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## Strengthening Social Programs to Promote Economic Stability during Childhood

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### Introduction

Income level is well established as a key macro context for child development, and a vast literature indicates that higher income during childhood promotes development in every domain (e.g. Akee, Copeland, Keeler, Angold, & Costello, 2010; Case & Paxson, 2011; G. B. Dahl & Lochner, 2012; G. J. Duncan, Magnuson, Kalil, & Ziol-Guest, 2012; G. J. Duncan, Yeung, Brooks-Gunn, & Smith, 2006; Ziol-Guest, Duncan, & Kalil, 2009). This evidence frequently provides both substantive and rhetorical basis for the creation and design of income support policies and early childhood education programs (National Academies of Sciences, 2019).

While income *level* is important, emerging evidence suggests that the nature of *changes in income* and other aspects of social and economic circumstances matter as well. Income volatility has increased in the U.S. since the 1970s and is higher for lower income, non-White, and less educated individuals (Gottschalk & Moffitt, 1994; Hardy, 2014; Hardy & Ziliak, 2014; Keys, 2008; Morris, Hill, Gennetian, Rodrigues, & Wolf, 2015). The rise in income volatility was driven largely by employment insecurity, and is attributed to both short-term economic shocks, such as job loss, and permanent structural changes, including the decline of blue-collar manufacturing jobs and the increased reliance on part-time and contingent work arrangements (Dyner, Elmendorf, & Sichel, 2012; Gottschalk & Moffitt, 2009; Haider, 2001; Keys, 2008; Western, Bloome, Sosnaud, & Tach, 2016; Ziliak, Hardy, & Bollinger, 2011).

Over this same period, our social safety net has become less of a stabilizing force for low-income families (Hardy, 2017), in part because benefits are often tied to employment and earnings (Hardy et al., 2018; Hill, Romich, Mattingly, Shamsuddin, & Wething, 2017; Hoynes & Schanzenbach, 2018). In addition, large and growing gaps in family wealth leave families with children, particularly Black and Hispanic families with children, at risk of having insufficient savings or assets to buffer against income changes (Darity et al., 2018; Gibson-Davis & Percheski, 2018; Hamilton & Darity, 2017; McKernan, Ratcliffe, & Zhang, 2013).

The stability, timing, and predictability of when resources come into the household are likely to affect parental and child stress, parenting, and investments in child development (Adams et al., 2016; Hill, Morris, Gennetian, Wolf, & Tubbs, 2013; Sandstrom & Huerta, 2013).

Importantly, income volatility can be both a cause and consequence of broader social instability, including disruptions to health, transportation, housing and neighborhoods, nutrition, and relationships. Recent advances in developmental science have made far more explicit how chaotic family and neighborhood contexts negatively affect parenting and child health and development (Coldwell, Pike, & Dunn, 2006; Evans & Wachs, 2010; Raver et al., 2015; Vernon-Feagans, Garrett-Peters, et al, 2012), and how chronic stress can have lasting consequences for psychological and physiological functioning (Ganzel & Morris, 2011; Ganzel, Morris, & Wethington, 2010; Shonkoff, Garner, et al., 2012).

This report bridges the economic and developmental evidence to offer insights into how policy can promote stable and supportive economic contexts during childhood. In the first section, we describe a rise in economic instability in the United States, particularly for families with adults who are less-educated or non-White. We then explore how economic instability matters to children from the perspective of economics, developmental science, and social neuroscience. Next, we discuss how existing programs and emerging policy ideas could promote stability or buffer against the harms of instability. We conclude with thoughts for further work.

## What is Economic Instability?

In keeping with Hill et al. (2017), we define economic instability in this report as “repeated changes in employment, income, or financial well-being over time, particularly changes that are not intentional, predictable, or part of upward mobility” (pg. 374). Some research has described a similar concept as “economic insecurity” (Hacker, 2008; Hacker et al., 2014; Western, Bloome, Sosnaud, & Tach, 2012; Western et al., 2016). In addition, we use the terms volatility and variability interchangeably to capture the raw amount of change in economic circumstances regardless of the specific direction or predictability of the change.

Hill et al. (2017) describe some the key domains of economic volatility, and the processes that portend such conditions for low- and moderate-income families—including labor market, relationship, and safety net benefit instability—and how these processes have consequences for the choices and investments parents make that impact children (see Figure 1). The public policies, family-level events, and economy-wide phenomena that we have discussed combine—depending on the individual or family—and may be moderated to the extent that formal or informal credit and wealth buffers exist to absorb these shocks.

Income is heavily influenced by labor market earnings which are, for most families, the largest subcomponent of income. For low-income families, income often includes benefits from important social safety net transfer programs, such as cash welfare, food assistance benefits, and the Earned Income Tax Credit. These programs reduce the after-tax, after-transfer level of volatility for socioeconomically disadvantaged families and smooth consumption (Bitler, Hoynes, & Kuka, 2017; Hardy, 2017; Hardy & Ziliak, 2014; Kuhn, 2018). Amid low, volatile incomes, families must often comprise to cover childcare, housing, food, and health consumption (e.g. Morduch & Schneider, 2016; Schenck-Fontaine, Gassman-Pines, & Hill, 2017) leading to material instability. In-kind programs, which subsidize childcare and housing, can buffer families against instability in earnings or

family structure, but they also potentially amplify instability if families churn on and off due to eligibility requirements. Other key buffers might include liquid assets and informal support, which can be used to smooth consumption or reduce stress.

### **The Rise in Earnings and Income Volatility**

Many studies indicate a rising trend in income and earnings volatility over the 1970s and 1980s, and again in the 2000s (Carr & Wiemers, 2018; Dynan et al., 2012; Gottschalk & Moffitt, 1994, 2009; Haider, 2001; Hardy, 2017; Moffitt & Zhang, 2018). The evidence base on economic instability uses both survey and administrative data sources and a variety of measures of both discreet economic shocks or overall levels of volatility (see box insert on Measuring Instability). For example, among all families, the variability of pre-tax and transfer income increased by 35 percent between 1980 and 2012, as shown in Figure 2 (Hardy, 2017). Socioeconomically disadvantaged families, specifically those with less-educated household heads, black families, and families headed by a single-parent female, report the highest levels of earnings and income volatility and the largest increases over time (Gennetian, Rodrigues, Hill, & Morris, 2018a; Hardy, 2017; Hardy & Ziliak, 2014; Hryshko, Juhn, & McCue, 2017; Keys, 2008; Latner, 2018; Morduch & Schneider, 2016). Married families are not necessarily protected from volatility shocks, however, given assortative mating patterns wherein partners work within the same sectors of the economy, suffer the same macro-shocks, and are therefore unlikely to buffer earnings for one another (Ziliak et al., 2011).

