Measuring earnings instability using survey and administrative data

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Abstract

Earnings instability is measured to have different levels depending on the data source and type of measure. Understanding trends in earnings instability is important to understanding inequality, and if instability results based on survey data are inaccurate, administrative data may be a valuable alternate resource. We explore this topic by measuring earnings instability for the same set of individuals using multiple data sources: the Survey of Income and Program Participation (SIPP) and administrative earnings records from the Social Security Administration. We compare instability results for years ranging from 1984 to 2010 from the two data sources and also investigate how instability estimates are sensitive to different measures. Our results show a marked difference in instability estimates for the two data sources. In almost all cases, instability results based on the SIPP are higher than those based on the administrative data. Additionally, trends in instability differ depending on the data used.

I. Introduction

A large literature has documented the rise in cross-sectional inequality in earnings and family income in the U.S. since the 1970s. Beginning with Gottschalk and Moffitt's (1994) seminal work, an accompanying literature has examined the driving forces behind this phenomenon, focusing on trends in the within-person variance in earnings, i.e., earnings instability. The implications and causes of rising inequality due to permanent changes in income are very different from those due to increased earnings instability. Factors such as skill-biased technological change and increased international trade and outsourcing can raise the wages of skilled workers relative to unskilled workers, contributing to increased inequality.[1] Potential causes of rising earnings instability are very different and might include increases in job turnover, self-employment, and temporary work or increased prevalence of bonuses as part of compensation. From a policy standpoint, increased inequality due to increased earnings instability might not be so worrisome to policymakers if individuals and families are able to smooth their consumption and insure against temporary fluctuations in earnings more easily than permanent fluctuations.

Much of the work in this area aims to decompose earnings and income inequality into its permanent and transitory components and examine whether the variance of the transitory component has increased over time. The consensus of these studies is that male earnings instability began to increase in the 1970s and continued to rise through the mid-1980s.[2] However, studies using data since the mid-1980s differ in their results with some papers finding

[1] See Autor, Katz, and Kearney (2008).
[2] See Gottschalk and Moffitt (1994), Moffitt and Gottschalk (1995), Haider (2001), Stevens (2001), Hyslop (2001), Moffitt and Gottschalk (2002), Gottschalk and Moffitt (2006), Keys (2008), and Jensen and Shore (2010).

no trend and others finding increased or decreased instability.[3] More recently, many studies do not attempt to separate the permanent and transitory components of earnings variance, instead focusing on trends in the variance of year-to-year changes in annual earnings, often referred to as *earnings volatility*. Again, most of these studies have concluded that earnings volatility increased in the 1970s and early 1980s, but results using more recent data are mixed. Dynan et al. (2008) find that household head earnings volatility and household income volatility increased from the early 1970s to the early 2000s, and Shin and Solon (2010) find that men's earnings volatility rose during the 1970s and then again after 1998. In contrast, Dahl, DeLeire, and Schwabish (2011) find that earnings volatility has been fairly constant since the mid-1980s.

The purpose of this paper is to contribute to the earnings instability literature using a unique data source based on administrative earnings records and shed some light on the divergent findings for instability in recent years. Most of the literature on earnings instability and volatility uses survey data, often the Panel Study of Income Dynamics (PSID). The Current Population Survey (CPS) and the Survey of Income and Program Participation (SIPP) have also been used to study this topic. Several papers use administrative data sources, and the estimated levels of earnings instability are sometimes very different from those papers using survey data.[4] In this paper, we measure earnings instability for the same set of individuals using multiple data

[3] For example, Moffit and Gottschalk (2002) find that male earnings instability declined from the early 1990s to 1996. Using data through 2004, Moffit and Gottschalk (2012) conclude that the transitory variance of male earnings grew considerably in the 1970s and 1980s and remained at this higher level through 2004.

[4] Gottschalk et al. (2008) use the Longitudinal Employer-Household Dynamics data set (LEHD), which is created from Unemployment Insurance earnings reports, from 1991 to 2005 to measure the transitory variance of male earnings and find similar trends to Moffitt and Gottschalk (2012) using the PSID, but the magnitude of the fluctuations is much smaller using the administrative data. Using the matched CPS, SIPP, and the LEHD, Celik et al. (2009) find similar trends among the three data sets, but the estimated levels differ greatly.

sources contained in the SIPP Gold Standard File (GSF), a data set that links SIPP data to administrative earnings data from the Social Security Administration (SSA). Using both data sets, we are also able to explore the extent to which different measures of earnings instability are sensitive to differences in the two data sources.

To our knowledge, there are two existing studies that estimate earnings instability using earnings measures in both survey and administrative data for the same set of people. Juhn and McCue (2010) use the 1996 SIPP panel data linked to Unemployment Insurance (UI) earnings records in the LEHD and find that much of the difference in estimates from each data source is due to differences in earnings changes for people in the lower end of the earnings distribution. We use data from a wider range of years than Juhn and McCue (2010) and employ several different measures of earnings instability. The SSA earnings that we use also have uniform coverage over states and broader coverage of types of employment including self-employment. Dahl et al. (2011) use the same data that we employ in this paper but their focus is on income volatility. Dahl et al. (2011) present basic comparisons of survey and administrative earnings measures similar to our basic results in this paper, but they do not explore the extent to which the observed discrepancies between the measures are related to demographic characteristics or are related to demographic characteristics and transitions between employment and non-employment.[5]

[5] Since the focus in Dahl et al. (2011) is on income inequality (as opposed to earnings inequality), these authors make different sample restrictions than we make and obtain different estimates than we obtain and present here.

