



# Before and After the Pandemic: Income Volatility, Health Care Affordability, and Debt

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# Background

Many Americans' incomes vary from month to month. The sources that cause income volatility are hard to predict, such as involuntary departure from a job<sup>1</sup>, in-job irregular work schedules or unstable work hours<sup>2,3</sup> and inconsistent receipt of government benefits.<sup>4</sup> Workers who rely exclusively on gig work or have unexpected illnesses that prevent them from working may also encounter income instability.

Annual income numbers do not capture the fact that income may fluctuate widely from month to month, or even quarter to quarter, over the course of the year. Families that experience year-to-year income gains and losses experience diminished financial well-being and have less savings than households with stable income<sup>5</sup>. The economic state of those reporting income variation *within* a year is even more precarious, with substantial subgroup differences<sup>6,7</sup>. And household consumption is highly sensitive to changes in month-to-month income, especially for those at the bottom of the income distribution<sup>8,9</sup>.

Volatility in workers' incomes could lead them to make different financial planning decisions, such as not saving as much<sup>10</sup>. This might presumably lead to taking on unsecured debt, which is

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<sup>1</sup> Federal Reserve Board. 2014. Report on the economic well-being of US Households in 2013.

<https://www.federalreserve.gov/econresdata/2013-report-economic-well-being-us-households-201407.pdf>

<sup>2</sup> Hannagan, Anthony, and Jonathan Morduch. 2015. "Income Gains and Month-to-Month Income Volatility: Household Evidence from the US Financial Diaries," no. NYU Wagner Research Paper No. 2659883, US Financial Diaries Working Paper (September). <https://doi.org/10.2139/ssrn.2659883>.

<sup>3</sup> Morduch, Jonathan, and Julie Siwicki. 2017. "In and Out of Poverty: Episodic Poverty and Income Volatility in the US Financial Diaries." *Social Service Review* 91 (3): 390–421. <https://doi.org/10.1086/694180>.

<sup>4</sup> Ben-Ishai, Liz. 2015. "Volatile Job Schedules and Access to Public Benefits." Center for Law and Social Policy. <https://www.clasp.org/wp-content/uploads/2022/01/2015.09.16-Scheduling-Volatility-and-Benefits-FINAL.pdf>.

<sup>5</sup> Pew Charitable Trust. 2017. "How Income Volatility Interacts With American Families' Financial Security." Available at [https://www.pewtrusts.org/-/media/assets/2017/03/incomevolatility\\_and\\_financialsecurity.pdf](https://www.pewtrusts.org/-/media/assets/2017/03/incomevolatility_and_financialsecurity.pdf)

<sup>6</sup> Gennetian, Lisa, and Bradley Hardy. 2023. "The Financial and Psychological Costs of Income Volatility." Available at <https://econofact.org/the-financial-and-psychological-costs-of-income-volatility>

<sup>7</sup> Schneider, Daniel, and Kristen Harknett. 2019. "It's About Time: How Work Schedule Instability Matters for Workers, Families, and Racial Inequality". Available at <https://shift.hks.harvard.edu/files/2019/10/Its-About-Time-How-Work-Schedule-Instability-Matters-for-Workers-Families-and-Racial-Inequality.pdf>

<sup>8</sup> Fisher, Jonathan, and Bradley L. Hardy. 2023. "Money matters: consumption variability across the income distribution." *Fiscal Studies* 44, no. 3: 275–298.

<sup>9</sup> Ganong, Peter, Damon Jones, Pascal J. Noel, Fiona E. Greig, Diana Farrell, and Chris Wheat. 2020. "Wealth, race, and consumption smoothing of typical income shocks." No. w27552. Cambridge, MA: National Bureau of Economic Research.

<sup>10</sup> Peetz, Johanna, Jennifer Robson, Silas Xuereb. 2021. "The Role of Income Volatility and Perceived Locus of Control in Financial Planning Decisions." *Frontiers in Psychology*, 12, p.638043.



unattached to how much collateral (aka property) a person has. In the United States, many low-income and middle class people experiencing job loss have sudden expenses that they are unable to pay, such as non-discretionary expenditures like out-of-pocket medical expenses<sup>11</sup>. For service workers in particular, schedule unpredictability is an important predictor of having high cost debt from sources like payday loans, pawn shop loans, auto-title loans, overdrafts, and problematic credit card debt<sup>12</sup>.