Many studies examining earnings and income volatility include adults with dependent children (e.g. Gottschalk & Moffitt, 2009; Hardy, 2017; Hardy & Ziliak, 2014), but only a few focus specifically families with children or during childhood (Hill, 2018; Morris et al., 2015; Western et al., 2016). Dahl et al. (2011) explore sources of differences in income volatility, examining households with and without children, as well as by family structure—especially married versus unmarried. They generally find slightly higher levels of volatility among households with more dependent children.

### **Causes of Economic Instability**

For many socio-economically disadvantaged individuals and families, income volatility may derive from family and individual-specific events related to labor market experiences, including job loss. These forms of “transitory” volatility include a host of factors that can interact to impede work participation, including housing insecurity, physical and mental health events and trauma, and relationship instability (Adams et al., 2016; Sandstrom & Huerta, 2013). Parents’ own physical or mental health problems, relationship difficulties, traumatic grief or loss, elder care needs, or other demands may simultaneously create problems in both family life and employment. Importantly, child health or developmental problems may also lead to economic instability. For instance, children’s behavioral, medical, or learning needs may require parents’ attention and make it hard for parents to maintain stable employment (Kuhlthau & Perrin, 2001; Smith et al., 2002).

Prior studies of trends have not differentiated between chosen versus unanticipated risks, which would help to identify the sources of economic instability as we have defined it. Some

types of economic shocks, such as changes in health status, on-the-job injuries, and plant closings, may be good proxies for instability because they are unlikely to be desirable or part of an intentional path to upward mobility (Charles & Stephens, Jr., 2004; Currie, Stabile, Manivong, & Roos, 2015; Eliason & Storrie, 2015; Page, Stevens, & Lindo, 2009; Stevens, 2002; Woock, 2009). Other shocks, such as employment instability around the time of a birth or to pursue educational opportunities might be thought of as intentional and not meet our definition of instability. While properly sorting out these distinctions is important, it is worth considering that children *could* reasonably be assumed to absorb economic shocks, whether occurring intentionally or not. That is, children do not choose their parents, nor do they choose their parents' socioeconomic circumstances and decisions that yield varying levels of instability. Even seemingly benign or forecastable instances of economic instability could transmit negative consequences onto children.

Individual and family exposure to volatility also takes place within larger, macro-level forms of volatility—including large-scale changes to work, family, and the social safety net since the 1980s (Shin & Solon, 2011). Western et al. (2016) estimate that almost half the increase in extreme income losses for families with children can be attributed to trends in employment precarity and single parenting. In fact, both of these factors are likely interacting with one another and with eligibility rules for public assistance to amplify economic instability in low-income family life. We discuss each in turn below.

### **Employment instability**

The relative decline of high-quality employment opportunities that do not require a college degree, and the subsequent earnings inequality produced, appears to expose low- and moderate-income workers to more volatile earnings (Morduch & Schneider, 2016). Meanwhile, workers at the top end of the earnings distribution have and continue to experience earnings growth, fewer shocks related to the macroeconomy, and relative employment stability (Hardy, 2017; Jaimovich & Siu, 2018). Employers have shifted away from longer-term commitments and towards increasingly contingent arrangements that maximize management flexibility, including contracting or using temporary workers and just-in-time scheduling (Kalleberg, 2009; Lambert, 1999; Schneider & Harknett, 2019). While hours instability may be a growing contributor to observable differences in earnings volatility, actual entry into and exit from employment remains an important culprit (Bollinger, Hokayem, & Ziliak, 2018; Ziliak et al., 2011).

### **Family instability**

As work became less stable, so too did family structure as a result of changes in marriage, cohabitation, and divorce rates (Cherlin, 2010; Fomby & Cherlin, 2007). The modal American child now experiences at least one family structure change during childhood, particularly children in single- or cohabiting-parent families, who are also more likely to have low incomes (Cavanagh & Huston, 2006). Family structure is known to be both a driver and consequence of economic inequality more broadly (McLanahan & Percheski, 2008). Most of what we know about family structure and economic wellbeing relates to how discreet changes, such as divorce or relationship dissolution affect family income (e.g. Avellar & Smock, 2019; Holden & Smock, 1991), but changes in family structure could alter

economic circumstances in multiple ways, including access to health insurance, housing arrangements, and public assistance eligibility.

### **Safety net instability**

In 1996, federal welfare reforms shifted the nation's core cash assistance program for poor families from Aid to Families with Dependent Children to Temporary Assistance for Needy Families (TANF). The reform devolved authority to states and counties and shifted much of the nation's safety net benefits away from cash aid and towards non-cash benefits (Bitler & Hoynes, 2016). Strong evidence suggests that welfare reforms lowered safety net cash buffers for low-income families (Bitler & Hoynes, 2016; Danziger, 2010; Hardy, Samudra, & Davis, 2019). In addition, increases to food stamp benefits and refundable federal and state earned income tax credit benefits effectively shifted cash and near-cash support from individuals and families below the poverty line towards those near and above poverty, including towards families participating in work (Ben-Shalom, Moffitt, & Scholz, 2012; Shaefer, Edin, & Talbert, 2015).

To the degree that cash welfare serves as an important insurance mechanism for low-income families, such reforms alongside increased labor market volatility impose more risk onto families (Hacker, 2008) many who already fluctuate near or into poverty (Heggeness & Hokayem, 2013; Huff Stevens, 2012; Moffitt & Zhang, 2018) at higher rates. This context of reduced family-level insurance over the decades is important, as we consider how the design of these and other policies and programs can be modified in order to promote economic stability.

## **How Economic Instability Matters to Child Development**

The literature on family's economic circumstances and child development posits two primary pathways by which parental employment and family income and wealth affect children: 1) parental investments of time and money, and 2) parental stress. Economic instability may operate independently and interactively with poverty through these modes. Instability also aligns with the emerging literature on household chaos and the stability and quality of family routines.

### **Parental Investments**

Parents invest in children by allocating time to child rearing and by purchasing food and clothing, childcare and education, and neighborhoods and housing. There is a positive income gradient of spending on children, which has steepened over time, but the percentage of family income spent on children is far higher for the lowest quintile families than for any other group (Kornrich & Furstenberg, 2013; Schneider, Hastings, & LaBriola, 2018). Parental spending is viewed as a key pathway by which social class is reproduced across generations (Coley, Sims, & Votruba-Drzal, 2016; Pfeffer, 2018; Pfeffer & Killewald, 2018; Schneider et al., 2018).

