DX 14.F.1

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF CALIFORNIA
SAN DIEGO DIVISION

In re Bank of America California Unemployment Benefits Litigation,	Case No. 3-21-md-02992-GPC-MSB

This Document Relates to All Actions

EXPERT REPORT OF
CHLOE N. EAST

March 4, 2025

Table of Contents

I. Introduction *1*

A. Qualifications **1**

B. Summary of Assignment **1**

C. Summary of Opinions **2**

II. Importance of Unemployment Insurance ("UI") Benefits and Impacts of Denying Beneficiaries Access to Their UI Funds **3**

A. Importance of UI Benefits **3**

B. Impacts of Denying Beneficiaries Access to Their UI Funds **9**

III. Appropriate Measures of Damages for Class Members Who Were Deprived of Access to UI Funds by the Bank's Actions and Inactions *11*

A. Costs of Borrowing **11**

B. Costs of Cutting Spending **12**

C. Conclusion **15**

IV. Appendices *16*

Appendix A: CV **16**

Appendix B: Materials Considered **23**

Case Materials 23

Research 23

Data 24

I. Introduction

A. Qualifications

1. I am an Associate Professor of Economics at the University of Colorado Denver. I received a B.S. in Economics from the University of Texas at Austin in 2011, an M.A. in Economics from the University of California, Davis in 2012, and a Ph.D. in Economics from the University of California, Davis in 2016.

2. I founded and run the Equitable Policy Research Lab, which disseminates evidence-based recommendations to advocates and policy-makers and offers training opportunities to individuals from under-represented groups in economics. I am a Research Associate at the Institute for Research on Poverty at the University of Wisconsin, a Non-Resident Fellow at the Brookings Institution, a Faculty Research Fellow at NBER, and a Research Fellow at IZA.

3. My research has been published in top economics journals such as the American Economic Review, the Journal of Labor Economics, the Journal of Public Economics, and the Journal of Human Resources. My research has also been featured in major media news outlets such as CNN, NPR, the New York Times, the Washington Post and others. I teach courses to undergraduate and graduate students that cover U.S. public programs, causal inference and data analysis tools.

4. I am a nationally recognized expert on U.S. safety net and social insurance programs including Unemployment Insurance ("UI"). I have done research on UI since 2012 and have published multiple papers studying the effects of UI as a cushion for people after they lose their job. My CV is attached as **Appendix A**.

B. Summary of Assignment

5. Plaintiff's counsel has retained me in the case of *In re Bank of America California Unemployment Benefits Litigation,* Case No. 3-21-md-02992-GPC-MSB. I was requested to provide expert opinions on: 1) the vulnerability of UI recipients and the importance of UI benefits in mitigating the harms that would otherwise be suffered by those who lose their jobs through no fault of their own, 2) the impacts of denying UI beneficiaries access to their UI funds, and 3) an appropriate compound interest rate that can be used under a common methodology to calculate the consequential damages, or lost value to class members of their UI benefits, resulting

from their inability to access their UI benefits at the time they were due as a result of the Bank's challenged policies and practices.

6. I am being compensated at a rate of $400 per hour, plus expenses, for my services.

7. In preparing this report, I have reviewed and analyzed several reports and declarations from Plaintiffs' expert Greg Regan and from Bank of America's expert Dr. Victor Stango. I have also reviewed the labor economics literature on UI and on borrowing while unemployed. I have relied on both in forming my opinions as laid out in this report. The sources I relied on are contained in footnotes and additional sources listed in **Appendix B**.

C. Summary of Opinions

8. <u>UI Benefits Provide a Critical Safety Net for Individuals Experiencing Involuntary Job Loss</u>

   a. UI recipients are a highly vulnerable and financially precarious group. UI is a critical safety net program provided by the government to ensure that individuals who lose their job can afford food, health care, transportation, housing, and other life necessities.

9. <u>The Typical UI Recipient Does Not Have Enough Savings to Survive Abruptly Losing Access to UI Benefits Without Incurring Costs Elsewhere</u>

   a. In my expert opinion, the evidence is clear that the typical UI recipient does not have enough savings to handle abruptly losing access to UI benefits, without either increasing their borrowing, cutting their consumption, or both.

   b. In my opinion, while there may be a few households with enough savings to cover this temporary loss of UI benefits, these households are outliers and not representative of the experience of the median UI recipient.

10. <u>The Credit Card Interest Rate is a Minimum Estimate of the Costs Faced by UI Recipients Who Lost Access to Their Benefits</u>

   a. Given the low levels of savings among UI recipients, many UI recipients are dependent on their UI benefits to pay for basic life necessities; thus, the value of receiving UI benefits when they are due is far greater than the dollar value of those benefits if paid at some later point in time.

b. Most UI recipients who lose or are denied access to their UI benefits will need to secure an alternative source of replacement funds and thus will turn to borrowing. One of the most common methods of borrowing for UI recipients is credit cards.

c. Those who cannot borrow on credit cards will borrow using even more expensive methods, will cut consumption, or both.

d. Therefore, UI recipients who were denied access to their UI benefits as a result of the Bank's challenged policies and practices were denied the full value of their UI benefits, even if access to their benefits was later restored. The cost to UI recipients who lost access to their UI benefits is at least as high as the interest rates faced when borrowing on a credit card.

e. The average credit card interest rate is a conservative estimate of the costs faced by the class members who were denied access to their UI benefits when due and thus denied the full value of those benefits, since UI recipients almost all have relatively low credit scores and so are likely to face high interest rates when borrowing.

f. In my opinion, the average credit card interest rate of 20.8% is an appropriate figure to use to calculate the cost to class members resulting from denial of access to their principal claim amounts and frozen account balances.[1]

II. <u>Importance of UI Benefits and Impacts of Denying Beneficiaries Access to Their UI Funds</u>

A. Importance of UI Benefits

11. Many people experience involuntary job loss through no fault of their own, and UI provides a critical safety net for those individuals and their families.

12. UI was especially important during the COVID-19 pandemic. During the first few months of the pandemic, an estimated 22 million people (13% of the workforce) in the United States lost their jobs.[2]

---

[1] Plaintiffs' counsel has informed me that another expert will be proposing a methodology for calculating consequential damages that advocates for use of a compound interest rate.

[2] Jeffry Bartash, "The U.S. has only regained 42% of the 22 million jobs lost in the pandemic. Here's where they are," *MarketWatch* (August 7, 2020) ("The economy shed a record 22.2 million jobs in March and April after large swaths of the U.S. were shut down to curb the spread of Covid-19, according [sic] the Labor Department's survey of business establishments.").

