2021 ■ Number 8
https://doi.org/10.20955/es.2021.8

ECONOMIC Synopses

Childhood Income Volatility

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Research has shown that beyond poverty, income volatility itself can have deleterious impacts on children (Smith-Ramani, Mitchell, and McKay, 2017), including disruptions in schooling or housing, lowering educational attainment and decreasing mental health. In this essay, we look at trends in income volatility for households with children. Childhood income volatility has been increasing since the 1980s, with 20 percent of families with children experiencing a large decrease in income each year.

As a part of the COVID-19 relief bill passed in January 2021, the child tax credit expanded from $2,000 to $3,000 per child. A key component of the bill allows families to receive their tax refund as a monthly check rather than as a lump sum (Zitner, 2021), with the goal of allowing families to smooth their income over the year. The rise in family income volatility suggests that government efforts to help lower family income volatility, such as the monthly payment of the child tax credit, may be appropriate.

Trends in Family Income Volatility

The data for this essay come from the Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS). This survey tracks many of the same families over consecutive years.[1] The ASEC collects data on a variety of types of income, which we group into three categories: (i) wage income and self-employment income, (ii) wealth income, and (iii) government income and child non-government income. Wealth income includes income from rent, dividends, trusts, pensions, and other sources of financial income. Child non-government income comes from alimony, child support, or other family sources.

> Rising volatility in family income suggests that government efforts such as the monthly payment of the child tax credit may be appropriate.

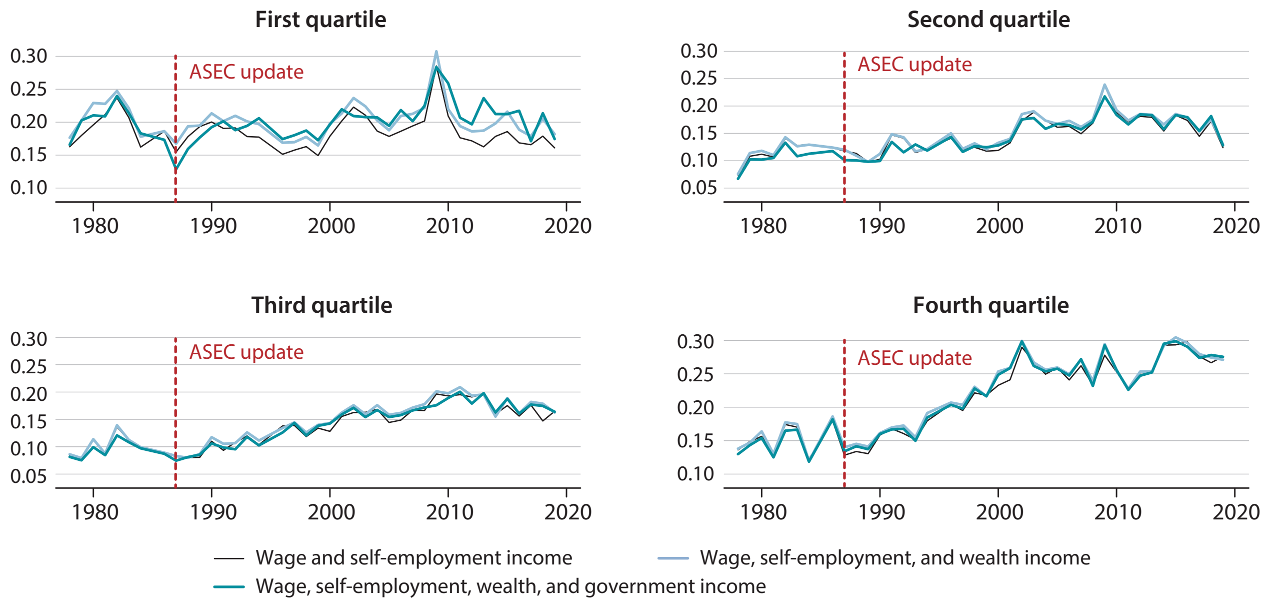
Throughout this essay, we measure income volatility by the probability that a family experiences a decrease in annual income of 25 percent or more.[2] Figure 1 shows the share of households that have children that experience a large decrease in income. In 1987, the Bureau of Labor Statistics, which conducts the CPS and the ASEC, changed the definition of many income categories, which could create some spurious income changes; we mark this date with the red vertical line on the figure.

