When Jobs Disappear or Become Unstable: Income Dynamics and Economic Well-Being among Urban Households

(Version: September 9th, 2018)

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Abstract

While scholars have increasingly focused on income instability, fewer studies have examined the economic consequences of employment instability. We use data collected at 3-month intervals over 12 months and limit our analyses to prime working-age respondents to study associations of household members' employment trajectories with (1) different levels of household income packages, (2) poverty status, and (3) material hardships, paying particular attention to whether the social welfare benefit receipt buffers adverse financial consequences of unstable employment. We find that consistent unemployment is most strongly associated with low income and poverty but not material needs. However, unstably employed households—especially job losses only—have almost twice higher likelihood of being deprived at all domains of hardship. We also find that cash transfer does a much better job of buffering the negative impact of persistent unemployment than it does for those experiencing job loss, while in-kind transfers benefit this job-loss group more.

Keywords: employment instability, poverty, social safety net, economic well-being

Introduction

An increasing number of American households are experiencing unstable employment in their economic lives, and an increasing number of households are experiencing financial insecurity. Such employment dynamics are still underexplored in existing literature that might have distinct consequences for households' income packages, especially certain subgroups such as households with children or women-headed households. Disadvantaged households often experience employment instability[1], and poor and near-poor families with children become often involve with non-standard work settings. Furthermore, research on income instability has largely focused on its consequences; few studies have examined economic consequences of employment instability. With the attention paid by social scientists and policymakers to the importance of social programs or interventions in smoothing consumption, we will study in detail whether employment trajectories are associated with (1) household income package, (2) poverty status, and (3) material hardship, paying particular attention to whether social welfare benefit receipt buffers adverse financial consequences of unstable employment.

It has been well documented that the developmental trajectory of children growing up with fewer economic resources is constrained relative to their affluent peers. Growing up in poorer households have been found to have a significant on health, academic achievement, and development (Dahl & Lochner, 2012; Dearing, McCartney & Taylor, 2006). This pattern holds among samples of low-income families; household with income levels are associated with increasingly positive child outcomes, specifically developmental outcomes (Berger, Paxson & Waldfogel, 2009). Additionally, economic conditions have been found to affect parents, in turn, affecting their children (Dearing, McCartney & Taylor, 2006). One essential source tied to this accumulation of household economic resources is earnings from the labor force. Yet, with increasing technological change, more low-skilled jobs are being replaced by auto facilities, which inevitably push low-educated or low-skilled workers to the edge of the already-competitive labor market. Based on National Employment Law Project data (2012), the greatest proportion of people experiencing job loss lies in the mid-wage[2] group (60%), followed by the

[1] In this paper, instability refers to between-job instability. Discussion on within-job instability (job change within the same employer) is beyond the scope of this paper.
[2] Mid-wage refers to $14-$21/hr during period examined (2008-2012)

lower-paid[3] group (21%), from 2008 to 2012. Thus, the paradox of technology advancement and employment sustainability has also drawn social scientists and advocates' attention to how to better maintain a more stable labor force, so that poor or near-poor households, especially households with children, can make ends meet.

In considering policy responses to our war on poverty, the trend somewhat is reversed. It has increasingly transferred income support from the desperately poor with little or no earnings to the working poor (Moffitt & Pauley, 2018) and most recently, work requirements were added to almost all targeted income support policies for food, housing, and even medical care (Trump, 2018). One should note that more work-based eligibility rules could lead social programs to be unresponsive to instability events that occur in the labor force. These phenomena have also been sparked by the emergence of a study on families with children living on less than $2 per person per day (Edin & Shaefer, 2017). While some question the $2 poverty measure and the length of time a family might be in such straits, there is an emerging belief that instability and lack of access to credit drive many families with children to this position at some point within a given year and that in fact deep poverty is rising (Jencks, 2016).

The role of unemployment status is not limited to their overall self-efficacy effect but is also linked to a more fundamental issue of the poverty effect and the response from the public sector per se. The consensus in most employment studies is that unemployment is adversely related to disadvantages. However, if work status is treated as a static state and the increasingly precarious employment phenomenon is not taken into account, studying employment and household well-being in this contemporary context is insufficient. It is time for social scientists and policy makers to think about how the instability and complexity involved in employment trajectories and their consequence on household multi domain of live circumstances. The more we understand this process, the better the methods that could be developed toward the policy prescription.

To our knowledge, this is the first paper to investigate employment instability and its financial and material consequences simultaneously on urban households and assess the role that governmental transfer programs play in cushioning the adverse effects of chronic unemployment and unstable employment. This is also one of the few papers that uses a longitudinal lens to examine chronic unemployment and recurrent unemployment on household economic well-being.

[3] Lower-wage refers to $8-$14/hr during the period examined (2008-2012)

Literature Review

Employment, Income Change, and Poverty

Employment instability is crucial for family well-being, especially families with children, as the unstable nature of work status triggers issues that threaten parental stress and health and decrease family resources, which indirectly influences children (Han & Fox, 2011; Hill, Morris, Castells & Walker, 2011; Strully, 2009). There is no doubt that precarious employment is linked with households' income flows. The gap in income change between the highest income group and lowest end household has been fivefold since the 1980s, and not surprisingly, the poorest households have more frequent income change than their wealthiest counterparts (Morris et al., 2015). Drawing upon data from the US Financial Diaries, Morduch and Schneider (2017) also found that low-income families experience a larger drop of monthly income than their wealthier counterparts. A study by Wolf, Gennetian, Morris, and Hill (2014) found that households with higher income fluctuation are associated with an increased change in employment status. Although increasing studies are documenting the prevalence of income and earning instability, factors causing this fluctuation of economic resources are still far less understood. Fewer studies have examined the economic consequences of employment instability.

