

Discussion of:  
Financial Frictions and Employment during the  
Great Depression

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## Motivation: Ben's Version

- ▶ Large firms suffered much less during the great depression
- ▶ If elasticity of substitution of output between large and small firms non too low, lost supply from small firms should have been substituted for by large firms
- ▶ Contraction of supply cannot be the driver of the great depression
- ▶ “It's the demand, stupid!”

## This paper

- ▶ It claims that this view is wrong: credit-related supply effects amplified the contraction
- ▶ It consider two arguably exogenous sources of exposure to **financial frictions**:
  1. Bonds maturing in the 1930-1934 period
  2. Localization in cities with national banks failures
- ▶ Frictions considered first separately, then interacted: combined effect of having bonds maturing and being localized in a city with national banks' failures
- ▶ Strictly a paper on the great depression, but clearly it speaks also about the present

# Results

- ▶ Bond maturity matters
- ▶ Evidence less clear for localization in a city with national banks failures
- ▶ **Interaction super important**
- ▶ Use a structural model to quantify the aggregate effects: (lack of) credit related fall in employment may have accounted for between 10% and 30% of the total fall in employment
- ▶ It confirms the results of a growing body of literature on the great recession: financial frictions matter, and quantitatively important!

## Analytical framework: growth regressions

- ▶ Empirical approach can be cast within the development of the growth regression literature:

### 1. Cross sectional growth regressions (Barro):

$$\Delta \log(\text{Empl}_{i,1933-1928}) = \alpha + \beta \text{Financial Friction}_i + \lambda X_i + \\ + \theta \log(\text{Empl}_{i,1928}) + \text{Dummies}_i + \epsilon_i$$

- ▶ Even if variables measured at the beginning of the period, still endogeneity concerns
- ### 2. Rajan and Zingales diff-in-diff approach:
- interact financial frictions (banks failure) with need of external finance (bonds expiring) and include more controls

## Why end of the period variables?

- ▶ Typically, use beginning of the period variables. Here, LEVERAGE and ROA as of 1933.
- ▶ Very likely to be correlated with the residual: Negative shocks reduce employment and profitability, increases leverage
- ▶ But also with the measures of financial frictions: LEVERAGE in 1933 depends on bond expiring, weakening identification
- ▶ They are careful in commenting the coefficient of this variable. But the problem is that it can bias the coefficient of the variable of interest – Financial frictions
- ▶ I would stick to the tradition: use controls date at 1928

## Maturing Long-term Debt

- ▶ Perfect exercise: same overall bond outstanding, but randomly different maturities
- ▶ Due to sample size, they cannot do it. In fact, many firms have no bond issued (on this some more clarity needed)
- ▶ Current estimates a mixture of extensive (bonds maturing yes/no) and intensive (amount maturing 1930-1934)
- ▶ it would be interesting to separate them: include a dummy for zero BONDS DUE and the continuous variable
  - ▶ Imposing continuity at zero strong assumption
  - ▶ Is the intensive margin significant by himself? Within this group unobserved heterogeneity less likely
  - ▶ Possibly control for two dummies: those with no bonds and those with bonds, but not due 1930-1933
  - ▶ In fact, when restricting the analysis to firms with non zero leverage (table A.3) results weaker

## Maturing Long-term Debt, continued

- ▶ Given the emphasis on advance labor payments, maybe bond over wage bill more correct than over assets
- ▶ Data constraints/collection costs might prevent this, but if possible it would be interesting to exploit the time series dimension: are employment contractions coincident with the years in which bonds come to maturity?
- ▶ Again data permitting, Look at the extensive margins of employment reduction: probability to fail – in ongoing work on zombie lending in Italy, I find that it is more important than intensive margin



## Treatment B: Bank failures

- ▶ Not as clean (as they acknowledge): more endogeneity concerns – especially for big cities– , and, probably more importantly, other channels (local demand)
- ▶ Plot a map with the location of the firms to assess the geographical concentration
- ▶ Some information on the relative size of national and local banks
- ▶ Specification: they use of a dummy=1 if at least one failure
  - ▶ I would include city size: large cities more likely to be treated just because larger
- ▶ As before, it might be interesting to sort out the extensive and intensive margins

## Main Results: Interaction

- ▶ **Significance: wow!** And this what we expect: lack of credit matters for those who need it!
- ▶ Run it only on firms with due debt?
- ▶ Diff-in-diff framework allows for finer controls
  1. National banks used to alleviate endogeneity concerns. But at the cost of measuring collapse of the banking system with noise
  2. With the interaction, one can account for local effects with city dummies and factor in local bank failures
  3. Same with the discrete measure of bonds due
- ▶ I would focus on this analysis more

## Evaluating the effects

- ▶ First, using directly the estimates – standard exercise
- ▶ Then, with a structural model to assess the total effects of financial frictions-and not just that related to maturing debt
- ▶ More ambitious and more questionable, as they acknowledge
  - ▶ Computation of productivity-labor over assets –, homogeneity across firms of the financing costs...
- ▶ Overall, I am not sure what to buy from this exercise

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- ▶ Financial frictions played a role in employment reduction during the great depression
- ▶ The effect emerges forcefully where it should be: for firms needing external finance in cities with bank failures
- ▶ It adds to the debate the effects of the finance of economic activity and, in particular, employment
- ▶ Although the opportunity cost is high, worth to be here talking about labor and finance!