Many models of intra and inter-generational mobility explicitly or implicitly rely on the "permanent income hypothesis," which suggests that consumption and leisure choices are based a long-term "permanent" income path, and that families are able to absorb temporary

deviations from this path by drawing down savings or accessing freely available credit (Friedman, 1957). As a result, economic instability is viewed as unlikely to affect parental investments in children. It is true that averaged income relates more strongly than does any one year's income level to family and child outcomes (Blau, 1999; Dahl & Lochner, 2012; Korenman, Miller, & Sjaastad, 1995; Mayer, 1997). Nonetheless, the permanent income hypothesis rests on assumptions that do not hold for many low and moderate-income families with credit constraints (Baker & Yannelis, 2017; Jappelli & Pistaferri, 2010) as well as families from racial and ethnic groups historically discriminated against and excluded from the mainstream labor, housing, and loanable funds market (Hamilton & Darity, 2017; Pfeffer, Danziger, & Schoeni, 2013; Pfeffer & Killewald, 2018). Minimal savings and lack of access to credit likely leave low-income families with limited avenues for smoothing consumption (Dynarski & Gruber, 1997). No studies that we know of have examined whether spending on children is affected by economic instability, but there is evidence that consumption variability increased in the late 20<sup>th</sup> century although not by as much as income volatility (Dogra & Gorbachev, 2016; Gorbachev, 2011).

### Stress

Bioecological models of development emphasize the importance of consistent and predictable proximal processes in supporting healthy growth (Bronfenbrenner & Morris, 2007). By definition, development is a series of changes, but it also requires considerable underlying stability in contexts and relationships. In their seminal work highlighting proximal processes as the “engines of development,” Bronfenbrenner & Evans (2000) described the dimensions that define exposure to proximal processes, including duration, intensity, and *interruption*. Even earlier, Bronfenbrenner described chaotic contexts as potentially interfering with beneficial proximal processes or producing dysfunctional ones (Bronfenbrenner, 1995).

In keeping with the bioecological model, low income and drops in income are known to produce parental stress, which decreases the warmth and sensitivity of parenting and is associated with child behavior problems (Conger & Elder, 1994; Elder, Eccles, Ardel, & Lord, 1995; Mcloyd, 1990). The Family Economic Stress Model (FESM) originated in the work of Glen Elder and collaborators' on children raised during and after the Great Depression (Conger & Elder, 1994; Elder, 1974). Other scholars later adapted the model to fit the circumstances of a more diverse group of low-income families in the end of the 20<sup>th</sup> century (Mcloyd, 1990; Mcloyd, Jayaratne, Ceballo, & Borquez, 2015; Mistry, Benner, Biesanz, Clark, & Howes, 2010; Mistry, Benner, Tan, & Kim, 2009; Mistry, Lowe, Benner, & Chien, 2008). While the experience of poverty always included some degree of uncertainty and instability, the recent changes in the economy noted above mean that instability is now a normative dimension of low-income status for many families.

The concept of “environmental instability” in the developmental literature on chaos offers insight into how repeated changes in one domain or changes in multiple domains can be stressful and disruptive for children directly. Chaos is a description of contexts that are over-stimulating because of environmental disorder (e.g. crowding, noise, clutter) or environmental instability (e.g. changes in housing, school, and family composition; Evans &

Wachs, 2010; Shonkoff, 2010). Most studies that use the concept of chaos focus on noise, clutter, and other types of disorder, a much smaller set include indicators of both disorder and instability (Coley, Lynch, & Kull, 2015; Garrett-Peters, Mokrova, Vernon-Feagans, Willoughby, & Pan, 2016; Raver et al., 2015; Vernon-Feagans et al., 2012; Vernon-Feagans, Willoughby, & Garrett-Peters, 2016). Disorganization, but not instability, mediates the relations between income and academic achievement (Garrett-Peters et al., 2016) and predicts children's behavior at Kindergarten entry (Vernon-Feagans et al., 2016). Both disorder and instability early in life are associated with child physical and mental health (Coley et al., 2015). Similar to models of income level effects on child development, studies of chaos also focus on parenting as a key mediator, with responsiveness and warmth (reductions) and harsh parenting (increases) being especially implicated in these processes (Coldwell et al., 2006; Dumas et al., 2005; Vernon-Feagans et al., 2016).

Advances in social neuroscience also highlight the potential for chronic or "toxic" stress to alter the body's stress response system (Ganzel & Morris, 2011; Shonkoff et al., 2012). Beginning in utero, a child's environmental contexts shape not only exposure to stress but also future stress reactivity. The human body is well designed to cope with intermittent or occasional stress, but can be dysregulated by chronic or intense stress (Ganzel & Morris, 2011; Ganzel et al., 2010). Importantly, positive stress reactions by children are promoted by warm and sensitive parenting, but economic instability may challenge both the child's stress response system and the quality of parenting. If economic instability reflects or creates too much change in children's lives, and particularly if it causes chronic stress and related reductions in warmth and contingency in parent-child interactions, it could have long-lasting effects on stress response systems, emotional health, and social relationships (Danese & McEwen, 2012; Evans & Schamberg, 2009; Miller, Chen, & Parker, 2011). Another strand of research from behavioral science suggests that poverty and its associated stressors may adversely affect cognitive processing and decision-making. The theory is that low and volatile incomes tax cognitive bandwidth to make decisions, making it harder to execute longer-range plans amid a series of immediate-term emergences and exigencies (Gennetian & Shafir, 2015; Mani, Mullainathan, Shafir, & Zhao, 2013; Mullainathan & Shafir, 2013).

