Institute for Fiscal Studies

Does leaving education in a recession have a lasting impact on living standards?

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Executive summary

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Introduction

Almost a decade ago, the Great Recession saw increased levels of youth unemployment and particularly large falls in the earnings of young adults. This has led to a further concern about whether having entered the labour market during a recession will have long-lasting negative effects on the living standards of these people. It is important for policymakers to understand the extent to which young adults are persistently affected by the economic conditions in which they first look for a job, in terms of not only their employment and pay, but also more comprehensive measures of their material living standards. This short note summarises the results of new IFS research, which estimates the effects of entering the labour market when the economy is weak. As set out in detail in the full working paper, we use data from the Family Expenditure Survey and the Family Resources Survey spanning the last 40 years (almost 200,000 people) to effectively compare the outcomes of individuals who entered the labour market at similar times but nevertheless faced different initial economic conditions due to sharp swings in the economic cycle.

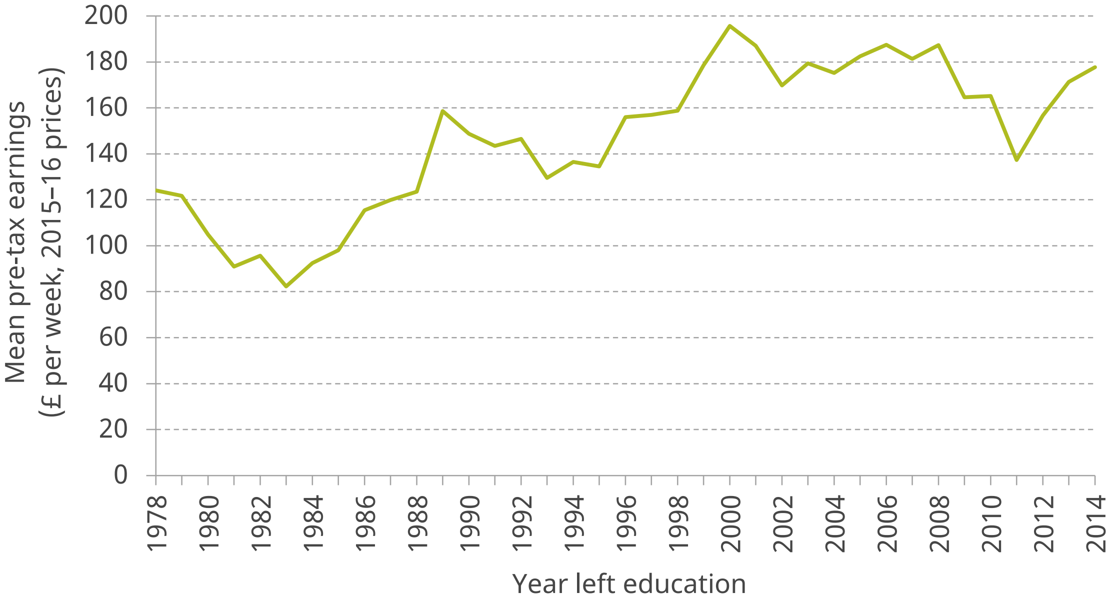
Effects on employment and pay

Unsurprisingly, there is an initial negative impact of recessions on the earnings of those who enter the labour market at that time. Figure 1 shows, over time, the average (mean) weekly earnings of people in paid work who left full-time education within the past two years. The amounts are before tax and are expressed in 2015–16 prices.[1] The figure shows that there are falls in the earnings of individuals who have just started work during recessions. In each of the recessions of the early 1980s, early 1990s and the Great Recession, the earnings of those entering the labour market at that time were lower than the earnings of those entering the labour market immediately before or immediately after the recession.

However, a critical question, to which the answer is less obvious, is whether entering the labour market during a recession causes *persistently* worse labour market outcomes in future years. It is important to be clear about precisely what this means. We are asking whether, after taking the current state of the economy into account, the earnings of someone who left education five years ago are affected by the state of the economy five years ago. If so, we can say that the state of the economy upon leaving education has a persistent effect on their earnings – often known as 'scarring'.

