Deloitte.

Understanding the impact of financial advice.

A Report for the Resolution Foundation

1st September 2006

Audit . Tax . Consulting . Corporate Finance .

Contents

Executive Summary

- The Resolution Foundation is a research and policy organisation, which is currently focusing on how people on low incomes can access and use the financial services system. It has recently published new proposals for developing a national financial advice resource targeted at people on low incomes. This report forms part of the research programme being supported by Resolution Foundation.

- This report has been prepared for Resolution Foundation in response to a brief to explore and estimate the financial effects financial advice could have if received and acted upon by the individuals in the 'Target Group' identified by the Resolution Foundation. The potential effect of advice is estimated through a number of scenarios both at the individual level and at the level of the target population, including the effect on the UK Government pension credit system.

  - The Target Group for this study has been defined by the Resolution Foundation as those individuals that are not reliant on state support and whose income is below the population median income.

  - The Target group is segmented into 5 life-stage clusters: young, families, middle age, eve of retirement and elderly.

- Deloitte studied the relationship between advice and financial income. Data from Deloitte's own study of wealth demonstrates that a relationship does exist between advice and the wealth of the individual, irrespective of age, income or gender. However, no firm causal relationship between advice and financial outcomes can be established from existing research.

- Using data from various data sets for calibration, including the FSA Financial Capability Baseline Study and the British Household Panel Survey, Deloitte designed and built a model which projected forward individuals within the Target Group and estimated the extent to which their net assets, income and levels of financial stress would improve throughout their life.

- The assumptions on which the model is based have been discussed and agreed with the Resolution Foundation. Complete and/or longitudinal data on financial behaviour is scarce. However, where possible the assumptions have been either drawn or tested using the data sources above, in particular by looking at the experiences of older cohorts of individuals who appear from their history to have been in a similar position at an earlier age.

Executive Summary (contd)

- The outputs from the scenario assumption model can indicate that, if all advice is acted upon by individuals:
  - Individuals in the young, families, middle age and eve of retirement clusters see an increase in real net assets at age 60 and at retirement. They also experience an uplift in real incomes in retirement.
  - By way of example, the youngest cluster could experience:
    - An average increase of about 60% in net assets at age 60 if they were to respond to advice throughout their lives. This represents approximately between 5% and 10% of individuals cumulative employment income at that age, and is achieved through a combination of reduction in expenditure (in particular through better management of debt but also improved budgeting at times of reduced income) and better selection of financial products.
    - An almost four-fold increase in pension fund at retirement, which is a substantial part of the increased asset.
    - An increase in private pension income of about £2,100 per annum and an average decrease in pension credit received of about £600 per annum. The net effect is an average increase of about £1,500 per annum income in retirement.
    - An average increase in consumption over his or her lifetime of £50,000, which corresponds to approximately 10% of their day-to-day consumption. This implies that 'typically', although individuals are deferring consumption and replacing pension credit with income from savings, they are 'better off' as a result of responding to advice.
    - A two-thirds reduction in the proportion of individuals facing financial stress at any point in their lives among those who respond to the advice (defined as periods where all financial assets are drawn down and the individual is unlikely to gain access to further debt, resulting in the need for a drastic reduction in expenditure or sale of one's home).
  - Similar but lesser effects can be seen in the other clusters modelled with the effect least marked among the elderly cluster where lack of time and lifetime resource prevents any significant change in financial outcome.
- We have also projected these results based on the individuals modelled to estimate the impact on the population of the Resolution Foundation Target Group. The results for the population are particularly sensitive to the extent to which advice can be accessed by members of the target group and the degree to which individuals are able or willing to act upon the advice delivered to them.
  - For the target population as a whole, the delivery of advice, has the potential to improve wealth (including housing wealth) at age 60 in the range of £39bn to £78bn. This is on the assumption that the advice is provided to the whole target group population and that a percentage of the individuals between 10% and 20% of the target group optimise their behaviour. It should be noted that this amount is calculated by summing the increase in assets for the individuals of the different cohorts when they are 60 and that the accumulation of these assets would therefore materialise at different times in the future.
  - However, the model suggests that not all individuals' standard of living is improved through the provision of advice. 22% of the youngest cluster (and similar proportions of other clusters) experience a fall in consumption during the period modelled implying that the deferral of spending in order to save for tomorrow and improved financial behaviour does not always offset the loss of pensions credit. However, a number of other benefits can be identified even for these individuals, specifically a reduction financial stress and debt in retirement and the existence of a savings and housing equity 'buffer' in retirement that should make the individual more resilient to life events and economic circumstances.

Executive Summary (contd)

- The model also indicates the level of savings to the UK Government through reduced payment of pension credit to the Target Group. This number depends on the percentage of the Target Group that would optimise their financial behaviour as a consequence of the advice received. The following ranges have been obtained by assuming that between 10% and 20% of the target population is reached and responds to advice:
  - An annualised saving in the range £50m to £100m ten years from the start of delivering advice to the whole target group
  - An annualised saving of £200m to £400m at the peak in 2055, after which the savings for the current population cohort begin to decline (but would be expected to be supplemented by savings from subsequent cohorts of the target population).
  - If future cohorts are taken into account the annualised savings after 2080 could be in the range £400m to £800m. The purpose of calculating these figures is to demonstrate that the impact the continued provision of advice beyond the next 50 years is likely to continue and potentially increase over this time period. They are therefore not intended to be an accurate estimate of the benefits over such a prolonged time period.
  - These numbers compare to the amount currently paid yearly by the Government to more than 2m pensioners requesting credits which we estimate to be around £10bn per year
- There are also additional potential benefits for the individual of receiving advice. These are not quantified in this study, but are worth mention:
  - A relationship between wealth and health has been established through US studies. Although the research does not establish that this is a causal relationship, i.e. that greater wealth can lead to improved health, the research provides powerful evidence that such a causal relationship may exist.
  - The potential for improvements in financial capability, general well-being and a generational effect (not yet measured in any studies found)
- The model also assumes a number of potential impacts on the financial services industry including:
  - The potential for an increase in contributions to savings contracts, including long term savings;
  - More consumers attracting higher levels of interest on savings and lower levels of interest on credit;
  - More consumers shopping around for best deals on credit, savings and annuity products;
  - A rise in the demand for product information.

Project objectives and scope

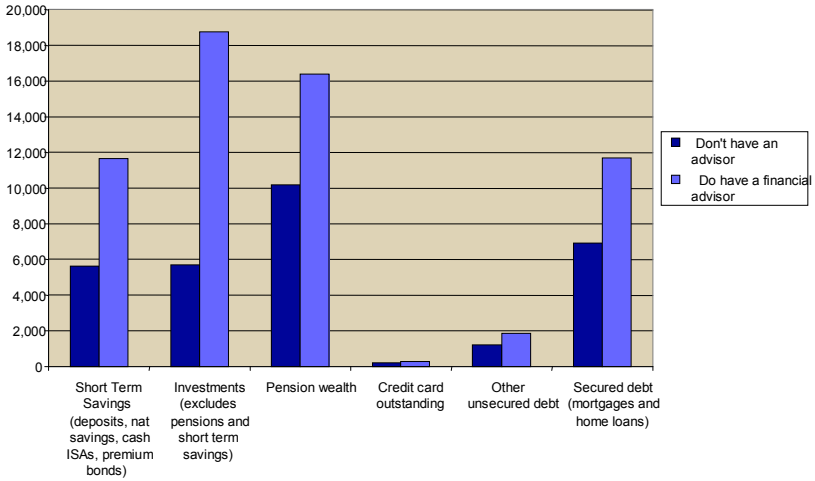
- Starting with the premise that the delivery of generic financial advice would improve both the financial position of an individual and the Government, Resolution Foundation appointed Deloitte to produce a model to illustrate the potential scale of impact.
- The individuals that populate the model are representative of the Resolution Foundation Target Group. These were defined by the Resolution Foundation as those basic rate tax payers who are independent from state support (benefits are less than 20% of income), but with limited financial means (below median income level). While the first condition suggests that they may have sufficient financial resources to manage, the latter condition indicates that they are unlikely to receive financial advice from financial service firms or IFAs, who would typically not see them as a profitable target.
  - The Resolution foundation also segmented the Target Group into 5 different life-stages clusters: Young, Families, Middle Age, Eve of retirement and Elderly. The clusters are defined by demographic parameters, in the main – age. We have agreed with the Resolution Foundation to use this segmentation to present our outputs.
- The model developed illustrates what could happen were individuals to respond in full or in part to advice on how to manage their budget, manage debt, save (for both short and long term needs) and shop around for the best rates. It is important to note that the model itself neither 'proves' that financial advice (generic or full) would improve individuals' financial position, nor demonstrates that individuals would respond to advice. However, evidence of the impact has informed and in some instances, calibrated the model.
- The model described in this report was designed to illustrate:
  - The potential benefits to an individual of responding to financial advice in terms of improved level of financial assets at retirement and available income in retirement
  - The potential impact of advice across that part of the population described by Resolution Foundation as the Target Group for generic advice
  - The extent to which the receipt of financial advice if acted upon removed individuals from the system of pension credit in retirement (or reduced their need for credit)
  - The potential impact on government spending on pension credit of the delivery of and response to financial advice

