The Job-Preservation Effects of Paycheck Protection Program Loans

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DISCUSSION

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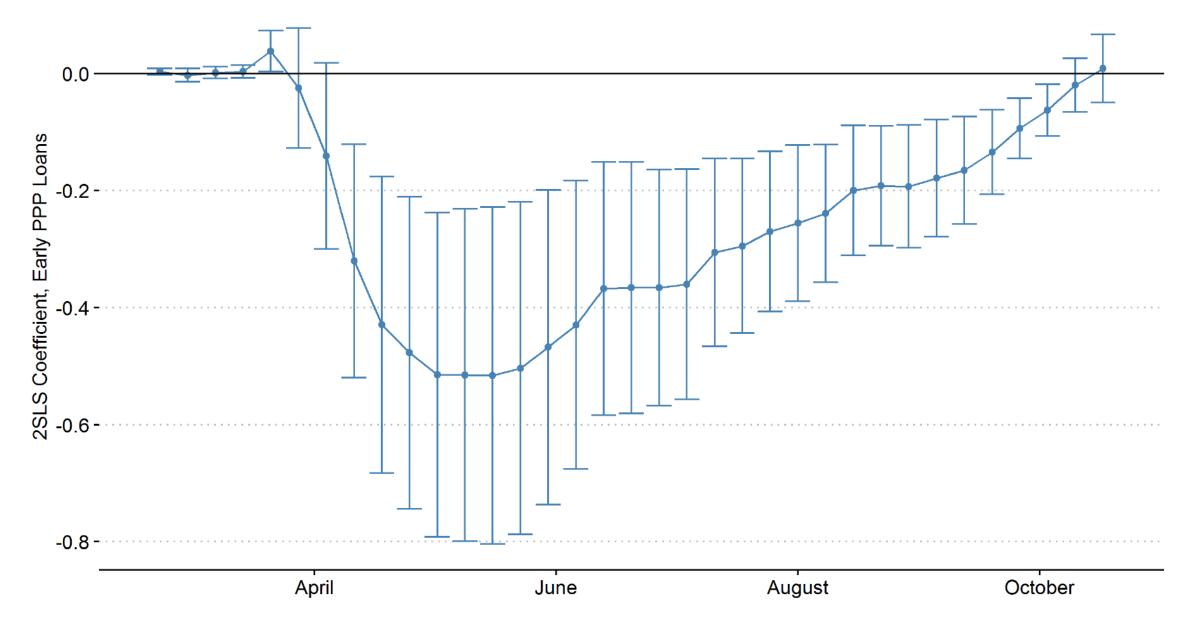
Comparison to Previous Literature

- This paper uses cross-sectional variation in PPP loan access combined with BLS UI Claims data
 - Instrumented with community bank shares (18.6 million jobs)
 - Similarly, Granja et al. (2020) instrument with bank-share-based Bartik instrument, using payroll data (3.5 million)

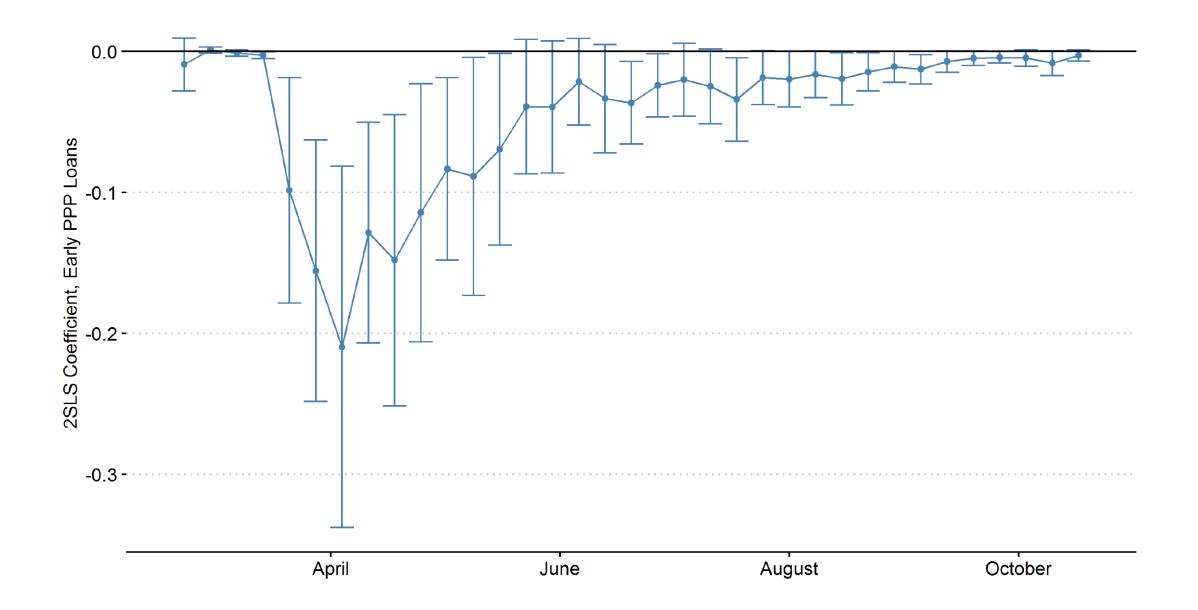
 Alternative identification: size threshold for eligibility (500 employees for many sectors) combined with payroll data (1.5-2.3 million)

What explains the relatively large estimate in this paper?

