Addressing Income Volatility of Low Income Populations

Prepared for The Financial Clinic

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Foreword

This report is the result of collaboration between the Robert M. La Follette School of Public Affairs at the University of Wisconsin–Madison and The Financial Clinic, a nonprofit community-based organization in New York. The objective of this project is to provide graduate students at La Follette the opportunity to improve their policy analysis skills while contributing to the capacity of partner organizations.

The La Follette School provides students with a rigorous two-year graduate program leading to a master's degree in public affairs. Students study policy analysis and public management, as well as concentrating study in at least one policy area. The authors of this report are all in their final semester of their degree program and are enrolled in the Public Affairs 869 Workshop in Public Affairs at the University of Wisconsin–Madison. Although studying policy analysis is important, there is no substitute for engaging actively in applied policy analysis as a means of developing policy analysis skills. The Public Affairs 869 Workshop gives graduate students that opportunity.

In recent years, there has been growing academic and media attention regarding income inequality—the disparity in the distribution of income across households. This report focuses on a less studied issue, how income varies within households even over relatively short periods of time. Variability or volatility in income can contribute to economic hardship, even among families with an annualized income above the poverty line. While this report highlights the importance of income volatility for working families, it also launches a timely discussion of what policies and programs can do to mitigate the hardships imposed by increasing income volatility. This report develops an innovative set of alternatives to stimulate innovations in policies, programs, and financial products aimed at economically vulnerable households.

I am grateful to The Financial Clinic for partnering with the La Follette School on this project. The staff of The Financial Clinic have been exceptionally generous with their time to support this project. The students have collectively contributed hundreds of hours to this project and, in the process, developed a genuine commitment to this important topic. The La Follette School is grateful for their efforts and hope that this report proves valuable for The Financial Clinic and the broader financial development field.

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We would like to take this opportunity to express our profound gratitude to Haidee Cabusora and the dedicated staff at The Financial Clinic for their support, insight, and feedback throughout the course of our analysis and research project. We also would like to thank all of the scholars, advocates, and professionals who gave up their time to provide valuable expertise and resources. We thank Professor J. Michael Collins for his exemplary guidance and inspiration, and to Karen Faster for her editorial support. Finally, we thank our colleagues at the La Follette School for providing feedback and encouragement throughout the process.

Executive Summary

Individuals and families are managing increasingly volatile incomes, a trend on the rise since the 1970s. Income volatility affects more than half of the population with more than 35 million working households experiencing a 50 percent change or greater in income in 2010. The rise in income volatility coincides with changing labor markets and the growth of part-time and temporary positions. Individuals who work in precarious positions encounter job insecurity and limited access to employer benefits. Moreover, public benefits and financial services have not adapted to serve the needs of the growing population of individuals with volatile incomes.

The implications of income volatility are greatest for low income families as they have fewer resources to manage volatility. In addition, families with volatile income experience negative consequences such as financial insecurity, food insecurity, and reduced child academic attainment. While families employ a number of coping strategies when faced with income volatility, these strategies are rarely enough and often carry their own risks to long-term financial and familial stability.

After consulting with experts and leaders in the field, we have identified strategies to mitigate and tools to manage income volatility, including policies, programs, and products that target employment, government benefits, and financial services. These include:

- Strategies to mitigate volatility from employment include improving employer scheduling practices, enforcing current labor law, proposing new legislation, creating employer-provided benefits, and using wage-related financial technology.
- Strategies to improve public benefit design and delivery to better serve populations with volatile income include changing enrollment and eligibility processes and improving annual tax credits to maximize smoothing potential.
- Strategies to increase access to financial services that help manage income volatility include technological services that aid financial planning, and new credit and savings mechanisms.

The Financial Clinic is well-positioned to improve the financial capacity of households coping with volatile income and leverage its network of clients, practitioners, financial institutions, and others to propel to policymakers and innovators to address the systemic contributors that create income volatility. Drawing on the Clinic’s strengths, this report presents a roadmap of concrete steps the Clinic can take to incorporate income smoothing into its mission to improve the financial security of low income groups. These steps include:

- Inform the practice of financial practitioners, including providing education and tools so that practitioners can better advise their clients on ways to mitigate income volatility.
- Develop a compelling narrative to communicate the importance and urgency of income volatility as a policy issue.
- Build partnerships with employers, unions, policymakers, and other stakeholders to expand the Clinic’s influence in shaping the movement to address income volatility.
- Advocate for research and data collection to improve knowledge on income volatility.

Introduction

Families and households are managing increasingly volatile incomes, a trend on the rise since the 1970s (Gottschalk and Moffitt 2012). As policymakers aim to increase the financial well-being of a public still recovering from the Great Recession, this trend in volatile income poses challenges to traditional methods of increasing financial well-being. Measures of financial well-being include the capacity of individuals and families to build financial resiliency, often in the form of liquid savings (CFPB 2015). However, uncertainty about income makes budgeting savings and expenses very difficult, and in extreme cases, nearly impossible (CFSI 2015; NFCDCU 2015). In a recent study of the general population, a full one third of respondents reported having no savings (Pew 2015). While volatile income affects more than half of the population (Pew 2015), the negative effects are felt most severely by those with lower incomes (CFSI 2015).

The rise in income volatility coincides with broad changes in the labor market and, above all, an increase in the precarious nature of work in the low-skill labor market (Kalleberg 2009; Lambert and Henly 2009; Lambert, Fugiel, and Henly 2014). Low-wage worker conditions, particularly scheduling practices, captured national attention in 2014 and 2015. Reductions in scheduling notification periods and greater use of scheduling practices such as requiring an employee to close a workplace at night and to return in the morning to re-open, coined as “clopening,” have been investigated by *The New York Times* and are the subject of recent legislative proposals (Cohen 2014, Greenhouse 2015, Kantor 2014, Hofherr 2015, Tabuchi and Greenhouse 2014).

The hardships associated with getting by on a volatile income go beyond employer-employee relationships. Government policies designed to help increase the financial well-being and upward mobility of low income groups are not designed to account for the increasingly volatile incomes experienced by many individuals in these groups today. Furthermore, holes in the financial services market leave low income customers turning to costly alternative financial service products. These structures, which contribute to income volatility and the hardships associated with volatile income, require policy intervention and market innovation to better serve the needs of the increasing number of individuals with volatile income.

Lack of good data has left this issue underreported and understudied. Until recently, most studies of income volatility attempted to quantify the prevalence of fluctuations of annual income (Gottschalk and Moffitt 2012; Dynan, Emendorf, and Sichel 2007; Hacker et al. 2012). New research has helped to underscore the prevalence of fluctuating income within weekly and monthly household budgets and the hardships imposed by within-month fluctuations of income (Wolf et al. 2014; CFSI 2015; Pew 2015; U.S. Financial Diaries 2015). This report identifies the barriers low income individuals and households face in smoothing income, and proposes actions The Financial Clinic can take to reduce structural barriers and contributors to income volatility.

Income Volatility in the United States

Income volatility, or the variation in the receipt of income, can take on many forms. Income can vary day to day, week to week, month to month, and year to year. Monti and Gathright (2013) estimate that half of U.S. households experience income volatility with 35 million workers experiencing changes in earnings greater than 50 percent. Income volatility can produce a large amount of insecurity in the lives of U.S. families as evidenced in the stories of participants in the

U.S. Financial Diaries, a one-year project that tracked the financial lives of more than 200 low income families. The project documented the day-to-day financial lives of the participants and detailed the choices that families make when facing volatility (Murdoch, Schneider, and Collins 2013). A few of their stories, with names changed, are presented below.