Impact of advice

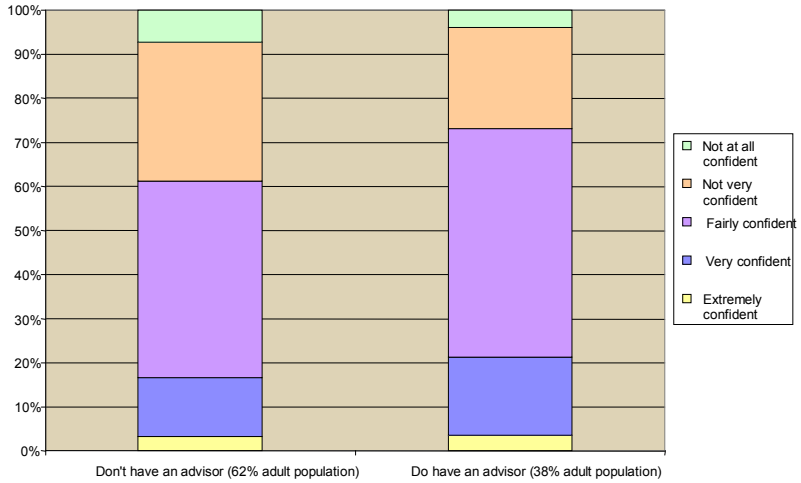
- The Resolution Foundation work programme and this project in particular are predicated on the assumption that the delivery of advice to the target group will result in positive outcomes for individuals and society.
- Whilst this project did not set out to establish a causal relationship between the delivery of generic advice and improvements to an individual's financial well-being, evidence does exist that those individuals who have a relationship with a financial advisor (of any kind):
  - Accumulate more wealth than their peers who do not have an advisor – this appears to be true whether controlling for age, income or gender. The top chart shown on this page compares the assets and liabilities for those in the Target Group who either have or do not have an advisor (the advisor may be an IFA or tied advisor with whom they feel that they have an on-going relationship)
  - Borrow more – individuals with an advisor tend to have higher levels of unsecured and secured debt, perhaps in response to greater financial confidence.
  - Hold more financial products than those without an advisor (2.3 products compared to 1.1)
  - Claim to be more interested and confident in their financial dealings. The lower chart compares across the adult population the confidence of those with and without an advisor.
  - Are more willing to take some risk with their money (57% prepared to take some risk compared to 34%)

Source: Deloitte Wealth & Portfolio Choice 2002

Value of assets and liabilities for those with income between £10,000 an £20,000



How confident in financial matters?

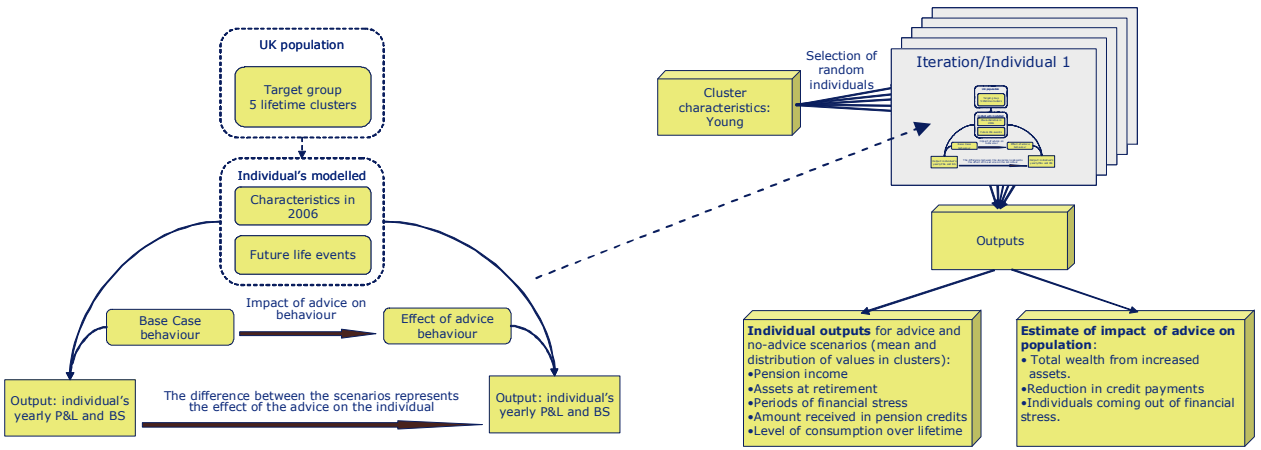


Our approach to modelling

- The model starts with a typical individual within each of the clusters in the Target Group (defined by age, income and dependency on benefits) and projects him or her forward through various events (such as marriage, divorce, redundancy, retirement).
- Each of these life events triggers different income and expenditure patterns and therefore different financial behaviour and outcomes. For example:
  - marriage changes the probability of acquiring a mortgage and of having children;
  - having children changes both income and expenditure patterns and may lead to more debt;
  - children leaving home leads to further changes in expenditure and may lead to greater saving;
  - losing ones job or serious illness has an immediate impact on income and therefore expenditure and may lead to a drawdown from savings or acquisition of debt;
  - retirement (timed to coincide with state pension) triggers the purchase of an annuity using pension assets and the receipt of state pension benefits and a change in expenditure patterns.
  - A list of the dimensions modelled is presented in the following section of this report.
- The model produces a Profit & Loss account (i.e. income minus expenditure) and Balance Sheet (i.e. a list of assets and liabilities) for the individual for each year projected.
- In the first instance, the model calculates the expected surplus or deficit in income each year and then prescribes how in the absence of advice :
  - that surplus is used (to reduce or eliminate debt, for short or long term saving or through additional spending)
  - the deficit is managed (the type of credit used, drawing down savings or reducing expenditure)
- The model then imposes different outcomes in the event of the individual responding to advice.
- Where possible, the assumptions are based on data extracted from the FSA baseline data, BHPS, ONS Expenditure and Food Survey and Deloitte's Wealth database. Where data was not available, the assumptions were based on discussions with Resolution Foundation, industry experts, input from a financial advisor and Deloitte's own experience.

Our approach to modelling (contd.)

- The model employs both stochastic (driven by probability of certain events occurring) and deterministic / rules based approaches:
  - The future life events which have an impact on financial outcomes and decisions for each individual modelled are stochastic using the Monte Carlo technique†. Random events are generated for the individual based upon the probability of those events occurring and the boundaries established for the cluster (eg young singles can't retire).
  - The model also projects financial outcomes for 1000 individuals within each cluster. These are also generated stochastically. These represent 1000 different individuals typical of each life-stage cluster.
  - Each individual's income and expenditure is determined by the stochastic modelling above and a number of deterministic calculations such as economic and mortality assumptions– ie the model does not test for different returns on investment, interest rates or changes in mortality.
  - The individual's response to financial surplus or deficit is deterministic. A set of rules is established for how individuals will deal with a surplus of income over normal expenditure.
- The results for each cluster are then summarised to illustrate the impact on the individual and the reduction in the payment of pension credit by the state. The individuals created in the different iterations are a representation of the population in the target group.



†Monte Carlo simulation is a stochastic technique which is used to test the impact of uncertainty on the output of the analysis.

It consists of running several iterations, generating, for each iteration, random values for the variables affected by uncertainty and producing one set of outputs for each iteration. This allows the effect of the uncertainty on the average value and the distribution of the outputs to be estimated.

In this model the stochastic approach randomly generates life events such as marriage, children, redundancy etc for any given individual based on the probability of such events given their age, gender working status etc. For each of the clusters this results in 1000 individuals who all have unique but plausible paths through life with income and expenditure patterns that match that path.

Key Model Assumptions

- The model is built on a series of assumptions about:
  - The characteristics of the target population which was segmented in the five life-stage clusters described above
  - The life events that will drive income, expenditure, debt and savings patterns
  - The behaviours that will emerge should the individual NOT gain access to advice
  - The impact that advice can have on consumption patterns, the cost of debt, the income from investment and the portfolio of assets and liabilities.
- A full description of the model is contained in a separate document - the technical appendix to this report.

