

Income Volatility and Food Assistance in the United States

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Introduction

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The chapters in this volume were originally papers commissioned by the National Poverty Center at the University of Michigan and by the Economic Research Service (ERS) in the U.S. Department of Agriculture. They were presented at a conference titled “Income Volatility and Implications for Food Assistance Programs II,” held in November 2006 in Washington, D.C. The conference was the second in a series sponsored by ERS examining the role of income volatility on food assistance programs. As volatility continues to emerge as an important policy concern across a number of sectors of the macroeconomy—from labor markets to housing markets to financial markets—the chapters in the present volume provide a much-needed focus on the issue and an in-depth examination of the effect of income volatility on the participation in and design of food assistance programs.

The seminal paper from which this volume is derived was written by Peter Gottschalk and Robert Moffitt (1994), who documented dramatic growth in earnings volatility among white men in the 1980s. Gottschalk and Moffitt showed that rising volatility was due both to increases in the variance of so-called permanent factors, such as returns on human capital skills, and to increases in the variance of transitory factors, such as job loss from frictional unemployment. In the next chapter, Benjamin Keys updates the Gottschalk and Moffitt analysis to include the 1990s and expands the scope of the earlier work by examining volatility among other demographic groups such as black men, white and black women, and female-headed families. Because food assistance programs such as food stamps, school lunch, and WIC serve a diverse array of individuals and families, it is important to establish

the basic patterns of volatility for a population that reflects the diversity of program participants. Keys also examines consumption volatility in order to test whether volatile incomes translate into variable consumption patterns, or whether families are able to smooth consumption over time in response to income changes, as predicted by Friedman's permanent income hypothesis. Friedman's hypothesis states that families make consumption decisions based on permanent income, not temporary highs or lows.

Keys finds a large increase in transitory earnings, income, and consumption over the past 30 years across all major demographic groups. Permanent volatility increased for all groups as well, except for female-headed families. Although there is evidence that families are able to smooth consumption in the face of income shocks, overall consumption volatility rose nearly one-third since the 1970s. These findings suggest that families are increasingly less able to insulate consumption from income changes, particularly among low-income households.

Understanding how this increase in volatility affects the well-being of low-income households is of particular importance for U.S. food assistance programs, whose aim is to ensure that children and needy families have access to food. Greater volatility can result in more households needing assistance to maintain an adequate level of consumption during difficult times. The U.S. Department of Agriculture supports 15 domestic food and nutrition assistance programs, and approximately one in five Americans participates in at least one of these programs during the year. Federal expenditures on these programs in 2006 totaled almost \$53 billion, with the three largest of these programs (the Food Stamp Program, the National School Lunch Program, and the Special Supplemental Nutrition Program for Women, Infants, and Children, or WIC) accounting for 87 percent of the expenditures. The remaining chapters in this volume focus on these programs and examine how income volatility influences the way people participate in food assistance programs, and the way policymakers design them.

Robert Moffitt and David Ribar use data from a longitudinal survey of low-income families with children and link this to administrative records on Food Stamp Program participation. They examine whether volatility in earnings affects program participation differently depending on a household's income level. In particular, they focus on differences between households with trend incomes above and below the

gross-eligibility threshold for the Food Stamp Program. Their findings suggest that earnings volatility reduces participation among low-income households but that this effect dissipates for higher-income households. One explanation for this is that for households that are initially eligible, volatility results in periods of ineligibility, but for households that are initially ineligible, increased volatility results in periods of eligibility.

David Ribar and Marilyn Edelhoich use administrative data from the state of South Carolina to identify the reasons why families with children exit the Food Stamp Program. They find that about 20 percent of exits from food stamps in South Carolina are due to income or resources exceeding eligibility limits. But this effect is dwarfed by the two-thirds of exits that are attributable to household heads failing to file the necessary paperwork for recertification (about 50 percent) or failing to provide sufficient or verifiable information (about 16 percent). These families averaged more than \$230 in benefits per month before their exit, suggesting that they are leaving significant benefits on the table. Ribar and Edelhoich show that the households that failed to recertify had lower and more volatile incomes than the households determined to be income-ineligible. For both black and white households, more variable earnings histories increased the likelihood of leaving voluntarily or for other reasons. The policy implications arising from this chapter weigh heavily toward improving Food Stamp Program recertification procedures and policies for households with children, especially those with volatile earnings sources.

Brian Cadena, Sheldon Danziger, and Kristin Seefeldt use unique panel data from Michigan—the data come from the Women’s Employment Study (WES)—to examine both the reasons for food stamp exits (as do Ribar and Edelhoich) and the reasons for reentry onto food stamps in the post-welfare reform world. Using competing risks, Cadena, Danziger, and Seefeldt estimate a Cox proportional hazard model of food stamp exit and entry that, coupled with the decision to work or not to work, identifies the effect of personal characteristics such as education, marital status, health status, economic conditions, and policy changes (i.e., Electronic Benefits Transfer [EBT] rollout and asset-limit expansions) on these competing decisions. They find that women living with a partner are more likely to exit, with or without work, than women not living with a partner, which suggests that marriage and cohabitation form one pathway out of the program. This finding is most

likely due to the woman becoming income-ineligible once her partner's income and resources are considered in determining benefit eligibility. They also find a strong link between physical and mental health problems and the likelihood of going off food stamps. A woman with physical-health problems is about 33 percent less likely to exit with work, a woman with a mental health problem is about 30 percent less likely, and a woman with a child with learning, mental-health, or physical health problems is about 33 percent less likely. This suggests that food stamps are operating effectively as a food safety net for those suffering serious personal problems. The rollout of the EBT in Michigan and the expanded generosity of vehicle asset limits had no discernible effect on entry onto and exit from food stamps. However, women who did not understand eligibility rules for food stamps after exiting TANF were significantly more likely to exit food stamps, with or without work. The obvious policy implication here is more basic than that from Ribar and Edelhoch in that the results found by Cadena, Danziger, and Seefeldt imply the need for expanded outreach efforts to inform former welfare recipients of their ability to combine work and food stamps.