Despite the declining uninsured rate across the country (over 90 percent of the US population<sup>13</sup> has some form of health insurance in 2023, with over 20 million opting into the Affordable Care Act Marketplace plan in 2024<sup>14</sup>), affordable health care access is out of reach for many because it is often tied to employment status. High medical bills can create a financial burden, and income instability makes it harder to pay those bills, which can drive people into debt<sup>15</sup>. Prior work using US data has showed the negative role that inconsistent income and job churning may play on workers' health per se<sup>16,17,18</sup>.

However, it is crucial to acknowledge that there is still much we need to learn empirically about the relationship between income instability, a worker's health care hardship, and their potential unsecured debt burden. While there is promising literature in the general area of research of income instability, these papers do not directly address the relationship between income instability and unsecured debt. Most literature that exists is from before the pandemic. There is not a large pool of research examining the periods directly before and after the onset of the

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<sup>11</sup> Schaller, Jessamyn, and Ann Huff Stevens. 2015. "Short-run effects of job loss on health conditions, health insurance, and health care utilization." *Journal of Health Economics*, 43, 190–203.

<sup>12</sup> Amorim, Mariana, and Daniel Schneider. 2022. "Schedule Unpredictability and High-Cost Debt: The Case of Service Workers." *Sociological Science* 9: 102–135.

<sup>13</sup> Keisler-Starkey, Katherine, and Lisa N. Bunch. 2024. "Health Insurance Coverage in the United States: 2023." Available at <https://www2.census.gov/library/publications/2024/demo/p60-284.pdf>

<sup>14</sup> Centers for Medicare & Medicaid Services. 2024. "Historic 21.3 Million People Choose ACA Marketplace Coverage." Available at <https://www.cms.gov/newsroom/press-releases/historic-213-million-people-choose-aca-marketplace-coverage>

<sup>15</sup> Addo, Mina, and Lisa Servon. 2021. "Income volatility and health care decisionmaking." Brookings Institution. Available at [https://www.brookings.edu/wp-content/uploads/2021/05/20210506\\_ServonAddo\\_IncomeVolatilityHealthcare\\_Final.pdf](https://www.brookings.edu/wp-content/uploads/2021/05/20210506_ServonAddo_IncomeVolatilityHealthcare_Final.pdf)

<sup>16</sup> Bania, Neil, and Laura Leete. 2022. "Monthly income volatility and health outcomes." *Contemporary Economic Policy* 40, no. 4: 636–658.

<sup>17</sup> Schaller, Jessamyn, and Ann Huff Stevens. 2015. "Short-run effects of job loss on health conditions, health insurance, and health care utilization." *Journal of Health Economics*, 43, 190–203.

<sup>18</sup> Strully Kate W. 2009. "Job Loss and Health in the U.S. Labor Market." *Demography*. 2009;46:221–246.



pandemic, and how this experience affected different groups of workers and their economic well-being.



# Key Findings

- Those with volatile incomes are more likely to have healthcare affordability issues compared to those with stable incomes. The chance of having trouble affording medical care increases by 7 percentage points when someone experiences income volatility.
- The likelihood of having unsecured debt increases by 3 percentage points when someone has an unstable income.
- Volatility, in and of itself, is a problem for workers of all incomes. Month-to-month income variability is economically and statistically significant even after controlling for income level.
- During the pandemic recovery, the share of workers reporting month-to-month income instability remained unchanged relative to pre-pandemic level. However, certain groups within the overall sample displayed notable changes over time, as well as variations from the national average.
- Workers in the West South Central region of the US— Arkansas, Louisiana, Oklahoma, and Texas – had markedly unstable incomes (roughly 34 percent).
- The unfavorable income volatility phenomenon is more concentrated among Hispanics (38 percent) and Black workers (36 percent). Hispanic workers saw an improvement in their income stability during the recovery.
- The industry with the highest rate of inconsistent income is Leisure and Hospitality (46 percent), with Agriculture, Wholesale and Retail Trade following behind. Business related industry work has the lowest rate of unstable incomes.

# Data and Related Information

In this report, we use pooled data from the Survey of Household Economics and Decisionmaking 2018–2022 with a measure of income volatility that is based upon respondents’ own assessment of how their month-to-month income varied<sup>19</sup>. Note that researchers applied other approaches to measure income instability using household panel data, such as the magnitude and directions of frequent income swings<sup>20,21,22</sup>.