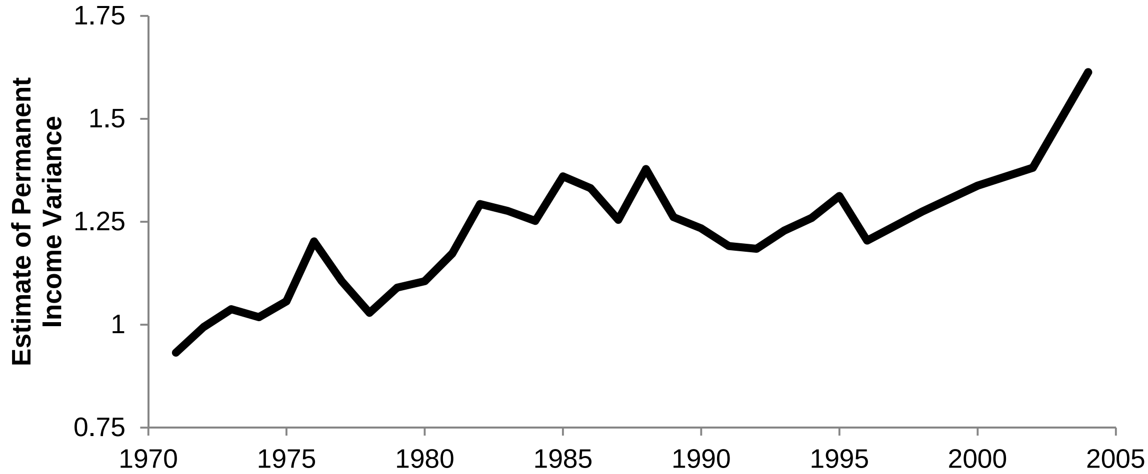
- Ahmed and Shalia Housain and their two children, recent emigrants from Bangladesh, live in Queens, New York. Both Ahmed and Shalia have master's degrees from Bangladeshi universities and would like to pursue higher education in the United States. However, they work multiple jobs in the United States just to cover living expenses. Ahmed works at a dry goods store, a check cashing store, and as a taxi driver. Shalia works at the dry goods store as well and at a coffee shop. In the course of a year, their income varied from nearly $3,000 monthly to just more than $1,700, the low point occurring after Ahmed hurt his hand at work and missed two weeks of work. Their expenses include child-care costs and $1,400 for rent each month. The Housains cope with low periods of income by borrowing money and renting out a room in their apartment.
- Rita Douglas, 62, lives alone in Ohio. She has income from a pension and a part-time job. Each month, she times paying her utility bills and rent, her largest expenses, with the arrival of her pension payment at the beginning of the month. However, if hours aren't available at her place of employment, she is frequently short of funds by the end of the month. These end-of-the-month shortages have caused her to forgo grocery shopping and needed medical treatment.
- Lauren Douglas, 29, is raising a four-year-old son. She moved seven times in five years and is hoping that she can settle in in her current rented three-bedroom, one-bathroom townhouse in Mississippi. After surviving two years on seasonal work and unemployment benefits, Lauren now has a stable position at a construction company and earns $300 a week. This income varies slightly: it increases when overtime is available and falls when the office is closed. She borrows money from her mother to help cover child-care and spends her own funds on groceries, gas, and rent. Lauren receives a substantial portion of income in the form of tax credits and immediately uses most of the income to repay her mother. While her income is now more stable, she lacks health insurance and is forgoing finishing her college degree.

A growing number of families experience similar challenges in managing income volatility.

Measures and Trends of U.S. Income Volatility

Through various measures, scholars have found trends of increasing income volatility. Scholars have looked at income volatility at annual income and at more granular time increments. Examining income volatility annually, Gottschalk and Moffitt (2009, 2012), Dynan, Emendorf, and Sichel (2007), Dahl, Deleire, and Schwabish (2011), and Hacker et al. (2012) have tracked an increase in variation in income since the 1970s. The scale of the increase in volatility differs by model and data source (survey or administrative), and among subgroups within the datasets (e.g. high vs. low income). Figure 1 below shows the rise in income volatility of U.S. male head of household earners.

Figure 1. Income Volatility of Male Head of Household Earners in the United States



Source: Gottschalk and Moffit 2012

Note: The parameter estimate of permanent income variance is the moving variance of annual income normalized around 1.

Models based on annual income data cannot capture volatility at the day-to-day, week-to-week, or month-to-month levels. Annual data overlook the micro-level behavioral changes and perhaps the usage of alternative lending services, such as payday lending, check-cashing services, pawn shops, and other financial instruments with usurious lending conditions, that are often indicative of the struggles associated with income volatility (Ziliak 2014). Such analysis is necessary for understanding the uncertainty and risk to welfare that income volatility poses. Wolf et al. (2014) found that month-to-month household income volatility exists and is different within the same income level and between ranges of income levels, suggesting that measures of annual income volatility may be insufficient in measuring income volatility in that they mask the actual volatility over time that individuals or households experience. Given the challenges of capturing income volatility as a quantitative measure, especially given limited data on income volatility, this report does not attempt to quantitatively analyze income volatility further.

Problems Posed by Income Volatility

The link between income volatility and financial insecurity is clear. As income volatility increases so does financial insecurity, especially among people with low incomes. Such insecurity does not come without consequences. As income is more variable, negative social consequences can result. In this section, we describe the financial and social implications of income volatility.

Financial Insecurity and Reduced Economic Mobility

Households rely on predictable income to pay for current expenses and to save for future expenses. If income is more variable, households use credit cards, saving accounts, and government transfers to uphold a baseline consumption standard (Keys 2008; Gottschalk and Moffit 2009). In some cases, Americans also turn to debt and other expensive forms of credit to cover day-to-day expenses and emergency expenses (Carroll 2001). Using these services contributes to high levels of debt and depletes emergency savings instead of reducing financial burdens and growing savings with predictable income streams. This situation suggests income volatility may be even more indicative of financial trouble than income level itself.

Income volatility can make traditional banking and financial services more costly. Bank accounts frequently require minimum account balances and impose service fees, and loan products often have stringent lending requirements. According to a 2013 survey by the Federal Deposit Insurance Corporation, 7.7 percent of households are unbanked and another 20 percent are underbanked, or have bank accounts but still rely on alternative financial institutions or informal mechanisms. A large reason cited is the difficulty in maintaining balances, and the fear of accruing overdraft and other banking fees (Burhouse et al. 2014).

Other economic implications exist for those with volatile incomes. Income volatility is related to one's economic mobility and ability to accumulate assets. Persistently unstable income limits one's mobility to move up the economic ladder (Gottschalk and Moffitt 2009).

Negative Social Consequences

Income volatility is a statistically significant indicator of food insecurity (Bania and Leete 2007). Among individuals with incomes at or below 300 percent of the poverty level, income volatility, not income level, was found to be the strongest predictor of food insecurity. This result was found to be even more significant among those below the poverty level. Decreasing income volatility could help alleviate household food insecurity (Bania and Leete 2007). Income volatility also can have negative consequences for health, especially for low income individuals (Halliday 2007).

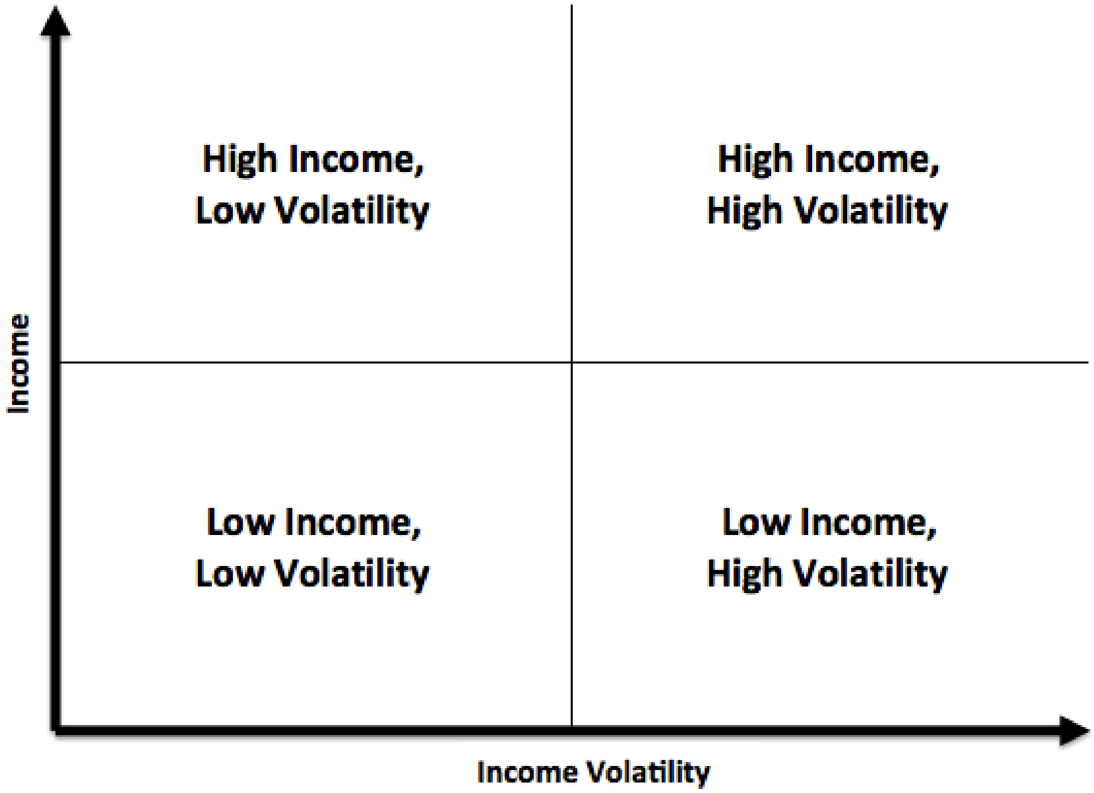
Wolf et al. (2014) found that income volatility is linked to parenting stress and relationship instability. Financial instability can place a significant strain on the home, and volatile incomes may increase workers' stress levels, which affects taking care of children and maintaining relationships. Children from households with low and volatile income were associated with higher rates of school suspension and expulsion compared to those with low and stable income (Wolf et al. 2014).