We use two different measures of earnings instability and consider how using survey versus administrative data affect the results. Our first measure of earnings instability calculates the share of workers who experience large fluctuations in their year-to-year earnings. We find that a rather large share of workers have large changes in their earnings, and this share is consistently greater using the survey data than the administrative data. Married couples and male workers are less likely to experience large earnings changes, and we find that a substantial portion of the measured instability is due to entry and exit out of employment. Based on our second instability measure, which measures the cross-sectional spread of the change in earnings, we again find that the survey data produces higher instability results in all but one subgroup: male workers with positive earnings. We also observe different trends in instability depending on the source of the data. Overall, both measures indicate that earnings instability results based on survey data may be quite different from results based on administrative data.

In Section II we discuss other papers that employ both survey and administrative data and how these relate to our work. We describe our data in Section III and present our estimates of earnings instability in Section IV. Section V concludes.

II. Background

External to the earnings instability literature, other studies have also used both survey and administrative data and examined differences in the data sources. Many of these papers focus on measurement error. Abowd and Stinson (2012) use SIPP survey data matched to earnings data from the SSA's Detailed Earnings Report (DER) to study measurement error in earnings at the job level. In their measurement error model, they do not assume that either the SIPP measure or the DER measure is true and note several reasons why the administrative data might be flawed.

The treatment of both health insurance premiums and employee benefits are two potential reasons for the survey and administrative data differences. Additionally, firm re-organizations may cause workers to receive multiple W-2's, making the matching of survey data to administrative jobs difficult.[6]

Gottschalk and Huynh (2006) also use the SIPP matched to earnings records from the DER to study measurement error and its impacts on measures of inequality and mobility. They find that the SIPP earnings data has considerable non-classical measurement error, and as a result, inequality is underestimated in the SIPP. Abraham et al (2009) compare the employment status of individuals using the Current Population Survey (CPS) data matched to UI wage records. They find large discrepancies between the two data sources and provide support for the hypothesis that these discrepancies are more prevalent for marginal workers and jobs. These differences could have important implications for labor market analysis and the estimated effects of policy on labor market outcomes. Roemer (2002) compares March CPS and SIPP data to matched DER data. While CPS and SIPP workers have nearly identical wage distributions using the DER, the March CPS has higher aggregate wages than the SIPP. Compared to the administrative data, the March CPS has relatively more small and large discrepancies while the SIPP has relatively more medium-sized discrepancies. Wages are under-reported more often in the SIPP than in the March CPS, shifting the SIPP wage distribution to the lower end.

The findings in these studies could have important implications for our focus on earnings instability. While survey data is most commonly used in the earnings instability literature, more recently administrative data sources are receiving more attention. However, as discussed above,

[6] False matches between survey data and administrative jobs may also result from the incorrect assignment of social security numbers to survey sample persons.

administrative data is not flawless, and it is important to understand why administrative and survey sources on employment on earnings may differ.

In our study, we use both administrative and survey sources for annual earnings for the same set of people to estimate measures of earnings instability. We compare instability estimates using the two different sources and also explore how the difference in estimates is sensitive to the chosen instability measure.

III. Data

We use data from an early edition of Version 6.0 of the SIPP Gold Standard File (GSF). The GSF is a restricted-use dataset that combines data from nine panels of the Survey of Income and Program Participation (SIPP) linked to administrative data from the Social Security Administration (SSA) on earnings and Social Security benefits.[7,8]

The SIPP sample persons in the GSF are linked to the administrative records by Social Security Number (SSN). With informed consent from sampled households, SIPP sample persons are matched to their SSN using the Census Bureau's Person Identification Validation System (PVS).[9] By formal arrangement between the Census Bureau and SSA, the latter uses this "crosswalk" between SIPP identifiers and SSN to deliver to the Census Bureau administrative

[7] SIPP panels included in the GSF 6.0 are 1984, 1990-1993, 1996, 2001, 2004, and 2008. The only SIPP panels not included in GSF 6.0 are 1985-1988. Linked data is not currently available for these panels. For information on sampling and nonsampling error see www.census.gov/sipp/source.html.

[8] The estimates in this report (which may be shown in text, figures, and tables) are based on responses from a sample of the population and may differ from actual values because of sampling variability or other factors. As a result, apparent differences between the estimates for two or more groups may not be statistically significant. All comparative statements have undergone statistical testing and are significant at the 95-percent confidence level unless otherwise noted.

[9] See Mulrow, Mushtaq, Pramanik, and Fontes (2011) for an accessible description of the PVS.

data for the linked sample persons. Our work with these linked data has been with an anonymized version that replaces each SSN with a Protected Identity Key (PIK) and redacts other person-identifying information.

Some sample persons are not successfully matched to a SSN during the PVS process. These records have no PIK assigned and have missing administrative records variables in the GSF. To account for possible selection in which sample persons are assigned a PIK and are included in our analysis, we weight our linked analysis sample by the inverse of the probability of having a PIK assigned. Our probability model of successful PIK assignment is a probit model, estimated by SIPP panel, and uses age and indicators for gender, race, and Hispanic origin as independent variables. These demographic variables in the GSF are based on SIPP data.