We define health care affordability as respondents who report they needed but could not afford to seek one of the following: a prescription, a doctor or specialist visit, dental care, or mental health care. For our examination of debt, we particularly look at “unsecured debt.” This type of debt is different from “secured debt” such as mortgages or car loans, which require the borrower to prove they have sufficient collateral or savings. We include two common forms of unsecured debt: medical bills and credit card debt<sup>23</sup>. Unsecured debt can be problematic because it tends to carry much higher interest rates. Given that it is riskier for the lender, default rates tend to be high, industries like payday lenders are unregulated, and vital medical care can saddle a person with thousands of dollars worth of bills. We recognize that, in some situations, both secured and unsecured debt can be beneficial tools towards building stability and wealth for many Americans; however, unsecured indebtedness may jeopardize long-term economic sustainability for those confronting labor market churn and, thus, income swings.

The subsequent sections present the demographic profile of those experiencing income instability. We then present regression-adjusted results unpacking a worker’s chance of having

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<sup>19</sup> Gennetian, Lisa, and Bradley Hardy. 2023. “The Financial and Psychological Costs of Income Volatility.” Available at <https://econofact.org/the-financial-and-psychological-costs-of-income-volatility>

<sup>20</sup> Gennetian, Lisa A., Sharon Wolf, Heather D. Hill, and Pamela A. Morris. 2015. “Intrayear household income dynamics and adolescent school behavior.” *Demography* 52, no. 2, 455–483.

<sup>21</sup> Hardy, Bradley L., and Dave E. Marcotte. 2020. “Ties that bind? Family income dynamics and children’s post-secondary enrollment and persistence.” *Review of Economics of the Household*, 1–25.

<sup>22</sup> Ziliak, James P., Bradley Hardy, and Christopher Bollinger. 2011. “Earnings volatility in America: Evidence from matched CPS.” *Labour Economics* 18, no. 6, 742–754.

<sup>23</sup> We acknowledge that student loans are also unsecured debt, and this brief focuses on medical bill hardship. Compared to student loan debt, medical debt might have higher interest, and those who cannot afford the medical payment may put it on the credit card and might see their credit card debt pile up. We choose not to include student loans in our analysis of unsecured debt among workers aged 18 and above.



medical care hardship and bearing unsecured debt when facing unstable income. As a supplemental analysis, we descriptively show the income instability situation before and after the pandemic by groups according to a worker's region, industry, race and ethnicity, education attainment, and income levels. We end with a brief discussion of potential policy solutions.



# Demographic Portrait of Income Instability

**Table 1**

## Stability vs Instability: A Breakdown

*Expressed in percentages*

	All	Workers with Stable Income	Workers Reporting Income Instability
Cannot afford medical care	26	21	35
Has any unsecured debt	49	48	52
Has health care insurance	88	92	80
<b>Race and Ethnicity</b>			
White	62	64	59
Black	12	11	13
Hispanic	17	15	21
Other	9	9	7
<b>Age</b>			
18 to 24	7	6	11
25 to 34	25	24	25
35 to 44	22	23	21
45 to 54	18	19	16
55 plus	28	28	26
<b>Education</b>			
Less than high school degree	4	3	6
High school degree or GED	21	19	24
Some college/Associate's degree	33	31	38
Bachelor's degree and above	43	48	32
<b>Income</b>			
\$0 to \$24,999	21	16	32
\$25,000 to \$49,999	16	15	19
\$50,000 to \$74,999	15	15	14
\$75,000 to \$99,999	12	13	10
\$100,000 to \$149,999	17	19	12
\$150,000 to \$199,999	10	12	6
\$200,000 or higher	10	11	7

\*Note: Unsecured debt includes medical debt and/or unpaid credit card debt

Source: Authors' analysis of the Survey of Household Economics and Decisionmaking 2018–2022



Table 1 reports the demographic breakdown of workers with stable incomes and those experiencing income instability. Our sample includes adults aged 18 or over who held a job at the time of survey. This sample selection may underestimate the prevalence of income instability, since workers with intermittent employment status and subsequent variable income would not be captured in this number.

