Corporate Debt Overhang and Credit Policy

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Credit dimensions of 2020 and 2008

2008
- Banking, Households
  - Fed/Treasury liquidity and capital injections in the financial system
  - Household liquidity via HAMP, HARP and Fed MBS purchases

- Policy objective
  - Stimulus

2020
- Corporate sector
  - Fed/Treasury corporate bond purchase programs
  - Main Street Lending Program, SBA’s Paycheck Protection Program

- Policy objective
  - Insurance against scarring that would slow a recovery once the pandemic is past
Corporate bond spread = \textbf{Prob of Default} \times \textbf{Risk Premium on Default Risk}

High Yield and Investment Grade Corporate Bond Spreads

Industry Average Credit Spreads
Corporate sector: dispersion in risk exposure
Corporate finance and credit policy

• Absent corporate financing friction (Modigliani-Miller), no role for credit policy
  • Only path of policy rate matters for economic outcomes

• Corporate finance and debt:
  1. Nature of bankruptcy costs: severity is the scarring concern?
  2. Nature of corporate financial friction: how does debt affect firm operations?
Policy question we evaluate

Suppose policy could inject $1 into a firm, where should this subsidy go to maximize macroeconomic benefits?

• Case 1:
  • Large corporation run by management in the interest of outside equity holders
  • Solvency and debt overhang
  • Chapter 11 reorganization is bankruptcy process

• Case 2:
  • Small owner-run enterprise
  • Liquidity constraints and debt service concerns
  • Chapter 7 liquidation is bankruptcy process
Case 2: SME and liquidity constraints

• Owner-manager has pledged firm + personal assets towards a loan

• Earnings decrease triggers debt servicing problems
  • Owner’s equity tapped out: liquidity constraint
  • Prioritize scarce liquidity towards debt service, rather than actions that maintain enterprise value (maintaining work force, capital)
  • Eventual Chapter 7 bankruptcy, firm liquidation, and possible personal bankruptcy

• Scarring:
  • In the recession, firm value erodes as real expenditure falls
  • Post-bankruptcy, firm will scale up slowly even if pandemic ends because net worth of owner remains low

• Policy: provide cheap liquidity to firm
  • Close analogy to high MPC households in 2008 recession
Case 1: Large corporate

- Solvency problem creates debt overhang (Myers, 1977)
  - Management runs firm in interest of deep-pocketed outside equity-holders
  - Expenditures to maintain enterprise value (labor, capital) partly benefit debt-holders
  - Underinvestment erodes enterprise value

- Filing for Chapter 11 can eliminate debt overhang
  - Automatic stay on debt payments
  - Creditors become new owners of firm, and restructure the debts to ensure firm is viable

- Chapter 11 has direct and indirect bankruptcy costs
Case 1: Large corporate decision to file

• Consider a case of zero Chapter 11 bankruptcy costs

• Filing for Chapter 11 reorg is a decision of the equity-holders
  • Equity holders own a call option on the firm (Leland, 1994)
  • Debt service is the equity-holders payment to retain the option
  • In the process, firm underinvests and enterprise value erodes

• Equity-holders delay longer than is socially efficient
Case 1: Credit subsidy for large corporates

• Credit subsidy
  • Long pandemic/low bankruptcy costs
    • No credit subsidy: it enables equity-holders to delay a Chapter 11 filing
    • While enterprise value erodes, enabling “zombie” firms
  • Short recession/high bankruptcy costs
    • Credit subsidy to avoid fixed bankruptcy cost

• Given current Fed’s current economic assessment (zero rates for two years) policy should not direct subsidy to large corporates
  • Corporate bond programs should be left on stand-by, to be used in event of a risk dislocation (like March 2020)
Bankruptcy costs

• Reduction of bankruptcy costs is unambiguously beneficial
  • See proposal in paper for offering subsidized loans to a firm in Chapter 11
  • Reduces direct financial cost of bankruptcy, and subsidizes debt restructuring

• Bankruptcy has indirect spillover costs
  • Most significant are spillovers to banks, via losses on bonds/loans
  • Pre-emptive actions to shore up bank capital such as trigger C-CYB, especially now while markets are operating smoothly and embed low risk prices
Policy conclusions

• Subsidize credit to SMEs

• Given current Fed’s current economic assessment (zero rates for two years) policy should not direct subsidy to large corporates
  • Corporate bond programs left on stand-by

• Instead subsidy to reducing direct financial costs of bankruptcy

• And shore-up bank balance sheets to reduce indirect costs
EXTRA
Credit policy as insurance

• In an Arrow-Debreu ex-ante allocation
  • Firms would write debt contracts to be state-contingent, falling in a pandemic
  • Avoids erosion of enterprise value due to debt overhang and bankruptcy scarring

• Credit policy of government fills in the contract ex-post
  • Subsidies to avoid debt costs and default
Benefits flow to lenders: household ABS

Asset Backed Securities Cumulative Returns

Credit Card ABS Spreads
Taxation to restore ex-ante AD allocation

• In AD allocation, lenders would have lost money in pandemic

• Ex-post credit subsidy flows to lender; without subsidy lenders would have lost money

• To replicate AD allocation, incidence of taxes should fall on asset owners (i.e., lenders) rather than workers