The GSF contains two sets of administrative data on earnings from SSA: the Detailed Earnings Record (DER) and the Summary Earnings Record (SER). The SER for each linked sample person is a record of (FICA-capped) annual earnings for each linked sample person from 1951 to 2009. The DER for each linked sample person includes employer-level (uncapped) annual earnings by whether the earnings were FICA-covered and whether the earnings were deferred. The DER also records annual earnings from self-employment. In our analysis, we use the earnings from the DER for the years 1984 to 2010.

The GSF contains a detailed marital history for each adult sample person based on the SIPP core interview and the SIPP Marital History Topical Module (administered in one wave per panel). However, in the GSF, a person record contains a link to a spouse record only for the sample person's first SIPP-observed marriage during the panel. For example, a sample person

who begins a SIPP panel during her second marriage would have a link to her second husband (if he were also a SIPP sample person).

SIPP samples are not designed to be representative of the US population without the use of the appropriate sampling weights. We use the published final person-level calendar year SIPP sampling weights.[10] To have a positive calendar year weight, a sample person must have interview data recorded for every month of the calendar year. The interview for a wave may be a whole-person impute, but only if at least one member of the household provided an interview for the wave. In these person weights, the sampling weight of sample persons households that were entirely missing from SIPP during a wave are given to otherwise similar responding households. Additional adjustments for variance reduction and coverage correction are also part of these weights.

The GSF also contains survey-reported earnings at the person-month level for the months that each respondent was in a SIPP panel. We sum these monthly amounts at the person-year to create survey measures of calendar year earnings. For some person-years, there are months with no earnings reports, since the SIPP panels cover some calendar years incompletely, and because some respondents fail to participate in all of the waves of their respective panels.

The survey-reported earnings measure in the GSF, like the DER-based measure that we use, includes earnings from both employment and from self-employment. Differences between the two measures can arise from misreporting in the survey of job-specific earnings, misreporting in the survey of jobs held, or error in the administrative data.

[10] See the revised version of Chapter 8 of the SIPP User's Guide at http://www.census.gov/sipp/usrguide.html

Discrepancies may also exist due to accurate reporting in the survey of employment that was not reported to the IRS via Form W-2 or self-employment that was not reported to the IRS via Form 1040. Stinson, Gathright, and Skog (2012) link recent SIPP data about employment relationships to Form W-2 data and find that survey reported jobs for which there is no corresponding Form W-2 are typically in reported industries where off-the-books work is believed to be common. As discussed in the previous section, Abraham et al. (2009) find evidence that CPS reported jobs for which no unemployment insurance earnings records exist are more likely to be off-the-books jobs.

Table 1 presents un-weighted summary statistics for the years in our data. Because we are interested in calculating changes in year-to-year earnings, we present statistics for SIPP and DER earnings for each year of our data as well as for the preceding year. That is, the earnings in the supercolumns labeled Year 1 are from the year preceding the year indicated in the row title. The earnings for Year 2 are for the indicated year. For example, there are 20,347 SIPP respondents that were matched to the administrative data and are aged 25-59 for the years 1986 and 1985. For these individuals, average survey earnings is $22,587 in 1985 and $21,636 in 1986 and average administrative earnings is $26,332 in 1985 and $27,503 in 1986. Because the administrative earnings data are reported in annual amounts, we restrict our sample to survey respondents that are present for the full calendar year. Because the SIPP uses a rotating panel survey structure, rotation groups have different starting and ending dates, and annual measures are not available for part of the sample at the beginning and ending of the panels. Therefore, sample sizes are different each year; additionally, individuals age into and out of the sample. Two year periods with full calendar year measures from our SIPP panels are 1984-1985, 1990-

1991, 1991-1992, 1992-1993, 1993-1994, 1996-1997, 1997-1998, 1998-1999, 2002-2003, 2004-2005, 2005-2006, and 2009-2010.

From inspection of the raw earnings statistics, mean DER earnings are higher than mean SIPP earnings and tend to be more widely distributed for this sample. However, it is unclear without further analysis how this might affect estimates of earnings instability.

					Annual SIPP Earnings				Annual DER Earnings			
					Year 1		Year 2		Year 1		Year 2	
Year	N	Age	Male	Married	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
1985	20347	40.1	0.48	0.72	22,587	24,007	21,636	24,895	26,332	34,262	27,503	38,055
1991	23117	40.1	0.48	0.67	28,460	26,252	27,586	26,264	30,068	60,083	29,705	69,157
1992	14582	40.4	0.49	0.69	28,335	26,605	28,081	26,623	29,377	37,201	30,726	76,430
1993	20291	40.6	0.48	0.69	28,041	26,065	27,693	25,916	29,957	45,329	30,395	44,359
1994	20076	40.9	0.48	0.69	28,368	26,577	28,041	26,316	30,024	46,393	30,898	59,619
1997	34996	41.3	0.48	0.67	28,977	34,902	29,580	36,042	30,295	43,946	31,607	46,048
1998	31949	41.6	0.47	0.67	30,890	36,152	31,005	36,971	31,531	45,428	33,011	43,692
1999	29994	41.9	0.47	0.67	32,121	37,315	32,028	38,163	33,003	43,070	34,288	60,527
2002	21410	42.2	0.47	0.65	32,825	36,778	31,604	37,374	33,566	51,112	33,120	46,984
2005	39808	43.0	0.47	0.66	34,507	45,797	32,792	45,493	35,473	83,297	35,249	53,997
2006	38128	43.2	0.47	0.65	33,146	45,624	24,944	34,992	34,688	52,359	35,856	89,457
2010	38640	43.5	0.48	0.62	30,681	39,272	28,591	38,279	33,629	58,192	33,344	73,370

Source: U.S. Census Bureau, Survey of Income and Program Participation, 1984, 1990, 1996, 2001, 2004, and 2008 Panels.
Notes: Includes individuals aged 25-59. SIPP survey earnings and DER earnings from the SSA Master file are reported in 2006 dollars.