The rise of earning instability is viewed as one of the two factors that led to a rise of earning inequality between the 1970s and 1990s (Gottschalk & Moffitt, 2009; Haider, 2001). In general, income instability is more likely to occur as a result of earning volatility (Dahl, DeLeire, & Schwabish, 2011; Gottschalk & Moffitt, 2009). By analyzing data from the 2008 panel of the SIPP with households containing children aged 3 to 5, Wolf and Morrissey (2017) investigated the association between the occurrence, accumulation, and timing of within-year employment and income instability (both positive and negative changes) and children's health and food outcomes. Atkinson (1996) suggested that changes in the distribution of employment could be responsible for a significant share of the well-documented secular increase in inequality in some Western countries.

Labor force trigger events, such as job loss or gain, are found to be substantially associated with family's poverty dynamics—entering or exiting the poverty trap in the 1970s (Duncan et al., 1984) and the period of the early 1980s (Ruggles & Williams, 1986). Furthermore, work instability is not only the issue faced by those at the lower end of income spectrum; it has been suggested that risks of facing job loss or between-job instability have also

surfaced among high socio-economic groups, and the likelihood of experiencing such events are becoming equally distributed across all income levels (Farber, 2005). The conventional approach considers occupational status as a fixed measure to adequately represent a family's economic position through its link with "permanent" or long-run income. However, this view is increasingly not the case in contemporary urban settings, as households experience uncertainties. Their transitions in terms of employment are often unexplored.

Household's Income, Employment and Social Programs

Given the facts about limited liquidity constraint and earning uncertainty, an increase in change of earnings would lower one's welfare because such instability impedes individuals' capability to smooth consumption (Haider, 2001). Also, the experience of income instability was associated with greater likelihood of having food hardship (Wolf & Morrissey, 2017). Wealth, however, serves as a buffer of the negative effects of income shock on daily functional life (Fisher, Johnson, Latner, Smeeding, & Thompson, 2016) and reduces the effect of income shock on experiencing dissolution (Eads & Tach, 2016).

To some extent, SNAP could help stable income when earning volatility occurs (Gunderson & Ziliak, 2003). Analyzing the Fragile Family data, Hernandez and Ziol-Guest (2009) found that an income drop of 30 percent or more in the 18 months preceding the survey was associated with an increasing likelihood to enter or remain persistently in the SNAP program. Yet, more recent studies suggest that governmental transfers play a larger role in raising the average household income rather than cushioning the intra-month income fluctuation (Morduch & Siwicki, 2017). Also, social safety nets tend to be less responsive to employment and income instability (Hardy, 2017), which would play a negative role on income volatility among low-income households. The latest study by Schenck-Fontaine, Gassman-Pines, and Hill (2017) examined how disadvantaged families cope with within-month income instability by utilizing SNAP benefits combined with informal network support and found that the likelihood of borrowing money for food purchases significantly increased as the SNAP benefit circle advanced. The food hardship these families experienced remained steady, indicating that informal resource support plays a role in offsetting short-term economic instability.

Previous studies on work outcomes focus more on occupation-based measures to portray employment. This approach, however, could not fully capture a welfare's effects on household's economic well-being, as social programs would most likely influence beneficiaries' income

packages rather than the occupations of household members. In order to better understand the relationship between employment, income dynamics and the welfare state, this paper would consider the transition between work activities for other adults within the household.

Thus, this study aims to contribute to the current knowledge of households' economic well-being in two ways: (1) We study the financial consequences of household members' labor market dynamics on their household income level, which includes labor earnings and "semi-universal" programs[4], such as social security and unemployment benefits. We then further take into account the integration of joint impact of the labor market and redistributive effects, which materialize through cash benefits and other in-kind transfers, on the household income package. (2) In addition to studying the monetary poverty status outcome, we also investigate the responsive results of household members' employment trajectories on five domains of household needs-based well-being measures: food consumption, housing needs, medical care, ability to pay bills, and financial capabilities.

Data, Measure and Method

The New York City Longitudinal Survey of Wellbeing study[5] (NYC-LSW) was designed and funded to take a longitudinal look at the challenges regarding severe material well-being and income poverty that current New Yorkers face in order to trace the dynamics of the vulnerable population. Using data from first 5 waves of pooled data from the first two cohorts of the NYC-LSW collected at 3-month intervals over 12 months (N=2,363), this paper examines how urban households' employment statuses are associated with their short-term income dynamics, as well as other forms of economic hardship, and also asks whether welfare policy could buffer or magnify this impact on household's income package caused by various labor market conditions from household members.

The analysis sample includes respondents and their spouse/partner (if spouse/partner is present in household) who participated in both baseline, quarterly and one-year follow-up

[4] Programs of Social Security, Medicare or Unemployment are not means-tested. Instead, these programs are contributory in nature and are available to all Americans regardless of income level.
[5] Details on background of the data could be found on "Neckerman, K. M., Garfinkel, I., Teitler, J. O., Waldfogel, J., & Wimer, C. (2016). Beyond income poverty: Measuring disadvantage in terms of material hardship and health. *Academic pediatrics*, *16*(3), S52-S59."

surveys. As we are mainly interested in employment transition and its effects on households' economic well-being, we exclude the retiring populations, so the sample is restricted to those respondents aged between 25 and 64 at the time of initial interviews. All income is adjusted for inflation and converted to 2012 dollars.