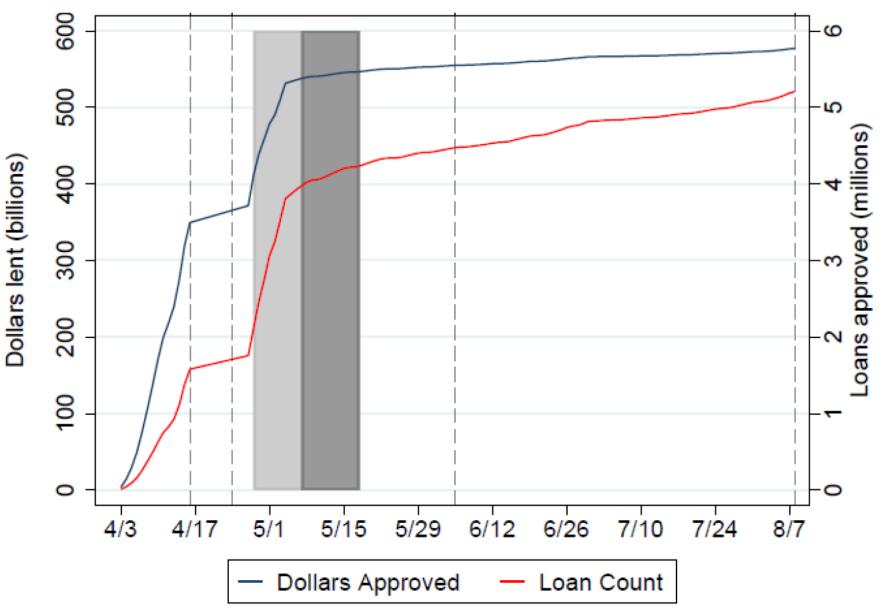
Effects of PPP on UI Continuing Claims Faulkender et al. (2021), Figure Xb



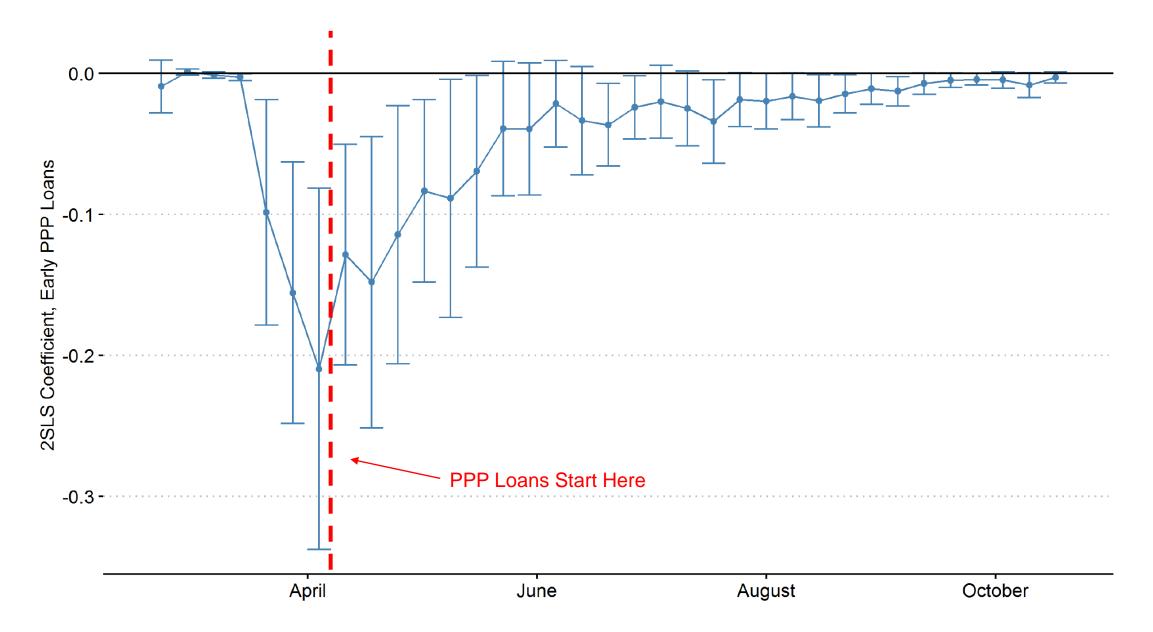
Effects of PPP on UI Initial Claims Faulkender et al. (2021), Figure Xa



