

Central Bank Lending and Bank Liquidity: Evidence from the Paycheck Protection Program

Derek Tran

University of California, Irvine

Motivation

The key question for fiscal policy is how effective it is.

The Paycheck Protection Program distributed \$800B to small businesses in 2020.

Autor et al. (2022) show that to save one job-year, the PPP spent \$170-250k.

Could the PPP have been more effective and how?

Institution

PPP funds were distributed through the banking sector.

The banking sector faced a liquidity crisis when trying to distribute the funds.

How did the discount window alleviate these liquidity issues?

Contribution

- ① Document relationship between bank lending and DW borrowing.
- ② **When** and **why** did banks use the discount window?
- ③ **How** much did DW borrowing impact PPP lending?

Contribution

- ① Document relationship between bank lending and DW borrowing.
 - DW usage has a heterogeneous effect for small and large banks.
- ② **When** and **why** did banks use the discount window?
- ③ **How** much did DW borrowing impact PPP lending?

Contribution

- ① Document relationship between bank lending and DW borrowing.
 - DW usage has a heterogeneous effect for small and large banks.
- ② **When** and **why** did banks use the discount window? **Event Study**
 - DW was used as a transient source of liquidity before availability of long-term funding.
- ③ **How** much did DW borrowing impact PPP lending?

Contribution

- 1 Document relationship between bank lending and DW borrowing.
 - DW usage has a heterogeneous effect for small and large banks.
- 2 **When** and **why** did banks use the discount window? **Event Study**
 - DW was used as a transient source of liquidity before availability of long-term funding.
- 3 **How** much did DW borrowing impact PPP lending? **IV**
 - For large banks, DW usage increased PPP lending by 91% during early stages.
 - 69% after 3PLF funding, suggesting substitution away from DW.