Constance Newman uses national data from the Survey of Income and Program Participation to examine the role of income volatility on eligibility for and participation in the National School Lunch Program (NSLP). The NSLP provides a critical link in the food assistance network as it offers a nutritive, free or reduced-price lunch to low-income children during the academic year (and in some communities on weekends and summer weekdays as well). A number of reports over the past decade raise concerns about the accuracy of the NSLP application and eligibility certification procedures; they variously estimate that between one in eight and one in three children receive school lunch benefits for which they are not entitled. Newman finds that households experience substantial income fluctuations, especially households that are eligible for free or reduced-price NSLP meals. Income volatility in two-thirds of lower income households causes one or more changes in their monthly NSLP eligibility during the year. An estimated 27 percent of households that are income-eligible for subsidized lunches at the beginning of the school year in August are no longer eligible for benefits by December because of monthly income changes. The fluctuations come largely from changes in labor market behavior such as changes in hours worked, and Newman argues that these changes in labor market outcomes may ex-

plain a large amount of overcertification error. However, the monthly volatility may be of less programmatic concern because Congress extended the recertification interval from one month to one year as part of the Child Nutrition and WIC Reauthorization Act of 2004. That said, eligibility for the NSLP is still based on income in the month prior to application, and fewer low-income families are estimated to be eligible based on monthly income than on annual income.

Craig Gundersen and James Ziliak use national data from the Panel Study of Income Dynamics to estimate the age gradient in Food Stamp Program participation, as well as possible interaction between income volatility and age on food stamp participation. Knowledge of how participation varies across an individual's life course is especially important to policymakers given the pending retirement of the first members of the baby boom generation. Some observers have raised concerns that food stamp participation rates tend to decline with age, particularly among the elderly, who are financially vulnerable. However, the demographic bulge caused by baby boomers may lead to higher rates of participation at older ages than in the past because this is the first generation to come of age with the modern Food Stamp Program, which began in the early 1960s. In addition, because income volatility likely varies over one's lifetime, we might expect the effect of volatility on the decision to use food stamps to vary across the age gradient. Contrary to conventional wisdom (which is based on simple descriptive statistics), Gundersen and Ziliak find evidence of a U-shaped pattern in food stamp participation by age. The probability of participation, conditional on other known risk factors, is highest when one is young or old, which is basically the mirror image of the standard inverted-U age-earnings profiles widely documented by labor economists since the late 1950s. They also find that households with above-average income volatility are more likely to participate in the Food Stamp Program than those with lower income volatility at most ranges across the age gradient. One implication of their results is that we should make efforts to enhance outreach to prime-age working individuals and those with relatively stable incomes. Because Gundersen and Ziliak find evidence of higher participation among more recent birth cohorts, Congress must be prepared for the prospect of higher Food Stamp Program participation as the baby boom generation exits the labor force and enters a potentially long period of retirement.

The last two chapters deal with the complex issues of optimal program design in the presence of volatile incomes and when households are unable to fully self-insure against income shortfalls. Robin Boadway, Katherine Cuff, and Nicolas Marceau provide a sweeping overview of the key issues in welfare program design, including identifying exogenous and endogenous sources of income volatility, possible market and government responses to volatility, and government objectives (cash versus in-kind assistance) and constraints in the face of need by individuals with low resources. The authors note the importance of timeliness in identifying and assisting those with unexpected income shortfalls. Because low-income persons typically cannot self-insure against adverse shocks, the effects of negative incentives to work and save may well be less severe in the short run than in the long run. Boadway, Cuff, and Marceau thus suggest that the response to short-term volatility should be more generous than for more long-term need, and that the issue of false positive errors in administering benefits should be given less weight. They also suggest that the trade-offs between providing timely need in the short run and the effects of negative incentives to work and save in the longer run imply the need for relatively short recertification periods as well as other measures to improve program compliance, such as monitoring and auditing.

Mark Prell examines in detail the issue of recertification duration—that is, how much time a program allows to elapse before participants must provide verification that their eligibility status has not changed. He develops a dynamic model of recertification that weighs the costs, in terms of both administrative and recipient burden, against the benefits, which include cutting down on the provision of unwarranted benefits. Prell then describes the parameters of the model using a range of parameter estimates and finds an optimal recertification duration for WIC children of between 7 and 14 months, which is longer than the actual recertification requirement of 6 months.

Although the research contained in this book expands significantly our understanding of the links between income volatility and food assistance programs, especially regarding how those links affect program participation and optimal recertification length, more research on these and related issues is warranted. We still lack an understanding of how volatility simultaneously affects participation in food assistance programs and in those programs that address other family needs, such as

income assistance, subsidized housing, and health insurance. Many individuals participate in multiple transfer programs, and if volatility serves as a trigger event for eligibility in one program—say, food stamps—do current or potential recipients also change their participation in TANF, Medicaid, or Section 8? And if so, is this due to coordination failures (in cases where recipients exit programs even when still eligible) or successes (in cases where recipients sign up for multiple programs as part of one-stop shopping) across agencies of federal, state, and local governments? We are just now beginning to scratch the surface of the many and varied implications of income instability for family well-being and optimal program design, and it is our hope that the research contained in this volume will stimulate future work on income volatility and transfer programs.

Reference

- Gottschalk, Peter, and Robert Moffitt. 1994. "The Growth of Earnings Instability in the U.S. Labor Market." *Brookings Papers on Economic Activity* 25(2): 217–272.