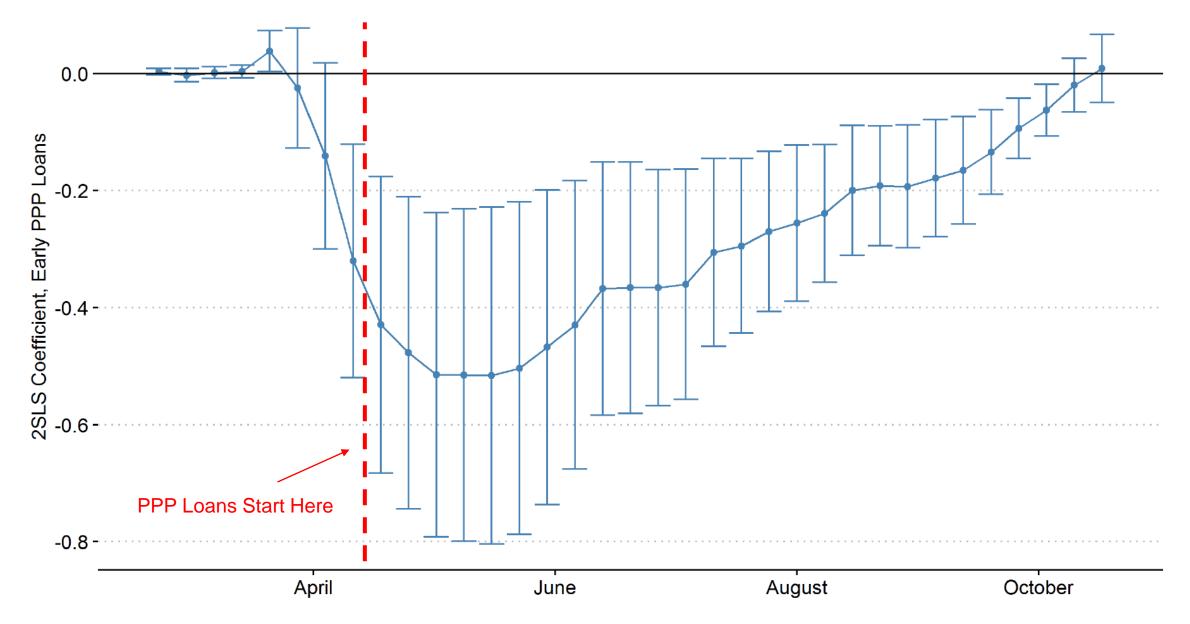
Timing of PPP Loan Disbursal Hubbard and Strain (2020)



Effects of PPP on UI Initial Claims Faulkender et al. (2021), Figure Xa



Effects of PPP on UI Continuing Claims Faulkender et al. (2021), Figure Xb



What Causes the Large Pre-Treatment Trend?

- Three possibilities:
 - 1. <u>Retroactive Claims Data</u>: Authors' data classifies claims by the date of initial filing, even if not approved for many weeks. If firms do (do not) rehire workers after PPP, the initial pre-PPP claim could be disallowed (approved) as true cause of the program.
 - 2. <u>Anticipatory Behavior</u>: If firms anticipate PPP loans, might reduce firing in advance of PPP loans. (But did firms know they were more likely to get loans in high- vs. low- community bank share locations?)
 - 3. <u>Differential Economic Shocks by Location</u>: The recession may have been worse, even before PPP, in low-community bank share locations.
- Replicate findings in publicly-available data to discern between these possibilities

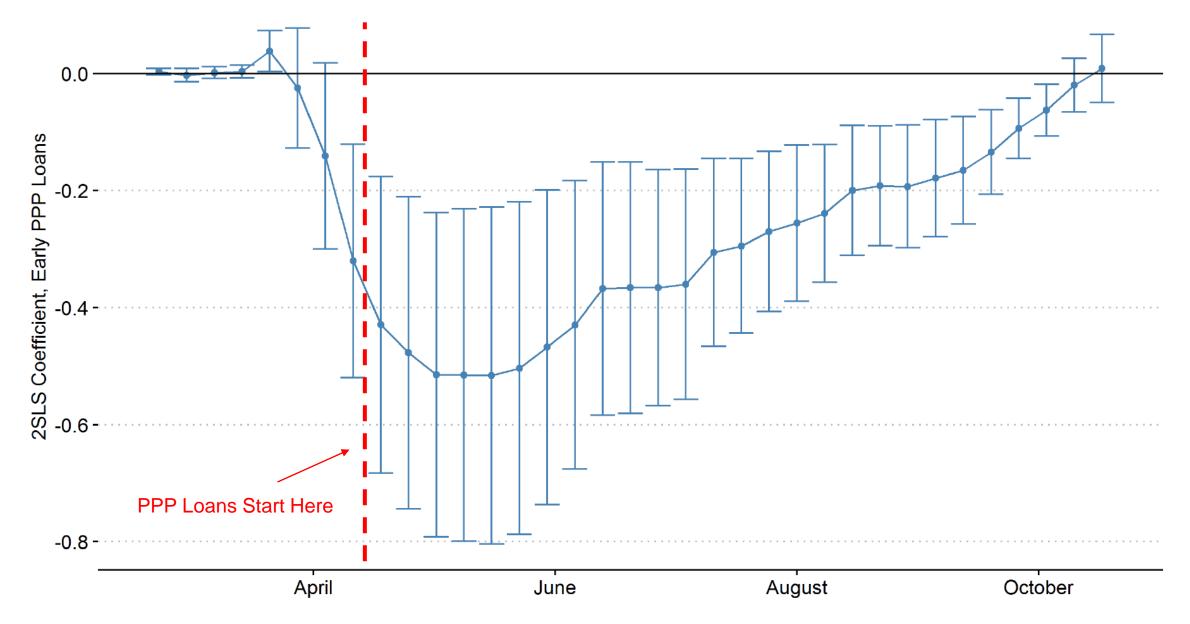
Replication in Payroll Data

- Replicate Faulkender et al. (2021) results using administrative payroll data on ~15 million workers from the OI Economic Tracker
 - Publicly available database for employment at the county x week level at <u>www.tracktherecovery.org</u>
 - Sources: Paychex, Intuit, Earnin