Experiencing income volatility during childhood is associated with reduced educational attainment. Using longitudinal data, Bradley Hardy found a statistically significant relationship between volatility and attainment. These results suggest that addressing family income volatility could have positive educational implications for later generations (Hardy 2014).

Compounding Effects of Low Income and High Volatility

Fifty-six percent of Americans report having difficulty covering all of their bills and expenses (CFSI 2015). Furthermore, 45 percent of Americans report earning a steady income (Pew 2015). These data indicate income volatility poses a risk for many individuals and households in the United States. Low income individuals and households are at the greatest risk of suffering from the problems of income volatility. Figure 2 illustrates this income volatility landscape. This paper focuses on low income, high volatility populations and identifies strategies the Clinic can take to help these individuals cope.

Figure 2: Income, Income Volatility, and Individual Risk



Source: Authors

Some demographic groups tend to be more at risk of income volatility. Lower education levels tend to be associated with more income volatility. Since the 2008 recession, Black and Hispanic individuals have experienced more volatility compared to their White counterparts. Single parent households and younger families with primary earners aged 18-35 also tend to have higher volatility (Craig 2015). Wolf et al. (2014) found low and middle income households with high income volatility are less likely to have a full-time earner, less likely to own a home, and more likely to own a business.

Sources of Income Volatility

As an aggregate measure of the variation in a person's or household's entire income, sources of income can vary from wages and tips to government benefits. Because the sources of income volatility are so diverse and complex, we address them within the broad categories of earnings and benefits. This framework is summarized in Table 1. A major theme in this section is the influence earnings volatility, and the labor structures that contribute to it, have on benefits volatility. In many cases, volatility of earnings can result in volatility of benefits. This interaction underscores a second theme—many low income people are tackling income volatility from multiple sources. Using this framework, we identify the major factors contributing to income volatility within each category and the actors and mechanisms in place that influence, and in some cases incentivize, the structures that create volatile income streams.

Table 1: Sources of Income Volatility

Income Type	Source of Volatility	Factors Driving Volatility
Earnings/Wages	Changes between jobs	Self-employment Temporary work Seasonal jobs Day laborers
Earnings/Wages	Changes within a job	Scheduling variation Wage rate Duration of position
Benefits	Changes in eligibility and enrollment based on employment, assets, and family and household structure	Employment *Health Insurance, Paid Leave* Entitlement *Social Security Insurance, Disability Insurance, Unemployment Insurance* Means-Tested *Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families* Tax *Earned Income Tax Credit, Child Tax Credit*

Source: Authors

Volatility of Earnings and Wages

Numerous labor market changes, including a more competitive global economy, growth of the service sector, evolving management practices, decreased employee and labor union power, U.S. labor market shifts toward high-skilled workers, and an increase in self-employed individuals have changed the nature of work over the past several decades and are associated with the rise in income volatility (Kalleberg 2009; Gottschalk and Moffitt 2009; Dynan, Emendorf, and Sichel 2007; Ziliak, Hardy, and Bollinger 2011).

Labor sociologist Arne Kalleberg and Ida Rademacher, the executive director for Initiative on Financial Security at the Aspen Institute, argue the increase in income volatility can be attributed to an increase in precarious work (Kalleberg 2015; Rademacher 2015). Kalleberg (2009) asserts the relationship between employer and employee has changed since 1970, and that work has become more precarious, unpredictable, and risky. Indicators of the increase in insecure employment, Kalleberg (2015) notes, include a decrease in attachment between employers and employees, an increase in long-term unemployment, a growth in perceived job insecurity, a growth in contracting and temporary work arrangements, and the decrease of employer contributions toward employee benefits. Rademacher adds that low-wage, part-time jobs are growing in the United States, and that income volatility has increased due to the unpredictability of part-time scheduling (Rademacher 2015).

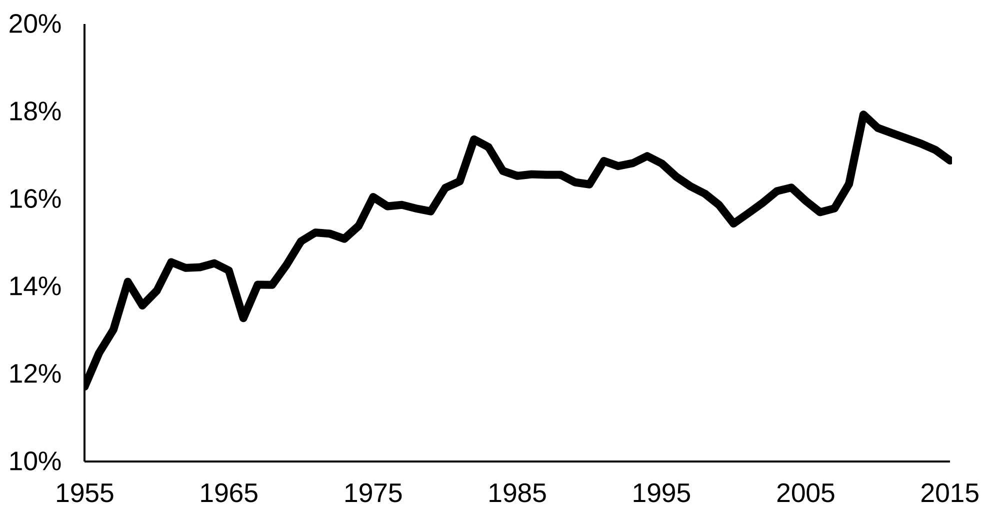
Characteristics of these labor contracts can be referred to as “nonstandard”. They differ from standard contracts, typically defined as a work agreement between an employee and an employer for full time hours (Kalleberg 2003). Workers with non-standard labor contracts can have income volatility within their jobs and between jobs: Hours worked can vary week to week, and positions can be short term as opposed to permanent. Further complicating nonstandard worker’s employment is the prevalence of employment contracts that fall outside of the direct-hire employee-employer contract, such as independent contracting or subcontracting through temporary agencies. These characteristics affect the stability and predictability of wages and hours worked and cause volatile income streams. Finally, many workers with nonstandard work arrangements have little control over their hours, meaning they lack control over mechanisms that could smooth out their own income (Lambert 2008).

Incidence of Nonstandard Jobs

Approximately 20 percent of the working population has contracts outside of the direct labor contract (Cappelli and Keller 2013). However, an increase in "permatemping" and the incorporation of temporary workers doing work previously done by permanent workers has changed the nature of how employers use temporary workers (Peck and Theodore 2007; Kalleberg 2009). In addition, while still concentrated in low-skill professions, temporary workers are increasingly found in high-skill positions (Peck 2007). However, recent decades have seen a growth in contingent labor contracts; analysis that isolated contracts via temporary agencies found an increase from 1.1 million workers in 1990 to 2.8 million workers in 2006 (Kalleberg 2009; Peck 2007).

More recently, the 2008 recession and slow recovery have resulted in a higher incidence of adults relying on part-time jobs (Valletta and Bengali 2013). However, data suggest this trend began prior to the 2008 recession. U.S. Bureau of Labor Statistics data illustrate that the percentage of part-time workers in the U.S. labor force has increased since 1955. Figure 3 shows the percentage of the U.S. labor force in part-time work. Often, workers have multiple types of nonstandard positions, increasing their vulnerability to earnings volatility. Forty percent of contingent workers reported in 2005 that they also worked another part-time position (BLS 2005). Consistently from 2000 to 2015, approximately five percent of the labor force has held multiple jobs (BLS 2015). More than 15 percent of these workers report that hours within both of these jobs vary (BLS 2014). While multiple jobs can increase the total amount of earnings an individual makes, they can also increase stress and volatility as workers attempt to juggle disparate schedules.

Figure 3: Percentage of U.S. Labor Force in Part-Time Work, 1955-2015



Source: U.S. Bureau of Labor Statistics Current Population Survey 1955-2015

Scheduling Practices within Jobs

In addition to labor contracts, the scheduling practices of employers have changed such that low-wage workers are more at risk of experiencing unstable earnings (Lambert 2008; Lambert and Henly 2009). Because of managing practices that shift risk onto employees, these various elements of schedule fluctuations are built into many low-wage jobs, making their earnings precarious. Scheduling managers often require or have a strong preference toward hiring employees with full-time hour availability, even if the job is part-time. Another manifestation of this trend toward lowering labor costs is the low incidence of employee take-up of costly employer-provided health benefits for full-time low-wage employees and reduced benefit eligibility for part-time employees. Lambert suggests that the employers lower fixed costs per employee by keeping the headcount high, hours low, and schedules variable to match daily or hourly demand (Lambert 2008).

Volatility between Jobs

Contingent work puts workers at greater risk of experiencing volatility between jobs as contracts end. The contract can vary from an almost permanent arrangement to a day-to-day agreement. We highlight four types of contingent work: temporary work, seasonal work, day labor, and self-employment.