IV. Earnings Instability Estimates

We estimate earnings instability two different ways. Both methods use simple statistics and capture different aspects of earnings instability; by using two different methods, we are able to examine how our data sources may affect different definitions of instability. First, we use the method of Dahl et al. (2011) who use a similar SIPP sample linked to the same administrative earnings as in the GSF to study large year-to-year changes in household earnings and income. Dahl et al. (2011) also use both survey and administrative data sources, but their focus is different from ours. They use administrative data on earnings and add this to total household survey nonlabor income to create a measure of household income. The second earnings instability measure we use is also a simple, descriptive measure. This method, used by Shin and Solon (2011) as well as others, measures the dispersion of year-to-year changes in earnings. In particular, we calculate the standard deviation of the change in earnings and log earnings. Increases in earnings instability will result in an increase in the cross-sectional spread of earnings changes.

Using the method of Dahl et al. (2011), we measure earnings instability by examining the share of individuals or married couples who experienced large changes in earnings from one year to the next. Specifically, we calculate the arc percentage change in earnings between two years as

$$\Delta_t = (Y_t - Y_{t-1})/((Y_t + Y_{t-1})/2)$$

where Y_t denotes earnings in year t. Using the arc percentage change provides a measure of percentage change that is symmetric with respect to the reference year for measuring change. While the arc percentage change is not defined when earnings are 0 in both years, it is defined

when earnings in one of the two years is 0. Therefore, person-years or couple-years with 0 earnings in the given and preceding years are not included in the analysis. Earnings instability is then measured by calculating the percent of individuals or couples whose earnings change by 50% or more from the previous year. Percent changes for married couples are calculated using combined earnings.

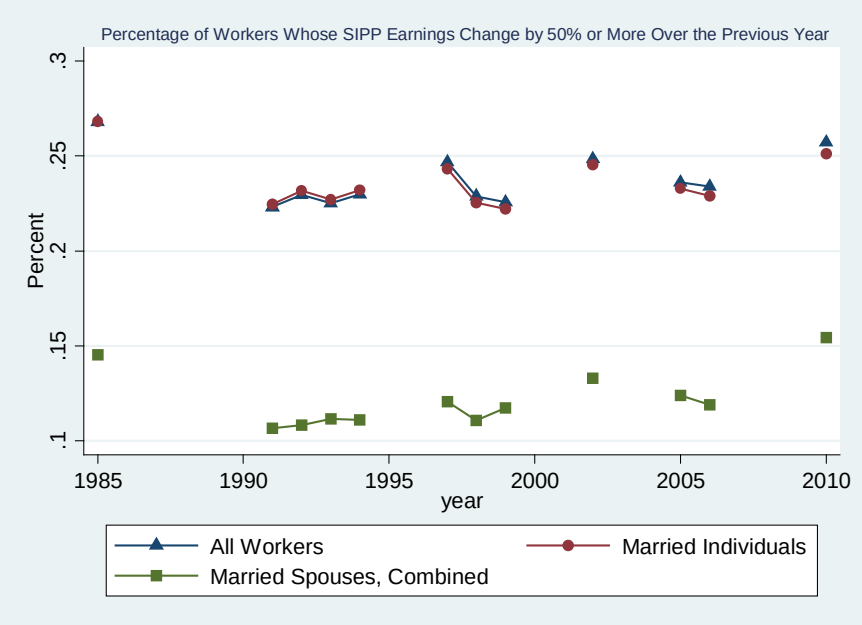
The second method begins by regressing, separately for each year, the change in earnings (or log earnings) from the previous year on a quadratic function in age in order to remove year and life-cycle effects. We then use the standard deviation of the residuals from these regressions as our measure of earnings instability. We use log earnings when we restrict our analysis to persons with positive earnings in both of the two relevant years and the level amount of earnings, not in logs, when we include observations with zero earnings. We make an additional rescaling adjustment to the residuals from the level earnings regressions by dividing by the sample mean of real earnings in the two years.

We employ similar sample restrictions as done in other papers in the earnings instability literature. We restrict our sample to individuals aged 25-59 who are not in school and have positive earnings in at least one of the two relevant years. Additionally, because we are interested in comparing earnings instability measures using different data sources for the same set of people, we restrict our sample to individuals who are able to be matched to the administrative data. To remove outliers, we trim the top and bottom 1% of earners in each year. In our analysis of married couples, we trim based on the couple's combined earnings. As discussed earlier, we weight our results using the SIPP person-level calendar year sampling weights adjusted for the probability of matching to the administrative data.