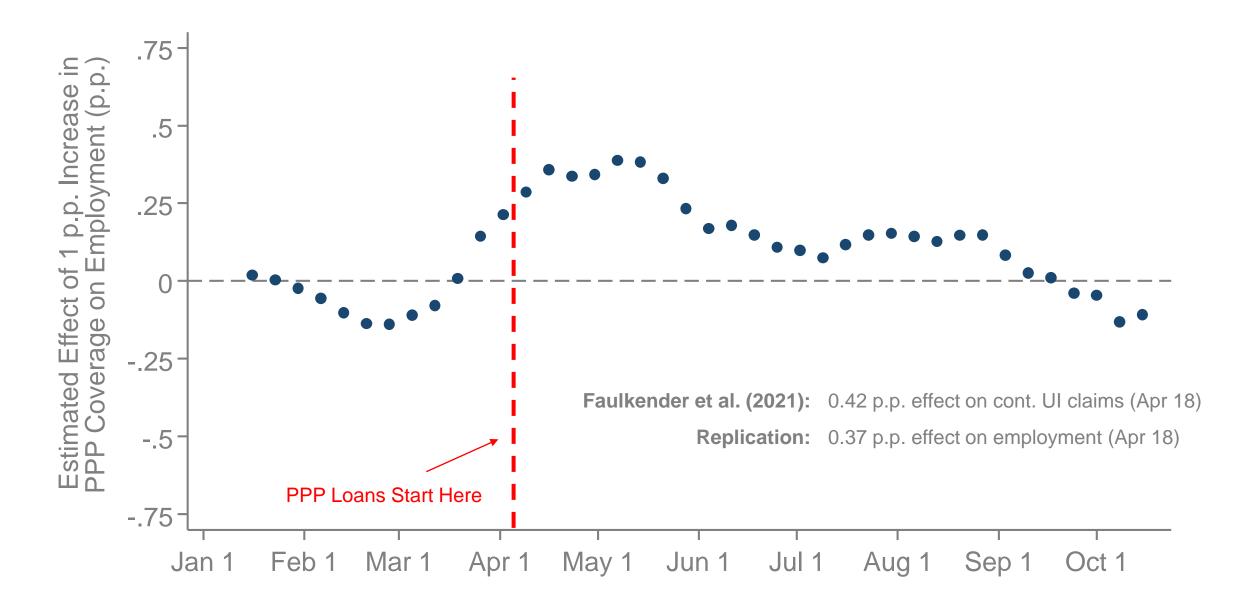
- Take other data, variable definitions, and specifications from this paper
 - Instrument (community bank shares) from FDIC
 - First stage (PPP loan saturation) from SBA and Census Statistics of U.S. Business (2017)

• 2SLS estimates replicate well (many thanks to authors for helping to align!)

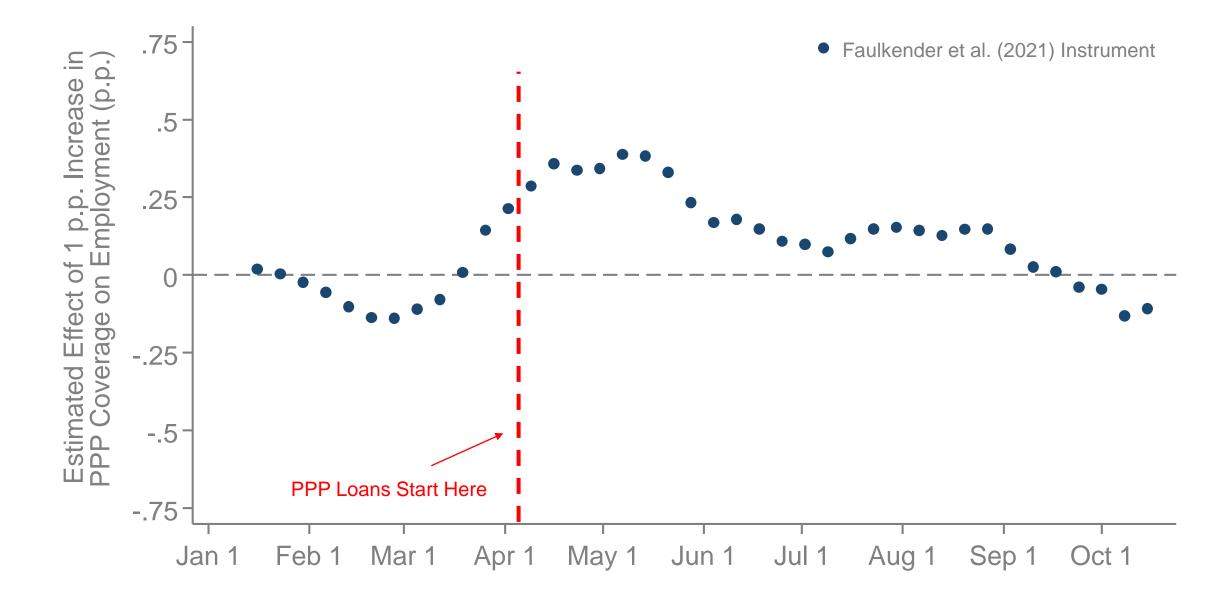
Effects of PPP on UI Continuing Claims Faulkender et al. (2021), Figure Xb