It is these scarring effects that we estimate in new research.[2] In what follows, we report the estimated impact on subsequent economic outcomes of the national unemployment rate being 4 percentage points higher (e.g. facing an unemployment rate of 10% rather than 6%) upon leaving education. This corresponds to a typical peak-to-trough rise in the

Figure 1. Mean real earnings of young adults in paid work in the first two years after leaving education, by year left education

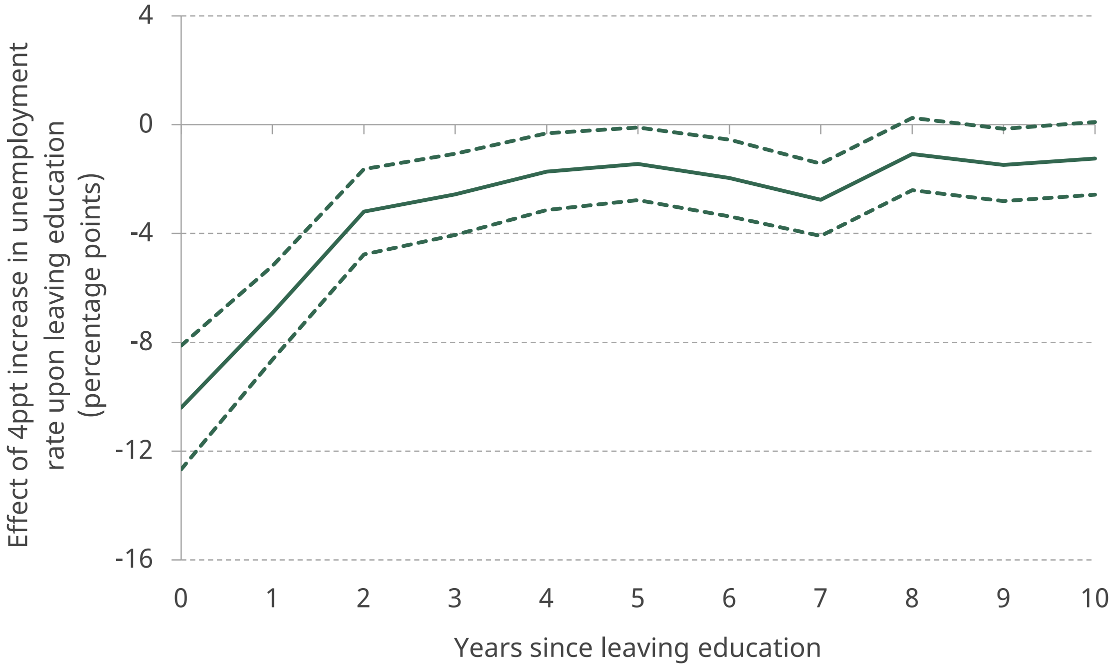


Source: Authors' calculations using the Family Resources Survey and the Family Expenditure Survey (and successors), various years.

1 We adjust for inflation using a variant of the Consumer Prices Index.

2 J. Cribb, A. Hood and R. Joyce, 'Entering the labour market in a weak economy', IFS Working Paper 17/27, 2017, https://www.ifs.org.uk/publications/10180.

Figure 2. Effect of a 4 percentage point increase in unemployment rate upon leaving education on probability of being in paid work



Note: Dashed lines are the 95% confidence intervals.

Source: Figure 4, Panel A of Cribb, Hood and Joyce (2017).

unemployment rate during a recession (it is the average such rise over the past three recessions in the UK).

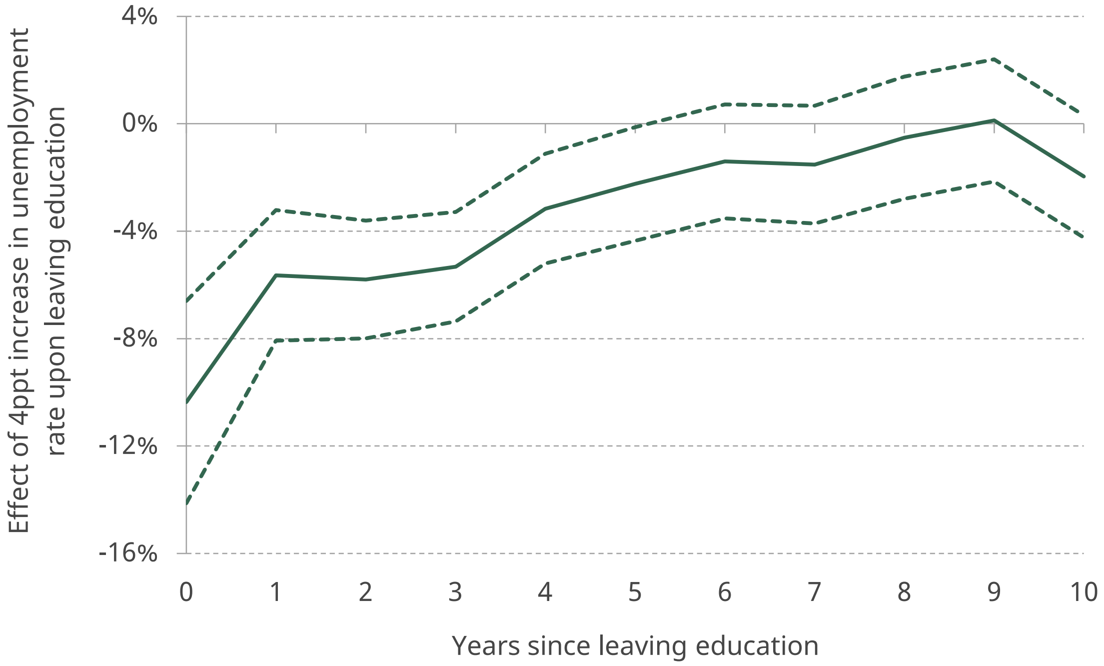
Figures 2 and 3 show how persistent the effect of the economic conditions upon leaving education is on the probability of being in paid work and on the pre-tax earnings of those in work. The dashed lines on the graphs show 95% statistical confidence intervals around the estimated effects.