We present our first set of earnings instability estimates in Figure 1a and Figure 1b. We calculate the percentage of workers with large changes in annual earnings for three different groups: all workers, married individuals, and married couples. Figure 1a shows results using the SIPP earnings data, and Figure 1b shows results using the DER earnings data. The fraction of people who experience large changes in earnings is large, ranging between about 23% and 27% of individuals using SIPP data and between about 20% and 26% using DER data. The estimates are not different for the earlier years of data, and in the later years, instability estimates are higher using the SIPP than the DER. Using the DER, we do not find a trend in the results from the early 1990s through 2010, although the SIPP estimates have a slight overall positive trend for the all workers group and married spouses group. Earnings instability was not significantly different for the all workers group, and it declined only slightly for the married individuals group between 1985 and 2010 using the SIPP estimates whereas the DER estimates yielded a more significant decline. The share of married couples in each year that experience large changes to their combined earnings is considerable smaller than the share of the spouses separately, suggesting that spouses have somewhat offsetting changes in earnings. The SIPP estimates indicate an increase (at the 90% confidence level) in this fraction between 1985 and 2010 whereas the DER estimates indicate a decrease of several percentage points.

Figure 1: Percentage of workers whose earnings change by 50% or more from the previous year

(a) SIPP earnings



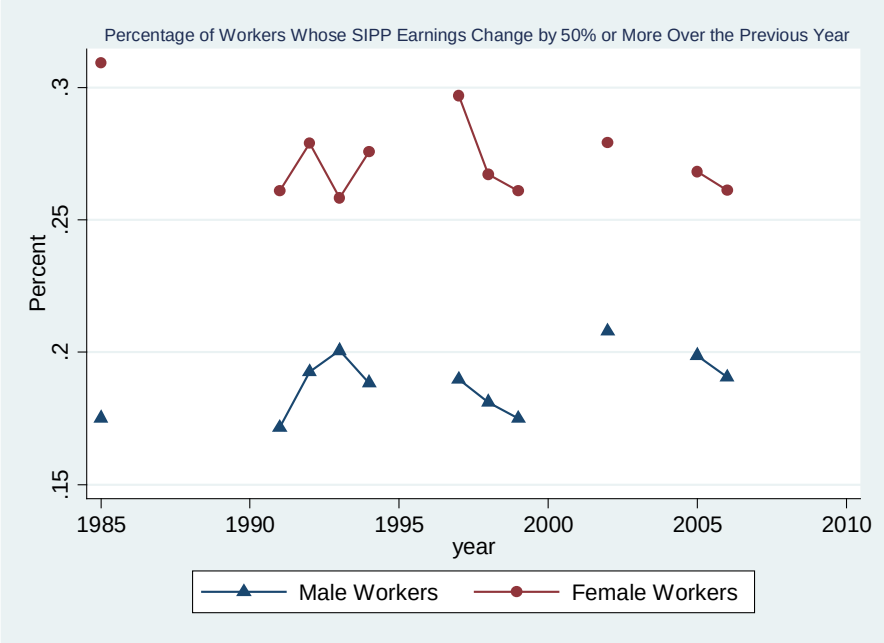
(b) DER earnings

Source for Fig. 1(a), (b): U.S. Census Bureau, Survey of Income and Program Participation, 1984, 1990, 1996, 2001, 2004, and 2008 Panels.

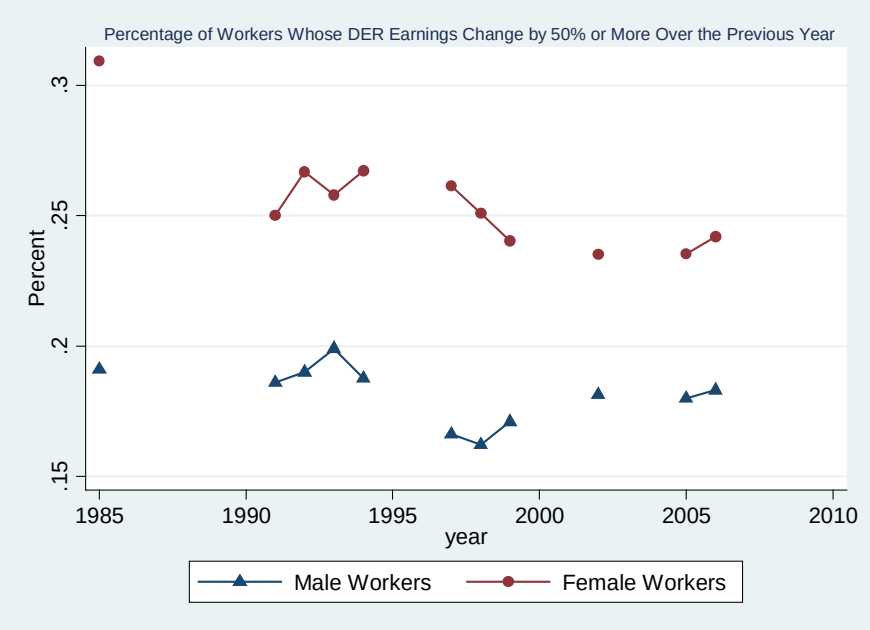
We next estimate earnings instability separately for male and female workers. Because female workers have a weaker attachment to the labor force than male workers, it is likely that much of the observed volatility in earnings is driven by women exiting or entering the labor force or switching between full and part-time employment. As shown in Figure 2, the share of female workers who experienced at least a 50% change in earnings is about 15 percentage points above the share of male workers in 1985 using SIPP data and about 12 percentage points higher using DER data. While the share of female workers with large year-to-year earnings changes is consistently higher for the whole sample period, this gap shrinks greatly in the last few years of the sample. Again, estimates based on the SIPP are higher than those based on the DER for most of the sample period.

