# Effects of Debt Restructuring Session

Discussion by
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Federal Reserve Board

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# Decomposing Present Value Effects: Evidence from a large-scale restructuring experiment

by Deniz Aydin

# What the paper is about

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- **Approach**: Bank randomized trial control large scale experiment on borrowers of unsecured credit in Turkey
  - Stratify participants in bins: late pay, balances, geography.
  - Participants are randomly assigned into treatement legs wrt three contract features: rate reduction, maturity increase, relief.
  - Design of a debt relief program for delinquent borrowers: new contract terms (lower rate, higher maturity and several months of forbereance)
  - Debt relief type *unexpected and exogenous* shock: permanent vs temporary

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  - Debt relief type *unexpected and exogenous* shock: permanent vs temporary
- **Findings**
  - Interest rate reductions have LR effects while short-term forbereance has SR effects
  - Rate reductions create larger variation in PV while short-term forbereance in montly payments

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- Methodology - provide explanations
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  - Effectiveness of debt relief type. What about effects on loan portfolio performance?
- Use specific terms instead of generic (intro)
  - balance sheet effects, monetary vs fiscal payments, borrower friendly loan program.

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- Borrower risk and contractual arrangements
  - Borrowers are asked about the *nature of financial distress* - individually tailored rates and maturity recommendations
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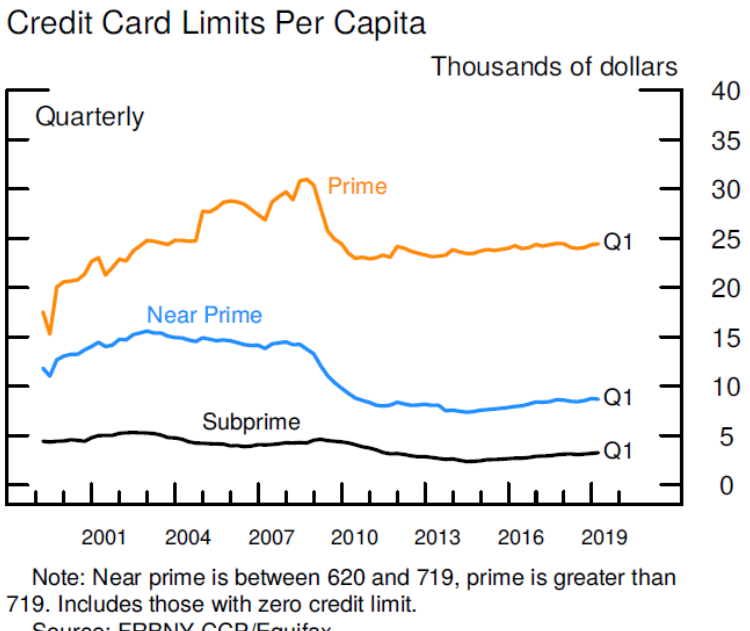
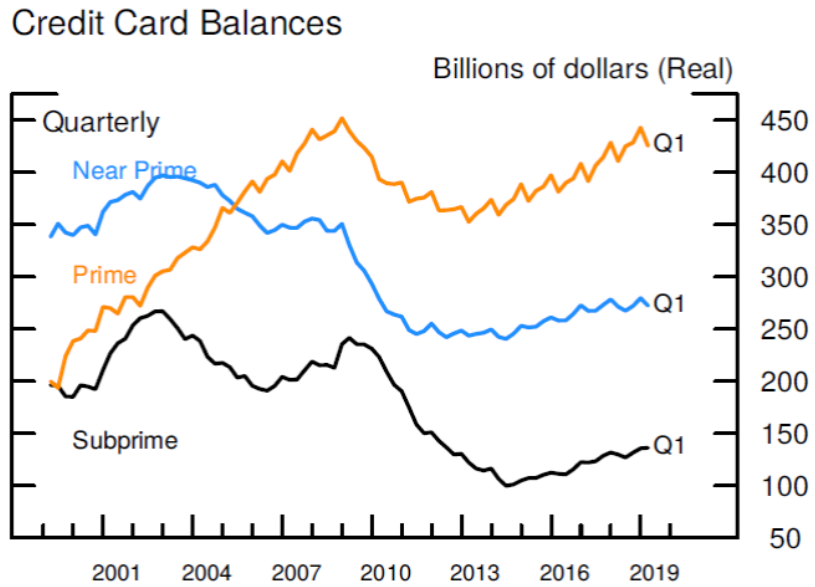
Figure: Terms and balances by borrower risk




Note: Near prime is between 620 and 719, prime is greater than 719. Includes those with zero credit limit.




Note: Near prime is between 620 and 719, prime is greater than 719. Scores are measured contemporaneously.

Source: FRBNY CCP/Equifax.

