



Session #1
PAYCHECK PROTECTION PROGRAM (PPP) LENDING

Discussion by
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Two Papers on PPP

- **“Government Loan Guarantees During a Crisis: The Effect of the PPP on Bank Lending and Profitability”**
 - **W. Blake Marsh and Padma Sharma**
- **“The Effect of the PPPLF on PPP Lending by Commercial Banks”**
 - **Sriya Anbil, Mark Carlson, and Mary-Frances Styczynski**





The Context

- **COVID-19 was a precipitous exogenous shock**
 - **Significant macro effects on firms and employees**

“the most unanticipated large and widespread exogenous shock of all time” (Berger and Dermirguc-Kunt, 2021)





The Context

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 - **Significant macro effects on firms and employees**
- **Significant policy response**
 - **Chairman Powell states on 2/28/20 that Fed will “act as appropriate” to calm markets**
 - **Some key policy initiatives specifically targeted small and midsize firms and their employees**
 - **This prominently included PPP**





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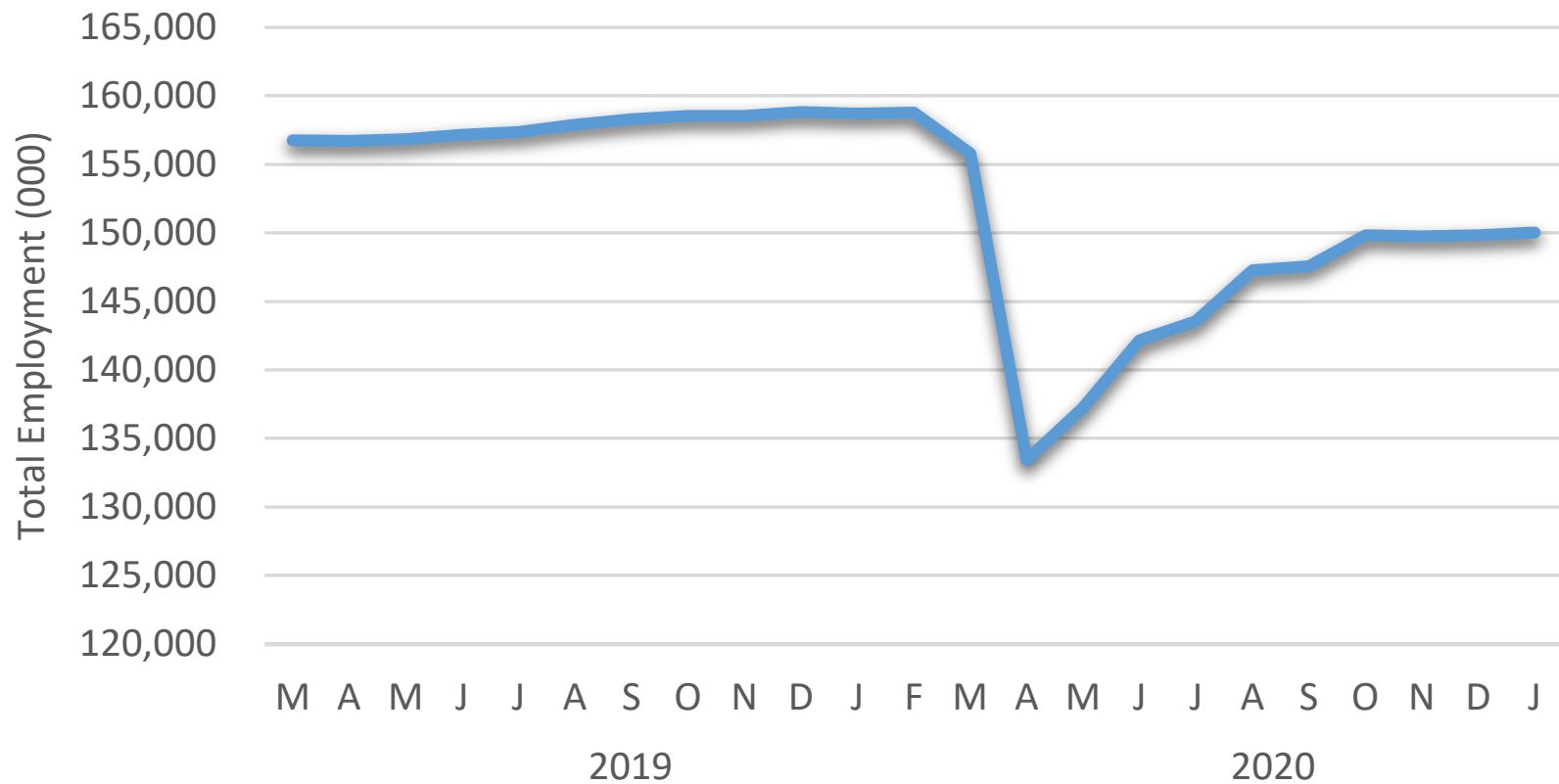
Many more papers are likely to come given that TARP generated “well over” 100 papers (Berger and Roman, 2020)!