There are a few key highlights of this breakdown. We see that while 26 percent of the total sample cannot afford their medical care, 35 percent of those with income instability experience unaffordability. While 88 percent of the sample has health insurance, just 80 percent of those with income instability do. Nearly half of the sample reports having any credit card debt they cannot pay off in the next cycle, or any medical debt. Those with inconsistent income are slightly more likely to fall into this category. Hispanics disproportionately have income instability; they are 17 percent of the sample but 21 percent of the group with unstable incomes. Seven percent of the sample is young workers aged 18–24, but this group comprises 11 percent of those with income instability.

## **Higher Income Volatility Linked to Health Care Unaffordability and Debt**

To understand how variable income experience relates to workers' outcomes of interest, we show in Figure 1 the likelihood of having healthcare hardship or unsecured debt for those with income volatility relative to their counterparts who are stable economically and have similar demographic makeup. We present both unadjusted and adjusted results from the linear probability models (in Appendix Table A1)



Figure 1

## Higher Income Volatility Links to Health Care Unaffordability and Debt

*Regression-adjusted likelihood of having medical hardship or owing unsecured debt*



Please see unadjusted and adjusted results in Table A1.

Source: Authors' analysis of the Survey of Household Economics and Decisionmaking 2018–2022



Consistent with the pattern described above, our results suggest that income volatility is linked to someone's ability to afford medical care. On average, those who report short-term income variability appear to have a 7.3-percentage-point increase in difficulty affording medical care relative to those with stable income (see Figure 1).

Experiencing income instability is associated with a 3.1-percentage point increase in the rate of having unsecured debt. Put simply, after considering workers' demographic factors, job-related characteristics, and state of residence, the likelihood that a worker owes unsecured debt increases if they are experiencing income volatility<sup>24</sup>.

## Group Differences in Income Instability Before and After the Pandemic

As a supplemental analysis, Table 2 (comprising five-domain tabs) shows the share of those reporting month-to-month income instability before and after the pandemic. It is broken down according to a worker's region of residence, industry, race and ethnicity, education level, and income gradient. Below we discuss these results<sup>25</sup>.

<sup>24</sup> There are fewer respondents reporting debt questions of interest in 2018 data. The job loss event in 2020 might have a large impact on healthcare and debt-related outcomes. As a sensitivity check, we also test the relationship between income instability and debt or healthcare affordability by excluding years 2018 and 2020 and results are highly similar.

<sup>25</sup> In PDF version, results for subsequent text can be found in Appendix Table 2.



### *Region of Residence*

Across most regions, the share of workers with variable income slightly decreases in the pandemic recovery, relative to the average of 2018 and 2019. The West–South Central region still sees the highest percentage of its residents reporting income instability between 2021 and 2022. That is, slightly over one–third of workers residing in Arkansas, Louisiana, Oklahoma, and Texas experienced short–term income instability both in the pre–pandemic and pandemic recovery period. There is not wide variation between the different regions. A noticeable change from year to year was seen in New England (Maine, Vermont, New Hampshire, Massachusetts, Connecticut and Rhode Island), where the share of those experiencing income volatility declined by roughly 12 percent from pre–pandemic to the pandemic recovery period. However, places in the South–Atlantic region (such as Maryland, West Virginia, Georgia, and Florida) saw an approximately 5 percent increase in workers facing income instability.

### *Industry*

Due to the strong labor market during the pandemic economic recovery – as people gradually were getting back jobs, especially higher quality jobs – one would expect to see a decline in income volatility. In fact, the share of workers experiencing income volatility did not fluctuate much before and after the onset of the pandemic, except for those working in service sectors.

Income volatility month to month varies widely across different industries. The industries with the highest shares of workers experiencing unstable incomes are leisure and hospitality. Over four out of nine workers in these industries had unstable incomes between 2021 and 2022, a slight increase from its pre–pandemic level. The other two sectors that see an increase in variable income during the recovery phase are wholesale and retail and education and health care service. Compared to pre–pandemic levels, they had about a 2 percent and 5 percent increase, respectively, in those reporting inconsistent income during the recent recovery.

### *Race and Ethnicity*

Across racial and ethnic groups, Hispanic people had the highest percentage of income volatility; approximately two–fifths indicated their income varied month to month in both time periods. This is roughly 10 percentage points higher than the share of white people experiencing income instability.

The most notable change from the pre-pandemic to pandemic-recovery period was for Blacks and those who identified as Asian American, Pacific Islander (AAPI) or multi-racial people. The percentage of Black workers experiencing income volatility rose by about 1.7 percentage points (or about 5 percent), while the percentage of Hispanic workers declined by 2.3 percentage points – indicating an improvement in this group’s financial stability.