Employment status:

At the baseline and 12-month follow-up, respondents were surveyed regarding how many months they had worked in the past year and whether they had worked in the last week. Starting from the second wave (every 3-month follow-up) and continuing through the 1-year timespan, the same households reported whether any of the members started a new job. Similarly, they also reported whether they had lost a job in the previous 3 months[6]. We used the reported amount of working months combined with work status in the past week as a proxy of labor force participation at the baseline. That is, to be considered employed at the initial interview, respondents had to report working 3 months or more in the past year and working in the past week. Those who reported working 9 months or longer in between[7] (baseline and one-year follow-up) were defined as employed at the 12-month interview.

We organized these surveyed households into several mutually exclusive categories: (1) *Always employed without any shocks*: someone who worked at the time of the baseline interview and one-year follow-up (based on the definition mentioned above) and had not experienced any job gain or loss. (2) *Always unemployed without any shocks*: Someone who did not work at the time of the baseline interview regardless of the number of months worked in the prior year or at the baseline interview but who worked less than 3 months in the prior year but did not work at the 12-month follow-up and worked less than 3 months in between, without experience of any job gain or loss. (3) *Unstably employed*: Everyone else.

Because we also intend to examine the financial consequence of detailed employment patterns and assess the buffering effects resulting from safety nets among the disadvantaged population, we created three sub-groups based on the unstably employed as follows: (3.1) *unstably employed with job gain only*, (3.2) *unstably employed with job loss only*, (3.3) *Unstably employed with gain and loss*. In addition, using the same scheme, we also constructed mutually

[6] If any of these work status and quarterly job gain/loss variables are missing, then they were excluded from the analysis.
[7] This is because the Family and Medical Leave Act allows up to 3 months of leave in any given 12-month period.

exclusive categories on the work status of spouses/partners, with an additional group of "no spouse/partner present," and included them as covariates in later analyses.

Income dynamics: our income outcome is measured by using natural logarithm of monthly household income at one-year follow-up. We compared results using five versions of income package. We began with a household's market income, then incrementally added cash transfers received and further added in-kind transfers. We also assessed the economic consequence after subtracting tax, and lastly we subtracted other types of expenses. Detailed sources constituting these five sets of a household's income package are displayed below:

Market income (MI) =	Earned income + Capital income	(1)
MI + Cash =	MI + Social security + Unemployment benefits + Disability income + Private transfers + Public/Cash assistance	(2)
MI + Cash + In-Kind =	MI + Cash + Housing assistance + School lunch + WIC benefits + Tax benefits	(3)
Post-tax income =	MI + Cash + In-Kind – Tax payment	(4)
Disposable income (DI) =	Post-tax income – OOP[8] expense – Child care expense – NCC[9] work expense	(5)

Income poverty: Those who were poor at the one-year follow-up were defined to have a household income below 100 percent of the federal poverty line. In addition to the poverty rates based on official poverty measures, we also used supplemental poverty measures to determine the level of income poverty.

Material hardships: A total of material hardship scores (ranging from 0 to 5) at the one-year follow-up is a continuous variable with a sum of household material hardships (including food insecurity, precarious housing, inability to pay bills, lack of medical help, financial insecurity). In addition to the summary hardship index, we also consider these five aspects of hardship. Five dichotomous variables are constructed to reflect each domain of hardship at the one-year follow-up.

Controls: Most of the covariates included in the models are measured at the baseline. Several binary variables indicate household heads' basic demographic factors. Respondents' health/disability status, spouse/partner's work statuses, the number of adults, and the number of

[8] OOP = Out-of-Pocket Expenses, including prescription co-pays, emergency visits
[9] NCC = Non-child-care work related expenses, such as commuting costs

children in the household are also included. We also control for baseline outcome to reduce selection bias.

Ordinary least regressions will be used to address the extent to which employment instability results in various levels in a household's income package. We first perform a series of regressions with robust standard errors of five income measures on employment status and refer to the baseline as time 0, the 12-month follow-up as time 4, and the quarters in between as time 1-time 3. The model is specified in Equation 6:

$$Ln(Y_{it4}) = \alpha + \beta_1(CU)_{it} + \beta_2(UE)_{it} + \beta X_{it0} + \varepsilon_{it4} \quad (6)$$

Where Y_{i4} is the outcome of interest described above for household i. CU_i indexes a dichotomous variable, with a value of 1 indicating that respondents are chronically unemployed. UE_i also indicates a dummy variable, with a value of 1 noting the surveyed households are unstably employed (experiencing any job shock). X_{it0} contains a set of covariates mentioned above to control for household's characteristics and income level at baseline (time 0).

As mentioned above, various outcomes of our income measures were obtained by applying the natural log function, and we noticed interpreting results of the log transformed data could be challenging. Therefore, for purposes of accurate and confident interpretation, in addition to the size of these coefficients, we computed their real value change when regressing various income measures on the same set of covariates. To be specific, we used the "exponentiate" function to covert natural-logged forecasts back to their real units. For instance, if we predict market income effects of employment status using Equation 6, β_1 is the size of the coefficient for the consistently unemployed group estimated in the regression. The parameter value of β_1 corresponds to a change in percentage[10] of market income, which is (exp(β_1) – 1)*100.