Figure 2 shows that a 4 percentage point increase in the initial unemployment rate leads to a decreased probability of being in paid work of about 7 percentage points in the year after leaving education and about 3 percentage points two years afterwards. There are small, but mostly statistically significant, negative impacts of between 1 and 2 percentage points on the probability of being in paid work between 4 and 10 years after leaving education.

Figure 3 shows that there are also large negative impacts on the earnings of those who are in paid work, and that these persist for a few years. A 4 percentage point increase in the unemployment rate at labour market entry reduces the weekly earnings of workers by around 6% on average a year after leaving education. This impact dissipates slowly, with a 2% impact remaining after five years. After this, the effects fade towards zero and are no longer statistically significant.

These kinds of effects are not unique to the United Kingdom. Other studies have examined whether there are persistent negative effects on pay and employment of leaving education in a weak economy in other European and North American countries.

Figure 3. Effect of a 4 percentage point increase in unemployment rate upon leaving education on pre-tax earnings of those in paid work



Note: Dashed lines are the 95% confidence intervals.

Source: Figure 4, Panel B of Cribb, Hood and Joyce (2017).

Like our estimates, most find significant negative effects on these outcomes in the first few years after entering the labour market, but that the effects do not persist for many years afterwards. Although not the focus of this briefing note and associated working paper, there is also work examining the mechanisms behind these labour market 'scarring' effects, which has highlighted factors including depreciation of skills during unemployment[3] and taking lower-skilled work,[4] in lower-quality or lower-paying firms.[5]

[3] C. Pissarides, 'Loss of skill during unemployment and the persistence of employment shocks', *Quarterly Journal of Economics*, 1992, 107, 1371–91.

[4] L. Kahn, 'The long-term labor market consequences of graduating from college in a bad economy', *Labour Economics*, 2010, 17, 303–16.

[5] B. Brunner and A. Kuhn, 'The impact of labor market entry conditions on initial job assignment and wages', *Journal of Population Economics*, 2014, 27, 705–38.