Temporary Work

Temporary workers are an increasing percentage of the workforce (Kalleberg 2009; Peck 2007; Kirk and Belovics 2008). Temporary workers often face unpredictability stemming from uncertainty about when a contract is ending or poorly communicated labor terms. Furthermore, if temporary workers gain employment via an intermediary agency, they typically must take a position without the ability to negotiate terms, which often lowers overall wages and decreases access to employment benefits (Kirk and Belovics 2008).

Seasonal Work

Earnings volatility over the course of the year is inherent in seasonal work. Seasonal workers may have difficulty finding additional employment during off-peak season. However, volatility is more predictable as these positions typically begin and end based on a more predictable schedule based on the calendar year. Common seasonal work arrangements include retail holiday workers, tax filers, and construction workers.

Day Labor

Day laborers have the most precarious work arrangements of these four groups, as the beginning of their work day frequently involves a job search. On average, a day laborer works one to three days out of every five that they look (Seton Hall 2011). Complicating day labor volatility, many day laborers work in the agricultural and construction industries and thus report more hours in the summer, adding a seasonal variable to their employment security (Norcia 2010).

Self-employment and Independent Contracting

In 2014, approximately 10 percent of the labor market was self-employed (BLS 2015). The self-employed include a broad range of individuals: small business owners, agricultural workers, licensed professionals, and independent contractors. Self-employed workers have more variable income than many wage earning workers because they tend to be more affected by cyclical economic changes and they have a higher tendency to work part-time (Parker, Belghitar, and Barmby 2005; Hipple 2010). As such, many worked other jobs, which could add additional volatility to their income stream (Hipple 2010).

Another important factor of independent contracting that adds to income volatility is the employer practice of misclassifying workers as independent contractors who should be classified as employees. These misclassified employees then shoulder the entire responsibility for payroll taxes and are not eligible for worker benefit programs. This practice increases workers' income volatility and decreases their access to worker protections.

Volatility within Jobs

Much of the income fluctuation within hourly jobs is determined by schedule variation. Lambert and Henly (2009) categorize schedule fluctuations into three dimensions: the amount of control a worker has over her or his schedule (*rigidity)*, the extent to which scheduled hours vary from one pay period to the next *(instability)*, and whether a worker can anticipate changes to her or his work schedule *(unpredictability).* While even full-time hourly positions experience cuts in hours (Lambert 2008), we dedicate this section to discussing the schedule and earnings variation within the part-time labor and tipped labor sectors. In addition, this section addresses wage theft.

Part-time and Tipped Labor

Part-time workers in service industries report low wages and high levels of variation in their work schedules (Lambert 2008; Lambert 2014; Henly, Schaefer, and Waxman 2006). Examples of this instability include lacking a set shift schedule, being sent home in the middle of a shift for lack of work, and being asked to stay on the clock beyond the scheduled end time when work is busy. A 2014 analysis found that fewer than half of workers receive a week's notice of work hours and that day-to-day scheduling patterns were common (Lambert 2014). When surveyed, part-time employees reported perceiving little control over their hours (Lambert 2014; Henly, Schaefer, and Waxman 2006).

A disproportionate number of workers who rely on tips as part of their income also work part-time (DOL 2013; Allegretto and Cooper 2014). Tipped labor is especially vulnerable to having volatile earnings because their earnings vary not only by work schedules, but also by the amounts customers tip per shift. According to data from the Current Population Survey, tipped workers are more likely to be women and represent 60 percent of the restaurant industry (Allegretto and Cooper 2014).

Wage Theft

Further adding to workers' earnings volatility is the practice of wage theft. As determined by the Fair Labor Standards Act and state laws, wage theft is the illegal withholding of wages or benefits by employers that are legally owed to employees. Common forms of wage theft include minimum wage violations, overtime violations, employee misclassification as independent contractors, working off the clock, illegal deductions from pay, and not being paid at all (National Consumers League 2011). From Annette Bernhardt and colleagues' (2009) survey of workers in low-wage industries in three cities, more than two-thirds had experienced at least one pay-related violation in the last week. Wage theft adds to income volatility as workers do not necessarily know what their paycheck will be, and they lose a significant portion of their income. Bernhardt and colleagues estimate that victims of wage theft lose almost 15 percent of their earnings annually.

Volatility of Benefits

Benefits like health insurance, the Supplemental Nutrition Assistance Program, and Unemployment Insurance help ensure that families and individuals can afford basic goods and services during times of tumultuous earnings. While month-to-month benefit levels are stable, many of these programs have periodic recertification processes or limited time frames in which recipients can rely on them. Therefore, the potential for abrupt changes to benefit levels or eligibility can periodically add to financial instability. For example, Mills et al. (2014) found that spikes in income were a factor in individual or family losing Supplemental Nutrition Assistance Program benefits, thus increasing financial insecurity.

Most benefit programs use similar criteria to establish eligibility and participation terms. These criteria include employment status, family and household structure, and ability to comply with enrollment processes. For instance, employer-provided benefits and unemployment benefits depend on employment status and hours worked. Employers are only required to offer health insurance benefits to full-time employees. Similarly, to be eligible to collect Unemployment Insurance, one must be consistently employed above a minimum level of hours for a minimum number of weeks, and in some cases required to prove that the job loss was not due to poor worker performance. The Supplemental Nutritional Assistance Program and Temporary Assistance for Needy Families program require many recipients to work a minimum number of hours and qualify below an income threshold based on household size. Individuals must navigate each program’s enrollment processes, which vary in difficulty to complete.

Employment Benefits

The structure of employer-provided health insurance reveals potential problems for low income workers with non-standard employment or unstable hours. Employer-provided health insurance typically comes with requirements regarding a minimum number of hours an employee must work to be eligible, a percentage of the premium to be paid by the employee, and a waiting period before a new employee becomes eligible to enroll. Furthermore, fluctuating hours may result in employees cycling in and out of eligibility for an employer-provided plan. Workers at firms with low wages, high turnover, no unions, and a large number of part-time workers are the least likely to have access to employer-provided health insurance. For workers who are offered insurance, the size of the employee premium and the wage level of the worker are important factors influencing employee enrollment (Stanton and Rutherford 2004). Under the Affordable Care Act, employers have new requirements to provide employee health insurance. The impact of the Affordable Care Act is still uncertain but has the potential to unintentionally incentivize employers to cut employee hours who are above or near the threshold for providing coverage (Rademader 2015).

Means-tested Benefits

Means-tested programs, such Supplemental Nutritional Assistance Program and Temporary Assistance for Needy Families, are intended to maintain basic consumption levels of necessary goods and services for low income individuals and families. Volatile income can cause low income families’ eligibility for these programs to fluctuate so that they temporarily lose benefits, reducing the intended effect of programs created to stabilize consumption patterns of the people most in need. Newman (2006) found that within one year, 28 percent of all households with children and nearly 66 percent of households with income below the threshold one month of the year experienced at least one monthly income change that put them above or below the eligibility threshold. Temporary Assistance to Needy Families participants may meet minimum hour requirements when they start a job, only to see their scheduled hours decrease, costing them their program eligibility (Lambert and Henly 2013). Asset limits for public benefits can deter building emergency savings (Lewis et al. 2014; Hurst and Ziliak 2006). These characteristics demonstrate that while means-tested programs can alleviate the effects of income volatility, they can also induce income volatility.

Entitlement Benefits

Entitlement programs such as Unemployment Insurance can contribute to income volatility. While not directly tied to a demonstrated need for assistance, these programs maintain criteria for program eligibility. Although the primary goal of Unemployment Insurance is to stabilize consumption during a period of decreased earnings, many low income workers with volatile incomes are not eligible for Unemployment Insurance. Their ineligibility can be due to not working for a long enough period, not having enough hours to qualify, or for having already exhausted their unemployment benefits after a previous job loss (Nicholson and Needels 2006).

Tax Benefits

Refundable tax credits like the Earned Income Tax Credit and the Child Tax Credit can result in low and moderate income families receiving tax refunds that are large relative to their yearly income, creating spikes in income. Moreover, some workers choose to increase their withholding levels more than necessary, which increases the size of this income spike. While tax refunds are not necessarily detrimental to families' financial stability, this income might be better received in paychecks throughout the year rather than in a lump sum. A nationwide survey of Earned Income Tax Credit participants showed that participants experience all material hardships at rates higher rates than non-Earned Income Tax Credit participants (Lim, Livermore, and Creel Davis 2010). Larger paychecks throughout the year could help to alleviate day-to-day material hardships of Earned Income Tax Credit participants. More worrisome is the tendency for Earned Income Tax Credit recipients to take out small dollar loans with intention to repay the loans when their refunds arrive (Barr and Dokko 2006).

Individual Strategies

Individuals and households use a variety of strategies to cope with volatile income. The strategies individuals use evolve as they learn and gain experience with managing income volatility. In this section, we discuss some of the common strategies that individuals and households employ to mitigate the effects of income volatility.

