Corporate Debt Overhang and Credit Policy

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Credit dimensions of 2020 and 2008

2008

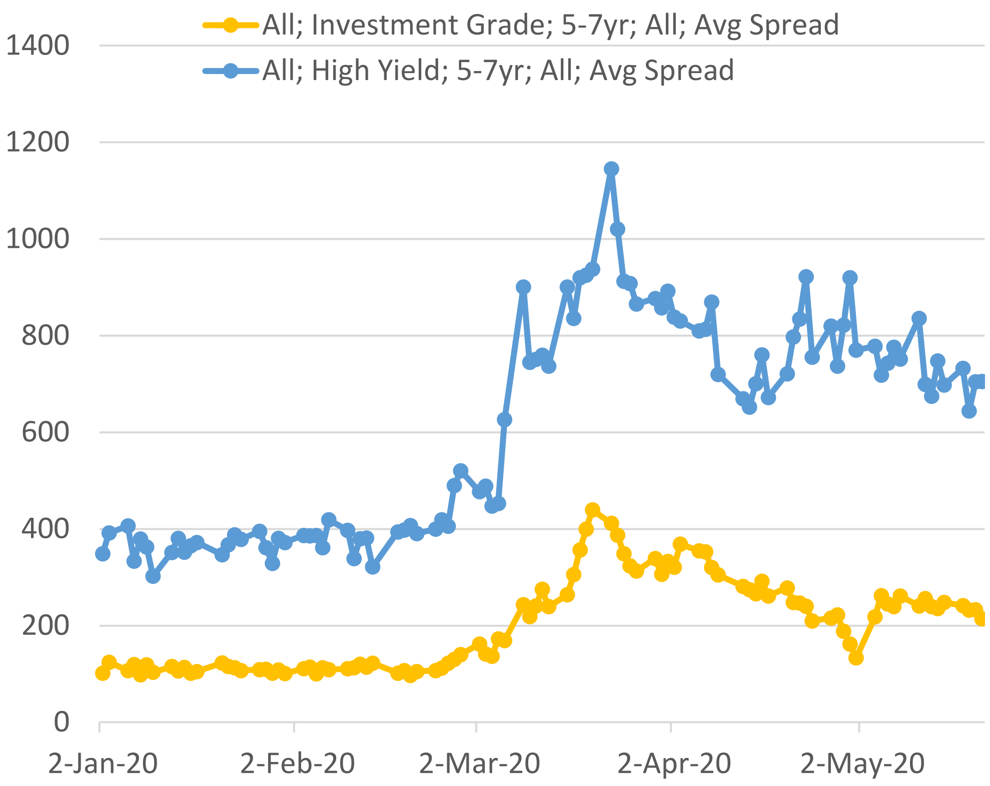
- Banking, Households
  - Fed/Treasury liquidity and capital injections in the financial system
  - Household liquidity via HAMP, HARP and Fed MBS purchases
- Policy objective
  - Stimulus

2020

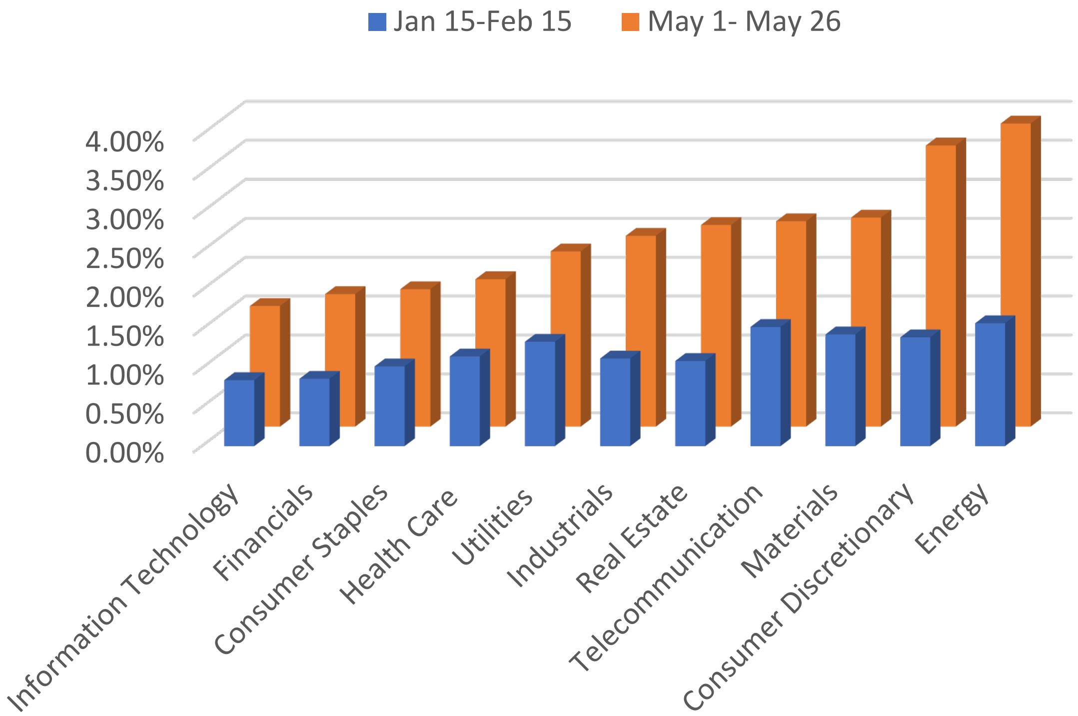
- Corporate sector
  - Fed/Treasury corporate bond purchase programs
  - Main Street Lending Program, SBA's Paycheck Protection Program
- Policy objective
  - Insurance