13. For decades, economists have been very clear about why the U.S. should have publicly provided unemployment insurance: to help people maintain their spending at the same amount it was pre-job-loss in the event they lose their job.[3] In other words, UI is provided by the government to ensure that individuals who lose their job can afford food, health care, transportation, and can continue to stay current on bills, rent, and/or their mortgage. Specifically, economists assert that if people were able to use their own personal savings to maintain spending at the same amount it was pre-job-loss, then publicly provided UI benefits would not be necessary.[4] However, that is not the case. Economists have shown for decades that low levels of private savings among people who lose their jobs demonstrates that those individuals cannot use private savings to cover their essential expenses during unemployment.[5]

14. An alternative method, beyond savings, that households can use to maintain their spending when a principal income-earner loses their job, is to borrow against current assets or future earnings. If the credit market is complete and perfect, borrowing might be a satisfactory alternative to publicly provided unemployment insurance. For the market to be complete and perfect, though, several conditions must be satisfied: 1) the lender must be able to observe each borrower's probability of repaying their loan; 2) every potential borrower must have access to borrowing, and the price of borrowing they face (interest rates) must reflect their likelihood of paying back the loan; and 3) the lenders must make no profits. In reality, it is impossible to perfectly observe each potential borrower's likelihood of paying back the loan and lenders may assume that only those who have lower ability to pay back loans will apply for loans, so lenders charge higher prices and deny some loan applications to account for this (and do make profits).[6] Because of these economic realities, economists conclude the credit market is not complete and

---

[3] Jonathan Gruber, "The Consumption Smoothing Benefits of Unemployment Insurance," 87 *The American Economic Review* 192, 192 (1997); Raj Chetty, "Moral Hazard versus Liquidity and Optimal Unemployment Insurance," 116 *Journal of Political Economy* 173, 174 (2008); Kory Kroft and Matthew J. Notowidigdo, "Should Unemployment Insurance Vary With the Unemployment Rate Theory and Evidence," 83 *The Review of Economic Studies* 1092, 1094 (2016).

[4] Gruber, *supra* note 3 at 192.

[5] *Id.*; Chetty, *supra* note 3 at 174; Jesse Rothstein and Robert G. Valletta, "Scraping by: Income and Program Participation After the Loss of Extended Unemployment Benefits," 36 *Journal of Policy Analysis and Management* 880, 884 (2017).

[6] Stephen G. Cecchetti and Kermit L. Schoenholtz, "Adverse Selection: A Primer," *Money and Banking* 1, 3 (2017)

perfect and that there are constraints on borrowing, with the result that publicly provided UI is necessary to correct for this market failure.[7]

15. Economists who study the low savings levels of unemployed people and the importance of UI in helping them make ends meet often focus on the experience of a representative person within a large and representative data set. In general, empirical analysis in economics emphasizes the importance of using large, representative samples, and recognizes that accurate conclusions may be drawn from studying a sample similar to the population of interest. This approach to economic data analysis has been the norm throughout my experience in academia—especially when studying large populations and the impact of policies like UI.

16. In my experience, it is not appropriate to predict the effects on the mean or median person based on results from extreme values. Drawing conclusions based on a small sample or a selected sample, such as one drawn only from one set of extreme values, does not lead to generalizable conclusions. Economists do the opposite—we look to aggregate data, including the mean or median, and draw conclusions about the average experience. As such, the economics literature I have reviewed in my time studying UI and analyzing why UI benefits are important, frequently relies on the well-established fact that the *median* UI unemployed person who receives UI benefits has low savings available to compensate for the loss of income. Economists focus primarily on the median in conducting these analyses because the distribution of savings among UI recipients, like the population in general, is skewed instead of evenly distributed, which is explained in more detail below. Examples from the literature I have reviewed include:

> "The median 25-64-year-old worker has gross financial assets equivalent to less than three weeks of income, and the average unemployment spell for those becoming unemployed lasts approximately 13.1 weeks."[8]

> "The median checking account balance in the JPMCI sample is $1250…"[9]

---

[7] Gruber, *supra* note 3 at 195-97.

[8] Gruber, *supra* note 3 at 192 n.2.

[9] Peter Ganong and Pascal Noel, "Consumer Spending during Unemployment: Positive and Normative Implications," 109 *American Economic Review* 2383, 2392 (2019).

> "[M]edian liquid wealth net of unsecured debt is only $128, suggesting that many unemployed individuals may not be in a position to smooth consumption while unemployed."[10]

> "We list median values because the means are heavily influenced by high values in the long tail of the distribution of household wealth," and "[t]hus, median liquid financial wealth is not far above zero and is only equal to about one-half of monthly household income."[11]

Note that different papers report different nominal dollar values, depending on when each paper was published, but even without adjusting them to all be in the same dollars, the findings are strikingly similar in concluding that savings among the unemployed are low across all these studies.

17. There are several potential measures of personal savings (also referred to as "liquidity") as highlighted above in the sampled papers. I focus in this report on one common measure that is frequently used in the economics literature: the household's net liquid wealth as a percentage of their monthly income.[12] This measure takes into account differences in household size, household needs, and financial status. Net liquid wealth is the difference between liquid assets and unsecured debt. Liquid assets include the value of jointly and individually owned checking and savings accounts, money market accounts and funds, and certificates of deposit. Unsecured debt includes the amount owed on credit cards and store bills, medical, and education debt.

18. I use the Survey of Income and Program Participation (SIPP) data to evaluate the savings of UI recipients in California during 2020 and 2021.[13] This is a common data set used in the economics literature to understand the effects of job loss and the role of UI.[14] With this data, I document that UI recipients in California during the pandemic had low levels of savings and were thus unable to maintain consumption at pre-job-loss levels (thus becoming unable to afford

---

[10] Chetty, *supra* note 3 at 196.

[11] Jesse Rothstein and Robert G. Valletta, "Scraping by: Income and Program Participation After the Loss of Extended Unemployment Benefits," 36 *Journal of Policy Analysis and Management* 880, 890-91 (2017).

[12] The economics research that uses the same data I use here uses the same measure of liquidity constraint. Chetty, *supra* note 3 at 195; Rothstein, *supra* note 11 at 889. Other economics research that does not have access to the exact same information uses similar, but not exactly the same, measures of liquidity.

[13] "Survey of Income and Program Participation," U.S. Census Bureau, https://www.census.gov/programs-surveys/sipp.html, accessed July 9, 2024.