Figure 2: Percentage of male and female workers whose earnings change by 50% or more from the previous year

(a) SIPP data



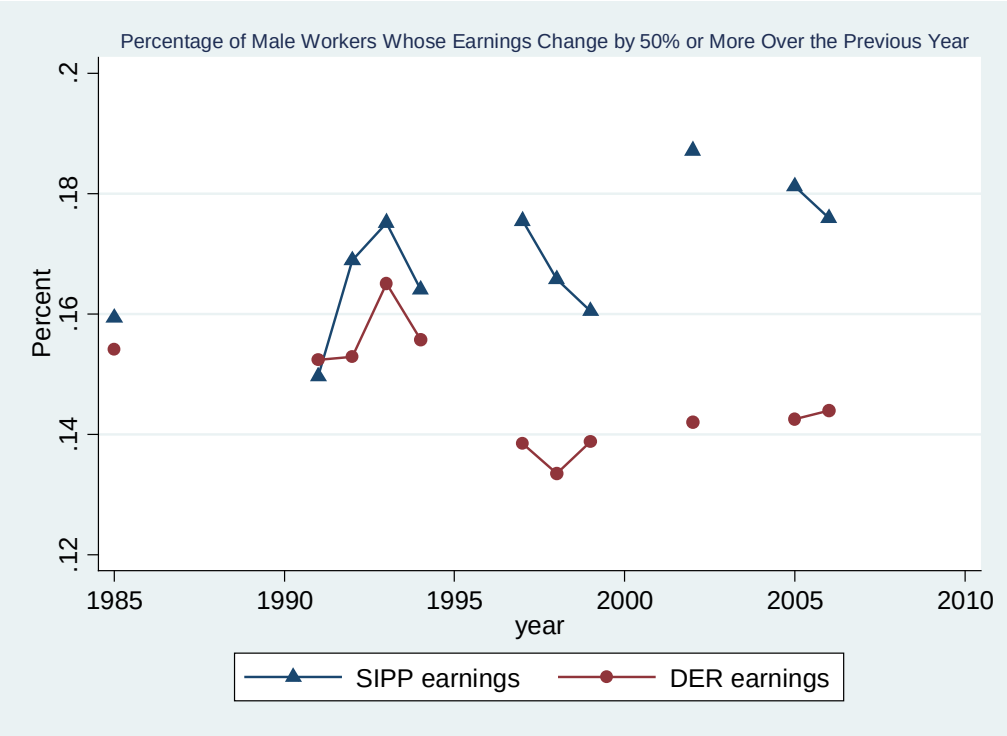
(b) DER data



Source for Fig. 2(a), (b): U.S. Census Bureau, Survey of Income and Program Participation, 1984, 1990, 1996, 2001, 2004, and 2008 Panels.

Thus far we have examined earnings instability without regard to employment entry and exit. While individuals or couples with zero earnings in two adjacent years are necessarily excluded from the analysis, an increase or decrease in year-to-year earnings of at least 50% is a significant change, and many individuals who fall into this group may not be employed at all during one of the two years. In order to have a better idea of how much these individuals are driving the results, we examine earnings volatility for the subset of our sample with positive earnings in both of the relevant years. We additionally restrict our sample to males, as males with positive earnings is the most commonly studied group in the instability literature. These results are presented in Figure 3. As expected, the levels of instability for this group are lower than for all workers, and again, estimates based on the SIPP are higher than the DER estimates for most years with the largest difference between the two seen in the later years of the data.

Figure 3: Percentage of male workers with positive earnings whose earnings change by 50% or more from the previous year

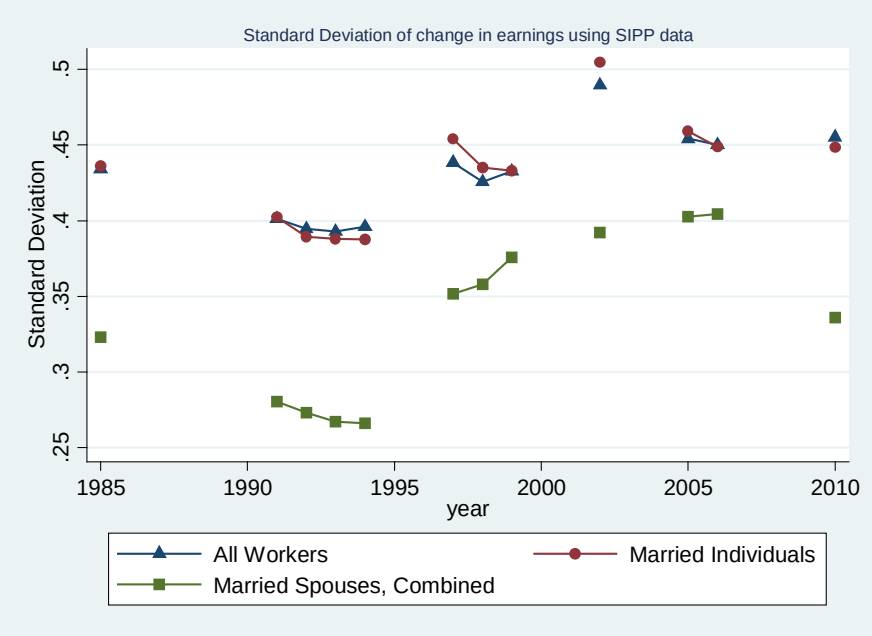


Source: U.S. Census Bureau, Survey of Income and Program Participation, 1984, 1990, 1996, 2001, 2004, and 2008 Panels.