Furthermore, if we let *mk* be the household's market income and let *pt* be the post-benefit and tax income, the proportion of the reduction in market income that is buffered by the post-transfer and post-tax income could be computed as follows:

$$\frac{[exp(\beta_{mk}) - 1]*100 - [exp(\beta_{pt}) - 1]*100}{[exp(\beta_{mk}) - 1]*100} \quad (7)$$

[10] One may interpret the coefficient estimate from a log-lin model as change in percentage without exponentiating the value and subtracting one. But this approximate interpretation of the coefficient holds only when the coefficient estimate is small enough; otherwise, the results would be biased. We therefore employ the exact calculation.

where β_{mk} is the effect of a particular employment status on household's market income in the equation, and β_{pt} is the effect of that same employment status in the equation for household's post government income.

In a further step, we decomposed the unstably employed group and performed the same regressions with robust standard errors based on the same set of covariates, as shown in Equation 8, in which $UEJG_i$ and $UEJL_i$ displayed being unstably employed through merely job gains or only job losses, respectively, while those who both started a job and lost at least one job during observation period are indicated as $UEGL_i$.

$$Ln(Y_{it4}) = \alpha + \beta_1(CU)_{it} + \beta_2(UEJG)_{it} + \beta_3(UEJL)_{it} + \beta_4(UEGL)_{it} + \beta X_{it0} + \varepsilon_{it4} \quad (8)$$

$$(Y_{i4}) = \alpha + \beta_1(CU)_{it} + \beta_2(UEJG)_{it} + \beta_3(UEJL)_{it} + \beta_4(UEGL)_{it} + \beta X_{it0} + \varepsilon_{it4} \quad (9)$$

Similarly, we estimated a conventional OLS model for the sum of hardship scores and performed a series of logistic regression estimates for other indicators of economic well-being (including income poverty and sorted forms of material hardship) at time 4, as presented in Equation 9.

Descriptive Results

As Table 1 demonstrates, we report means of all outcomes of interest as well as the characteristics of surveyed households. The results were stratified by whether the respondents were always employed without any job shock, were always unemployed without shocks, or were unstably employed (having any job gain or loss). The average rate of chronic unemployment in the sample was 19 percent, while 29 percent of the surveyed respondents experienced stable employment across the whole period examined. It is striking that over half of the surveyed households experience at least one job gain or loss during a one-year window. Of the households surveyed, 30 percent of the sample is Hispanic, with non-Hispanic Whites and non-Hispanic Blacks making up 36 percent and 27 percent of the sample, respectively. In addition, 11 percent did not have a high school degree.

The average monthly income resources vary by their labor force participation status. While those who were unemployed and have never experienced any job shocks reported an average of around $2,857 in market income each month, households experiencing any employment instability reported over twice that amount per month on average, and those who

have been employed without gaining or losing jobs possessed nearly four times the amount owned by the chronically unemployed group. Even after incrementally integrating cash income and in-kind transfers into a household's economic resources, the chronically unemployed respondents still witnessed approximately less than half of the income of either the unstably or stably employed groups. However, it is promising to note the average income gaps between the economically inactive group and either stably/unstably employed groups narrowed as we further netted out tax payments and other necessary expenses.

The average proportion of those living under the federal poverty line and experiencing material hardships also varies between these three groups. The percentage of being income poor among unstably employed households is close to the average citywide, while the percentage of chronically unemployed households without any job shocks report being poor is over twice the average across the entire sample. Not surprisingly, this most vulnerable group—the always unemployed group—scores the highest regarding the hardship index one year after the initial interview and disproportionally struggles with financial needs, reflected by the experience of being food insecure and the likelihood of living paycheck to paycheck. The chronically unemployed group, however, encounters relatively lower housing-related hardships and health care needs compared to the unstable group. This could be because the always unemployed group is protected by safety nets. Yet, if this is the case, it is a bit surprising that food insecurity is still prevalent among the chronically unemployed households, most of which might be eligible for SNAP. Similarly, the unstably employed group performed poorly in almost all domains of economic deprivation. Who are the people in these households who either experience job loss or are starting a new job or both? The question leads to a need to distinguish the positive and negative employment shocks among the unstably employed group.

Regression Results

Separate models are estimated for each of the outcome variables, and the results are presented in Table 2. Regressions with robust standard errors are used to take into account issues regarding heterogeneity. In addition to a series of covariates (including spouse/partner work status, basic household demographic factors and household heads' disability/health status), we also control for baseline measures of the outcomes examined to address potential selection bias. As discussed in the method section, these results could be converted to exact percentages of

increase or decrease of household income by exponentiating the coefficients and then subtracting one. Therefore, in Model 1, the effect of the always unemployed group (-1.75) corresponds to an 83 percent decrease in market income. We show these exact percentage changes in Figure 1. It is not surprising for us to observe significant effects of adverse labor market events – chronically employed without job shock – on households' market income. As expected, compared to the stably employed households, the unstably employed households are also associated with 26 percent less market income, a relatively smaller effect. When we take cash transfers into account, the decrease (56 percent) in household economic resources is slightly less than three-quarters of that in their sole-market-income outcome for the always unemployed group (left panel in Figure 1). Furthermore, if non-cash transfers and tax payment are considered, the decrease gradually drops to 39 percent in terms of their post-government and post-tax income, compared to their job-secure counterparts. A similar pattern applies when the governmental benefits and taxes are factored in for the unstably employed group, but the effects are much smaller, which implies that employment instability has a more muted effect on households' income packages. A 16 percent decrease in post-tax and benefits income is observed among the unstable group.