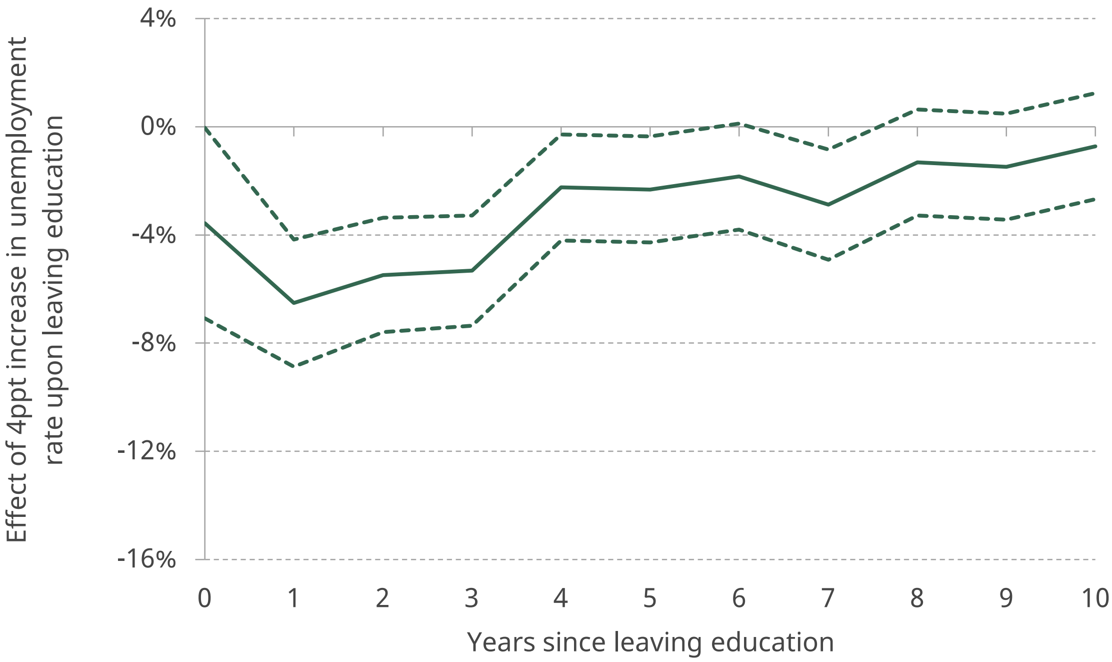
Effects on measures of material living standards

People's pay and employment are not the only economic outcomes that are important to them. Individuals' material living standards are determined not only by their own pay, but also by income they receive from other sources (such as state benefits), and often by the incomes of other household members with whom they share resources. This means there are various factors that can mitigate the effect of lower employment and earnings on living standards.

We find that the tax and benefit system does indeed help to soften the blow of persistently lower earnings and employment for young adults. Lower earnings for young adults mean that they pay less in tax to the government, and receive more in means-tested benefits or tax credits. Those out of work can also receive out-of-work benefits. These lower tax payments and higher benefit entitlements partly offset the falls in earnings from work. Nevertheless, as Figure 4 shows, if we consider the net (i.e. after taxes and benefits) incomes of young adults – plus the incomes of any cohabiting partner where applicable – we still see clear negative effects of leaving education during a recession, which persist for at least five years after leaving education.

Another reason why the impact of lower earnings and employment for young adults who start out during a recession may be cushioned is that, irrespective of economic conditions, many young adults live with their parents in the years immediately after leaving education. As shown in Figure 5, between 2010 and 2015, 74% of people who left education one year ago lived with their parents and 38% of those who left five years ago

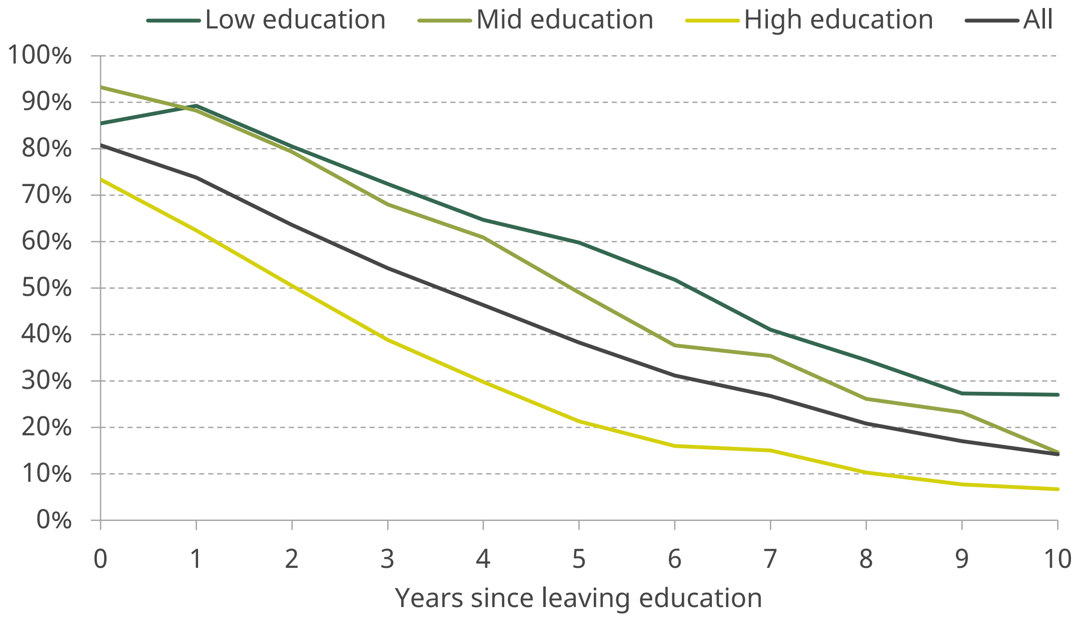
Figure 4. Effect of a 4 percentage point increase in unemployment rate upon leaving education on net income of individuals and their cohabiting partner



Note: Dashed lines are the 95% confidence intervals. Net income is 'equivalised' (adjusted for the number of people in the family).