[14] *See* Chetty, *supra* note 3 at 196; Rothstein, *supra* note 11 at 885; Chloe N. East and David Simon, "The safety net and job loss: How much insurance do public programs provide?," 238 *Journal of Public Economics* 1, 3 (2024).

to maintain spending on food, bills, housing, and other necessities) by relying on their own savings. I measure household savings of UI recipients as the net wealth the household has in the year *before* UI receipt as a percentage of the household's monthly income, where household monthly income is used to proxy for the household's monthly expenditures. I measure all of this before UI benefits are received, to avoid capturing the effect of UI itself. This is a common approach in the literature to characterize the financial well-being of people who eventually receive UI.[15] I also adjust all dollar values in the SIPP to be in constant 2024 dollars. 44% of those who receive UI had negative net wealth before they received UI—meaning that their unsecured debt was more than they had in liquid savings. I recode these negative values to be 0 to be conservative. Finally, I "winsorize" the net wealth variables (a statistical process that replaces the most extreme values in the data with representative values) to reduce the impact of outliers on the conclusions.[16]

19. Within the sample of UI recipients who received benefits in California between 2020 and 2021 in the SIPP, the median UI recipient had 7.2% of monthly household income in net household wealth. The average (mean) UI recipient had 219.7% of their monthly household income in net household wealth. The difference between the median and mean illustrate that the distribution is highly skewed and thus reliance on the mean values would put too much weight on very few, extreme high values that are not representative of the typical UI recipient's wealth. Indeed, in the literature, economists caution against reading too much into extreme and uncommon high values of net wealth since they are not representative of most UI recipients, as noted in the quotations above. The difference between the mean and median here also demonstrate that most UI recipients had very little net wealth, and therefore savings and ability to cover their expenses when they lose access to UI benefits, between 2020-2021.

20. To further understand the savings of UI recipients in California between 2020 and 2021, I calculate that 67% of UI recipients have household net wealth under 100% of household monthly

[15] Chetty, *supra* note 3 at 178; Rothstein, *supra* note 11 at 890.

[16] Winsorizing is the process of assigning the most extreme observations with more representative values (this can apply to low and high values). I winsorize at the 90th percentile, which means I assign the value at the 90th percentile to all observations above the 90th percentile. The median net wealth is unchanged if I winsorize at the 10th percentile or do not winsorize at all. Several papers studying the effect of UI, the authors note that they "winsorize" the variables at a similarly high percentile in order for outliers to not have too much impact on their conclusions. Ganong & Noel, *supra* note 9 at 2396; Peter Ganong, Fiona Greig, Pascal Noel, Daniel M. Sullivan, and Joseph Vavra, "Spending and Job-Finding Impacts of Expanded Unemployment Benefits: Evidence from Administrative Micro Data," 114 *American Economic Review* 2898, Online Appendix A-4 (2024).

income, and 79% have less than three months' worth of income in savings, which is the suggested amount households should have saved in the event of a job loss or other hardship.[17] Taken together, this evidence points to the vast majority of UI recipients in California between 2020 and 2021 being unable to cover their expenses if they suddenly lose access to UI benefits.

21. Additionally, I have used data from the Federal Reserve Survey of Household Economics and Decisionmaking (SHED) to calculate that 20% of UI recipients in the pandemic reported being behind on educational expenses.[18] Additionally, 21% reported that they expected to be unable to pay or only make a partial payment that month on expenses such as rent or mortgage, credit card bills, utility bills, phone or cable bills, car payments, or student loans. Another 22% of UI recipients in 2020-2021 reported having unpaid medical debt. Thus, UI recipients are already in a precarious financial situation even before losing UI benefits. Given the low levels of savings and pre-existing debt among those receiving UI, when UI benefits are cut off from their benefits, recipients have to either find some other way to finance their spending, like borrowing, or cutting back on necessities, or some combination of the two.

22. The sample of UI recipients who received benefits in California between 2020 and 2021 had very similar net wealth as a percentage of their income as compared to a sample of UI recipients across the country in this sample time period, and to a sample of UI recipients in the entire country in 2019. The data shows that 33% of California UI recipients in 2020-2021, 29% of UI recipients in the United States as a whole in 2020-2021, and 30% of UI recipients in the United States as a whole in 2019, had a net worth of one month's worth of their pre-job-loss income. This suggests that low net wealth of UI recipients during the pandemic period was not unusual. The nationwide and California-specific samples of UI recipients during the pandemic were also similar in terms of their income levels, share of female head of households, household size, and number of children (statistics produced using the SIPP). When using data from the SHED, which does not identify state of residence, I instead use a national sample of UI

[17] Vanguard, "Emergency Fund: What's the right emergency fund amount?" ("To prepare for income shocks, many experts suggest keeping enough money in your emergency fund to cover 3 to 6 months' worth of living expenses."), https://investor.vanguard.com/investor-resources-education/emergency-fund#:~:text=To%20prepare%20for%20income%20shocks,%242%2C500%20to%20cover%20spending%20shocks.

[18] "Survey of Household Economics and Decisionmaking," Board of Governors of the Federal Reserve System, https://www.federalreserve.gov/consumerscommunities/shed.htm, accessed September 26, 2024.

recipients, which are plausibly generalizable to the population of UI recipients in California during 2020-2021 because of the similarity of these samples.

23. Before the pandemic, California UI replaced about 50% of individual's lost earnings.[19] Due to temporary federal policies that made UI more generous, the replacement rate in several months of the pandemic was higher, and for some it reached around 100% for a few months in 2020.[20] For many who lost their jobs in the pre-pandemic period, UI was the only state or federal government program that provided a meaningful amount of income support.[21] During the pandemic, those who got UI often received stimulus payments as well,[22] but even with these more generous UI payments and stimulus checks, household wealth remained low. I calculated that even after receiving stimulus payments, most UI recipients in California still had less than one month's worth of income in net household wealth (calculated in the SIPP). Thus, households receiving UI in this period could not rely on stimulus checks or other government transfers to cover their expenses without UI benefits.

B. Impacts of Denying Beneficiaries Access to Their UI Funds

24. Past research has shown the importance of UI in allowing households to cover essential expenses in the face of unemployment.[23] To conduct this research, social scientists took advantage of changes in UI generosity to determine how much consumption and expenditures changed when UI generosity changed. This research concluded that providing more generous UI benefits leads to a smaller drop in consumption during unemployment. For example, expenditures on groceries fall by 16% and expenditures on medical care fall by 14-15% when UI benefits run out.[24] Importantly, these expenditure changes follow a predictable reduction in UI

---

[19] Alex Bell, Thomas J. Hedin, Geoffrey Schnorr, and Till von Wachter, "An Analysis of Unemployment Insurance Claims in California During the COVID-19 Pandemic," *California Policy Lab* 1, 6 (2020).

[20] Peter Ganong, Pascal Noel, and Joseph Vavra, "US Unemployment Insurance Replacement Rates During the Pandemic," 191 *Journal of Public Economics* 1, 1 (2020).

[21] East & Simon, *supra* note 14 at 7.

[22] Michael Karpman and Gregory Acs, "Unemployment Insurance and Economic Impact Payments Associated with Reduced Hardship Following CARES Act," *Urban Institute* 1, 3 (2020).

