

## From Me to You? How the UK State Pension System Redistributes

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The state pension system redistributes income both across people's lifetimes and between different people. This study examines these two types of redistribution among those born in the 1930s.

### Key Points

- State pension entitlements vary across individuals. Under the existing state pension rules, men born in the 1930s are expected to receive on average over 50% more state pension income over their lifetimes than women. However, lifetime state pension income is more equally distributed than lifetime earnings.
- Much of the inequality in state pension benefits received reflects similar inequality in the financial contributions paid during people's working lives. We find that 80% of state pension spending simply reflects individuals' own contributions and can be seen as redistributing from earlier to later in individuals' own lifetimes.
- The remaining 20% of state pension spending reflects a transfer of resources between different individuals. On average, women receive a greater share of benefits from the system than the share of financial contributions that they paid (and vice versa for men) and so, overall, the system redistributes towards women.
- The degree of redistribution towards women would have been smaller were it not for the fact that women on average receive state pension income for more years than men – both because the state pension age for this cohort of women was 60 (rather than 65 for men) and because women live longer on average than men.
- Replacing the current state pension rules for the 1930s cohort with a system similar to the recently-legislated single-tier pension (at the same overall cost) would focus a greater share of spending on women and on low lifetime earners. The share of state pension spending that reflects a transfer of resources between individuals would be increased to around 33%.
- The above conclusions are based on examining individuals in isolation, but many individuals live in couples. The level of inequality and the degree of redistribution achieved are sensitive to the assumption made about how couples share their income.
- Assuming that couples share all income equally reduces inequality in lifetime earnings and state pension entitlements. Under this assumption, just 14% of all state pension spending reflects redistribution between different individuals.
- Redistribution within the state pension system is inequality reducing, with lower-income households receiving a greater share of state pension benefits than the share of financial contributions that they paid during working life – and vice versa for the highest-income households.

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## Introduction

The state pension system in the UK redistributes over people's lifetimes: people make contributions when they are young and are provided with an income in retirement. The state pension also redistributes money between individuals, away from the lifetime rich and towards the lifetime poor, and potentially between different cohorts. This study investigates how much redistribution took place over the lifetimes of those born in the 1930s and between individuals within this cohort; we abstract from redistribution between different cohorts by assuming that the financial contributions paid by the 1930s cohort were exactly sufficient to pay for the benefits they received.

The extent of redistribution achieved by the state pension system *between* and *within* people has changed a lot over the last 40 years. There have been two strong trends in reforms to the state pension rules. On the one hand, there was a move towards a greater earnings-related element to the state pension in the late 1970s, which has subsequently been gradually reversed. On the other hand, there has been a steady move over time towards greater crediting for non-paid work activities (such as looking after children). We therefore also consider the extent of redistribution provided by a number of alternative sets of state pension rules, which are designed to approximate the steady-state version of some of the main reforms that have been enacted over the last 40 years.

We examine the redistribution achieved by the state pension system first considering individuals in isolation and then allowing for the fact that couples may pool their resources both during working life and in retirement. Allowing for pooling of resources within households significantly affects how redistributive the state pension systems appear to be.

## Inequality in pension income under the existing state pension system

Among the 1930s cohort, on average men earned around five times more over their lifetimes than women. They are also expected to receive about one-and-a-half times as much state pension income during their lifetimes as women on average. This means that state pension income is less unevenly distributed than are earnings. The difference between men and women would be larger if it were not for the facts that women in this cohort received their state pension from age 60 (rather than age 65 for men) and that women are expected to live for longer on average than men. While differences in life expectancy between men and women narrow the gap in average lifetime state pension income between men and women, the same is not true for high and low lifetime earners. High earners, on average, live for longer than lower earners and also have higher state pension entitlements, meaning that these differences in longevity exacerbate inequality in state pension entitlements.

## Redistribution under the existing state pension system

Much of this inequality in state pension benefits received reflects similar inequality in the financial contributions paid. The study examines financial contributions to the system under two alternative assumptions: first, assuming that NI contributions paid by individuals and their employers are sufficient to finance the benefits received by the cohort as a whole; and second, assuming that the cohort's benefits are financed by a proportional tax on their

earnings. In principle, NI contributions were intended to be sufficient to finance the NI benefits paid, including state pensions. However, over time, the link between contributions and benefits has become increasingly weak and NI rates are now set by reference to overall revenue needs rather than concern about achieving a balance on the NI fund. Therefore, we focus on results assuming that state pension benefits are financed through a proportional tax on earnings. Assuming that the cohort's contributions exactly match their benefits allows us to focus on redistribution *within* the 1930s cohort and abstract from any overall redistribution that may have occurred to or from this cohort.