### *Education and Income Levels*

Those without a college degree report a higher inconsistent income situation relative to the national average during both time windows examined. In particular, the share of workers without a high school degree facing income fluctuation increased by around 4 percent in the recovery phase, at nearly 50 percent. For those with a high school degree or GED, it seems that there was actually a decline in the percentage of workers that experienced income fluctuation; roughly 12 percent less workers had unstable incomes during the pandemic recovery period compared to the pre-pandemic period.

Across the time periods we examined, the share of workers with a pre-tax annual family income under \$75,000 reporting inconsistent income remains relatively stable. However, a staggering disparity across income gradients exist. Nearly half of workers at the bottom income group (defined as pre-tax income less than \$25,000) reported income swings. Those with annual family income at \$100,000 or above have a rate of income instability that is roughly *half* of the lowest income group.



# Conclusion

Income volatility is common across demographic groups, but is more acute for workers of color, those living in the Southern states, and those working in the low-wage services industry. Our results also indicate that there is a significant link between income volatility and a worker's likelihood to owe unsecured debt, as well as the ability to afford healthcare. This may have practical implications for both employers and policymakers.

Half of the income volatility experienced by American workers stems from variations in income from the same job<sup>26</sup>. Employer practices like irregular work schedules and short notice or “just in time” scheduling translate to unstable and unpredictable incomes for millions of workers<sup>27</sup>.

As previously documented, an overwhelming majority of low-wage workers face unpredictable work schedules, and thus income variability. And many of them do not hold a college degree<sup>28</sup>. For those concerned with workers' economic insecurity, legislation that addresses workplace stability, and thus workers' financial stability, such as the [Schedules That Work Act](#) (H.R.5563 / S.2851), should be one of the policy prescriptions. The bill would be a vital step towards curbing the harmful scheduling practices that cause workers' instability. A particularly important part is the requirement that employers in the industries with the most pervasive income instability provide advance notice to employees of work schedules, predictability pay for schedule changes made without the required notice, and split shift pay. There are additional fair workweek laws which have been enacted across certain places and jurisdictions which require employers to offer predictable schedules, but nothing similar has materialized on a federal level<sup>29,30</sup>.

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<sup>26</sup> Morduch, Jonathan, and Rachel Schneider. 2017. “The financial diaries: How American families cope in a world of uncertainty.” Princeton University Press.

<sup>27</sup> Lambert, Susan J. 2008. “Passing the buck: Labor flexibility practices that transfer risk onto hourly workers.” *Human relations* 61, no. 9: 1203–1227.

<sup>28</sup> Cai, Julie. 2023. “Work-hour volatility by the numbers: How do workers fare in the wake of the pandemic?” Federal Reserve Bank of Boston. Available at <https://www.bostonfed.org/publications/community-development-issue-briefs/2023/work-hour-volatility-by-the-numbers-how-do-workers-fare-in-the-wake-of-the-pandemic>

<sup>29</sup> Ananat, Elizabeth O., Anna Gassman-Pines, and John A. Fitz-Henley. 2022. “The effects of the emeryville fair workweek ordinance on the daily lives of low-wage workers and their families.” *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8, no. 5: 45–66.

<sup>30</sup> Schneider, Daniel, and Kristen Harknett. 2019. Consequences of routine work-schedule instability for worker health and well-being. *American Sociological Review*, 84(1), 82–114.



Our findings around unsecured debt and income volatility underscore the need for urgent federal action to address the high medical and credit card debt of millions of Americans. The [No Surprises Act](#), which went into effect in January 2022, was a major step to protect patients from being charged surprise, unexpected medical bills by providers that are not in their insurance networks. The Biden–Harris administration recently identified medical debt as a priority<sup>31</sup>, and the Consumer Financial Protection Bureau announced regulations to prohibit medical debt from appearing on consumer credit reports<sup>32</sup>.

Any efforts to protect Americans from unsecured debt should recognize that healthcare access is often tied to income stability. Many low–income workers, especially those in precarious jobs, struggle to maintain continuous healthcare coverage throughout the year; their hours and income fluctuate month to month, and employers are often reluctant to pay for health insurance and other benefits. Qualifying for Medicaid is typically based on one’s income level which means many of these workers go in and out of coverage, especially in states without the Affordable Care Act’s Medicaid expansion<sup>33,34</sup>. Even insured, intermittent access may lead to accumulating medical debt. It is vital to ensure consistent, secure hours for workers in precarious work situations so they can avoid these coverage gaps and secure stable access to healthcare for themselves and their families.