Context (cont.)

US Employment





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US Employment

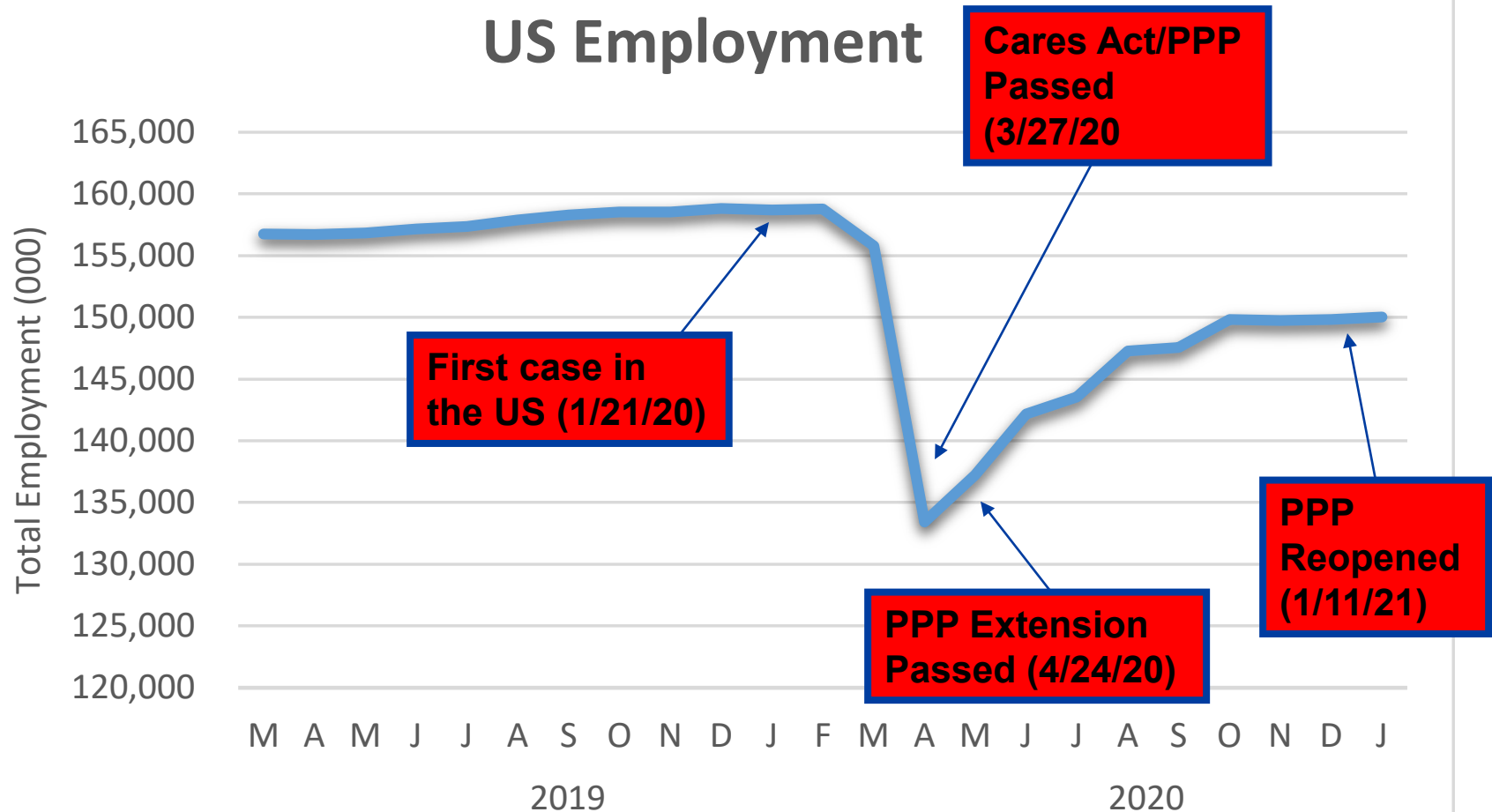
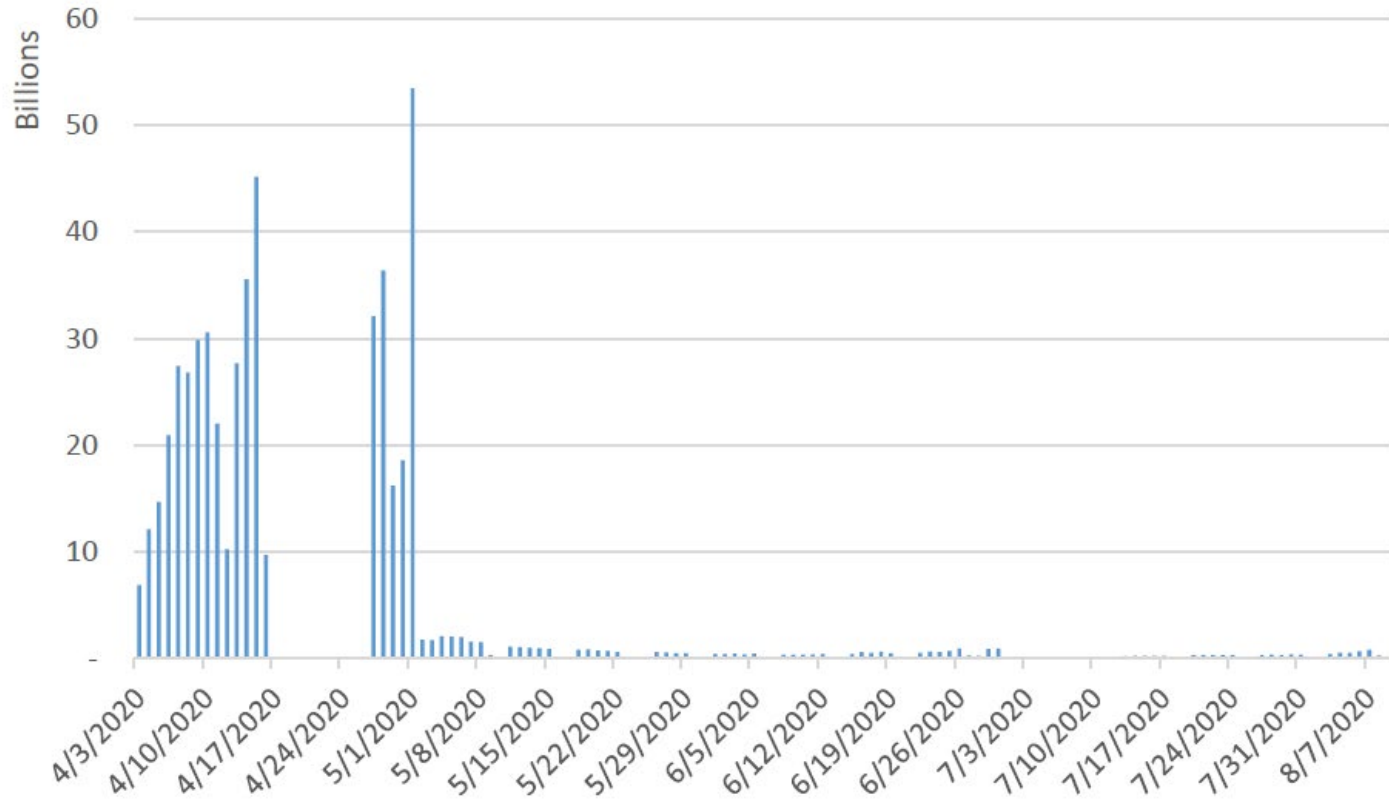




