# The Timing of Parental Income and Child Outcomes: The Role of Permanent and Transitory Shocks.

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How does adolescent and early adult human capital respond to shocks to parental income? The two biggest innovations of this paper are firstly to estimate the effect of shocks across the life cycle of childhood, from age 1-16 and secondly to distinguish between income shocks that are permanent and transitory. A structural model decomposes household shocks into permanent and temporary components. Then the effect of shocks at each age is estimated upon a range of child outcomes - measured by years of schooling, high school dropout, university attendance, IQ and health. This requires a rich panel dataset observing family income across the lifetime of a child, hence I use the Norwegian administrative and register data. I find that the effect of permanent income shocks declines across the age of the child. This is intuitive, given that a permanent shock changes household wealth and hence a shock at age 1 drives more future income realisations than a later shock. Transitory income shocks to the household have a constant effect across child age, suggesting parents optimise in a similar manner to consumption. This is not the case when examining a liquidity constrained sample. Whereas the change in consumption for this group is larger than for the total sample, I find a lower transmission to human capital. I argue that the reason is that for the sample of poorer parents, investment goods such as books and private tuition are not necessity goods. Rather, parents use the unexpected income for essential consumption, such as heating, clothes and food. Finally, the results prove robust to checks which vary the persistence of permanent and transitory income shocks.

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