Source: Table 2 of Cribb, Hood and Joyce (2017).

Figure 5. Percentage of individuals living in the same household as their parents, by years since left education (2010–15)



Note: Low education – left education at age 16 or younger. Mid education – left education at age 17 or 18. High education – left education between ages 19 and 25.

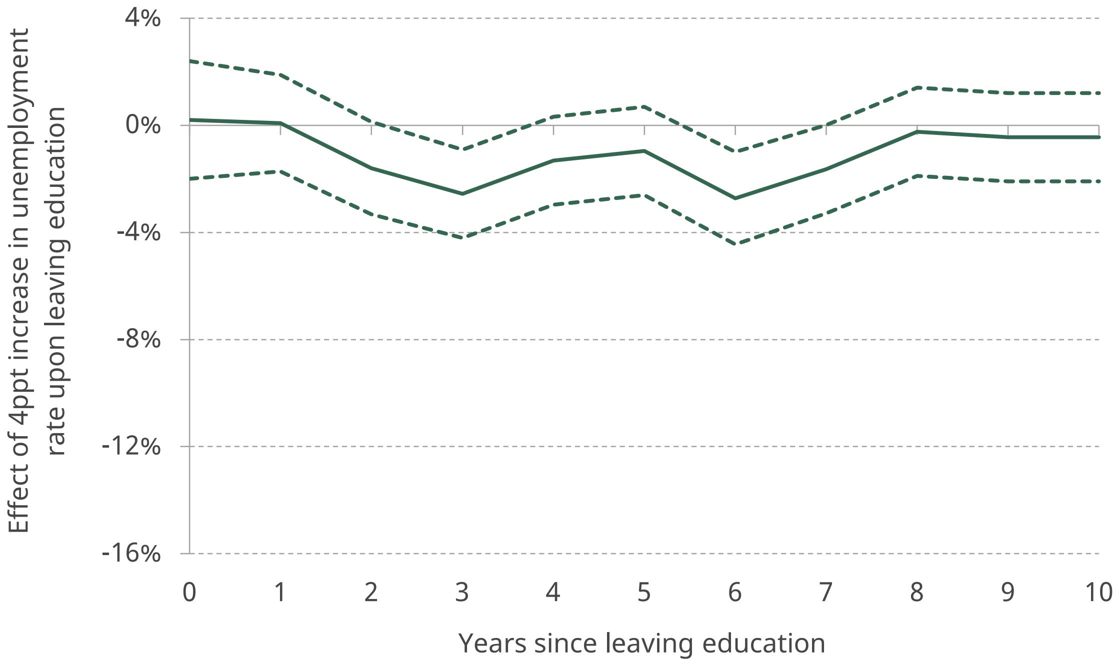
Source: Authors' calculations using the Family Resources Survey and the Family Expenditure Survey (and successors).

did so. In addition, people who left education within the last five years (and their cohabiting partners, where applicable) accounted for only 43% of the total income of their household, on average. This means that the total resources available to these young adults' households are often quite insensitive to their own labour market outcomes. The figure also shows that lower-educated young adults – whose employment and earnings are hit hardest by leaving education during a recession – are the most likely to live with their parents. Among those who leave school at 16, 89% live with their parents a year after leaving education and 60% still live with their parents five years after.

If parents share their resources fully with their adult children (when they live together), a good way of proxying the standard of living of the young adults is to look at after-tax household income, adjusted for household size. Figure 6 shows the impact of a 4 percentage point increase in the unemployment rate when leaving education on the net household income of young adults (including both those living with their parents and those living elsewhere). In other words, it is the same as Figure 4 except that we now include the incomes of all household members – not just the young adult and any partner they live with.