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<sup>31</sup> The White House. 2023. “Readout of the White House State Convening on Medical Debt.” December 8, 2023. <https://www.whitehouse.gov/briefing-room/statements-releases/2023/12/08/readout-of-the-white-house-state-convening-on-medical-debt/>

<sup>32</sup> Consumer Financial Protection Bureau. 2023. “CFPB Kicks Off Rulemaking to Remove Medical Bills from Credit Reports.” September 21, 2023, <https://www.consumerfinance.gov/about-us/newsroom/cfpb-kicks-off-rulemaking-to-remove-medical-bills-from-credit-reports/#:~:text=The%20CFPB%20outlined%20proposals%20under,plagued%20with%20inaccuracies%20and%20mistakes>

<sup>33</sup> Beyond the Basics. 2024. “Income Definitions for Marketplace and Medicaid Coverage.” Available at <https://www.healthreformbeyondthebasics.org/wp-content/uploads/2024/08/FAQ-Income-Definitions.pdf>

<sup>34</sup> Lukens, Gideon. 2021. “Medicaid Coverage Gap Affects Even Larger Group Over Time Than Estimates Indicate.” Washington DC: Center on Budget and Policy Priorities. Available at <https://www.cbpp.org/sites/default/files/9-3-21health.pdf>





# Methodology

The analytic data come from the Survey of Household Economics and Decisionmaking 2018–2022. We select respondents (aged 18 or older) who report holding a job last month at the time of survey. The main variable comes from the question “In the past 12 months, which one of the following best describes your (and/or your spouse's or partner's) income?”. Respondents are offered three choices. Respondents who select “Occasionally varies from month to month” or “Varies quite often from month to month” are coded as 1, and otherwise coded as 0.

We estimate linear probability models to understand whether there is a link between short-term income volatility and a worker's unsecured debt as well as healthcare affordability. The outcomes of interest include (1) health care affordability and (2) unsecured debt.

To do so, we use two types of debt to capture unsecured debt a worker may owe: whether someone has credit card debt they are not able to pay in full at their next payment and/or they have medical debt from any care they or their family has received. If a respondent answers yes to any of these two, they are deemed as having unsecured debt. Constructing whether someone could afford health care use is based on the following questions: During the past 12 months, was there a time when you needed each of the following, but went without because you couldn't afford it?” The types of healthcare include prescription medicine, seeing a doctor or specialist, mental health care or counseling, and dental care.

We then provide supplemental descriptive analysis about average income instability before and after the pandemic according to a worker's place of residence, industry, race or ethnicity, education attainment, and income level. The income level variable is informed by how much a respondent and/or their spouse received from all sources (before taxes and deductions) in the past 12 months.

# Appendix

**Table A1**

## Relationship between income instability and health care affordability as well as unsecured debt

	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>
	Cannot afford medical care	Cannot afford medical care	Unsecured debt	Unsecured debt
Month-to-month income varies	0.137*** (0.005)	0.073*** (0.005)	0.050*** (0.006)	0.031*** (0.006)
Socio-demographic controls	no	yes	no	yes
Industry controls	no	yes	no	yes
State fixed effects	no	yes	no	yes
Time fixed effects	no	yes	no	yes
Constant	0.209*** (0.003)	0.407*** (0.047)	0.477*** (0.003)	0.384*** (0.055)
Observations	31,902	31,902	31,902	31,902

Note: Socio-demographic covariates include income level, race and ethnicity, age, gender, education, marital status, household size, whether have children, and whether have health care insurance. Standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, † p<0.10

Source: Authors' analysis of the Survey of Household Economics and Decisionmaking 2018–2022



**Table A2.1**

## Income Volatility Month to Month: **Region**

Click on the buttons below to see data for the different breakdowns:

[Region](#)
[Industry](#)
[Race/Ethnicity](#)
[Education level](#)
[Income levels](#)