Input Assumptions

- Characteristics of the target population are used to define the individuals who represent the starting point for the model
- The full set of assumptions is shown n the next page of this report.
- A number of different individuals are then generated (for the different iterations) based on the distribution of the characteristics within the population (eg age at outset defined by age bands for the cluster and selected randomly by model). Each cluster is modelled separately.
- The target group and the lifetime cluster segmentation were defined by earlier work of Future Foundation and analysis of FSA Baseline Financial Capability Study, BHPS

Life event assumptions

- Wealth and income outcomes for individual shaped by set of assumptions about patterns of income and expenditure shaped by life events
- For example:
  - Marriage increases the probability of having children and of buying a house
  - Having children increases expenditure and income
  - Inheritance increases income with no-advice / advice assumptions driving how this is then used.
- Drivers are calibrated from FSA Baseline, BHPS, ONS Expenditure and Food Survey, Deloitte Wealth data.

No advice / advice assumptions

- The initial output from the model based on set of assumptions about behaviour without advice
  - Based on observable patterns of borrowing and lack of saving among population
  - Calibrated through combination of judgement and data from FSA Baseline / BHPS / ONS/ Deloitte wealth study
- Impact of advice changes outcomes by changing:
  - Consumption patterns
  - Changes in saving / debt behaviour
  - Improved product rates
  - Change in mix of asset returns
- Impact of advice calibrated through discussions with Deloitte FS team, advice received from IFA by Resolution Foundation, testing with industry experts

Key Model Assumptions (contd.)

Individual's characteristics

(Stochastic)

- Socio demographic
  - Gender
  - Age
  - Level of education
  - Employment status (Including retirement)
  - Marital status
  - Number of dependent children
  - Illness
- Financial characteristics
  - Income from employment
  - Annual income from benefits
  - Qualifying years for state pension if already retired
  - Second pension if already retired
  - Annual income from private pension
  - Annual rental payments
  - Annual share of expenditure
  - Savings
  - Portfolio of financial assets
  - Pension Asset
  - Whether owns home
  - Value of property
  - Life Cover
  - Credit Card Debt
  - Other unsecured debt
  - Mortgage debt as % of property value

Life Events Modelled

(Stochastic)

- Changes in Employment status
- Entering retirement
- Changes in Marriage status: getting married/cohabiting, separated/divorced, becoming widowed.
- Birth of children and their moving out of parental dependency
- Falling ill and recovering
- Purchase of own home
- Death
- Other circumstances:
  - Death of spouse
  - Need to care for ill relative
  - Receipt of inheritance (cash)

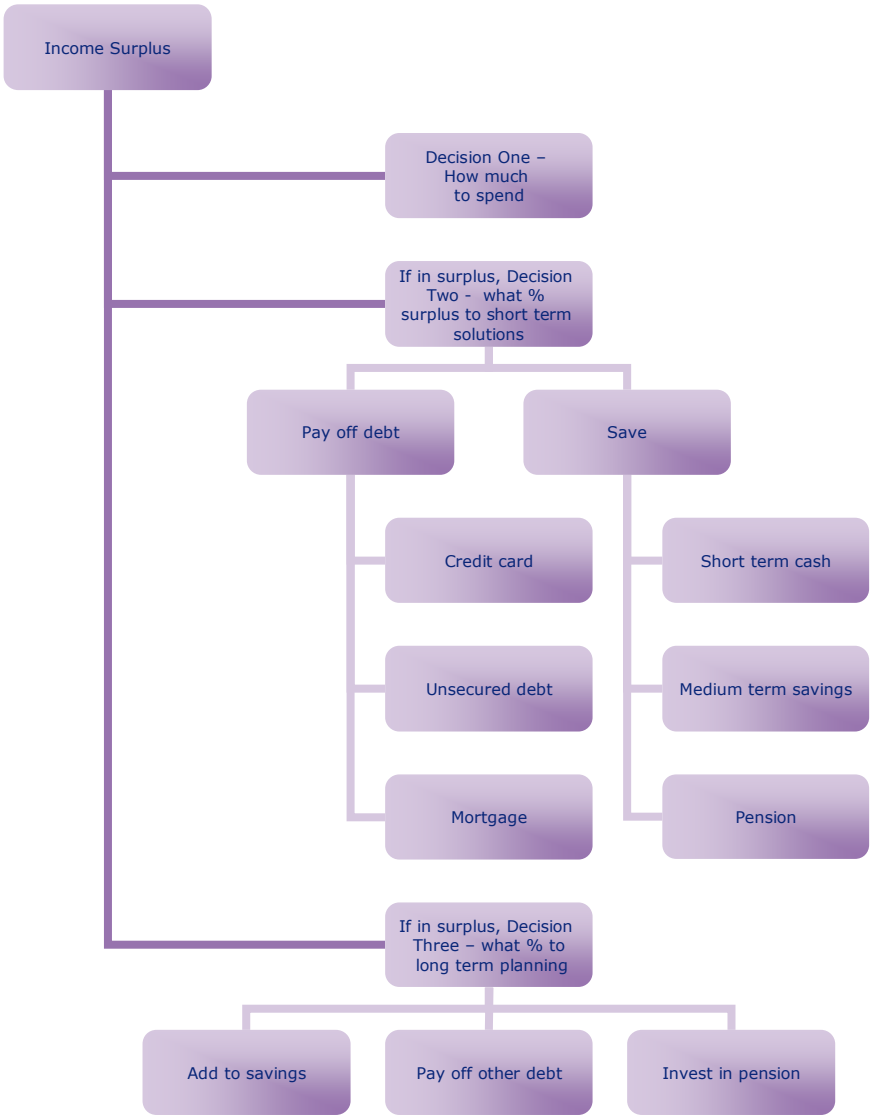
Financial products and behaviour

(Deterministic – Change with advice scenario)

- Use of surplus of income over expenditure:
  - Percentage immediately consumed
  - Proportion used to clear different type of debts and to purchase different type of assets.
- Financing of income shortfalls:
  - Percentage reduction in consumption
  - Proportion of use of the different assets to draw down and borrowing facilities to be used.
- Proportion of salary paid into pension
- Life cover purchased
- Product characteristics:
  - Interest on saving account
  - Dividend income from portfolio
  - Baseline Investment portfolio growth scaling factor
  - Mortgage Rate on initial mortgage
  - Loan Period in years
  - Interest payments on unsecured debt
  - Interest payments on unsecured debt (Credit cards)
- Maximum levels that individuals would keep in each type of asset or that they would hold as debt (for mortgage this is assumed to be the value of the house)

Model - Impact of advice

- The initial output from the model provides results based on no advice:
  - Assumptions on how individuals deal with income surplus or deficit imposed according to current financial behaviours
  - Consumers are assumed to have a sub-optimal management of their investment/debt portfolio – eg borrow on high interest rate products, don't save where possible, achieve poor rates of return
  - Model allows for gearing – i.e. for different proportion of assets and debt.
  - The decisions tree imposed by the model was tested with industry experts
- The assumptions are then changed where advice is deemed to cause a change in behaviour, including:
  - Rebalance of consumption and saving in periods of limited income
  - More rational management of debt (high interest rate debt paid off first)
  - Better saving and debt interest rates
  - Balance between short and longer term saving (more long term saving, eg pension, where possible)
  - A reduction in spending in periods of low income.
  - Increased / decreased life cover
  - Better annuity rates on retirement
- Two advice scenarios are modelled:
  - Full, efficient advice is received and acted on throughout the remaining lifetime of the individual
  - Partial advice is delivered or acted on by the individual (in effect a mid-point between no advice and full advice)
  - For simplicity it is assumed an average level of attitude to risk to modify rational/optimal behaviour
- The decision tree shown to the right describes the key decisions for all three scenario (without advice, some advice and full advice). In each scenario the relationship between the three key decisions is varied.