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- Theory: In equilibrium credit terms vary with borrower risk (Dempsey and Ionescu (2019))

$$q(x, \ell; s) = \frac{p(x, \ell; s')}{(1+\eta)(1+i)} \text{ if } \ell < 0 \quad (1)$$

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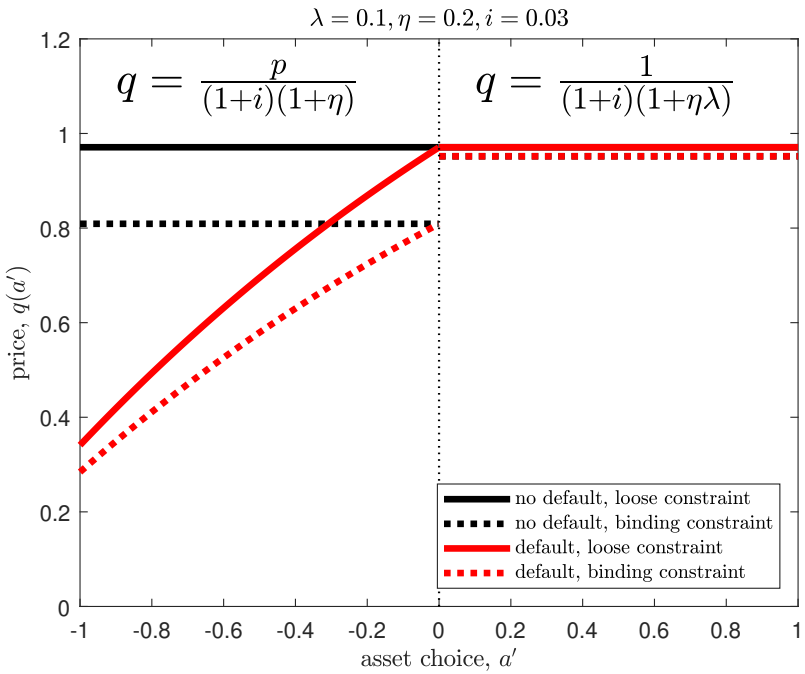

# 2. How to reconcile this study with theories of unsecured credit cont.

- Consider high risk borrowers in the experiment:
  1. Interest/principal ratio is higher (high rates, low credit limits, low balances)
  2. Have higher incentives to accept low rate offers compared to low risk borrowers (R)
  3. How would the bank cover this cost? One option would be to adjust terms for other borrowers (increase rates)
  4. In equilibrium: Direct relationship between interest rates and credit risk - counterfactual and in conflict with the theory
  5. How to interpret outcome response?

# Concluding remarks

- Clever exercise
  - Great deal of effort to design and conduct the experiment and collect data
- Paper needs more clarity
  - Urge authors to rewrite the paper to be reader friendly
- Qualitiative effects on default not suprising (by construction)
  - Focus on quantitative assesment
- Redirect focus on implications for bank policies
  - Effectiveness of various debt relief plans
- Difficult to reconcile with unsecured credit literature
  - Maybe related to a different type of unsecured credit environment?

# Second Chance: Life Without Student Debt

by Marco Di Maggio, Ankit Kalda, Vincent W. Yao

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  - Debt relief *exogenous* to borrowers' choices.

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- **Approach**
  - Treatment: 10K individuals involved in the failed collection lawsuits
  - Control: 94K borrowers in Equifax that were *similarly* in default

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  - Debt relief *exogenous* to borrowers' choices.
- **Approach**
  - Treatment: 10K individuals involved in the failed collection lawsuits
  - Control: 94K borrowers in Equifax that were *similarly* in default
- **Results:** Discharge leads to
  - Decreased debt usage, driven by unsecured credit (ext margin)
  - Decreased delinquency, driven by unsecured credit (both margins)
  - Increased mobility and income

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Argument: Control group = Delinquent borrowers on *similar* debt levels, same code area, same age.

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**Two concerns:**

1. How about risk type?
   - Different risk profiles
2. How about debt type?
   - *Not similar* – private (treatment) vs public student debt (90+% of loans in control)

   1. Risk profiles of borrowers affected
   2. Provision of debt relief embedded ex-ante in the two types of debt is different.

# 1. Selection: Different risk profiles across groups

- Portfolio allocation differs across groups (collateralized debt vs unsecured debt)

| Loan type | Delinq SL Population | Sample Treated Individuals |
|---|---|---|
| Credit card balance | 269 | 1,829 |
| Auto balance | 14,354 | 4,464 |
| Mortgage balance | 134,257 | 6,470 |
| Credit card utilization | 0.98 | 0.37 |

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- Some thoughts:
  - Simply use risk score in Equifax
  - Look at other measures that point to risk profiles: Credit limits; minimum scores on credit accounts
  - Can also use debt to income ratio measures; (income proxy in merged Equifax and Census data)
  - Results for credit outcomes should distinguish by type of debt (later)

# 2. Private (treatment) vs federal student loans (control)

Private student loans = mix between unsecured credit and federal student loans (Ionescu and Simpson (2016))

- Both types are non dischargeable
- Different eligibility criteria: need based vs credit score based
  - Unlike for private loans, no credit score and collateral requirement for public loans
  - Implications for risk profiles
- Subjected to different contractual terms
  - credit limits fixed vs varying
  - interest rates fixed vs varying accounting for risk
  - debt relief of some sort embedded in public loans; can choose repayment options for public loans – different degree of insurance
- Collection procedures are different

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- Ideally, you would have only private loan borrowers in your control group

# Some concluding remarks

- Nice contribution on data collection to overcome the empirical challenge of finding exogenous variation in the borrowers' exposure to student debt
- Polished, clearly written
- **Main concerns:** Debt relief across control and treatment groups not comparable for a variety of reasons
  - Some work on risk profiles and private vs public student debt
- **Additional thoughts:** Is there really an improvement in outcomes?
  - Separate by loan types to make that statement
  - Redo figures 3 and 5 by types of debt
  - Might be useful to look at debt burden and at how close borrowers are to credit limits by loan categories
  - Figure 6 by DTI rather than income
  - Try different measures of delinquency, in particular 120+