Because incomes may not be fully shared in practice between young adults and their parents, the true impact of leaving education during a recession on young adults' living standards may lie somewhere between those implied by Figures 4 and 6. But Figure 6 illustrates just how large the potential role of parents is here. In contrast to the results on earnings and employment, not only is there little or no persistent impact of leaving education during a recession on the net household income of young adults, but there is

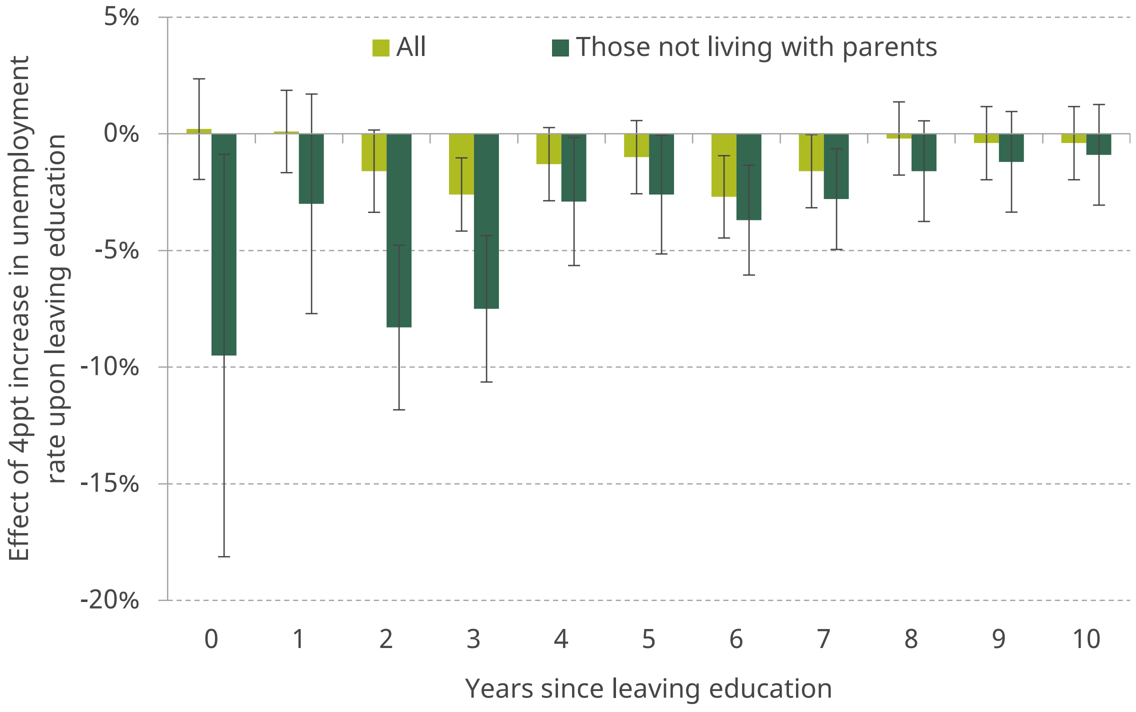
Figure 6. Effect of a 4 percentage point increase in unemployment rate upon leaving education on net household equivalised income



Note: Dashed lines are the 95% confidence intervals.

Source: Table 2 of Cribb, Hood and Joyce (2017).

Figure 7. Effect of a 4 percentage point increase in unemployment rate upon leaving education on net household equivalised income



Note: Error bars are the 95% confidence intervals.

Source: Table 2 and Appendix Table 3 of Cribb, Hood and Joyce (2017).

also little or no immediate impact. Using total household spending (rather than income) as another measure of living standards yields essentially the same finding.

Of course, there is a group of young adults who cannot or do not live with their parents after leaving education – currently around one-quarter of young adults one year after leaving and 60% five years after. The analysis above suggests this group may be the most vulnerable, in terms of living standards, to the effects of leaving education in a recession. Further analysis confirms this. Figure 7 shows the effect of leaving education during a recession on net household income for those individuals not living with their parents, compared with the average impact across all individuals. It shows significant negative impacts on income for people not living with their parents, which persist for at least seven years. In the full paper, we also give results using household spending as another measure of living standards, which leads to a similar conclusion.

Conclusion

In summary, we have provided new evidence on the effects on young adults of starting working life when the economy is weak, considering more complete measures of living standards than previous work, which has focused on employment and pay. To the extent that resources are shared within households, many young adults who would otherwise be hit hard when their employment and/or pay suffer are cushioned significantly by their parents' resources, as well as the tax and benefit system. The question of precisely how resources are in fact shared within these households is therefore an important one for further research. But our research also shows, for the first time, that the scarring effects of starting out in a recession feed right through to both net household incomes and to levels of spending for one significant group – those not living with their parents.