Region	2018-2019 ▼	2021-2022	Change (pp)
Overall	32.1%	31.3%	-0.8
Mountain (MT, ID, WY, NV, UT, CO, AZ, NM)	36.3%	34.4%	-1.9
East-South Central (KY, TN, MS, AL)	35.8%	32%	-3.8
West-South Central (TX, OK, AR, LA)	34.7%	34.4%	-0.3
Pacific (WA, OR, CA, AK, HI)	33.7%	31.3%	-2.4
South-Atlantic (MD, DE, DC, WV, VA, NC, SC, GA, FL)	31.3%	33%	1.7
East-North Central (WI, MI, OH, IL, IN)	30.6%	29.7%	-0.9
West-North Central (ND, SD, MN, NE, IA, KS, MO)	30.3%	30.9%	0.6
Mid-Atlantic (NY, PA, NJ)	29.7%	28.3%	-1.4
New England (ME, VT, NH, MA, CT, RI)	28.1%	24.5%	-3.6

Source: Authors' analysis of the Survey of Household Economics and Decisionmaking 2018, 2019, 2021, 2022.



**Table A2.2**

## Income Volatility Month to Month: **Industry**

Click on the buttons below to see data for the different breakdowns:

[Region](#)
[Industry](#)
[Race/Ethnicity](#)
[Education level](#)
[Income levels](#)

Industry	2018-2019 ▼	2021-2022	Change
Overall	32.1%	31.3%	-0.8
Construction	46.8%	38.6%	-8.2
Leisure and Hospitality	44.4%	45.9%	1.5
Transportation and Warehousing	40.6%	38.9%	-1.7
Agriculture and Mining	39.6%	39.2%	-0.4
Wholesale and retail trade	38.2%	39.1%	0.9
Other Services	35.9%	34.4%	-1.5
Information	29.0%	25.3%	-3.7
Manufacturing	27.2%	27.5%	0.3
Education and Health Care Services	27.1%	28.4%	1.3
Finance, Insurance, and Real Estate	27.0%	26.3%	-0.7
Public Administration	24.2%	22.7%	-1.5
Business Related	23.3%	20.4%	-2.9

Source: Authors' analysis of the Survey of Household Economics and Decisionmaking 2018, 2019, 2021, 2022.



**Table A2.3**

## Income Volatility Month to Month: Race and Ethnicity

Click on the buttons below to see data for the different breakdowns:

[Region](#)
[Industry](#)
[Race/Ethnicity](#)
[Education level](#)
[Income levels](#)

Race/ethnicity	2018-2019	2021-2022	Change
Overall	32.1%	31.3%	-0.8
White	30.3%	29.3%	-1
Black	34.3%	36%	1.7
Hispanic	40.7%	38.4%	-2.3
Other	25.1%	25.2%	0.1

Source: Authors' analysis of the Survey of Household Economics and Decisionmaking 2018, 2019, 2021, 2022.



**Table A2.4**

## Income Volatility Month to Month: Education Attainment

Click on the buttons below to see data for the different breakdowns:

[Region](#)
[Industry](#)
[Race/Ethnicity](#)
[Education level](#)
[Income levels](#)

Education	2018-2019	2021-2022	Change (pp)
Overall	32.1%	31.3%	-0.8
Less than high school degree	47%	49.1%	2.1
High school degree or GED	40.4%	35.5%	-4.9
Some college and associate's degree	35%	37.1%	2.1
Bachelor's degree and above	23.8%	23.4%	-0.4

Source: Authors' analysis of the Survey of Household Economics and Decisionmaking 2018, 2019, 2021, 2022.



**Table A2.5**

## Income Volatility Month to Month: Annual Income Levels

Click on the buttons below to see data for the different breakdowns:

[Region](#)
[Industry](#)
[Race/Ethnicity](#)
[Education level](#)
[Income levels](#)

Income level	2018–2019	2021–2022	Change
Overall	32.1%	31.3%	-0.8
\$0 to \$24,999	48.6%	47.9%	-0.7
\$25,000 to \$49,999	39.6%	37.6%	-2
\$50,000 to \$74,999	30.4%	30.3%	-0.1
\$75,000 to \$99,999	25.1%	27.7%	2.6
\$100,000 to \$149,999	24%	22.7%	-1.3
\$150,000 to \$199,999	19.9%	19.1%	-0.8
\$200,000 or higher	24.9%	21.1%	-3.8

Source: Authors' analysis of the Survey of Household Economics and Decisionmaking 2018, 2019, 2021, 2022.