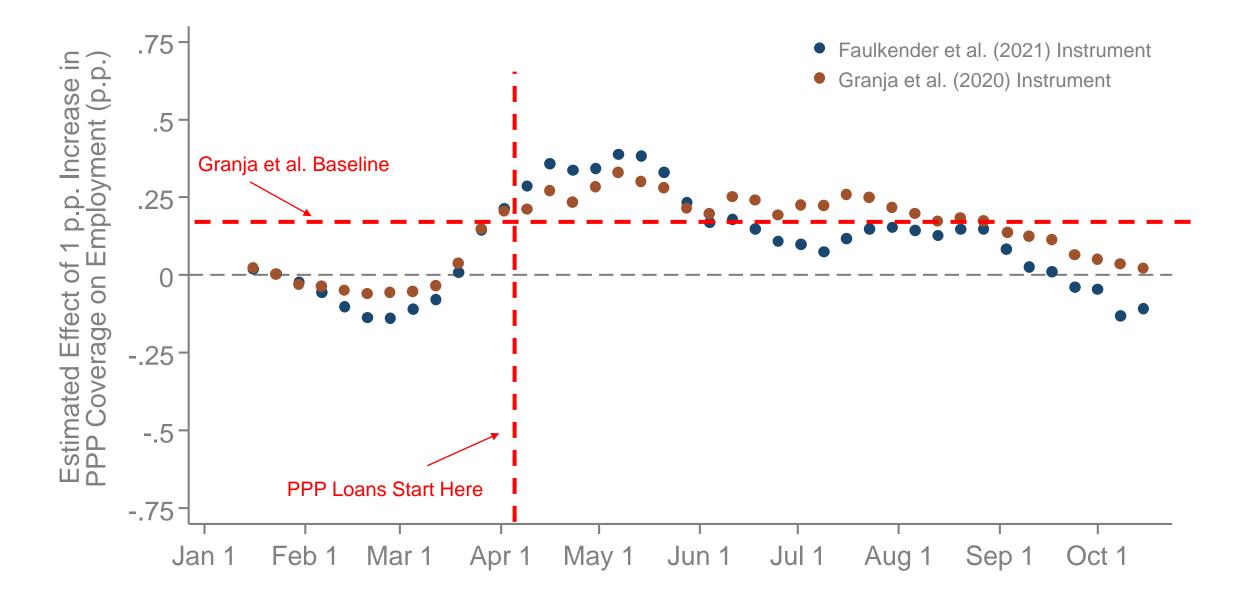
Effects of PPP on Paychex-Intuit-Earnin Employment Faulkender et al. (2021) Instruments



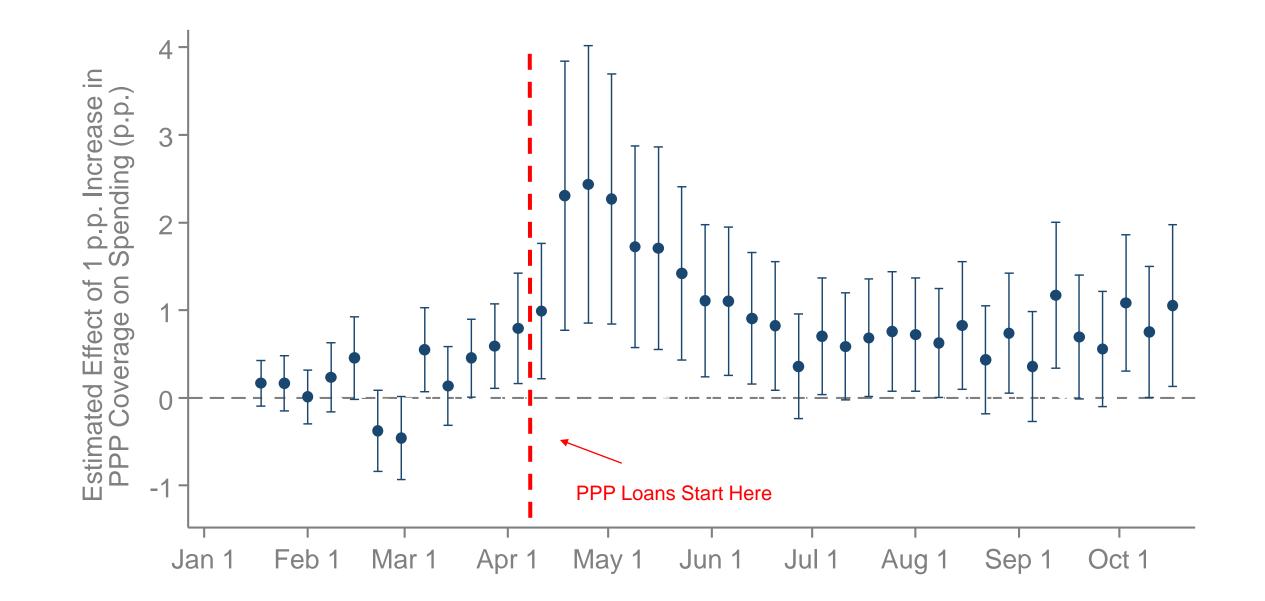
Effects of PPP on Paychex-Intuit-Earnin Employment Comparison with Granja et al. (2020)