  against scarring that would slow a recovery once the pandemic is past

Corporate bond spread = Prob of Default X Risk Premium on Default Risk

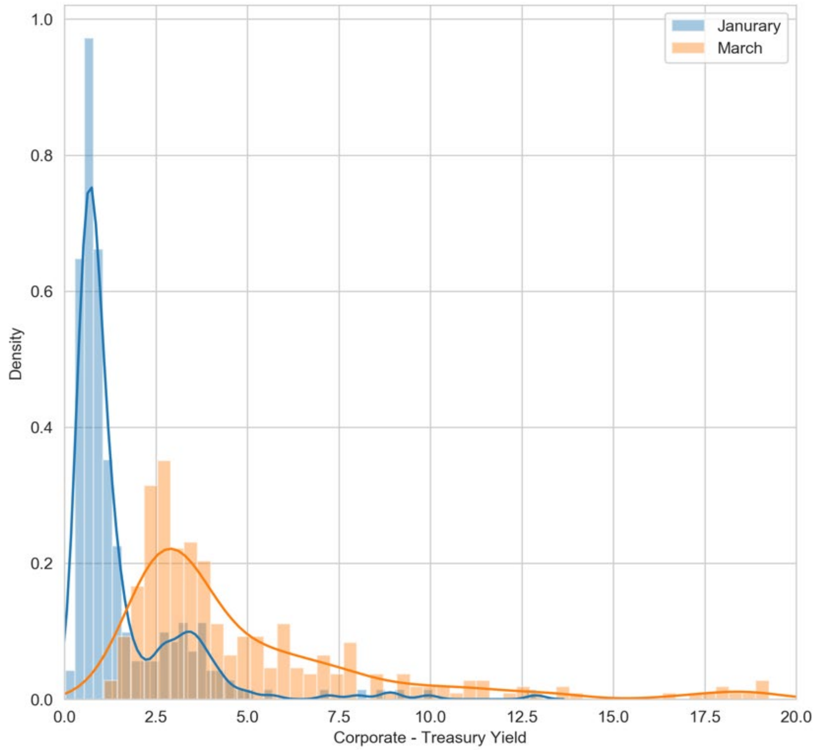


High Yield and Investment Grade Corporate Bond Spreads

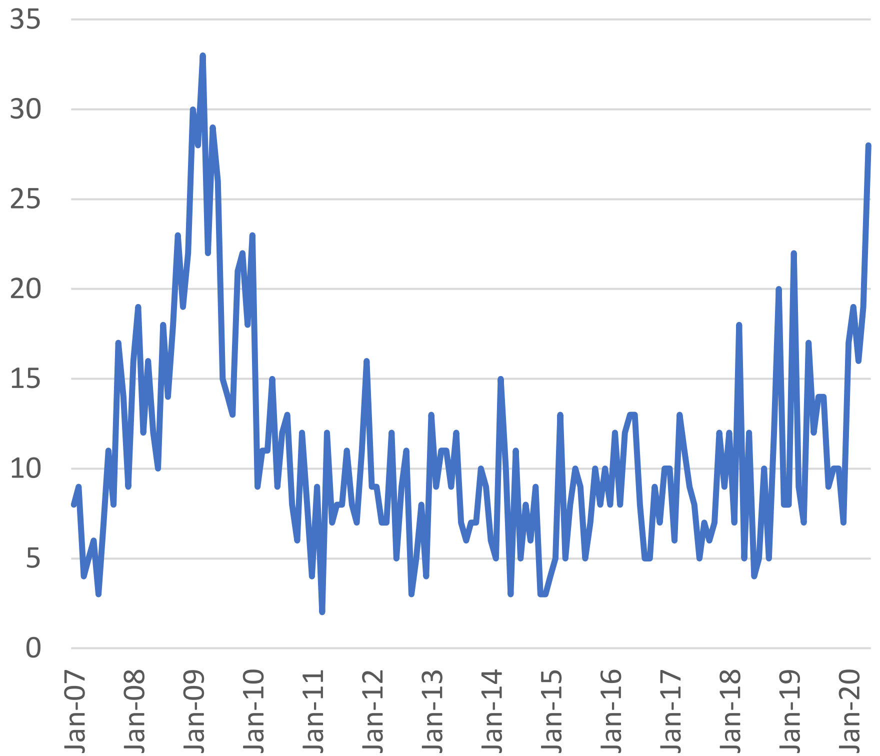


Industry Average Credit Spreads

Corporate sector: dispersion in risk exposure