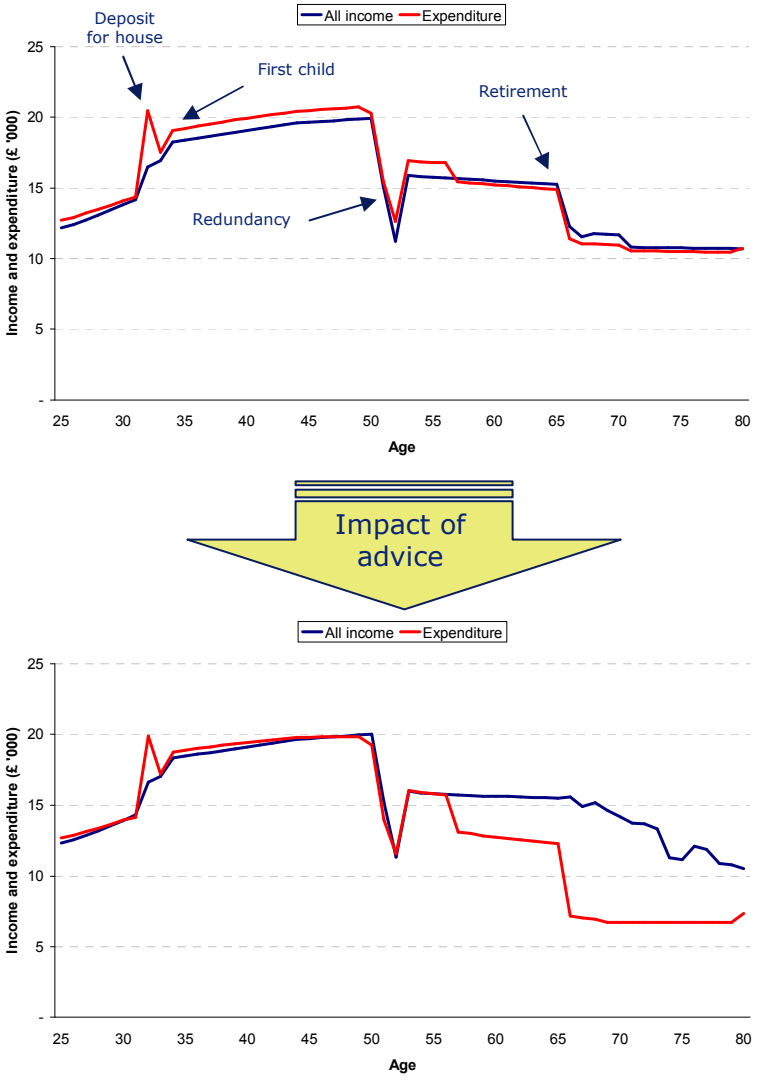


Model – Reliances & Limitations

- The results on the following pages are subject to a number of reliances and limitations summarised below.
- We relied on the Resolution Foundation definition of the target group and the five lifetime clusters. We have not reviewed whether the Target Group is appropriate for the provision of financial advice.
- It was agreed with the Resolution Foundation that we would model individuals and not households. This choice was dictated by the fact that advice targets individuals and not assets and that a number of data sources (such as the FSA Baseline data) are based on individuals and not households. However, this imposes some limitations:
  - Both income and expenditure may be better captured at a household level.
  - We are not able to model directly the income and the wealth of other members of the household. In particular we would not be able to model transfers of income or assets within the household.
- In particular, as noted above, robust and reliable data relating to financial behaviour and outcomes is scarce. Where possible, the inputs of the model are derived from public surveys, in particular the FSA Baseline Survey and the British Household Panel Survey.
  - It was not part of our scope to challenge the reliability of this data; and
  - We have used different surveys to derive different information (on the basis of the availability and the reliability of the information in each survey).
- We did not have any evidence to quantify the proportion of people that having received free financial advice would modify their behaviour and improve on their financial management. This is one of the assumptions to which the model is most sensitive. Assumptions on appropriate behaviour as a consequence of advice is not documented but in this model are based on views of a number of individuals with experience of the provision of advice. The rules applied to the changes in behaviour following advice were kept constant irrespective of personal circumstances (ie advice was not personalised).
- The model is based and calibrated on the basis of the characteristics of today's population. This implies that we are projecting that the 20 year old individual of today are forecast to have, in 30 years time, similar characteristics to the 50 year old individuals of today.
- We have not assumed any structural change in the economy, i.e. drastic changes or adjustment in house prices, long term interest rates, investment returns or major recessions.
- We agreed with the Resolution Foundation that a number of simplification would be used to reduce the complexity of the model. These are presented in detail in the technical appendix to this document. These include:
  - Treatment of tax: a constant 10% effective tax rate has been considered for every individual;
  - Pension Age: we have assumed that, unless forced by ill health, individuals would retire at the state pension age. We have modelled both current rules and changes introduced by the pension reform (so where an individual retires after the reform is intended to start, we retire the individual later).
  - We have simplified the calculation of basic and second pension and pension credits but have sought to incorporate the suggested changes to pension credit proposed by the White Paper on pension reform. From 2012, state pensions are linked to earnings.
  - We have not explicitly modelled the impact of auto-enrolment and mandatory employer contributions (where the individual does not opt-out) as proposed in the DWP white paper. However, the assumptions in the model do result in individuals contributing to a pension where advice is received – a mechanism which is similar to auto-enrolment.

Impact of Advice – Individual Case Study
Income & Expenditure

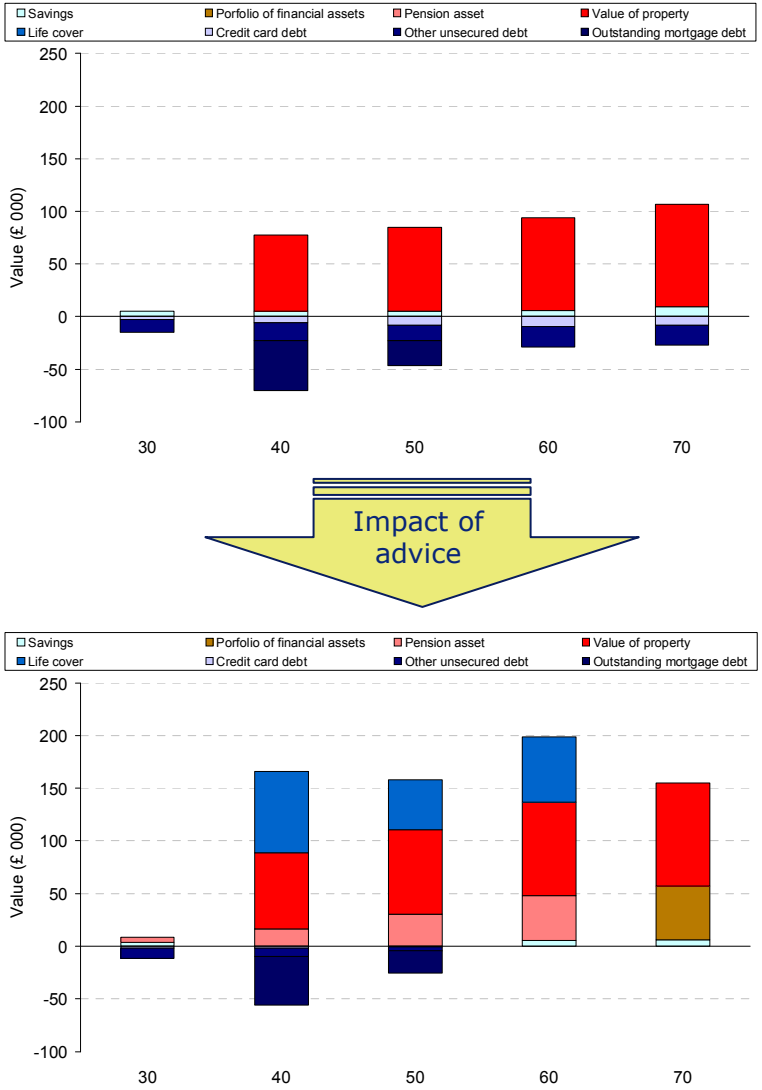
- We show opposite the effect of advice on an individual who:
  - is a male aged 25 in 2006 (Young cluster);
  - gets married and buys a property when he is 31, has a first child two years later and a second the year after that; and
  - is employed until he is 50 (his income is £12k when he is 25, peaks at £20k when he is 49), then after two years of being unemployed he starts to be self employed, and retires at 68.
- The likely impact of financial advice would be to help the individual managing his finance more efficiently throughout the different phases of his/her life which include:
  - an increase in expenditure as he gets married, buys a house and has children. This is matched by an increase in income (corresponding to the stage of his working career and to his increased effort to provide for his children).
  - a fall in income and expenditure as he is made redundant, and then a lower income as he becomes self employed
  - a fall in income as he retires.
- The effects of advice can be observed in:
  - reduced expenditure levels as the cost of debt falls (which is here part of expenditures) and the individual contains the level of day-to day expenditure. This is shown in the chart: in the first part of the graph the individual is able to reduce the gap between the red expenditure line and the blue income line. In the latter part of his/her life, as expenditure is reduced for the limited impact of financial liabilities, he/she is able to save a higher proportion of income for the latter years.
  - a larger income at retirement: at retirement age income is £3k higher. Later this benefit is eroded as part of the increase in pension is offset by a reduction in pension credits.



