Pension fund carbon savings research: A summary of the approach

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Efforts to tackle climate change involve decarbonising the global economy. A key component of this mitigation strategy is helping individuals understand and reduce their carbon footprint. Individual carbon footprints convey the quantity of **Greenhouse Gases (GHGs**) released through an individual's consumption choices over the course of a year.

Reducing individual carbon footprints is rightly associated with lifestyle choices and, typically, choices involve trade-offs. For example, flying less and or switching to rail journeys, driving less and or switching to an electric vehicle, eating less meat and or switching to a vegetarian diet.

An action that is less well understood is how switching an individual's pension contribution and pension wealth to an alternative fund or pension provider could deliver carbon footprint reduction / carbon savings.

To help illuminate the potential of this lever – and drive awareness of the power of our money as a vehicle for impact - **Aviva has undertaken a study with leading data analytics company, Route2, in association with Make My Money Matter, and as part of Aviva's partnership with WWF-UK, to** (a) quantify the average UK individual carbon footprint, across age groups; (b) quantify the carbon savings of switching pension contributions and pension wealth from a broad global equity index, to an equity-focused sustainable fund; (c) quantify the carbon savings (i.e. carbon footprint reduction potential) of the more familiar behavioural adaptations, such as switching to a vegan diet; and (d) demonstrate the relative carbon benefits of pension fund switch versus the more familiar behavioural adaptations.

The main data source for the study was the UK's Office of National Statistics (ONS), which provides weekly household consumption data (in addition to pension wealth) by age group. For example, weekly spend on food and non-alcoholic drinks items, transport items etc.

For each item, specific **indirect** greenhouse gas emission **intensities** were applied (i.e., KG of GHG / £ Meat Products). These intensities quantify the greenhouse gas emissions that result from an item's manufacture and distribution, up to the point of sale. Further, some spend items result in greenhouse gas emissions at the point of consumption, for example petrol and natural gas. For these items, spending was translated into physical quantities (e.g. litres of petrol) and subsequently item specific direct emission intensities were applied. Taken together, across the 220 items that represent the ONS's view on household consumption, and extrapolated for one year, the UK average individual annual carbon footprint is equal to **7.02** Tonnes.

The pension contribution and pension wealth component of the study comprised a further two analytical steps. First the GHG emissions per £1 invested in a broad global equity index fund were estimated. Second, the GHG emissions per £1 invested in an Aviva equity-focused sustainable pension fund was estimated[1]. When compared the analysis revealed a greenhouse gas (carbon) 'saving' of **0.64 KG** per £1 invested.

When the 'carbon savings' intensity is applied to the average individual pension wealth (c. £30,000) the total carbon savings of switching from the global equity index, to an equity-focused sustainable fund equals 19 Tonnes.

Finally, the study shows the carbon savings benefit of switching pension funds compared to more familiar behavioural adaptations. For example, moving the national average pension wealth to the sustainable fund used in the calculation is 21 times more effective (respectively) than the combined annual carbon savings of switching to a renewable electricity provider, substituting all air travel with rail travel and adopting a vegetarian diet.

It should be noted that savers should not use this research in place of financial advice.

More details of the research findings and the Make My Money Matter campaign can be found at **www.makemymoneymatter.co.uk/21x**

[1]Intensities were constructed through extended input-output modelling

How the result was calculated: a step-by-step guide

1. First we worked out the overall carbon footprint of two equity-focused funds: one global index and one sustainable fund.
2. To do this, we first worked out the carbon footprints of the businesses those funds are invested in. This was done by understanding which sectors and countries each company operated in, and then multiplying their revenues with appropriate sector carbon emission intensities. The carbon emission intensities comprised both direct and indirect, allowing comparison to the other lifestyle footprint calculations (e.g. consuming meat etc). We couldn't do this on an individual, business by business basis as there is limited consistency in how companies report carbon emissions and limited company disclosures of their direct and upstream emissions
3. We then worked out the % of carbon attributable to the pension funds based on their investment levels, i.e. if fund Y owns 10% of company X, then it gets 10% of their carbon footprint
4. We added these totals together (i.e. the attributable 'pension carbon footprint' of each business invested in by the pension fund) to get a total carbon footprint of that fund
5. We then divided this by the total amount of money invested in that fund total, to get an absolute amount of carbon attributable to each £1,000 invested
6. Finally, we multiplied this by 30 (i.e. equivalent to the average UK pension pot of £30,000) to get the absolute carbon emissions associated with an average £30k pension.
7. We did this across each of the funds to establish the carbon emissions avoided/saved per a sustainable fund, relative to a standard benchmark.
8. We then compared the carbon savings of a 'pension switch' - i.e. moving between the different funds - with the associated carbon savings of other lifestyle choices i.e. becoming vegetarian
9. This provided us with a relative comparator between the two actions.

Nick Robins, Professor in Practice - Sustainable Finance at the London School of Economics said of the research:

"I reviewed a draft of the report and presented questions to the author to explore the methodology and the results; I did not review the calculations involved and reviewed this on a pro bono basis.

Overall, I find this to be a very powerful piece of analysis, credibly showing how carbon emissions linked to use of financial products like a pension can be compared with other parts of a person's lifestyle, such as diet, housing and transport.

Thinking ahead, four points are worth taking forward:

First, it would be interesting over time to additionally investigate the carbon impact of consumption choices (including finance) across a range of income groups. Higher income consumers generally have higher carbon footprints and the responsibility to take action on the climate impact of larger pools of savings is particularly important.

Second, it is important to note that this statistic is indicative, as while it focuses on equity only funds, savers would want to consider a range of funds to meet their investment or savings goals. It's also important to make clear the research doesn't constitute financial advice.

Third, I'd additionally note that shifting investment is an important way of sending signals to companies to accelerate action to support the net-zero transition. Shareholder engagement is another strategy, and the use of this tool can act to draw out how individual savers ensure that their pensions provide a lever for climate action.

Finally, the study points to the need for individuals to build up their capacity to make informed climate choices over all aspects their lifestyle, not least finance. In my view this should be included in the Government's forthcoming Net Zero Strategy, and the particular role that independent financial advisors could play should be explored."

Make My Money Matter

Acting on climate
change to build
a better tomorrow

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