Figure 3: Daily approved PPP loan amount



Source: “Who Supplies PPP Loans (and Does it Matter)? Banks, Relationships and the COVID Crisis” by Lei Li and Philip E. Strahan (2020), NBER working paper.





What Do We Know from Prior Literature?

US Employment





Commercial Bankruptcies - 2020 (Chapters 7 + 11)



Source: American Bankruptcy Institute





What Do We Know from Prior Literature?

- **Firms**

- **PPP improved firm access to finance**
 - e.g., Berger, Freed, Scott and Zhang (2021)
- **Positive effect on medium-term firm survival**
 - e.g., Hubbard and Strain (2020)
- **Positive survival effect limited to microbusinesses**
 - e.g., Bartlett and Morse (2020)

- **Employees and employment**

- **Positive (thought not necessarily large) effect on employment**
 - e.g., Chetty, Friedman, Hendren, and Stepner (2020); Faulkender et al., (2020); Hubbard and Strain (2020); Autor et al. (2020); Humphries, Neilson and Ulyssea (2020; Barraza, Rossi and Yeager (2020); Bartik, et al. (2020); Granja, Matridis, Yannelis and Zwick (2020); Duchin and Hackney (2021); Li and Strahan (2021)





What Do We Know from Prior Literature?

- **Banks – fewer papers**
 - Without PPP bank loan performance would likely have been worse (e.g., Beck and Keil, 2021)
 - Banks emphasized relationships in their PPP underwriting (Li and Strahan, 2020)
 - PPP mitigated effects of a bank supply shock (Chodorow-Reich, Darmouni, Luck and Luck, 2020) and benefited most needy firms (Berger, Freed, Scott and Zhang, 2021)
 - PPP and PPPLF had significant positive effects on small business lending (Lopez and Spiegel 2021)





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- PPP and PPPLF had significant positive effect on small business lending (Lopez and Spiegel 2021)

The Marsh and Sharma (2021) and Anbil, Carlson and Styczynski (2021) papers specifically contribute to the literature on bank behavior and the PPP





“Gov’t Loan Guarantees ...” Marsh and Sharma (2021) **- Summary, Contribution and Comment**

- **The paper in brief**

- **PPP Focus**

- **Community (banks with assets < \$10 billion)**
 - **Whether PPP program was used to “reduce capital at risk”**
 - **Pitted risk aversion vs. profitability**

- **Methodology**

- **Two approaches**

- 1. **Main analysis: Bayesian model set up**

- 2. **Robustness: 2SLS set up**

Now in the Appendix

- **Key findings**

- **Banks that are larger, more profitable, and with higher drawdown risk => more likely to participate in PPP**
 - **Intensity driven by risk aversion, not a drive for profitability**
 - **PPP offset potentially large contraction in business lending**





- **Key contributions**

- The methodology itself
 - Joint estimation in the Bayesian set up to control for selection effects and simultaneity of decision-making
 - Joint model for participation, intensity & bank outcomes
- The focus on community banking
- The finding that lenders driven by risk-aversion and funding capacity, not profitability





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- **Brief comments**

- More distinction from Li and Strahan (2020)

- What do results here say about the importance of relationship lending?





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- The finding that capacity, not price

The paper notes that results are “in line” with Li and Strahan (2020) but little discussion of how and to what extent in the Bayesian analysis. e.g., discussion of unused commitments as measure of liquidity risk, not relationship lending.

Key unanswered question: *What is the relative importance of risk aversion vs. relationships in driving PPP lending?*

- Brief comments

- More distinction from Li and Strahan (2020)

- What do results here say about the importance of relationship lending?





Somewhat answered on p. 78 in the alternative Logit/OLS tests, but:

- depends on interpretation/strength of other relationship variables
- doesn't take into account Li and Strahan's periphery tests

self

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- Brief comments
 - **More distinction from Li and Strahan (2020)**
 - What do results here say about the importance of relationship lending?
 - **Li and Strahan (2020) run separate regressions on community banks**





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No size effect in Li and Strahan
(2020) for community banks
- Table 5, column 3

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“The Effect of the PPPLF ...” – Anbil, Carlson and Styczynski (2021) - Summary, Contribution and Comment

- **The paper in brief**

- **Focus**

- **Was PPPLF successful in bolstering PPP?**
 - **Again, a focus on community banks (large vs. small CBs)**

- **Methodology**

- **2SLS with IV for PPPLF: familiarity with Fed discount window**

- **Key findings**

- **Banks using PPPLF made twice as many loans per asset \$**
 - **Discount window experience (borrowing documents) increased PPPLF use – particularly strong for smaller banks**
 - **Banks with more unused C&I commitments used more PPPLF**
 - **Evidence of backstop function: PPPLF filing as an instrument**
 - **PPPLF causally linked to about \$53B more PPP bank loans**
 - **Smaller banks driving the impact of PPPLF on PPP lending**





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- Extended literature by examining whether PPPLF causally linked to PPP lending
- Methodological contribution: discount window familiarity
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Unused commitments is an imperfect proxy for relationship lending, e.g., an asset-based lending L/C is a transactions based loan.





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Unused commitments is an imperfect proxy for liquidity needs, e.g., the liquidity exposure in a borrowing base L/C or an ABL L/C is the “excess availability” against eligible A/R and inventory, not the unused portion of the commitment.





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I would flesh out this and your contribution

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Some interesting differences including the sign on the small CI loan variable





Final Comments

- **Emerging literature on partisan politics and bank lending**
 - Bankers may be influenced by politics in loan underwriting
Dagostino, Gao and Ma (2021)
 - Two papers specifically on PPP
 - Duchin and Hackney (2021)
 - Berger, Karakaplan and Roman (2021)
- **How does the PPP/PPPLF as a crisis policy focused on SMEs compare with other crises SME initiatives?**
 - Marsh and Sharma mention the relevance of Japan's Special Credit Guarantee Program
 - e.g., Ono, Uesugi and Yasuda (2013), Wilcox and Yasuda (2019)





Conclusions

- Two very interesting and important papers on the largest SME crisis initiative ever.
- Both papers significantly move the needle on understanding of these programs.
- They are a must read and must cite for future research on this topic.