All results are real, i.e. in today's money

Impact of Advice – Individual Case Study
Balance Sheet

- The effect of advice has an impact on the choice of financial products used by the individual represented in this case study, as shown on these charts.
- No advice scenario:
  - in absence of advice, the individual's main financial asset is the value of his house (which is assumed to appreciate in value at a rate 1%pa higher than income and expenditure growth); and
  - In order to finance the house purchase this individual takes out a mortgage. However, he does not optimise his mix of products and does not pay off completely his credit card and his other debts taken out to finance his day to day expenditure.
- Advice scenario:
  - Debt is managed more efficiently and eliminated before age 60.
  - The decision to finance a pension results in a lower amount being held in cash in favour of a higher value in a private pension fund.
  - Pension savings account for a higher proportion of the portfolio providing a higher income in retirement
  - When married and working he and his wife purchase life cover that provides cover in the event of death.
  - Post retirement, some savings / investments are accumulated providing a cushion for that period.



Impact of Advice – Cluster Results

- The individual's output from the model presented above was then run through 1,000 different iterations for each of the life-stage clusters.
- Each iteration for each lifestage cluster will have made different assumptions about gender, starting age (within the constraints of the cluster definition), income, working patterns and key life events such as marriage, children etc.
- The table on the following page show the aggregated output of the model from these iterations. For each life-stage cluster and a selection of relevant variables, the table shows the average values for each one of the three advice scenarios modelled. The outputs, presented in turn in the following slide, include:
  - The value of assets accumulated by individuals before retirement - at age 60 (described more fully on page 19);
  - The size of private/occupational pension funds at the time of retirement (described on page 20);
  - The average value of the annuity paid by a private pension;
  - The value of the contribution made to the private pension fund;
  - The value of the pension credits received over the individuals' lifetime and as an average annual amount;
  - The value of the lifetime expenditure by individuals, excluding housing and expenditure on interests on debt; and
  - The percentage of people that entered periods of financial difficulty and the size of the debt that they would incur to keep their standard of living unchanged.
- We have defined three different scenarios to model the impact of advice:
  - *No advice*: sub-optimal behaviour;
  - *Full advice*: optimised behaviour;
  - *Some advice*: which represents a scenario in which the gains from receiving advice are approximately half way between full advice and no advice.
- More details on the assumptions at the bases of each scenario are provided in the technical appendix to this report.
- The impact of the advice on the population is calculated by taking the difference between the *Full advice* and the *No advice* scenario and multiplying it by the number of individuals in the target population that act upon the advice.

Impact of Advice – Results for Individuals

	Net Assets @ 60	Pension asset at retirement/death	Annuity from personal pension (first year)	Pension Credit received	Avg Annual Amount of pension credit	Day to day consumption	Percentage of individuals in financial difficulties	Average amout of potential shortfall over lifetime
	£ '000	£ '000	£ '000	£ '000	£ '000	£ '000	%	£ '000
Young								
No Advice	88.9	10.6	0.5	30.8	1.3	367.5	31.4%	145.6
Limited Advice impact	124.8	30.2	1.7	21.4	1.0	401.9	13.4%	39.6
Effective advice	145.1	39.0	2.6	17.6	0.8	407.8	10.8%	23.2
Families								
No Advice	79.8	22.8	1.0	27.9	1.3	263.2	20.8%	114.1
Limited Advice impact	102.3	35.5	2.0	21.1	1.0	281.0	7.4%	31.9
Effective advice	115.5	42.9	2.8	18.5	0.9	283.0	5.4%	19.9
Middle Age								
No Advice	76.6	31.1	1.4	25.7	1.2	135.4	34.9%	121.9
Limited Advice impact	100.6	37.3	2.0	20.5	1.0	161.3	9.2%	40.0
Effective advice	115.4	42.1	2.7	18.3	0.9	168.6	13.6%	18.9
Eve of retirement								
No Advice	63.3	31.2	1.3	28.7	1.3	79.7	4.8%	47.8
Limited Advice impact	66.4	32.3	1.6	25.2	1.2	86.4	0.0%	0.0
Effective advice	69.0	33.2	1.9	23.4	1.1	87.8	1.0%	0.6
Elderly	*at death							
No Advice	91.6	(n/a)	(n/a)	14.0	0.5	36.7	5.0%	51.0
Limited Advice impact	106.1	(n/a)	(n/a)	13.5	0.5	40.4	0.3%	9.5
Effective advice	116.6	(n/a)	(n/a)	13.3	0.5	42.3	0.3%	1.2

The figures are taken from the model and are expressed in real terms. The sum of the cash flows are undiscounted.

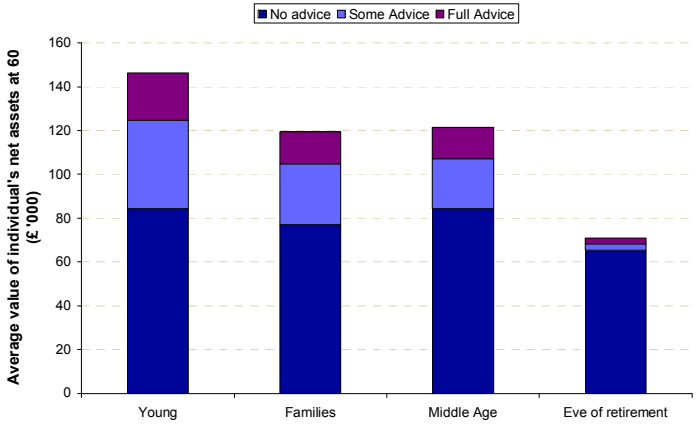
Impact of Advice – Cluster Results

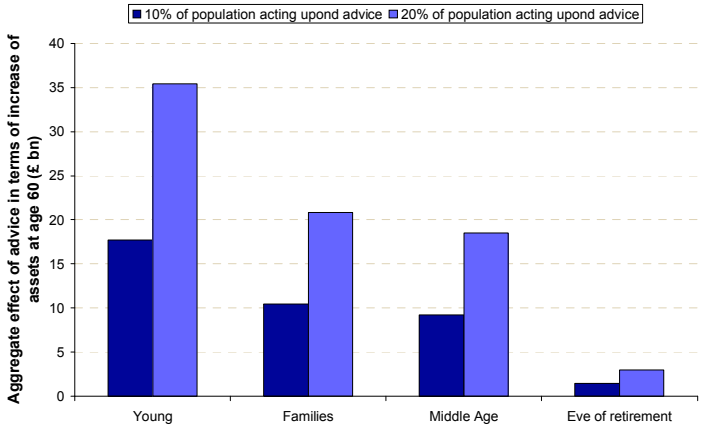
- The table below is an attempt to use the results of the table above, which shows the average projected impact of advice on the individuals of each cluster, to estimate the magnitude of the potential macro impact of advice on the UK population. They are obtained by multiplying the average numbers for the individuals by the number of individuals who are assumed to act upon the advice. The table shows figures referring to two scenarios in which either 10% or 20% of the target population of each cluster act upon the advice and optimise their behaviour.
- It should be noted that the different cohorts reach age 60 at different times in the future this aggregation is not a measure of the increase in assets at a specific time in the future but just the sum of the expected effect on the different cohorts, obtained by multiplying the expected increase in asset by the population of each cohort that is expected to act upon the advice.

	Population	Net Assets @ 60	Pension asset at retirement/death	Annuity from personal pension (first year)	Pension Credit received	Avg Annual Amount of pension credit	Day to day consumption	Number of individuals taken out of financial difficulty through advice	Average amout of potential shortfall over lifetime
	million	£ billion	£ billion	£ billion	£ billion	£ billion	£ billion	no of individuals	£ billion
Young	**2.9**								
10% acting upon advice		**17.7**	**8.1**	**0.6**	**-4.2**	**-0.2**	**13.7**	**68,319**	**7.6**
20% acting upon advice		**35.4**	**16.2**	**1.2**	**-8.5**	**-0.3**	**27.4**	**136,639**	**15.3**
Families	**2.5**								
10% acting upon advice		**10.4**	**5.0**	**0.4**	**-2.4**	**-0.1**	**5.8**	**46,163**	**3.9**
20% acting upon advice		**20.8**	**10.0**	**0.9**	**-4.7**	**-0.2**	**11.6**	**92,327**	**7.7**
Middle Age	**2.5**								
10% acting upon advice		**9.2**	**2.7**	**0.3**	**-2.0**	**-0.1**	**8.9**	**68,206**	**6.1**
20% acting upon advice		**18.5**	**5.3**	**0.7**	**-4.1**	**-0.2**	**17.8**	**136,411**	**12.2**
Eve of retirement	**2.6**								
10% acting upon advice		**1.5**	**0.6**	**0.2**	**-1.6**	**-0.1**	**2.5**	**14,217**	**0.5**
20% acting upon advice		**3.0**	**1.1**	**0.4**	**-3.3**	**-0.1**	**5.0**	**28,433**	**1.1**
Elderly	**3.7**	*at death							
10% acting upon advice		**8.3**	**(n/a)**	**(n/a)**	**-0.3**	**0.0**	**2.2**	**19,264**	**0.7**
20% acting upon advice		**16.5**	**(n/a)**	**(n/a)**	**-0.7**	**0.0**	**4.5**	**38,529**	**1.4**