### Family Routines

Family routines, such as regular shared meals, are associated with beneficial parenting practices, greater marital satisfaction, and better adolescent mental health and behaviors (Fiese et al., 2016, 2002). Far less is known about family routines as a mechanism by which economic disadvantage may be transmitted between generations. The increase in economic instability, however, raises the importance of better understanding how changes in employment, public assistance, or family structure might disrupt family routines. According to Weisner (2010), sustaining family routines depends on fitting the routine to family resources and providing stability and predictability of the daily routine. In an ethnographic study of 75 low-income families in Chicago during the 2000s, Roy et al. (2004) documented the challenge of managing unpredictable daily routines with insufficient resources: "...the hectic pace of multiple and often overlapping time obligations results in sudden shifts and crises when families did not have consistent resources to adjust their daily routines" (pg. 174). This challenge is confirmed by time use surveys, which show that parents, particularly

mothers, organize their time to complete multiple tasks (e.g. shopping and childcare) at the same time (Craig, 2006; Offer & Schneider, 2011)

### **Buffers Against Instability**

Even regular change in economic circumstances might promote development under the right circumstances. Many scholars have noted that the predictability and control that parents have over economic changes is likely to be fundamental to determining whether the changes are stressful and whether parents are able to smooth consumption. Regular, predictable changes in family income, such as those experienced by seasonal workers, might not disrupt family processes because they can be anticipated and plans can be made to accommodate or smooth consumption. Furthermore, income volatility that occurs because of intentional reallocations of parental time might be less disruptive if parents are making choices to substitute time at home for income. Finally, compensating for income loss may be more feasible and less noticeable with small changes, whereas a relatively large change could require substantial savings or assistance. Both emotional and financial support from family, friends, or the government could reduce the effects of economic instability as a stressor on parents and children (Carrillo, Harknett, Logan, Luhr, & Schneider, 2017; Schenck-Fontaine et al., 2017).

### **Evidence on Economic Instability and Child Outcomes**

A small body of evidence suggests that income volatility is negatively associated with both adolescent and adult school outcomes (Cheng et al., 2017; Gennetian, Rodrigues, Hill, & Morris, 2018b; Gennetian, Wolf, Hill, & Morris, 2015; Hardy, 2014). Using the SIPP 2004 panel, Gennetian et al. (2015) find that a greater number of intra-year income shocks over a 32-month period is associated with lower odds of a high level of engagement in school among adolescents. Using the PSID, Hardy (2014) finds a small negative association between income variability during childhood and adult educational attainment. In both studies, the adverse effects are larger for lower-income and non-white adolescents. The associations with school outcomes could reflect a mix of effects on cognitive and socioemotional development. The volatility-adult educational attainment link may be driven by underlying household conditions during the latter stages of child development and secondary educational attainment; adolescent-age children in families exposed to volatile income and multiple poverty spells are less likely to graduate high school or persist through college (Hardy, 2014; Hardy & Marcotte, 2018). Children within families exposed to higher levels of income volatility may be more likely to exhibit behavioral problems and mental health disorders (Cheng et al., 2017; Gennetian et al., 2015).

Change in multiple developmental contexts, including childcare arrangements (Claessens & Chen, 2013; Morrissey, 2009; Pilarz & Hill, 2014, 2017), schools (Adam, 2004; Metzger, Fowler, & Swanstrom, 2018), housing (Adam, 2004; Adam & Chase-Lansdale, 2002), family structure (Ackerman et al., 2002; Cavanagh & Huston, 2006, 2008), and parental employment (Hill, Morris, Castells, & Walker, 2011; Johnson, Kalil, & Dunifon, 2012b; Kalil & Ziol-Guest, 2005, 2008) consistently and negatively relates to child socioemotional development as reported by parents and teachers. For example, higher counts of family structure changes between birth and kindergarten predict more teacher-rated externalizing



behavior in children born to married parents and more negative or disruptive behavior with peers for children born to single parents (Cavanagh & Huston, 2006). Similarly, stable maternal employment in the first five years of a child's life is associated with decreased externalizing behavior problems at ages five and nine (Pilkauskas et al., 2018). Multiple residential moves during adolescence are associated with more internalizing problems but not externalizing problems or school achievement (Anderson & Leventhal, 2017; Dupere, Archambault, Leventhal, Dion, & Anderson, 2015). The associations between contextual instability and cognition, school outcomes, and health are less studied and less consistent (Bzostek & Beck, 2011; Gaydosch & Harris, 2018).

## **How Policies and Programs Could Reduce or Moderate Economic Instability**

What can be done to stabilize income for low- and moderate-income families or interrupt the potential harms of family income fluctuations on child development? Recognizing that economic stability is good for families and children does not automatically transfer into an active political commitment to design policies to promote stability. Within a market economy, policymakers have choices with respect to whether and how policy works to dampen or insure against risk – and for whom. For example, many businesses fail to realize their financial goals and objectives or do so at a slower-than-expected pace. Tax policies to buffer against such unforeseen circumstances have long included loss offsets within the tax code, minimizing the downside consequences of economic loss (Slemrod & Bakija, 2017). Similarly, publicly subsidized insurance programs support agricultural producers, banks, and firms in other industries against catastrophic – or even reasonably foreseeable – fluctuations in profits. In this section we argue that family economic stability can and should be an important goal of multiple policy domains in the same way that business stability is now. We then review principles and discuss promising strategies for four broad types of policy changes.

### **Reducing Economic Instability and its Effects**

We group policy approaches into four broad types of strategies: 1) policies that reduce instability caused by fluctuations in earnings (“market” instability), 2) policies that smooth market earnings through transfer programs, 3) in-kind programs that provide stability to children in families with unstable income, and 4) policies or programs that enhance parents’ capacity to deal with or avoid instability. Table 1 summarizes these strategies, which include a variety of policy types, ranging from rules governing private employers to government provision of in-kind goods or transfer income. While Table 1 and the bulk of our discussion focus on extant programs and likely reforms, we also reference the instability-reducing potential of emerging policy ideas such as Universal Basic Income or job guarantees.

Beyond the type of policy, specific program rules and functions can operate in ways that are more or less favorable to families who experience income volatility. Means-tested programs typically assess income at initial application and at recertification points, and some require recipients to report changes in income during the period of receipt; considering income volatility means the specific rules around these assessment points matters (J. Romich & Hill,

2017). As the agency assesses a family for initial eligibility, how does it count their income? When income varies from month to month, do families run the risk of losing benefits? For instance, in the case of childcare funded through the federal Child Care and Development Fund, recent reforms allowed states to expand the eligibility period from six months to up to a year, and created rules allowing states to retain some subsidy to families whose income goes above the income thresholds (US Department of Health and Human Services, 2016). These updates to the program's design allowed it to better serve children from families experiencing economic instability. Such design choices matter across the four policy strategies outlined below.