Furthermore, using the 7th formula above, we can compute a result of 0.53 for the always unemployed group, which suggests that 53 percent of the reduction in a household's market income is offset by public or private transfers and net of tax. Similarly, for households experiencing any job shock (either job gain or loss), we apply the same method and get a value of 0.38, meaning that 38 percent of the drop in market income is compensated at the post-tax and benefit level.

It is a bit surprising to note that there is no substantial difference in the material hardship score between the always unemployed households and their stably employed counterparts, as the standard error is as large as its coefficient, while those households with any job shocks report significantly higher scores. But this is consistent with results from the previous descriptive table, where housing-related and health care needs are relatively lower in this chronically unemployed group (with comparison to the employment precarious group), which might compensate for part of the adverse deprivation effects of unemployment on their other financial needs. Lastly, as expected, this vulnerable group is more likely to fall into the income poverty trap than the job-secured households, given the negative financial consequence of their out-of-labor force.

Even though substantial positive effects from the government side do exist, the extent to which this change to household income packages as a function of employment status is attributed by social insurance, transfers and tax does not vary that much between unemployed households and unstably employed households. Also, the magnitude estimated for those with employment instability appear a bit smaller than expected. One possible explanation could be that the magnitude of those who report starting a job might compensate for some of the financial consequence of instability for job losers. Thus, we further deconstruct the households with unstable employment into three groups, and perform the same analyses with robust standard errors as shown in the previous table. Results are reported in Table 3.

Again, we began with a direct effect of employment instability on households' monthly market income, paying particular attention to both the unemployed without shock and the only job-loss group. Without exception, the size of the coefficient of the financial consequences resulting from being chronically unemployed and the change in magnitude with respect to their market income and post-transfer and post-tax resources is almost consistent with the ones observed in Table 2. This makes it evident that the previous estimate regarding the financial consequences of always being unemployed is reliable. Similar magnitudes are also reported in terms of the economic hardship score and income poverty for this group. Yet, the effect size does vary by type of job shock experience.

Households with only job loss experienced a significant average drop in market income of 59 percent (right panel in Figure 1), compared to their employment-secure counterparts. When cash and in-kind transfers and tax are factored in, the effect size decreases to 27 percent and remains significant at the 0.001 level. Again, by applying the previous method to further compute the buffer effect from social welfare programs and the tax system, we find that the reduction in market income eliminated at the post-benefit income level remained unchanged at about 53 percent for the always unemployed group. Furthermore, governmental benefits and tax also substantially offset approximately 54 percent of the reduction in market income for the job-loser households.

In order to illustrate how the weights of different redistribution programs account for buffering total reduction in household market income, we calculated the extent to which cash transfers, in-kind transfers, and taxes buffer the overall reduction in a household's market income in Figure 2. The results imply that cash transfers buffer the adverse consequences of

being persistently unemployed more effectively than non-cash transfers do. Yet the in-kind transfers are more beneficial for the job-loss group in helping them cope with the negative impact of employment instability.

Lastly, to determine the degree to which employment status is associated with material hardships, we further examined five detailed hardship patterns for households related to food, eviction/shelter living, inability to pay bills, living paycheck by paycheck, and medical hardship, as seen in Table 4. The most striking results are that households with only job loss had almost two times higher odds of being deprived, at all forms of material needs, compared to the stably employed. That said, those having both job gain and job loss also struggled considerably with all these material needs. Surprisingly, however, significantly higher odds of being food insecure are prevalent among the chronically unemployed group, but not of housing or health care needs.

Discussion and Conclusion

Employment instability, or job churning, may have distinct consequences for households' economic well-being. Yet, scholars have increasingly focused on income instability, fewer studies have examined the economic consequences of employment instability. Economic theory as well as applied studies in the area of social safety nets tends to emphasize the policy's employment effects. This paper, however, argues that a more pertinent social welfare question is how safety nets respond to the deprivation encountered by households experiencing labor force instability. This is especially timely in the present situation, which calls for reducing access to the already small safety net, which will produce even more deeply poor households, particularly households with children, or single-head families.

Using an ongoing longitudinal survey of New York City residents' multi-dimensional well-being collected in aftermath of the recession, we studied in detail of household members' employment trajectories and their association with household income packages, poverty status and multi domain of consumption-based wellbeing; we also examine how much social safety net programs attempt to protect household from precarious employment.

Results suggests that employment instability is common and has implications for economic wellbeing. Approximately 51 percent of surveyed households experienced unstable employment during a one-year time span, while over 12 percent among them reported losing jobs without any gain. On the whole, consistent unemployment was most strongly associated

with low-income and poverty. However, employment instability—both gains and losses—was negatively associated with economic wellbeing, particularly material hardship. The most striking results are that households with only job loss had about two times higher odds of being deprived, at all forms of material needs, compared to the stably employed, when controlling for baseline demographic factors, partner/spouse's work status and baseline measures of outcome. Surprisingly, significantly higher odds of being food insecure are prevalent among the chronically unemployed group, but not of housing or health care needs. Households with only job loss experienced a significant decrease in pre-tax market income of 59 percent, compared to their employment-secure counterparts. When we take into account cash income, in-kind transfers, and tax, the magnitude of those unstably employed with job loss decreases substantially, which suggests that social welfare transfers buffer these associations. Future studies could examine whether social programs result in different patterns of income mobility among different subgroups (such as household with children vs. childless household; women-headed household vs. male-headed household; and single-person household or household with spouse present).