Credit Spread Histogram, January and March



Large Corporate Bankruptcy Filings Monthly Count, Jan 2007 to May 2020

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

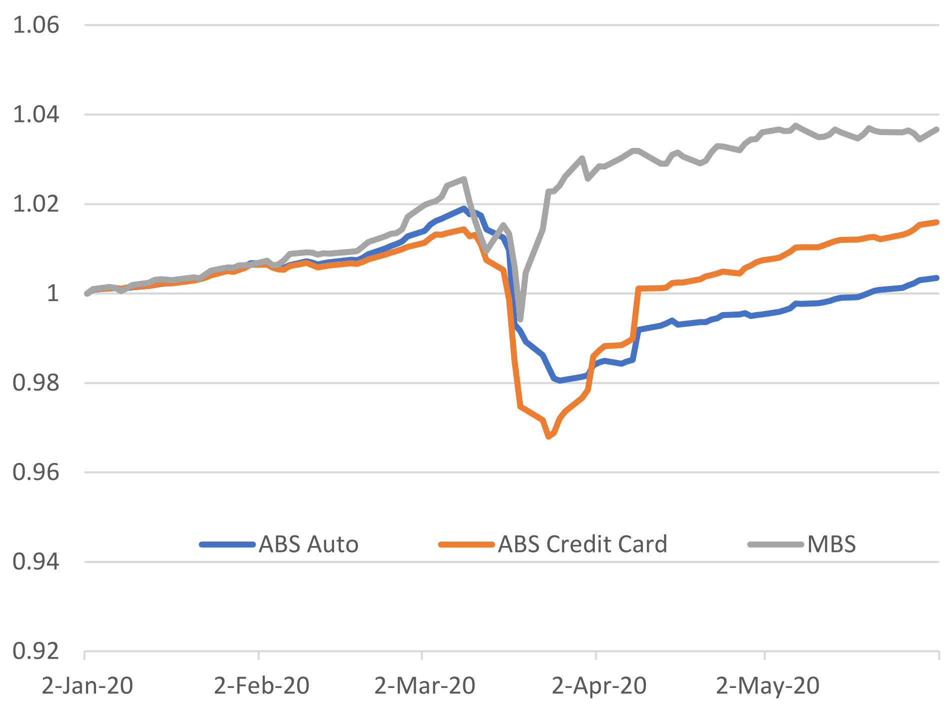
- And shore-up bank balance sheets to reduce indirect costs

EXTRA

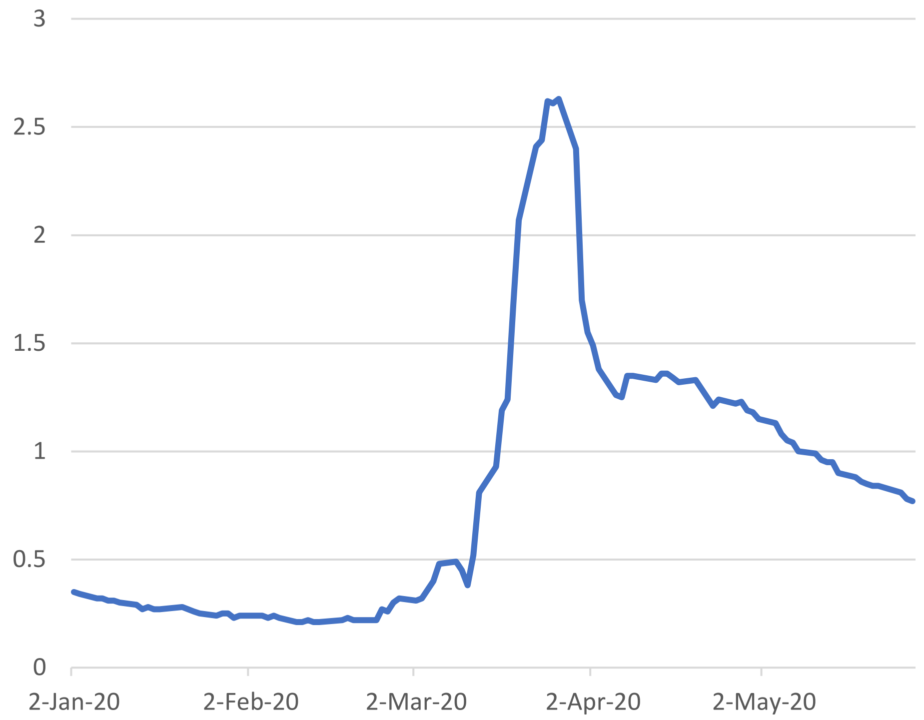
Credit policy as insurance

- 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