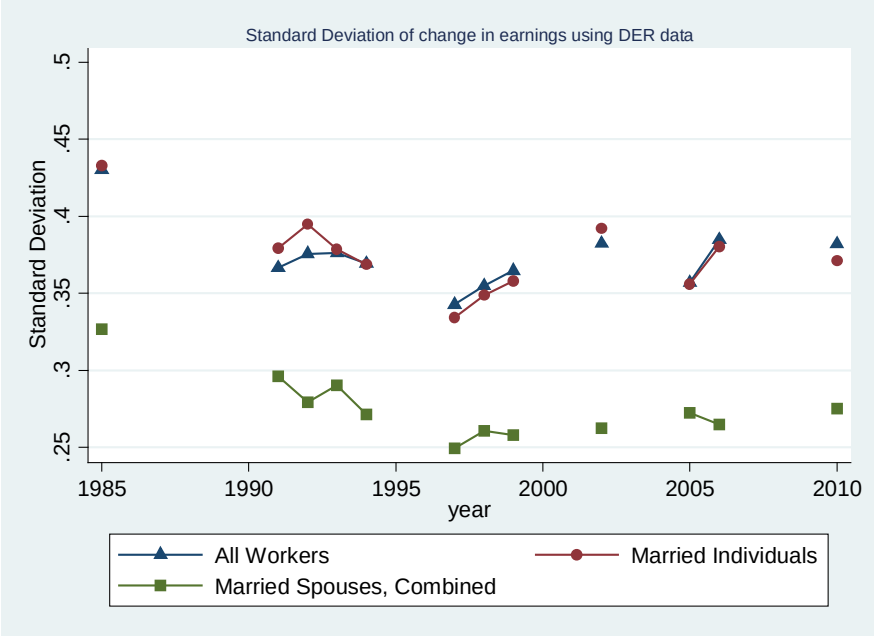
We next repeat the above analysis using our second measure of earnings instability based on the standard deviations of the change in year-to-year earnings. Figure 4 shows the first set of these results and is comparable to Figure 1 above. As with our previous results, estimates based on the SIPP tend to be higher than the DER results for the all workers groups; for the other groups of workers, the SIPP estimates are higher in certain years. The SIPP and DER yield estimates for 1984-1985 that are not different from each other, and then the estimates start to diverge in the early 1990s. The SIPP shows that earnings instability increased for all three groups from the early 1990s to the early 2000s before dropping, while the DER shows that instability did not increase or decrease significantly between the early 1990s and 2010.

Figure 4: Standard deviation of the age-adjusted change in earnings

(a) SIPP data



(b) DER data

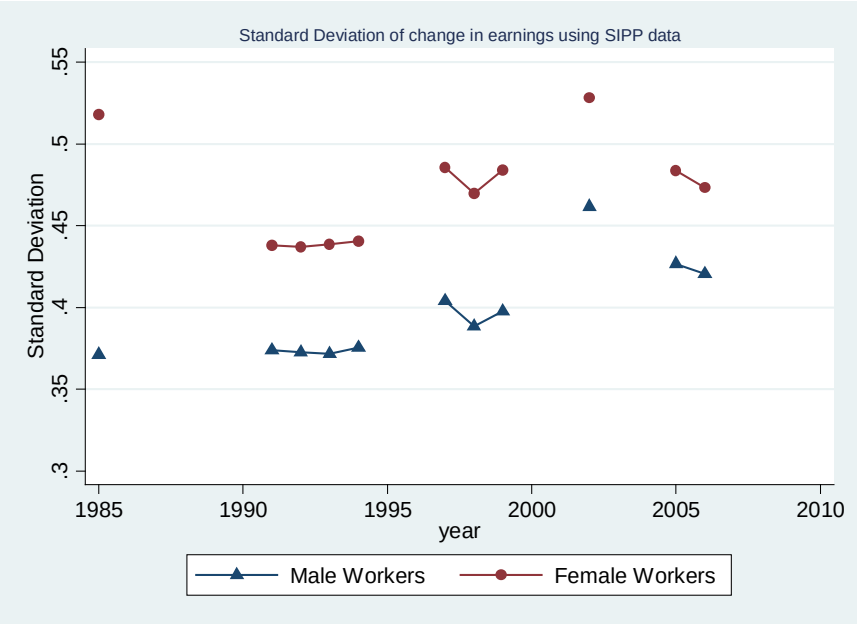


Source for Fig. 4(a), (b): U.S. Census Bureau, Survey of Income and Program Participation, 1984, 1990, 1996, 2001, 2004, and 2008 Panels.