Strategic Bill Paying

Individuals with unpredictable income or unpredicted expenses may time how they pay expenses as a financial management strategy (O'Brien 2015; Collins and Gjertson 2013). For example, an individual may pay the car mechanic first for an unexpected repair and a utility after the due date. Although the individual might incur a fee for the late utility payment, the person can drive to work. Individuals have a sequence of bills due and often know which bills and for how long they can hold off on a payment with varying penalties. However, if individuals routinely fail to pay bills, they risk damaging their credit scores (Weiss-Grinstein et al. 2011).

Drawing on Savings

Individuals also draw on savings to cover expenses and smooth income. Examples of using savings include borrowing from friends and family's savings, creating informal savings circles, and withdrawing from retirement savings accounts early.

Borrowing from Friends and Family

One of the most common methods by which individuals manage income valleys or expense spikes is relying on friends and family networks for support (Wilson and Estes 2014; U.S. Financial Diaries 2015; Halpern-Meekin 2015; O'Brien 2015). The costs are likely limited to repayment and, depending on the strength of the social tie, can potentially be renegotiated if needed. Drawing on the savings of family and friends is often reciprocated; an individual will borrow in times of need and lend in times of greater income or savings (O'Brien 2015). This strategy runs the risk of adding strain to relationships and the risk of losing future support mechanisms.

Informal Savings Circles

Informal savings circles are a mechanism by which participants, typically a group of households, pool savings. Members make contributions on an agreed upon schedule. Funds are then distributed to group members on a predetermined schedule or on an as-needed basis. Immigrant communities who typically have less access to traditional financial services commonly use savings circles (U.S. Financial Diaries 2015; Halpern-Meekin 2015).

Retirement Savings Breach

Individuals who participate in retirement savings accounts, such as a 401(k), may make an early withdrawal to cover emergency expenses. Of households with 401(k) plans, 25 percent breach their accounts for spending on expenses not associated with retirement (Fellowes and Willemen 2013). This strategy is costly as it causes the individual to lose the investment income and pay tax penalties on the early withdrawal. Of those who withdraw from defined contribution plans, more than 70 percent cite bills, debt, or housing costs as the reason (Fellowes and Willemen 2013).

Reliance on Credit

Individuals also seek out credit to smooth income. In lieu of traditional loans, low income individuals use credit cards and alternative financial service products. However, households carrying high levels of debt have an added fixed cost of debt payment, and this debt means these households have less slack to cut expenses when facing a drop in income (Baker 2014).

Credit Cards

Individuals use credit cards when income is volatile to cover day-to-day and emergency expenditures (Levinger and Zabek 2011; Carroll 2001). According to the 2012 National Financial Capability Study, approximately 11 percent of respondents with credit cards said in the past 12 months they used their credit card for cash advances (NFCS 2012). However, consumer credit may be restricted for lower income households, and thus, credit cards may not be a sufficient income smoothing strategy as incomes get smaller (Burhouse 2014; Littwin 2008; O'Brien 2012; Elliehausen 2009).

Alternative Financial Services

Alternative financial services providers are credit providers outside of traditional financial services. These alternative services include payday loans, auto-title loans, pawn shop loans, tax refund advances, and rent-to-own financing. Approximately 30 percent of respondents to the National Financial Capability Study stated that they had turned to at least one or more of these alternative lending services once in the past five years (NFCS 2012). Many lower income households reported using alternative financial services if they have been denied credit or fear that they will be denied credit (Littwin 2008; O'Brien 2012; Elliehausen 2009). However, these services hinder financial stability by raising credit costs and making planning for day-to-day finances more difficult (Bhutta 2013).

Accessing Public Benefits

Public benefits, such as unemployment benefits, housing subsidies, and social insurance programs, can help smooth income. We discuss safety-net benefits and tax credits.

Safety-net Benefits

Safety-net benefits include but are not limited to the Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families, Unemployment Insurance, Medicaid, and housing assistance programs, such as Section-8. Of these programs, Supplemental Nutrition Assistance Program is a primary benefit program that individuals access to smooth income (Gundersen and Ziliak 2003). Gundersen and Ziliak (2003) found this program particularly effective at reducing volatility for those whose incomes fall significantly below the income threshold for the program.

Tax Credits

Individuals use tax credits, such as the Earned Income Tax Credit, child tax credit, dependent care tax credit, retirement savings credits, and higher education tax credits, to help smooth income. In 2009, more than 26 million households filed for the Earned Income Tax Credit (Athreya, Reilly, and Simpson 2014), with low income families with children being the primary beneficiaries (Wicks-Lim and Amo 2015). Many recipients use tax credits to cover bills, pay debt, purchase big-ticket items, and create savings (Halpern-Meekin 2015; Barr 2007; Bobek, Hatfield, and Wenztel 2007; Simpson, Tiefenthaler, and Hyde 2010; Edin, Tach, and Halpern-Meekin 2014; Romich and Weisner 2000; Goodman-Bacon and McGranahan 2008).

Additional Barriers to Income Stability

To this point we have discussed strategies people employ in attempt to smooth income and manage expenses. Behavioral biases, however, may limit the effectiveness of these strategies. Theses biases include status quo bias, risk aversion, and myopia. Status quo bias, the tendency for individuals to default to the status quo when making financial decisions, has been cited as a reason that individuals over-withhold taxes (Bobek, Hatfield, and Wenztel 2007). Risk aversion, or the propensity of individuals to avoid risk, leads people to avoid financial products that assess fees for penalties such as an account overdraft (Guiso and Pariella 2008). Myopia refers to an overvaluing of present consumption in relation to future consumption or consequences. Purchasing durable goods through rent-to-own contracts provides an example of myopia and risk aversion in the face of income and expense shocks (Zikmund-Fisher and Parker 1999). These behavioral biases may affect individuals' ability to make the optimal financial decisions when managing income volatility.

Failure to account for these behavioral biases in designing programs that address income volatility can lead to low take-up rates. For example, the Advanced Earned Income Tax Credit, a program that permitted participants to receive a portion of their tax credits throughout the year, had only a three percent participation rate, leading to its repeal in 2010 (IRS 2015; GAO 2007). Research has cited program design issues and behavioral biases of eligible workers for its failure. Eligible workers exhibited status quo bias by preferring to use their refunds as a savings mechanism and risk aversion by avoiding the risk of owing payment at the end of the year due to a change in predicted earnings (Jones 2010; Sternberg Greene 2013).

As we outlined, households have strategies when confronted with unanticipated expenses. However, many of these strategies are unavailable to those with low and volatile income. They may not have a viable social network from which to borrow, may not have access to credit cards, or may not have the capacity or time to successfully navigate the problems posed by income volatility. Even if available, these strategies may not be sufficient, especially for those experiencing volatility over a long-term period. Managing income volatility involves continually budgeting spending and prioritizing expenses. It involves attempting to predict finances over time, can be mentally exhausting, and can cause consumers to prioritize managing immediate problems over longer-term planning (CFSI 2015). These barriers combine to prevent individuals from being able to manage income volatility on their own.

Income Smoothing Strategies

We provide strategies for mitigating income volatility or easing income smoothing through three venues: employment-based strategies, government program-based strategies, and financial service-based strategies. We prioritize these more systemic options for reducing income volatility because large numbers of people face income volatility and documented low take-up rates of more individualized options.

Employment-based Strategies

Employment-based strategies focus on employees, unions, financial technology, and labor law. We identify opportunities to lessen income volatility among workers through changing scheduling practices and labor laws, offering additional or new employment benefits, and partnering with financial technology companies.

Scheduling

Employer scheduling practices in the hourly wage sector have evolved to increase emphasis on tightly matching hours scheduled with labor demand. This "scheduling on demand" tactic shifts risks onto employees through schedule volatility, as discussed above (Lambert 2008). The variable nature of hourly labor costs has contributed to this trend; however, some firms have made a commitment to maximize employee schedule stability through better management practices (Lambert 2008). Employers such as Costco, Trader Joes, and QwikTrip manage their employees differently and are still highly competitive in terms of profit and customer experience. To reduce scheduling fluctuation, these retailers train their employees in many tasks so that in times of low customer traffic, employees can tackle other maintenance tasks such as stocking, restocking, and cleaning, instead of being sent home early. Investing in employee training allows retailers to offer more stable schedules and reduces employee turnover (Ton 2012).

Unions can play an important role in lessening income volatility through negotiating more secure or stable pay, hours, or scheduling. Although better scheduling practices do not mean a loss of profitability, arguing the business case for changing scheduling practices has not dramatically shifted business scheduling practices (Haley-Lock 2015; Lambert 2015). As many businesses, especially retailers, have adopted competing on cost efficiency rather than quality, these businesses may be less likely to change their models. Unions provide a collective of workers to negotiate with employers on work conditions and may be key drivers in propelling firms to change scheduling practices to reduce income volatility.