Under the preferred assumption that benefits are financed through a proportional tax on earnings, the study finds that most (80%) of the spending on state pension benefits under existing rules reflects a transfer of resources from earlier to later in the same individuals' own lifetimes. The remaining 20%, however, reflects redistribution between people and particularly, on average, towards women, who made a lower fraction of the cohort's financial contributions than the fraction of benefits they received, on average. Overall, the system reduced inequality in lifetime resources, as higher earners tended to have made higher financial contributions than the benefits they received, and vice versa for lower earners.

### **Comparisons of redistribution under different pensions policies**

We consider a number of alternative sets of state pension rules. Systems with a greater earnings-related element entail more redistribution across individuals' own lives and less redistribution of resources between people than those with a greater flat-rate element. The system with the greatest degree of interpersonal redistribution that we consider is a stylised version of the new single-tier pension. This is the only system that we consider in which we find that the level of benefits received by women will exceed those received by men on average. However, even under this system, two-thirds of spending reflects redistribution over individuals' lifetimes rather than redistribution between people.

### **Taking into account sharing of resources within households**

The results discussed so far have considered individuals in isolation – that is, ignoring the fact that many people live in couples and may share income with their partner, both during working life and in retirement. The study finds there are two main implications of instead assuming that all individuals in couples share their resources equally. First, inequality in state pension entitlements (and lifetime earnings) is much lower – since many low-earning women (with low state pension entitlements) are married to high-earning men (with high state pension entitlements). Second, once this 'within-household' redistribution is taken into account, the redistribution between individuals achieved by the state pension system is lower. Under the existing state pension rules, 20% of state pension spending is estimated to reflect redistribution between people when household pooling is ignored, but this falls to 14% once individuals in couples are assumed to share their resources equally.

The study finds that, once sharing within households is accounted for, the existing state pension system redistributes, on average, from higher-earning families to lower-earning families. For example, the highest-earning fifth of individuals (ranked according to their

family's per-capita lifetime earnings) on average received benefits worth around 60% of the financial contributions they paid, while the lowest-earning fifth received benefits worth 170% of their financial contributions on average.

Comparing the stylised versions of alternative state pension systems reveals that, while the flat-rate systems are still found to achieve more interpersonal redistribution than the earnings-related systems, the gap is not as large once household sharing is taken into account. This suggests that a good portion of redistribution between people that the flat-rate systems achieve might in any case have been done by households themselves.

## Conclusion

The study examines the redistribution achieved by the state pension system. Accounting for financial contributions, the vast majority of state pension spending is simply a redistribution of income from when people are young to when the same individuals are older; only a minority of state pension spending reflects interpersonal redistribution. That redistribution does, however, transfer resources from higher to lower lifetime earners and thus reduce the inequality of lifetime earnings. Reforms to the state pension rules over time have affected the degree of redistribution between individuals, with the latest (single-tier pension) reforms resulting in a system that will have a greater proportion of redistribution between individuals than earlier systems. However, exactly how much the state is redistributing between people (and how the different systems compare on this front) depends on the extent to which couples share their available resources.

## Methodology

The study used data from the English Longitudinal Study of Ageing (ELSA), linked to administrative data from National Insurance (NI) records, to estimate lifetime earnings and state pension entitlement. The data include the entire history of NI contributions for 1,296 people born in the 1930s who survived to 2002–03. We focus on the 1930s cohort as this is a group for whom we observe their circumstances both after the state pension age (in ELSA) and for a significant fraction of their working lives (in the NI data). We focus on intragenerational redistribution within the 1930s cohort because we do not observe this information for enough other cohorts to be able to examine intergenerational redistribution at this time.

## Further information

This is a summary of the IFS working paper 'From Me to You? How the UK State Pension System Redistributes' by Rowena Crawford, Soumaya Keynes and Gemma Tetlow. The full report is available from <http://www.ifs.org.uk/publications/7324>.

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