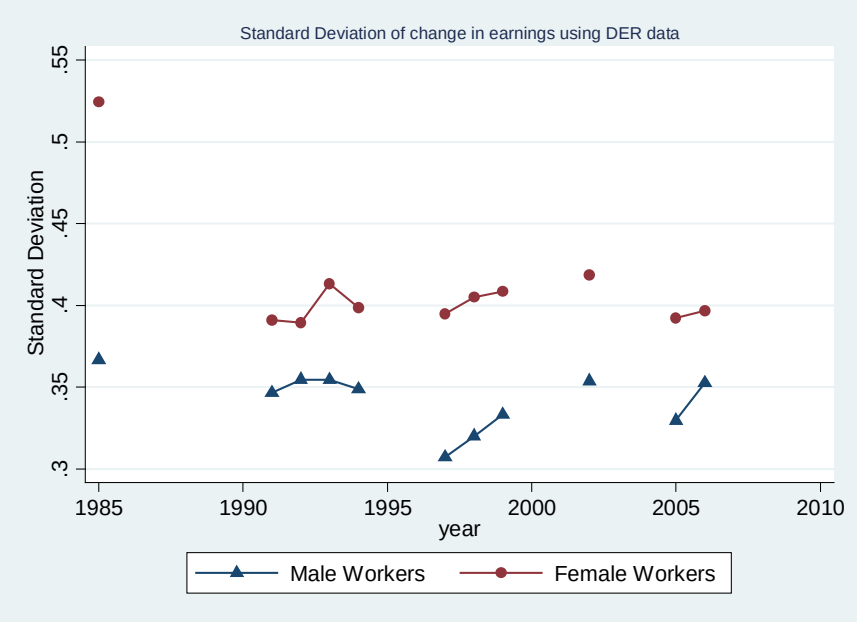
We next calculate results for male and female workers separately. Instability for female workers is greater than males, but, as we saw using our first instability measure, this difference decreases significantly from 1985 to 2010. SIPP estimates are again higher than DER estimates, and the SIPP shows an upward trend in instability from the early 1990s to 2003 whereas the DER indicates that instability is does not show a positive or negative trend.

Figure 5: Standard deviation of the age-adjusted change in earnings, calculated separately for male and female workers

(a) SIPP data



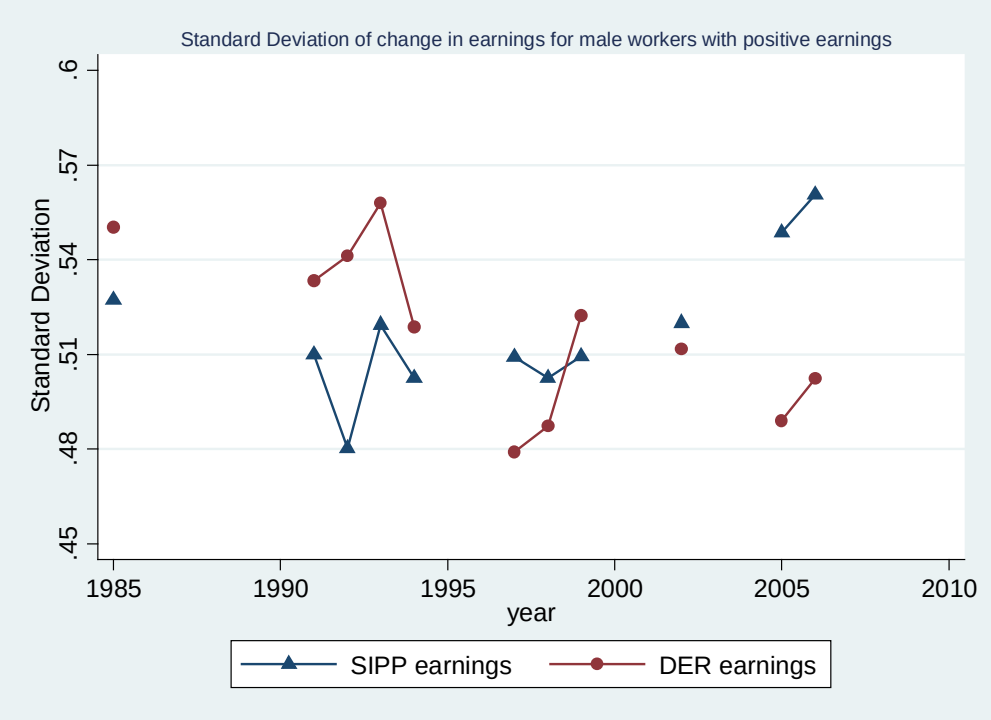
(b) DER data



Source for Fig. 5(a), (b): U.S. Census Bureau, Survey of Income and Program Participation, 1984, 1990, 1996, 2001, 2004, and 2008 Panels.

We next consider male workers with positive earnings, analogous to the results shown in Figure 3. Figure 6 shows these results, now using the residuals from log earnings regressions, for both data sources. In contrast to the previous results, instability estimates are larger using the DER for the first part of the sample period (through 1994) and also for 1999. The SIPP shows a positive trend in instability beginning in 1990 whereas the DER indicates decreasing instability over the same time period.

Figure 6: Standard deviation of the age-adjusted change in earnings for male workers with positive earnings



Source: U.S. Census Bureau, Survey of Income and Program Participation, 1984, 1990, 1996, 2001, 2004, and 2008 Panels.

V. Conclusion

We document that administrative earnings from the SSA's DER file tend be higher than reported earnings in the SIPP. Both studied measures of earnings instability yield higher estimates using SIPP data than the DER data in all cases but one. We also find that the different data sources can show different trends in instability. While our first earnings instability measure shows that instability does not increase or decrease significantly beginning in the early 1990s (regardless of the data source used), our second instability measure, calculated as the dispersion in earnings changes, shows upward trends in instability using the SIPP data. In contrast, estimates based on the DER do not show this trend.

Our results may partially explain the divergent findings in the earnings instability literature. Results based on survey data overstate instability compared to administrative data results, but it is important to realize that administrative data is not necessarily without its flaws. Additionally, careful consideration should be given to the differences in the data sources and what they are individually measuring. In this paper, we have begun examining earnings instability for different subgroups of the population and plan to continue this work by exploring what may explain the difference in results for the two data sources.

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