[23] Gruber, *supra* note 3 at 199; Chloe N. East and Elira Kuka, "Reexamining the consumption smoothing benefits of Unemployment Insurance," 132 *Journal of Public Economics* 32, 32 (2015); Peter Ganong and Pascal Noel, "Consumer Spending during Unemployment: Positive and Normative Implications," 109 *American Economic Review* 2383, 2384 (2019).

[24] Ganong & Noel, *supra* note 9 at 2399.

benefits, and the drop in expenditures and consumption would likely be even larger in the face of an unexpected reduction in UI.[25] All of this points to UI being a crucial source of income during unemployment that helps individuals pay for food, medical care, and other necessities. As summarized by Gruber, "results [that show how consumption responds to UI generosity] therefore decisively reject the notion that there are complete private consumption insurance markets for unemployment spells,"[26] meaning that without UI, households must turn to expensive borrowing or else incur costs related to foregoing these necessities.

25. An economic study of the pandemic period also confirms that UI served the same purpose in this period as well; when federal expansions to UI benefits expired in 2020 and 2021, those who had previously received these expansions reduced their spending dramatically.[27]

26. Additionally, my own calculations using the Census Household Pulse data show that about 69% of UI recipients in California in 2020 reported that they used the UI benefits to cover their spending needs.[28]

27. Based on this research, it is my opinion that UI benefits provide a critical lifeline for recipients, many of whom have little to no savings, and that delaying benefits deprives those families of a critical income source. When UI benefits are delayed, it is my expert opinion that those families are unlikely to have other sources of funds to pay their bills, buy food, and afford medical care, so they are forced to incur debt or pay the high costs associated with cutting back on those necessities.

---

[25] Peter Ganong, Fiona Greig, Pascal Noel, Daniel M. Sullivan, and Joseph Vavra, "Spending and Job-Finding Impacts of Expanded Unemployment Benefits: Evidence from Administrative Micro Data," 114 *American Economic Review* 2898, 2899 (2024).

[26] Gruber, *supra* note 3 at 195.

[27] Peter Ganong, Fiona Greig, Pascal Noel, Daniel M. Sullivan, and Joseph Vavra, "Spending and Job-Finding Impacts of Expanded Unemployment Benefits: Evidence from Administrative Micro Data," 114 *American Economic Review* 2898, 2932 (2024).

[28] "Household Pulse Survey Release," U.S. Census Bureau, Phases 1-4.2 (April 23, 2020-September 16, 2024), https://www.census.gov/programs-surveys/household-pulse-survey/data/datasets.html, accessed September 18, 2024.

III. Appropriate Measures of Damages for Class Members Who Were Deprived of Access to UI Funds by the Bank's Actions and Inactions

A. Costs of Borrowing

28. The value of UI benefits is not simply the dollar amount of the benefits, but the fact that benefits are paid when a household is facing an unanticipated change in income. Thus, the benefits are worth more than their dollar value because they provide insurance at a time the affected households are particularly vulnerable. The adverse impacts of a sudden loss of access to UI benefits cannot be fully rectified by later lump sum receipt of those lost benefits, because to a UI recipient, the timing of the benefit payment matters. This is because households that receive UI are already financially constrained, so the loss of UI benefits, even for a short period of time, will cause further financial hardship that cannot easily be undone.

29. Based on my review of the literature, when UI benefits are abruptly cut off, households will adjust their finances in a combination of two ways. First, households may turn to expensive methods of borrowing, such as credit card utilization, in order to finance their expenses. Second, households may cut back on these expenses and incur the significant costs associated with late bill payments, food insecurity, etc. Households can also do a combination of these two activities. I consider these possibilities, and the costs associated with each, next.

30. Many Americans are heavily reliant on credit cards to make ends meet[29] and UI recipients are no exception; 76% of UI recipients in California during the pandemic had household credit card debt even before they received UI.[30] Credit card borrowing is the most common source of borrowing among people who receive UI, and UI recipients are more likely than the general population to report that they pay off their credit card debt over time instead of each month, meaning they accrue debt and interest costs.[31] Furthermore, compared to all households in 2020-2021, UI recipients were 52% more likely to be denied credit and 54% more

---

[29] Khristopher J. Brooks, "Americans continue to rack up credit card debt, hitting a record $1.14 trillion," *CBS News*, August 6, 2023, https://www.cbsnews.com/news/credit-card-debt-total-us-2024/ ("Americans have increasingly been relying on credit cards to make ends meet, with 6 in 10 adults, or 60%, using credit cards to buy groceries in 2023, according to a May report by the Urban Institute.").

[30] Calculated using statistics on UI recipients from the SIPP.

[31] Calculated using statistics from the Federal Reserve SHED data

likely to be given less credit than they desired.[32] Thus, people receiving UI may turn to even more expensive forms of borrowing compared to credit cards, such as pawn shop loans or auto title loans, to make ends meet. These alternative borrowing methods can have annual percentage rates (APRs) up to 200% to 300%.[33]

31. Furthermore, unemployment causes an increase in default on debt and UI helps people avoid defaulting on existing debt and ending up in a worse financial position in the longer run.[34] Defaulting on debt causes long-term harm because it leads to reduced credit scores, less ability to borrow, and/or more expensive borrowing options in the future.[35]

B. Costs of Cutting Spending

32. Other households that are not able to turn to borrowing to finance their essential expenses may be forced to cut back on necessities when they lose UI benefits. While some budget tightening might be easy for households to do, two facts point to how costly this cutting back can be. First, as I calculated in the SHED and described above, individuals who receive UI apply for more credit but are denied, which indicates they would prefer not to cut consumption by as much as they do. For example, 33% of those who receive UI and apply for more credit have their request denied.[36] According to economic theory, the value of UI benefits is higher the more recipients must cut their consumption, so the cost of losing access to UI benefits will be higher if people cannot borrow.[37] Second, households cut consumption of important necessities, including food and medical care, rather than just non-essential items, when they stop receiving UI or

---

[32] Calculated using statistics from the Federal Reserve SHED data.

[33] Bev O'Shea, "Should You Take a Pawnshop Loan?," *NerdWallet*, March 1, 2024, https://www.nerdwallet.com/article/loans/personal-loans/pawnshop-loans ("While payday loans and car title loans can easily top 400% APR, pawnshop loans may be more affordable, with APRs around 200%."); Marcie Geffner, "Car title loans: 3 things to know before getting one," *CreditKarma*, November 11, 2023, https://www.creditkarma.com/personal-loans/i/car-title-loans#:~:text=Car%20title%20loans%20have%20high%20fees%20and%20interest%20rates,-With%20a%20car&text=This%20translates%20into%20an%20annual,total%20cost%20of%20the%20loan ("This translates into an annual percentage rate, or APR, of more than 300%.").

[34] Niklas Flamang and Sreeraahul Kancherla, "Unemployment Insurance as a Financial Stabilizer: Evidence from Large Benefit Expansions," *Working Paper* 1, 15 (2023).