Current Labor Laws

As Lambert (2014) highlights, voluntary action by some employers will only go so far reducing income volatility for precarious, low-wage workers. Enforcing current labor laws and creating laws that address income volatility is a key piece in mitigating income volatility.

In comparison to other developed countries, the United States has few federal labor laws, and none are designed specifically to mitigate or prevent income volatility. However, some states and cities have enacted labor protections. These protections include reporting pay laws, call-in pay laws, workers bills of rights, and right to request flexible scheduling laws. Reporting pay laws require that employers pay employees for a minimum number of hours when employees are sent home early from scheduled shifts. Call-in pay laws require a minimum number of hours of pay for workers who are called in when they are not otherwise scheduled for work (Alexander, Haley-Lock, and Ruan 2014). Laws encoding the right to request flexible scheduling allow employees to request scheduling changes and require employers to consider the requests without retaliation (Vermont Commission on Women 2014).

The 2014 San Francisco ordinance, *Retail Workers Bill of Rights*, provides an example of a more comprehensive law that requires retail employers to provide advanced notice of schedules and a form of reporting pay, offer hours to current employees before hiring new employees, and institute measures to ensure parity between part-time and full-time employees (Jobs with Justice San Francisco 2014). While these laws are in place in some states and cities, they only work if enforced. In New York State, the attorney general is investigating 13 major retailers' practices of scheduling workers for on-call shifts in which workers must report to work to determine whether they must work that shift. The investigation is determining whether these practices violate existing reporting pay laws (Virtanen 2015). Enforcement and advocating new laws could help reduce income volatility caused by labor violations and weak labor protections.

Creating New Labor Laws

The *Schedules that Work Act* (H.R. 5159) introduced in Congress in July 2014 would protect workers from the most harmful employer scheduling practices. The law would establish the right of an employee to request a more flexible, stable, or predictable work schedule without employer retaliation, and the right of certain employees to receive this schedule unless an employer has legitimate business reasons for not granting the request. The law would establish further rights for employees in retail, food preparation and service, and building cleaning by requiring employers to pay extra wages for every change in an employee's schedule with less than 24 hours notice and to pay reporting pay for employees sent home early (Ben-Ishai 2014). In 2014, Michigan introduced legislation similar to the federal *Schedules that Work Act*, and, in 2015, California, Connecticut, Illinois, Indiana, Maryland, Massachusetts, Minnesota, New York, and Oregon introduced bills to change scheduling practices (NWLC 2015).

Some proposed state legislation goes further to provide greater protections for employees. For example, Minnesota introduced *Working Parent Act* (S.F. 1085) in 2015 to require more stringent scheduling requirements for employers compared to the federal *Schedules that Work Act*, requiring employers to pay predictability wages for each shift changed with less than 21 days notice, and requires employers to pay reporting pay for each shift changed or cancelled with less than 24 hours notice (Wilhelm 2015).

In addition to legislation mandating paid leave for all workers, key features of such legislation includes scheduling, minimum hours, and parity for part-time work. Scheduling legislation can specify the length of notice an employee must receive before being notified of being on or off the work schedule. If the employee is not notified or the schedule changes after that time frame, the law could require employers to pay a fee or some minimum threshold of wages (Pham et al. 2014). Under this type of legislation, if employers wanted to retain the option of on-call scheduling, they would be required to pay a premium wage rate.

In addition to or alternatively, legislation could set a minimum threshold for the number of hours for which a worker must be hired. The legislation could require a written agreement between the employer and employee specifying the minimum work-hour arrangement as part of employment. If employers wanted to retain the option for having some workers with no guaranteed threshold, legislation could limit the number of this type of employee and require the employer to pay a premium wage rate.

Finally, legislation could require employers to offer the same wages and benefits for part-time and full-time workers with equivalent positions. The part-time benefits could be prorated to the percentage of hours a part-time employee works compared to full-time. If the employer does not offer health insurance as a benefit or the number of hours is not substantial enough to provide insurance without a burdensome employee premium, the legislation could require employers to offer a pre-tax credit for employees to purchase private health insurance.

Benefits Offered through Employment

In addition to stabilizing earnings income, employer benefits can mitigate income volatility. We outline some examples, including pre-tax spending accounts, paid leave, and insurance products.

Pre-tax Spending Accounts

One option includes employers offering more flex-spending account options to their employees. Some employers offer health flex and health saving accounts, public transportation accounts, or dependent care flexible spending accounts. These accounts allow employees to elect to have a certain amount withheld each month from pre-tax earnings to pay for qualified health, transportation, or child-care expenses. The money held within the accounts usually must be used within the same year to pay for qualifying expenses. Encouraging more employers to offer these programs could increase the relative pay of employees as a portion of their earnings is sheltered from federal income taxes.

Paid Leave

Employers may offer paid leave for sick, safe, and family time. Sick leave, the most common type, allows employees paid time off to recover from and manage illness. Safe time leave allows victims of domestic or sexual assault to receive counseling, and family leave allows workers to care for sick family members or take maternity, paternity, or adoption leave. No federal law requires employers to provide any type of paid leave. However states have introduced and enacted laws that require employers to provide paid leave. For example, Minnesota's *Working Parent Act* would allow Minnesota to join California, Connecticut, Massachusetts, and 11 cities in requiring employers to provide paid sick leave (A Better Balance 2015). California, New Jersey, and Rhode Island provide paid family leave. These states fund their programs through payroll taxes and administer the benefit through their disability programs (NCSL 2013).

Insurance Products

Beyond increasing access to health insurance, employers and individuals can purchase insurance to cover the loss of wages from short-term illness or accidents. These products often pay out the difference between the amount received under disability insurance and the employee's wages. Another type of paycheck insurance includes employers offering insurance products as a benefit to cover lost wages due to a variety of unscheduled work absences, including transportation issues or child-care issues. A 2003 survey revealed 13 percent of employers reported providing access to sick/emergency child-care programs for their employees (Hewitt Associates 2003), including such employers as Microsoft (Microsoft Careers 2015) and Columbia University (2014). Limited data on aggregate risk profile of workers has prevented these products from being more widely available. However, researchers are working on collecting observations on these events over time, which could facilitate the development of an insurance market for intermittent interruptions to work (Rademacher 2015).

Unions could play an important role in mitigating income volatility through insurance by offering the same benefits and insurance provisions that employers typically offer. Unions hold promise for offering these protections, particularly in situations where employees have limited or short-term relationships with employers or employees lack trust of employers, for example, in occupations with higher risk of wage theft. One example is the Freelancers Union, whose members receive services typically provided by employers, including health and disability insurance and retirement plans. Other unions, including the AFL-CIO through Union Plus (2015), offer access to these types of benefits.

Wage-related Financial Technology

Financial technology applications offer mechanisms for individuals to smooth income. These products make it easier to access earned wages throughout a pay period rather than at the end of the cycle. These applications may be particularly useful in providing alternatives to expensive payday loans. Growing numbers of individuals own smart phones: 64 percent of all Americans adults own one as of 2015 (Smith 2015); 47 percent of adults aged 30-49 whose incomes are $30,000 or less own one as of 2013 (Smith 2013). Financial application technology created for smart phones builds on this new potential to reach low income individuals with volatile incomes, spurring new product designs under emergent financial technology companies.

Two applications on the market, FlexWage and Activehours, provide the option to gain immediate access to earnings for a nominal fee. Another application, Even, offers assistance averaging income over time by tracking income and saving peaks, and providing interest-free credit if no savings are available, for a flat rate of $5 per week or $260 per year. Although these services seem promising, they have been on the market for a short time, so there is still uncertainty regarding their ability to sustain profitability in the long term. A short description of each of these products is provided in Table 2.

Table 2: Financial Technology

	FlexWage	Activehours	Even
Purpose	Allow access to wages for hours already worked	Allow access to wages for hours already worked	Smooth income across paychecks
Features	Provides advance on earning on prepaid debit card of up to 80 percent of next paycheck	Direct-deposits advance on earnings into customer bank account	Uses past paycheck data to calculate average earnings to automatically smooth income by saving on above average weeks and withdrawing or providing interest free credit on below average weeks
Requirements	Must be provided through employer	Employers must use online timesheets, and customer must have bank account	Customer must have checking account
Fee	$3 fee per use	$0, tip encouraged	$5 per week

Source: Authors

Government Program-based Strategies

Government benefits play an important role in mitigating drops in income and providing assistance when households face persistent low incomes. However, most government benefits are designed for "standard" work structures of consistent 40 hour work schedules that can cause participants to churn in and out of eligibility, contributing to income volatility.

Benefits Eligibility and Enrollment Processes

Two key changes to eligibility requirements of means-tested programs could help to reduce eligibility churning experienced by individuals with volatile incomes. The first, extending certification periods for means-tested programs, would allow administrators to review longer periods of income when re-enrolling participants. Longer certification periods would help reduce incidence of seasonal or temporary income increases from churning participants out of benefits programs because eligibility would be contingent upon a longer period of average earnings (USDA 2007; O'Brien 2015). A second strategy would be to allow for greater slack in eligibility requirements. This policy would prevent churn by requiring increases in income to be sustained for a certain period of time before the increase disqualifies a participant from eligibility for means-tested programs (O'Brien 2015).