**Approach 1: Reduce earnings instability**—One policy approach is to directly try to make market income more stable by reducing the fluctuation in work earnings across pay-periods by either regulating employers or requiring that they contribute to social insurance programs. Labor standards, the laws that set parameters on how employers treat employees address some forms of income stability and could be enhanced. Social insurance schemes, in which workers pay in via taxes on earnings and claim when eligible, provide another set of stabilizing mechanisms. One common labor standard, paid sick leave, could stabilize workers' income. Many employers do not provide paid time off to lower-wage workers. Hence when workers do not or cannot work, they do not get paid. Such paid time, whether paid vacation time or paid sick leave, can stabilize income. Overall 72 percent of workers have paid sick leave, but fewer than half of the workers in the lowest wage quartile have this benefit (Bureau of Labor Statistics 2017). Among part-time workers - a category that includes many parents - only 36 percent have access to paid sick leave. Mandating or encouraging employers to offer this benefit can help stabilize workers' lives. While the US has no national requirement for paid sick leave, 12 states and at least 20 cities or counties have instituted paid sick leave laws (A Better Balance, 2018), and federal policy is under discussion.

Scheduling variation is another issue. Week-to-week variations of 10 hours per week are common among workers paid by the hour, which means that pay for those weeks can vary as well (Lambert, Fugiel, & Henly, 2014). Such variation may be helpful flexibility, such as jobs that let parents work fewer hours during periods when their children do not have school. However, evidence suggests that a lot of this variability is involuntary and harmful for workers (Lambert, Haley-Lock, & Henly, 2012). Employers schedule workers for more hours during busier times and fewer when business is slow or employers with high turn-over may keep more workers than needed on the payroll so that any given employee's hours depend on how many others are competing for shifts. "Fair scheduling" or "fair workweek" laws limit employers' rights to change workers' schedules or require a reasonable guarantee of minimum hours per week. A handful of progressive cities have implemented such measures (Wolfe, Jones, & Cooper, 2019). Media pressure has led to employers stopping some of the more egregious practices (e.g. Starbucks stopped doing "clopenings" after press), but fair scheduling laws are another option. The uniqueness of each business and industry make this a hard type of work to legislate, but local efforts allow for testing of different models (Lambert, 2019).

Periods away from work due to family leave or spells of unemployment can also add to family income volatility. For such extended absences, public insurance programs can stabilize income. Setting these programs up as insurance, with wide eligibility and required participation, spreads the risk more broadly than requiring individual employers to replace wages. Paid family leave is one example. Only 6 percent of low-wage workers and 5 percent of part-timers receive paid family leave, even though this type of leave is an important income stabilizer around the birth of a child (Bureau of Labor Statistics 2017). Paid family leave would prevent severe dips in earnings for parents who take bonding leave after the birth of a child, during serious illness, or when a family member requires extended care. The US is the only high income country without paid leave for parents of newborns (Earle & Heymann, 2006). A small handful of states have or are in the process of instituting state level paid leave policies. Having state paid leave rights predicts greater use of leave, although the laws have stronger effect for more educated parents relative to lower educated parents (Han, Ruhm, & Waldfogel, 2009). At the federal level, efforts such as the Family And Medical Insurance (FAMILY) Act, which has been introduced but not passed during the past few congresses, would provide for a national paid family and medical leave program covering most workers in private companies (National Partnership, 2019).

State Unemployment Insurance (UI) programs already protect some workers against income volatility resulting from involuntary unemployment. Typically, workers are only eligible for UI payments when they have earned or worked a certain minimum amount during a base period, typically the first four of the last five calendar quarters, and payments replace only a portion of prior wages. The percentage of the workforce that can claim UI and the adequacy of the wage replacement varies by state; with some state's systems have strong funding and adequate benefits and others have low provision and financing (Chang, 2019). UI programs often exclude part-time workers, who are disproportionately women and lower-earners (Lovell & Hill, 2001), but recent reforms may be helping the programs reduce poverty (Chang, 2019). Further changes to the program could help make UI more responsive to involuntary part-time work and other changes in the labor market that lead to income volatility (Mckay, Pollack, & Fitzpayne, 2018). Reforms include improved connections to workforce development services, higher benefit levels, and extended benefits for adults with limited work histories (West et al., 2016).

While paid leave and UI benefits are tied to specific employers, they need not be. For gig workers or occasional part-time workers, a Portable Benefits model, could provide paid sick leave, unemployment insurance, and retirement funds (Rolf, Clark, & Brant, 2016). Under a Portable Benefits plan, which workers or their short-term employers contribute to insurance that belongs to the worker and follows them from job-to-job. For instance, in the State of New York, for-hire livery drivers receive workers compensation through the state's "Black Car Fund" which is funded by a surcharge on each ride.

**Approach 2: Stabilize income through transfers**—Augmenting market earnings with transfer payments comprises a second strategy. Adding cash or cash-like payments to market wages mechanically stabilizes total income. The US safety net includes cash payments under some circumstances, and advocates push for other transfers, such as child allowances. The recognition of the need to address both income adequacy and stability is consistent with the

recent National Academies (2019) report on reducing child poverty by 50 percent in 10 years, which describes stability and predictability of income as one of six major contextual factors related to anti-poverty policy.

The Supplemental Nutrition Assistance Program (SNAP) is one part of the current safety net that acts to stabilize income. SNAP, formerly known as “Food Stamps,” serves over 40 million low-income Americans with benefits averaging \$126 per recipient per month (CBPP 2018). SNAP funds are delivered monthly via Electronic Benefit Transfer (EBT) cards that allow recipients to buy food directly from retailers. States administer SNAP benefits and generally require families to be recertified for benefits after for six or 12 month periods. Within certification periods, SNAP benefits provide a reliable supplement to other income. However, families have to report large positive income changes, and program “churn” in which families leave the program (often for administrative reasons) and re-enter within four months limits the stabilizing potential (Mills et al., 2014). In contrast to SNAP, design features of the National School Lunch Program (NSLP) enhance stability in children’s lives. For instance, NSLP requires families to show the prior month’s earnings to qualify, but they can use the prior year’s earnings if the prior month was not representative. This makes the program more accessible to children whose parents’ income fluctuates. Once qualified, the students have access subsidized breakfasts and lunches for the entire academic year regardless of family economic changes (Gothro, Moore, Conway, 2015).

Among the most salient policy changes that reduced the insurance mechanism within the overall safety net for low-income workers was the retreat from providing robust cash assistance, which occurred with the transition away from Aid to Families with Dependent Children to Temporary Assistance for Needy Families in 1996. The welfare caseload fell noticeably, and states spent proportionately less of their block grants over time on cash assistance (Bitler & Hoynes, 2016; H. Luke Shaefer et al., 2015; Hardy et al., 2019). In lieu of access to the standard unemployment insurance system described above—perhaps because they do not work in a covered sector or are otherwise inconsistently employed or employed part-time (West et al., 2016)—welfare cash assistance can operate as important financial buffer.

