

DISCUSSION:

DID THE PAYCHECK PROTECTION PROGRAM HIT THE TARGET?

BY: GMYZ

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# PLAN

- ① What did PPP target?
- ② Summary of GMYZ.
- ③ Related literature.
- ④ My view of PPP.
- ⑤ Conclusion.

# WHAT DID PPP TARGET?

- Policymakers: “there is no doubt in my mind that there are people by the millions who kept their jobs and paychecks and there are businesses by the hundreds of thousands that would not today be viable had it not been for the program” (Marco Rubio, June 10, 2020).
- Market failures/externalities:
  - ▶ Liquidity bridge since future cash flows not fully pleadgable.
  - ▶ Solvency bridge because of aggregate demand/bankruptcy congestion/labor market congestion externalities.
  - ▶ Not *just* firm-specific human capital, because of furlough+UI option.
- Metrics for success:
  - ▶ Impact on employment at PPP recipients in May/June 2020?
  - ▶ In December 2020?
  - ▶ In December 2021?
  - ▶ + spillovers and infinite horizon (ideal):  $\int_{h=0}^{\infty} \beta^h \times [\Delta Welfare_{t+h}] dh$ .

## SUMMARY OF GMYZ

- Definitive overview of PPP allocation.
- Bank relationships mattered to access to first round of funding.
- This meant that initial round was not well targeted.
- Under-performing banks substantially caught up in subsequent round.
- Variation in timing of receipt due to bank exposure sufficient to identify early impact.
- Getting PPP funds earlier increased employment/reduced shutdowns in April/May/June 2020.
- Employment effects are 3.4-6.8% of small business employment, larger effects in May/June than April.
- PPP substantially reduced missed loan or non-loan payments and increased cash-on-hand.

## RELATED LITERATURE

- Autor, Cho, Crane, Goldar, Lutz, Montes, Peterman, Ratner, Villar, Yildirmaz: ADP data + 500 employee discontinuity = 3.25% higher employment at eligible firms in June.
- Chetty, Friedman, Hendren, Stepner, OI: OI data + 500 employee discontinuity = 2% higher employment at eligible firms through August.
- Bartik, Cullen, Glaeser, Luca, Stanton, Sunderam: firm surveys + tranche 1 banking relationship = firm expected survival  $\uparrow$  22 p.p.
- Bartlett, Morse: firm surveys in Oakland + rejection/approval design = expected 6 month survival  $\uparrow$  20.5p.p. but only for microenterprises.
- Hubbard, Strain: D&B + DiD, RD = employment effects rising over time, more for smaller firms.
- Note: should not compare cost-per-job to other stimulus policies. Fiscal stimulus literature measures cost-per-job-year.

## MY VIEW

- Before PPP, SMEs were unable to access pre-committed liquidity.
- Bridge component about fixed costs other than labor:
  - ▶ Enhanced UI (+\$600 per week) supported household balance sheets.
  - ▶ High *ex post* recall rates from temporary layoff.
- PPP alleviated immediate financial constraints: SMEs paid down non-PPP credit in 2020Q2.
- Some evidence effects larger for smallest firms.
- Too early to evaluate long-run impact.
- Following slides based on Y-14 data in Chodorow-Reich, Darmouni, Luck, Plosser, “Bank Liquidity Across the Firm Size Distribution.”

## SMALL FIRMS DID NOT ACCESS LIQUIDITY IN 2020Q1

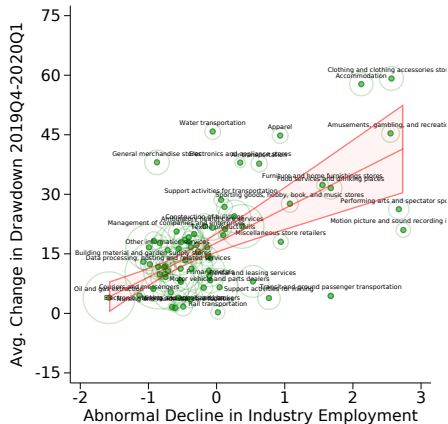
	Total Credit (billions)			CL Drawdowns (billions)		
	2019Q4	2020Q1	2020Q2	2019Q4	2020Q1	2020Q2
Assets (millions):						
Not classified	273.6	289.6	273.4	104.3	121.1	98.7
0-50	137.9	139.9	118.0	77.3	78.5	53.7
50-250	163.3	167.1	143.6	91.1	94.9	72.3
250-1000	160.5	179.3	157.9	89.7	107.9	88.5
1000-5000	218.6	277.6	236.2	121.9	178.7	139.4
5000-	316.6	485.6	388.4	105.2	248.1	155.3
Sum	1270.5	1539.0	1317.5	589.6	829.2	607.8