Impact of Advice – Level of assets at 60

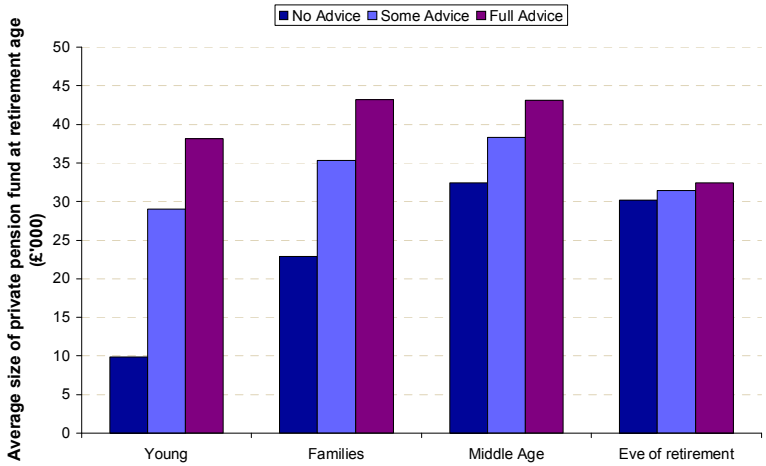
- The model points to the potential benefits to the individual of receiving advice being:
  - An increase in personal wealth providing personal choice, flexibility and resilience
  - A reduction in dependency upon state support
  - Greater protection from adverse movements in economy
  - Greater protection for family in the event of death of individual
  - Higher levels of income in retirement for some (where the individual move beyond the levels of pension credit)
  - A reduction in the number of times that the individual finds themselves in financial difficulty during their lifetime
- For the individuals who are willing to change their behaviour, the delivery of advice has the potential to improve personal wealth (including housing wealth) by an average of up to £60,000 (excludes the elderly) at age 60, an increase of up to 60% on the value of wealth without advice.
  - Impact is most marked in young singles and middle age cluster and where improvements in wealth created through advice delivery is particularly marked.
  - For those on the eve of retirement the amount of improvement is very limited since this category includes individuals of age in the bracket 52 to 68.
- For the target population as a whole, the delivery of advice, under the modelling assumptions, has the potential to improve wealth (including housing wealth) at age 60 of a value in the rage £39bn to £78bn, depending on whether it is assumed that 10% or 20% of the population acted upon the advice given and optimised their behaviour. It should be noted that the different cohort reach age 60 at different times in the future this aggregation is not a measure of the increase in assets at a specific time in the future but just the sum of the expected effect on the different cohorts, obtained by multiplying the expected increase in asset value by the population of each cohort that is expected to act upon the advice.

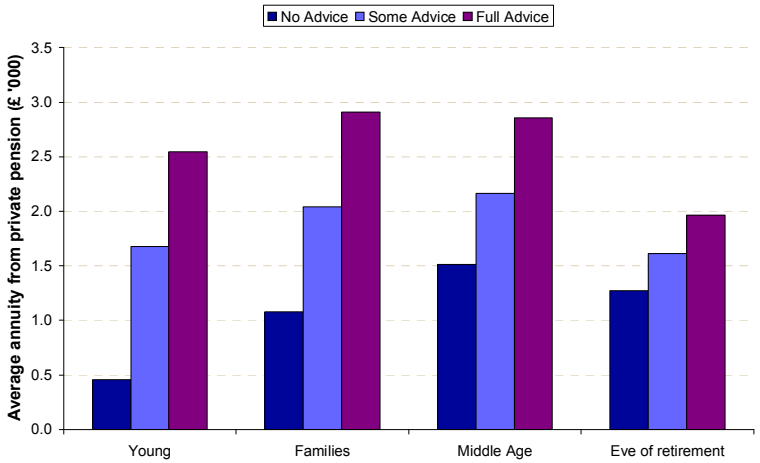




Impact of Advice – Pension

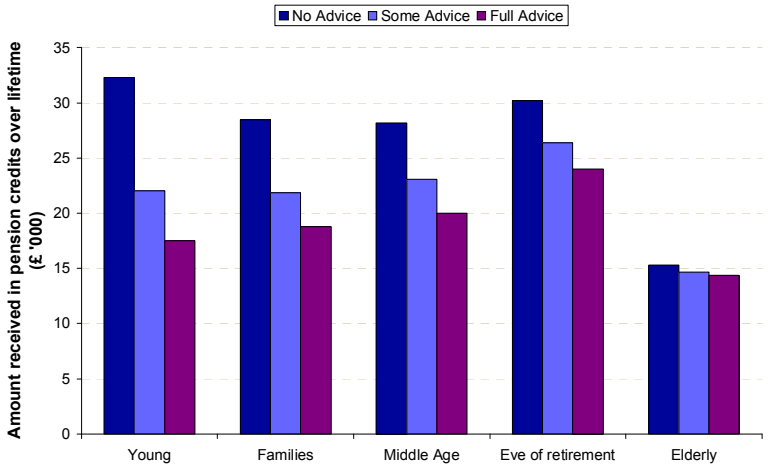
- Advice encourages individuals to increase their contributions into a pension fund. We have assumed that individuals who follow the advice:
  - Would increase regular contributions into a private pension fund; and
  - Would direct a higher proportion of their excess income into the private pension fund.
- The impact of advice is highest for the younger generations due to the length of time that the fund has to accumulate
  - The average fund at retirement for the young cluster has grown from just under £10,000 to almost £40,000.
  - For the 'eve of retirement' cluster the effect of advice on pension funding is minimal.
- The value of the pension fund is then reflected in the level of the annuity pension received by the individuals during retirement.
- Advice affects the value of the annuity through both the impact on the size of the pension asset and the improved rate that the individuals may be able to achieve through the use of the open market option.

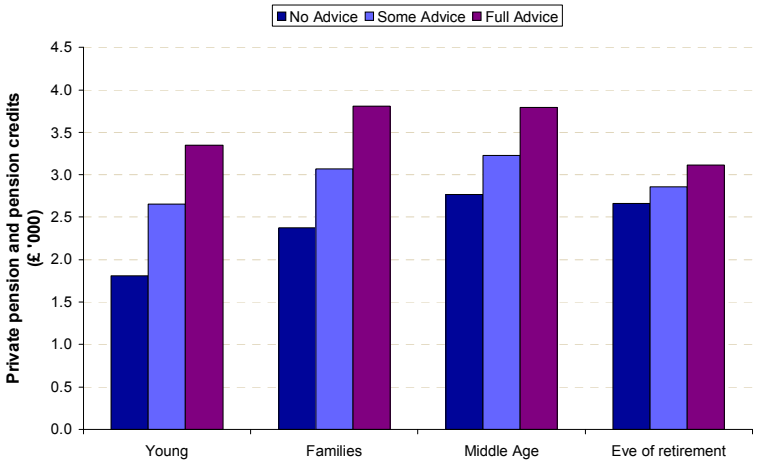




Impact of Advice - Pension credits

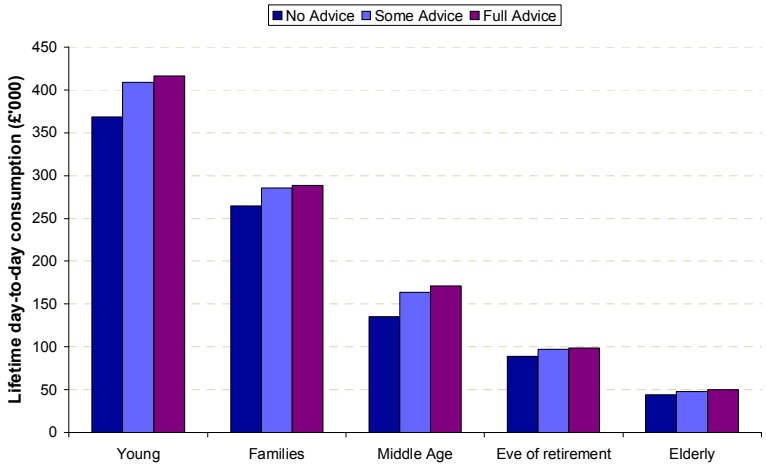
- The top chart shows the assumed average amount received in pension credits by the individuals modelled under the three advice scenarios.
  - This is calculated as the sum of the guaranteed credits and saving credits. Both of them are awarded to individuals on the basis of the income received and of the assets owned by individuals in their retirement.
- Advice is effective in reducing the amount of pension credit received in retirement, consistent with the increased assets and pension payments observed under the advice scenarios.
  - The reduction in pension credits is a result of the higher level of private pension income and the higher value of net assets available in retirement.
- In all typical cases in the model, the amount of pension credit lost through saving is outweighed by the increase in annuity income generated at retirement.
- This result is used in slides 24 and 25 to calculate the benefit of the advice to state outflows in credit payments.
- The bottom chart shows the sum of the private pension income and the income from pension credits. In addition to this amount individuals would receive basic and second pension. It shows the net effect of the increase in income from private pension observed above and the decrease in pension credits shown in the top chart.
  - The net effect of advice on pension income is positive, which shows that under the advice scenario the typical individuals from all life-stage clusters are better off than without advice.