[35] Ben Luthi, "What Happens if I Default on a Loan?," *Experian*, January 22, 2024, https://www.experian.com/blogs/ask-experian/what-does-it-mean-to-default-on-a-loan/.

[36] Statistics calculated using the SHED.

[37] Kory Kroft and Matthew J. Notowidigdo, "Should Unemployment Insurance Vary With the Unemployment Rate Theory and Evidence," 83 *The Review of Economic Studies* 1092, 1094 (2016).

receive less generous UI. Recall that even while receiving UI, most households already face the need to tighten their budgets and cut spending because their UI benefits generally do not make up for their entire lost earnings. Thus, losing UI benefits when households already have to cut their spending is even more costly. Taken together, the costs of cutting consumption after the loss of UI benefits are likely at least as high as the costs of the preferred option of borrowing. It is my opinion that the cost of borrowing on a credit card is likely an underestimate of the actual costs to cutting consumption.

33. As an example of the importance UI plays in helping households afford necessities, and the costs to households if UI benefits are taken away and they have to cut back, I focus on food consumption. It is well documented that food purchases fall when people lose their jobs, and UI helps to lessen this decline after a job loss.[38] In fact, receiving UI was associated with a 35% decrease in food insecurity and a 48% decrease in the likelihood of reducing meals because of financial constraints in 2020.[39] Food insecurity has many negative and well documented downstream impacts that generate real costs to the impacted individuals. In the literature, food insecurity is associated with greater cognitive problems, higher risks of birth defects, higher probabilities of asthma, higher levels of chronic disease, stress and anxiety, and more.[40]

34. As a second example, I consider the fact that it is well documented that UI helps people afford health care and health insurance coverage.[41] The loss of UI benefits will cause people to reduce health care spending, increase their risk of becoming uninsured, and can also lead to increases in medical debt. Using SHED data, I find that 22% of UI recipients in 2020-2021 report having unpaid medical debt. Loss of UI benefits will only exacerbate the problems faced by these individuals with medical debt. Having medical debt comes with its own set of issues; according to the Kaiser Family Foundation, the majority of adults with health care debt have had

---

[38] Gruber, *supra* note 3 at 195; East & Kuka, *supra* note 23 at 33; Ganong & Noel, *supra* note 9 at 2405.

[39] Julia Raifman, Jacob Bor, and Atheendar Venkataramani, "Association Between Receipt of Unemployment Insurance and Food Insecurity Among People Who Lost Employment During the COVID-19 Pandemic in the United States," 4 *JAMA Netw Open* 1, 9 (2021).

[40] Craig Gundersen, Brent Kreider, and John Pepper, "The Economics of Food Insecurity in the United States," 33 *Applied Economic Perspectives and Policy* 281, 289 (2011).

[41] Elira Kuka, "Quantifying the Benefits of Social Insurance: Unemployment Insurance and Health," 102 *The Review of Economics and Statistics* 490, 490 (2020); Ganong & Noel, *supra* note 9 at 2399.

to cut back on basic necessities or use up their limited savings to pay down their debt.[42] Unpaid medical debt could further be sent to collection agencies and negatively affect credit in this time period. Additionally, health insurance is associated with improved health outcomes both in the short and longer run.[43] Worse health leads to an increase in costs of about $1,500 per year (in 2013 USD) due to both increases in out-of-pocket medical spending and decreases in earnings.[44]

35. Because decreasing consumption can lead to such negative impacts, I expect that these costs will exceed the cost of credit card interest rates these same individuals might have incurred if they had been able to borrow. The credit card interest rates thus serve as an appropriate *minimum bound* for the costs of the class, whether they borrow or simply cut spending. This estimate likely undervalues the cost of being denied access to UI funds, because some people in the class likely had to borrow using even more expensive methods and others were not able to borrow and thus had to incur the extreme costs and harmful outcomes related to cutting back on food and medical care along with other necessities.

36. To understand the cost of credit card borrowing for UI recipients, I used statistics from the SHED data. I calculate that the median UI recipient in 2020-2021 had a "Good" credit score. This corresponds to scores of about 739 and below.[45] Thus, the vast majority of UI recipients would face a minimum APR of 20.8% on their credit cards. If anything, this is an underestimate since the APR would be as high as 23.6% for some of the group.[46] I therefore recommend using a borrowing rate of 20.8% as an estimate of the cost to class members resulting from losing access to UI benefits, even temporarily.

---

[42] Lunna Lopes, Audrey Kearney, Alex Montero, Liz Hamel, and Mollyann Brodie, "Health Care Debt in The U.S.: The Broad Consequences of Medical and Dental Bills," *Kaiser Family Foundation,* June 16, 2022, https://www.kff.org/report-section/kff-health-care-debt-survey-main-findings/ ("When asked about some specific problems they or someone in their household may have experienced in the past five years as a result of their health care debt, six in ten adults with health care debt say they cut back spending on food, clothing, and basic household items (63%).").

[43] Sarah Miller, Norman Johnson, and Laura R. Wherry, "Medicaid and Mortality: New Evidence from Linked Survey and Administrative Data," 136 *Quarterly Journal of Economics* 1783, 1820 (2021).

[44] Mariacristina De Nardi, Svetlana Pashchenko, and Ponpoje Porapakkarm, "The Lifetime Costs of Bad Health," *The Review of Economic Studies* 1, 3 (2024).

[45] Beverly Harzog, "What is a Fair Credit Score?," at "What is a Fair VantageScore?," *U.S. News & World Report*, July 1 2024, https://money.usnews.com/credit-cards/articles/what-is-considered-a-fair-credit-score#:~:text=If%20you%20have%20a%20fair,t%20let%20that%20discourage%20you.

[46] Consumer Financial Protection Bureau, "The Consumer Credit Card Market," at 19, Table 1, and 46-50, Figure 3 September 2021, https://files.consumerfinance.gov/f/documents/cfpb_consumer-credit-card-market-report_2021.pdf (showing credit score ranges and average APR data).