This present study indicates that governmental transfers have a meaningful role in the reduction of financial consequences from employment instability. Yet, how to better achieve reconciliation of the instability of employment remains a question faced by most of the households. Beyond the short-term buffering effects of state transfers, additional long-term policies and integrated social service delivery systems should be considered to help reduce employment instability and/or help unstably employed families cope with financial stress. In addition, the social safety nets must be designed to be more flexible and responsive to job churning events, in order to prevent households from experiencing multidimensional unmet needs.

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Table 1. Characteristics of New Yorkers by employment status during one-year time span

	Full sample	Always employed without any shock	Always unemployed without any shock	Unstably employed
N	*2363*	*697 (29%)*	*446 (19%)*	*1220 (52%)*
Income Dynamics (monthly)				
12-month before initial interview				
Market income (MI)	6833	9649	2857	6677
MI + Cash transfers	7142	9776	3441	6990
MI + Cash transfers + In-kind transfers	7494	9953	3992	7369
Post-tax and transfers	6188	7798	3769	6155
Post-tax, transfers and expenses	5692	7095	3580	5663
12-month after initial interview				
Market income (MI)	6845	9710	2478	6805
MI + Cash transfers	7112	9806	3074	7049
MI + Cash transfers + In-kind transfers	7510	10015	3729	7460
Post-tax and transfers	6189	7865	3532	6203
Post-tax, transfers and expenses	5825	7344	3342	5864
Economic well-being				
Living in poverty at one-year follow-up	0.23	0.07	0.50	0.21
Hardship score (0-5)	1.67	1.06	2.00	1.89
Food hardship %	0.41	0.23	0.61	0.45
Inability to pay bill %	0.28	0.18	0.29	0.33
Housing insecurity %	0.23	0.14	0.24	0.28
Cannot afford to see doctors %	0.20	0.12	0.18	0.25
Live paycheck by paycheck %	0.54	0.39	0.67	0.58
Experience money anxiety %	0.70	0.60	0.77	0.73
Spouse/partner's work status				
Always employed without shocks	0.14	0.32	0.14	0.03
Always unemployed without shocks	0.05	0.09	0.09	0.01
Unstably employed	0.20	0.06	0.03	0.36
No spouse/partner present	0.61	0.53	0.75	0.60
Household Characteristics				
Income-to-needs ratio (baseline)	4.79	6.72	2.37	4.57
Female	0.63	0.61	0.68	0.63
Number of children	0.65	0.67	0.53	0.69
Number of adults	1.91	1.80	1.69	2.06
Disability/health problem	0.23	0.06	0.64	0.17
Race/ethnicity				
White (non-Hispanic)	0.36	0.48	0.27	0.32
Black (non-Hispanic)	0.27	0.25	0.32	0.27
Asian	0.04	0.05	0.02	0.05
Others	0.03	0.02	0.02	0.03
Hispanic	0.30	0.20	0.36	0.33
Education:				
Less than high school	0.11	0.06	0.22	0.10
High school	0.18	0.13	0.27	0.17
Some postsecondary education	0.23	0.19	0.26	0.23
Higher education	0.49	0.62	0.25	0.50
Age				
Age: 25-54	0.71	0.71	0.52	0.79
Age: 55-64	0.29	0.29	0.48	0.21

Note: The sample is restricted to those respondents aged between 25 and 64 at the time of initial interviews.

Table 2. Regressions examining effects of employment dynamics on household's income levels, economic hardship and poverty at one-year follow-up