Retooling eligibility requirements and enrollment processes could improve entitlement benefits such as Unemployment Insurance. Twenty-three percent of unemployed workers had received benefits as of the end of 2014. Many workers are not eligible for Unemployment Insurance coverage due to the low number of hours they work, the length of their employment, or the reason they left their positions (Kimball and McHugh 2015). In addition to states changing eligibility requirements, Congress could pass legislation to increase the uniformity of requirements and the coverage of workers with variable incomes.

Tax-related Strategies

As social policy is increasingly enacted through the tax code (Mettler 2011; Howard 1999), tax policies that mitigate income volatility are essential. To increase individuals' take-home pay, financial coaches already use strategies to modify withholding through changing the number of exemptions claimed on the W-4 form (Blackenblecker 2015).

A more systematic approach can include moving tax programs away from taxpayers solely receiving a large lump sum at tax time. Given design issues and poor take-up of the Advance Earned Income Tax Credit program, any program that offers advanced delivery of tax credits must be well publicized and better structured for the target population. Taking lessons from the Advance Earned Income Tax Credit, the better candidate for advance payment might be the Child Tax Credit. Filers with child dependents, regardless of income, could qualify for a set amount per dependent to be dispersed throughout the year. The Social Security Administration, in conjunction with the Internal Revenue Service, could enroll children and designate the caretaker when children receive their Social Security numbers. This system would mostly involve changing the delivery mechanism of the credit, which has few earnings and income restrictions.

Another tax based strategy could build off the program that allows individuals to buy U.S. Series I Savings Bonds with their tax refunds (IRS 2015b). The Internal Revenue Service, in partnership with the Treasury, could offer short-term savings bonds with higher interest rates than current market rates to individuals whose income falls below certain thresholds. The program could include offering three-, six-, or nine-month bonds with increasing interest rate earnings. These savings and earnings could automatically be deposited in a bank account or mailed as a check or no-fee prepaid card. This program could offer meaningful payoffs for saving, be easily accessible to individuals, provide flexibility to individuals' financial planning over a one-year period, and simplify administration in comparison to other nongovernmental tax time savings programs.

Insurance Programs that Address Income Volatility

In addition to more universally accessible health insurance, federal and state governments could devise insurance programs to mitigate large drops in income. For example, Hacker (2006) proposes a broad-based income insurance program to provide temporary and partial relief to families whose income drops more than 20 percent from the previous year, including drops from catastrophic health costs. Structured as insurance, the program would have a premium and deductible, and would require meeting minimal work history requirements for eligibility. It would apply to taxpayers in the 95th percentile income bracket and below, and be more generous to lower-income families.

Financial Service-based Strategies

Availability of financial services becomes increasingly important for individuals who have volatile incomes, especially whose with limited or no emergency savings or poor credit.

Increased access to small dollar loans or other credit services can help individuals adjust for volatility. Services provided can range from technology budgeting applications to formal savings pools to protect against an income drop.

Financial Services Technology

Beyond wage-based strategies to smooth income, financial technology can offer individuals a platform to self-manage their finances through a variety of credit or savings options. These options vary from nonprofits that offer free consulting services to phone applications that track spending. Services, such as Hellowallet and Mint, offer customers ways to budget and track finances through a spending management tool and help users avoid overdraft fees. Services such as Piggymojo focus on helping users build savings (Manturuk, Dorrance, and Halladay 2015). Given the recent interest in developing financial application technology products for low income populations (Gordon 2015), new financial application products are likely to appear.

Many financial technology companies have created products with the intent to improve social well-being, but these tools face sustainability and profitability issues. An example is BillFloat, which transformed into Better Finance. The organization initially offered small consumer loans as an alternative to payday loans to help consumers afford regularly scheduled expenses, but later adjusted its business model into providing small business loans. The company cites changes to federal regulation on the payday loan industry for this change (Calvey 2014). While the influx of new technology offers creative tools for individuals to smooth income, the staying power of these products in the market is unproven (Gordon 2015).

Credit and Savings

Governments, employers, and credit unions could offer loans with minimal profit margins, making borrowing more affordable for low income individuals.

Short-term, low-cost loans could be provided through government entities to increase individuals' access to affordable credit. In the past, the U.S. Postal Service provided a variety of banking services to citizens (USPS 2015). The U.S. Postal Service's Office of the Inspector General released a whitepaper in 2014 that supported the feasibility of the agency offering low-cost banking services. In 2014, U.S. Representative Cedric Richmond of Louisiana and others introduced *The Providing Opportunities for Savings, Transactions and Lending Act* to allow the U.S. Postal Service to offer basic financial services (Lane 2014).

An example of government-provided banking services is the United Kingdom program in which individuals may take out interest-free loans against their future benefits. Repayment occurs through taking out portions from benefits over a multiple month period (O'Brien 2010). Loans are offered for larger item purchases or emergency expenses. The United Kingdom's postal system also offers financial products, including mortgage loans and auto insurance.

Beyond government entities, employers and unions present an opportunity to offer loans to employees and members. Employers offering short-term, small-interest loans could provide liquidity to employees in need (Gordon 2015). Unions may offer loan services as a membership benefit. Workplaces can also implement smaller measures to prevent work-related expenses from burdening employees. Products such as Netspend offer prepaid cards that employers give to employees to make work-related purchases, such as travel expenses (Rademacher 2015).

Some credit unions offer low-interest, small-dollar loans that many large financial institutions do not. Some credit unions offer the new product, Borrow and Save, to provide small dollar lending that expands the customer base and still results in a profit. This program offers small loans to customers and requires a savings component as part of the repayment schedule. Once the loan is repaid in full, the savings are released to the consumer (NFCDCU 2014). Partnering with credit unions to support and expand these types of products could help increase access to safe credit options.

Other options to expand access to credit include borrowing services through churches and peer-to-peer lending platforms. It is difficult for large banks to offer small short-term loans or to lend to individuals with bad or no credit because of the risk involved and minimal profit margin. Church programs, such as the Jubilee Assistance Fund, provide a borrowing service to help members with low credit scores obtain affordable loans. Through this model, the church offers funds to use as collateral for small loans with low interest rates from local credit unions (Robbins 2015). Peer-to-peer lending websites, such as Lending Club and Prosper, allow borrowers to choose a loan amount and post online the loan's purpose. Investors then review and can fund the loan request, receiving fixed monthly payments from the borrower in return (Lending Club 2015; Prosper 2015).

Another option for improving customer credit options are secured credit cards, such as the Prosperity Work's SmartSave card (Henderson 2015). To access a secured credit card, customers must pay an upfront security deposit in the amount of the line of credit they wish to receive. Customers are encouraged to add to the security deposit, building their lines of credit. Customers can then use this line of credit to essentially borrow from and repay their own savings while building their credit scores.

Formal savings pools bring individuals together to access funding and avoid loan interest. An example of a savings pool is the Mission Asset Fund (2014), which provides interest free loans through lending circles in which group members rotate who receives the pooled funds each month. Reports of the repayment of loans go to the credit bureaus to help establish or repair an individual's credit history. Thus, this program not only allows individuals to repay debt and create savings, but it also helps to build credit. The Mission Asset Fund also provides loans for renters' security deposits in which the non-profit issues a voucher for the security deposit for qualified housing options, and individuals pay the deposit over time, building their credit scores.

Situating The Financial Clinic

With the wide range of existing, emerging, and potential strategies for institutional solutions, the question remains: How can The Financial Clinic best position itself to reduce income volatility for low income groups? To answer this question, we outline the existing networks, structures, and strengths of the Clinic, draw on the insights of experts we interviewed in the field, and briefly discuss the advocacy that is underway. We use this knowledge to situate the Clinic within the political and institutional landscape, and we develop actionable next steps that draw on the Clinic's strengths.

The Clinic employs four major avenues to effect change: providing direct financial planning services, training and supporting financial practitioners, promoting products and practices financial institutions can use to better serve low income populations, and developing and advocating for policies to improve the lives of the working poor. The Clinic works directly with thousands of low income people to promote financial security through education, coaching, counseling, and planning. The Clinic's direct work with clients informs The Change Machine, an online community and training resource center that supports financial practitioners across the country. The Clinic works directly with financial institutions and organizations in a consulting capacity to increase the ability of these institutions to better serve low income customers. In addition, the Clinic has drafted legislation, built coalitions, and advocated for reforms that reduce barriers to low income people building financial resiliency. We believe each of these avenues has a role to play in reducing and mitigating income volatility in the lives of low income people.