C. Conclusion

37. Based on my research and review of the economic literature on UI recipients in California during the stated time period, it is my opinion that the classwide harm caused by delayed UI benefits can be measured, in part, by using an interest rate that represents the costs incurred by those class members when the critical lifeline of UI was abruptly taken away (in addition to the dollar value of the benefits themselves). Each class member incurred a related cost: some turned to credit card borrowing, others to higher cost forms of borrowing, and others were forced to go without food, forego medical care, or fall behind on bills because no credit was available to them. Using the credit card interest rate, as a result, is in my opinion a conservative estimate of the aggregate costs faced by the class while waiting for their UI benefits.

~~~~~~~~~~~~~~~~

Dated: March 4, 2025

Chloe N. East
~~~~~~~~~~~~~~~~

IV. Appendices

Appendix A: CV

Chloe N. East

she/her

Updated February 28, 2025

Department of Economics
University of Colorado, Denver
1380 Lawrence St.
Denver, CO 80217

Email: chloe.east@ucdenver.edu
Homepage: http://www.chloeneast.com/
Citizenship: United States

CURRENT EMPLOYMENT AND AFFILIATIONS

University of Colorado Denver

Associate Professor of Economics, August 2023 – present

Assistant Professor of Economics, August 2016 – July 2023

Associate Chair of Equity, Diversity and Inclusion, Economics Department, March 2022 – May 2023

National Bureau of Economic Research (NBER)

Research Associate, June 2024 – present

Faculty Research Fellow, April 2023 – May 2024

The Brookings Institution

Non-Resident Fellow, December 2023 – present

Institute for Research on Poverty (IRP), University of Wisconsin Madison

Affiliate, November 2022 – present

Equitable Policy Research Lab

Founding Director, March 2022 – present

IZA- Institute for the Study of Labor

Research Fellow, November 2021 – present

Research Affiliate, August 2016 – November 2021

OTHER EMPLOYMENT, APPOINTMENTS, AND VISITING POSITIONS

The Hamilton Project, Brookings Institution

Visiting Fellow, August 2023 – December 2023

Becker Friedman Institute for Economics at the University of Chicago

Visiting Scholar, February 2023 – March 2023

Census Bureau

Summer at Census Scholar, May 2019

Federal Reserve Bank of Boston

Visiting Scholar, June 2019

EDUCATION

Ph.D. Economics, University of California, Davis, June 2016

M.A. Economics, University of California, Davis, June 2012

B.S. Economics with High Honors, University of Texas, Austin, May 2011

ACADEMIC PUBLICATIONS

How Well Insured are Job Losers? Efficacy of the Public Safety Net (with D. Simon), NBER Working Paper 28218, *Journal of Public Economics Volume 238, Number 105171, October 2024*

Unintended Consequences of Immigration Enforcement: Household Services and High-Skilled Women's Work (with A. Velasquez), IZA DP No. 12029, *Journal of Human Resources Vol. 60, Issue 1 1 Jan 2025*

Multi-generational Impacts of Childhood Access to the Safety Net: Early Life Exposure to Medicaid and the Next Generation's Health (with S. Miller, M. Page, and L. Wherry), NBER Working Paper 23810, *American Economic Review, 113 (1): 98-135, 2023*

The Labor Market Effects of Immigration Enforcement (with A. Hines, P. Luck, H. Mansour, and A. Velasquez), IZA DP No. 11486, *Journal of Labor Economics, 41(4), 957-996.*

Can Collaboration Between Nonprofit Hospitals and Local Health Departments Influence Population Health Investments by Nonprofit Hospitals? (with T. Santos (lead author), S. Lee, and R. Lindrooth), *Medical Care, 59(8), 687-693.*

An Apple a Day? Adult Food Stamp Eligibility and Health Care Utilization (with A. Friedson), IZA DP No. 11445, Upjohn Institute Working Paper No. 19-295, *American Journal of Health Economics, 6(3), 289-323.*

How do Early Life Health Experiences Affect Future Generations' Equality of Opportunity? (with M. Page), *An Equal Start: Policy and Practice to Promote Equality of Opportunity for Children.* (American Psychological Association edited volume)

The Effect of Food Stamps on Children's Health: Evidence from Immigrants' Changing Eligibility, *Journal of Human Resources, 55(2), 387-427.*

The Labor Supply Response to Food Stamp Access, *Labour Economics, 51, 202-226.*

Reexamining the Consumption Smoothing Benefits of Unemployment Insurance (with E. Kuka), *Journal of Public Economics, 132, 32-50.*

ACADEMIC WORKING PAPERS

The Effect of Means-Tested Transfers on Work: Evidence from Quasi-Randomly Assigned SNAP Caseworkers (with J. Cook), NBER Working Paper 31307, Updated October 2023

The Disenrollment and Labor Supply Effects of SNAP Work Requirements (with J. Cook), NBER Working Paper 32441, Dec 2024

WORK IN PROGRESS

Racial and Ethnic Disparities in Health Insurance Coverage and Health, with Sebastian Tello-Trillo

The Effect of SNAP and Medicaid Administrative Burden on Enrollment and Health, with Marianne Bitler and Jason Cook

OTHER PUBLICATIONS

Low-income workers experience—by far—the most earnings and work hours instability, with L. Bauer and O. Howard, The Hamilton Project, Brookings, Jan 9, 2025

The labor market impact of deportations, Brookings, Sept 18, 2024

Beyond hunger: The role of SNAP in alleviating financial strain for low-income households, with E. Cox and I. Pula, The Hamilton Project, Brookings, June 20, 2024

Texas SB 4 will harm public safety, the economy and families, Op-Ed in Dallas Morning News, December 26, 2023

Major economic developments of 2023 and how they'll evolve in 2024, Brookings, December 21, 2023

Have workers gotten a raise?, with W. Edelberg and N. Steinmetz-Silber, The Hamilton Project, Brookings, October 24, 2023

A primer on SNAP work requirements, with L. Bauer, The Hamilton Project, Brookings, October 5, 2023

New Research Reveals the importance of Unemployment Insurance for Displaced Workers, Niskanen Center, December 18, 2020

Job Loss and the Safety Net, with D. Simon, EconoFact, December 2, 2020

Coronavirus' Disproportionate Economic Impacts on Immigrants, with H. Hoynes and T. Watson, EconoFact, June 17, 2020

Disparities in Access to Health Care During a Pandemic, with M. Marcus, EconoFact, May 27, 2020

Secure Communities: Broad Impacts of Increased Immigration Enforcement, EconoFact, January 13, 2020

Access to Food Stamps Improves Children's Health and Reduces Medical Spending, UC Davis Poverty Center Policy Brief, Volume 7, Number 4, November 2018

FELLOWSHIPS AND GRANTS (amounts to UC Denver listed below)

Grant, National Science Foundation, $401,632 (Co-PIs J. Cook and M. Bitler)	2024
Research Grant, Russell Sage Foundation, $33,324 (Co-PI J. Cook)	2022
ORS COVID-19 Research Grant, UC Denver, $10,000	2020
R01 HD093898, National Institutes of Health, $220,773 (PI M. Bitler)	2018
Policies for Action Grant, RWJ Foundation, $32,060 (Co-PI M. Page)	2017
RIDGE Grant, Tufts/UConn RIDGE Center (PI M. Page)	2017
ORS New Faculty Grant, UC Denver, $15,600	2017
Early Career Research Grant, W. E. Upjohn Institute, $5,000	2017
University Research Grant, Southern Methodist University (Co-PI E. Kuka)	2015
Provost's Dissertation Year Fellowship, UC Davis	2015
Dissertation Improvement Grant, Institute for Social Sciences, UC Davis	2014
Biliniski Fellowship, UC Davis	2014
Doctoral Dissertation Research Grant, RIDGE Center for Targeted Studies	2014
Institute of Governmental Affairs and Economics Department Grant, UC Davis	2011