	Model 1 [a]	Model 2 [a]	Model 3 [a]	Model 4 [a]	Model 5 [a]	Model 6 [a]	Model 7 [b]	Model 8 [b]
	Market income (ln)	MI+Cash (ln)	MI+Cash+In-kind (ln)	Post-tax, post-govt. (ln)	Disposable income (ln)	Hardship score	Income poverty (opm)	Income poverty (spm)
	β RSE	*β RSE*	*β RSE*	*β RSE*	*β RSE*	*β RSE*	*Odds ratio*	*Odds ratio*
Ref. Always employed with no shock								
Always unemployed without shock	-1.75 (.18)***	-0.81 (.12)***	-0.59 (.10)***	-0.50 (.10)***	-0.53 (.11)***	0.06 (.07)	4.47 (.98)***	2.13 (.43)***
Unstably employed	-0.30 (.08)***	-0.32 (.07)***	-0.21 (.06)***	-0.18 (.06)**	-0.21 (.07)**	0.16 (.06)**	2.44 (.47)***	1.94 (.32)***
Black	-0.47 (.12)***	-0.36 (.09)***	-0.27 (.07)***	-0.22 (.07)**	-0.24 (.08)**	0.22 (.06)***	1.95 (.35)***	1.31 (.21)†
Asian	-0.02 (.13)	-0.11 (.11)	-0.10 (.10)	-0.07 (.10)	-0.06 (.11)	0.13 (.11)	1.18 (.45)	0.88 (.31)
Others	-0.41 (.24)†	-0.20 (.18)	-0.20 (.17)	-0.14 (.14)	-0.12 (.15)	0.39 (.17)*	1.89 (.65)†	1.61 (.53)
Hispanic	-0.29 (.11)**	-0.28 (.08)***	-0.23 (.07)**	-0.17 (.07)**	-0.20 (.08)*	0.16 (.07)*	1.84 (.33)***	1.32 (.21)†
Less than high school	-0.67 (.19)***	-0.62 (.13)***	-0.35 (.08)***	-0.30 (.08)***	-0.25 (.09)**	0.24 (.10)*	2.56 (.56)***	2.08 (.41)***
High school	-0.49 (.13)***	-0.45 (.09)***	-0.35 (.08)***	-0.29 (.07)***	-0.30 (.08)***	0.16 (.07)*	2.70 (.47)***	2.27 (.36)***
Some postsecondary education	-0.34 (.11)**	-0.29 (.08)***	-0.23 (.07)***	-0.18 (.07)**	-0.20 (.08)*	0.17 (.06)**	1.52 (.25)*	1.39 (.22)*
Female	0.17 (.08)*	-0.05 (.06)	-0.06 (.05)	-0.05 (.04)	-0.06 (.06)	0.09 (.05)*	1.09 (.14)	1.12 (.14)
Age: 55-64	-0.13 (.10)	-0.10 (.07)	-0.09 (.06)	-0.08 (.06)	-0.14 (.07)*	-0.05 (.05)	1.21 (.18)	0.98 (.13)
Spouse – always unemployed	-0.13 (.20)	-0.34 (.15)*	-0.34 (.14)*	-0.28 (.13)*	-0.25 (.14)†	0.07 (.11)	3.32 (1.31)**	1.54 (.54)
Spouse – unstably employed	-0.25 (.11)*	-0.07 (.08)	-0.13 (.08)	-0.12 (.07)†	-0.11 (.09)	0.15 (.08)†	1.91 (.65)†	1.09 (.29)
No spouse/partner present	-0.80 (.11)***	-0.60 (.09)***	-0.54 (.08)***	-0.51 (.07)***	-0.49 (.09)***	0.24 (.07)***	4.19 (1.33)***	2.48 (.61)***
Number of children	0.02 (.03)	0.02 (.02)	0.03 (.02)	0.06 (.02)**	0.05 (.02)*	0.08 (.02)***	1.28 (.08)***	1.13 (.06)*
Number of adults	0.13 (.05)*	0.05 (.05)	0.00 (.04)	0.01 (.04)	0.03 (.05)	0.04 (.03)	0.96 (.07)	1.37 (.07)***
Baseline MI (ln)	0.38 (.03)***							
Baseline MI+Cash(ln)		0.31 (.04)***						
Baseline MI+Transfers(ln)			0.26 (.04)***					
Baseline Post-tax, post-govt.(ln)				0.23 (.04)***				
Baseline Disposable income(ln)					0.20 (.04)***			
Baseline hardship score						0.67 (.02)***		
Baseline poverty status (opm)							4.30 (.57)***	
Baseline poverty status (spm)								2.39 (.30)***
Constant	6.01***	6.65***	7.21***	7.19***	7.37***	-0.15+	0.01***	0.02***
	(0.32)	(0.40)	(0.42)	(0.41)	(0.38)	(0.09)	(0.00)	(0.00)
N	2,363	2,363	2,363	2,363	2,363	2,363	2,363	2,363
R-squared/ Pseudo R^2	0.51	0.35	0.28	0.24	0.18	0.58	0.30	0.13

Note: The sample is restricted to those respondents aged between 25 and 64 at the time of initial interviews. Coefficients (β) and robust standard errors are presented for OLS regressions; odds ratios and robust standard errors are presented for logistics regression. [a] OLS regression; [b] Logistic regression.

*** p<0.001, ** p<0.01, * p<0.05, †p<0.10

Table 3. Regressions examining effects of different types of employment dynamics on household's income level, economic hardship and poverty at one-year follow-up

	Model 1 [a]	Model 2 [a]	Model 3 [a]	Model 4 [a]	Model 5 [a]	Model 6 [a]	Model 7 [b]	Model 8 [b]
	Market income (ln)	MI+Cash (ln)	MI+Cash+In-kind (ln)	Post-tax, post-govt. (ln)	Disposable income (ln)	Hardship score	Income poverty (opm)	Income poverty (spm)
	β RSE	*β RSE*	*β RSE*	*β RSE*	*β RSE*	*β RSE*	*Odds ratio*	*Odds ratio*
Ref. Always employed with no shock								
Always unemployed with no shock	-1.77 (.18)***	-0.84 (.12)***	-0.61 (.10)***	-0.52 (.10)***	-0.55 (.11)***	0.07 (.07)	4.54 (1.00)***	2.18 (.44)***
Unstably employed with only job gain	-0.11 (.10)	-0.25 (.08)**	-0.18 (.07)**	-0.15 (.06)*	-0.15 (.07)*	0.02 (.07)	2.07 (.44)***	1.81 (.33)**
Unstably employed with only job loss	-0.90 (.16)***	-0.63 (.13)***	-0.37 (.10)***	-0.32 (.09)***	-0.42 (.12)***	0.31 (.09)***	3.96 (.94)***	2.47 (.51)***
Unstably employed with both gain & loss	-0.01 (.14)	-0.18 (.12)	-0.14 (.10)	-0.11 (.10)	-0.12 (.11)	0.31 (.10)**	1.85 (.49)*	1.71 (.40)*
N	2,363	2,363	2,363	2,363	2,363	2,363	2,363	2,363
R-squared/ Pseudo R^2	0.52	0.36	0.29	0.25	0.18	0.59	0.30	0.14