We spoke to 15 leaders and experts whose work relates to income volatility. While each focused on a different contributor to or solution for income volatility, there was consensus that income volatility needs more attention from researchers, policymakers, the financial industry, employers, and activists. Interviewees referenced a lack of knowledge about the key role volatile income plays in threatening financial security. Our analysis of contributors to income volatility and scan of recent news coverage show groups across the country are promoting solutions to mitigate income volatility. However, these groups do not connect this work to the large theme of increasing volatile income. Hence, The Financial Clinic could provide leadership and collaboration to bring together these movements and build a cohesive message about income volatility. The Financial Clinic is well positioned to work as a focusing agent to build knowledge across sectors about the prevalence of and negative outcomes associated with volatile income for low income groups.

Next Steps

We considered the strengths of the Clinic and the need in the field to develop a four-part multi-level advocacy platform that the Clinic is well situated to implement. The Clinic's wide-reaching network makes it a natural candidate for building consensus and collaboration on strategies and policies to reduce income volatility and its negative effects. We recommend the Clinic work to improve public knowledge about income volatility, inform policy and practice, and encourage investigation on the subject by advocating for research and data collection.

Raise Awareness and Inform Practice

The Clinic's direct engagement with clients and with financial practitioners through consulting work and online community The Change Machine presents an opportunity to shape financial management tools and practices of low income customers.

- The Clinic can incorporate a screening process with new clients to assess their risk of volatile income. This process could include screening for employment types vulnerable to volatile schedules, wage theft, or other forms of uncertainty and benefits with rigid eligibility requirements. This screening process offers practitioners a jumping off point to educate clients about income volatility and strategies to manage it. Once developed, this screening tool and financial curriculum could be scaled to use as a resource on The Change Machine.
- The Clinic can educate clients and practitioners about technologies and products available to help smooth consumption and income. Many of these products offer short-term solutions to volatile income and should be more thoroughly vetted by financial experts to determine the circumstances in which they can be confidently recommended to

clients. The Clinic can develop a toolkit for The Change Machine and other education outlets that overviews the available technology and products available to address the financial management challenges of volatile income and the strengths and weaknesses of each option.

- The Clinic can connect clients to benefits, services, and resources that will help to mitigate volatile income and smooth consumption of basic goods. As discussed, benefits eligibility churning can worsen volatile income; however, in conjunction with financial planning, practitioners can help clients plan for the possibility of eligibility lapses.
- The Clinic can take steps to measure progress in helping clients address income volatility. Screening for clients with volatile income, or those at high risk for volatile income, is a starting point in collecting data on how the Clinic is serving this group. Currently, The Change Machine measures client attainment in six categories: assets, banking, debt, credit, taxes, and client goals. Each of these items is useful in measuring a client's resilience in managing volatile income. New measures could be developed to evaluate a client's risk of income volatility and access rate to benefits and resources that help individuals manage volatility
- In its consulting capacity, the Clinic can educate financial institutions about the challenges faced by low income people with volatile income and help design products to reduce barriers to financial security.

Develop a Narrative

The Clinic's wide network is a valuable resource in developing a narrative to drive education of policymakers and the public. Income volatility is a complex issue with many causes and effects. Developing a central narrative that is easy to understand will be useful in efforts to advocate for better policy and to build coalitions. The Clinic's relationships with clients on the ground and financial providers can be leveraged to develop compelling narratives that communicate the importance and urgency of this complex issue.

- The Clinic can work with consenting clients with whom it has formed strong relationships to capture stories of low income people living with volatile incomes. The Clinic can help clients craft narratives to portray their personal experiences with volatile income and the difference a more stable income would make in their lives. These stories are useful in helping to demonstrate the value of prioritizing income volatility as a policy issue in a simple, compelling way.
- Once the Clinic has collected client stories, it can use them for advocacy and education efforts and for demonstrating the need for collaboration among organizations advocating on issues related to income volatility.

Negotiate Buy-in and Build Collaboration

The Clinic can build on its experience working with a range of policymakers, advocacy organizations, and think tanks to build a coalition that recognizes income volatility as the central outcome of many types of labor, public benefit, and financial policy issues. This strategy would give the Clinic access to employers, a group with which the organization has few ties, by partnering with organizations that work with employers.

- The Clinic can begin building a coalition with groups working on issues related to income volatility and individuals' ability to manage volatile income. Some examples include the Just Hours campaign of the Retail Action Project, the National Employment Law Project's wage justice campaigns, and initiatives at the Center for Financial Services Innovation.
- As discussed above, employment structure plays a major role in producing volatile incomes. The Clinic can partner with groups working directly with employers to promote better scheduling practices, such as the Retail Action Project and the Restaurant Opportunities Center. The Clinic's role in this partnership could include providing the narratives discussed above to illuminate the impacts of scheduling practices on the lives of low income people.
- The Clinic can mobilize partners to launch a labor law enforcement campaign. For example, New York has a reporting pay law that reduces the volatility risk for employees, but a lack of enforcement undermines workplaces adhering to this standard. The Attorney General's 2015 investigation into wage law enforcement presents an opportunity for the Clinic and partners to push for better enforcement practices. This campaign could also transition into further improving employment policy as a long-term goal of the Clinic.

Advocate for Data and Research

Despite limited quantitative research on income volatility, there is little doubt that volatile income presents difficulties to low income individuals in managing their finances. Important questions remain about the best course of action policymakers, employers, and financial institutions can take to prevent and mitigate the effects of income volatility. The Clinic can advocate for partners and government agencies to improve data collection and availability surrounding this issue. Data that examine income at small time increments, such as daily and weekly, would be useful for research on this issue. Much of the current available data examine income in monthly and annual increments, which is not necessarily optimal for shedding light on the difficulty households actually undergo in the face of income volatility. Such data will enable more applicable research, and could allow government agencies and institutions to make better decisions regarding programs that seek to address income volatility and to evaluate those decisions against a baseline after changes are implemented.

Conclusion

As highlighted in the *New York Times*, "Income volatility has been called America's 'hidden inequality'" (Giridharadas 2015). The prevalence of volatile income among low income groups warrants changes to how financial practitioners and policymakers solve problems related to financial security and help low income individuals build financial resilience. While individuals employ coping strategies when faced with income volatility, these strategies fall short. Policymakers, advocates, employers, and financial institutions can help reduce income volatility and its resulting hardships by improving the stability of employment and benefits and by increasing access to low-cost credit and other financial products.

Media attention on income volatility and its effects has sparked a public conversation that the Clinic is well-positioned to focus and move forward. The Clinic can build knowledge across sectors about the prevalence of and negative outcomes associated with volatile income for low income groups. The Clinic can deliver a narrative about income volatility that brings attention to the ways policymakers and innovators can work to address the systemic causes and the shortcomings of financial services and benefits design. The Clinic's direct engagement with low income groups and the practitioners who serve them plays an important role in identifying tools to manage and alleviate income volatility that individuals currently face. Pursuing each of these efforts will allow the Clinic to shape new paths to success for millions of U.S. households struggling to get by.

Appendix A: Interview Guide

We interviewed the people listed below about income volatility and income smoothing to complete this project. We discussed the following topics with these individuals:

- Trends in income volatility
- Populations, individuals, and communities affected by income volatility
- How income volatility affects individuals, households and communities
- Appropriate institutional mechanisms that can ameliorate income volatility
- Appropriate institutional venues to address income volatility
- Strategies for addressing income volatility that the interview subject has seen
- Policies that can address income volatility
- Barriers to decreasing income volatility
- Limitations of current income volatility research

Individuals We Interviewed

Anika Little
Strategic Programs Manager, Asset Funders Network
Interview conducted March 5, 2015

Anna Haley-Lock
Professor, School of Social Work, University of Wisconsin–Madison
Interview conducted: March 25, 2015

Arne Kalleberg
Professor, Sociology Department, University of North Carolina–Chapel Hill
Interview conducted: March 18, 1015

Heather Hill
Professor, Evans School of Public Affairs, University of Washington
Interview conducted: March 13, 2015

Ida Rademacher
Executive Director, Aspen Institute for Financial Security
Interview conducted: March 6, 2015

John McHugh
Corporate Communications and Leadership Development, Kwik Trip
Interview conducted: March 13, 2015

Josh Blankenbeckler
Manager, Data and Program Evaluator, The Financial Clinic
Interview conducted: March 20, 2015

Rourke O’Brien
Health and Society Scholar, Harvard University
Interview conducted: March 9, 2015

Sarah Gordon
Vice President, Center for Financial Services Innovation
Interview conducted: March 16, 2015

Sarah Halpern-Meekin
Professor, School of Human Ecology, University of Wisconsin–Madison
Interview conducted: March 9, 2015

Steve Wendel
Principal Scientist, HelloWallet
Interview conducted: March 13, 2015.

Stuart Craig
Research Associate, Institution for Social and Policy Studies, Yale University
Interview conducted: March 12, 2015

Susan J. Lambert: University of Chicago
Professor, School of Social Service Administration, University of Chicago
Interview conducted: March 18, 2015

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