TEACHING EXPERIENCE

Guest Lecturer, University of the District of Columbia

Instructor, University of Colorado Denver
Undergraduate Intermediate Microeconomics (Fall 2016, 2017, 2018, 2019 (x2), 2020 (x2), 2021; Spring 2017); Undergraduate Public Finance (Spring 2017, 2018, 2019, 2020, 2021); Graduate Public Finance (Spring 2018, 2019, 2022)

Associate Instructor, University of California, Davis
Undergraduate Public Finance

Teaching Assistant, University of California, Davis
Undergraduate Introductory Microeconomics

PRESENTATIONS

2024-2025 Academic Year (including scheduled) NBER Summer Institute, Colorado State University, North Carolina State University, Duke University, University of Minnesota, Baker Institute at Rice University

2023-2024 Academic Year: University of Wisconsin Madison Institute for Research on Poverty, University of Kentucky, University of Kansas, University of Colorado Boulder Population Center and Econ, Virtual Economics of Poverty and Policy Seminar, George Mason University, American University Econ, University of Duisburg-Essen, Association for Public Policy and Management Annual Conference, University of Delaware, George Washington University, Georgetown University, American University SPA, Southern Methodist University

2022-2023 Academic Year: Binghamton University (SUNY), University of Pennsylvania Leonard Davis Institute and Center for Health Incentives and Behavioral Economics, University of Chicago, University of Duisburg-Essen (cancelled), University of Oklahoma, University of Wisconsin Madison, Ohio State University

2021-2022 Academic Year: NBER Trans-Atlantic Public Economics Seminar: Economic Behavior and Inequality, International Congress of the Latin American Studies Association, Upjohn Institute (postponed due to COVID), University of Utah, Brookings Institute Economic Studies Program, University of São Paulo, University of Colorado Denver Health & Behavioral Sciences Department, Southern Economic Association Annual Meeting

2020-2021 Academic Year: ASHEcon Annual Conference, Notre Dame, University of New Mexico, University of Connecticut, Western Economic Association Virtual International Conference, NBER Spring 2021 Immigrants and the U.S. Economy Conference, Vanderbilt University, UCLA Center for the Study of International Migration and the UCSD Center for Comparative Immigration Studies Emerging Immigration Scholar Workshop, San Diego State University, Southern Economic Association Annual Meeting, Association for Public Policy and Management Annual Conference, University of Nebraska

2019-2020 Academic Year: CSWEP Sessions at Western Economic Association Annual Conference, Dartmouth College (postponed due to COVID), Columbia University, Allied Social Science Association Annual Meeting, Carnegie Mellon University and University of Pittsburgh, University of Houston, Stanford Institute for Theoretical Economics (SITE) Summer Workshop on Migration

2018-2019: Federal Reserve Bank of Boston, Census Bureau, Colorado School of Mines, BEA, UC Denver Anschutz Campus, UC Irvine, Syracuse University, Association for Budgeting and Financial Management Conference, Northeastern University, University of Texas at Austin

2017-2018: IZA World of Labor Conference, UC Davis Alumni Conference, Population Association of America Annual Conference, Economic Demography Workshop, NBER Children's Meetings, Texas A&M, Southern Economic Association Annual Meeting, Association for Public Policy and Management Annual Conference, Panel Study of Income Dynamics Annual User Conference, Western Economic Association Annual Meeting

2016-2017: Society of Labor Economists Annual Meeting, Allied Social Science Association Annual Meeting, Southern Economic Association Annual Meetings, Association for Public Policy and Management Annual Conference, RAND, Federal Reserve Board, Census Bureau, UVA Batten School, American University, Bureau of Labor Statistics, CU Denver, University of Tennessee, Purdue University

2014-2015: Association for Public Policy and Management Annual Conference; Sonoma State University; UC Davis Applied Micro Brownbag; Research Innovation and Development Grants in Economics Conference (USDA ERS); University of Nevada at Reno; Western Economics Association Annual Conference; The Future of SNAP Conference (UC Berkeley, poster); Drexel University; UC Davis Poverty Center Graduate Student Retreat; Western Economics Association Annual Conference

MEDIA OR POLICY COVERAGE

NPR's Morning Edition, NPR's Up First, Newsweek, Washington Post, NPR's All Things Considered, Colorado Public Radio, Axios, Politico, Business Insider, Milwaukee Journal Sentinel, Tradeoffs Newsletter, CBS Denver, New York Times Upshot, The Conversation, Denver Business Journal, CNBC, New York Times, The Economist, The Wall Street Journal, Bloomberg News, VOX, IGPP VMF, wbur, Texas Observer, NPR, New Republic, nextavenue, Denver 7, Colorado Sun, BBC, CU Denver News, Politicon, Houston Chronicle, Forbes, Famer's Advance, US News, Yahoo Finance, FactCheck, CNN, Christian Science Monitor, Dallas Morning News, Pharmaceutical Technology

PROFESSIONAL ACTIVITIES

Member, Children Thrive Action Network Research Working Group (July 2023-present)

Co-Leader, Children Thrive Action Network Research Working Group (March 2021-July 2023)

Organizer and Chair, Virtual Public Discussions of New Event Study and Difference in Difference Methods Papers (March 2021-July 2021, July 2022)

Organizer: EconTwitter Intermediate Microeconomics Teaching Planning Meeting (August 2020)

Referee (journals only listed once even if refereed multiple times): Journal of Political Economy; Econometrica; Journal of Political Economy: Microeconomics ; American Economic Review; American Economic Review: Insights; Southern Economic Journal; Economics and Human Biology; American Economic Journal: Applied; Health Affairs; National Tax Journal; Journal of Public Economics; American Journal of Health Economics; Quarterly Journal of Economics; Journal of Urban Economics; American Economic Journal: Economic Policy; Journal of Labor Economics; Health Economics; Journal of Human Resources; Journal of the European Economic Association; European Economic Review; Journal of Health Politics, Policy and Law; Empirical Economics; Applied Economic Perspectives and Policy; Economics of Education Review; Contemporary Economic Policy; Journal of Policy Analysis and Management; Journal of Health Economics; Economic Inquiry; Social Science Review; American Journal of Agricultural Economics

Reviewer: Reviewer of submissions for the IRP Emerging Poverty Scholar Program; Reviewer of submissions for the Gifford Center/USDA Purchase to Plate Tool Grant; Reviewer of submissions for National Tax Association Annual Conference as Program Committee Member (Summer 2021), Reviewer of submissions for Association for Public Policy Analysis & Management Annual Conference as Program Committee Member (Summer 2019, Summer 2020); APPAM Program Committee leading reviews for Population and Migration Submissions (Summer 2022); NSF Grant Reviewer