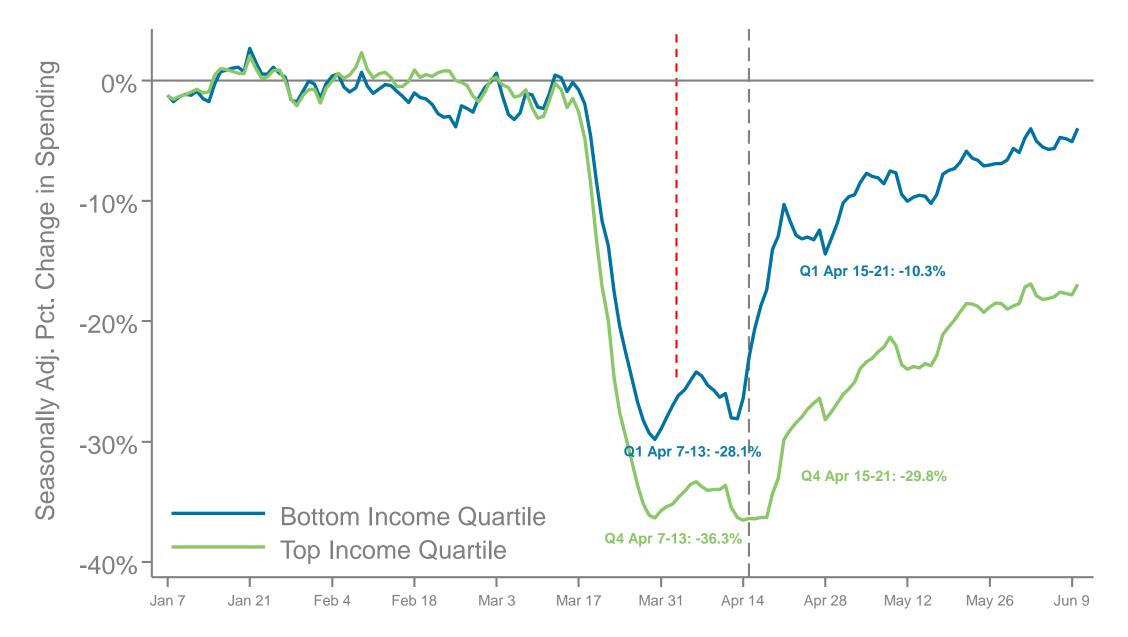
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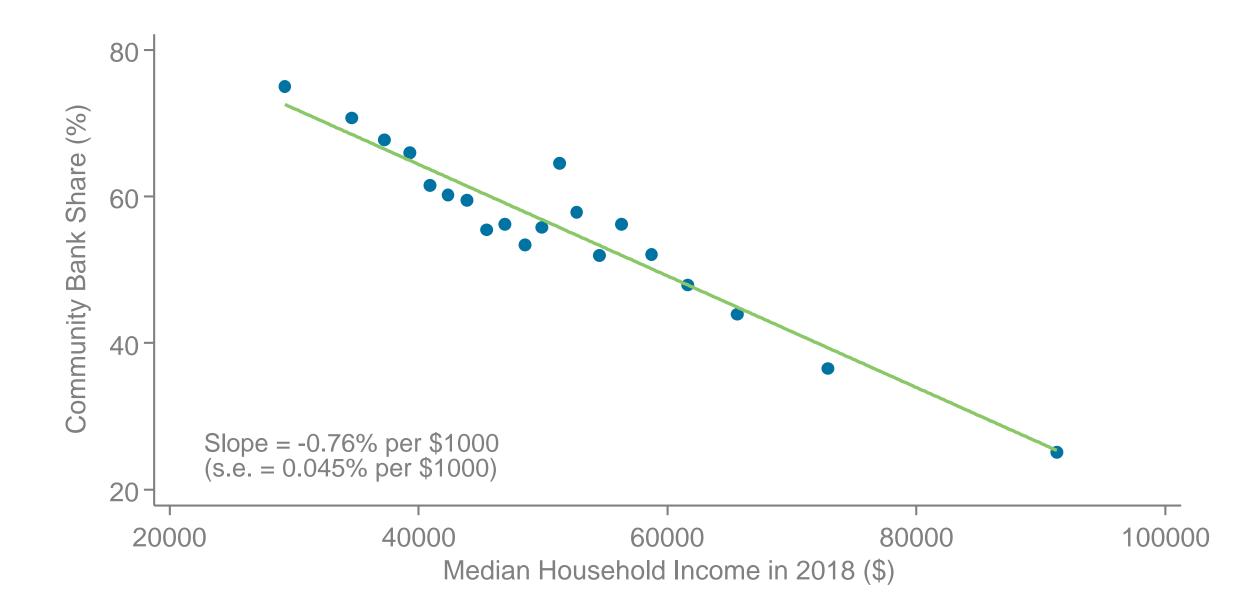
Effects of PPP on Affinity Consumer Spending