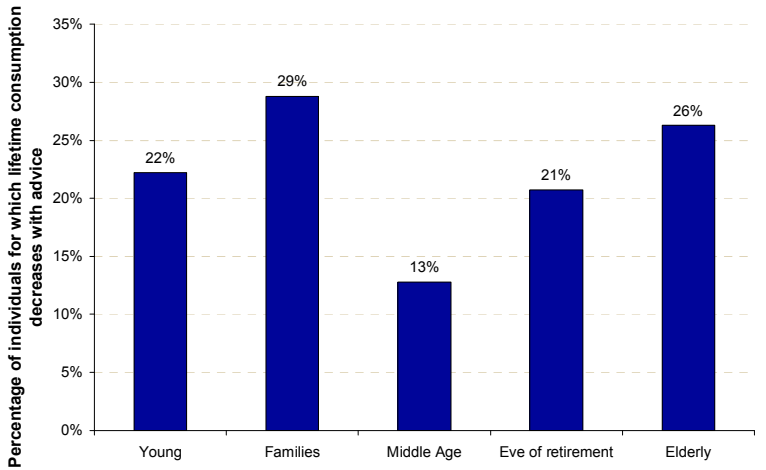




Impact of Advice - Consumption

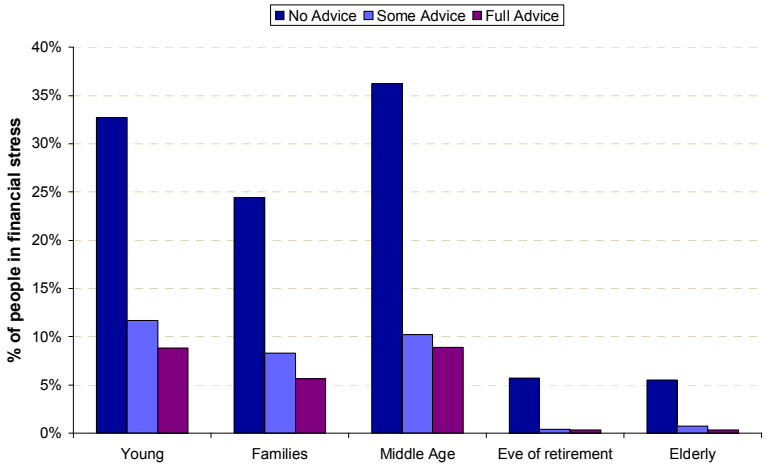
- The model also calculates the level of an individual's consumption (spending) across the period modelled. The chart shows the average value of day-to-day consumption for the individuals modelled throughout their lifetime (from the start of modelling to their death).
- This variable can be used as a measure of individual standards of living over their lifetime. It is important to look at lifetime consumption because it is possible that individuals have only changed the timing of their consumption, saving more in the earlier part of their life to have more assets available for retirement. The model assumes that advice may increase individuals ability to control expenditure through budgeting, particularly in periods of low income, and increases the level of savings where incomes permit.
- The model indicates that advice does not on average reduce lifetime consumption, but that typically consumption increases:
  - Although consumption is in most instances deferred, the overall level of lifetime consumption increases on average when individuals act upon the advice received.
  - This result indicates that the gains made by the state through the reduction in pension credit are typically not at the expense of individuals' welfare (as measured by lifetime consumption). In other words, although many of these individuals have replaced pension credit with income from personal savings, they could be considered to be better off over their lifetime. Such individuals might also be considered to be better protected against any future changes in personal circumstances or changes in government policy on state benefits.
  - However there is a small proportion of people whose consumption reduces as advice is provided. These percentages are shown in the bottom chart. For these individuals, the impact of advice might be considered negative, trading off as it does pensions credit for savings.

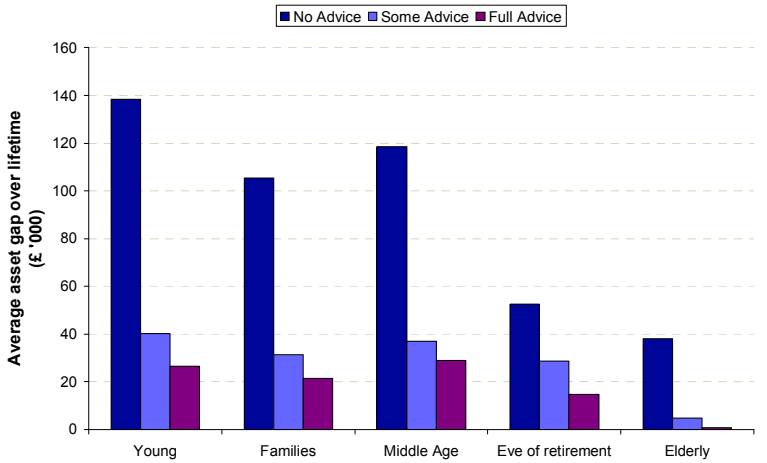




Impact of Advice – Financial stress

- Another dimension that the model captures is the extent to which individuals face financial stress during their lifetime.
- We have modelled financial stress in the following way:
  - If at the end of each year individuals have spent more than their income, the individuals will finance the shortfall through a combination of the following measures:
    - Reducing the level of day-to-day expenditure;
    - Drawing down their assets;
    - Increasing the level of borrowing.
  - If the level of income does not cover expenditure for a prolonged period it is possible that the individual will use up all his/her savings and all its borrowing options. We identify this case as entering a period of financial stress.
    - Although in this case it is unlikely that in reality individuals will literally go bankrupt, it is likely that they would need to reduce their expenditure level drastically, and for example be forced to move to different accommodation (e.g. relatives).
- The model provides as an output:
  - Whether at any point in their life the individuals modelled found themselves in a situation of financial stress.
  - The value of the amount they would need throughout their life to avoid such situations.
- The model indicates that across all clusters:
  - the proportion of the cluster experiencing financial stress is reduced significantly by advice
  - The shortfall in assets is significantly lower.