Source: Chodorow-Reich, Darmouni, Luck, Plosser, "Bank Liquidity Across the Firm Size Distribution".

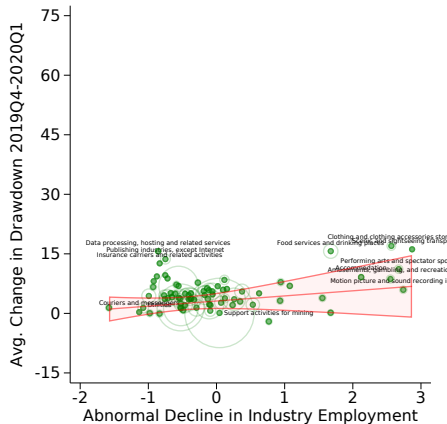
- Y-14 data covering commitments of \$1m+ from large lenders.
- Increase in bank credit outstanding in 2020Q1 only to large firms on pre-committed lines of credit.
- Small firms did not draw in 2020Q1, paid *down* credit in 2020Q2.

# EVEN WHEN EXPOSED TO SIMILAR SHOCKS

Firm Assets > \$1b



Firm Assets < \$250m



Source: Chodorow-Reich, Darmouni, Luck, Plosser, "Bank Liquidity Across the Firm Size Distribution".

- Lower axis: change in employment in firm's industry between 2019Q2 and 2020Q2 less trailing 5-year average.
- Large firms drew in response to industry shocks, small firms did not.
- Holds using physical proximity requirements as instrument for employment.



# WHY DIDN'T SMALL FIRMS DRAW?

- Credit lines not all equal:
  - ▶ Maturity: more than 1/2 of credit lines to small firms due in 2020H1, 3/4 of credit lines to large firms due in 2022 or later.
  - ▶ Collateral: small firms post accounts receivable/inventory, large firms borrow unsecured.
- These terms grant lenders discretion. Large firms have covenants that didn't bind (yet).
- Possible role for government-sponsored liquidity to small firms.

## PPP ALLEVIATED LIQUIDITY CRUNCH

PPP Recipients:	Non-PPP Credit (bil.)			PPP Credit (bil.)		Obs.
	2019Q4	2020Q1	2020Q2	Max	Min	
Assets (millions):						
Not classified	35.3	35.8	30.8	16.6	7.1	8343
0-50	80.1	80.8	61.8	40.2	17.1	21266
50-250	64.3	65.2	53.9	16.2	7.2	3683
250-1000	20.3	21.7	18.9	2.2	1.0	559
1000-5000	9.6	12.9	10.2	0.4	0.2	133
5000-	9.4	14.3	11.7	0.2	0.1	74
Sum	218.9	230.6	187.4	75.8	32.7	34058

Source: Chodorow-Reich, Darmouni, Luck, Plosser, "Bank Liquidity Across the Firm Size Distribution".

- Y-14 matched to SBA file of PPP borrowers with \$150,000+ loan.
- Credit line repayments equal 47-111% of PPP disbursement to small SMEs, 69-157% for large SMEs, 56-132% pooled across all firms.

## CONCLUSION

- PPP alleviated liquidity constraints at small firms.
- Either poorly targeted or impact spread over several months.
- Some evidence of larger effects at smallest firms.
- Too soon to evaluate full impacts of program.
- Should we write early impact papers? Yes! (And all research is early impact: recall  $\int_{h=0}^{\infty} \beta^h \times [\Delta \text{Welfare}_{t+h}] dh$ .) But also important that early impact research not “crowd out” later evaluation.
- Requires new research design: first round allotment constraints and bank relationships useful for identifying early impact of PPP. Probably not relevant for longer-run effects.