The TANF program could be reformed and redesigned to better coordinate TANF and Workforce Innovation and Opportunity Act providers, allow for education and training to count as an allowable work activity for a longer period of time, and improve the safety net for adults seeking training (Hardy, 2016). The program could also add requirements or triggers to provide greater liquidity, following the approach of Bitler & Hoynes, (2016), who propose that states provide a minimum share of their block grant to cash assistance. In this spirit, Ziliak, (2016a) has proposed that SNAP benefits—an important near-cash benefit—can be increased in response to contemporary realities of work and home-life; specifically, SNAP benefits should be increased to address longer commute times from work to home compared to the introduction of the modern food stamp program in the 1970. A larger share of families now, by necessity, purchase food outside the home. Such policies could also provide additional economic stimulus to neighborhoods and regions with low- and moderate-income families (Blinder & Zandi, 2010).

Bolder income supplementation policies could stabilize income more with less burden on recipients than means-tested programs. Unlike many other wealthy countries, the US does not have a universal child benefit. Such programs, also known as child cash allowance, provide monthly supplements to all parents. Proposed models for the US call for payments ranging from \$100-\$300 per child per month, with designs including flat cash transfers or more nuanced models with higher payments for younger children and adjustments for economies of scale associated with multiple children (Bitler, Hines, & Page, 2018; Shafer et al., 2018).

### **Approach 3: Create consistency in developmental contexts**

Public spending already partially or substantially subsidizes many contexts of children's lives. The federal government subsidizes housing through the tax deductibility of mortgage interest and property tax payments for families with enough resources to purchase a home; for low-income renters, federal housing support takes other forms. Public investments also support some early childhood and most K-12 education. These extant public investments do not directly prevent or offset income volatility, but when properly designed, they can mitigate its effects. For instance, amendments to the McKinney-Vento Homeless Assistance Act of 1987 specifically identified how family homelessness leads to problematic instability in children's lives. As a partial remedy, the measure provided funding and legal framework for ensuring homelessness does not interfere with children's schooling (National Coalition for the Homeless, 2006). Similarly, child welfare policy recognizes that repeated changes in foster care placements harm children and Federal policy requires states to report placement stability among other outcomes (Children's Bureau, 2016). We believe changes to the design or reach of other key in-kind programs can help buffer children against some effects of economic instability.

Children too young to be in public school may spend time in non-parental childcare. Federal funds via the Childcare Development Block Grant and other programs assist low-income workers with subsidies to purchase care from private providers. Subsidizing childcare simultaneously serves two policy goals: ideally it provides children with safe and enriching environments while it also promotes parental employment. Despite these benefits, program funding and design limits its effectiveness. Only a portion of eligible families are served. And the required recertifications – in which families have to re-verify their low income and employment status – have the effect of removing many families from the program due in part to administrative burden (Henly, Kim, Sandstrom, Pilarz, & Claessens, 2017). In order to promote continuity in childcare arrangements, the 2016 Childcare Development Fund Final Rule allowed a 12-month certification and 3 months of transitional assistance in the childcare subsidy program in order to “support equal access to stable, high quality childcare for low-income children” (Office of Childcare, Administration for Children and Families, 2016). Since the need for pre-school care naturally sunsets when a child enters public school, expanding eligibility until that point would be a bolder – but certainly costly – enhancement to this program's stabilizing effect.

Federal housing support for low-income families represents a substantial investment in stability. Along with co-residing family membership, housing is a foundation of children's

home environment. Families establish routines, deploy resources, and meet basic needs within their housing unit. When families move, they have to adjust daily routines and may need to change children's school or care centers as well as figure out new community resources (parks, community centers, churches, etc.). Not all residential instability is bad of course; families may move to increase safety, improve the physical quality of the housing, or access more resources. But both multiple moves and physically crowded or unsafe housing are linked to many adverse child outcomes, both conceptually and empirically (Sandstrom & Huerta, 2013).

Insofar as public support for housing stabilizes families in good quality housing and neighborhoods, it can support child development. Federally-funded housing for the poor comes in three forms: project-based housing, housing vouchers, and units in building built with the Low Income Housing Tax Credit. Local housing authorities build and operate residential housing projects, with tenants paying a reduced and means-tested rent, typically a third of disposable income. Housing authorities also administer vouchers, formerly known as the Section 8 program and now called Housing Choice Vouchers, which allow households to rent an apartment in the private market while paying the same level of rent as in project-based housing. Finally, the federal government also offers tax incentives to private developers to acquire or build apartments that will rent at an affordable level (typically 30% of income) for income-qualified residents. Evidence on the impact of these programs on child development is relatively sparse and mixed but suggests that housing assistance enabling families with young children to live in low-poverty neighborhoods benefits them over the life course (G. Duncan et al., 2019).

Housing policy design typically allows for good stability for families who receive the available slots and are able to use them. Housing benefits are not entitlements, and housing authorities have to allocate the majority of their funds to families with income below 30% of the area median. Once qualified a family can earn more than that without losing their voucher status (Collinson, Ellen, & Ludwig, 2016). Families living in project-based housing can generally stay until they move out voluntarily unless the housing is being renovated or removed. As a condition of voucher receipt, families have to sign a lease of at least 12 months, providing some measure of stability. Although their subsidies are less, tenants in LITC buildings have to meet income requirements at the initial application period, but then can stay regardless of subsequent income changes. We believe the existing program rules help to stabilize recipient families fairly well. The major problem is that many income-eligible families do not receive assistance. In many metro areas, families face lotteries to get on waiting lists that can then take years to yield a voucher. Expanding federal funding could serve more families.

**Approach 4: Build family and community capacity to prevent or adapt to economic instability**—A final set of policy strategies centers around developing family capacity to prepare for or prevent economic instability, through financial or human capital resources. These interventions may be delivered individually, or at the neighborhood, city, or regional level.

When family income dips unexpectedly, access to wealth or credit can avoid drastic changes in material well-being or the cascade of changing environments (eviction, change in childcare settings, etc.) that can accompany income loss. Yet evidence suggests that a large portion of the American households lack such resources. Close to half of households surveyed in one study reported that they would not be able to come up with \$2000 in 30 days without using pawn shops or similar high-cost financing products (Lusardi, Schneider, & Tufano, 2011). Of concern are less understood and potentially harmful alternatives to employment as a vehicle for liquidity, including below-market activities, panhandling, bartering, borrowing from family and friends, or selling plasma (O'Toole, Gibbon, Seltzer, Hanusa, & Fine, 2002; Weimer, 2015). Policy innovations that allow families to cover temporary shortfalls could help.