Presenter: UC Davis Poverty Center – California's Post Pandemic Recovery: Policies and Unique Challenges for Vulnerable Populations (March 2022)

Moderator: APPAM Webinar on Immigration Policy - Reshaping U.S. Border and Asylum Policy (August 2021)

Member: Unemployment Insurance Reform Working Group (2021)

Member: American Economic Association, Association for Public Policy Analysis and Management, Southern Economic Association, Western Economic Association

DIVERSITY, EQUITY, AND INCLUSION ACTIVITIES

Co-Chair, APPAM Communities Women in Economics Group (2022-present)

Organizer and Chair, Equity Diversity and Inclusion Committee, CU Denver (2021-present)

Organizer and Chair, Minorities in Economics Group, CU Denver (2018-2020)

Led and Organized Addition of Language on FMLA Leave for Faculty for tenure and mid-tenure review, CU Denver, College of Liberal Arts and Sciences (2018-2019)

Led and Organized Presentation on AEA Professional Climate Survey and Potential Solutions: Economics Department, CU Denver (August 2019)

Led and Organized Presentation on Bias in Student Evaluations of Teaching: Faculty Assembly, CU Denver (January 2020); College of Liberal Arts and Sciences Council, CU Denver (March 2020)

Participant, Course Design for Social Justice, CU Denver (November 2020)

Participant, Equity Certificate Program, CU Denver (April 2021)

Participant, Equitable Search Processes Training, CU Denver (October 2021)

Compiled and Distributed Information about How to Structure Inclusive Classrooms during COVID-19 to Economics Department at CU Denver and on Twitter (Spring 2020 - present)

UNIVERSITY SERVICE AND ADVISING

Graduate Advisor, Economics Department, CU Denver (July 2021-present)

Participant, Graduate Student Discussion of External Seminar Speaker Presentations, CU Denver (2019-2020)

Member, Hiring Committee, Economics Department at CU Denver (2019-2020; 2021-2022)

Member, College of Liberal Arts and Sciences Research Advisory Group, CU Denver (2018-present)

Member, Immigration Research Initiative, CU Denver (2016-2020)

Member, Faculty Assembly, CU Denver (Fall 2019)

Advisor to: Reid Taylor (Master's Program, 2016-2018), Tatiane Santos (Ph.D. Program at Anschutz, 2020), Katherine Bleakley (Master's Program, 2020), Gabrielle Toborg (Master's Program, 2022), Keanan Gleason (Master's Program, 2023), Soumak Basumallik (PhD Program, 2024)

COMMUNITY SERVICE

Volunteer, Ward 6 Mutual Aid (August 2023 - September 2023)

Volunteer, Mutual Aid Monday (June 2023 - present)

Volunteer, Denver Community Fridges (July 2022 - present)

Volunteer, Hope Communities (July-August 2021)

Volunteer, Planned Parenthood Votes (October-November 2020)

Volunteer, Vote Riders (October-November 2020)

Appendix B: Materials Considered

Case Materials

Order Re Preliminary Injunction dated May 17, 2021
Preliminary Injunction dated June 2, 2021
CFPB Consent Order dated July 14, 2022
OCC Consent Order dated July 14, 2022
Expert Report of Greg Regan dated August 29, 2024
Expert Report of Victor Stango dated October 24, 2024
Expert Report of Greg Regan dated November 21, 2024

Research

Camille Landais and Johannes Spinnewijn, "The Value of Unemployment Insurance," *Review of Economic Studies 88*, no. 6, 2021, pp. 3041-3085

Federal Reserve, "How Insured Are Workers Against Unemployment? Unemployment Insurance and the Distribution of Liquid Wealth," André Victor, D. Luduvice, and Anaya Truss-Williams, 2024

Federal Reserve, "The Impact of Government Transfer Payment Frequency on Consumption: Evidence from Delayed UI," by Michael Gelmen, Zachary Orlando, and Dhiren Patki, 2024

Federal Reserve Bank of San Francisco, "Enhanced Unemployment Insurance Benefits in the United States During COVID-19: Equity and Efficiency," by Robert G. Valletta and Mary Yilma, Working Paper 2024-15, 2024

Fei Man and Valerie Tarasuk, "Employment Insurance may mitigate impact of unemployment on food security: Analysis on propensity-score matched sample from the Canadian Income Survey," *Preventative Medicine* 169, 2023

James X. Sullivan, "Borrowing During Unemployment: Unsecured Debt as a Safety Net," *Journal of Human Resources 43*, no. 2, 2008, 383-412

Jonathan Gruber, "The Wealth of the Unemployed," *Industrial and Labor Relations Review* 55, no. 1 2001, 79-94.

Judith Bartfeld and Fei Men, "Policy and economic factors that affect food security," *IRP Focus* 36, no. 3, 2020, pp. 13-25

Marianne P. Bitler, Jonah B. Gelbach, and Hilary W. Hoynes, "What Mean Impacts Miss: Distributional Effects of Welfare Reform Experiments," *American Economic Review* 96, no. 4, 2006, pp. 988-1012

Mathematica, "A Longitudinal Survey of Unemployment Insurance Recipients in Two Regions in California," by Joanne Lee, Karen Needels, and Walter Nicholson, 2017

Office of Financial Research, U.S. Department of the Treasury, "Household Liquidity Measurement: A New Approach," by Dasol Kim and Nick Schwartz, no. 24-03, 2024

Peter Ganong and Pascal Noel, "Liquidity versus Wealth in Household Debt Obligations: Evidence from Housing Policy in the Great Recession," *American Economic Review* 110, no. 10, 2020, pp. 3100-3138

Peter Ganong, Pascal Noel, and Joseph Vavra, "US unemployment insurance replacement rates during the pandemic," *Journal of Public Economics* 191, 2020, 104273

Politico, "Unemployment assistance to millionaires soared during pandemic," by Brian Faler, November 2022.

PPIC, "Unemployment Benefits in the COVID-19 Pandemic," by Sarah Bohn, Marisol Buellar Mejia, and Julien Lafortune, April 2020.

Vox, "American layoffs and firings are at a 20-year low," April 2019

<u>Data</u>

"Survey of Income and Program Participation," *U.S. Census Bureau,* 2019-2023, https://www.census.gov/programs-surveys/sipp.html, accessed July 9, 2024.
"Survey of Household Economics and Decisionmaking," *Federal Reserve*, 2019-2023, https://www.federalreserve.gov/consumerscommunities/shed.htm, accessed September 26, 2024
"Household Pulse Public Use File," *U.S. Census Bureau*, 2020-2024, https://www.census.gov/programs-surveys/household-pulse-survey/data/datasets.html, accessed September 18, 2024.