Note: The sample is restricted to those respondents aged between 25 and 64 at the time of initial interviews. All models include a series of same covariates from Table 2 and spouse/partner's detail employment patterns. Coefficients (β) and robust standard errors are presented for OLS regressions; odds ratios and robust standard errors are presented for logistics regression.
[a] OLS regression; [b] Logistic regression. *** p<0.001, ** p<0.01, * p<0.05, +p<0.10

Figure 1. Real percentage change of household income

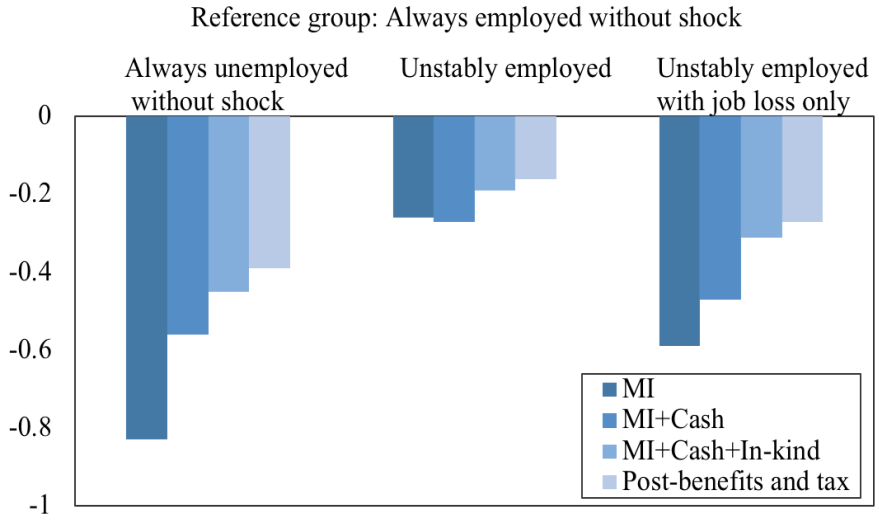

Figure 2. Percentages of buffering effects that each income component account for

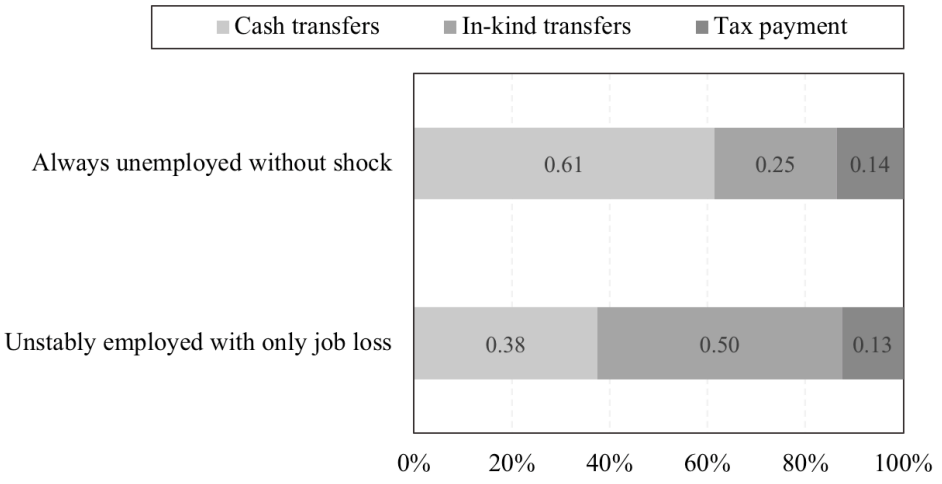

Table 4. Logistic regressions examining effects of different types of employment dynamics on each domain of economic hardship at one-year follow-up

	Model 1 Food hardship	Model 2 Inability to pay utilities	Model 3 Housing hardship	Model 4 Inability to afford medical care	Model 5 Live paycheck by paycheck	Model 6 Money anxiety
	OR RSE	*OR RSE*	*OR RSE*	*OR RSE*	*OR RSE*	*OR RSE*
(Ref.: always employed with no shock)						
Always unemployed with no shock	1.81 (.35)**	1.14 (.21)	1.00 (.21)	1.20 (.24)	1.02 (.20)	1.44 (.27)†
Unstably employed with only job gain	1.16 (.21)	1.10 (.20)	1.20 (.22)	1.29 (.24)	0.95 (.16)	0.99 (.16)
Unstably employed with only job loss	1.94 (.40)**	1.78 (.37)**	1.69 (.37)*	1.89 (.39)**	1.73 (.37)**	1.63 (.31)*
Unstably employed with both gain and loss	2.08 (.47)**	1.43 (.32)	1.77 (.42)*	2.53 (.54)***	2.08 (.51)**	1.61 (.36)*
N	2,363	2,363	2,363	2,363	2,363	2,363
Pseudo R^2	0.40	0.26	0.26	0.17	0.39	0.21

Note: The sample is restricted to those respondents aged between 25 and 64 at the time of initial interviews. Odds ratios and robust standard errors are presented. All models include a series of covariates from Table 3 and each outcome of interest at baseline. *** p<0.001, ** p<0.01, * p<0.05, †p<0.10