion in Wave 4 of *Understanding Society.*