Since the 1980s, volatility has increased for each income category. Since volatility is roughly the same after adding in other sources of income, such as dividends or government transfers, this similarity suggests that these other sources are not necessarily doing a good job of insuring

Figure 1
Probability of a Large Income Decrease for Families with Children

SOURCE: CPS and authors' calculations.

Figure 2
Probability of a Large Income Decrease for Families with Children, by Income Quartile



SOURCE: CPS and authors' calculations.

against the risk of changes in wage income. However, many low-income families do not have much wealth income and many high-income families do not receive government transfers. Thus, the impact of different sources of income on specific types of families could be disguised.

Figure 2 shows the same measure of income volatility for the same income categories but split into quartiles by household income in the first year households appear in the survey. Volatility varies between the quartiles, with the first and fourth quartiles having the highest probabilities of a large change in income. However, the three lines remain close together for all quartiles.

In 1980, low-income households (first quartile) faced the most income volatility and had a 20 percent probability of experiencing a large income decline. However, since then, income volatility has increased for families in the second through fourth quartiles. Today, income volatility is highest for high-income households. Of all households, approximately 25 percent in the fourth quartile, 20 percent in the first quartile, and 15 percent in both the second and third quartiles experience large income declines. This finding suggests that policies that help protect families against large income shocks may be appropriate throughout the income distribution, not just for low-income families.

Conclusion

Hardy (2014), Hardy and Marcotte (2020), and Siwei et al. (2020) all document negative impacts of income volatility on households and the children in them, linking volatility to lower educational attainment as an adult and negative effects on mental wellbeing. Given the large increase in income volatility for families with children, the 2021 child tax credit expansion, designed to lift children out of poverty and provide greater levels of household income stability, seems pertinent. ■

Notes

[1] To match family data across years, households are first matched on their household number, individual family number, the month in sample, the sex of the household head, and the person ID of the household head. Then, the matches are discarded if the race of the household head does not match across years, if the age of the household head has changed by more than three years, or if the state of residence changed across the years.

[2] We limit our sample to households in which the head of household is between 25 and 55 years of age and drop families that had a change in the number of children or number of adults in the labor force.

References

Hardy, B. "Childhood Income Volatility and Adult Outcomes." *Demography*, 2014, *51*, pp. 1641-65.

Hardy, B. and Marcotte, D. "Ties that Bind? Family Income Dynamics and Children's Post-Secondary Enrollment and Persistence." *Review of Economics of the Household*, 2020, pp. 1-25.

Siwei, Cheng; Kosidou, Kyriaki; Burström, Bo; Björkenstam, Charlotte; Pebley, Anne R. and Björkenstam, Emma. "Precarious Childhoods: Childhood Family Income Volatility and Mental Health in Early Adulthood." *Social Forces*, December 2020, *99*(2), pp. 672-99; https://doi.org/10.1093/sf/soaa020.

Smith-Ramani, J.; Mitchell, D. and McKay, K.L. "Income Volatility: Why It Destabilizes Working Families and How Philanthropy Can Make a Difference." The Aspen Institute, 2017; https://www.aspeninstitute.org/wp-content/uploads/2017/12/AFN_2017_Income-Volatility_Final.pdf.

Zitner, Aaron. "Child Tax Credit: How the Covid-19 Stimulus Package Gives Additional Money to Families." *Wall Street Journal*, March 11, 2021.

Posted on May 7, 2021

ISSN 2573-2420