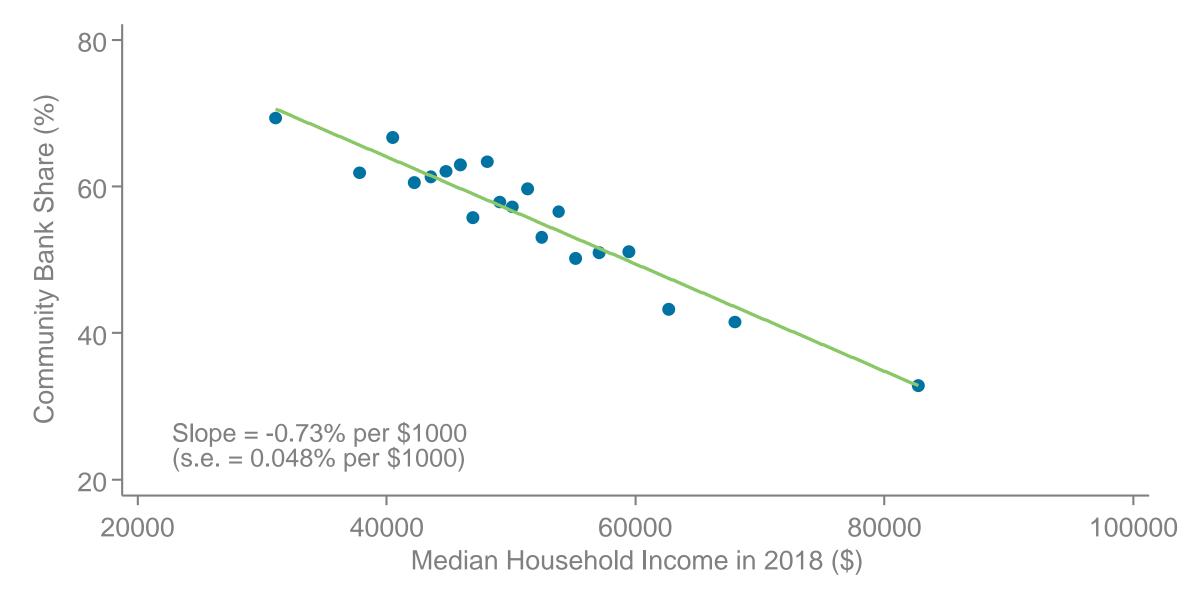




County-Level Binscatter of Community Bank Share vs. Median Household Income No Controls



County-Level Binscatter of Community Bank Share vs. Median Household Income Controls for State FIPS, One-Week New Case Rate, Four-Week New Case Rate, One-Week New Death Rate, Four-Week New Death Rate at April 11, Population Density



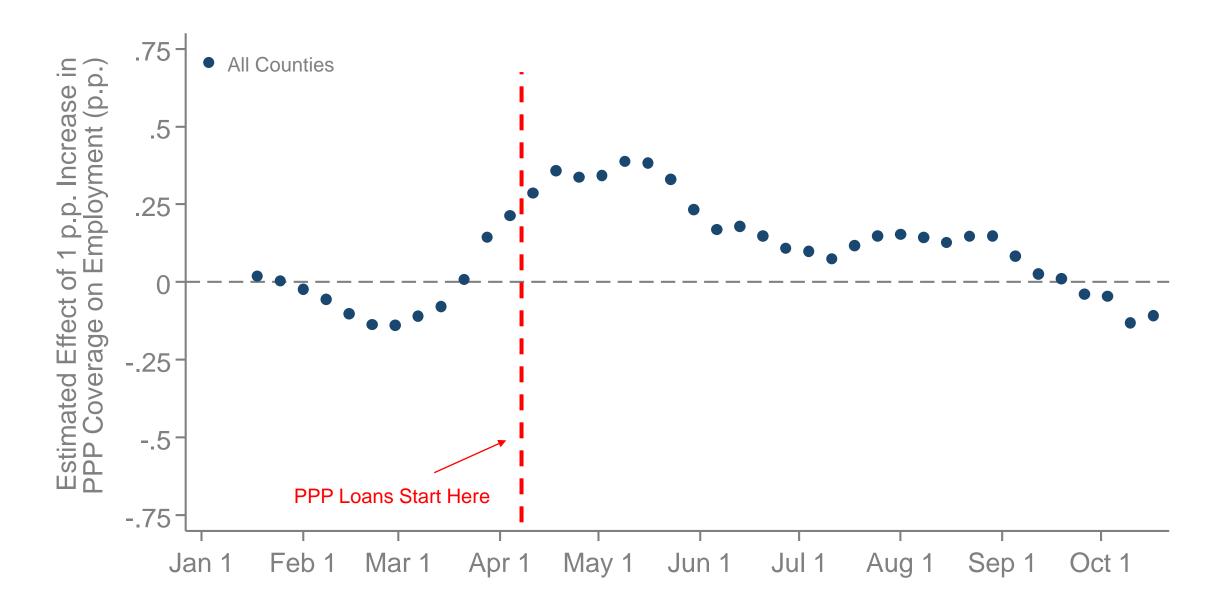
Differential Economic Shocks Explain the Pre-Trends

- Replication suggests that differential economic shocks drive the large estimates
 - Retroactive UI Claims story would have workers unemployed in late March, should not cause differences in employment (directly measured) or spending before PPP
 - Stimulus checks gave a differential boost to the economies in low-community share counties, for reasons not plausibly driven by the PPP
 - Community banks are concentrated in counties with lower median incomes, even with state fixed effects and controlling for COVID cases / deaths and density
 - Simply controlling for income is not sufficient since it is just the observable tip of the unobservable iceberg