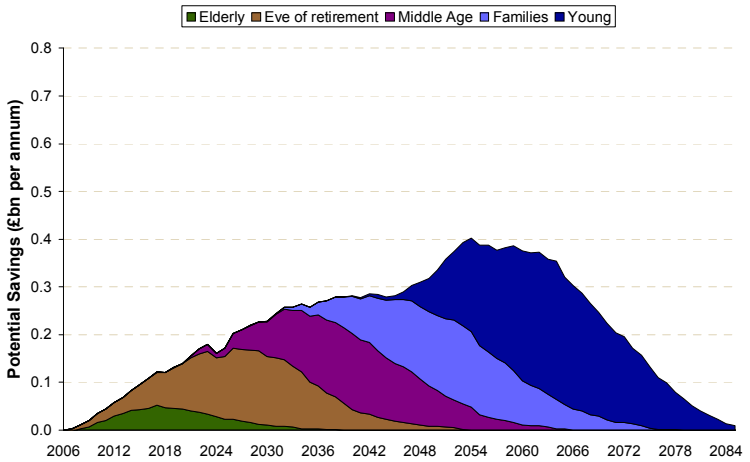




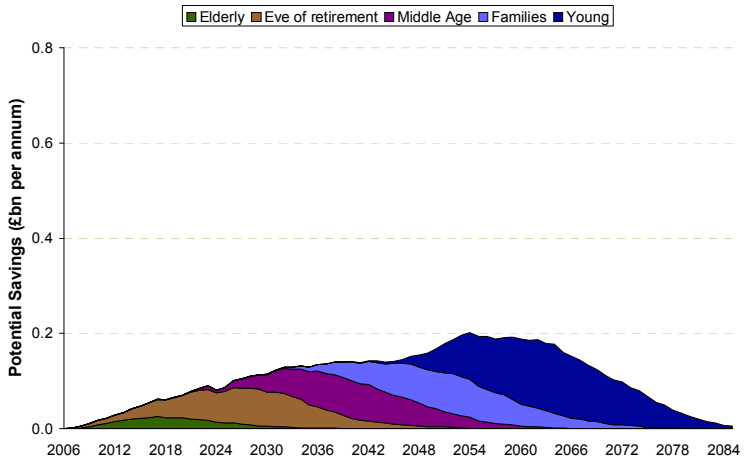
Annualised Benefits to the State

- In order to estimate the annual impact of providing advice to the individuals of the different clusters it is worth observing the timing of when the benefits can be achieved (since they are based on savings in pension credit payments).
  - Over the next 10 years, only benefits from individuals in the *elderly* cluster could be achieved (and the effect of advice is limited for the *elderly*).
  - Between 10 and 20 years in the future it will also be possible to see the effect of the advice on individuals in the *Eve of Retirement* cluster.
  - Between 20 and 30 years in the future the benefits of advice on the individuals currently in the Middle Age cluster will also be visible.
  - And so on…
- The two charts to the right show an estimate of the annual savings (expressed consistently with the two scenario described above which assumes 10% and 20% as percentage of individuals that respond to advice) as the different cohorts defined by the clusters start benefiting from the advice.
- The results show that for the today's target population cohort, the range of savings peak in 2055 to £200m to £400m per year.
- Ten years from today, the range of estimated annual savings reach close to £50m to £100m.
- These numbers compare to the £10bn that the UK government spends each year in financing pension credits to the more than 2m pensioners claiming credits.
- Both of these estimates assume that advice starts to be delivered and responded to in 2006.

20% response to advice



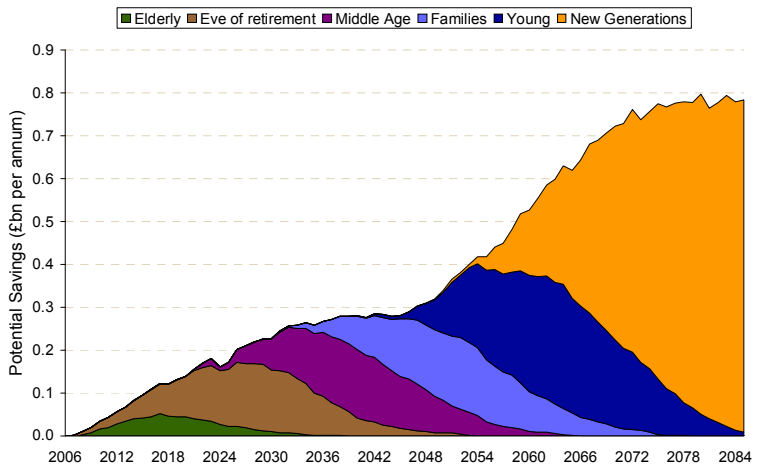
10% response to advice



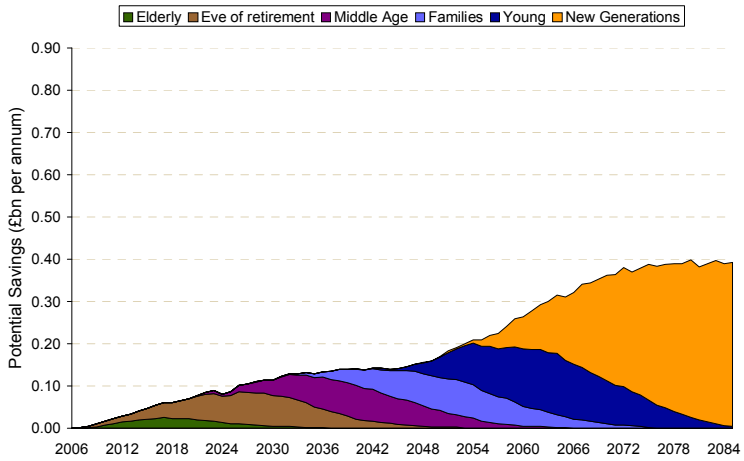
Annualised Benefits to the State

- The figures in the preceding slide show the potential savings that could be achieved based on the current cohort of the target group.
- However, in order to determine the magnitude of the long term impact of the advice it is necessary to include in the calculation the effect that advice would have on the new generation that are not in the target group today.
  - We have assumed that the effect of advice on these generation will be equivalent to the impact of the advice on the *young* life time cluster.
  - From our modelling, it appears that the estimate of the annual savings on the pension credit system for the UK government could be in the range £0.4bn to £0.8bn, defined on the assumption that the advice is acted upon by a percentage of population that varies between 10% and 20%.
- The results shown on this slide serve to demonstrate that the impact a continued provision of advice beyond the next 50 years is likely to continue providing benefits to the Government even when the individuals that are currently part of the Resolution Foundation's target population have died, because it can have an impact on the new generations. They are therefore not intended to be an accurate estimate of the benefits achievable over such a prolonged time period.

20% response to advice



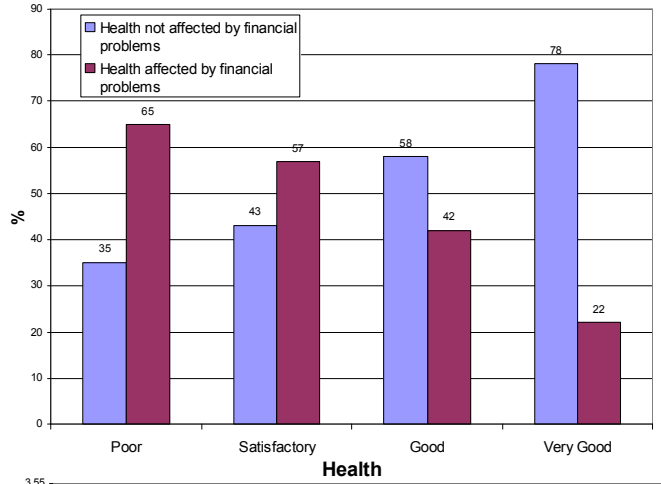
10% response to advice

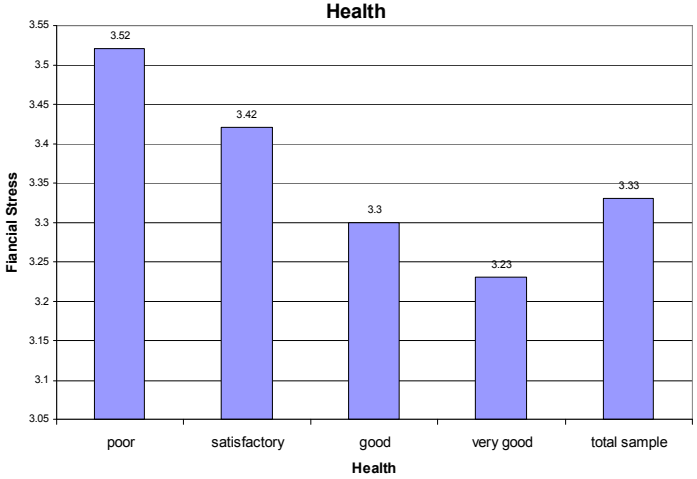


Other benefits to the individual / society

- In addition to the direct financial benefits to the individual of receiving and taking action as a result of advice, other benefits may arise for the individual, state and society in general.
- Academic studies in the United States, most of which do not claim to have established a causal relationship between wealth and health have however established a close relationship between the two. All studies demonstrate that the relationship between wealth & health is extremely complex and difficult to measure.
- A study in 2005 by O'Neill, Sorhaindo, Xiao and Garman* found that:
  - Financial wellbeing is positively associated with health and with absenteeism which could bring benefits to employers and national productivity
  - Financial stress is negatively associated with health and with organisational commitment which could bring benefits to the health service
  - Access to debt counselling improved health in 48% of the sample
  - Health was affected by financial problems among 43% of the sample
- Other potential benefits to the individual and society (not quantified through the model) include:
  - Improvements in general levels of financial capability through exposure to more financial products through the lifetime
  - Improvements in general well-being created by financial resilience
  - Some potential for a generational impact as saving and repaying debt becomes a 'family habit'
  - An eventual reduction in the state and private sector cost of providing debt counselling services

Sample of customers of US national credit counselling service. 42% reported health problems associated with financial difficulty





Key: 1=No Financial Stress and 5=Overwhelming Financial Stress

*** Health, Financial Well-being, and Financial Practices of Financially Distressed Consumers** ,2005Barbara O'Neill, Rutgers University, Benoit Sorhaindo, InCharge Education Foundation, Jing J. Xiao, University of Arizona, E. Thomas Garman, Virginia Tech University

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