Although innovators in the field of asset-building develop and test ways to increase savings, particularly for low- and moderate-income consumers, most interventions focus on savings for larger, long-term goals such as home ownership or higher education rather than short-term emergency savings (Michael & Gjertson, 2013). Among current policies, the Earned Income Tax Credit (EITC) often serves as a *de facto* emergency savings vehicle for poor families. Families use the credit, which is delivered as a once yearly lump-sum, for a variety of purposes including placing a portion in savings (Edin, Tach, & Halpern-Meekin, 2014; Mendenhall et al., 2012; Romich & Weisner, 2000). Examinations of bank records from EITC recipients who participated in a savings incentive program showed that many who put funds into savings spent the funds down within four months (Beverly, Tescher, Romich, & Marzahl, 2001). Although families prefer the lump-sum delivery, results from a test in which funds were spread out into four periodic payments over the course of the year show that periodic payment recipients experienced lower levels of perceived financial stress relative to those who received a lump sum (Kramer et al., 2019). Because families' financial needs are both consistent and "lumpy," the periodic payment may be a good compromise.

Building more and better opportunities for stable employment, particularly in economically distressed parts of the country, would improve community-level capacity for income stability. For example, a proposal by Neumark (2018) aims to inject high-poverty neighborhoods with government-subsidized employment. Such a scheme could ostensibly reduce employment instability and therefore affect earnings and income volatility. Another such place-based policy intervention proposed by (Ziliak, 2019) focuses on rural America, proposing a series of infrastructure enhancements, subsidies to move workers to employment opportunities, as well as a federal job guarantee in the spirit of (Paul, Darity, Hamilton, & Zaw, 2018) targeted at rural areas. The core elements of this proposal could be more broadly applied beyond rural communities to areas of the country with high levels of joblessness. By intervening in the nation's poorest areas, such place-based employment policies would likely touch individuals and families with relatively high economic instability.

Given transitions into and out of employment are major drivers of economic volatility, interventions that provide and guarantee employment could substantially reduce volatility. Direct public provision of jobs dates to the earliest eras of the safety net, and different jobs programs constituted important parts of the New Deal response to the Great Depression.

Since then, public job provision has been limited to small state and local efforts, but an invigorated national subsidized employment scheme could help reduce poverty and employment-related income instability (Indivar Dutta-Gupta, Kali Grant, Julie Kerksick, Dan Bloom, & Ajay Chaudry, 2018). Publicly-provided employment programs (S. Danziger & Gottschalk, 1995; Mark Paul et al., 2018) vary in size and intensity; some provide employment of “last-resort” and may effectively operate at the local or federal minimum wage.

Whether incentivizing private-sector jobs or guaranteeing public sector jobs, policymakers should design specifics of the proposal to enhance stability. In the case of jobs, this means requiring or providing at least a minimum of paid leave as discussed above. Sectors or industries matter as well. A common theme of such proposals is to target efforts towards various forms of infrastructure activity—including “green” infrastructure, transportation, public school and park maintenance, or services such as early education and childcare. These are activities that are both routinely under-invested in and have an ostensibly positive economic return both in general and in buffering low-income children against effects of economic instability.

## Conclusion and Recommendations

Social science evidence has long established income and resource levels as an important determinant of child development outcomes and socioeconomic outcomes into adulthood. The focus on resource levels potentially obscured the role that *changes* to income and aspects of the family’s environment play in shaping developmental outcomes. Unforeseen and unwelcome changes to family income have become more common over recent decades. Economic instability may operate through the same major pathways as income – via investment in children or stress in key relationships. Repeated and undesired changes in resources may co-occur with or cause chaos or destabilize family routines. Low resource levels and high instability have both independently and combined deleterious consequences. We argue that developmental science can work to better understand economic instability and build an evidence base for addressing it.

More and better consideration of economic instability within research studies could build a stronger evidence and inform policy design. For scholars collecting new data, the sidebar on “Measuring Economic Stability” indicates ways to capture meaningful fluctuations in economic circumstances, and we welcome further measurement innovations relevant to children and family life. Extant evidence on links between economic instability and child development is scarce and focused on a small set of outcomes. Expanding this literature would contribute to our knowledge base, as would working to disentangle effects via the conceptually-supported pathways of investments, stress, chaos, and family routine. As new policies that could affect economic instability come online, human development scholars could partner with policy researchers to study both family resource outcomes and impacts on family processes or child development. Finally, rigorous modelling of the trade-offs between benefits to stabilizing family income or children’s contexts and the public cost of these programs could help support policy change.



Policymakers, administrators, program staff, and street-level bureaucrats can implement a range of low-cost and costlier, ambitious interventions to mitigate the consequences of instability, with the goal of helping families absorb shocks that disrupt the normal function of the household. These include shocks to employment, housing, health, and relationships. Qualification and recertification for public benefits can be made less onerous, while cash assistance can re-emerge as a focal point of the TANF program—without a retreat on work supports. Work supports such as childcare can be greatly expanded to reduce family instability. A guiding principal for such policy interventions would require that the policy or decision buffers the family when change occur, or at least aim to reduce harm. This may also extend to how sanctions are levied within the welfare system, and the flexibility and available hours that social workers and welfare administrators have to adjudicate decisions for families. Crises do not occur on a 9-to-5 basis, and our safety net can continue to adapt to these realities.

Larger-scale interventions would confront core issues such as the shortage of affordable housing in U.S. cities, and the conundrum that housing benefits such as public housing and section 8 vouchers are *not* an entitlement. Likewise, regional economies very often lack viable, affordable transportation options to connect families to social and economic opportunities. Ultimately, the programs and policies needed to make progress across these related domains will require a recommitment to financing these programs. Specifically, this will require tax policy at the federal and state level that will raise the needed revenue to support such investments. These are expensive problems, though the costs of disinvestment and lost human potential are likely greater than doing nothing.