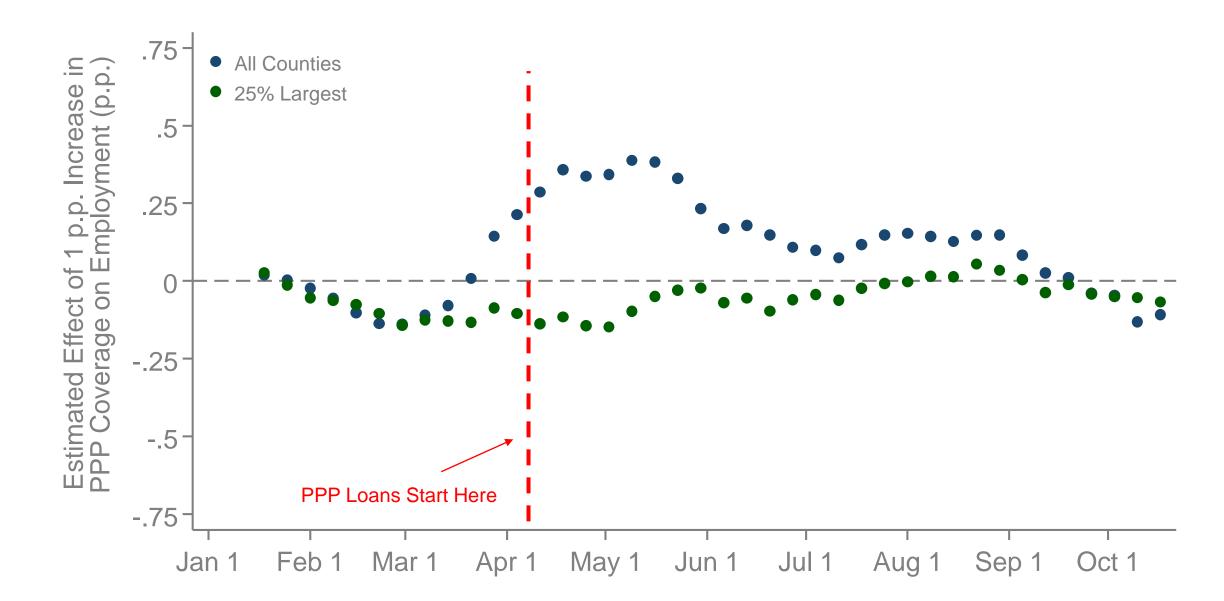
Heterogeneous Effects By County Size

- Faulkender et al. (2021) use even weighting across counties in their results
 - Alternative: weight by size (e.g., local labor force, payroll) or precision
 - If small counties responded to the PPP in different ways than large counties, even weighting produces misleading aggregate estimates

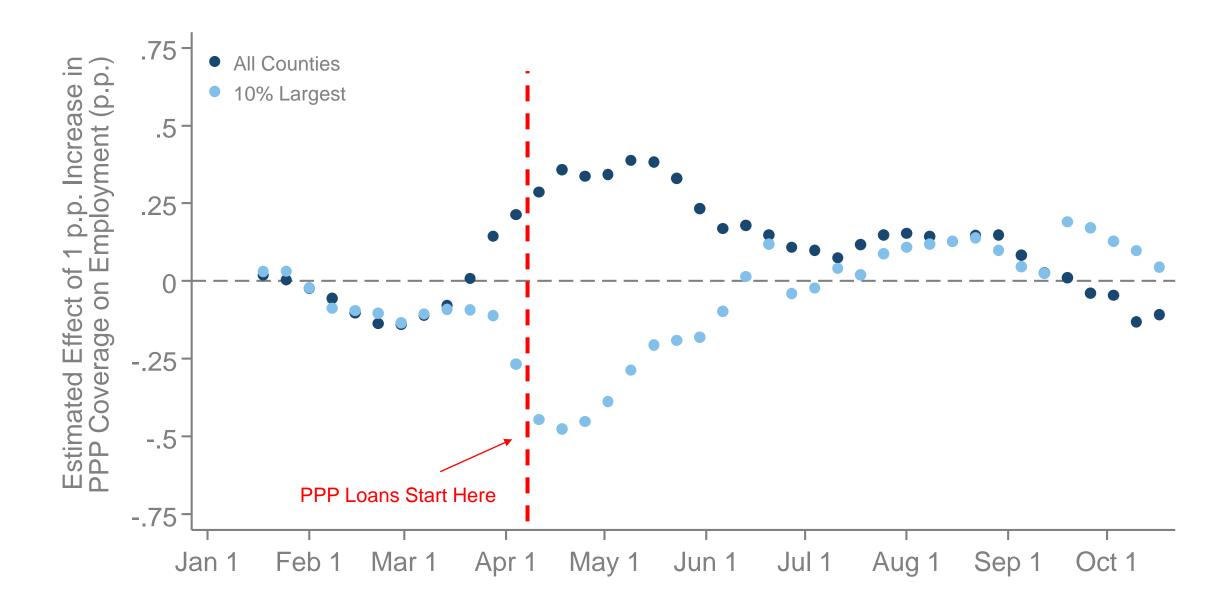
Effects of PPP on Paychex-Intuit-Earnin Employment By County Population



Effects of PPP on Paychex-Intuit-Earnin Employment By County Population



Effects of PPP on Paychex-Intuit-Earnin Employment By County Population



What Explains the Relatively Large Effect in This Paper?

- Data suggest two explanations of the difference with other papers:
 - 1. Recession hit with particular force in counties with low community bank shares, generating differential underlying economic paths
 - Community bank share correlates with local incomes (and likely other unobserved variables) that mediated the strength of the local economic shock
 - 2. Measured effect driven by data in relatively small counties
 - Lack of effects in large counties suggests that aggregate effects were smaller

Broader Implications

- 1. Smaller effects of the PPP imply very high costs per job saved
 - Estimates from size threshold implies costs of > \$200K per job saved
 - Why? Many loans went to areas and firms that did not appear in greatest need

2. Geographic identification difficult when studying the pandemic due to highly localized economic shocks

Changes in Small Business Revenues (Womply) from January to April by ZIP Code New York City