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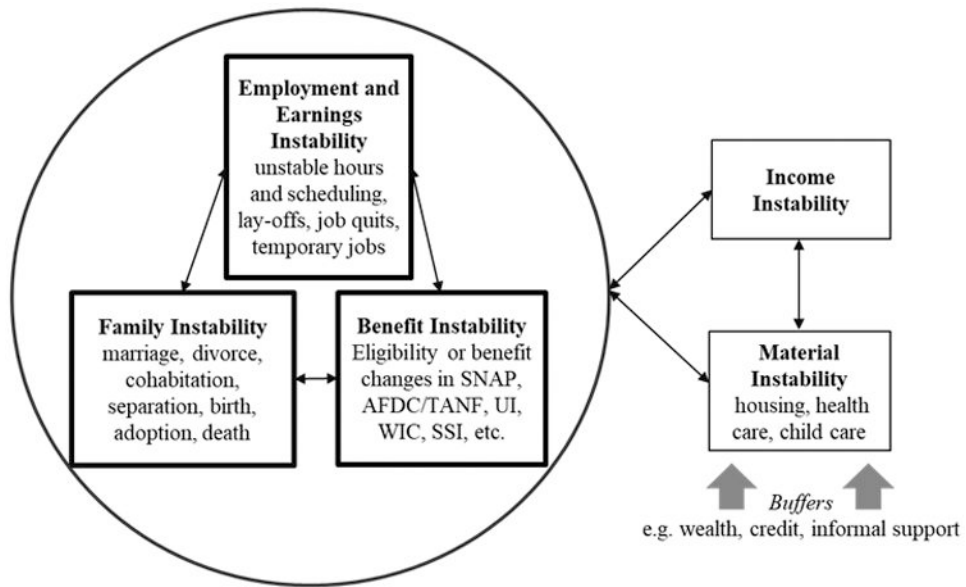
### Measuring Economic (In)stability

Many studies use measures of **total earnings or income variability**, including percent change, arc percent change, or close transformations such as the standard deviation of income percentage changes and the log difference in income or earnings (M. Dahl et al., 2011; Dynan et al., 2012; Gennetian et al., 2018a; Hardy, 2014; Hardy & Ziliak, 2014; Shin & Solon, 2011).

Variability measures can be further differentiated in terms of the **direction of change**. For example, Wagmiller et al.(2006) and Johnson et al. (2012a) characterize patterns of poverty and maternal employment, respectively, as stable, unstable, and upwardly mobile. Others use counts of substantial income or earnings drops, often measured as drops of more than 25 or 33 percent (Acs & Nichols, 2010; Hardy, 2014; Hill, 2019; Yeung, Linver, & Brooks-Gunn, 2002). With a long enough observation period, one can measure the growth rate in continuous variables, such as earnings or income, capturing both the steepness and direction of a trajectory (Hill, 2018). This is done by regressing the measure on a continuous variable for year and then exponentiating the coefficient on year. The growth rate is one minus the exponentiated coefficient .

For economic circumstances that are not measured continuously (e.g. employment and housing), **count variables** and indicators for any change are straightforward and easy to interpret. For example, studies have used any, or number of, job or family structure transitions in a particular period (Ackerman, Brown, D'Eramo, & Izard, 2002; Ackerman, Kogos, Youngstrom, Schoff, & Izard, 1999; Adam & Chase-Lansdale, 2002; Cavanagh & Huston, 2006; Johnson et al., 2012a). Studies predicting the stability in employment, family structure, and public assistance receipt also use **spell measures** and event history methods that explicitly model duration (Hoynes, 2000; Musick & Michelmore, 2015). Still others use either theoretical or data-driven categories that capture qualitative aspects of patterns, such as continuous or churning (Pilkaskas, Brooks-Gunn, & Waldfogel, 2018).

The perception of instability, insecurity, or chaos are captured with multi-item **subjective wellbeing scales**. For example, in a study of family chaos and food insecurity, Fiese et al. (2016) use the Confusion, Hubub, and Order Scale (CHAOS; Matheny, Wachs, Ludwig, & Phillips, 1995) and the U.S. Consumer Protection Bureau's Financial Well-Being Scale includes questions about a respondent's sense that they can control their finances (Consumer Financial Protection Bureau, 2015).



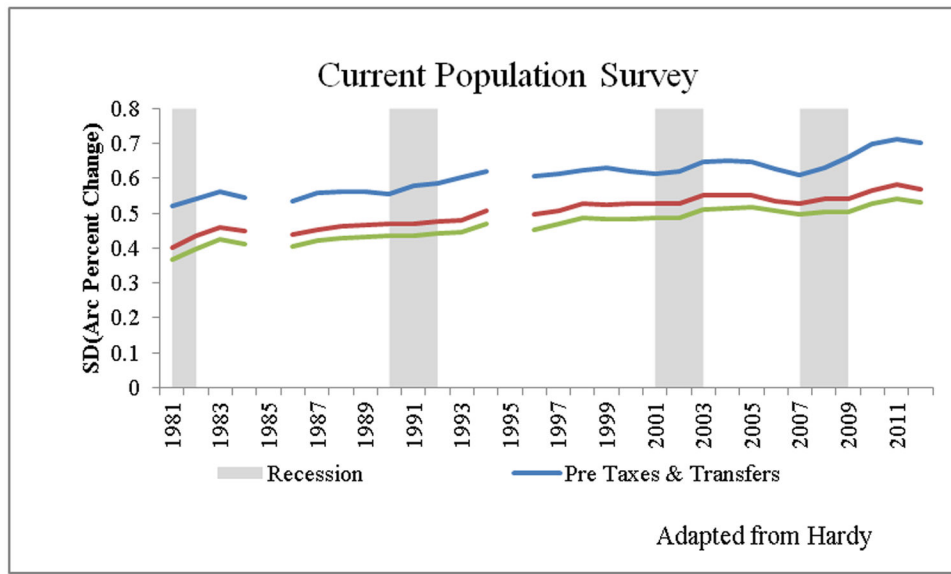
**Figure 1.**  
Economic Instability Conceptual Framework

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**Figure 2.**  
Income Instability, All Families.

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**Table 1.**

## Policy Strategies to Promote Economic Stability

Strategy	Policy Approaches	Example
1. Reduce earnings instability	Regulate employer practices	Scheduling and paid sick leave laws
	Expand social insurance against employment interruptions	Unemployment Insurance program and proposed expansions
2. Stabilize income through transfers	Supplement basic needs	Supplemental Nutrition Assistance Program
	Provide stable cash assistance	Restore welfare cash benefits Universal basic income
3. Create consistency in developmental contexts	In-kind program provision	Subsidized housing programs
	Use program rules to ensure stability	Broad eligibility rules for childcare assistance
4. Build family and community capacity to prevent or adapt to economic instability	Increase employment opportunities	Good job creation Public employment
	Promote savings or assets	Earned Income Tax Credit Emergency savings